#### No. 418 Oiler

#### **Pump Assembly**

- 50% more oil per stroke than other hand-held oilers for longer die life.
- An ergonomic 2-finger trigger design that reduces user fatique.
- · Die cast, heavy-duty body with swivel nozzle with no exposed parts for longer life.

### **Heavy Duty Reservoir**

- The 418 oiler features a patented fastenerless twist and lock drip pan that easily locks in place.
- The material withstands abrasion, is lighter than metal and does not rust.
- The reservoir will not crack or leak.
- · Material is so strong that under normal use, no dents will form on impact or shape changes will occur over time. As a result, the drip pan will fit squarely on the reservoir time after time.
- Integral molded body eliminates leaks at the hose-reservoir connection.
- 50% more oil per stroke than other hand-held oilers for longer die life.

Cat. No.	Model No.	Description	Wt. (lbs)
10883	418	Hand operated oiler complete, includes 1-gallon thread cutting oil, bucket with removable chip tray, and 54" hose.	20.5
72342	402	Hand operated oiler with attachment for 1 gallon and 5-gallon containers and 54" hose.	2.5
72332	#4	Hand operated oiler only.	1.25
72327	#4	Hand operated oiler with 54" hose and hose fittings.	2.25

Model 535 Threading Machine
Pipe Capacity: 1/8"-2", 2-1/2"-4", 4"-6" with 141 and 161 geared threaders

Bolt Capacity: 1/4"-2"

The Model 535 maintains the ruggedness of the industry workhorse while adding the features that makes the threading operation more productive. A large chip tray and oil reservoir make the 535 ideal for longer uninterrupted threading. The 535 features a high clearance carriage making the threading operation easier and a generous top cover area that is ideal for keeping tools and work related



materials handy. The 535 is designed around maximum uptime with the upgrades that matter most to the pipe working professional. Users also benefit from the part commonality between the 535, the 535A Automatic and other RIDGID equipment.

#### **Features**

- Large 1.75 gallon oil tray.
- 100% larger chip tray.
- · Generous top cover for keeping tools and fittings handy.
- · High clearance carriage.
- · Speed chuck with rocker-action jaws centers and grips work piece instantly.
- Can be used with geared threaders Models 141 and 161.
- Uses Model 816/817 semiautomatic, Model 815A self-opening or Model 811A quick-opening die heads.
- · Length gauge for quick, accurate cut-off.
- Approved by CSA to CSA and UL standards (115V only).

Motor: 1/2 HP, single-phase, 115V, 50/60 Hz, 15 amp reversible universal motor. (36 RPM)

Switches: FOR/OFF/REV and Integral safety foot switch.

**Chuck:** Speed Chuck<sup>™</sup> with replaceable rocker-action jaw inserts (3).

Rear Centering Device: Cam-action, turns with chuck.

Cutters: Self-centering, full-floating. Two models available:

- One Standard. No. 820 Wheel-Type Cutter, pipe capacity 1/8"-2", bolt capacity 1/4"-1".
- Two Optional. No. 821 Blade-Type cutter, pipe capacity 1/2"-2". See ordering chart.

## Ridgid

Spindle Speed: 36 RPM standard (no load), 54 RPM model also available.

Reamer: 5-flute cone, RH, 1/8"-2" (3mm-50mm).

Oil Pump: Self-priming gerotor oil pump.

RH/LH combination reamer available.

#### Standard Equipment

- One No. 811A universal, quick-opening die head.
- One set 1/2"-3/4" universal alloy dies.
- One set 1"-2" universal alloy dies.
- One No. 820 cutter.
- One No. 341 reamer.
- One gallon of premium extreme performance thread cutting oil.
- Four hex wrenches.
- One spare E-1032 cutter wheel.

#### **Standard Machines**

Cat. No.	Model No.	Description 115V 25-60 Hz	Cutter Model	RPM	Volt	Wt. (lbs)
93287	535	1/2" - 2" NPT	820	36	115V	260
96497	535	Machine Only	820	36	115V	245
96502	535	1/2" - 2" NPT	820	54	115V	260
		230V 25-60 Hz				
96507	535	1/2" - 2" NPT	820	36	230V	260

#### **International Standard Machines**

Cat. No.	Model No.	Description 230V 25-60 Hz	Cutter Model	RPM	Volt	Wt. (lbs)
96512	535	1/2" - 2" BSPT	820	36	230V	260

Machines listed as 1/2" - 2" include Standard Equipment. Machine only includes Standard Equipment less all Die Heads and Dies. All machines have 25-60 Hz Universal 1/2 HP single-phase motors.

Note: NPT Dies are for NPT Die Heads only. BSPT Dies are for BSPT Die Heads only. Please use Catalog item Nos. when ordering. High-Speed Dies are recommended for use with machines having an RPM of 54 or more.

#### Accessories:

- Die Heads & Dies
- Die Head Racks
- Stands Three Models Available
- Thread Cutting Oil
- Nipple Chuck

NOTE: These three stands can be used with Power Threading Models: 535, 300 Compact, 1822-I & 1224.







### **Machine Accessories**

Cat. No.	Model No.	Description	Wt. (lbs)
42365	341	Reamer	6-3/4
42390	820	Wheel-Type Cutter	8-1/2
97365	_	Jaw Inserts for Coated Pipe	1/2
92457	100A	Universal Leg & Tray Stand*	75
92462	150A	Universal Wheel & Tray Stand*	103
92467	200A	Universal Wheel & Cabinet Stand*	104
58007	_	Machine stand adapter bracket for 535's built before 1996	5.* 17
96517	MJ-I	535M Left Hand Threading Kit	3-1/2
42415	768	Drive Link Assembly	2-1/2
42405	844	Drive Bar	5-3/4
51005	819	Nipple Chuck Complete 1/2" – 2"	10-1/2
84537	816	1/8" -3/4" Semi-automatic Die Head	13
84532	817	1" - 2" Semi-automatic Die Head	13
41620	_	Gearhead Motor Grease	1

To attach a pre 1996 Model 535 to a Model 100, 150, or 200 Stand a #58007 Adapter Kit must be used.



## Model 1210 Oil-less Threading Machine

Pipe Capacity: 1/2" - 1".

The RIDGID® Model 1210 Oil-less
Threading Machine offers an unbeatable
combination of portability and clean
operation in a rugged package designed
for job-site threading. With the Model
1210, you can thread virtually anywhere:
in basements, on roof-tops, even in
finished rooms! Thread where you
install and save time and effort.

#### Features:

- Oil-less operation provides clean, cool, virtually dry thread.
- Light-weight, portable design-only 59lbs.
- Oil-less Gold Dies<sup>™</sup> produce superior quality threads.
- Self-contained with all the tools needed to cut, ream and thread.
- · Compact foot switch with integral storage clip.
- Two carrying handles.
- CSA Approved.
- Approved to UL Standards (NRTLC).

#### **Technical Specifications:**

Motor: 1/2 HP, 115V universal 50/60 Hz.

Motor Control: Heavy-Duty Toggle ON/OFF with integral Foot Switch.

Spindle Speed: 25 RPM right hand operation.

**Chuck:** Hammer-type with replaceable inserts; cam action rear chuck.

Coolant System: Through-the-head with integral coolant reservoir; self-

priming gerotor pump; 20 oz. reservoir capacity.

Cutter: Model 354.
Reamer: Model 334.

#### Standard Equipment:

Model 1210 Oil-less Threading Machine with Foot Switch

- 1 Model 610 Quick-Open Die Head
- 1 Model 334 Reamer
- 1 Model 354 Cutter with Cutter Wheel
- 1 Set 1/2" 3/4" Oil-less Gold Dies
- 1 Set 1" Oil-less Gold Dies
- 1 Quart Thread Cutting Coolant

Cat. No.	Model No.	Deparintion	Wt.
		Description	(lbs)
Machines	3		
67872	1210	1/2" - 1" NPT, 115V, 50/60Hz	59
Die Head	s		
67817	610	1/2" - 1" NPT, Quick-Opening, RH	11
Dies			
67807	-	1/2" - 3/4" NPT Oil-less Gold, RH	1
67812	-	1" NPT Oil-less Gold, RH	1
Coolant			
30693	-	1 Qt. Thread Cutting Coolant	2
Stands			
67822	120	Folding Stand	12
Lubricant	t		
41620	-	Gearhead Grease	1

Please Note: The Model 1210 is warranted for use only with RIDGID Thread Cutting Coolant and RIDGID Oil-less Gold Dies. RIDGID Thread Cutting Coolant and RIDGID Oil-less Gold Dies are not for use with any other RIDGID threading equipment.

## Ridgid

## **Model 1215 Threading Machine**

Capacity:

Pipe: 1/4" - 1-1/2" Bolt: 5/16" - 1"

#### Features:

- · Compact, lightweight design
- One piece aluminum housing
- Two easy to use carrying handles
- · Integral footswitch hanger
- Powerful motor and transmission
- Through die head oiling
- Adjustable oil flow control
- CSA Approved
- Approved to UL Standards(NRTLC)

#### **Technical Specifications:**

Motor: 1/2 HP universal motor 50/60Hz

Motor Control: On/off heavy duty switch and integral foot switch

Spindle Speed: 44 RPM right hand operation

Front Chuck: Hammer type with replaceable rocker action jaw inserts

Rear Centering Device: Cam action

Cutter: Model 732

Reamer: Model 344, 1/4 – 1-1/2"

Oiling: Through die head adjustable

Pump: Self-priming constant flow, gerotor type

#### Standard Equipment:

- 1 No. 811A Quick Opening Die Head
- 1 Set 1/2" 3/4" Universal Alloy NPT Dies
- 1 Set 1" 1-1/2" Universal Alloy NPT Dies
- 1 No. 344 Five Fluted Reamer 1/4" 1-1/2"
- 1 No. 732 Cutter with Cutter Wheel1 Gallon Nu-Clear Oil

#### Accessories:

- Model 1203 Mounting Stand
- Model 531 1/4" 1 " Bolt Die Head
- Model 1219 Nipple Chuck 1/2" 1-1/2"

Cat. No.	Model No.	Description	Wt. (Ibs)
61142	1215	1/2" - 1-1/2" NPT, 115V, 60Hz	69

#### **Machine Accessories**

Cat. No.	Model No.	Description	Wt. (lbs)
61187	1203	Tripod Stand	15
62457	1219	Nipple Chuck, NPT	5-3/4
97045	531	Bolt Die Head 1/4" - 1"	7-1/2
84537	816	1/8" - 3/4" Semi-automatic Die Head	13
84532	817	1"-2" Semi-Automatic Die Head	13
41620	-	Gearhead Motor Grease	1

## Ridgid

## **Model 300 Compact Threading Machine**

Capacity: Pipe: 1/8" - 2" **Bolt:** 1/4" - 2"

#### Features:

- Heavy-Duty Proven Performance
- · Lightweight, Portable Design
- Fast Transport and Set-Up
- Self-Contained Oil System with adjustable flow
- · Versatility for Threading and Grooving
- Quieter Operation
- CSA Approved
- · Approved to UL Standards (NRTLC)

#### **Technical Specifications:**

Motor: 1/2 HP 115V universal

50/60 Hz

Motor Control: Heavy duty rotary FOR/OFF/REV with

integral foot switch

Spindle Speed: 38 RPM (52 RPM available)

Chuck: Hammer-type with replaceable, rocker-action

jaw inserts

Oiling System: Through-the-head, with integral oil reservoir. Self-priming, constant-flow, gerotor pump.

Cutter: Model 360, roll-type cutoff, self-centering, full-floating. Reamer: Model 344, 1/8" - 2", five flute cone, right hand only.



300 Compact shown with optional Model 250 Folding Wheel Stand

Machine NPT Die Head

811A

815A

816

817

842

811A

815A

856

Machine BSPT Die Heads

Machine Bolt Die Heads

97065

97075

84537

84532

23282

10491

97070

97080

23297

#### Standard Equipment:

Model 300 Compact Threading Machine

- 1 No. 811 A Quick-opening die head
- 1 No. 344 Reamer
- 1 No. 360 Cutter with E-1032 Cutter Wheel
- 1 Set 1/2" 3/4" Alloy Universal Dies
- 1 set 1" 2" Alloy Universal Dies

Thread

Direction

RH

RH

RH

RH

LH

RH

RH

RH/LH RH/LH

RH

RH

RH

RH

RH

RH

RH

Opened

O O

S.O. S.A. S.A.

Q.0.

Q.0. S.0.

Q.0.

Q.0.

Q.O. Q.O.

Q.0.

Q.O. Q.O.

Q.0.

Oil Thru

Yes

Dies

Used

Univ

Univ.

Univ.

Univ

Univ

Dual/Bolt

Univ

Univ.

Univ

500B 500B

Mono

Mono

Mono

Mono

Mono

Mono

Mono

Mono

Mono

Pipe

1/8 - 2

1/8 - 2

1/8 - 3/4

1-2

1/8 – 2 1/8 – 2

1/8 - 2

1/8

1/4

3/8 1/2

3/4

1-1/4

1-1/2

1/8 -

Bolt

1/4 - 2

1/4 - 2

 $\frac{1}{4} - \frac{2}{2}$ 

1-1/8 - 2

Used

(lbs)

12-1/2

13 13

13

12-1/2

12-1/2

13

12-1/2

7-1/2

6-3/4

7-1/4

7-1/4

8

8-1/2

1 Gallon Nu-Clear Threading Cutting Oil

Cat. No.	Model No.	Description	Wt. (Ibs)
Machines			
66947	300 Compact	1/2" - 2" NPT, 115V, 50/60 Hz	115
67182	300 Compact Kit	1/2" – 2" NPT, 115V, 50/60 Hz – includes Model 250 Folding Wheel Stand	160
73447	300 Compact	52RPM 1/2"-2" NPT, 115V, 50/60 Hz	115
75602	300 Compact Kit	52RPM 1/2"-2" NPT, 115V, 50/60 Hz - includes Model 250 Folding Wheel Stand	160
58752	300 Compact	1/2" - 2" BSPT, 230V, 50/60 Hz (Aust. Only)	115
58757	300 Compact	1/2" – 2" NPT, 230V, 50/60 Hz (Export Only)	115
Die Heads	3		
97075	815A	1/8" - 2" NPT, Self-Opening, RH	13
97065	811A	1/8" – 2" NPT, Quick-Opening, RH	13
97045	531	1/4" - 1" Bolt, Quick-Opening, RH/LH	8
97050	532	1-1/4" – 2" Bolt, Quick-Opening, RH/LH	9
84537	816	1/8" – 3/4" Seni-Automatic Die Head	13
84532	817	1" – 2" Semi-Automatic Die Head	13
Accessori	es		
67662	-	916 Groover Adapter Bracket for 300 Power Drive version of 916	30
51005	819	Nipple Chuck, 1/2" – 2" NPT	10.5
41620	_	Gearhead Motor Grease	1
Stands			
67657	250	Folding Wheel Stand	45
92457	100A	Universal Leg & Tray Stand	75
92462	150A	Universal Wheel & Tray Stand	103
92467	200A	Universal Wheel & Cabinet Stand	164

## Die Heads for 2" Threading Machines/Die Head Racks

#### **Die Head Differences**

- Self-Opening Automatic release for repeatable number of threads.
- Quick-Opening Manual release for user-specified thread lengths.
- Bolt Specially for bolt threader.
- Mono Dedicated to a specific size of thread.
- Semi-Automatic Can be quickly adjusted from size to size with manual release.



No. 815A Self-Opening



No. 811A Quick-Opening







Mono Die Head

#### 97045 531 532 97050 Machine Mono Die Heads Mono 42047 500A 42052 500A Mono 42057 42062 500A Mono 500A Mono 42067 500A Mono 42072 42077 500A Mono 500A Mono 42082 500A Mono Mono

### Die Head Racks For All Machine Die Heads

Die Head

Description

Universal

Universal

Universal

Universal

Universal

British Universal

British Universal

British Universal

Cat. No.	Model No.	Description	Weight (lbs)	
42485	4U	4 Heads	8-1/2	
42490	6U	6 Heads	12-1/2	

\* 535-535A-1822 Machines and 300 and 300-A w/carriage. Q.O. = Quick-Opening - Manually flip throwout lever to retract dies when thread length is cut.

S.A. = Semi Automatic (Dies retract automatically on depressing handle)

S.O. = Self-Opening - Trigger foot automatically retracts dies when thread length is cut. No. 811A Die Head replaces

the No. 811 and No. 841 Die Heads.

No. 815A Die Head replaces the No. 815 and No. 845 Die Heads.

No. 500A Die Heads replace the No. 500 Mono Die Heads.

No. 555 Die Head replaces No. 515.

Note: British Die Heads use British Dies only

Note: 531 and 532 Die Heads replace 500B Die Head. Individual Machine Die Heads do not include dies



No. 816/817 emi-Automatic Die Head





## Ridgid

## **Pipe Dies for Machine Die Heads**

Pipe Dies for use in Universal Die Heads (Nos. 504A, 711, 713, 811A, 815A, 816, 817 and 842)

			(NPT)				(N	PSM)	
		Nomi	Nominal Pipe Size - Threads Per Inch			Nominal Pipe Size - Threads Per Inch			ch
Die Material or Type		1/8"-27	1/4"-3/8"-18	1/2"-3/4"-14	1"-2"-11-1/2	1/8"-27	1/4"-3/8"-18	1/2"-3/4"-14	1"-2"-11-1/2
Alloy High-Speed	RH RH	47735 47755	47740 47760	47745 47765	47750 47770	- 47845	- 47850	- 47855	- 47860
High-Speed H.S. for Stainless Steel H.S. for Cast Iron	†LH RH RH	39587 47775 –	47810 47780 –	47815 47785 —	47820 47790 70740	- - -	- - -	- - -	- - -
H.S. for PVC H.S. for Plastic coated Pipe	RH RH		_ _	70745 50012	70750 31822	_ _		- -	_ _
† Requires left hand model die head.									

#### Pipe Dies for use in British Universal Die Heads (Nos. 504A, 811A, 815A, 856, 911 and 913)

			(BS	PT)			(B	SPP)		
		Nominal Pipe Size - Threads Per Inch				Nomi	Nominal Pipe Size - Threads Per Inch			
Die Material or Type		1/8"-28	1/4"-3/8"-19	1/2"-3/4"-14	1"-2"-11	1/8"-28	1/4"-3/8"-19	1/2"-3/4"-14	1"-2"-11	
Alloy	RH	*66655	*66660	*66665	*66670	_	_	_	_	
Alloy	†LH	_	*66720	*66725	*66730	_	_	_	_	
High-Speed	ŘН	*66750	*66755	*66760	*66765	*66795	*66800	*66805	*66810	
H.S. for Stainless Steel	RH	*66770	*66775	*66780	*66785	*66815	_	*66825	*66830	
H.S. for PVC	RH	_	_	*70755	*70760	_	_	_	_	
H.S. for PE-Coated	RH	_	_	*34007	_	-	_		_	
*Requires British Model D	ie Head.	Requires let	t hand model d	ie head.		•				

#### **Conduit Dies for Universal Die Heads**

		(ISO) (BEC) Nominal Conduit Size Pitch in mm Threads Per Inch				
Die Material or Type		16-32mm-1.5	40-63mm-1.5	5 1/2"-5/8"-18 3/4"-1-1/4"-16 1-1/2"-2-1/2"-		1-1/2"-2-1/2"-14
Alloy	RH	50645	50650	66700	66705	66710

#### Pipe Dies for use in 500A Mono Die Heads

					Nomina	ıl Pipe Size -	Threads Per I	nch		
Die Material or Type		1/8"-27	1/4"-18	3/8"-18	1/2"-14	3/4"-14	1"-11-1/2	1-1/4"-11-1/2	1-1/2"-11-1/2	2"-11-1/2
(NPT)										
High-Speed	RH	50700	50705	50710	50715	50720	50725	50730	50735	50740
H.S. for Stainless Steel	RH	50745	50750	50755	50760	50765	50770	50775	50780	50785
(NPSM)										
High-Speed	RH	-	_	-	50895	50900	50905	50910	50915	50920

### Pipe Dies for 1/4"-3/8" dual Die Heads (No. 502)

•		
		(NPT)
		Nominal Pipe - Threads Per Inch
Die Material or Type		1/4"-3/8"-18 TPI
High-Speed	RH	47940

### Pipe Dies for Nos. 514 (LH), 515 (RH), 555 (RH), and 1/2"-3/4" Dual Die Heads

		(NPT) Nominal Pipe - Threads Per Inch			Nomin	SPT) Ial Pipe - s Per Inch
Die Material or Type		1/8"-27	1/4"-3/8"-18	1/2"-3/4"-14	1/4"-3/8"-19	1/2"-3/4"-14
Alloy High-Speed H.S. for Stainless Steel	RH RH RH	47870 47885 47900	47875 47890 47905	47880 47895 47910	66955 66905 —	66880 66910 66920

### Pipe Dies for No.424 and 415 Die Head

		(NPT) Pipe Size-TPI	(NPSM) Pipe Size-
Die Material or Type		2-1/2"-3" x 8 TPI	2-1/2"-4" x 8 TPI
H.S.	RH	99545	94220

### Dies for Rebar, for use in 500B, 531, 532, 541 and 542 Die Head

	•		•		
Cat	. No.	Cat. Nos.			
U	NC	U	NC		
RH High-Speed	Rebar Size - TPI	RH High-Speed	Rebar Size - TPI		
34077	3/8"-16	85850	1"-8		
34082	1/2"-13	79120	1-1/8"-7		
34087	5/8"-11	85855	1-3/8"-6		
34092	3/4"-10				

## Ridgid

## **Bolt Dies for Machine Heads**

**Bolt Dies for Universal Die Heads** 

(Nos. 504A, 711, 811A, 815A, 816, 817 and 911 Die Heads)

(UI)	(UNC)		JNF)	(E	(BSW)	
Rod Size- TPI	RH High-Speed	Rod Size- TPI	RH High-Speed	Rod Size - RH TPI	RH High-Speed	
1/4"-20	48215	1/4"-28	48295	1/4"-20	*67880	
5/16"-18	48220	5/16"-24	_	5/16"-18	*67885	
3/8"-16	48225	3/8"-24	48305	3/8"-16	*67890	
7/16"-14	48230	7/16"-20	48310	7/16"-14	_	
1/2"-13	48235	1/2"-20	48315	1/2"-12	*67900	
9/16"-12	48240	9/16"-18	48320	9/16"-12	*67905	
5/8"-11	48245	5/8"-18	48325	5/8"-11	*67910	
3/4"-10	48250	3/4"-16	48330	3/4"-10	*67915	
7/8"-9	48255	7/8"-14	48335	7/8"-9	67920	
1"-8	48260	1"-14NS	48340	1"-8	*67925	
1-1/8"-7	48265	1"-12	48375	1-1/8"-7	-	
1-1/4"-7	48270	1-1/8"-12	48345	1-1/4"-7	*67935	
1-3/8"-6	48275	1-1/4"-12	48350	1-3/8"-6	_	
1-1/2"-6	48280	1-3/8"-12	48355	1-1/2"-6	*67945	
1-3/4"-5	48285	1-1/2"-12	48360	1-3/4"-5	_	
2"-4-1/2	48290	_	-	2"-4-1/2	67955	
* Requires Br	itish Model Die	Head.				

#### Bolt Dies for 500B, 532 and 542 Die Heads

(8 (	(8 UN)					
Rod Size- TPI	RH High- Speed					
1-1/8"-8	49215					
1-1/4"-8	49220					
1-3/8"-8	49225					
1-1/2"-8	49230					
1-3/4"-8	49240					
1-7/8"	49245					
2"-8	49250					
(12 UN)						
2"-12	49345					

### Bolt Dies for 500B and 531, 532, 541 and 542 Die Heads

	(UNC)		(UI)	IF)
Rod Size-	RH High-	LH High-	Rod Size-	RH High-
TPI	Speed	Speed	TPI	Speed
1/4"-20	48605	-	1/4"-28	48690
5/16"-18	48610	48915	5/16"-24	48695
3/8"-16	48615	48920	3/8"-24	48700
7/16"-14	48620	48925	7/16"-20	48705
1/2"-13	48625	48930	1/2"-20	48710
9/16"-12	48630	48935	9/16"–18	48715
5/8"-11	48635	48940	5/8"–18	48720
3/4"-10	48640	48945	3/4"–16	48725
7/8"-9	48645	48950	7/8"–14	48730
1"-8	48650	48955	1"–12	48735
1-1/8"-7	48655	48960	1"–14NS	49305
1-1/4"-7 1-3/8"-6 1-1/2"-6 1-3/4-5 2"-4-1/2	48660 48665 48670 48675 48680	48965 48970 48975 - 48985	1-1/8"-12 1-1/4"-12 1-3/8"-12 1-1/2"-12	48740 48745 - 48755

For use w/ 531, 541 and 500B 1/4" - 1" Die Heads

> For use w/ 532, 542, and 500B 1-1/8" – 2" Die Heads

(UNC)				
Rod Size - TPI	RH High- Speed			
1/4"-20	_			
5/16"-18	-			
3/8"-16	67615			
7/16"-14	67620			
1/2"-12	67625			
9/16"-12	-			
5/8"-11	67635			
3/4"-10	67640			
7/8"–9	67645			
1"-8	67650			
1-1/8"-7	67655			
1-1/4"-7	67660			
1-3/8"-6	67665			
1-1/2"-6	_			
1-5/8"-5	67675			
1-3/4"-5	-			
1-7/8"-4-1/2	67685			
2"-4-1/2	-			

For use w/ 531, 541 and 500B 1/4" - 1" Die Heads

> For use w/ 532, 542, and 500B 1-1/8" – 2" Die Heads

Acm	е	(S.I.) Se	ries A Metr	ic	Series B Metric (ISO) Intn'I.		(ISO) Intn'I. St	ands. Organ.
Rod Size- TPI	RH High- Speed	Rod Size- Thread Pitch In. mm	RH High- Speed	LH High- Speed	Rod Size- Thread Pitch In. mm	RH High- Speed	Rod Size- Thread Pitch In. mm	RH High- Speed
_	-	M6-1.0	49795	49845	-	-	M6-1.0	50040
_	-	M7-1.0		49850	_	-	M7-1.0	
	-	M8-1.25	49805	-	_	-	M8-1.25	50050
_	-	M9-1.25	-	-	_	-	M9-1.25	-
_	-	M10-1.5	49815	-	M10-1.0	50560	M10-1.5	50060
-	-	M11-1.5	49820	49870	_	-	M11-1.5	-
3/4"-6	49610	M12-1.75	49825	49875	M12-1.5	85865	M12-1.75	50070
_	-	M14-2.0	49830	_	M14-1.5	_	M14-2.0	50075
-	-	M16-2.0	49835	-	M16-1.5	50575	M16-2.0	50080
_	-	M18-2.5	49840	49890	_	-	M18-2.5	50085
_	_	M20-2.5	50480	49895	M20-1.5	50585	M20-2.5	50090
_	-	M22-2.5	50485	49900	M22-1.5	50590	M22-2.5	50095
1"-5	49585	M24-3.0	50490	49905	M24-2.0	85870	M24-3.0	50100
_	_	M25-3.0	50495	-	_	_	M27-3.0	50105
1-1/16"-5	-	M26-3.0	-	-	_	-	M30-3.5	50110
_	_	M27-3.0	50500	_	M27-2.0	_	M33-3.5	50115
-	_	M30-3.5	50505	49915	M30-2.0	_	M36-4.0	50120
1-1/4"-5	49600	M33-3.5	50510	-	_	-	M39-4.0	50125
_	_	M36-4.0	50515	49925	_	-	M42-4.5	50130
1-3/8"-4	_	M39-4.0	50520	49930	_	_	M45-4.5	-
-	-	M42-4.5	50525	-	_	-	M48-5.0	50140
_	-	M45-4.5	50530	-	-	-	M52-5.0	_
-	_	M48-5.0	50540	_	_	_	_	-
_	-	M50-5.0	50545	-	_	-	_	_
_	_	M52-5.0	50550	-	=	-	-	_

For use w/ 531, 541 and 500B 1/4" – 1" Die Heads

For use w/ 532, 542, and 500B 1-1/8" – 2" Die Heads

## **Model 1224 Threading Machine**

#### Capacity:

Pipe: 1/4" - 4" 4" - 6" with 161 Geared Threader Bolt: 1/4" - 2"

#### **Features**

- Threads 1/4" 2" pipe at 36 RPM and 2-1/2" 4" at 12
- RPM.
- The 1224 threads a wide range of pipe including black, galvanized and plastic-coated pipe, together with stainless steel, IMC and heavy-wall conduit, as well as rod up to 30 Rockwell C.



- An induction motor helps insure sound levels well within the limits set by the regulating authorities.
- A special capacitor-start/capacitor-run motor allows the 1224 to thread a full range of material where voltage drop is experienced.
- 1/4" 2" Universal Die Head; 2-1/2" 4" receding die head allows cutting of tapered or straight NPT/NPSM or BSPT/BSPP threads.
- Constant and proper lubrication of dies and workpiece with through-head oiling.
- CSA Approved

#### **Technical Specifications**

Motor: 1-1/2 HP single-phase, 60 Hz or 50 Hz, induction type. Motor Control: Reverse/off/forward, heavy-duty rotary-type and integral foot switch.

Spindle Speed: 36/12 RPM.

Gear Box: Two-speed gear box 3:1 ratio.

Chuck: Hammer-type with replaceable rocker-action jaw inserts.

Rear Centering Device: Cam-action.

Cutter: Model 764 full-floating, self-centering 1/4" - 4"

with F-229 cutter wheel.

**Reamer:** Model 744, 1/4" - 4" blade-type.

Oiling: Through-die head.

Pump: Self-priming, geroter-type, automatic reversing, constant-flow.

#### STANDARD EQUIPMENT

Model No. 1224 threading machine with foot switch

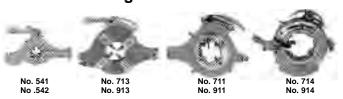
- 1 No. 714 (914) 2 1/2"- 4" receding self-opening die head.
- 1 No. 711 (911) 1/4"- 2" universal self-opening die head.
- 1 Set 1/2"- 3/4" universal alloy dies.
- 1 Set 1" 2" universal alloy dies.
- 1 Set 2 1/2"- 4" 1224 high-speed dies.
- 1 No. 764 cutter.
- 1 No. 744 reamer.
- 1 Spare F-229 cutter wheel.
- 1 Gallon Nu-Clear oil.
- 3 Hex keys.
- 1 3/4" combination wrench.
- 1 Tool box.

Cat.	Model		Wt.
No.	No.	Description	(lbs)
26092	1224	1/2 - 4 NPT 120V 60Hz	509
26097	1224	1/2 - 4 NPT 240V 60Hz	509
26127	1224	1/2 - 4 BSPT 120V 60Hz	509
26112	1224	1/2 - 4 BSPT 115V 50Hz	509
26122	1224	1/2 - 4 BSPT 240V 60Hz	509
26107	1224	1/2 - 4 BSPT 220V 50Hz	509
26102	1224	1/2 - 4 BSPT GS 220V 50Hz	526
31442	1224	1/2 - 4 NPT 220V 50Hz	509

## Ridgid

Cat. No.	Model No.	Description	Wt. (lbs)
92457	100A	Universal Leg & Tray Stand	75
92462	150A	Universal Wheel & Tray Stand	103
92467	200A	Universal Wheel & Cabinet Stand	164
67657	250	Folding Wheel Stand	45
22563	_	Steel Čabinet	42

## Power Threading/Model 1224



#### Die Heads for Model 1224

Die neaus ioi		Woder 1224		
Cat No	Model No	Description	Capacity (in)	Weight (lb)
26132	711	Universal Self-Opening R.H. NPT	1/4 - 2	12-1/2
26142	713	Universal Quick-Opening L.H. NPT	1/4 - 2	12-1/2
26152	714	Receding Self-Opening R.H. NPT	2-1/2 - 4	30
26137	911	Universal Self-Opening R.H. BSPT	1/4 - 2	12-1/2
26147	913	Universal Quick-Opening L.H. BSPT	1/4 - 2	12-1/2
26157	914	Receding Self-Opening R.H. BSPT	2-1/2 - 4	30
26162	541	Quick-Opening Bolt L.H./R.H.	1/4 - 1	7-1/2
26167	542	Quick-Opening Bolt L.H./R.H.	1-1/8 - 2	9-1/2
55447	725	Cut-Grooving Die Head	2-1/2 - 4	30
57497	-	2 1/2"-3 1/2" Grooving Die Set	2-1/2 - 3/12	2
57507	-	2 1/2"-3 1/2" Grooving Bit only	_	_
57492	ı	4" Grooving Die Set	4	2
57502	-	4" Grooving Bit only	_	_
55452	766	Blade Type Cutter	3/4 - 4	21
58712	_	Cut-Off Tool Bit	_	_

Note: Die Heads do not include dies. All Die Heads are through-head oiling.

#### Pipe Dies 2-1/2 - 4"

Cat No	Model No	Capacity (in)	Weight (lb)
26192	1224 H.S. Dies NPT	2-1/2 - 4	2-1/4
33642	1224 H.S. Dies BSPT	2-1/2 - 4	2-1/4
31827	1224 H.S. NPT Dies for Plastic-Coated Pipe	2-1/2 - 4	2-1/4
31832	1224 H.S. BSPT Dies for Plastic-Coated Pipe	2-1/2 - 4	2-1/4
32237	1224 H.S. Dies NPT for PVC	2-1/2 - 4	2
32242	1224 H.S. Dies BSPT for PVC	2-1/2 - 4	2
33057	1224 H.S. Dies NPT for Stainless Steel	2-1/2 - 4	2
33072	1224 45° Beveling Dies	2-1/2 - 4	2
33077	1224 37 1/2° Beveling Dies	2-1/2 - 4	2
44992	1224 Bevel Guide Set	2-1/2 - 4	2
44997	1224 37 1/2° Bevel Bit Only	_	_
45002	1224 45° Bevel Bit Only	_	_

Note: NPSM threads are made with NPT dies by adjusting the die head. See manual for details.

#### Accessories

	7.0000001100					
Cat No	Model No	Description	Capacity (in)	Weight (lb)		
26212	764	1/4"-4" Wheel-Type Cutter	_	_		
26217	744	1/4"-4" Blade-Type Reamer	_	_		
34577	_	1/4"-4" Reamer Blade	_	_		
26187	_	Jaw Insert and Roll Set for PE-Coated Pipe	_	_		
51005	819	Nipple Chuck	1/2- 2	10-1/2		
34157	419	Nipple Chuck 2 1/2" NPT	_	_		
34162	419	Nipple Chuck 3" NPT	_	_		
34167	419	Nipple Chuck 4" NPT	_	_		
34172	419	Nipple Chuck 21/2" BSPT	_	_		
34177	419	Nipple Chuck 3" BSPT	_	_		
34182	419	Nipple Chuck 4" BSPT	_	_		
61122	840A	Universal Drive Shaft	_	_		
26707	_	Gear Grease (1224 & 1822)	_	_		

Hand Tools

## Ridgid

## 819 Nipple Chuck Kit

- · Holds short or close nipples for threading.
- For use with 300 Power Drive, 535 and 1822 (with adapter kit) and 1224 Threading Machines.
- Standard Nipple Chuck includes insert and 5 adapters: 1/2", 3/4", 1", 1-1/4" & 1-1/2". (Nipple Chuck body serves as 2" Adapter.)



ſ	Cat. No.	Model No.	Description	Wt. (lbs)
	51005	819	NPT Nipple Chuck 1/2" - 2"	10
	68160	819	BSPT Nipple Chuck 1/2" – 2"	10
	51020	D-380-X	Nipple Chuck Wrench	1/4
	35867	839	Adapter Kit for 1822 Machine	16-1/2
	62457	1219	NPT Nipple Chuck for 1215	5-3/4
	62462	1219	BSPT Nipple Chuck for 1215	5-3/4

## **Pipe Adapters**

For use with No. 819 Nipple Chuck to allow close nipple threading of all sizes of pipe smaller than 2 inches.

	NPT Standard		BSPT	Standard	
Size (in)	Cat. No.	Model No.	Cat. No.	Model No.	Wt. (lbs)
1/8 1/4	51040 51045	E-729 E-730	- 68195	– E-730-B	1/2 1/2
3/8	51050	E-731	68200	E-731-B	1/2
1/2 3/4	51055 51060	E-732 E-733	68165 68170	E-732-B E-733-B	1/2 1/2
1	51065	E-734	68175	E-734-B	1/2
1-1/4 1-1/2	51070 51075	E-735 E-736	68180 68185	E-735-B E-736-B	1/2 1/2

## **Beveling Dies**

For beveling pipe prior to welding. A set of beveling dies consists of three guide segments and one cutting segment.

Cat No.	Description	Pipe Size (in)	Used in Die Head	Wt
52192	37 1/2° Bevel Die Set	1/2-3/4	Universal	1
50960	37 1/2° Bevel Die Set	1-2	Universal	1
52202	45° Bevel Die Set	1/2-3/4	Universal	1
50965	45° Bevel Die Set	1-2	Universal	1

**Cut Grooving Dies**To cut groove pipe for mechanical type couplings, consult chart for sizes and die head information.

Cat No.	Description	Pipe Size (in)	Used in Die Head	Wt
52217	Grooving Die Set	1/2-3/4	Universal	1
50985	Grooving Die Set	1-2	Universal	1

Note: 2 1/2-4 Beveling Dies are available for the No. 1224 threading Machine. See accessories for No. 1224. Note: Universal Dies fit all Universal Die Heads.

### PIPE FABRICATION

#### Roll Groover/Model No. 915

The new RIDGID 915 Roll Groover is a manual roll groover for in-place field applications. The 915 requires only 3-1/2" of clearance to travel around a pipe and a minimum of 2 3/4" of exposed pipe for grooving. With the appropriate roll sets, the 915 can groove from 1 1/4" to 12" pipe, the widest range in its class! The 915's cast-in handle allows for easy transport or chaining the groover down



to prevent theft. The 915 is a must for service work crews.

#### - continues -

#### Roll Groover/Model No. 915 (continued)

#### Features:

- Lightweight design only 23 pounds.
- Easy roll set change out up to 12" pipe capacity in one unit for service versatility.
- Cast-in carrying handle easy to transport or lock up to prevent theft.
- Included ratchet 90 degree bend-in handle makes grooving easier.
- Available customized tool box holds 915 groover and all available roll sets.
- Easy to use depth setting gauge helps make accurate grooves.

#### Specifications:

Capacity: 1-1/4" - 12" Sch. 10 Steel and Stainless Steel Pipe 1-1/4" - 6" Sch. 40 Steel Pipe, 1-1/4"-2" Sch. 40 Stainless Steel Pipe

Operation: Feed screw with 1/2" ratchet wrench (included).

Weight: 23 lbs. including ratchet

#### Standard Equipment:

915 Roll Groover with 2" - 6" Sch. 10 (2" - 3 1/2" Sch. 40). Roll Set Ratchet Wrench

Cat No	Model No	Description	Weight (lb)
88232	915	915 Roll Groover with 2" - 6" Sch. 10 (2" - 3 1/2" Sch. 40) Roll Set	23
92437	_	Drive and Groove Roll Set for 11/4" - 11/2" Sch. 10 or 40 Steel, Stainless Steel, PVC	2
92447	-	Drive and Groove Roll Set for 4" - 6" Sch. 40 Steel, Stainless Steel, PVC	4-1/2
92442	-	Drive and Groove Roll Set for 8" - 12" Sch. 10 Steel, Stainless Steel, PVC	4-1/2
92452	-	Drive and Groove Roll Set for 2" - 8" Copper Tube Type K, L, M, and DWV	2
93497	-	915 Tool Box	21-1/2
76827	-	Metric Diameter Tape	1/2
76822	_	English Diameter Tape	1/2

### Roll Groover/Model No. 916

The RIDGID Model 916 Roll Groover is the most durable and efficient lightweight portable unit available. Built with a solid, durable cast-iron housing, it withstands heavy usage, yet is light enough for easy transportation. The 916 features a patented single stroke feed mechanism that allows for accurate operation quickly and effortlessly.

- · Specifically designed for field service roll grooving applications.
- · Quick and easy mount to RIDGID Nos. 300 Power Drive, 535 or 1822 Threading Machines.
- Cam-type feed actuation translates into minimum operator effort to form roll grooves.
- Durable cast-iron housing withstands extensive field use.
- · Depth adjustment screw separate from feed mechanism allows for consistent groove depth.
- · Lightweight, only 33 lbs., allows for easy transport and storage.
- Integral feed handle is part of overall unit. No extra tools required.
- Optional Roll Sets for: Copper 2"- 6" (Types K, L, M, DWV), 1" Sch. 10, 40 steel pipe.
- Optional 11/4"-11/2" and 2"- 6" AWWA Roll Sets.
- Easy serviceability drive and groove rolls are easy to change.

– continues –





#### Roll Groover/Model No. 916 (continued)

Capacity: - 1 1/4"- 6" Sch. 10 steel, stainless steel, PVC.

- 1 1/4"- 3" Sch. 40 steel, stainless steel, PVC.

- 2"- 6" Copper (type K, L, M, DWV) optional.

Weight: 33 lbs.

Standard Equipment: One 1 1/4"- 6" Roll Groove Set for steel

(1 1/4"-6" schedule 10, 1 1/4"-3" schedule 40).

Cat No	Model No	Description	Weight (lb)		
45007	916	Roll Groover for 300 Power Drive	33		
46852	916	Roll Groover for Copper Tubing for 300 Power Drive	34		
60382	916	Roll Groover for 535	33		
48307	916	Roll Groover for 1822	33		
Accessor	Accessories				
45347	_	Roll Set for 1" Sch. 10, 40	6		
45352	_	Roll Set for Copper (optional)	6		
69667	_	Roll Set for 11/4"-11/2" AWWA (optional)	6		
69692	_	Roll Set for 2"-6" AWWA (optional)	6		
67662	_	Adapter Bracket for 300 Compact	30		
76822	_	English Diameter Tape	1/2		
76827	_	Metric Diameter Tape	1/2		

## Hydraulic Roll Groover/Model No. 918

The RIDGID Model 918 Hydraulic Roll Groover features a powerful 15-ton hydraulic ram in a compact, easy to transport unit. With one man set-up and operation, the 918 is the ideal groover for job site requirements. The 918 mounts quickly to RIDGID 300 power drive, 535, 1822, or 1224 Threading Machines. Designed to provide maximum efficiency, the 918 is capable of grooving up to 12" Schedule 10 and 8" Schedule 40 standard wall pipes. Roll Set changeout is accomplished in seconds.

### Specifications:

#### Capacity:

- 1" 12" Schedule 10 steel, stainless steel, PVCI
- 1" 8" Schedule 40 steel, PVC
- 1" 2" Schedule 40 stainless steel
- 2" 6" Copper (Types K, L, M, DWV)
- 2-1/2" 6" Schedule 80 PVC

# Weight: 81 lbs. Standard Equipment:

- One (1) 2" 6" Schedule 10/40 Roll Set
- One (1) 8" 12" Schedule 10 (8" Schedule 40) Roll Set
- Tools for Roll Set change
- One (1) Carry case for Roll Sets

Cat. No.	Model No.	Description	Wt. (lbs)
48297	918-1	918 Roll Groover w/300 Power Drive Mount Kit	104
48377	918-2	918 Roll Groover w/1822 Carriage Mount Kit	134
48382	918-4	918 Roll Groover w/1224 Carriage Mount Kit	131
48387	918-5	918 Roll Groover w/535 Carriage Mount Kit	117
47222	918 Only	918 Roll Groover Only	95
		Mounting Kit Only	
48292	911	300 Power Drive Mount Kit Only	9
48392	912	1822 Carriage Mount Kit Only	39
48397	914	1224 Carriage Mount Kit Only	36
48402	915	535 Carriage Mount Kit Only	22
		918 Accessories	
48405	_	Roll Set for 8"-12" Sch. 10(8" Sch. 40) with carry case	18
48407	_	Roll Set for 1 1/4" to 1 1/2" Sch. 10/40.	10
		Tool box includes drive shaft, bolt and tools	
48412	_	Roll Set for 1" Sch. 10/40, and 1-1/4" to 1-1/2"	20
		Sch. 10/40. Tool box includes drive shaft, bolt and tools	
48417	_	Roll Set for copper (2" – 6")	10
59992	_	2-1/2" – 12" Stabilizer for grooving nipples.	
		For 918 w/300 Mounting Kit or 918-I	11
49662	_	Tool Box	4.8
50272	_	Ridgid Hydraulic Oil 1 Qt	
76822	_	English Diameter Tape	0.3
76827		Metric Diameter Tape	0.3
Note: A Ro	II Set consists	of a Groove Roll and a Drive Roll.	

## Ridgid

## Hydraulic Roll Grooving Machine/ Model 918-I

The RIDGID Model 918-I Roll Grooving Machine is capable of grooving 1" to 8" schedule 40 and 1" to 12" schedule 10 pipe faster than any roll grooving machine in its class. Powered by a 1.2 HP universal motor and heavy duty transmission, the 918-I produces high quality grooves consistently and effortlessly.

The 918-I comes standard with a rugged wheel stand built for mobility in the shop without compromising stability. The stand's tray is tough enough to support 200 lbs.

The 918-I uses a custom-designed, two-stage hydraulic pump that minimizes pipe flare, operator fatigue and hydraulic fluid leaks.

#### Features:

- Fastest roll groove time in its class.
- Offers maximum versatility in roll grooving capacities (see specifications below).
- Custom engineered 2-stage, 15-ton hydraulic pump and ram eases grooving and reduces flare and operator's fatigue.
- Produces consistent, high quality roll grooves.
- 115V approved by CSA to CSA and UL standards.

#### Specifications:

1" - 12" Schedule 10 steel

1" - 8" Schedule 40 steel

2"-6" Copper (Types K, L, M, DWV)

2-1/2" - 6" Schedule 80 PVC

Weight: 185 lbs.

Motor: Universal 1.2 HP, 115v 60 Hz

Motor Control: On/Off Heavy-Duty

with Foot Switch **RPM:** 45 (no load)

#### Standard Equipment

- One (1) 2" 6" Schedule 10/40 Roll Set
- One (1) 8" 12" Schedule 10 (8" Schedule 40) Roll Set
- One (1) Tools for Roll Set changeout
- One (1) Carry case for Roll Sets
- One (1) Heavy-Duty Wheel Stand with Tray
- One (1) Foot Switch
- One (1) 1" 12" Stabilizer for Grooving Nipples

Cat. No.	Model No.	Description	Wt. (lbs)
64977	918-I	Roll Grooving Machine complete. 115v	185
65902	918-I	Roll Grooving Machine complete. 230v (Export only)	185
		Accessories	
48405	-	Roll Set for 8" - 12" Sch 10 (8" Sch 40) w/Carry Case	18
48407	-	Roll Set for 1-1/4" - 1-1/2" Sch 10/40 w/Carry Case	10
48412	-	Roll Set for 1" Sch 10/40 and 1-1/4" - 1-1/2"	20
		Sch 10/40 w/Carry Case	
48417	_	Roll Set for 2" – 6" Copper	10
59992	_	1" – 12" Stabilizer for Grooving Nipples	11
76822	_	English Diameter Tape	0.3
76827	_	Metric Diameter Tape	0.3
Note: A Ro	II Set consis	ts of a Groove Roll and a Drive Roll.	

## **Ridgid**

## Dry Cut Saw/Model 614

The Model 614 features carbide-tipped blades to cut different materials and geometric configurations without cutting fluid. Cutting with the Model 614 generates no burr, abrasive dust or heat, providing clean and fast cuts on steel, copper, plastic and wood. Either straight or miter, the Model 614 offers the largest cutting capacity in its class.

#### **Specifications**

- Powerful 15A Motor
- Miter cut up to 45°
- Blade dimensions 14" x 80T x 00087" x 1"
- Spindle lock
- Dust collector
- · Built-in maintenance tools
- Exclusive quick-acting vise

#### Standard Equipment

One (1) dry cut saw with quick acting vise

One (1) 14" - 80 tooth blade (installed)

Two (2) Maintenance Tools

Cat No	Model No	Description	Weight	
71687	614	Dry-Cut Saw, 115V, 60Hz	47	
72862	614	Dry-Cut Saw, 230V, 60Hz	47	
Blades for Model 614				
71697		12" Carbide-Tipped Blade 60 Tooth	2	
71692		14" Carbide-Tipped Blade 80 Tooth	3	

#### **Model 614 Capacity**

	Workpiece Geometry			
<b>Cutting Angle</b>	Circle	Rectangle	Square	
90° Cuts	5-1/8" O.D.	3-3/4" x 7"	4-3/4" x 4-3/4"	
45° Cuts	4-1/8" O.D.	3-1/3" x 4"	4-3/4" x 4-3/4"	

## Power Pipe Cutter/Model 258 & 258XL

The RIDGID Model 258 Power Pipe Cutter cuts 21/2" to 8" schedule 10\*/40 steel pipe, galvanized pipe, rigid conduit etc. at the job site or in the shop. Powered by the RIDGID No. 700 Power Drive, the 258 is a displacement cutter that provides square cuts. The operator controls the feeding rate by pumping the Model 258 hydraulic foot pump throughout the operation. A square cut with minimal burr on either 21' or nipple lengths of pipe is achieved quickly\*\* without abrasive dust, sparks,

or open flame. Also, the RIDGID Pipe Roller for beveling can be used to rotate the pipe while a second operator uses a grinder to bevel the pipe.

#### Features:

- Square cut 21' or nipple lengths of pipe without effort.
- Easily cuts by displacing instead of removing pipe material.
- No abrasive dust, dangerous sparks, or open flame.
- · Quickly cuts steel pipe with minimal burr.
- Great for cutting pipe for groove joining.
- Heavy-duty design is perfect for field or shop use.
- Adaptable for beveling.

#### Specifications:

Cutting Capacity: Model 258 2-1/2" to 8" schedule 10\*/40 steel pipe Model 700 Power Drive (not included)
Power Drive RPM: 26-30 (no load)

Weight: 105 lbs. (excludes No. 700 Power Drive)

#### Standard Equipment:

One (1) Ridgid 774 Square Drive Adapter One (1) 8-1/2" HD Cutter Wheel Assembly

One (1) Hydraulic ram and foot pump Two (2) 2-1/2" to 12" Ball Transfer Pipe Supports

- \* Use the thin cutter wheel for best results
- \*\*Cutting time varies with pipe schedule and diameter

Note: Models 258 and 258XL are not recommended to cut cast iron pipe For optimum wheel life always properly support the work piece with Ball Transfer pipe supports.

**The Ridgid 258XL** offers 8"-12" diameter pipe cutting capacity. Utilizing displacement type cutter wheel technology, the design enables larger diameter pipe to be cut to length. The 258XL also uses the RIDGID 700 Power Drive to rotate the heavy-duty cutter wheel. Now one person can easily square cut 12" schedule 40 pipe in minutes.

#### Specifications:

Cutting Capacity: Model 258XL

8" - 12" schedule 10\*/40 steel pipe

No. 700 Power Drive (not included) RPM: 26-30 (no load)

Weight: 140 lbs. (excludes No. 700 Power Drive)

#### Standard Equipment

- One (1) Ridgid 774 Square Drive Adapter
- One (1) 8-1/2" HD Cutter Wheel Assembly
- One (1) Hydraulic ram and foot pump

Two (2) 2-1/2" to 12" Ball Transfer Pipe Supports.

\*Use the thin cutting wheel for best results.

Note: For optimum wheel life properly support the work piece with standard Ball transfer pipe supports.

Cat. No.	Model No.	Description	Wt. (lbs)
50767	258	2-1/2" - 8" Pipe Cutter	105
58227	258-XL	8" - 12" Pipe Cutter	140
Note: 700	Power Drive	not included.	
		Accessories	
66687	-	8-1/2" HD Cutter Wheel Assembly (includes HD Cutter Wheel, hub w/pins, cover plate)	13
50812	E-258	8-1/2" HD Cutter Wheel only	2
58222	E-258-T	8-1/2" Thin Wall Cutter Wheel Only (PVC & Steel)	2 2
54397	_	Transport Cart	24
60002	258PS	Pipe Support 2-1/2" – 12"	7
60007	_	Replacement Ball Transfer Head Set	5-1/2
61757		Pipe Roller for Beveling (for Model 258 only)	13

## Hole Cutting Tool/Model HC-300

The RIDGID Model HC300 Hole Cutting Tool is designed to cut holes up to 3" diameter into steel pipe. The multiple hole size allows the use of fittings such as Mechanical T®, Hookers®, Vic-O-Let™, Weld-O-Let™ and others for branching unpressurized pipelines.

The HC300 features a 1/2" capacity chuck to accommodate all sizes of holes up to 3" diameter and standard

hole saw arbors up to 7/16" Hex (1/2" chuck size).

An integral motor and gear reduction optimizes the performance and saw life in the capacity range. A single-feed handle and ON/OFF switch allows for easy operation. The compact two-piece design allows the HC300 to be used in tight quarters and difficult-to-reach locations.

The Model HC300 offers great features that translate into unparalleled field and shop performance.

- Quick Connecting Two-piece Design. This unique design allows for easy
  mounting, transport and set up. In addition, weighing only 31 lbs., the
  unit can be broken down into two lighter weight units for maximum
  transport and operation comfort. This is particularly useful when working
  off a ladder or overhead
- Single-hand Chain Latching. The Model HC-300 features a patent pending spring-loaded chain that saves time and significantly aids set up and operation.

**Hand Tools** 



## Ridaid

- Single-hand Chain Latching. The Model HC300 features a springloaded chain that saves time and significantly aids set up and operation.
- Ergonomic Design. With all controls at the operator's fingertips, the tool has been designed for maximum productivity.
- High Speed. With a powerful 1.2HP, 11 amp motor, the Model HC300 delivers 360 RPM to quickly bore holes while optimizing hole saw life.
- · Horizontal and vertical flats to ensure perpendicular cutting.

Specifications:

Motor: Universal, 110V or 230V 25-60Hz 11 amp, 1.2 HP, UL/CSA listed.

RMP: 360 (no load)

Hole Cutting Capacity: up to 3" Chuck Size: 1/16" - 1/2"

Pipe Diameter Mounting Range: 1-1/2" - 8"

Weight: 31 lbs. Height: 12.8" Length: 11.9" Width: 13.2"

**Standard Equipment:** 

One (1) Hole Cutting Tool (Base and Motor Assembly)

One (1) Chuck Key

#### Accessories:

- Hole Saws
- R300 Solid Shank Arbor
- Carrying Case

Cat. No.	Model No.	Description	Wt. (lbs)
76777	HC-300	3" Hole Cutting Tool 115V	31
76787	HC-300	3" Hole Cutting Tool 230V	31
76792	HC-300-J	3" Hole Cutting Tool 100V	31
16671	R2S	Solid Shank Arbor	3/4
84472	_	HC-450/HC-300 Carrying Case	19
77017	-	Chuck Key	1/4
		a hot tapping tool. en drilling 1-1/4" and larger holes	

## Hole Cutting Tool/Model HC450

The RIDGID Model HC450 is engineered for continuous 1/4" to 4-3/4" hole cutting in and up to 8" diameter steel unpressurized pipe. The built-in level ensures line up for multiple holes when branching lines using Mechanical T, Vic-O-Let fittings or welded saddles. Dual-side feed handles and switches provide easier operation from any angle. In addition, the HC450's heavy-duty chuck accommodates 1/8" to 5/8" arbors. The HC450 is ideal for



and fire protection contractors since it cuts holes into a wide variety of pipe materials. No off-the-shelf drill-based hole cutter compares in performance or durability to the rugged purposed-built Model 450.

- 13 amp 1.2 HP worm-gear driven motor delivers unmatched hole cutting power for schedule 10, 40 and 80 pipe.
- Engineered for 1/4" to 4-3/4" continuous dry or oiled hole cutting.
- Quickly mounts onto 1-1/4" to 8" diameter pipe.
- RPM maximizes holesaw life and does not spray lubricant or chips.
- Only 11-1/2" high for low clearance jobs.
- · Dual-side controls provide easy operation.
- GFCI and a built-in breaker for operator protection.
- Chuck accommodates 1/8" to 5/8" arbors.
- Two carrying handles ease mounting and alignment.
- Built-in level for multiple hole alignment.

#### Specifications:

Motor: Universal, 115V or 220V 25-60Hz 13 amp, 1.2 HP, UL/CSA listed

RPM: 110 (no load)

- continues -

Hole Cutting Tool/Model HC450 (continued)

Hole Cutting Capacity: up to 4-3/4"

Chuck Size: 5/8"

Pipe Diameter Mounting Range: 1-1/4" to 8"

Weight: 42 Lbs. Height: 11-1/2" Length: 17" Width: 17"

#### Standard Equipment:

One (1) Hole Cutting Tool

One (1) 5/8" Arbor only for Hole Saws

One (1) Chuck Key

Cat No	Model No	Description	Weight (lb)		
57592	HC450	4-3/4" Hole Cutting Tool 110V, 50/60 Hhz	42		
57597	HC450	4-3/4" Hole Cutting Tool 220V, 50/60 Hhz	42		
57602	HC450-J	4 3/4" Hole Cutting Tool - Japan 100V, 50/60 Hhz	42		
Accessor	Accessories				
84427	-	HC450 Carry Case	19		
59502	R4	5/8" Arbor only for Hole Saws	1/4		
59132	_	Chuck Key	1/4		

Note: The HC450 is not a hot tapping tool.

## Mini Tapping Tool/Model RT1000

The Model RT1000 Mini Tapping Tool is ideal for branching pressurized water lines. With 1" tapping capacity and the ability to drill into most pipe materials, the lightweight compact and corrosion-resistant design of the RT1000 is the perfect tool for branching pressurized pipe when system shut down is out of the question.

#### Features

· Compact and lightweight, the tool is great for tight quarters and awkward locations.



- · Sturdy machined construction and corrosion-resistant materials combine to provide dependable lifelong operation.
- Independent cutter feed mechanism gives the operator full control of drilling to optimize cutter performance and service life.
- Taps steel, cast iron, ductile iron and plastic pipe.
- Coupon retaining bits give you the confidence that the coupon will not be dropped in the pipe, preventing medium contamination or possible damage of downstream equipment.

#### Specifications:

Tapping Capacity: 3/4 - 1"

Mounting: Saddle, Welded Nipple, Weld-o-let, Thread-o-let Activation: Hand Ratchet, Air Ratchet, Right angle Drill Cutter Feed: Rotation of sleeve around an acme threaded barrel

Pressure: Water, 150 psig @ 100°F Steam, Air - 100 psig @ 370°F

#### Standard Equipment:

Model RT1000 Mini Tap Tool

- RT1000 Tapping Tool Only.
- 3/4", 1" CTS Corporation Adapter.
- Small Shaft Extension.
- · Small Saw Arbor.
- 1/4" Pilot Bit.
- · Ratchet Wrench.
- (2) Spud Wrenches.
- Tool Box.

Note: Cutters are not included. Note: The RT1000 uses the same drills and hole saws as the RT3422 and the MLT3401 saddle tapping tool. The RT1000's maximum capacity is 1".

– continues –

## Ridgid

#### Mini Tapping Tool/Model RT1000 (continued)

Cat. No.	Model No.	Description	Wt. (lbs)
83567	RT1000	RT1000 Tapping Tool CTS Set	16
83302	RT1000	RT1000 Tapping Tool Only	6
83307	_	RT 1000 Tool Box	7
76022	_	Ratchet Wrench	2
83317	_	3/4" CTS Adapter	0.3
83322	-	1" CTS Adapter	0.3
83337	-	3/4" NPTM Adapter	0.3
83342	_	1" NPTF Adapter	0.3
83347	_	1" NPTM Adapter	0.3
83327	_	3/4" Mueller 110 Compression Adapter	0.3
83572	_	1" Mueller 110 Compression Adapter	0.3

Hole Saws         Model No.         DIA (in)         Type           52760         M16         5/8         Bi-Metal           52780         M24         7/8         Bi-Metal	Cutters	ers		
	<b>Hole Saws</b>	Saws Model No.	DIA (in)	Туре
52780 M24 7/8 Bi-Metal	52760	60 M16	5/8	Bi-Metal
	52780	'80 M24	7/8	Bi-Metal
76267 – 5/8 Steel Shell	76267	.67 –	5/8	Steel Shell
76272 – 7/8 Steel Shell	76272	72 –	7/8	Steel Shell
76292 – 5/8 CI-DI Bit	76292	.92 –	5/8	CI-DI Bit
76297 – 7/8 CI-DI Bit	76297	.97 –	7/8	CI-DI Bit
76317 – 5/8 Plastic Shell	76317	17 –	5/8	Plastic Shell
76322 – 7/8 Plastic Shell	76322	22 –	7/8	Plastic Shell

## **Tapping Tool/Model RT3422**

The Model RT3422 is designed for branching pressurized water, steam and natural gas mains. With up to 2" capacity, corrosion-proof design, ability to handle most types of material, and lightweight, the Model RT3422 is the tool to meet your tapping needs.

#### **Features**

 Easy to use. At only 21", this lightweight and compact tool is great for tight quarters and awkward locations.



- Heavy-Duty Design. Sturdy machined, corrosion-resistant materials for dependable lifelong benefits.
- Built-in bleed valve. Allows for easy purge of chips.
- Independent cutter feed gives the operator total independent control of the cutter feed rotation for optimal saw life.
- Taps a variety of materials. The RT3422 is capable of tapping into steel, cast iron, ductile iron and plastic pipe.
- Versatility. The RT3422 is capable of tapping mains of:
- Water up to 500 psig.
- Steam, air and natural gas up to 150 psig.
- Coupon retaining bits. Exclusive pilot bits give you the confidence that the coupon will not be dropped in the pipe, preventing medium contamination or possible damage of downstream equipment.

#### **Specifications**

Tapping Capacity: 3/4 - 2"

Mounting: Saddle, Welded Nipple, Weld-o-let, Thread-o-let

Cutter Travel: 14"

Activation: Hand Ratchet, Air Ratchet, Right angle Drill

Cutter Field: Rotation of sleeve around an acme threaded barrel

Pressure: Water, 500 psig @ 100°F

Steam, Air and Natural Gas - 150 psig @ 370°F.

Cat. No.	Model No.	Description	Wt. (lbs)
75982	RT3422	Tapping Machine Only	18
75992	RT3422	3/4" - 2" NPT Set (male)	30
91192	RT3422	3/4" - 2" CTS Set (flared)	30

The RT3422 sets include RT3422 tapping tool with bleed valve, shaft extensions, heavyduty hole saw arbors, 1/4" and 3/8" coupon retaining pilot bits, ratchet wrench, (2) spud wrenches, and 5 valve adapters in a steel tool box. Cutters are available separately.

#### Cutters

Outtors	,						
<b>Hole Saws</b>	Model No	Dia. (in)	Туре	Hole Saws	Model No	Dia. (in)	Туре
52760	M16	5/8	Bi-Metal	76292	ı	5/8	CI/DI Bit
52780	M24	7/8	Bi-Metal	76297	ı	7/8	CI/DI Bit
52800	M29	1-1/8	Bi-Metal	76302	ı	1-1/8	CI/DI Shell
52820	M35	1-3/8	Bi-Metal	76307	ı	1-3/8	CI/DI Shell
52850	M44	1-3/4	Bi-Metal	76312	ı	1-3/4	CI/DI Shell
76267	_	5/8	Steel Shell	76317	ı	5/8	Plastic Shell
76272	_	7/8	Steel Shell	76322	ı	7/8	Plastic Shell
76277	_	1-1/8	Steel Shell	76327	1	1-1/8	Plastic Shell
76282	_	1-3/8	Steel Shell	76332	1	1-3/8	Plastic Shell
76287	_	1-3/4	Steel Shell	76337	-	1-3/4	Plastic Shell

#### Tapping Tool/Model RT3422 (continued)

Cat. No	. Description
	Tool Box
76022	11/16" Ratchet Wrench
Pilots	
76027	Coupon Retaining 1/4" Pilot
76032	Coupon Retaining 3/8" Pilot
Hole Sa	aw Arbors
76037	Small Hole Saw Arbor 5/8" - 1-3/16" Hole Saws
76042	Large Hole Saw Arbor Asm. 1-5/16" - 1-3/4" Hole Saws
Shaft E	xtensions
76047	
76052	Large Shaft Extension 1-5/16" – 1-3/4" Hole Saws
Valve A	dapters
76057	CTS 3/4" Female
	CTS 1" Female
	CTS 1-1/4" Female
	CTS 1-1/2" Female
76082	CTS 2" Female
	3/4" Mueller™ 110
84002	1" Mueller™ 110
	1-1/2" Mueller™ 110
84012	2" Mueller™ 110
76132	NPT 3/4" Male
76137	NPT 1" Male
76142	NPT 1-1/4" Male
	NPT 1-1/2" Male
76152	NPT 2" Male
NPT Set	s available only with steel, male valve adapters.
	is a registered Trade Mark of Grinnell.

#### **TUBING TOOLS**

## Close Quarters Tubing Cutters Nos. 101, 103, 104, 117 and 118

#### Features:

- Specifically designed for use in restricted spaces on small diameter, hard and soft copper, aluminum, brass and plastic tubing; rollers include grooves for close-to-flare cuts.
- Strong, lightweight slide and wheel housing, large knurled feed screw knob gives easy control of cutting pressure for clean cuts.
- Models 117 and 118 include a self-feeding cutter wheel that automatically cuts after tightening the knob only once.

 The Model 117 features a special knob for easier tightening of the feedscrew

Cat	Model		Std	Capacity	Weight
No	No	Description	Wheel	(in)	(lb)
40617	101	Close Quarters Cutter	E-3469	1/4 - 1-1/8	1/2
32975	103	Close Quarters Cutter	E-3469	1/8 - 5/8	1/3
32985	104	Close Quarters Cutter	E-3469	3/16 - 15/16	1/3
97787	117	Close Quarters Quick-Feed Cutter	E-3469	3/16 - 15/16	1/3
86127	118	Close Quarters Quick-Feed Cutter	E-3469	1/4 - 1-1/8	5/8
32573	118	Close Quarters Quick-Feed Cutter with Ratchet Handle	E-3469	1/4 - 1-1/8	1/16
32573	118	Ratchet Handle for 118 Close Quarters Quick-Feed Cutter	-	_	5/8

19

Hand Too

101



## Constant Swing Cutters - Nos. 150

- Telescoping feed screw design keeps the cutter at the same length regardless of tubing diameter – good for tight spaces.
- Features an enclosed feed screw to eliminate clogging and jamming, grooved rollers for close-to-flare cuts, and a fold-away reamer.



- Now includes X-CEL® knob and X-CEL Pin for quicker cutting and wheel replacement.
- · Made from high-strength zinc alloy.
- Spare cutter wheel included in the knob.
- Cuts copper, brass, and aluminum tubing and thin-wall conduit.

Cat. No.	Model No.	Description	Std. Wheel	Cap. (in)	Wt. (lbs)
31622	150	Constant Swing Cutter	E-3469	1/8 - 1-1/8	1
31627	150	Above w/H-D Wheel(s)	E-4546	1/8 - 1-1/8	1
66737	150-L	Constant Swing Cutter	E-3469	1/4 - 1-3/8	1
66742	150-LS	Above w/H-D Wheel(s)	E-4546	1/4 - 1-3/8	1-1/8

## **Enclosed Feed Cutters - Nos. 250**

- · Cuts copper, brass and aluminum tubing and thin-wall conduit.
- Both Enclosed Feed Cutters have a quick-acting mechanism for faster size adjustments.



<ul><li>Spare</li></ul>	cutter w	heel.		0	
Cat. No.	Model No.	Description	Std. Wheel	Cap. (in)	Wt. (lbs)
33055	205	Ratcheting Encl. Feed Cutter	E-3469	1/4 - 2-3/8	2
33070	205	Above w/H-D Wheel(s)	E-4546	1/4 - 2-3/8	2

## Tubing and Conduit Cutters

- Clean, square cuts are easily made on copper, brass, aluminum and thin-wall conduit.
- Now includes X-CEL® Knob for quicker cutting.
- Nos. 10, 15 and 20 feature a convenient fold-away reamer.
- No. 30 is rated for larger diameter steel and stainless steel tubing.
- No. 65S and 35S are especially designed for stainless steel tubing. Includes six individual bearings and cutter wheel to make stainless cutting easier.



Cat. No.	Model No.	Description	Std. Wheel	Cap. (in)	Wt. (lbs)
32910	10	Tubing and Conduit Cutter	F-158	1/8 - 1	7/8
32915	10	Above w/H-D Wheel	E-1240	1/8 - 1	7/8
32920	15	Tubing and Conduit Cutter	F-158	3/16 - 1-1/8	1-1/2
32925	15	Above w/H-D Wheel	E-1240	3/16 - 1-1/8	1-1/2
32930	20	Tubing and Conduit Cutter		5/8 - 2-1/8	1-3/4
32935	20	Above w/H-D Wheel		5/8 - 2-1/8	1-3/4
32940	30	Tubing and Conduit Cutter	E-2558	1 - 3-1/8	3-1/2
32950	30	Above w/H-D Wheel	E-2191	1 - 3-1/8	3-1/2
97212	15-SI	Tubing and Conduit Cutter	E-1525	3/16 - 1-1/8	1-1/2
29963	35 S	Stainless Steel Cutter	E-635	1/4 - 1-3/8	1
31803	65S	Stainless Steel Quick-Acting Cutter	E-635	1/4 - 2-5/8	1-1/2

## Quick Acting Tubing Cutters

- · Models 151-156 feature a quick-acting design, I-beam construction, hardened wear surfaces and thrust bearing slide assemblies for smooth operation.
- All Models now include an X-CEL® Knob and X-CEL Pin for quicker cutting and wheel replacement.
- · These cutters are available in models for plastic pipe or metallic tubing.
- · Models 151 and 152 feature fold-away

Cat.	Model	Description	Std.	Cap.	Wt.
No.	No.		Wheel	(in)	(lbs)
31632	151	Quick-Acting Cutter	E-3469	1/4 - 1-5/8	1-1/4
31637	151-P	Above w/Wheel for Plastic	E-2155	1/8 - 1-1/4*	1-1/4
31642	152	Quick-Acting Cutter	E-3469	1/4 - 2-5/8	2
31647	152-P	Above w/Wheel for Plastic	E-2155	1/4 - 2*	2
34572	152-P	Above w/Wheel for PVC	E-5272	1/4 - 2*	2
36597	153	Quick-Acting Cutter	E-3469	1-1/4 - 3-1/2	2
36592	153-P	Above w/Wheel for Plastic	E-2155	1 - 3*	2
31652	154	Quick-Acting Cutter	E-2558	1-7/8 - 4-1/2	3-7/8
31657	154-P	Above w/Wheel for Plastic	E-2156	1-1/2 - 4*	3-7/8
31662	156	Quick-Acting Cutter	E-2558	4 - 6-5/8	5
31667	156-P	Above w/Wheel for Plastic	E-2157	4 - 6*	5

## Quick-Acting CSST Cutter

- Cuts corrugated gas tubing sizes 3/8" - 1" diameter.
- Two sets of split-floating guide wheels\*, located on the top and along the sides of the cutter wheel, ride in the corrugations to provide stable tracking, resulting in a high quality cut.



- The floating guide rollers also serve to hold the two pieces of pipe together to ensure a complete and clean cut.
- Ergonomic knob provides a firmer grip to cut through tubing quickly.
- · Quick acting mechanism allowing the cutter to rapidly adjust from 3/8" - 1" diameter tubing.
- · Durable I-beam style frame.

Cat.	Model	Description	Std.	Cap.	Wt.
No.	No.		Wheel	(in)	(lbs)
32078	151CSST	Quick-Acting CSST Cutter	E-3469	3/8 - 1	1.1

## Internal Tubing Cutters

- For trimming tubing below floor level for shower/floor drain installations, or above the ceiling for sprinkler head installations.
- · Model 106 features a tool steel and aluminum body while 108 and 109(P) have cast iron bodies
- · Each model features hardened steel rollers and cutter wheels.
- Model 109P is equipped to cut PVC
- Model 102 internal cutter features reamer type end for ease of entry into distorted or burred tubing, and will cut lengths from 5/16"- 4-1/2".

		_		-	
Cat. No.	Model No.	Description	Std. Wheel	Cap. (in)	Wt. (lbs)
33005	106	Internal Cutter	E-2558	2-3 Nominal 1/4 – 2-5/8 Depth	2-3/8
83240	108	Internal Cutter	E-2558	1-1/4 – 2 Nominal 1/4 – 1-3/4 Depth	2
83290	109	2-Handle Internal Cutter	E-2558	2-1/2 – 4 Nominal 1/4 – 2-1/8 Depth	4
83295	109-P	Above w/Wheel for Plastic	E-5299	2-1/4 – 4 Nominal 1/4 – 2-1/8 Depth	4



## **Ridgid**

Cut	bing ters	Catalog No.	32910	32920	97212	29963	31803	32078	32930	32940	32945	32955	40617-86127	32975-32985-97787	33005	83240	83290	83295	31622	31632	31637	31642	31647	36597	36592	31652	31657	31662	31667	33055	93492	10973	0
	ginal duct)	Model No.	10	15	15-SI	358	658	CSST	20	30	30P	40	101/118	103/104/117	106	108	109	109P	150	151	151-P	152	152-P	153	153-P	154	154-P	156	156-P	202	122	122XL	
Catalog No	Model No	Blade Exp																															Application/Material
33210	E-702	.500																									χ		χ				Heavy Wall PVC, ABS
33165	E-1240	.162	Χ	Χ	Χ																												Steel - SS
33200	E-1740	.147											Χ	Χ					Х		Х		Χ		Χ								Soft Flexible Pipe
74720	E-2155	.286																			•		•		•								PE,PB, PP, Std. and Heavy Wall
74730	E-2156	.412									•																•		Χ				PE,PB, PP, Std. and Heavy Wall
74735	E-2157	.500																									Χ		•				PE,PB, PP, Std. and Heavy Wall
33175	E-2191	.292								Х		Χ														Χ		Χ			•	Χ	Steel Tubing
33170	E-2558	.220								•		•				•	•	•								•		•					Aluminum and Copper
83235	E-2880	.747													Χ	Χ											Χ		Χ				PE,PB, PP, Std. and Heavy Wall
33205	E-2990	.112	Χ	Χ					Х																								Steel, Aluminum and Copper
33185	E-3469	.149											•	•					•	•		•		•						•			Aluminum and Copper
34695	E-3495	.290																		Х		Х		Χ						Χ			Aluminum
33190	E-4546	.162																		Х		Χ		Χ						Χ			Steel - SS
33195	E-5272	.290																			Х		χ										PVC, ABS, Std. Wall
33180	E-5299	.412									Χ				Χ	Χ		•									χ		Χ				PVC, ABS, Std. Wall
33160	F-158	.149	•	•					•																								Aluminum and Copper
88260	E-10279	.185																									Χ		Χ				Thin-Wall PVC
96397	E-1525	.120			•																												Stainless Steel
33551	122SS	.292																													Х	٠	Stainless Steel
29973	E-635	.120				•	٠																										Stainless Steel
33190	E-4546	.120						•																									Stainless Steel

**X** Denotes Cutter Wheel Furnished w/Original. • Denotes Alternate Cutter Wheel.

### **FLARING TOOLS:**

## No. 458R Flaring Tool

- This precision tool provides smooth, uniform flares with minimum effort.
- The new ratcheting feed screw handle turns easily and requires less motion and effort than a standard handle.
- Hardened steel flaring cone, eccentrically mounted in needle bearings, produces rolling action for even metal flow, giving

unifor	uniform flare walls without galling.											
Cat. No.	Model No.	Туре	Sizes (in)	Wt. (Ibs)								
83037 41295	458R 454-W	45° SAE Flares 45° SAE-Nominal Water Tube	1/8, 3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 3/4 3/8, 1/2, 3/4, 1	3-1/2 6-1/4								
41300 41162 41285	455 377 375	45° SAE Flares 37° SAE Flares 37° SAE Flares	1/2, 5/8, 3/4, 7/8, 1 3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 3/4 1/2, 5/8, 3/4, 7/8, 1	6-3/4 3-1/2 6-3/4								
Metric I	Model			Sizes (mm)								

4, 4.75, 6, 8, 10, 12, 15, 16

## **Hammer-Type Flaring Tools**

50257 458MM 45° SAE Flares

Made of high-grade hardened steel, these tools have a long nose guide that centers tools for smooth, 45° uniform flares.

Cat. No.	Model No.	Water Tube Size (in)	Wt. (lbs)
41315	E-37	3/8	3/16
41320	E-45	1/2	1/4
41325	E-46	5/8	3/8
41330	E-47	3/4	1/2
41335	E-52	1	3/4
41340	E-61	1-1/4	1
41345	E-63	1-1/2	1-1/2
41350	E-64	2	2-1/2



3-1/2

## No. 345 Flaring Tool

- Model 345 is a precision designed tool for producing 45° flares in soft copper, brass, aluminum and mild steel (JIC and Bundy)
- A hardened, smooth cone provides fast, 45° flares either single or double lap.
- · A single clamp screw provides for easy clamping and removal of tubing.

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1	1		
1	W.	8	2
	10	*	ě

Cat.	Model			Wt.
No.	No.	Туре	Sizes (in)	(lbs)
23332	345	45° SAE Flares	3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 5/8	2-3/4
23337	345-DL	45° SAE- (double flares)	Above w/adapters for double lap flares 3/16, 1/4, 5/16, 3/8, 1/2 O.D. Tubing	3
24797	345/150	45° SAE Flares	No. 345 w/No. 150 Tubing Cutter and Case Kit	3-1/2
33927	345/150DL	45° SAE Flares	No. 345/DL w/No. 150 Tubing Cutter and Case Kit	3-1/2
31597	_	_	3/16" Double Lap Adapter	_
31602	_	_	1/4" Double Lap Adapter	_
31607	_	_	5/16" Double Lap Adapter	_
31612	_	_	3/8" Double Lap Adapter	_
31617	_	_	1/2" Double Lap Adapter	_
Metric I	Vlodels	Sizes (mm)		
23342	345M	45° SAE Flares	6, 8, 10, 12, 14, 15, and 16	2-3/4
24087	345M/150	45° SAE Flares	No. 345M w/No. 150 Tubing Cutter and Case Kit	3-1/2
31502			Case Only	



## **LEVER BENDERS:**

## 300 Series Plumbing Benders

- Designed to bend copper tubing to a maximum of 180°.
- Offset cushion grip handles and a 90° start angle, together with a specially engineered plastic shoe, combine to ease bending effort.
- 300 series lever benders form smooth bends in types K & L soft (annealed) copper tubing.



			Capacity	<u>'                                     </u>	
Cat.	Model	Description	Tube Size	Bend	Wt.
No.	No.		(Actual O.D.)	Radius	(lbs)
36962*	310	Lever Bender	5/8	2-1/4	6.5
36972	312	Lever Bender	3/4	2-7/8	7.0
36942	310M	Lever Bender	10 mm	42 mm	4.0
36947	312M	Lever Bender	12 mm	42 mm	4.0
36952	314M	Lever Bender	14 mm	56 mm	6.5
36957	315M	Lever Bender	15 mm	56 mm	6.5
36962*	316M	Lever Bender	16 mm	56 mm	6.5
36967	318M	Lever Bender	18 mm	72 mm	7
*This pro	duct is dual	-purpose, being bo	th inch and metric		

#### 400 Series Instrument Benders

- 400 Series Instrument Benders combine accuracy with easy operation. Offset cushion grip handles eliminate knuckle cracking when forming 180° bends.
- A 90° start angle and unique oil-absorbing shoe minimize bending effort while forming accurate bends in copper, steel and stainless steel tubing.



			Capacit	у	
Cat. No.	Model No.	Description	Tube Size (Actual O.D.)	Bend Radius	Wt. (lbs)
36117	403	Lever Bender	3/16	5/8	1.5
36122 36092*	404 405	Lever Bender Lever Bender	1/4 5/16	5/8 15/16	1.5 2.75
36097	406	Lever Bender	3/8	15/16	2.75
36132	408	Lever Bender	1/2	1-1/2	5.5
36112	406M	Lever Bender	6 mm	16 mm	1.5
36092*	408M	Lever Bender	8 mm	24 mm	2.75
36102	410M	Lever Bender	10 mm	24 mm	2.75
36127	412M	Lever Bender	12 mm	38 mm	5.5

#### 456 Tri-Bender

The 456 Tri-Bender is designed to easily bend three different sizes of soft tubing: 1/4", 5/16" and 3/8" with the same tool. Ideal for plumbing and HVAC applications. A 90° start angle minimizes effort required to form a bend. Handy reference marks indicate the angle for quick bends through 90°.

tne ang	ie for qu	ick benas throu	ıgn 90°.
Cat. No.	Model No.	Cap. (in)	Wt. (oz)
44852	456	1/4, 5/16, 3/8	14



## Ridgid

## **600 Series Instrument Tubing Bender**

The RIDGID® 600 Series Lever Benders are specially designed for bending hard tubing such as stainless steel, steel and titanium. A simple two-stage handle design easily switches to bend up to 180°, keeping bends in-plane and accurate.

- In-Plane: Two-stage design allows bends from 90° to 180° without ever crossing handles; lock/unlock with a half-turn rotation of the bending handle.
- Accurate: Roll dies in bending carriage reduce tube flattening (ovality).
   Gain marks on front of form ensure properly aligned bending angles.
- Reduced Force: Extra-long handles for increased leverage; vise clamp block for extra stability.
- Ergonomic: Cushioned handle grips for improved bending ease.

Cat. No.	Model No.	Cap.	Bend Radius	Wt. (lbs)
38028	603	5/8	5/8	1.68
38033	604	1/4	5/8	1.68
38038	605	5/16	15/16	4.1
38043	606	3/8	15/16	4.1
38048	608	1/2	1-1/2	6.1
38053	606M	6mm	16mm	1.68
38038	608M	8mm	24mm	4.1
38058	610M	10mm	24mm	4.1
38063	612M	12mm	38mm	6.1



## **Geared Ratchet Lever-Type Tube Benders**

- High geared mechanical ratios, bend heavy-wall steel tube (up to 1/8" wall thickness), stainless steel tube (up to 3/32" wall thickness) and hard copper water tube (types K and L).
- Benders produce uniform bends up to 180°, with no need to anneal tubing or use special temper grade tubing.
- Reduce bending effort to a minimum.

Cat. No.	Model No.	Radius to Center of Tube (in)	Tube O.D. (in)	Wt. (lbs)
35170	358	3	5/8	7-1/2
35175	368	3-3/4	3/4	13-1/2
35180	378	3-3/4	7/8	13-1/2

## **Spring-Type Tube Benders**

For fast, free-form bending of soft copper and aluminum tube.



Cat. No.	Model No.	Description	Length (in)	Tube O.D. (in)	Wt/Pk. (lbs)
35245	D-1375	Pack of 6 Spring-Type Benders	10	1/4	3/8
35250	D-1376	Pack of 6 Spring-Type Benders	10	5/16	1
35255	D-1377	Pack of 6 Spring-Type Benders	10	3/8	1
35260	D-1378	Pack of 6 Spring-Type Benders	12	7/16	1-5/8
35265	D-1379	Pack of 6 Spring-Type Benders	12	1/2	2-5/8
35270	D-1380	Pack of 6 Spring-Type Benders	12	5/8	3-1/4
35275	D-1381	Pack of 6 Spring-Type Benders	12	3/4	3-3/4
35280	D-1382	Pack of 6 Spring-Type Benders	12	7/8	4-1/8
Spring-Type Bender Sets					
35285	E-5732	Set of 6, 1/4 - 5/8			1-3/4
35290	E-5734	Set of 8, 1/4 - 7/8			3

## Ridgid

### **CONDUIT BENDERS:**

## **Heavy-Wall Conduit Benders**

- Designed for the larger sizes of heavy-wall conduit.
   This bender has hardened teeth for slip-resistant grip.
- Extra-long supporting socket minimizes handle breakage.
- · Notch in radius protects conduit threads.

Cat. No.	Model No.	Cap. (in)	Wt. (lbs)
35230	B-1709	1/2	2-5/8
35235	B-1711	1/2, 3/4	2-3/4
35240	B-1712	1, 1-1/4	7-3/4
Handles no	t included.		



#### Thin-Wall Conduit Benders

- Made of cast iron, these tools have exceptionally smooth side walls which grip conduit snugly to minimize distortion.
- Bending grooves conform to Standard Code Radii. Marks indicate 30°,45°, 60° and 90° bends.

Cat. No.	Model No.	Description	Wt. (lbs)
35215	B-1677	Bends 1/2" Thin-Wall Conduit to 4" Inside Radius	2-1/2
35220	B-1678	Bends 3/4" Thin-Wall and 1/2" Heavy-Wall Conduit to 5" Inside Radius	4-1/2
35225	B-1679	Bends 1" Thin-Wall and 3/4 Heavy-Wall Conduit to 6-1/2" Inside Radius	8-1/2

# No. 4100 Inner-Outer Copper Cleaning Brush

- Combines tube O.D. cleaning and fitting I.D. brush into one hand tool.
- High carbon steel brushes quickly clean 1/2" or 3/4" nominal tube and fittings in preparation for soldering or brazing.
- Durable plastic construction designed for easy brush replacement.

Cat. No.	Model No.	Cap.	Wt. (oz)
34142	4100	I-O Copper Cleaning Brush	3.25
34147	_	Replacement Brush Set	1.5

# Accessories for No. 124 Copper Cleaning Machine

Cleaning Brushes: 13 internal, standard-duty wire for 1/2" - 4" fittings External Cleaning Brush and Deburring Cutter: For 1/2" - 2" fittings and 1/2" - 4" tube

Reamer: Replaceable blade for 1/2" - 2" tube

**Accessories:** No. 126 Facing Cutter – Replaceable hardened steel insert. Fitting Brushes – Small internal brushes for refrigeration and air conditioning.

Cat. No.	Model No.	Description	Wt. (lbs)
47395	126	4" Facing Cutter	1-3/4
46425	E-6128	2" to 4" Brush Arbor	1/4
46450	E-6212-X	5" to 6" Brush Arbor	1-1/4
42295	D-1415	External Brush	3/4

StdD	uty Brushes	Brushes for No. 124	Machine			
Cat. No.	Model No.	Description	Wt. (oz)			
42245 42250	E-5715 E-5720	3/8" Fitting Brush 1/2" Fitting Brush	1 1			
42255 42260	E-5721 E-5722	3/4" Fitting Brush 1" Fitting Brush	1 2			
42265	E-5723	1-1/4" Fitting Brush	2			
42270 42275	E-5724 E-5725	1-1/2" Fitting Brush 2" Fitting Brush	4 6			
42280	E-5726	2-1/2" Fitting Brush	8			
42285	E-5727	3" Fitting Brush	10			
42290 **42300	E-5728 **D-1545	4" Fitting Brush 5" Fitting Brush	14 16			
	_	6" Fitting Brush	18			
**Requires	**Requires Brush Arbor Catalog No. 46450					

# Model S Tube Expander

This single-stage expander is designed to expand tubing for fast, accurate joints in soft copper, aluminum and soft steel tube without using fittings. The mechanism is free-floating and self-centering.



Cat.	Model		Tube	e Cap.	Wt.
No.	No.	Description	0.D.	Nominal	(lbs)
30032	S	Kit with 1/2", 5/8", 7/8" Heads and Case	_	_	6
34152	S	Kit with 3/8", 1/2", 3/4", 1" Heads and Case	_	_	6-1/2
15071	S	Expander Handle	-	-	1/2
10251	_	Expander Head	3/8	1/4	1/2
10261	_	Expander Head	1/2	3/8	1/2
10271	-	Expander Head	5/8	1/2	1/2
10281	-	Expander Head	3/4	5/8	1/2
10291	_	Expander Head	7/8	3/4	1/2
10301	-	Expander Head	1	-	1/2
10311	_	Expander Head	1-1/8	1	1/2
10321	_	Expander Head	1-1/4	_	1/2
10341	-	Expander Head	1-1/2	-	1/2
10351	-	Expander Head	1-5/8	1-1/2	1/2
10361	_	Expander Head	1-3/4	_	1/2
58747	-	Replacement Case	-	-	3
Note: Kit	Head size	es are given by Tube O.D. Replacement Case C	atalog No	. 58747	

## **Swaging Tools**

- RIDGID Swaging Tools are quality-made and zinc-plated for accuracy and durability.
- Set of four tools is packaged in handy vinyl pouch.
- Designed for copper, aluminum or brass.

Cat.	Model	Description	O.D. Cap.	Wt.
No.	No.		(in)	(oz)
52420	570	Kit-4 Tools	1/4, 3/8, 1/2, 5/8	16
52425	562	Swaging Tool	1/4	2
52430	563	Swaging Tool	3/8	4
52435	564	Swaging Tool	1/2	5
52440	565	Swaging Tool	5/8	8



## No. 575 EMT Sizing Tool for Conduit

Quickly resizes thin-wall conduit ends that have become deformed after installation. Tool can also be

used for slight bending of 1/2" and 3/4" conduit ends for alignment purposes. Hardened alloy steel resists wear.

-		3		
	Cat.	Model		Wt.
	No.	No.	Cap.	(lbs)
_	36005	575	1/2" and 3/4" FMT	1_3/8

### No. 127 Inner-Outer Reamer

- Handy for quick, clean and easy I.D. reaming and O.D. beveling of 1/4" through 1 1/2" nominal water tube.
- Plastic construction with long-wearing alloy steel blades
- Gives fast, professional reaming on copper, aluminum, brass and other types of tubing.

Cat. No.	Model No.	Cap.	Wt. (oz)
34965	127	1/4" through 1-1/2" Nominal Water Tube	4

## Hardened Steel Construction Inner-Outer Reamer

 46 cutting edges on interior cone allow for fast, clean, inner reaming and outer deburring/beveling of 1/2"-2" copper and stainless steel tubing.

Hardened steel construction

Cat. No.	Model No.	Cap.	Wt. (oz)
29983	223S	1/4 through 1-1/4 Copper and Stainless Tubing	3/4
29993	227S	1/2 through 2 Copper and Stainless Tubing	1-1/4



Hand To



## **Deburring Tools**

- Deburring Tool for plastic pipe and tubing.
- Made of high-grade steel with speciallydesigned, long-lasting cutting edges.
- · Slip-resistant vinyl hand grip.
- Ideal for removing outside ridges and inside burrs on plastic pipe and tubing.

Cat. No.	Model No.	Description	Plastic Pipe Cap. (in)	Plastic Tubing Cap., I.D. (in)
35155	72	Deburring Tool	1/2 - 1-1/2	3/4 - 2-1/8
64962	73	Deburring Tool	1-1/2 - 3	_
64967	74	Deburring Tool	4	_

## No. 1450 Pressure Test Pump

Tests hydraulically for leaks in installations which are required to be leak proof. Will test systems up to 725 PSI. Especially for use in heating, compressed air, refrigeration systems, oil installations, sprinkler systems and other small bore pipe installations.



Cat. No.	Model No.	Description	Max. Pressure	Connections	Wt. (lbs)
50557	1450	Pressure Test Pump	725 PSI	1/2" NPT	14

# Professional Electric Soldering Gun

- Designed for soft soldering (50/50, 95/5 Alloys) 1/4" – 1-1/2" Copper Tube
- Flameless soldering safe, easy-to-use
- · Six feet of cable
- Built-in handle and cord wrap
- Specially designed for repair and renovation jobs RT-175
- Soft solders 1/4" 3" tube
- Flameless soldering safe, easy-to-use
- · Twelve feet of cable
- Fully contained in metal carrying case

Cat. No.	Model No.	Description	Wt. (lbs)
69762	RT-100	115V Mini-Pro Soldering Gun	21
70662	RT-100	230V Mini-Pro Soldering Gun	21
62862	RT-175	115V Professional Solder Gun	33
17861	RT-175	230V Professional Solder Gun	33
39966	_	Carbon Tips	0.25
39976	_	Threaded Studs	0.25

## SF-2500 Pipe Freezer

SuperFreeze® Pipe Freezing Tool Avoids the Cost and Inconvenience of a System Shutdown and Purge.

The SuperFreeze Pipe Freezer is an easy-to-use pipe freezing unit that allows the contractor to keep water systems operating while making repairs. The RIDGID SF-2500 is a mini-refrigeration unit that circulates self-contained refrigerant to its aluminum freeze heads. This forms an



ice plug in as little as 6 minutes in 1/2" copper tube and can be used with up to 2 1/2" tube or 2" pipe. Once the pipe is plugged, repairs can be made while the ice plug is maintained by the unit. Now includes a bottle of specially formulated freeze gel to speed freezing. Apply the gel to freeze heads before placing on pipe.

Approved by UL to CSA and UL standards (115V only)

– continues –

## Ridgid

#### SF-2500 Pipe Freezer (continued)

**Capacity:** Steel Pipe: 1/2" – 2" Copper Tube: 1/2" – 2-1/2"

**Compressor:** 115V, 60 Hz, 4.3A or 230V, 50 Hz, 2.4 A

Refrigerant: R-507 (14.2 oz. Charge)

Weight: 55 lbs.

**Hose Length:** 8.5 ft. (17 ft. span) **Dimensions**: L = 21" W = 10.5" H = 13"

Cat. No.	Model No.	Description	Wt. (lbs)
68967	SF-2500	Pipe Freezing Kit - 115V 1/2" – 2" Steel Pipe 1/2" – 2-1/2" Copper Tube	55
68962	SF-2500	Pipe Freezing Kit - 230V Export 1/2" – 2" Steel Pipe 1/2" – 2-1/2" Copper Tube	55

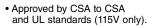
#### **Accessories**

Cat. No.	Description
65937	SF-2000R Velcro Straps (set of 2)
69707	SF-2500R Velcro Straps (set of 2)
66462	SF-2000R 11/4" CTS Bushings (set of 2)
69712	SF-2500R 3/4" CTS Bushings (set of 2)
70652	SF-2500R 11/4" CTS Building (set of 2)
69717	SF-2500R 2" CTS Bushings (set of 2)
68842	SF-2000R 3/8" End Adapters (set of 2)
68847	SF-2000R 1/2" End Adaptors (set of 2)
68972	SF-2000R 3/4" End Adaptors (set of 2)
68857	SF-2500R 1/2" End Adaptors (set of 2)
68862	SF-2500R 3/4" End Adaptors (set of 2)
65942	Quick Grip Clamp
74946	Ridgid Freeze Gel
84472	Replacement Rubber Feet
18643	Replacement Rubber Hose with Port
18648	Replacement Rubber Hose without Port

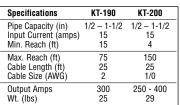
Note: Always make sure SuperFreeze heads and hoses are completely thawed before removing from pipe. DO NOT forcefully remove from pipe with any kind of tool, as it could permanently damage the heads and hoses.

### Models KT-190 and KT-200 Pipe Thawers

For fast thawing of frozen metal pipes 1/2" through 1 1/2" (12-36mm). The KT-190 and KT-200 Pipe Thawing Units provide continuous heating to quickly thaw 1/2" to 1 1/2" frozen metal pipes. With these lightweight, versatile units, there is no need to dig or tear apart walls. Simply attach the clamps to the metal pipe on each side of the frozen section and the pipe is thawed within minutes.



 Continuous Operation: The KT-190 and KT-200 operate continuously without requiring any



"cool-down" periods. There is no tripping of the unit or need to turn the unit off during the thawing process. Simply attach the cables to the pipe, turn the unit on and let it do its job – continuously from start to finish.

- Lightweight: Weighing under 30 lbs., each unit can be easily transported to the most difficult locations such as attics.
- Versatile: The KT-190 can be used on lengths of pipe between 15 and 75 feet.
   With 4 output levels, the KT-200 can be used on 4' to 150' lengths of pipe. The KT-200's amp meter allows the user to select the proper output level for maximum current draw and minimum thawing time.
- Powerful: Both units operate on a standard 115V, 15 amp outlet. The KT-190 produces 300 amps and the KT-200 produces 250-400 amps of thawing power.
- All these features and more make the KT-190 and the KT-200 the professional's choice.

Cat No.		l Description	Wt. (lbs)
6280	)2 KT-19	Pipe Thawer w/2-25' #2 Cables	46
6274	7 KT-20	Pipe Thawer w/2-25' 1/0 Cables	55
6266	52 -	Cable w/Clamp 25'	12
6277	'2 -	Extension Cable 25' #1/0 AWG	11
6281	2 -	Series Cable 3' #2 AWG	1.5

## Ridgid

#### **GENERAL PURPOSE TOOLS**

#### F-Series Vises

The F-Series vises are constructed of 75,000 psi tensile strength forged steel. These sleek, rugged vises out perform their bulky cast-iron competition.

RIDGID F-Series vises feature a patented parallel jaw alignment system. This exclusive feature gives the F-Series precise clamping action, as well as longer service life.

#### F-Series Also Features:

- All-steel, drop-forged construction.
- Rolled double lead Acme screw.
- · Steel handle with rubber anti-pinch rings.
- · Increased work areas.
- · Standard fixed pipe jaws.
- · Large, hardened anvil.
- Surface hardened slides for smooth, precise operation.
- Forged steel swivel base with dual draw-down bolts.
- RIDGID Lifetime Warranty.

Cat. No.	Model No.	Description	Wt. (lbs)
66987	F-45	4-1/2" Forged Vise	26
66992	F-50	5" Forged Vise	48
66997	F-60	6" Forged Vise	63
69907	_	Swivel Base Assembly for F-45	3
69912	_	Swivel Base Assembly for F-50 & F-60	6

#### Magnetic Jaw Covers

Magnetic Jaw Covers assist with specialty clamping applications. These high quality covers give you greater flexibility when working with your F-Series Vise.

- AJ/Smooth Aluminum General use and non-marring surfaces.
- FJ/Fiber Cover For gripping hardened non-marring surfaces.
- RJ/Soft Rubber For delicate, irregular work pieces.

Vise Model	F-45	F-50	F-60	Weight
Aluminum Magnetic Jaw Covers	69847	69852	69857	1
Fiber Magnetic Jaw Covers	69862	69867	69887	1
Soft-Faced Magnetic Jaw Covers	69877	69882	69887	1

## **Heavy-Duty Light Weight Aluminum** Torpedo and Laser Levels

The NEW RIDGID® professional levels are designed and built to last the toughest job conditions. Heavy duty structures are machined from a solid block of aluminum. These levels provide accuracy, stability and provide the trade professional the ability to read

1/6 - 1/2 slope per loot.					
Cat. No.	Model No.	Description	Length (in)	Wt. (lb)	
36243	400UM	4 Vial Torpedo Level	5-5/8	.23	
36248	500UM	5 Vial Torpedo Level	8-1/2	.36	
36253	800LMI	5 Vial Laser Level	8-1/2	.64	
36258	F-10	U-Shape Level with V-Groove	2-1/2	.26	
20233	395	Night Shade 9" Torpedo Level	9	1/3	
87107	724	24" Top-Read Magnetic Aluminum Level	24	1-1/8	

### **Bolt Cutters**

RIDGID Bolt Cutters are designed for cutting rod, wire mesh, concrete form ties, cable and bolts. Slim head permits cutting close to surface. Quick, easy adjustment through use of a cam/bolt mechanism. Jaws are made of hardened alloy steel.

Replacement Head Assemblies				
Cat. No.	Description	Wt. (lbs)		
18363	S14 Head Assembly	7/8		
18368	S18 Head Assembly	1-1/4		
18373	S24 Head Assembly	2-1/4		
18378	S30 Head Assembly	8-7/8		
18383	S36 Head Assembly	13-1/2		
18388	S42 Head Assembly	18-1/4		

18378 18383 18388	S36 F	lead Assembly lead Assembly lead Assembly	8-7/8 13-1/2 18-1/4			
		Ca	pacity/Met	als		
Cat. No.	Model No.	Bolt Cutter Description	Soft (15RC)† (in)	Med (31RC)‡ (in)	Hard (42RC)* (in)	Length Overall (in)
14213	S14	Center Cut	5/16	1/4	3/16	15
14218	S18	Center Cut	3/8	5/16	1/4	19
14223	S24	Center Cut	7/16	3/8	5/16	26

9/16

11/16

9/16

† Soft steel and nonferrous metals, bolts, screws, rivets, wire,

Center Cut

Center Cut

Center Cut

S42

14228

14233

14238

‡ Iron and steel. \*Stainless steel, spring wire, heat-treated rod, reinforcing rod.

### No. 10 Screw Extractor Set

No. 10 set contains 20 precision tools - one each of Extractor Nos. 1 to 5 inclusive with turnuts, drill Nos. 1 to 5 inclusive, and drill guides Nos. 921 to 1821 inclusive. Pre-formed plastic box provides convenient storage.

Cat. No.	Model No.	Description	Cap. (in)	Wt. (oz)
35585	10	Screw Extractor Set	1/4 - 1/2	1-1/4
25695	10	Box Only	1/4 - 1/2	1-1/4



(lbs)

1-1/4

5-7/8 8-7/8

18-1/4

3/8

## No. 25 Screw and Pipe Extractor Set

No. 25 set contains one each of screw extractors Nos. 1 to 8 inclusive (Nos. 1 to 5 Extractors with turnuts); Drill Nos. 1 to 8 inclusive, and one No. 36; and complete set of drill guides and bushings. Maximum depth extractor range 1" to 3". Pipe extractors Nos. 80 to 85 also included. These precision tools are packed in a fitted compartment box.



Cat. No.	Model No.	Description	Cap. (in)	Wt. (oz)
35590	25	Screw and Pipe Extractor Set	1/4 - 1/2	1-1/4
35700	25	Box Only	_	-

## Screw Extractors (with sliding turnut)



Cat. No.	Model No.	Screw Dia. (in)	Use Drill (in)	Flute Dia. (in)	Length Overall (in)	Max. Depth (in)	Wt. (oz)	Std. Pack
35535	1	1/4	1/8	0.139	2-5/16	1	1/2	6
35540	2	5/16	3/16	0.205	2-3/4	1	1	6
35545	3	3/8	1/4	0.272	3-1/16	1	1-1/4	6
35550	4	7/16	5/16	0.338	3-5/16	1	1-3/4	6
35555	5	1/2 - 9/16	11/32	0.374	3-3/4	1	2-1/4	6
1)	lo Turnu	t)						
35560	6	5/8	7/16	0.471	4-1/8	2	3	6
35565	7	3/4	1/2	0.538	4-1/2	2	4	6
35570	8	7/8 – 1	5/8	0.665	4-3/4	3	6-1/2	6

## Ridgid

## WET/DRY VACS AND PORTABLE AIR FILTRATION

## **Commercial Series Wet/Dry Vacs**

Ridgid Wet/Dry are the highest powered vacuums in the industry – offering 3.5 - 6.5 peak horsepower in 3 to 16 gallon capacities. They are an excellent accessory to your shop or garage, making easy clean-up for even the most challenging jobs.

The RIDGID Wet/Dry Vacs offer the following features.

- Proprietary motor and patented blower wheel design maximize performance.
- Pleated filter has more surface area for greater efficiency and longer life.
- · Automatic suction shut-off senses and prevents liquid overflow; integral drain plug makes draining the vacuum easy.
- Reduced dB sound level resulting in even quieter operation.

### **Industrial Series Wet/Dry Vacs**

RIDGID® 2-Stage Wet/Dry Vacuums are designed and built for the toughest heavy debris and fluid pickup applications.

- Powerful heavy-duty, dual-stage motor provides maximum suction power.
- Power head with a patented SNR "Scroll Noise Reduction" design provides better air flow and suction with less noise, resulting in more power and quieter operation.
- Tug-A-Long<sup>TM</sup> positive locking mechanism securely locks the hose to the vacuum so the hose will not pull out during use.
- Dual layer hose provides maximum durability and crush resistance.
- Rugged polyproplyene drum is impact and corrosion resistant.
- Heavy-duty cart system with large non-marring wheels provide effortless movement over the toughest terrains. The quick-release cart handle allows emptying the drum easily.
- Removable accessory storage bag keeps accessories together and accessible.
- Fine particle filter provides exceptional filtration, including for drywall dust. It is washable, reusable, clogs less and can be used for both wet and dry operation.



Cat No	Model No	Commercial Series - 120V	Sealed Pressure (in)	Peak Horse Power	Airflow 2-1/2 Orifice	Air Watts	Cord Length	Weight (lb)
36138	WD3050	3 Gallon Portable Wet/Dry Vac	67	3.5	62cfm	135	10	11.3
40063	WD3050M	3 Gallon Portable Wet/Dry Vac	67	3.5	62cfm	135	10	11.6
31653	WD4070	4 Gallon Portable Wet/Dry Vac	46	5	110cfm	167	20	18.4
31663	WD4522	4.5 Gallon Pro Pack	48	5	104cfm	162	20	18.5
36683	WD0671	6 Gallon Wet/Dry Vac w/Accessory Pack	53	25	62cfm	124	10	15.1
41588	WD0970	9 Gallon Wet/Dry Vac	67	3.5	70cfm	175	10	16.7
31773	WD0970M	9 Gallon Wet/Dry Vac	67	3.5	70cfm	175	10	16.7
40103	WD1270	12 Gallon Wet/Dry Vac	48	5	145cfm	227	15	22.0
18718	WD1450	14 Gallon Contractor Wet/Dry Vac	50	6	168cfm	257	20	26.0
40108	WD1680	16 Gallon Wet/Dry Vac w/Detachable Blower	50	6.5	172cfm	286	20	29.0
31693	WD1851	16 Gallon Contractor Wet/Dry Vac	47	6.5	199cfm	306	20	32.8
31703	WD1956	16 Gallon Steel Tank Wet/Dry Vac	46	6.5	187cfm	294	20	38.2
Cat	Model	Commercial Carias 020V	Sealed	Peak Horse	Airflow 2-1/2	Air	Cord	Weight

								0.0
Cat No	Model No	Commercial Series - 230V	Sealed Pressure (in)	Peak Horse Power	Airflow 2-1/2 Orifice	Air Watts	Cord Length	Weight (lb)
31658	WD4070EX	4 Gallon Portable Wet/Dry Vac (230V)	45	5	103cfm	109	20	18.4
41343	WD0671EX	6 Gallon Wet/Dry Vac w/Accessory Pack (230V)	53	2.5	62cfm	164	10	15.1
40123	WD1270EX	12 Gallon Wet/Dry Vac (230V)	43	5	120cfm	280	15	22.0
36188	WD1450EX	14 Gallon Contractor Wet/Dry Vac (230V)	50	6	168cfm	294	20	26.0
40128	WD1680EX	16 Gallon Wet/Dry Vac w/Detachable Blower (30V)	50	6.5	172cfm	324	20	29.0
31698	WD1851EX	16 Gallon Contractor Wet/Dry Vac (230V)	47	6.5	199cfm	336	20	32.8
Cat	Model	Indiatoial Carias	Sealed	Peak Horse	Airflow 2-1/2	Air	Cord	Weight

31698	WD1851EX	16 Gallon Contractor Wet/Dry Vac (230V)	47	6.5	199cfm	336	20	32.8
Cat No	Model No	Indistrial Series	Sealed Pressure (in)	Peak Horse Power	Airflow 2-1/2 Orifice	Air Watts	Cord Length	Weight (lb)
25648	RV2400A	14 Gallon Commercial Vac	100	-	105cfm	255	25	37.2
40048	RV2400HF	14 Gallon Certified HEPA Filtration Vac	100	-	105cfm	255	25	37.2
25653	25653 RV2600B 16 Gallon Commercial Vac w/Industrial Acc Kit		100	-	105cfm	255	25	40.1



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Hand Tools



## Ridgid

## **Accessories**

Vaccums are offered with a variety of standard equipment and accessories as indicated below. "A" indicates that the accessory is compatible with the vaccuum, model. "X" indicates that the accessory fits all Ridgid vacumms 5 gallons and larger, including older models,

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# Ridgid

## Ridgid® SeeSnake® Video Inspection Systems

DRAIN INSPECTION EQUIPMENT

1-1/2" to 6" Lines up to 200' 2" to 12" Lines up to 325'

RIDGID SeeSnake video inspection systems offer unmatched reliability and performance in a ruggedized package. Each system offers:

- 100% hardened stainless steel camera head spring assembly of optimum durability.
- Rugged, high-intensity lights for exceptional viewing and long life.
- Flexible transmitters make locating easy and are compatible with RIDGID locators.
- Can be used with any SeeSnake monitor or recorder.



- 1-1/2" to 6" Lines up to 200'
- Ideal for where portability and maneuverability are crucial: multi-story buildings, roof-tops, confined areas, etc.

#### SeeSnake

- 2" to 12" Lines up to 325'
- Wide pipe diameter capacity range makes this system ideal for a wide range of inspection needs.

#### SeeSnake Plus Self-Leveling Camera

- Same features and specifications as the SeeSnake Plus.
- · Includes an always upright, self-leveling camera design.

Catal	og No		
115V 230V		Description	Weight (lb)
14053	14103	SeeSnake 200' Color Reel	43
14058	1058 14108 SeeSnake 325' Color Reel		53
13988	13993	SeeSnake Plus 200' Self-LevelingColor Reel	43
13998	14003	SeeSnake Plus 325' Self-Leveling Color Reel	53
14063	14113	SeeSnake Mini 200' Color Reel	24.5

Description	Self-Level and Standard SeeSnake Accessoires	Mini-SeeSnake Plus Accessories
18" System Cable with Dubbing Block	12248	12248
Color Self-Leveling Camera Head – NTSC (115V)	14028	-
Color Self-Leveling Camera Head - PAL (230V)	14033	-
Color Camera Head – NTSC (115V)	14078	14083
Color Camera Head – PAL (230V)	14128	14133
SeeSnake Flexible In-Line Transmitter	15323	15828
Color Spanner Wrench	17563	17558
Extended Handle for Standard SS Reel	64492	_
SS 3" Centering Star Guides, Pkg of 20	64497	67312
SS 6" Centering Star Guides, Pkg of 10	64502	_
200' SeeSnake Push Cable Assembly	64607	67327
325' Standard SeeSnake Push Cable Assembly	64612	-
SeeSnake Interconnect Cord – 33/10'	64627	67307
SS Guide Hoop, Pkg of 4	93387	-
SS 3" Roller Dolly	97832	_
SS Ball Guides Pkg of 10	97852	_
Color Mini Ball Guides, Pkg of 6	_	97462
Mini Guide Hoop, Pkg of 4	_	93392
Count Plus Cable Counter	31753	31753

## SeeSnake<sup>®</sup> microDrain<sup>™</sup> and microReel<sup>™</sup> Video Inspection Systems

1" to 3" Lines up to 30', 1-1/2" to 4" Lines up to 100' SeeSnake microDrain and microReel video inspection systems provide small size and maneuverability for small diameter and tight-turn radius inspections.

- Lightweight and compact design is one-half the size of popular inspection systems, easily stowed in a truck and carried onto the jobsite.
- Multi monitor compatibility with existing SeeSnake monitors or the microEXPLORER® digital inspection camera.
- Durable and reliable construction with hardened stainless steel camera head spring assembly for a long service life as well as long lasting high intensity lights for exceptional viewing.

#### SeeSnake microDrain D30 System

**Features**: Ideal for inspections with tight turns such as toilet traps and P-traps.

#### **Specifications**

Camera Head.....0.86"
Cable Length.....30'
Cable Diameter...0.33"
Line Capacity.....1" to 3"
Weight.......73 lbs.
Length........13.25"
Width......6.6"
Height.........14.2"

Resolution.......510 x 496 NTSC Ball Guide......2 Included Sonde......Optional – 512 Hz Counter......Not Available

#### SeeSnake microReel L100 System

**Features:** Stiffer push cable than microDrain to enable line inspections up to 100 feet.

#### **Specifications**

Resolution.......510 x 496 N
Ball Guide.......2 Included
Sonde......512 Hz
Counter......Optional



Cat No	Description	Weight (lb)					
30' microDrain							
32663	microDrain D30 Reel (SeeSnake)	7.3					
33103	microDrain D30 Reel (mEXP)	7.3					
32928	microDrain D30/microEXPLORER System	8.6					
	65' microDrain w/Sonde						
37468	microDrain D65S Reel (SeeSnake)	9.8					
37473	microDrain D65S Reel (mEXP)	9.8					
37478	microDrain D65S/microEXPLORER System	11.1					
100' microReel L100 w/Sonde							
35133	microReel L100 (SeeSnake)	10.3					
35143	microReel L100 (mEXP)	10.3					
35153	microReel L100/microEXPLORER System	11.6					
	100' microReel L100C w/Sonde and Counter						
35183	microReel L100C (SeeSnake)	10.3					
35188	microReel L100C (mEXP)	10.3					
35193	microReel L100C/microEXPLORER System	11.6					
	Accessories						
33108	microDrain/microReel Interconnect (SeeSnake)	.65					
33113	microDrain/microReel Interconnect (mEXP)	.65					
35113	microDrain D30 Drum Only	.65					
37483	microDrain D65S Drum Only	5.3					
34623	L100 Drum Only	5.3					
35243	L100C Drum Only	5.3					

## Ridgid

## SeeSnake® Compact Video Inspection Systems

1-1/2" to 4" Lines up to 100'

The SeeSnake Compact system offers fast setup for quick inspections. Its ultra portability makes this system an excellent complement to your SeeSnake Plus.

# Standard Equipment Power Source:

- Battery port for use with optional 18V battery.
- · AC/DC operation.

#### MINIPak Monitor System:

- High-resolution monitor.
- Push button controls for sonde, power, lights, flipscreen and zeroing the counter.
- · Splash-resistant case with built in sunshade.
- · Video In/Out jack.

#### Camera System:

- Scratch-resistant, debris-shedding, flush-mounted sapphire lens.
- Integrated transmitter.
- Durable stainless steel camera head assembly and tapered spring assembly.

#### Reel:

- 100' of push cable.
- Debris-capturing, rotating drum with mercury-free slip ring.
- Counter to display distance on monitor in feet and inches.

Catalog No			
115V 230V		Description	Weight (lb)
32903	32948	Color Compact System w/Battery & Charger	20.9
32913	32753	Color Compact System	16.9
32658	32683	Compact Reel Only	13

# CS1000 Digital Recording Monitor The CS1000 camera control unit is a purpose built

The CS1000 camera control unit is a purpose built monitor that allows you to digitally record and report on your inspections in the field. With the CS1000, you have the flexibility you need to take full advantage of digital recording technology.

### Features:

- Read Writer gives you the ability to generate and deliver a full report on-site with integrated inspection footage and descriptions.
- 12.1" Daylight Readable Display allows you to easily monitor inspections in bright outdoor environments.
- 3 Modes of Recording lets you take digital stills, full frame video and a compressed video format called Auto-log (for smaller video files).
- Integrated Keyboard used for taking notes and storing information about the inspection and customer.
- Software Integrations with SeeSnake HQ and RIDGIDConnect.com allow you to deliver your reports in a wide variety of ways from online video to

#### **Specifications**

Weight: 14.75 lb. Length: 14.3" Width: 11.9" Height: 12.4"

Display: 12.1" Daylight Readable LCD

Resolution: 640 x 480

Power Source: 1 or 2 RIDGID 18V Batteries or AC Plug

Audio: Integrated Microphone and Speakers Video: AVI 20FPS - 720 x 480 NTSC

Image: JPG - 720 x 480 Transfer: USB Thumb Drive

Cat No	Description	Weight (lbs)
32603	CS1000 Digital Recording Monitor	14.75
32608	CS1000 Monitor w/2 Batteries and Charger	20.75

## CS10 Digital Recording Monitor

The RIDGID® SeeSnake® CS10 Monitor combines RIDGID durability with the easiest to use Digital Recording Monitor in the industry. One touch recording allows you to record snapshots and video to a USB Thumbdrive, and then hand it directly to your customer.

#### Features:

- USB Thumb Drive Recording lets you record digitally into a format that your customer can read on their computer
- 12.1" Daylight Readable Display allows you to easily monitor and record inspections in bright outdoor environments.
- Multi Mode Recording lets you take snapshots, record full frame video and record in a lean video format called Auto-log (small files).
- Software Integrations with SeeSnake HQ and RIDGIDConnect.com allow you to deliver your inspections in a wide array of formats from online to DVD.

#### Specifications

Weight: 12.2 lbs. Length: 14.3" Width: 11.9" Height: 12.4"

Display: 12.1" Daylight Readable LCD

Resolution: 640 x 480

Power Source: 1 or 2 RIDGID 18V Batteries or AC Plug

Audio: Integrated Microphone and Speakers Video: AVI 30FPS - 720 x 480 NTSC

Image: JPG - 720 x 480
Transfer: USB Thumb Drive

Cat No	Description	Weight (lbs)
39328	CS10 Digital Recording Monitor	13
39338	CS10 Monitor w/ 2 Batteries and Charger	15.8

### SeeSnake MiniPak Monitor

The new SeeSnake® MINIPak Monitor is the next generation in our line of compact and highly portable monitors. With a bigger LCD Screen and a greatly improved user interface, the MINIPak is a solid choice for our full line of cameras.

#### Features:

- Lithium-Ion Battery Power allows you to run on one RIDGID® 2.2A 18V Li-Ion Battery for up to 5 hours.
- Improved LCD Display with larger and brighter screen for better viewing.
- Push Button Interface for easy operation of LED lights, Transmitter, Screen Settings and System On/Off.
- New Integrated Line Trace Feature lets you trace the push cable with your RIDGID locator (requires transmitter)

#### **Specifications**

Display: 5.7" Color LCD

Power Source: 1 RIDGID 18V Li-Ion Battery or AC Plug

Weight: 3.9 lbs. without battery

Depth: 4" Width: 7.6" Height: 10"

Output: Composite Video Out

Lighting: 10 Level Adjustable LED Control

Cat No	Description	Weight (lb)
32668	MINIPak Monitor Only (115V)	3.9
32748	MINIPak Monitor w/Battery and Charger (115V)	7.9
32913	MINIPak with Compact Reel (115V)	16.9
32903	MINIPak with Compact Reel w/Battery and Charger	20.9
32658	Compact Reel Only (115V)	13
32708	18V 2.2Ah Li-Ion Battery and Charger Kit (115V)	4
32743	18V 2.2Ah Li-Ion Battery	2
27958	18V Li-Ion Battery Charger (115V)	2







## **DVDPak2 Inspection Camera Monitor**

The DVDPak2 Monitor utilizes the latest DVD burning technology to reliably record your inspections in the harshest environments. The DVDPak2's lightweight compact design makes transporting your equipment to the job site even easier.

- Fully Weatherized Design lets you take the DVDPak2 into whatever situation you may run into.
- Exceptional DVD Burning Reliability takes the question out of what DVDs to use and how to finalize correctly.
- Lithium-Ion Battery Power allows you to record inspections regardless of the availability of AC Power.
- Lightweight and Small design makes carrying your tools to the job site and stowing your monitor easier than ever.

#### **Specifications**

Display: 4.3" OLED or 5.7" LCD

Resolution: 480 x 272 (OLED)/320 x 240 (LCD) Power Source: 18V Li-Ion Battery or AC Plug

Weight: 9.15 lbs. Length: 13.8" Width: 9.1" Height: 5.3"

Input: Composite Video In, Built-In Microphone

Media Compatibility: DVD-R, DVD+R, DVD-RW, DVD+RW, DVD+R DL

Cat No	Description	Weight (lb)
32923	DVDPak Monitor Only – 4.3" OLED (115V)	7.5
33203	DVDPak Monitor w/Battery and Charger – 4.3" OLED (115V)	11.5
32673	DVDPak Monitor Only – 5.7" LCD (115V)	7.5
33198	DVDPak Monitor w/Battery and Charger - 5.7" LCD (115V)	11.5
32708	18V 2.2Ah Li-lon Battery and Charger Kit (115V)	4
32743	18V 2.2Ah Li-lon Battery	2
27958	18V Li-Ion Battery Charger (115V)	2

#### HAND-HELD INSPECTION EQUIPMENT

### micro CA-100 Inspection Camera

The RIDGID® micro CA-100 Inspection Camera, the next evolution of the SeeSnake® microTM Inspection Camera, allows you to perform more detailed visual inspections in even harder-to-reach areas. Its comfortable pistol-grip design, one-hand controls, and large screen make it easy to detect and diagnose the unreachable. The micro CA-100 comes standard with a rugged 3/4 inch, 17mm anodized aluminum camera head with 4 super bright LEDs. Easily rotate the active image counter-clockwise to see in any situation. The RIDGID micro CA-100 Inspection Camera provides solutions whenever and wherever you need them.

#### **Specifications**

Display (320x240 Resolution): 3.5" Color LCD

Camera Head: Aluminum 17mm Lighting: 4 Adjustable LEDs

Cable Reach: 3' (Expandable to 30' w/ optional extensions)

Video Output: 3' RCA Cable (included)

Waterproof: Camera head and Cable to 10' (when properly assembled)

Power Source: Batteries (4 x "AA") Attachments: Mirror, Hook & Magnet Weight: 5.5 lbs

Cat No	Description	Weight (lb)
36738	36738 micro CA-100 Inspection Camera	
37103	17mm Replacement Imager	0.7
31128	3´ Cable Universal Extension	0.7
31133	6´ Cable Universal Extension	1.4

## Ridgid

## micro CA-25 Inspection Camera

The RIDGID® micro CA-25 is the newest handheld inspection camera designed for visual detection, diagnosis, and confirmation in hard to reach areas.

The rugged 17mm aluminum camera head combined with a one-handed pistol grip design makes this tool ideal for the most demanding environments. A crisp 2.4" color LCD screen with 180° digital rotation allows for easy viewing, aided by 4 adjustable LCDs in the camera head. Included with the camera in a plastic blow molded case are a hook, magnet, mirror and RCA cable.

#### **Specifications**

Display: 2.4" Color LCD (480 x 234 Resolution)

Camera Head: 3/4" Aluminum Lighting: 4 Adjustable LEDs

Cable Reach: 3' Cable (Not Extendable) Video Output: 3' RCA Cable (Included)

Power Source: Batteries (4 x AA) Attachments: Hook, Mirror, Magnet

Cat No	Description	Weight (lb)
40043	micro CA-25 Inspection Camera	1.3
37123	Replacement Hook, Magnet, Mirror	0.1

## micro CA-300 Inspection Camera

Documentation made easy with the new RIDGID micro CA-300 Inspection Camera, the next evolution of the microEXPLORER® Inspection Camera. Easily record still images and videos of problems in hard-to reach areas and then share these findings with the RIDGIDConnect™ solution. Comfortable pistol-grip design, large screen, and rugged anodized aluminum camera head with four bright LEDs make it easy to detect and diagnose the unreachable. Get the perfect view with enhanced features like image rotation and digital zoom.

#### **Specifications**

Display: 3.5" Color TFT (320 x 240 resolution)

Camera Head: 0.7" LCD Diameter Aluminum Construction

Lighting: 4 Adjustable LEDs

Cable Reach: 3' (Expandable to 30' with optional extension, also compatible with microDrain, microReel and nanoReel)

Images: JPG - (640 x 480) Resolution Video: AVI - (320 x 240) Resolution

External Memory: SD Card up to 32 GB (4GB SD card included)

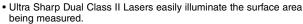
Power Source: Rechargeable 3.7V Li-Ion Battery

Cat No	Description	Weight (lb)
37888	micro CA-300 Inspection Camera	2.0
37103	17mm Replacement Imager	0.7
37108	3´ Cable Universal Extension	0.7
37113	6´ Cable Universal Extension	1.4
37083	3.7V Li-Ion Battery	.24
37098	1m Length x 6mm Diameter Replacement Imager	-
37083	4m Length x 6mm Diameter Replacement Imager	0.9

## Ridgid

## micro IR-100 Non-Contact **Infrared Thermometer**

The RIDGID® micro IR-100 Non-Contact Infrared Thermometer provides simple, quick and accurate surface temperature readings at the push of a button. You simply squeeze the trigger and point the ultra-sharp dual class II lasers at the surface being measured. The micro IR-100 provides an immediate temperature measurement on a clear, easy-to-read backlit LCD display. In addition to numerous other uses, this rugged, compact, instrument enables professional tradesman to diagnose heating and ventilation problems, perform preventative monitoring of electrical motors and systems, troubleshoot steam traps and quickly check fuses or circuit breakers for overheating without contact.



- Ergonomic Pistol Style Grip with rugged over molding allows you to keep a solid grip in the harshest of industrial environments.
- 20 To 1 Distance To Spot Ratio allows you to take more accurate measurements from a farther distance.
- High and Low Alarms quickly alert you to temperatures outside of the ranges that you set.
- · Bright Backlit Display which can be toggled on in poorly lit areas.
- Tripod Mount Capable for repeatable, precise temperature measurements.

#### **Specifications**

Temperature Range: -59º to 1472ºF Measurement Accuracy: -58°F ~68°F ±4.5°F;

68°F ~1472°F ±1.0% or ±1.8°F Response Time: <150ms

Measurement Calculations: current temperature, max temperature

Cat No	Model No	Description	Weight (lb)
36153	micro IR-100	Non-Contact Infrared Thermometer	.5

#### micro LM-100 Laser Distance Meter

The RIDGID® micro LM-100 Laser Distance Meter provides simple, quick and accurate distance readings at the push of a button. Simply push the measurement button to turn on the Ultra-Sharp Class II lasers, point the device at the spot to be measured to, and push the measurement button. The distance reading will appear on the easy to read LCD display. This rugged, compact, portable instrument enables professional tradesman to quickly determine run distances for bidding, distance of piping run, measuring trouble spots down the line and quickly determine spacing for code compliance.



- Ultra Sharp Class II Lasers clearly highlight the point being measured.
- Exceptional Distance Range allows accurate measurements up to 164 feet (50m).
- · Adjustable Units enable you to quickly read in feet, inches or meters on the fly.
- Bright Backlit Display for use in poorly lit areas.
- · Quick and Accurate calculations on the spot.
- Displays up to the last three measurements, stores the last 20 measurements.
- Rugged Over Molding allows you to keep a solid grip in the harshest of industrial environments.

#### **Specifications**

Measurement Accuracy: ±1/16 inch, (1.5mm)

Range: 164 feet (50m)

Measurement Units: inches, feet, meters Measurement Calculations: Area, Volume, and Indirect measurement calculations

Power Source: 2 x "AAA"

IP Rating: IP 54

Cat No	Model No	Description	Weight (lb)
36158	micro LM-100	Laser Distance Meter	.5

### micro CD-100 Combustible Gas Detector

The RIDGID® micro CD-100 Combustible Gas Detector provides simple and quick readings to identify the presence of combustible gases. The micro CD-100 is designed to detect Methane, Propane, Butane, Ethanol, Ammonia, Hydrogen and many other combustible gases. (See Chart on back for a complete list.) With adjustable sensitivity, even low-levels of gases can be detected in seconds.

The RIDGID micro CD-100 Gas Detector is the tool for ensuring proper gas line installations, checking for maintenance and repair needs or quickly pinpoint combustible gas leaks.

• Rugged Ergonomic Design makes it capable of withstanding jobsite rigor.

 Tri-Mode Detection™ gives the operator the flexibility to be alerted with a visual, audible or vibration alert which can be adjusted for your environment.

· Adjustable Sensitivity Settings provides precise leak locating with the touch of a button.

- 16" Flexible Probe allows location and detection of leak in hard-to-reach and confined spaces.
- Field Replaceable Sensor means more up-time and less time waiting for repairs.

#### **Specifications**

Detection Range: 0 to 6400 ppm (Methane) Alarm Sensitivity: 40 ppm (Methane) Calibration: Automatic

Alarms: Visual, Audible, Vibration

Power Source: 4 x "AA"

Classifications: Class B, Division 1

Cat No	Model No	Description	Weight (lb)
36163	micro CD-100	Combustible Gas Detector	1
31948	CD-100 RS	Replacement Sensor	-

#### LOCATING EQUIPMENT

## SeekTech SR-20

- Proximity Signal Minimizes depth over target and maximizes relative signal strength to guide you closer to the target independent of the current flow.
- · Mapping Display Virtually maps the utility to help guide you down the line. Shows signal distortion and line turns in real time.
- Continual Depth Increase productivity by showing depth changes in real time.
- Guidance Arrows Guides the operator to target line by minimizing signal gradient.
- Current Identifies current on target line for faster diagnosis of complex locates.
- Signal Strength Allows the operator to maximize signal strength over the target.

Active Line Trace Frequencies\*: 128Hz, 1kHz, 8kHz, 33kHz Sonde Frequencies: 16Hz, 512Hz, 640Hz, 850Hz, 8kHz, 16kHz, 33kHz

Passive Power Trace: 50Hz, 60Hz, <4kHz Broadband Passive Radio Trace: 4kHz-15kHz, 15kHz-36kHz

Weight: 3.5 lbs.

Power Source: 4 C-Size Batteries

\* User-definable frequencies can be set from 10Hz to 35,000Hz.

Cat No	Cat No Description		
21893 SeekTech SR-20 Line Locator (Includes Case)		4	
Accessories	Accessories		
22173 SeekTech SR-20 Hard Case		9	
16728	Remote Transmitter, 512-AAA	-	





### SeekTech SR-60

Choose the SR-60 locator for fast confident locates even under tough locate conditions (poor conductors, poor soil conditions, poor grounding, etc.)

- Can trace any frequency from 10 Hz to 490,000 Hz.
- Can trace energized lines and sondes (beacons) simultaneously.
- Has all the ease of use and accuracy of the SR-20 but with ALL locatable frequencies.

#### Specifications

Active Line Trace Frequencies\*\*: 128Hz. 1kHz. 8kHz, 33kHz, 51kHz, 93kHz, 200kHz, 262kHz

Passive Power Trace: 50Hz, 60Hz, <4kHz Broadband Passive Radio Trace: 4kHz-15kHz, 15kHz-36kHz

Sonde Frequencies\*\*: 16Hz, 512Hz, 640Hz, 850Hz, 8kHz, 16kHz, 33kHz

Weight: 5.1 lbs.

Battery Life: Approximately 16 hours Power Source: 4 C-Size Batteries

Meets FCC Class A and EN 55022 Class A requirements

\*\* 30 user-definable frequencies can be set from 10Hz to 490,000Hz

Cat No	Cat No Description	
22163	SeekTech SR-60 Line Locator	5.1
29798	SR-60 Case	5

### ST-305 Transmitter

- · Lightweight and compact transmitter that delivers up to 5 Watts of power
- · Can transmit two frequencies simultaneously
- · Audio feedback confirms a good circuit before beginning a trace

#### **Specifications**

Frequencies: 1kHz, 8kHz, 33kHz Output Power: 5 Watts, Nominal

Output: Any 2 Frequencies

Weight: 2.4 lbs.

Maximum Open Circuit Voltage: 240VAC 50/60Hz

Power Source: 6-C Size Batteries

Cat No	Description	Weight (lb)
21898	SeekTech ST-305 Transmitter (5 Watts)	2.5

#### ST-510 Transmitter

- · Ten Watts of fully variable power output.
- LCD display provides instant visual feedback on line resistance and current flow.
- Two 48" extended 46" contracted lead wires with heavy duty clips.
- · Compatible with competitor's equipment.

#### **Specifications**

Frequencies: 128Hz, 1kHz, 8kHz, 33kHz Output Power: 10 Watt, Variable

Display: LCD



## Ridgid

## ST-33Q Line Transmitter

- Distance: Induce over 8 times more current than the competition onto a target line. More current means that you can walk and trace further than ever before.
- Versatility: Induces at 8 kHz and 33 kHz for low distortion locates. In direct connect mode, the SeekTech ST-33Q can transmit at any frequency between 10 Hz and 490,000 Hz making the RIDGID SeekTech ST-33Q one transmitter than can be used with all receivers.



- Speed: More signal equals less retracing of your steps to pick up and move the transmitter. Cut your inductive trace steps in half, by only having to set up the ST-33Q once. In direct connect mode, the LCD display gives instant feedback on current flow and line resistance.
- · Accuracy: Induce more current at lower frequencies. Lower frequencies are less prone to jump onto other lines in congested areas reducing distortion and increasing accuracy.
- Confidence: More current on your line means more signal to locate. Combine your experience with the information provided by RIDGID Locators and you have the tools that allow you to work through difficult traces with confidence.

#### **Specifications**

Direct Connect: (Factory Set): 128 Hz, 1kHz, 8kHz, 33kHz, 93kHz Direct Connect: (User Defined): Any Frequency 10 Hz - 490kHz

Induction: 8kHz, 33kHz

Weight: 12.15 lb. (5.5 kg) w/batteries

Power Source: 6 Alkaline or rechargeable batteries. (D-Cells) or 12V external power supply

Power Settings: 5 mA to 400 mA on internal batteries; High Power option to 1000 mA

Cat No	Description	Weight (lb)
26168	SeekTech ST33Q Transmitter	12.2

### Inductive Signal Clamp

- The RIDGID Inductive clamp allows users to apply a signal to a cable or pipe when connecting directly to the target conductor is not possible.
- The clamp couples the transmitting signal onto the conductor which then allows users to locate using a compatible receiver, such as the NaviTrack™ or NaviTrack Scout™.



- Two built in LED's inform the user the clamp is functioning properly.
- · An integrated adapter allows users to attach a hotstick for out of reach lines.

Cat No	Cat No Description	
20973	Inductive Signal Clamp	2

### NaviTrack® II Locator

NaviTrack II navigates you to the location of underground pipes quickly and easily. It tracks energized lines with ease.

#### NaviTrack II Locates:

- SeeSnake In-Line Transmitters.
- · Remote Transmitters (Sondes).
- Energized Metallic Lines.

#### Performance

- Approach the transmitter from any direction for faster, more accurate locates.
- Maximize the signal and the locate is complete.
- · Verify the locate using the large mapping display.
- Depth measurement is continuous.
- Depths of greater than 15' can be read.

NaviTrack II provides unprecedented ease of use. Due to NaviTrack II's advanced technology, training time is greatly reduced. You can learn to locate with NaviTrack II in minutes.

– continues –



## Ridgid

#### NaviTrack II Locator (continued)

#### **Specifications**

Weight: 5 lbs.

Power Source: 4 C-Cell batteries. Battery Life: Approximately 16 hours.

#### Standard Frequencies

Sonde: 512 Hz.

Active Line Trace: 128 Hz, 1 kHZ, 8 kHz, 33 kHz, 262 kHz.

Passive AC Line Trace: 60 Hz, 50 Hz.

#### **Additional Frequencies**

Sonde: 16 Hz, 640 Hz, 850 Hz, 8 kHz, 16 kHz, 33 kHz.

Active Line Trace: 65 kHz. 200 kHz.

Cat No	Cat No Description	
96967	NaviTrack II Locator	5
22388	NaviTrack II Carrying Case	9
12543	Marker Chips and Clip	-

## NaviTrack® Scout®

Scout is designed to solve the most demanding remote transmitter (sonde) locates using the same multi-directional locating technology as the full-featured NaviTrack II.

#### **Easier Locates**

The Scout's multi-directional antenna technology sees the entire signal all of the time. Simply maximize the signal strength and you have found the target. No nulls or false peaks to complicate the locate.

Scout verifies the locate position using a micro-mapping display to mark distinctive poles in front of and behind the target, insuring an accurate locate.

#### **Automatic Depth**

Depth is automatically calculated and displayed when over the target.

The Scout is ideal for users locating SeeSnake cameras and other sondes who occasionally need to locate energized lines.

#### **Specifications**

Weight: 3 lbs.

Power Source: 4 C-Cell batteries. Battery Life: Approximately 24 hours.

#### **Standard Frequencies**

Sonde: 512 Hz, 640 Hz, 874 Hz, 16 kHz and 33 kHz.

Line Trace: 128 Hz, 1 kHz, 8 kHz and 33 kHz.

Passive AC Line Trace: 60 Hz, 50 Hz.

Cat No	Description	Weight (lb)
19238	NaviTrack Scout Locator	3
20248	Scout Carrying Case	6-1/4
12543	Marker Chips and Clip	-

### NaviTrack® Line Transmitter - 10 Watt

For tracing buried cable, TV lines, phone lines and other metallic lines which can carry an electromagnetic signal.

- Fully variable 10 watts of power output.
- Two 25' coil connectors.
- · Conductive ground rod.
- · Inductive signal clamp (optional accessory).

#### **Specifications**

128 Hz, 1 kHz, 8 Hz, 33 kHz - 10 Watt 200 kHz, 262 kHz - 1 Watt output power. Power Source: 8 D-Cell Batteries.

Battery Life: Greater than 120 hours.

Cat No	Description	Weight (lb)
14818	NaviTrack Line Transmitter	9
20503	Inductive Signal Clamp	2

#### NaviTrack® Brick - 5 Watt

- For tracing buried cable, TV lines, phone lines and other metallic lines which can carry an electromagnetic signal.
- Fully variable 5 watts of power output.
- Lightweight, easy to carry.
- Conductive ground rod.
- Two 10' connectors.

#### **Specifications**

- 1 kHz, 8 Hz, 33 kHz, 262 kHz.
- Power Source: Six C-Cell Batteries.
- Battery Life: Greater than 120 hours.

Cat No Description		Weight (lb)
20168	NaviTrack Brick Transmitter	2-1/2



- to apply a signal to a cable or pipe when connecting directly to the target conductor is not possible.
- The clamp couples the transmitting signal onto the conductor which then allows users to locate using a compatible receiver, such as the NaviTrack™ or NaviTrack Scout™.
- Two built in LED's inform the user the clamp is functioning properly.
- An integrated adapter allows users to attach a hotstick for out of reach lines.
- Compatible with both the NaviTrack 10 Watt Transmitter and the NaviTrack Brick Transmitter.

Cat No	Description	Weight (lb)
20503	Inductive Signal Clamp	2

### Inductive Signal Clamp

- Can be attached to a drain cleaning cable or a water jet hose to locate the Remote Transmitter in a line.
- · Flashing LED indicates that sonde is transmitting

	.og.
Cat No	Description
16728	Remote Transmitter, 512 – AAA
19263	Adapter for 5/8" & ¾"Drum Machine Cables
19268	Adapter for 7/8" Sec. & 1/2" Drum Machine
19273	Adapter for 5/8" Sec. & 3/8" Drum Machine
19258	Adapter for 1 1/4" Sectional Cable

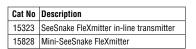
## Inductive Signal Clamp

- Ideal for locating septic tanks.
- 512 Hz signal.
- Flashing LED indicates that sonde is transmitting.
- Flushable.
- · Battery-powered.

Cat No Description		
	19793	Float Sondes (2), Plus Extra Battery

## Inductive Signal Clamp

- With a SeeSnake FleXmitter you can locate a camera in a line (now standard with all SeeSnake reels).
- If your SeeSnake camera isn't equipped with a transmitter, you can upgrade your camera with a FleXmitter.









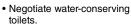
## Ridgid

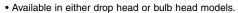
## **DRAIN CLEANER TOOLS & ACCESSORIES**

## K-3/K-6 Closet Augers

High quality tools in 3' and 6' lengths provide fast and safe clearing of closet obstructions. Features include:

- · Vinyl guard to protect porcelain.
- New durable, kink-resistant, 1/2" compression-wrapped Inner Core Cable.
- · Large, ergonomically designed handles.



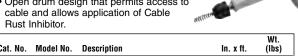


Cat.	Model	Description	Wt.	Replac.
No.	No.		Lb.	Cables
59787	K-3	3' Toilet Auger w/Bulb Head	4.5	_
59792	K-3 DH	3' Toilet Auger w/Drop Head	4.5	_
59797	K-6	6' Toilet Auger w/Bulb Head	4.5	60362
59802	K-6 DH	6' Toilet Auger w/Drop Head	4.5	60367

## K-26 Hand Spinner

A mid-priced tool ideal for users seeking excellent performance and value. Features include:

- · Slip-resistant collet chuck that clasps/unclasps cable with the flick-of-thewrist.
- 5/16" x 25' hollow core cable with bulb head auger for maximum flexibility.
- · Rotary molded plastic drum that won't rust or dent - cleans easily.
- Open drum design that permits access to cable and allows application of Cable



Cat. No.	Model No.	Description	In. x ft.	Wt. (lbs)
59812	K-26	Hand Spinner w/C1 Bulb Head Cable	5/16 x 25	6

### K-25 Hand Spinner

The professional's choice for many years, the K-25 Hand Spinner offers premium quality. It's the ideal tool for the user who demands the best. Features include:

- Premium quality precision machined 3-jaw chuck firmly secures cable. Loosens/tightens with the flick-of-the-wrist.
- · Cast aluminum ribbed hand grip that won't slip in your hand.
- Rotary molded plastic drum that won't dent or rust cleans easily.
- Available in bulb head and drop head models. 5/16" x 25' vinyl wrapped inner core kinkresistant cables.
- Well balanced for comfortable operation.
- Capacity for 35' x 5/16".

Cat. No.	Model No.	Description	ln. x ft.	Wt. (lbs)
58890	K-25-BP	Hand Spinner w/C-1 C Bulb Auger Cable	5/16 x 25	8
58895	K-25-DH	Hand Spinner w/C-2 C Drop Head Cable	5/16 x 25	

## RIDGID | Kollmann®

## **Powered Drain Cleaners**

Serving the needs of:

- Handymen
- Contractors
- Plumbers
- Facility Maintenance
- Professional Drain Cleaners

Out broad line of high quality products enable us to service the needs of all users - from service plumbers to professionals. Superior design and quality manufacturing of RIDGID/Kollman machines, cables, tools and accessories, provide the finest results with long,trouble-free service.

Model	App.	Drain Line (in)	Cable size (in)	Machine Type	Usage
K-39	Bathroom/lavatory/kitchen sinks, tub/shower, urinal & laundry tub drains	3/4 to 2-1/2	5/16 3/8	Drain Gun	Lt. Duty
K-40	Bathroom/laundry/kitchen sinks, tub/shower, urinal & laundry tub drains.	3/4 to 2-1/2	5/16 3/8	Sink Machine	Lt. Duty
K-375	Bathroom/lavatory/kitchen sinks, shower, laundry tub, roof vents & indoor floor drains.	1-1/2 to to 4	3/8 1/2	Drum	Lt. to Med. Duty
K-50	Bathroom/lavatory/kitchen sinks, tub/shower, laundry tub/stacks & indoor floor drains.	3/4 to 4	5/16 3/8 5/8	Sectional	Lt. to Heavy Duty
K-3800	Bathroom/lavatory/kitchen sinks, tub/shower, laundry tub, roof vents & indoor floor drains.	3/4 to 4	5/16 3/8 1/2	Drum	Lt. to Heavy Duty
K-60SP	Laundry tub/stacks, roof vents, and floor drains	1-1/4 to 4	5/8 7/8	Sectional	Lt. to Heavy Duty
K-75	Laundry tub/stacks & floor drains.	1-1/4 to 4	5/8 7/8	Sectional	Lt. to Heavy Duty
K-1500	Stacks/vents, floor drains, mains.	2 to 8	7/8 1-1/4	Sectional	Lt. Duty Heavy Duty
K-1500SP	Stacks/vents, floor drains, mains, commercial lines up to 10".	2 to 10	7/8 1-1/4	Sectional	Lt. to Heavy Duty
K-1500G	Stacks/vents, floor drains, mains, commercial lines to 10". Gas engine for remote locations.	2 to 10	7/8 1-1/4	Sectional	Lt. to Heavy Duty
K-750	Stacks/vents, floor drains, mains, commercial lines up to 10"	3 to 10	5/8 3/4	Drum	Lt. to Med. Duty
K-7500	Stacks/vents, floor drains, mains, commercial lines up to 10".	3 to 10	5/8 3/4	Drum	Lt. to Heavy Duty
		Rodders			
			od/Cable S		
K-1000	Straight main line work in municipalities, universities, institutions and industry	8 to 24	5/16 Rod	Rodder	Heavy Duty

	Water Jetting Machines (Fo	r grease, s	sludge, o	r soap-c	hoked l	ines)	
	Drain Hole Size (in) Line ————————————————————————————————————			in)	Machine		
Model	Application	Size (in)	Desc.	ID	OD	Туре	Usage
KJ-1350	Bathroom/lavatory/kitchen sinks, laundry stacks/vents and floor drains.	1-1/4 to 4	1/8 1/4 1/2	1/8 3/16 1/4	3/16 1/4 1/2	Jetter	Light to Heavy Duty
KJ-1750	Bathroom/lavatory/kitchen sinks, laundry stacks/vents and floor drains.	1-1/4 to 4	1/8 1/4 1/2	1/8 3/16 1/4	3/16 1/4 1/2	Jetter	Light to Heavy Duty
KJ-2200	Bathroom/lavatory/kitchen sinks, laundry stacks/vents and floor drains	1-1/4 to 6	1/8 1/4 1/2	1/8 3/16 1/4	3/16 1/4 1/2	Jetter	Light to Heavy Duty
KJ-3000	Laundry stacks/vents, floor drains/clean outs and main/commercial lines up to 8".	2 to 8	1/4 3/8	3/16 3/8	1/4 5/8	Jetter	Heavy Duty

## Ridgid

## K-5 Grappler Hook

- Retrieves rocks, tools, objects.
- Extends your reach 6' to deepest traps.

Cat. No.	Model No.	Description	Wt. (lbs)
59190	K-5	Grappler Hook	5

- One-Piece Flat Sewer Tape
   Sizes and lengths for use on sewer and drain lines through 8" in diameter and up to 100' in length.
- · Carrier included with all except 25' model.
- All models have a hand grip and a spear point at one end and roller ball at the other.



Cat. No.	Model No.	Width (in)	Thickness (in)	Length (ft)	Line Cap. (in)	Wt. (lbs)			
One-Pied	One-Piece Tapes								
62530	E-2724	1/2	1/16	25	3/4 thru 1-1/2	3			
62535	E-2725	1/2	1/16	50	3/4 thru 1-1/2	6			
62540	E-2726	1/2	1/16	75	3/4 thru 1-1/2	9			
62545	E-2727	1/2	1/16	100	3/4 thru 1-1/2	12			
62555	E-2729	3/4	1/16	50	2	8			
62565	E-2731	3/4	1/16	100	4	18			
62595	E-2737	3/4	1/8	50	4	16			
62605	E-2739	3/4	1/8	100	6	34			
62615	E-2741	1	1/8	50	4	22			
62625	E-2743	1	1/8	100	8	45			

## Model K-39 and K-39AF 3/4" to 2-1/2" Capacity

- Excellent for small line cleaning. Opens clogged lavatory, sink lines, urinals and tub/shower drains.
  - 5/16" cables best for 3/4" to 1-1/2" lines.
  - 3/8" cables best for 1-1/4" to 2-1/2" lines.
- Available in 3 styles: slide action chuck, powerfeed, and 3 jaw chuck.
  - Chuck styles allow for quick locking/releasing of cable.
  - New autofeed unit keeps hands off cable.
- Lightweight, easy-to-use, no setup required.
- Variable speed 1/2" ball bearing power unit rotates cable 0 500 rpm's.
- Two piece twist lock canister with interchangeable inner drum.
  - Makes cable changeout simple; easy to match the right cable to the job.
  - New inner drum prevents water leaks and gently reduces cable flip over.
  - Drums won't rust or dent ever.
- Drum Capacity: 50' of 5/16" or 35' of 3/8"
- · CSA approved.

#### Machine Options: K-39 and K-39AF

Cat.	No.	Model		Wt.
115V	230V	No.	Description	(lbs)
Slide Ad	tion Chuck			
68057	68097	K-39	Machine with: - C-1 C, 5/16" x 25' Inner Core Cable w/Inner Drum.	11
68062	68102	K-39-1	Machine with: - C-1 C, 5/16" x 25' Inner Core Cable w/Inner Drum. - C-6429 Carrying Case	27
68067	68107	K-39-5	Machine with: - C-1 C, 5/16" x 25' Inner Core Cable w/Inner Drum C-6, 3/8" x 35' Cable w/Inner Drum T-250, Five-Piece Tool Set for 3/8" Cable C-6429 Carrying Case	34
68072	68112	K-39-7	Machine with: - C-1 C, 5/16" x 25' Inner Core Cable w/Inner Drum C-6, 3/8" x 35' Cable w/Inner Drum C-21, 5/16" x 50' Cable w/Inner Drum T-250, Five-Piece Tool Set for 3/8" Cable C-6429 Carrying Case	42

#### Model K-39 and K-39AF - 3/4" to 2-1/2"

Cat.	No.	- Model		Wt.
115V	230V	No.	Description	(lbs)
68137	n.a.	K-39B	Cordless Machine with: - 12-BP Battery Pack - 12-BC Battery Charger - C-1, 5/16" x 25' Cable w/Inner Drum.	13
68142	n.a.	K-39B-1	Cordless Machine with: - Two 72-BP Battery Packs - 72-BC Battery Charger C-1, 5/16" x 25' Cable w/Inner Drum C-6429 Carrying Case	29
Slide Act	ion Chuc	k and Autofee	d	
21888	n.a.	K-39AF	Machine with: - C-1 C, 5/16" x 25' Inner Core Cable w/Inner Drum.	11
23508	n.a.	K-39AF-1	Machine with: - C-1 C, 5/16" x 25' Inner Core Cable w/Inner Drum C-6429 Carrying Case	27
23513	n.a.	K-39AF-5	Machine with: - C-1[C, 5/16" x 25' Inner Core Cable w/Inner Drum C-6, 3/8" x 35' Cable w/Inner Drum T-250, Five-Piece Tool Set for 3/8" Cable C-6429 Carrying Case	34
23518	n.a.	K-39AF-7	Machine with: - C-1 C, 5/16" x 25' Inner Core Cable w/Inner Drum C-6, 3/8" x 35' Cable w/Inner Drum C-21, 5/16" x 50' Cable w/Inner Drum T-250, Five-Piece Tool Set for 3/8" Cable C-6429 Carrying Case	42
23523	n.a.	K-39B-AF-1	Cordless Machine with: - Two 72-BP Battery Packs - 72-BC Battery Charger - C-1, 5/16" x 25" Cable w/Inner Drum C-6429 Carrying Case	29

### **Model K-39 Accessories**

#### Cables

	Cat. No.	Model No.	Description	Wt. (lbs)
1/4" Bulb Auger	50647 50652 50657	S-1 S-2 S-3	15' with Bulb Auger 25' with Bulb Auger 35' with Bulb Auger	2-1/4 3-1/2 5
5/16" Bulb Auger	62225 56782 89400 56792	C-1 C-1 C C-21 C-13 C	25' with Bulb Auger 25' Inner Core w/Bulb Auger 50' with Bulb Auger 35' with Bulb Auger	3-1/2 4 7 5-1/2
5/16" Drop Head	62235 56787 89405 56797	C-2 C-2 C C-22 C-23 C	25' with Drop Head Auger 25' Inner Core w/Drop Head Auger 50' with Drop Head Auger 35' with Drop Head Auger	3-1/2 4 7 5-1/2
3/8"	62245 62250 62260 96037	C-4 C-5 C-6 C-6IC	25' with Male Coupling 35' with Bulb Auger 35' with Male Coupling 35' with Male Coupling	4-1/2 8-1/4 8-1/4 8-1/2

#### Accessories

Cat. No.		
115V & 230V	Model No.	Description
18658 18663	12-BP BC-98	12V Cordless Battery Pack 12V Charger
68917 89410	_ C-6429	K-39 Inner-Drum Carrying Case
76817	-	C-6 Cable Kit incl. Inner Drum, C-6 Cable Torque Arm, T-250 Tool Set
98072	-	C-6IC Cable Kit including: Inner Drum, C-6IC Cable, Torque Arm, T-250 Tool Set
23908 23913	A-39AF A-38AF	Drum Front and AUTOFEED Assembly Replacement AUTOFEED Cartridge



### Model K-39 Accessories (continued)

#### Tools - Fits C-4, C-6 & C-6IC Cables

	Cat. No.	Model No.	Description	Replacement Blade(s)
	62067	T-201A	Straight Flex Auger	_
Water Street	62990	T-201	Straight Auger, 5" Long	_
-	62995	T-202	Bulb Auger, 1-1/8" O.D.	_
THE PARTY OF	63000	T-203	Bulb Auger, 7/8" O.D.	_
	55457	T-225	Retrieving Auger	_
The second	63065	T-217	Drop Head, 4" Long	-
	54837	T-204	"C" Cutter 1"	54832
-	63005	T-205	"C" Cutter 1-3/8"	97835
mount.	63010	T-206	Funnel Auger, 3" Long	-
0.0000000000000000000000000000000000000	63030	T-210	Grease Cutter, 1"	97905
4	63035	T-211	Grease Cutter, 1-3/8"	97825
7.00	63040	T-212	Grease Cutter, 1-3/4"	92850
100000000000000000000000000000000000000	63045	T-213	4-Blade Cutter, 1"	97795
-	63050	T-214	4-Blade Cutter, 1-3/8"	97910
200	63055	T-215	4-Blade Cutter, 1-3/4"	97915
	52812	T-230	H-D "C" Cutter, 2"	92815
50	52817	T-231	H-D "C" Cutter, 2-1/2"	92820
-	52822	T-232	H-D "C" Cutter, 3"	92835
	48482	T-250	Tool Set includes:	-
			- T-203	
			- T-205 - T-217	
			- T-210 - A-13	

## K-40 - For 3/4" to 2-1/2" Drain Lines

The K-40 Dual Feed Sink Machine provides the professional with a powerful yet compact machine for cleaning small secondary drain lines from 3/4" to 2 1/2" (19mm - 64mm). When used with the dual feed your hands literally never need to touch the cable, and THERE IS NO MESS.

#### **Features**

- Dual Feed Advanced two way feed keeps hands off cable, advances and retrieves with push of a lever.
- Reduces Job Time by 25% Guide Hose-AUTOFEED completely covers spinning cable. Protects porcelain surfaces and greatly reduces job site clean up.
- Dual Position The K-40 sits flat on the floor, countertop, or tips onto its back for easy access to elevated drains.
- Quiet and Powerful 1/8 hp induction motor quietly delivers enough torque to clear even the toughest blockages.
- Battery Powered Option Convenient K-40B (Battery) eliminates extension cords and improves portability. Weighs 8 lbs. less than standard K-40.
- Premium quality, compression wound inner core cable resists kinking and combines strength and flexibility.
- Two-piece "twist lock" drum housing allows easy access to the inner drum and cable and will not dent or corrode.

Cat.	No.		
115V	230V	Model No.	Description
71702	71727	K-40	Machine with: - C-1 C, 5/16" x 35' Cable w/Inner Drum
71722	71732	K-40G AF	Machine with: - Autofeed - Guide Hose - Mounting Bracket - C-13 C, 5/16" x 35" Cable w/Inner Drum
78347	N/A	K-40B AF	Battery Machine with: - (2) 14.4V Battery Packs - 14.4V Battery Charger - Autofeed - Guide Hose - Mounting Bracket - C-13[C, 5/16" x 35" Cable w/Inner Drum

## **Ridgid**

#### **Model K-40 Accessories**

Cables	Cat. No.	Model No.	Description	Wt. (lbs)
energy.	50647	S-1	15' with Bulb Auger	2-1/4
1/4"	50652	S-2	25' with Bulb Auger	3-1/2
Bulb Auger	50657	S-3	35' with Bulb Auger	5
	62225	C-1	25' with Bulb Auger	3-1/2
Section 2.	56782	C-1 C	25' Inner Core w/Bulb Auger	4
5/16"	89400	C-21	50' with Bulb Auger	7
Bulb Auger	56792	C-13 C	35' with Bulb Auger	5-1/2
	95847	C-13İCSB	35' Inner Core Speed Bump	5-1/2
			with Bulb Auger	
PROPERTY.	62235	C-2	25' with Drop Head Auger	3-1/2
5/16"	56787	C-2 C	25' Inner Core w/Drop Head Auger	4
Drop Head	89405	C-22	50' with Drop Head Auger	7
	56797	C-23 C	35' with Drop Head Auger	5-1/2
(Dimmi	62245	C-4	25' with Male Coupling	4-1/2
	62250	C-5	35' with Bulb Auger	8-1/4
COMMITTEE STATE	62260	C-6	35' with Male Coupling	8-1/4
3/8"			, ,	
to the state of the	96037	C-6IC	35' with Male Coupling	8-1/2

#### Tools - Fits C-4, C-6 & C-6IC Cables

	Cat. No.	Model No.	Description	Rpicmnt Blade(s)
Same Aller	62990 62995 63000 55457	T-201 T-202 T-203 T-225	Straight Auger, 5" Long Bulb Auger, 1-1/8" O.D. Bulb Auger, 7/8" O.D. Retrieving Auger	
The state of the	63065	T-217	Drop Head, 4" Long	_
E	54837 63005	T-204 T-205	"C" Cutter 1" "C" Cutter 1-3/8"	54832 97835
mount.	63010	T-206	Funnel Auger, 3" Long	_
4	63030 63035 63040	T-210 T-211 T-212	Spade Cutter, 1" Spade Cutter, 1-3/8" Spade Cutter, 1-3/4"	97905 97825 92850
4	63045 63050 63055	T-213 T-214 T-215	4-Blade Cutter, 1" 4-Blade Cutter, 1-3/8" 4-Blade Cutter, 1-3/4"	97795 97910 97915
	48482	T-250	Tool Set includes: - T-203 - T-217 - T-205 - A-13 - T-210	_

		T
Cat No	Model No	Description
26558	A-40AF	AUTOFEED Assembly & Guide Hose for K-40 Includes Mounting
23913	A-39/40AF	AUTOFEED Cartridge Assembly for K-40
71757	A-40G	Guide Hose
72702	A-40B	Mounting Bracket
76817		C-6 Cable Kit Includes: - C-6 3/8" x 35' (10.7m) Cable w/Inner Drum - Torque Arm - T-250 5 Piece Tool Kit
83407		14.4V Battery Pack
83417		115V Charger
68917		Inner Drum
71847		Torque Arm
98072		C-6IC Cable Kit Includes: - C-6IC 3/8" x 35' (10.7m) Cable w/Inner Drum - Torque Arm - T-250 5 Piece Tool Kit

## Ridgid

### Model K-400 - For 1-1/2" to 4" Drain Lines

The K-400 offers several unique, user-friendly features to make the toughest drain cleaning jobs easier and hassle-free. Designed with a sleek profile, the K-400 is a great fit for drain cleaners, service plumbers, facility and institutional maintenance departments and property management companies.

#### **Features**

- Integrated Transport Cart allows for easy movement to and from the job site. Heavy-duty, over-molded rubber wheels easily navigate over bumps and up stairs.
- Integrated Telescoping Handle provides high-handle height during transport. Handle locks in low position during drain cleaning operation or during transport to minimize space requirements.
- Cable Control System causes the drum to stop spinning when the blade becomes lodged in a blockage, limits potential for cable to flip over in the drum and helps to indicate to operator when blockages are encountered.
- "Solid Core" Cable uses tough 3/8" or 1/2" Integral Wound (IW) solid core cable that is rugged and kink resistant. Each size comes in several lengths and utilizes a variety of the RIDGID quick-connect cutters.
- AUTOFEED® offered as an accessory, this patented, automatic cable feed powers cable in and out of the drain. Reverse the direction of the AUTOFEED and the cable feeds back into the drum.

## 115V Machine Options

Cat No	Model No	Description
26993	K-400 w/C-31 IW	K-400 Machine w/Gloves & Std. Equipment - C-31 IW 3/8" x 50' Solid Core (Integral Wound) Cable, - T-260 Tool Set Includes: - T-202 Bulb Auger - T-205 "C" Cutter
24853	K-400 w/C-32 IW	K-400 Machine w/Gloves & Std. Equipment - C-32 IW 3/8" x 75' Solid Core (Integral Wound) Cable, - T-260 Tool Set
27008	K-400 AF w/C-32 IW	K-400 Machine w/Gloves & Std. Equipment – Two-Wheel Cart – AUTOFEED – C-32 IW 3/8" x 75' Solid Core (Integral Wound) Cable
27003	K-400 w/C-44 IW	K-400 Machine w/Gloves & Std. Equipment  – C-44 IW 1/2" x 50' Solid Core (Integral Wound) Cable  – T-260 Tool Kit
26998	K-400 w/C-45 IW	K-400 Machine w/Gloves & Std. Equipment – C-45 IW 1/2" x 75' Solid Core (Integral Wound) Cable – T-260 Tool Set
27013	K-400 AF w/C-45 IW	K-400 Machine w/Gloves & Std. Equipment – AUTOFEED – C-45 IW 1/2" x 75' Solid Core (Integral Wound) Cable – T-260 Tool Set

#### Model K-375 Accessories:

#### 3/8" IW Solid Core Cables

	Cat. No.	Model No.	Description	Wt. (lbs)
-	87577 87582 87587 91042	C-31IW C-32IW C-33IW	50' I.W. Cable 75' I.W. Cable 100' I.W. Cable Repair End	18 26 34 0.5

#### 1/2" IW Solid Core Cables

C	at. No.	Model No.	Description	Wt. (lbs)
8	7597	C-44IW C-45IW –	50' I.W. Cable 75' I.W. Cable Repair End	27 39 0.6

#### Model K-375 Accessories (continued)

#### Tools - Fits C-31IW, C-32IW, C-33IW, C-44IW, & C-45IW

	Cat. No.	Model No.	Description	Rplcmt. Blades
distribution Therefore	62990 62995 63000	T-201 T-202 T-203	Straight Auger, 5" Long Bulb Auger, 1-1/8" O.D. Bulb Auger, 7/8" O.D.	_
=	63065	T-217	Drop Head, 4" Long	
£	63005	T-205	"C" Cutter	97835
Eb	63010	T-206	Funnel Auger, 3" Long	_
	63015 63020 63025	T-207 T-208 T-209	Spiral Cutter, 1-1/4" Spiral Cutter, 1-1/2" Spiral Cutter, 2"	97840 97895 97900
•	63030 63035 63040	T-210 T-211 T-212	Spade Cutter, 1" Spade Cutter, 1-3/8" Spade Cutter, 1-3/4"	97905 97825 92850
*	63045 63050 63055	T-213 T-214 T-215	4-Blade Cutter, 1" 4-Blade Cutter, 1-3/8" 4-Blade Cutter, 1-3/4"	97795 97910 97915
400	63060	T-216	Chain Knocker, 2"	98000
	49002	T-260	Tool Set (3/8" - K-375) - T-202 Bulb Auger - T-205 "C" Cutter - T-211 Spade Cutter - A-13 Pin Key	_
	12128	T-240	Tool Set (3/8"- K-380) - T-202 Bulb Auger - T-211 Spade Cutter - A-13 Pin Key	_

#### **Accessories**

	Cat. No.	Model No.	Description	Wt. (lbs)
**************************************	41937	-	Drain Cleaning 1/2 0.2 Gloves, Leather	1/2
_	70032	_	Drain Cleaning Gloves, PVC	
_	59230	A-13	Pin Key For 3/8" Cable	_
	59225	A-12	Pin Key For 1/2" Cable	-
	26773	_	K-400 AutoFeed Assembly	2
	27048	_	K-400 Drum Assembly	10
	92607	_	3/8" x 1/2" Tool Adaptor	1/2
	92682	_	3/8" x 1/2" Drop Head Adaptor	1/2
	92687	_	Coupling 1/2" Drop Head Tool	1/2
	26778		Guide Hose	2
	51317	C-9	Trap Leader	5
	59982	_	Cable Rust Inhibitor - 1 Qt	2-1/2
	59987	_	Cable Rust Inhibitor - 1 Gal.	8-1/2

#### Model K-50 - For 3/4" to 4" Drain Lines

- Compact, versatile, professional's machine. Capable of running three different size cables: 5/16", 3/8", and 5/8". The perfect, all-around sink, shower and floor drain machine. Weighs less than 40 lbs.
- Unique, easy-to-use, instant-acting cable clutch maximizes operator control:
- Pull handle down and cable spins at 400 RPM.
- Release handle, cable stops instantly.
- Uses sections of 5/8" cable, cleans 1-1/4" to 4" lines up to 100 feet.
  - C-8 best for 1 1/4 -3" drains.
  - C-9 best for 2 4" drains.
- Equipped with an A-17 adapter, runs up to 50 feet of 5/16" or 35 feet of 3/8" continuous length cable.
- 5/16" best for 3/4" to 1 1/2" lines.
- 3/8" best for 11/4" to 2" lines.
- Equipped with 1/6 HP motor; 115V Models CSA approved.
- Approved to UL standards (NRTLC).
- continues -







#### Model K-50 (continued)

Cat. No.				Wt.
115V	230V	Model No.	Description	(lbs)
58920	76455	K-50	Machine Only	37
58960	76475	K-50-4	Machine, with: - A-30 Cable Kit	61
58980	76485	K-50-6	Machine, with: - A-17-A Adapter - A-30 Cable Kit	67
59000	76495	K-50-8	Machine, with: - A-17-A Adapter - A-17-B Adapter - A-30 Cable Kit	77
52972	_	K-50-9	Machine, with: - A-40 Cable Kit	74

#### K-50-8 includes:

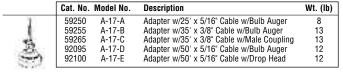
- K-50 Machine
- A-17-A, Adapter includes:
- 25' x 5/16", C-1 Bulb Auger Cable.
- A-17-B, Adapter includes:
- 35' x 3/8", C-5 Bulb Auger Cable

#### Model K-50 Accessories:

#### Cables

	Cat. No.	Model No.	Description	Wt. (lb)
5/16" Bulb Auger	62225 56782 89400	C-1 C-1 C C-21	25' w/Bulb Auger 25' Inner Core w/Bulb Auger 50' w/Bulb Auger	3-1/2 4 7
5/16" Drop Head	62235 56787 89405	C-2 C-2 C C-22	25' w/Drop Head Auger 25' Inner Core w/Drop Head Auger 50' w/Drop Head Auger	3-1/2 4 7
3/8"	62245 62250 62260 96037	C-4 C-5 C-6 C-6IC	25' w/Male Coupling 35' w/Bulb Auger 35' w/Male Coupling 35' w/Male Coupling	4-1/2 8-1/4 8-1/4 8-1/2
مستهدی میبیدی 5/8"	62265 62270 51317	C-7 C-8 C-9	7-1/2' Tight-Wind 7-1/2' All-Purpose Wind 10' Heavy-Duty Wind	4 3 4-3/4

#### **Adapters**



#### Cable Kits

	Cat. No.	Model No.	Cable	Tools & Access.	Wt. (lbs)
Q	59365	A-30	Six Sections: C-8, 5/8" x 7-1/2'	T-201 Straight Auger T-202 Bulb Auger T-205 "C" Cutter T-211 Spade Cutter A-13 Coupling Pin Key A-10 Cable Carrier A-14-6 Rear Guide Hose A-1 Left-Hand Mitt	20
	59370	A-30TW	Six Sections: C-7, 5/8"x7-1/2" Tight-Wind	Same as A-30	30
	52962	A-40	Six Sections: C-9, 5/8"x10'	T-206 Funnel Auger T-215 4-Blade Cutter T-231 "C" Cutter A-13 Coupling Pin Key A-10 Cable Carrier A-14-10 Rear Guide Hose A-1 Left Hand Mitt	37

## **Ridgid**

#### Accessories

	Cat. No.	Model No.	Description	Wt. (lbs)
	59235 84325	A-14-6 A-14-10	6' Rear Guide Hose 10' Rear Guide Hose	5 7
C.	59270	A-18	Front Guide Hose Assembly	9
<b>©</b>	59210	A-10	Cable Carrier (Holds 90' C-8, C-9)	3-1/4
142,7%	59205 59295	A-1 A-2	Left-Hand Mitt Right-Hand Mitt	1/2 1/2
·—o	59230	A-13	Pin Key For 5/8" Cable	1/8
43	59450	A-3179	K-50 Jaw Set	1-1/2

#### Tools - Fit C-4, C-6, C-7, C-8 and C-9

	Cat. No.	Model No.	Description	Rplcmt. Blades
<del>्याह</del> ्यीर ४ त्या	62990 62067 62995 63000 55457	T-201 T-201A T-202 T-203 T-225	Straight Auger, 5" Long Straight Flex Auger Bulb Auger, 1-1/8" O.D. Bulb Auger, 7/8" O.D. Retrieving Auger	_ _ _
THE MARK	63065	T-217	Drop Head, 4" Long	_
€	54837 63005 63010	T-204 T-205 T-206	"C" Cutter 1" "C" Cutter 1-3/8" Funnel Auger, 3" Long	54832 97835 —
5 E	63015 63020 63025	T-207 T-208 T-209	Spiral Cutter, 1-1/4" Spiral Cutter, 1-1/2" Spiral Cutter, 2"	97840 97895 97900
4	63030 63035 63040	T-210 T-211 T-212	Spade Cutter, 1" Spade Cutter, 1-3/8" Spade Cutter, 1-3/4"	97905 97825 92850
4	63045 63050 63055	T-213 T-214 T-215	4-Blade Cutter, 1" 4-Blade Cutter, 1-3/8" 4-Blade Cutter, 1-3/4"	97795 97910 97915
16	63060	T-216	Chain Knocker, 2"	98000
::	63280 63070 63080 63220	T-218 T-219 T-220 T-221	Flue Brush, 3" Flue Brush, 2-1/2" Flue Brush, 2" Flue Brush, 1-1/2"	
€	52812 52817 52822	T-230 T-231 T-232	H-D "C" Cutter, 2" H-D "C" Cutter, 2-1/2" H-D "C" Cutter, 3"	92815 92820 92835
	48482 12128	T-250 T-240	Tool Set includes: -T-203 -T-217 -T-205 -A-13 -T-210 Tool Set (3-8"-K-380) - T-202 Bulb Auger - T-211 Spade Cutter - A-13 Pin Key	_

## Model K-3800 - For 3/4" to 4" Drain Lines

- A powerful, easy to transport, versatile machine for cleaning indoor drains. Requires minimal set-up to clean sink lines, floor drains and roof vents.
- · Rugged, corrosion-resistant molded cable drum won't dent or rust. The drum tilt adjusts for proper cable feed angle. Inner-drum guards against cable flip-over.
- · Cable drum's quick-release and built-in hand-holds allow easy cable change and transport.
- Standard drum capacity is 100' of 3/8" or 90' of 1/2" continuous length cable:
- -3/8" cable best for 1 1/2" to 3" lines up to 100'.
- -1/2" cable best for 2" to 4" lines up to 90'.
- Optional sink drum holds up to 50' of 5/16" or 1/4" cable.
- Ideal for cleaning through 3/4" to 1 1/2" sink traps.
- continues -



# Visit us online at www.hanessupply.com

## Ridgid

### Model K-3800 (continued)

- Powerful 1/12 HP Universal Motor spins cable at 240 RPM. When cable hits blockage, motor gears down automatically to deliver more power and enhance operator control.
- Tools connect to cable in seconds.
- CSA approved.
- Approved to UL standards (NRTLC).
- IW (Integral Wound) cables available. IW cables are slightly stiffer and kink resistant. All IW cables use 3/8" T-200 series cutters.

#### **Machine Options**

Cat	. No.	Model		Wt.
115V	220-240V	No.	Description	(lbs)
53107	59462	K-3800	K-3800 Machine w/gloves	42
53112		K-3800 w/C-31	K-3800 Machine w/Std. Equip. C-31, 3/8* x50' Cable T-202 Bulb Auger T-205 "C" Cutter T-211 Spade Cutter A-13 Pin Key Pair of Gloves	65
53117	63827	K-3800 w/C-32	K-3800 Machine w/Std. Equip. C-32, 3/8* x 75' Cable T-202 Bulb Auger T-205 "C" Cutter T-211 Spade Cutter A-13 Pin Key Pair of gloves	71
53122	63822	K-3800 w/C-45	K-3800 Machine w/Std. Equip. C-45, 1/2" x 75' Cable T-102 Funnel Auger T-142 Knife Blade Cutter T-107 Spade Cutter A-12 Pin Key Pair of gloves	83
53127	-	K-3800 w/C-46	K-3800 Machine w/Std. Equip. C-46, 1/2" x 90' Cable T-102 Funnel Auger T-142 Knife Blade Cutter T-107 Spade Cutter A-12 Pin Key	91

#### 1/4" Cables - For Sink Drum

	Cat. No.	Model No.	Description	Wt. (lbs)
1// Funnel	50652 50657	S-2 S-3	25' w/Funnel Auger 35' w/Funnel Auger	3-1/2 5

#### 3/8" Cables - For Standard Drum

	Cat. No.	Model No.	Description	Wt. (lbs)
Green Street	37842	C-31	50' (15m) I.C. Cable	18
-	37847	C-32	75' (23m) I.C. Cable	26
	37852	C-33	100' (30m) I.C. Cable	34
	51752	T-122	Repair End	1

### Tools - Fits C-31, C-32 and C-33

	Cat. No.	Model No.	Description	Replacement Blades
	62990	T-201	Straight Auger, 5" Lon	
	62995	T-202	Bulb Auger, 1-1/8" O.[	Ď. —
	63000	T-203	Bulb Auger, 7/8" O.D.	
**********	63065	T-217	Drop Head, 4" long	_
-	54837	T-204	"C" Cutter, 1"	54832
-E	63005	T-205	"C" Cutter, 1-3/8"	97835
11-	63010	T-206	Funnel Auger, 3" long	_
	63015	T-207	Spiral Cutter, 1-1/4"	97840
	63020	T-208	Spiral Cutter, 1-1/2"	97895
	63025	T-209	Spiral Cutter, 2"	97900
	63030	T-210	Spade Cutter, 1"	97905
48	63035	T-211	Spade Cutter, 1-3/8"	97825
	63040	T-212	Spade Cutter, 1-3/4"	92850

#### Tools - Fits C-31, C-32 and C-33 (continued)

	Cat. No.	Model No.	Description F	Replacement Blades
4	63045 63050 63055	T-213 T-214 T-215	4-Blade Cutter, 1" 4-Blade Cutter, 1-3/8" 4-Blade Cutter, 1-3/4"	97795 97910 97915
49	63060	T-216	Chain Knocker, 2"	98000
	49002	T-260	Tool Set: T-202 Bulb Auger T-205 "C" Cutter T-211 Spade Cutter A-13 Pin Key	_
	12128	T-240	Tool Set (3/8") – T-202 Bulb Auger – T-211 Spade Cutter – A-13 Pin Key	_
	55457	T-225	Straight Retrieving Au	ger —

#### Accessories

	Cat. No.	Model No.	Description	Wt. (lb)
	55002 55007 55012	A-380 A-381 A-381-A	Standard Drum for 3/8", 1/2" Cable Sink Drum for 5/16", 1/4" Cable Sink Drum with 25' x 5/16" IC Cable w/Bulb Head	12-1/2 12-1/2 16-1/2
	41937	_	Pair of Gloves	1/2
	59230 59225	A-13 A-12	Pin Key for 3/8" Cable Pin Key for 1/2" Cable	1/2 1/2
il.	55017	_	Transport Cart	18
₩ 145.	60087	A3800 P.F.	Power Feed	7-3/8
	62412		Front Guide Hose Adaptor Kit	3.5
	59982 59987		Cable Rust Inhibitor 1 Qt. Cable Rust Inhibitor 1 Gal.	2.5 8.5

#### 5/16" Cables - For Sink Drum

	Cat. No.	Model No.	Description	Wt. (lbs)
5/16" Bulb Auger	56782 56792	C-11C C-13IC	25' Inner Core w/Bulb Auger 35' w/Bulb Auger	4 5-1/2
5/16"	56787	C-2IC	25' Inner Core w/ Drop Head Auger	4
Drop Head	56797	C-231C	35' w/Drop Head Auger	5-1/2

#### 1/2" Cable - For Standard Drum

	Cat. No.	Model No.	Description	Wt. (lbs)
	37857	C-44	50' I.C. Cable	27
Chinical Com-	37862	C-45	75' I.C. Cable	39
	37867	C-45HC	75' Hollow Core Cable	38
	55467	C-46	90' I.C. Cable	47
	59917	T-121	Repair End	0.6

	Tools - Fits C-44, C-45, and C-46					
	Cat. No.	Model No.	Description	Replacement Blades		
F3 00 1	62850 62855	T-101 T-102	Straight Auger Funnel Auger	=		
I	62865	T-104	"H" Cutter, 2-1/2"	97800		
4	62880	T-107	Spade Cutter, 1-3/4"	92850		
4	62930 62935	T-112 T-113	4-Blade Cutter, 1-3/4" 4-Blade Cutter, 3"	97915 97940		
<b>40</b>	62940	T-114	Chain Knocker	97985		
S	54842 54852	T-141 T-142	Knife Blade Cutter, 1-1/ Knife Blade Cutter, 2-1/			
	54992 92687	T-270	Tool Set: T-102 Funnel Auger T-142 Knife Blade Cutter T-107 Spade Cutter A-12 Pin Key Drop Head Adaptor 1/2			

# Model K-60SP - For 1-1/4" to 4" Drain Lines

A compact machine for institutional, commercial or residential cleaning.
 Also ideal for septic tank vacuum truck operators. Small enough to fit into cramped spaces, yet powerful enough to clear tough blockages.

- Ideal for roof-top vent stacks. Rear handle allows for easy transporting up ladders and onto roof tops.
- Unique, easy-to-use instant acting cable clutch maximizes operator control.

Push handle down, cable spins at 600RPM

Release handle, cable stops instantly, no overrun to kink or damage cable.

 Simple adjustment knob allows unit to spin both 7/8" and 5/8" diameter cable. Adjusts in seconds.

7/8" cable (C-10) cleans 2" to 4" lines through 150 feet. 5/8" cable (C-7, C-8, C-9) cleans 1-1/4" to 4" lines through 125 feet.

- Remove only two bolts to access jaw set for cleaning or replacement.
   Removal of same bolts provides access to belt drive.
- Equipped with 1/2 HP motor.
- · CSA approved.

#### **Machine Options**

115V	at. No. 220-240V	Model No.	Description	Wt. (lbs)
66492	66512	K-60SP	Machine with A-1 Operator's Mitt, A-12 Pin Key, and A-60-12 Rear Guide Hose	41
66497	66517	K-60SP-SE	Machine with A-1 Operator's Mit, A- 12 Pin Key, and A-60-12 Rear Guide Hose, plus: A-61 Tool Kit A-62 Cable Kit	92

#### K-60SP-SE includes:

- K-60SP Machine
- A-1 Operator's Mitt
- A-60-12 Rear Guide Hose
- A-62 Cable Kit, includes:
- A-8 Cable Carrier
- Five Sections Of C-10,
- 7/8" Cable, Total 75 Feet
- A-61 Tool Kit, includes:
- T-101 Straight Auger
- T-102 Funnel Auger
- T-107 Spade Cutter
- T-125 Retrieving Auger
- T-150-1 Sharktooth Cutter

#### Cables and Leaders

	Cat. No.	Model No.	Description	Wt. (lbs)
7/8"	62275 30007	C-10 T-127	15' All-Purpose Wind 7/8" Trap Leader	9-1/2 2
5/8"	51317 62270 25046	C-9 C-8 C-8PC	10' Heavy-Duty 7-1/2' All-Purpose Wind 7-1/2" All-Purpose Wind w/Plastic Core	5 3 3-1/2
	62265	C-7	7-1/2' Tight-Wind	4

### Cable Kits and Tool Kit

	Cat. No.	Model No.	Description	Wt. (lbs)
0	61630	A-62	Std. Equipment Cable Kit for K-60SE, includes:  – Five Sections C-10, 7/8" x 15' cable  – A-8 Cable Carrier	: 43
	61625	A-61	Std. Equipment Tool Kit for K-60 SE, includes: - T-101 Straight Auger - T-102 Funnel Auger - T-107 Spade Cutter - T-125 Retrieving Auger - T-150-1 Sharktooth Cutter - A-3 Tool Box - A-12 Pin Key	8
<b>©</b>	48472	A-35	5/8" Cable Kit, includes:  - Six Sections C-8, 5/8" x 7-1/2" cable  - A-10 Cable Carrier  - T-201 Straight Auger  - T-202 Bulb Auger  - T-205 "C" Cutter  - A-13 Coupling Pin Key	18

#### Accessories

	Cat. No.	Model No.	Description	Wt. (lbs)
13:	59360	A-3	Tool Box	5
	59205 59295	A-1 A-2	Left-Hand Mitt Right-Hand Mitt	1/2 1/2
~	59230	A-13	Pin Key, 5/8" cable	1/8
	61615 76575	A-60-12 A-60-16	12' Rear Guide Hose for K-60 16' Rear Guide Hose for K-60	12 15.5
	59445	A-5	Grease Gun	1/2
<b>(3)</b>	59470 59210	A-8 A-10	Cable Carrier (Holds 75' 7/8" Cable/C-10) Cable Carrier (Holds 45' 7/8" Cable/C-10) (Holds 90' 5/8" cable/C-7, C-8, C-9)	5-1/2 3-1/4
i.	59425	A-36	Cable Caddy	15
	65687		K-60SP Replacement Jawset	3/4

#### Tools for C-10 Cable (7/8")

	Cat. No.	Model No.	Description	Rplcmt. Blades
16 <u> </u>	62850 62855 27642	T-101 T-102 T-125	Straight Auger Funnel Auger Retrieving Auger	- - -
32	62860	T-103	Sawtooth Cutter, 2-1/2"	98070
<b>E</b>	62865	T-104	"H" cutter, 2-1/2"	97800
•	62870 62875	T-105 T-106	Grease Cutter, 2-1/2" Grease Cutter, 3-1/2"	97920 97925
<b>6</b>	62880	T-107	Spade Cutter, 1-3/4"	92850
*	62915 62920 62925	T-109 T-110 T-111	Spiral Sawtooth Cutter, 1-3/4" Spiral Sawtooth Cutter, 2-1/4" Spiral Sawtooth Cutter, 3"	97930 97935 92890
-	62930 62935	T-112 T-113	4-Blade Cutter, 1-3/4" 4-Blade Cutter, 3"	97915 97940
€	98050 98055 98060	T-150 T-150-1 T-150-2	Sharktooth Cutter, 3" and 4" Sharktooth Cutter, 3" Blade Sharktooth Cutter, 4" Blade	98005 98010
<b>₩</b>	62940	T-114	Chain Knocker	97985

# Model K-1500 – For 2" to 8" Drain and Sewer Lines

 The finest all-around sewer and drain cleaning machine. One-man can easily clean the heaviest blockages – indoors or out. High-speed cleaning gets the job done faster... better.

• Unique, easy-to-use instant-acting cable clutch maximizes operator control:

- Pull handle down, cable spins at constant 710 RPM
- Release handle, frees cable instantly, no overrun to loop or break cable.
- · Wheels to the jobsite sets-up fast, cleans-up fast.
- Low-profile "B" frame design will fit most crawl spaces, loads and unloads from truck easily. Upright "A" frame features cable carrier storage during transport, ideal for in-house applications.
- Equipped to run easy-to-handle 15-foot sections of 1-1/4" cable to clean 3" to 8" lines to 200 feet.
- Easy clutch jaw change-out adapts K-1500 to run 15-foot sections of 7/8" cable through 2" to 4" lines up to 175 feet.
- Equipped with 3/4 HP motor; 115V Models CSA approved.

- continues -



## **Ridgid**

#### Model K-1500 (continued)

#### **Machine Options - A Frame**

	Cat. No.		Model		Wt.
115V-60HZ	230V-50HZ	240V-50HZ	No.	Description	(lbs)
23692	_	27612	K-1500A	Machine with A-1 Mitt, A-12 Pin Key and Rear Guide Hose	135
23712	_	27592	K-1500A	Machine with A-1 Mitt, A-12 Pin Key, and A-34-12 Rear Guide Hose, Plus: - Seven Sections 1-1/4" (C-11) Cable, Total 105 Feet - Two A-8 Cable Carriers - Nine-Piece 1-1/4" Tool Set	256
23702	_	_	K-1500A	Machine with A-1 Mitt, A-12 Pin Key and A-34-12 Rear Guide Hose, Plus: - Seven Sections 1-1/4" (C-14) - Cable, Total 105 Feet - Two A-8 Cable Carriers - Nine-Piece 1-1/4" Tool Set	256

#### Machine Options - B Frame

	Cat. No.		Model		Wt.
115V-60HZ	230V-50HZ	240V-50HZ	No.	Description	(lbs)
23697	27617	_	K-1500B	Machine with A-1 Mitt, A-12 Pin Key, and A-34-12 Rear Guide Hose	135
23717	27597	27637	K-1500B	Machine with A-1 Mitt, A-12 Pin Key, and A-34-12 Rear Guide Hose, Plus: - Seven Sections 1-1/4" (C-11) - Cable, Total 105 Feet - Two A-8 Cable Carriers - Nine-Piece 1-1/4" Tool Set	256
23707	-	-	K-1500B	Machine with A-1 Mitt, A-12 Pin Key, and A-34-12 Rear Guide Hose, Plus: - Seven Sections 1-1/4" (C-14) - Cable Total 105 Feet - Two A-8 Cable Carriers - Nine-Piece 1-1/4" Tool Set	256

- K-1500 B W/C-11 shown above includes:

   K-1500 B Machine with A-1 Mitt, A-12 Pin Key and A-34-12 Rear Guide Hose
- Seven Sections of 1-1/4" (C-11) Cable, Total 105 Feet
- Two A-8 Cable Carriers
- Nine-Piece Tool Set Includes:
  - T-1 Straight Auger

     T-3 Funnel Auger

     T-6 Retrieving Auger - T-50-1 Sharktooth Cutter
  - A-2864 Hex Key
     A-3516 Hex Key T-8 Grease CutterT-13 Sawtooth Cutter - A-3 Tool Box

#### Accessories

	Cat. No.	Model No.	Description	Wt. (lbs)
<b>(2)</b>	59470 59475	A-8 A-9	Cable Carrier, 60-Foot Capacity (1-1/4") Cable Carrier, 150-Foot Capacity (1-1/4")	5-1/2 14
	59415 59395 59400	A-34-10 A-34-12 A-34-16	10-Foot Rear Guide Hose 12-Foot Rear Guide Hose 16-Foot Rear Guide Hose	13-3/8 20 26.4
A	59300	A-20	Front Guide Hose Assy.	25
1000	59205 59295 62467 62472	A-1 A-2 A-1HD A-2HD	Left-Hand Mitt Right-Hand Mitt Heavy-Duty Left-Hand Drain Cleaning Mitt Heavy-Duty Right-Hand Drain Cleaning Mit	1/2 1/2 1/2 t 1/2
( )	59360	A-3	Tool-Box	5
.—0	59225	A-12	Coupling Pin Key	1/8
	59440	A-4	Trap Spoon (30")	1-3/4
+	59240	A-17	Manhole Guide Pipe	23
•	59320 59325	A-369X A-368X	1-1/4" Replacement Jawset 7/8" Replacement Jawset	3/4 3/4

### Tools - Fits C-11, C-12, C-14 and C-15

	Cat. No.	Model No.	Description	Rpicmt. Blades
11 - 12 - 13 - 130**	62840	T-1	Straight Auger	_
	61800	T-2	Heavy-Duty Straight Auger	-
# 10 mg	63105 61790	T-3 T-4	Funnel Auger Heavy-Duty Funnel Auger	-
#11 × 1/2 ⇒V <sub>1</sub> (1)	63190 63195 63200	T-5 T-6 T-7	Straight Retrieving Auger Funnel Retrieving Auger Hook Auger	-
•	63205	T-8	Grease Cutter, 2-1/2"	97920
	63210	T-9	Grease Cutter, 3-1/2"	97925
	62845	T-10	Grease Cutter, 4-1/2"	97865
Œ	59480	T-11	"H" Cutter, 2-1/2"	97800
	59485	T-12	"H" Cutter, 3-1/2"	97945
37	61970	T-13	Sawtooth Cutter, 2-1/2"	98070
	61975	T-14	Sawtooth Cutter, 3-1/2"	98075
<b>₹</b>	61770	T-15A	Expanding Cutter, 4" – 6"	62970
	61825	T-15B	Expanding Cutter, 6" – 8"	62980
7	61960	T-16	Spiral Bar Cutter, 4"	97855
	61850	T-17	Spiral Bar Cutter, 6"	97955
	61855	T-18	Spiral Bar Cutter, 8"	97960
7	59625	T-21	Spiral Sawtooth Cutter, 3-1/2"	97965
	63075	T-22	Spiral Sawtooth Cutter, 3"	97970
	63085	T-23	Spiral Sawtooth Cutter, 4"	97850
•	59765	T-24	4-Blade Cutter, 2-1/2"	97940
	59770	T-25	4-Blade Cutter, 3-1/2"	97975
	59775	T-26	4-Blade Cutter, 4-1/2"	97805
	59780	T-26A	4-Blade Cutter, 5-1/2"	97980
€	98030 98035 98040 98045	T-50 T-50-1 T-50-2 T-50-3	Three Blade (3" - 4" - 5") Sharktooth Cutter, 3" Sharktooth Cutter, 4" Sharktooth Cutter, 6"	98005 98010 98015
<b>**</b>	63110	T-31	Chain Knocker, For 3/4" Pipe	97985
	63115	T-32	Chain Knocker, For 6" Pipe	97990
	63120	T-33	Chain Knocker, For 8" Pipe	97995
3 <del>-11-411-</del>	63145 63150 63155 63160 63165	T-38 T-39 T-40 T-41 T-42	Flue Brush, 1-1/2" Flue Brush, 2" Flue Brush, 2-1/2" Flue Brush, 3" Flue Brush, 3-1/2"	- - -
	63170	T-43	Flue Brush, 4"	-
	63175	T-44	Flue Brush, 4-1/2"	-
	63240	T-45	Flue Brush, 5"	-
	63180	T-46	Flue Brush, 5-1/2"	-
	63185	T-47	Flue Brush, 6"	-

#### Cables, Leaders and Cable Kits

	Oubics,	Cubics, Leaders and Cubic Kits					
	Cat. No.	Model No.	Description	Wt. (lbs)			
1-1/4"	62280	C-11	15' Std. All-Purpose Wind. 3/8" Pitch. Good for 4" Traps,	16			
	24226	C-11PC	3" – 8" Lines. 15' Standard All-Purpose Wind w/ Plastic Core. 3/8" Pitch. Good for 4" Traps, 3-8" Lines	17.6			
1-1/4"	62285	C-12	15' Extra-Heavy-Duty Wind. 3/8" Pitch. Recommended For 4" - 10" Long Runs, No. 4" Traps.	19			
1-1/4"	62295	C-14	15' Heavy-Duty Wind. 1/2" Pitch. Recommended For 3" - 10" Lines Through Cleanout, No 4" Traps.	16			
1-1/4"	62300	C-15	15' Extra-Flexible Wind. 1/2" Pitch Recommended for 3" - 6" Lines. Good for Traps.	12			
	63090	T-27	1-1/4" x 25" Leader	2-3/4"			
-	62275	C-10	15' Std., All-Purpose Wind.	9-1/2			
7/8"	25036	C-10PC	Requires A-368X Jawset 7/8" Tools 15' Std., All-Purpose Wind. w/ Plastic Core	10			
	To adapt I	K-1500 to run	7/8" cable; requires A-368X Jawset and 7/8	8" Cable Kit.			
	59325 59320	A-368X A-369-X	7/8" Jaw Set 1-1/4" Jaw Set	_			
0	61630	A-62	7/8" Cable Kit - Five sections C-10, 7/8" x 15' Cable - A-8 Cable Carrier	43			
<u> </u>	61625	A-61	7/8" Tool Kit - T-101 Straight Auger - T-102 Funnel Auger - T-107 Spade Cutter - T-125 Retrieving Auger - T-150 1 Sharktooth Cutter - A-3 Tool Box - A-12 Pin Key	8			

## Model K-1500SP - For 2" to 10" **Drain and Sewer Lines**

- All the features of the standard K-1500 with extra power to clean larger lines (10") and longer distances (through 300 feet). Cuts through blockages fast.
- Equipped with full 1 HP TEFC motor and heavy-duty rotary switch.
- · Unique easy-to-use, instant-acting cable clutch maximizes operator control:
- Pull handle down and cable spins at 600 RPM.
- Release frees cable instantly, no overrun to loop or damage cable.
- · Low-profile frame design will fit most crawl spaces.
- 10" semi-pneumatic ball bearing wheels.
- Easy clutch jaw change-out adapts the K-1500 SP to use 7/8" cable to clean 2" to 4" lines through 175 feet (order jawset A-368X, 59325).
- · CSA approved.
- Approved to UL standards (NRTLC).

#### K-1500SP W/C-11 shown above includes:

- K-1500SP Machine with A-1 Mitt and A-12 Pin Key.
- A-34-12 Rear Guide Hose.
- 150 Feet, Ten Sections of C-11, 1-1/4" Cable.
- Three A-8 Cable Carriers.
- Nine-Piece 11/4" Tool Package, includes:
- T-3 Funnel Auger. T-1 Straight Auger. T-6 Retrieving Auger. - T-8 21/2" Grease Cutter. - T-13 21/2" Sawtooth Cutter. - A-2864 Hex Key (3/16").
- A-3516 Hex Key (1/4"). - A-3 Tool Box.
- T-50 Sharktooth Cutter with 3", 4" and 5" Blades.

#### Machine Options - B Frame

Cat No				147-1-L4
120V - 60Hz	220/240V -50Hz	Model	Description	Weight (lb)
43507	43512	K-1500SP	Machine with A-1 Operator's Mitt and A-12 Pin Key, Plus: – A-34-12 Rear Guide Hose	141
46907	-	K-1500SP	Machine with A-1 Operator's Mitt and A-12 Pin Key, Plus: - A-34-12 Rear Guide Hose - A-34-12 Rear Guide Hose - 150 Feet, Ten Sections of C-11, 1 1/4" Cable	317
91027	-	K-1500SP	Machine with A-1 Operator's Mitt and A-12 Pin Key – A-34-12 Rear Guide Hose – C-14 Three Carrier Cable Combination Kit	297

#### Machine Options - A Frame

Ca	at No	Model	Decemention	Weight
120V	220/240V	wouei	Description	(lb)
46837	_	K-1500SPA	Machine with A-1 Operator's Mitt and A-12 Pin Key, Plus: – A-34-12 Rear Guide Hose	150
46902	-	K-1500SPA	Machine with A-1 Operator's Mitt and A-12 Pin Key, Plus: - A-34-12 Rear Guide Hose - 150 Feet, Ten Sections of C-11, 1 1/4" Cable - Three A-8 Cable Carriers	317
91032	-	K-1500SPA	Machine with A-1 Operator's Mitt and A-12 Pin Key, Plus: – A-34-12 Rear Guide Hose & C-14 Three Carrier	317

#### C-14 Heavy-Duty Accessory Kit

Cat No	Model	Description	Weight
48457	_	C-14 Three-Carrier Cable Combination Kit Includes: - 150' C-14 Cable, Ten Sections 1 1/4" - Three Cable Carriers - A-3 Toolbox and A-12 Pin Key - T-2 HD Straight Auger; T-4 HD Funnel Auger; - T-6 Funnel Retrieving Auger; T-8 Spade Cutter; T-13 Saw Tooth Cutters; T-50 Sharktooth	160

See pages 19-156-157 for Cables and Accessories for K-1500

## Ridgid

## Model K-750 - For 3" to 8" **Drain/Sewer Lines**

- · Powerful, self-contained machine ideal for lateral lines. Easy-to-transport, minimal set-up - attach a tool and go.
- · Autofeed advances, retrieves cable automatically, up to 20' per minute.
- Versatile powerfeed adjusts for either 5/8" or 3/4" cable with a twist of a screwdriver.
- Recommend 5/8" cable for 3" to 6" drain lines up to 200'.
- Recommended 3/4" cable for 4" to 10" drain lines up to 200'.
- Cable spins at 200 RPM
- Tough, corrosion-resistant cable drum withstands harsh treatment, abuse. It will not dent or corrode and cleans easily.
- Drum holds 100 feet of 3/4" or 125 feet of 5/8" cable and is designed for quick, easy removal.
- Well-balanced design gives machine a light-weight "feel". Transport wheel eases loading into service truck/van.

#### Machine Options - Powerfeed

Cat. No.		Model		Wt.
115v-60HZ	230V-50Hz	No.	Description	(lbs)
41977	44202	K-750	Machine with Gloves and Autofeed - 3/4" Pigtail	114
51402	51407	K-750	Machine with Gloves and Powerfeed - 5/8" Pigtail	113
42002	-	K-750 w/C-75	Machine with One Pair of Gloves, Autofeed, Standard 3/4" Tool Set, and: C-75, 75' x 3/4" Cable	206
42007	44212	K-750 w/C-100	Machine with One Pair of Gloves, Powerfeed, Standard 3/4" Tool Set, and: C-100, 100, x 3/4" Cable	234
42012	44217	K-750 w/C-27	Machine with One Pair of Gloves, Powerfeed, Standard 5/8" Tool Set, and: C-27, 75' x 5/8" Cable	182
47047	-	K-750 w/C-24	Machine with One Pair of Gloves, Powerfeed, Standard 5/8" Tool Set, and: C-24, 100' x 5/8" Cable	

#### Standard 3/4" Tool Set Includes:

- T-406 Spear Blade Cutter • T-413 3" Cutter • T-407 Retrieving Auger • T-414 4" Cutter
- T-411 2" Cutter

#### Standard 5/8" Tool Set Includes:

- T-403 3" P-Trap Cutter T-407 Retrieving Auger • T-406 Spear Blade Cutter • T-411 2" Cutter
- T-413 3" Cutter

### Model K-750 Accessories:

## Cables and Flevible I eaders

	Cables and Flexible Leaders					
	Cat. No.	Model No.	Description	Wt. (lbs)		
5/8"	92460	C-25	25' I.C. Cable	24		
	92465	C-26	50' I.C. Cable	43		
	92470	C-27	75' I.C. Cable	63		
	43647	T-24	100' I.C. Cable	84		
5/8"	32737	C-27HC	75' Hollow Core	52.75		
	58192	C-24HC	100' Hollow Core	70.6		
3/4"	92475	C-28	25' I.C. Cable	30		
	92480	C-29	50' I.C. Cable	60		
	41212	C-75	75' I.C. Cable	93		
	41697	C-100	100' I.C. Cable	122		
3/4"	47427	C-75HC	75' Hollow Core	75		
	47432	C-100HC	100' Hollow Core	100		
-	92555	T-458	5/8" x 2' Leader	1.90		
	92560	T-468	3/4" x 2' Leader	2.75		
	44122	-	5/8" Pigtail	2.5		
	44117	-	3/4" Pigtail	3.5		

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Hand Tools

## Ridgid

#### Model K-750 (continued)

#### Accessories

	Cat. No.	Model No.	Description	Wt. (lbs)
4	43637	A-7558	Drum Assy. w/5/8" Pigtail	33
અ <u>ક</u> ્	41982	A-7534	Drum Assy. w/3/4" Pigtail	37.5
	40040	A 7E	Downstand Apple	7.8
4	43642	A-75	Powerfeed Assy.	7.0
•	41992		C-100 IC Kit w/Tools 3/4" x 100'	
	49032		Front Guide Hose Assy.	2.8
	46015	E-453	Allen Wrench	_
<b>45</b> .	41937	-	Pair of Work Gloves	.5
<u> </u>	70032		PVC Drain Cleaning Gloves	.5
ţĴ≐	59360	A-3	Tool Box	5
	59982		Cable Rust Inhibitor 1 qt.	2.5
	59987		Cable Rust Inhibitor 1 gal.	8.5
				Wt. (oz)
	31487	A-7570	5/8" Repair Splicer	1.5
-/	92805	A-6582	5/8" Male Coupling	1
WE.TH	92810	A-6583	5/8" Female Coupling	2
	31492	A-7571	3/4" Repair Splicer	2
	92880	B-6840	3/4" Male Coupling	1
11	92885	B-6841	3/4" Female Coupling	2

Tools and Replacement Blades – Fits C-24, C-25, C-26, C-27, C-28, C-29, C-75, C-100, C-27HC, C-24HC, C-75HC and C-100HC

				Replace	ment
	Cat. No.	Model No.	Description	Blade(s)	Holder*
)	92485	T-403	P-Trap Cutter, 3"	92835	92900
~ <b>L</b>	92490	T-404	P-Trap Cutter, 3-1/2"	92840	92900
*	92495	T-406	Spear Blade	92850	92915
بالتحتيين	92500	T-407	Retrieving Auger	-	-
3	92505	T-408	Sawtooth Cutter	92890	92915
	51762	T-409	H-D Bulb Auger	-	-
	92510	T-411	Double Cutter, 2"	92815	92905
- 5 mars	92515	T-412	Double Cutter, 2-1/2"	92820	92905
	92520	T-413	Double Cutter, 3"	92825	92910
	92525	T-414	Double Cutter, 4"	92830	92910
	92530	T-416	Double Cutter, 6"	92855	92910
/	92535	T-432	3-Blade Cutter, 2"	92860	92895
<u></u>	92540	T-433	3-Blade Cutter, 3"	92865	92895
	92545	T-434	3-Blade Cutter, 4"	92870	92895
	92550	T-436	3-Blade Cutter, 6"	92875	92895

<sup>\*</sup> Includes Coupling and Fastener

## Model K-7500 - for 3" to 10" **Drain/Sewer Lines**

• The performance, cable control, durability, and maneuverability demanded by professional users. Ideal for any tough job, such as roots - up to 250'

K-7500

- Recommend 5/8" cable for 3" to 6" drain lines up to 250'.
- Recommend 3/4" cable for 4" to 10" drain lines up to 250'.
- · Cable spins at 200 RPM.
- Powerful, yet quiet, 4/10 Hp universal motor and gearbox bear down as cutter engages tough obstructions.
  - Provides audible and visual signal to operator.
- · Inner-drum and ball bearing distributor arm work with motor/gearbox system to reduce chance of cable flip-over.
- Main and inner drums won't rust, split, or dent ever, and clean easily for professional appearance. Main drum holds up to 100' of 3/4" cable or 125' of 5/8" cable.

- Powerful Autofeed mechanism has grease fittings and an open design for easy maintenance; advances and retrieves cable up to 22' per minute.
- Patented two position stair climber eases transport and loading eliminates extra cost for loading wheels.
- · Narrow profile allows machine to fit through bathroom doors.
- Handles adjust to desired height to ensure balanced transport.
- CSA Approved

#### **Machine Options - Power Feed**

Cat.	. No.	Model		Wt.
115V	220-240V	No.	Description	(lbs)
59562	61542	K-7500	Machine w/3/4" Pigtail and Standard Accessories	150
61102	61522	K-7500	Machine w/5/8" Pigtail and Standard Accessories	149
60062		K-7500 w/C-75	Machine, Standard Accessories, and 3/4" x 75' Inner Core Cable.	244
60052		K-7500 w/C-100	Machine, Standard Accessories, and 3/4" x 100' Inner Core Cable.	272

#### Standard Accessories:

- Spear Blade Retrieving Auger 2" Double Cutter - T-406 - T-407
- T-411 - T-413 - T-414B 3" Double Cutter 4" Double Cutter - (Blade only)
- T-416B 6" Double Cutter - (Blade only)
- T-408 Sawtooth Cutter - T-403 3" P-Trap Cutter - T-468
- 3/4" Flexible Leader - Leather Gloves, Tool Box, Hex Key

#### Standard Equipment:

(Included in All Machine Options) For 5/8" machine packages (Cat. Nos. 61102), the T-468 Leader is replaced with the T-458 Leader and the 6" Double Cutter Blade is eliminated.

Tools and Replacement Blades - Fits C-24, C-25, C-26, C-27, C-28, C-29, C-75, C-100, C-24HC, C-27HC, C-75HC and C-100HC

				Replace	ement
	Cat. No.	Model No.	Description	Blade(s)	Holder
-	92485	T-403	P-Trap Cutter, 3"	92835	92900
	92490	T-404	P-Trap Cutter, 3-1/2"	92840	92900
	92495	T-406	Spear Blade	92850	92915
بالتعويب	92500	T-407	Retrieving Auger	-	
3	92505	T-408	Sawtooth Cutter	92890	92915
	51762	T-409	H-D Bulb Auger	-	-
_	92510	T-411	Double Cutter, 2"	92815	92905
	92515	T-412	Double Cutter, 2-1/2"	92820	92905
- <b>, , , , ,</b>	92520	T-413	Double Cutter, 3"	92825	92910
	92525	T-414	Double Cutter, 4"	92830	92910
	92530	T-416	Double Cutter, 6"	92855	92910
	92535	T-432	3-Blade Cutter, 2"	92860	92895
	92540	T-433	3-Blade Cutter, 3"	92865	92895
	92545	T-434	3-Blade Cutter, 4"	92870	92895
	92550	T-436	3-Blade Cutter, 6"	92875	92895

#### Cables and Flexible Leaders

	Cat. No.	Model No.	Description	Wt. (lbs)
<del></del>	92460	C-25	25' I.C. Cable	24
5/8"	92465	C-26	50' I.C. Cable	43
	92470	C-27	75' I.C. Cable	63
	43647	C-24	100' I.C. Cable	84
5/8"	32737	C-27HC	75' Hollow Core	52.75
	58192	C-24HC	100' Hollow Core	70.5
3/4"	92475	C-28	25' I.C. Cable	30
	92480	C-29	50' I.C. Cable	60
	41212	C-75	75' I.C. Cable	93
	41697	C-100	100' I.C. Cable	122
3/4"	47427	C-75HC	75' Hollow Core	75
	47432	C-100HC	100' Hollow Core	100
-	92555	T-458	5/8" x 2' Leader	1.90
	92560	T-468	3/4" x 2' Leader	2.75
	44122	-	5/8" Pigtail	2.5
	44117	-	3/4" Pigtail	3.5

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# Ridgid

#### Model K-750 (continued) Accessories

	Cat. No.	Model No.	Description	Wt. (lbs)
-4ju	60042 61107	A-7534D A-7558D	Drum Assy. w/3/4" Pigtail Drum Assy. w/5/8" Pigtail	31 30
•	60047	A-75DR	Drum Only	20
À	60032 60037 41992	A-75PF	Power Feed Assy. Power Feed Spacers C-100 IC Kit w/Tools 3/4" x 100'	10
	49032		Front Guide Hose Assy.	2.8

	Cat. No.	Model No.	Description	Wt. (oz)
TT. TT.	31487 92805 92810	A-7570 A-6582 A-6583	5/8" Repair Splicer 5/8" Male Coupling 5/8" Female Coupling	1.5 1 2
مخمتر	31492 92880 92885	A-7571 B-6840 B-6841	3/4" Repair Splicer 3/4" Male Coupling 3/4" Female Coupling	2 1 2
-	41937 70032	- -	Pair of Work Gloves PVC Drain Cleaning Gloves	.5
Ţ	59360 59987	A-3	Tool Box Cable Rust Inhibitor 1 gal.	5 8.5

## **Cables**

#### For Drain Guns, Sink Drums, and Small Line Sectional Machines

	Model	Length (ft)	Size (in)/ Type	Typical Application	Characteristics	R/K Machines
-	C-1	25	5/16" Bulb Auger	Drain Lines 3/4" to 1-1/2"  – Kitchen Sinks, Lavatory Sinks, Bathtub		K-25/K-26
	C-21	50	•	Drains, Drinking Fountains & Urinals  Drain Lines 3/4" to 1-1/2".	Hollow Core Cables that Provide Maximum Flexibility for	(25' only) K-39
Ecolo.	C-2 C-22	25 50	5/16" Drop Head	Drop Head Leads into Down Drain Pipes. Especially Good for Back-To-Back Mounted Fixtures and Severe Bends.	Severe Bends and P-Traps.	K-40 K-50
	C-1IC C-13IC	25 35	5/16" Inner Core w/Bulb Auger	Drain Lines 1-1/4" to 2"  – Kitchen Sinks, Lavatory Sinks, Slop Sinks and Laundry Lines.	Inner Core Cables that provide Good Flexibility While	K-25/K-26 (25' only) K-39
<del>≖©:46</del> ;	C-2IC C-23IC	25 35	5/16" Inner Core w/Drop Head	Drop Head Leads into Down Drain Pipes, Especially Good for Back-To-Back Mounted Fixtures and Severe Bends.	Delivering More Cleaning Power to Cable End. Resists Kinking.	K-40 K-3800 K-50
	C-4 C-6 C-6IC	25 35 35	3/8" w/Male Coupling	Drain Lines 1-1/4" to 2-1/2"  – Kitchen Sinks, Lavatory Sinks, Slop Sinks and Disposal Waste Lines	Flexible, Yet Tough 3/8" Cable Most Commonly Used After	K-39 K-40
	C-5	35	3/8" w/Bulb Auger	Drain Lines 1-1/4" to 2-1/2" – Kitchen Sinks, Lavatory Sinks, Slop Sinks and Disposal Waste Lines.	Traps Have Been Removed.	K-50

For Sectional Machines		Length	Size (in)/	Typical		R/K
Macililes	Model	(ft)	Type	Application	Characteristics	Machines
Ψ	C-7	7-1/2	5/8	2" and 3" Floor Drains.	Tight Wind Cable providing good rigidity in a hollow core cable. Not for tree roots.	K-50, K-60SP K-75A/B
	C-8	7-1/2	5/8	Drain Lines 1-1/4" to 2".  - Ideal for Proper Cleaning of Small Lines.	Open Wind Cable that is more flexible than C-7. Open Wind acts as an auger to thoroughly remove blockages in small lines.	K-50, K-60SP K-75A/B*
· <u> </u>	C-9	10	5/8	Drain Lines 2" to 4". – Ideal for Floor Drains and Stacks.	Heavy-Duty Open Wind Cable ideal for long runs in indoor lines.	K-50, K-60SP K-75A/B*
Carrier States	C-10	15	7/8	Drain Lines 2" to 4". – Roof-Top Vent Stacks.	Std. All-Purpose Open Wind. Excellent flexibility.	K-60SP K-1500A/B*
<	C-11	15	1-1/4	Drain lines 3" to 8". Good for All Around Work. - Easily Negotiates 4" Traps.	Std. All-Purpose Open Wind w/ 3/8" pitch. Flexible. Yet rigid enough to do fast, tough root cutting.	K-1500A/B/ & Sp
cless@cobits	C-12	15	1-1/4	Drain Lines 4" to10". – Do Not Use Through 4" "P" Traps.	Extra-Heavy-Duty Open Wind 3/8" Pitch. Designed for 4" to 10" long runs.	K-1500A/B/ & SP
4	C-14	15	1-1/4	Drain Lines 3" to 10". – Do Not Use Through 4" "P" Traps.	Heavy-Duty Open Wind with 1/2" Pitch. Especially Good For 4" Cleanout or 8" Elbow Entering in 4" to 10" Line.	k-1500A/B/ & SP
<u>,</u>	C-15	15	1-1/4	Drain Lines 3" to 6" – Ideal for 4" Traps.	Extra-Flexible Open Wind with 1/2" Pitch.	K-1500A/B

For Drum Machines	Model	Length (ft)	Size (in)/ Type	Typical Application	Characteristics	R/K Machines
4444	C-3, C-31IW C-32, C-32IW C-33, C-33IW	50 75 100	3/8" w/Inner Core	Drain Lines 1-1/2" to 2-1/2"  – Kitchen Sinks, Lavatory Sinks, Slop Sinks and Laundry Stacks.	Good flexibility. As torque builds, outer spring tightens on Wire core causing cable to stiffen & Transfer greater torque to Cutter.	K-400 K-3800
<del></del>	C-44, C-44IW C-45, C-45IW C-46	50 75 90	1/2" w/Inner Core	Drain Lines 2" to 4" – Laundry Stacks, Roof Vents and Indoor Floor Drains.	Same characteristics as above. Exceptional flexibility and toughness for a 1/2" inner core cable.	K-400 K-3800
-	C-25, C-25HD C-26, C-26HD C-27, C-27HD C-24, C-24HD	25 50 75 100	5/8" w/Inner Core "	Drain Lines 3" to 4". – Floor Drains, Vents and Laterals.	General Purpose Cable. Inner core provides greater Stiffness under load.	K-750 K-6200 K-7500
	C-27HC C-24HC	75 100	5/8" w/Hollow Core	Drain Lines 3" to 4". – Floor Drains, Vents, Laterals.	Hollow core cable is lighter in weight & more flexible. Helps operator negotiate difficult traps & bends in large lines.	K-750 K-7500
1886— 1880—	C-28 C-29 C-75 C-100	25 50 75 100	3/4" w/Inner Core "	Drain Lines 4" to 10". – Main Lines Including Laterals.	Powerful cable used for heavy-duty blockages such as tree roots. Tightens on core to provide extra stiffness under load. Delivering power to cutter.	K-750 K-7500
	C-75HC C-100HC	75 100	3/4" w/Hollow Core	Drain Lines 4" to 6" – Main Lines including Laterals.	Hollow core cable is lighter in weight and more flexible. Helps operator negotiate difficult traps and bends in large lines.	K-750 K-7500

on H-10 Cart

# Ridgid

# Water Jetters:

# Model KJ-1350 & KJ-1750 Jets 1-1/4" - 4" Drain Lines

These jetters propel a highly flexible hose through 1-1/4" to 4" lines - blasting through sludge, soap, and grease blockages. As you pull the hose back, it power scrubs the line, flushing debris away and restoring drain lines to their free flowing capacity.

- Easy to use: Thrust propels the hose down the line. You simply guide the hose into the drain.
- High Quality: Duplex pump with corrosion resistant, forged, brass head. New pressure control valve allows quick and easy pressure adjustment.
- **Dependable:** Reduced number of fittings, hoses, and parts minimizes leaks and down time keeping you on the job.
- Versatile: Optional power washer package cleans cables, tools and other heavily soiled equipment.
   Model KJ-1350-C

# **KJ-1350 Water Jetter**

- Powerful: Actual working pressure of 1350 psi and flow of 1.4 GPM for fast, effective cleaning of lines.
- Pulse Action: Activate the KJ-1350's pulse action to easily negotiate difficult bends and traps. The KJ-1350-2 has a second level of pulse.

• Portable and Compact:

The optional H-10 Cart rolls the jetter and hose to the job site. Jetter and hose reel are easily removed from the cart in seconds for hard to reach drains or remote storage. The compact cart offers a retractable handle and swivel hose reel minimizing storage space. Optional adapter allows the KJ-1350 to be mounted on the upright H-30 Cart.

• Electrical Requirement: The 1.5 hp motor draws a maximum of 14 amps and can run on most standard 115-volt circuits.

# **KJ-1750 Water Jetter**

- Powerful: Actual working pressure of 1750 psi and flow of 1.4 GPM for fast effective cleaning of lines.
- Pulse Action: Two levels of pulse are standard. Activate the KJ-1750's pulse action to easily negotiate difficult bends and traps.
- Portable: The optional H-30 Cart rolls the jetter and hose to the job site. The jetter is easily removed from the cart in seconds for hard to reach drain or for remote storage. Optional adapter allows the KJ-1750 to be mounted on the compact H-10 Cart.
- Electrical Requirement: The 2.0 hp motor draws a maximum of 17 amps which requires a 20 amp, 115-volt circuit.



# **Jetter Nozzles**

# Model H-21 and H-31 (KJ-1350) & Model H-41 and H-51 (KJ-1750) Propulsion Nozzles

General-purpose nozzle that works well in most applications. Features three reverse thrusters for maximum propulsion to jet long distances.

# Model H-22 and H-32 (KJ-1350) & Model H-42 and H-52 (KJ-1750) Penetrating Nozzles

Penetrating nozzle features an additional forward pointing jet that blasts a hole in solid ice or sludge blockages. Three reverse jets provide propulsion.

# Model H-24 Drop Head Nozzle (KJ-1350) & Model H-44 Drop Head Nozzle (KJ-1750)

Allows jetter hose to negotiate difficult bends and traps. Three reverse thrusters provide propulsion.

# Model H-25 Spinning Nozzle (KJ-1350) & Model H-45 Spinning Nozzle (KJ-1750)

Spinning action cleans the entire interior of pipe surface.

Three reverse jets provide propulsion.

# Model KJ-1350 and KJ-1750 Accessories:

# Machine Options (115V)

Cat. No.	Model No.	Description	Wt. (lbs)
62587	KJ-1350	KJ-1350 Standard Jetter w/Pulse - H-21, H-22, and H-24 1/8" NPT Nozzles - 25' x 1/8" Sink Trap Hose - Nylon Storage Bag - Nozzle Cleaning Tool	70
62597	KJ-1350-C	Above with: – H-10 Cart – 100' x 1/4" Trap Hose	120
63107	KJ-1350-2	KJ-1350 Jetter w/Dual Pulse – H-21, H-22 and H-24 1/8" NPT Nozzles – 50' x 1/8" Sink Trap Hose – Nylon Storage Bag – Nozzle Cleaning Tool	72
63112	KJ-1350-2C	Above with: – H-10 Cart – 100' x 1/4" Trap Hose	122
62687	KJ-1750	KJ-1750 Jetter w/Dual Pulse - H-41, H-42, and H-44 1/8" NPT Nozzles - H-51 and H-52 1/4" NPT Nozzles - 50' x 1/8" Sink Trap Hose - Nylon Storage Bag - Nozzle Cleaning Tool	75
62697	KJ-1750-C	Above with:  – H-30 Cart  – 110' x 1/2" Jet Hose	155
67332	KJ-1750-SC	62687 with: - H-10 Cart - 100' x 1/4" Trap Hose	125

### **Jetter Nozzles and Hoses**

Cat. No.	Model No.	Description		Hose I.D	Hose O.D.
64707	H-21	KJ-1350 Propulsion Nozzle	1/8" Female NPT	-	_
64712	H-22	KJ-1350 Penetrating Nozzle	1/8" Female NPT	-	-
64717	H-24	KJ-1350 Drop Head Nozzle	1/8" Female NPT	-	-
82832	H-25	KJ-1350 Spinning Nozzle	1/8" Female NPT	-	-
64722	H-31	KJ-1350 Propulsion Nozzle	1/4" Female NPT	-	_
64727	H-32	KJ-1350 Penetrating Nozzle	1/4" Female NPT	-	-
64742	H-41	KJ-1750 Propulsion Nozzle	1/8" Female NPT	_	_
64747	H-42	KJ-1750 Penetrating Nozzle	1/8" Female NPT	-	_
64752	H-44	KJ-1750 Drop Head Nozzle	1/8" Female NPT	-	_
82837	H-45	KJ-1750 Spinning Nozzle	1/8" Female NPT		
64757	H-51	KJ-1750 Propulsion Nozzle	1/4" Female NPT	_	_
64762	H-52	KJ-1750 Penetrating Nozzle	1/4" Female NPT	-	-
52957	H-1825	1/8" x 25' Sink Trap Hose	1/8" Male NPT	1/8"	3/16"
53037	H-1850	1/8" x 50' Sink Trap Hose	1/8" Male NPT	1/8"	3/16"
47597	H-1435	3/16" x 35'	1/8" Male NPT	3/16"	1/4"
47602	H-1450	3/16" x 50'	1/8" Male NPT	3/16"	1/4"
49272	H-1475	3/16" x 75'	1/8" Male NPT	3/16"	1/4"
49277	H-1400	3/16" x 100'	1/8" Male NPT	3/16"	1/4"
64732	H-1415	3/16" x 150'	1/8" Male NPT	3/16"	1/4"
50002	HL-1	12" Flexible Leader 1/	8" Male & Female NPT	1/8"	3/16"
50007	HL-2	18" Flexible Leader 1/8"	Male & 1/4" Female NPT	1/8"	3/16"
47607	H-1250	1/4" x 50'	1/4" Male NPT	1/4"	1/2"
51587	H-1211	1/4" x 110'	1/4" Male NPT	1/4"	1/2"
49487	H-1215	1/4" x 150'	1/4" Male NPT	1/4"	1/2"
51597	H-1220	1/4" x 200'	1/4" Male NPT	1/4"	1/2"

### Jetter Accessories

Cat. No.	Model No.	Description
64697	H-10	H-10 Cart w/Hose Reel
62592	H-10 WH	H-10 Cart w/Hose Reel and 100' x 1/4" Trap Hose
62882	H-5	Mini Hose Reel (fits H-10 Cart) 150' x 1/4" Capacity
64737	H-30	H-30 Cart w/Hose Reel
62877	H-30 WH	H-30 Cart w/Hose Reel and 110' x 1/2" Jet Hose
62887	HP-EL	Pressure Wash Package, Electric Jetters
64702	HW-EL	Wash Wand, Electric Jetters
51572	H-1235	1/2" x 35' Wash Hose
62897	H-10A	KJ-1750 Adapter to Fit H-10 Cart
62892	H-30A	KJ-1350 Adapter to Fit H-30 Cart
48367	H-25	Winterizing Kit
47542	H-21	Nozzle Cleaning Tool
67187	H-32	Jet Vac
70032	-	PVC Drain Cleaning Gloves
41937	-	Leather Drain Cleaning Gloves
62757	-	Nylon Storage Bag



# Model KJ-2200 Jets 1-1/4" to 6" drain lines

This jetter propels a high flexible hose through 1-1/4" to 6" lines - blasting through sludge, soap and grease blockages. As you pull the hose back, it power scrubs the line flushing debris away and restoring drain lines to their full, free flowing capacity.

- Powerful: Actual working pressure of 2200 psi and flow of 2.4 GPM for fast, effective cleaning of lines.
- Easy to Use: Thrust propels the hose down the line. You simply guide the hose into the drain.
- Pulse Action: Activate the KJ-2200's pulse action to easily negotiate difficult bends and traps.
- Portable: The optional H-30 cart rolls the jetter and hose to the job site.
   The jetter is easily removed from the cart in seconds for hard to reach drains, indoor applications, or remote storage.
- Convenient: Standard equipment includes FV-1 foot valve. It makes remote or indoor operation simple and safe. You control the jetting action at the drain while leaving the jetter outdoors.
- Quality & Dependability: Triplex pump with corrosion resistant, forged, brass head. Reduced number of fittings, hoses and parts minimizes leaks and down time - keeping you on the job.
- Versatile: Optional power washer package cleans cables, tools and other heavily soiled equipment.

# Model KJ-2200 Accessories

# **Machine Options**

Cat. No.	Model No.	Description	Wt. (lbs)
63877	KJ-2200	KJ-2200 Jetter w/Pulse  – H-61, H-62, and H-64 1/8" NPT Nozzles  – H-71 and H-72 1/4" NPT Nozzles  – 75' x 1/4" Trap Hose  – FV-1 Foot Valve  – Nozzle Cleaning Tool	65
63882	KJ-2200-C	Above with: – H-30 Cart – 110' x 1/2" Jet Hose	145

# Jetter Nozzles and Hoses

Cat. No.	Model No.	Description		Hose I.D.	Hose O.D.
64772	H-61	Propulsion Nozzle	1/8" Female NPT	-	-
64777	H-62	Penetrating Nozzle	1/8" Female NPT	-	-
64782	H-64	Drop Head Nozzle	1/8" Female NPT	-	-
82842	H-65	Spinning Nozzle	1/8" Female NPT	_	_
64787	H-71	Propulsion Nozzle	1/4" Female NPT	-	-
64792	H-72	Penetrating Nozzle	1/4" Female NPT	-	-
82852	H-75	Spinning Head Nozzle	1/4" Female NPT	-	-
47597	H-1435	3/16" x 35' Trap Hose	1/8" Male NPT	3/16"	1/4"
47602	H-1450	3/16"x 50' Trap Hose	1/8" Male NPT	3/16"	1/4"
49272	H-1475	3/16" x 75' Trap Hose	1/8" Male NPT	3/16"	1/4"
49277	H-1400	3/16" x 100' Trap Hose	1/8" Male NPT	3/16"	1/4"
64732	H-1415	3/16" x 150' Trap Hose	1/8" Male NPT	3/16"	1/4"
50002	HL-1	12" Flexible Leader	1/8" Male NPT	1/8"	3/16"
50007	HL-2	12" Flexible Leader	1/8" Male NPT	1/8"	3/16"
47607	H-1250	1/4" x 50' Jet Hose	1/4" Male NPT	1/4"	1/2"
51587	H-1211	1/4" x 110' Jet Hose	1/4" Male NPT	1/4"	1/2"
49487	H-1215	1/4" x 150' Jet Hose	1/4" Male NPT	1/4"	1/2"
51597	H-1220	1/4" x 200' Jet Hose	1/4" Male NPT	1/4"	1/2"

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# **Ridgid/Stanley**

Model KJ-2200 Accessories (continues)

### **Jetter Accessories**

Cat. No.	Model No.	Description
62882	H-5	Mini Hose Reel
64737	H-30	H-30 Cart w/Hose Reel
62877	H-30 WH	H-30 Cart w/Hose Reel and 110' x 1/2" Jet Hose
64077	HP-22	Pressure Wash Package, KJ-2200
64767	HW-22	Wash Wand, KJ-2200
48157	FV-1	Foot Valve
66732	HF-4	Quick Connect Hose
48367	H-25	Winterizing Kit
47542	H-21	Nozzle Cleaning Tool
67187	H-32	Jet Vac
70032	_	PVC Drain Cleaning Gloves
41937	-	Leather Drain Cleaning Gloves

### **Jet Vac**

Model

K.J-2200-C

For use with all RIDGID/Kollman water jetters:

The Jet Vac attaches to any portable water jetter to quickly move (vacuum) liquid and debris from flooded basements, sumps, swimming pools, construction sites, car wash pits, etc. This cost and time saving product will move up to 60 gallons of liquid per minute.

### Jetter Nozzles

### Model H-61 and H-71 Propulsion Nozzles

General-purpose nozzle that works well in most applications. Features three reverse thrusters for maximum propulsion to jet long distances.

# 0

### Model H-62 and H-72 Penetrating Nozzles

Penetrating nozzle features an additional forward pointing jet that blasts a hole in solid ice or sludge blockages. Three reverse jets provide propulsion.



# Model H-64 Drop Head Nozzle

Allows Jetter hose to negotiate difficult bends and traps. Three reverse thrusters provide propulsion.



# Model H-65 and H-75 Spinning Nozzle

Spinning action cleans the entire interior of pipe surface. Three reverse jets provide propulsion.

# Stanley®

# **UTILITY KNIVES**

# Contractor Grade™ 199® Utility Knife - Fixed Blade

- Positive fixed blade retention for heavy-duty cutting
- · Super-duty cast metal textured handle designed for long, tough use
- Nose overlaps at top and bottom for added strength

No.	Description	Length (in)
10-209	Fixed Blade	51/2

# 99<sup>®</sup> Utility Knife - Retractable Blade

- Interlocking nose to hold blade securely
- Three-position retractable blade
- Blade storage in handle

	No.	Length (in)
1	10-099	6



# **Stanley**

# **Retractable Utility Knife**

- · Interlocking nose to hold blade securely
- Three-position retractable blade
- · Contoured handle with diagonal ribs for a slip-resistant grip
- Blade storage in handle

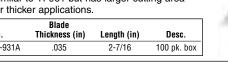


No.	Length (in)
10-079	5-3/8

# **Utility Knife Blades - Bulk Pack Boxes**

- Cuts linoleum, carpeting, roofing material, and cartons without damage.
- · Similar to 11-961 but has larger cutting area for thicker applications.

Blade No. Thickness (in		n) Length (in) Desc.		
11-931A	.035	2-7/16	100 pk. box	



# Hook Blade

- Edge protection blade for cutting and trimming roofing materials, linoleum, carpet, fabric, cartons and sheet materials
- Blade shape helps prevent damage to whatever is beneath material being cut
- · Fits most standard utility knives

No	Description	Thickness (in)	Length (in)
11-961	5 Pack	.024	2-1/16
11-961A	100 Dispenser Pack	.024	2 -1/16



# **COMPO-CAST® HAMMERS**

# Compo-Cast® Sledge Head Soft Face Hammers - Hi-Vis Orange

- Non-sparking, soft-face sledgehammers
- · Flat area on head allows upright storage
- Urethane covering helps reduce noise pollution
- Dead-blow function uses steel shot to eliminate bounce back
- · Handle is reinforced with steel to provide strength and safety and to prevent breaking on overstrike

No	Hammer Wt (lb)	Face Length (in)	Head Length (in)	Overall Length (in)
57-550	5.0	2-1/2	7	19-5/8
57-551	8.0	2.6	7-1/8	29-7/8
57-552	10.5	3	8-1/4	30
57-554	11.5	3	8-1/8	36

# Compo-Cast® Standard Head Soft-Face Hammers - Hi-Vis Orange

- Uni-Cast™ construction of non-ferrous materials eliminate sparking and won't absorb liquids
- · No exposed metal on face, head or shaft
- Soft faces prevent marring
- Dead-blow function uses steel shot to eliminate bounce back
- Handle is reinforced with steel to provide strength and safety and to prevent breaking on overstrike

No	Hammer Wt (oz)	Face Length (in)	Head Length (in)	Overall Length (in)
57-530	10	1.2	3-1/8	10-1/8
57-531	18	1.6	3-3/4	11-1/4
57-532	21	1.8	4-1/16	12-7/8
57-533	42	2.1	4-5/8	14-1/4
57-534	52	2-5	5-3/8	15-1/4

# **TAPE RULES**

# PowerLock® Classic Tape Rules

- 7' blade standout (on specified models).
- Mylar® polyester film extends life of entire blade.
- Chrome high-impact ABS case is job site tough.
- · Secure blade lock won't creep during measurements.
- 16" and 19.2" stud center markings simplify framing jobs.
- Corrosion-resistant Tru-zero end hook for accurate measurements.

No	Case Color	Blade Length	Blade Width	Blade Standout
33-116	Chrome	16'	3/4"	_
33-158	Chrome	5m/16'	3/4"	ı
33-425	Chrome	25'	1"	7'
33-428	Chrome	8m/26'	1"	7'
33-430	Chrome	30'	1"	7'
33-835	Chrome	35'	1"	7'



# PowerLock® Metal Case Tape Rules

- Cast-metal case is durable and suitable for heavy-duty use.
- Mylar® polyester film extends life of entire blade.
- Secure blade lock won't creep during measurements.
- 16" and 19.2" stud center markings simplify framing jobs.
- Corrosion-resistant Tru-zero end hook for accurate measurements.

No	Case Color	Blade Length	Blade Width
33-212	Chrome	12'	1/2"
33-215	Chrome	3.5m/12'	1/2"
33-231	Chrome	3m	1/2"
33-312	Chrome	12'	3/4"



# PowerLock® Metal Case Tape Rules

- 8' blade standout.
- BladeArmor™ coating on the first 3" maximizes durability of the blade.
- Mylar® polyester film extends life of entire blade.
- · Compact case design for grip and feel
- Chrome high-impact ABS case is job site tough.
- Secure blade lock won't creep during measurements.
- 16" and 19.2" stud center markings simplify framing jobs.
- Three-rivet, corrosion-resistant Tru-zero end hook for accurate measurements

No	Case Color	Blade Length	Blade Width	Blade Standout
33-516	Chrome	16'	1"	8'
33-525	Chrome	25'	1"	8'
33-530	Chrome	30'	1"	8'



# LeverLock® Tape Rules

- Push-release self-locking mechanism controls blade retraction.
- Polymer-coated blade withstands abrasion.
- · Magnetic end hook holds securely to metal surfaces (on specified models).
- High-impact ABS case with durable rubber holds up to heavy use.
- 16" and 19.2" stud center markings simplify framing jobs.
- Corrosion-resistant Tru-zero end hook for accurate measurements.

No	Case Color	End Hook	Blade Length	Blade Width
30-810	Yellow	-	12'	1/2"
30-812	Yellow	_	16'	3/4"
30-824	Yellow	_	8m/26' cm graduation	1"
30-825	Yellow	_	25'	1"
33-281	Yellow	Magnetic	25' Fractional Read	1"
33-270	Hi-Vis Orange	Magnetic	25' Fractional Read	1"
30-830	Yellow	-	30'	1"





# **Stanley**

# FatMax Xtreme® Tape Rules

- 13' blade standout.
- 1-1/4" wide blade for easy readability.
- 150% larger hook\* designed to grab on side, top or bottom for versatility.
- BladeArmor™ coating on the first 6" maximizes durability of the blade.
- High-visibility Mylar® polyester film extends life of entire blade and provides visibility in low lighting.
- · Chrome case with durable rubber-holds up to heavy use.
- AirLock™ rubber slide lock is resistant to impact and makes locking and unlocking easy.
- 16" and 19.2" stud center markings simplify framing jobs.

No	Case Color	Blade Length	Blade Width	Blade Standout
33-885	Chrome/black	16'	1-1/4"	13'
33-890	Chrome/black	25'	1-1/4"	13'
33-891	Chrome/black	8m/26' cm graduation	1-1/4"	13'
33-895	Chrome/black	30'	1-1/4"	13'
33-900	Chrome/black	35'	1-1/4"	13'



# FatMax® Tape Rules

- 11' blade standout.
- 1-1/4" wide blade for easy readability.
- BladeArmor<sup>™</sup> coating on the first 4-1/2" maximizes durability of the blade.
- Mylar® polyester film extends life of entire blade.
- High-impact ABS case with durable rubber-holds up to heavy use.
- Top-forward blade lock makes locking and unlocking easy.
- 16" and 19.2" stud center markings simplify framing jobs.
- Cushion grip provides comfortable, slip-resistant hold.
- Specially designed multi-catch hook grabs on top or bottom for versatility.
- Three-rivet, corrosion-resistant Tru-zero end hook for accurate measurements.

No	Case Color	Blade Length	Blade Width	Blade Standout
33-716	Yellow/black	16'	1-1/"4	11'
33-725	Yellow/black	25'	1-1/4"	11'
33-726	Yellow/black	8m/26' cm graduation	1-1/4"	11'
33-730	Yellow/black	30'	1-1/4"	11'
33-805	Yellow/black	10m/33' cm graduation	1-1/4"	11'
33-735	Yellow/black	35'	1-1/4"	11'
33-740	Yellow/black	40'	1-1/4"	11'



Mylar® is a registered trademark of DuPont Teijin Films

# Max™ Tape Rules

- 10' blade standout (on specified models).
- 1-1/8" wide blade for easy readability (on specified models).
- High-impact ABS case with durable rubber-holds up to heavy use.
- AirLock™ rubber slide lock is resistant to impact and makes locking and unlocking easy.
- 16" and 19.2" stud center markings simplify framing jobs.
- Cushion grip provides comfortable, slip-resistant hold.
- Three-rivet, corrosion-resistant Tru-zero end hook for accurate measurements.

No	Case Color	Blade Length	Blade Width	Blade Standout
33-691	Yellow	12'	3/4"	_
33-692	Yellow	16'	3/4"	_
33-278	Yellow	16'	1-1/8"	10'
33-279	Yellow	25'	1-1/8"	10'
33-262	Hi-Vis Orange	25'	1-1/8"	10'
33-298	Yellow	25'	1-1/8"	10'



# | PowerLock® Pocket Tape Rule

- Back of blade provides scale that measures up to 3' diameters.
- Polymer-coated blade withstands abrasion for long life.
- Chrome high-impact ABS case is job site tough.
- Slim case fits easily in pocket.
- Secure blade lock won't creep during measurements.

No	Case Color	Blade Length	Blade Width	Blade Standout
33-115	Chrome	10'	1/4"	ı



# PowerLock® Key Tape

- Polymer-coated blade withstands abrasion.
- · Durable key ring makes it easy to take anywhere.
- · Convenient and lightweight.

No	Case Color	Blade Length	Blade Width	Blade Standout
39-130	Chrome	3	1/4"	-



# **Pocket Tape Rule**

- Polymer-coated blade withstands abrasion.
- · High-impact ABS case for durability.
- Corrosion-resistant Tru-zero end hook for accurate measurements.

No	Case Color	Blade Length	Blade Width	Blade Standout
30-506	Yellow	6'	1/2"	-



# **Tape Rules**

- Polymer-coated blade withstands abrasion.
- High-impact ABS case for durability.
- 16" and 19.2" stud center markings simplify framing jobs.
- Corrosion-resistant Tru-zero end hook for accurate measurements.
- Fractional read blade graphics for quick and easy measurements (only on 30-454)

	-		-	
No	Case Color	Blade Length	Blade Width	Blade Standout
30-485	Yellow	12'	1/2"	-
30-495	Yellow	16'	3/4"	_
30-455	Yellow	25'	1"	_
30-464	Yellow	30'	1"	_



# **Hi-Vis Tape Rules**

- Polymer-coated blade withstands abrasion.
- High-visibility case makes it easy to find in tool box or on the job.
- High-impact ABS case with durable rubber holds up to heavy use.
- Cushion grip provides comfortable, slip-resistant hold.
- 16" and 19.2" stud center markings simplify framing jobs.
- Corrosion-resistant Tru-zero end hook for accurate measurements.

No	Case Color	Blade Length	Blade Width	Blade Standout
30-301	Hi-Vis Green	12'	1/2"	_
30-304	Hi-Vis Green	16'	3/4"	-
30-418	Hi-Vis Orange	16'	3/4"	_
30-305	Hi-Vis Green	25'	1"	_
30-419	Hi-Vis Orange	25'	1"	_



# **Stanley/Union Tools-Ames-True Temper**

# **Stanley Long Tape Rules**

- 3/8" wide steel blade for durability.
- Polymer-coated blade withstands abrasion for a long life.
- · High-impact ABS case for durability.
- 16" stud center markings simplify framing jobs.
- · Easy-wind drum for easy retraction.
- End hook recoils neatly into contoured case.
- Belt clip for hands-free use and convenient transportation.
- Corrosion-resistant Tru-zero folding end hook for accurate measurements.

No	Case Color	Blade Length	Blade Width	
34-103	Yellow	50'	3/8"	
34-106	Yellow	100'	3/8"	



# FatMax® Long Tape Rules

- 3:1 gear drive for fast rewind
- 3/8" wide steel blade for durability
- Polymer-coated blade withstands abrasion
- High-impact ABS case with durable rubber-holds up to heavy use
- Steel roller cage protects case during retraction for long life
- 16" stud center markings simplify framing jobs
- Cushion grip provides comfortable, slip-resistant hold

No	Case Color	Blade Length	Blade Width
34-130	Yellow/Black	100'	3/8"



# FatMax® Fiberglass Long Tape Rules

- Rewinds 3X faster\* with 3:1 gear drive
- 64 fiberglass strands provide 2X blade strength\*.
- 3/4" wide, 2-color blade for easy readability in most lighting conditions.
- 2-sided blade graphics with fractional inch/decimal foot scales for versatility.
- Polymer-coated blade withstands abrasion.
- Reinforced blade end for long life.
- End loop for easy pulling and anchoring.
- High-impact ABS case with durable rubber grip holds up to heavy use.
- Corrosion-resistant Tru-zero folding end hook for accurate measurements.

	No	Case Color	Blade Length	Blade Width
1	34-812	Yellow	100'	3/4"



# PowerWinder® Fiberglass Long Tape Rules

- Rewinds 3X faster\* with 3:1 gear drive.
- 40 fiberglass strands for strength and durability.
- 1/2" wide blade for easy readability.
- 2-sided blade graphics with fractional inch/decimal foot scales for versatility.
- Polymer-coated blade withstands abrasion.
- Reinforced blade end for long life.
- End loop for easy pulling and anchoring.
- High-impact ABS case with durable rubber grip holds up to heavy use.
- Corrosion-resistant Tru-zero folding end hook for accurate measurements.
- Blade bumper to help prevent blade damage.

No	Case Color	Blade Length	Blade Width
34-760	Yellow	100'	1/2"
34-762	Yellow	300'	1/2"

# **Open Reel Fiberglass Long Tape Rules**

- 1/2" wide blade with easy-to-read markings.
- 2-sided blade graphics with fractional inch/decimal foot scales.
- Polymer-coated blade withstands abrasion.
- High-impact ABS case with durable rubber grip holds up to heavy use.
- Corrosion-resistant Tru-zero folding end hook for accurate measurements.

No	Case Color	Blade Length	Blade Width
34-790	Yellow	100'	1/2"
34-793	Yellow	200'	1/2"



# **True Temper/Union Tools**

# Wheelbarrows:

### C5

Promotional contractor wheelbarrow; 5 cu. Ft. heavy gauge seamless steel tray, front tray braces, "H-Brace," 16" tire.

Tray: black seamless steel

### C6&C6K

Promotional contractor wheelbarrow; 6 cu. Ft. heavy gauge seamless steel tray, front tray braces, "H-Brace", 16" tire, #C6K has knobby tire.

Tray: black seamless steel

# CP6

Promotional contractor wheelbarrow; 6 cu. Ft. corrosion proof poly tray with reinforcing ribs around the tray curl for added strength, front tray braces, "H-Brace", 16" tire.

Tray: gray high-density polyethylene

# **J6&J6K**

Designed for contractor use, Jackson quality at a value price; 6 cu. Ft. heavy gauge seamless steel tray, front tray braces, steel cross strips, steel leg shoes, "H-Brace", 16" tire.

#J6K has knobby tire

Tray: blue, seamless steel

# M6T22, M6T22KB

Designed for heavy duty contractor use; 6 cu. Ft. heavy gauge seamless steel tray, front tray braces, cross strips, steel leg shoes, leg gussets, "H-Brace", 16" tire.

Tray: blue, seamless steel

# MP575T22

Heavy duty, corrosion proof poly tray, 5-3/4 capacity, front tray braces, cross strips, steel leg shoes, leg gussets, "H-Brace," 16" tire.

Tray: blue, seamless polyethylene

### В

Brick and Tile Wheelbarrow, front tray braces, steel leg shoes, leg gussets, "H-Brace", 16" tire.

Tray: wood

- continues -



















# **Union Tools-Ames-True Temper**

# Wheelbarrows (continues)

### BP8

Heavy duty, corrosion proof poly tray, 8 cu. Ft. capacity, two 16" tires with heavy duty bearings, front tray braces, steel cross braces, steel shoes, "H-Brace"

Tray: yellow, seamless polyethylene

# **BP10**

Heavy duty, corrosion proof poly tray, 10 cu. Ft. capacity, two 16" tires with heavy duty bearings, front tray braces, steel cross braces, steel leg shoes, "H-Brace"

Tray: orange, seamless polyethylene



# **Wheelbarrow Specs**

Prod. No.	Cap. (cu. ft.)	Wheel Size (in)	Wheel Type	Han- dles	Tray Braces	Cross Strips	Shoes	Gus- sets	Std. Pk.	Pk. Wt. (lbs)
C5	5	16 x 4	Pneumatic, 2 ply rated, oilube bearing	Wood	Х				1	42.60
C6	6	16 x 4	Pneumatic, 2 ply rated, oilube bearing	Wood	Х				1	46.30
C6K	6	16 x 4	Pneumatic, knobby tire, oilube bearing	Wood	Х				1	48.80
CP6	6	16 x 4	Pneumatic, 2 ply rated, oilube bearing	Wood	Х				1	35.30
J6	6	16 x 4	Pneumatic, 2 ply tire, oilube bearing	Wood	Х	Х	Х		1	51.00
J6K	6	16 x 4	Pneumatic, knobby tire, oilube bearing	Wood	Х	Х	Х		1	53.50
M6T22	6	16 x 4	Pneumatic, 2 ply rated, oilube bearing	Wood	Х	Х	Х	Х	1	57.00
M6T22KB	6	16 x4	Pneumatic, knobby tire, ball bearings	Wood	Х	Х	Х	Х	1	59.50
MP575T22	5-3/4	16 x 4	Pneumatic, 2 ply rated, oilube bearing	Wood	Х	Х	Х	Х	1	45.50
ВТ	120 bricks	16 x 4	Pneumatic, 2 ply rated, ball bearings	Wood	Х	Х	Х	Х	1	59.70
BP8	8	16 x 4 2-each	Pneumatic, 2 ply rated, oilube bearing	Wood	Х	Х	Х		1	54.90
BP10	10	16 x 4 2-each	Pneumatic, 2 ply rated, oilube bearing	Wood	Х	Х	Х		1	56.90

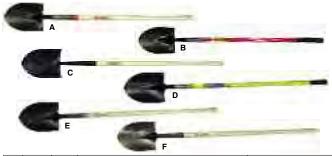
# **Mixing Boxes**



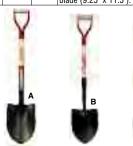
Cat No Cubic		Product	Dimensions (in)
1MP	3	Steel Mortar Pan	29.5 x 29.5 x 7
18MPS		Steel Mortar Pan Stand	30 x 18 x 21
1HMPP	3	Heavy Duty Poly Mortar Pan	32 x 32 x 6
MBP	9	Poly Mixing Box	61 x 37.25 x 11.75
40MB	11	Steel Mixing Box	63.25 x 35.5 x 11

# 18MPS

# **Round Point Shovels**



Key	Cat No	Level	Description	ldeal For	
	45657	Pro	Forward turned-step. 14 gauge, #2, closed-back blade (9.5" x 12"). Dual rivet, extended tab socket. 48" ash handle.		
Α	45520	Pro	Forward turned-step. 14 gauge, #2, open-back blade (9.5" x 12"). Dual rivet, extended tab socket. 48" ash handle	Digging and excavation in various soils.	
	45519	Pro	Rolled step. 14-gauge, #2, open-back blade (9.5" x 12"). Dual rivet, extended tab socket. 48" ash handle.		
В	45013	Pro	Forward turned-step. #2, closed-back handle with reinforced steel backbone for maximum strength (9.5" x 12"). 48" fiberglass handle.	Digging and excavation	
В	45000	Pro	Forward turned-step. #2, open-back handle with reinforced steel backbone for maximum strength (9.5" x 12"). 48" fiberglass handle.	in hard, rocky soils.	
С	45019	Pro	No-Step. #2, solid shank, 9.25" x 11.5"). 10" socket. 47" ash handle.	Digging and excavation	
	45020	Pro	Forward turned-step. #2, solid shank (8.75" x 11.5"). 10" socket. 47" shaped fiberglass handle.	in hard, rocky soils.	
D	45160	Better	Forward turned-step. 16 gauge, #2, open-back, heavy-duty blade with crimp collar (9" x 11.5"). 9" socket. 48" fiberglass handle.	Digging and excavation	
Е	45106	Good	Forward turned-step. 16 gauge, #2, open-back, heavy-duty blade with crimp collar (9" x 11.5"). 9" socket. 48" ash handle.	in various soils	
	41126	Good	Forward turned-step. #0, open-back, floral blade (8.25" x 6"). 7" socket. 43" ash handle.	Digging in tight spaces and transplanting small plants and shrubs	
F	40191	Good	Forward turned-step. 16 gauge, open-back blade (9.25" x 11.5"). 9"socket. 48" ash handle.	Digging in light, sandy soils	









Key	Cat No	Level	Description	ldeal For	
	43069	Pro	Forward turned-step. 14 gauge, #2, closed-back blade (9.5" x 12"). Dual rivet, extended tab socket. 30" ash handle with steel and wood D-grip		
А	43205	Pro	Forward turned-step. 14 gauge, #2, open-back blade (9.5" x 12"). Dual rivet, extended tab socket. 30" ash handle with steel and wood D-grip	Withstand repeated use in toughest conditions	
	43201	Pro	Rolled Step. 14 gauge, #2, open-back blade (9.5" x 12"). Dual rivet, extended tab socket. 30" ash handle with steel and wood D-grip	Conditions	
В	43007	Pro	No-step. #2, solid shank blade (9.25" x 11.5"). 10" Socket. 27" ash handle with steel and wood D-grip.	Digging and excavation in hard, rocky soils	
С	45167	Better	Forward turned-step. 16 gauge, #2, open-back, heavy-duty blade with crimp collar (9" x 11.5"). 9" socket. 27" fiberglass handle with ergo D-grip.	Medium to heavy duty lawn and garden jobs	
D	43516	Good	Forward turned-step. 16 gauge, #2, open-back, heavy-duty blade with crimp collar (9" x 11.5"). 28" ash handle with steel and wood D-grip.		
Е	43106 Good (9.25 x 11.5"). 9" socket. 28" ash handle with poly D-grip.		Light to medium duty lawn and garden jobs		

# **Union Tools-Ames-True Temper**

# **Square Point Shovels**

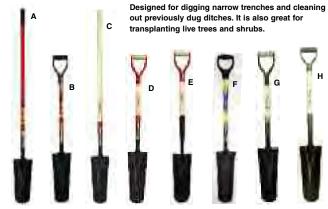


Key	Cat No	Level	Description	ldeal for	
А	44363	Pro	Forward turned-step. 14-gauge, #2, closed-back blade (9.5" x 12"). Dual rivet, extended tab socket. 48" ash handle.		
	44124	Pro	Forward turned-step. 14-gauge, #2, open-back blade (9.5" x 12"). Dual rivet, extended tab socket. 48" ash handle.	Moving loose garden materi- al, sand, top	
	44101	Pro	Rolled-step. 14-gauge, #2, open-back blade (9.5" x 12"). Dual rivet, extended tab socket. 48" ash handle.	soil or debris. It can also be used to shape beds, mix con- crete, level off areas that need to be flat or to scrape stub-	
В	44004	Pro	Rolled-step. 14-gauge, #2, closed-back blade (9.5" x 12"). 10" socket. 48" fiberglass handle.		
	44000	Pro	Rolled-step. 14-gauge, #2, open-back blade (9.5" x 12"). 10" socket. 48" fiberglass handle		
С	44009	Pro	No-step. #2, solid shank blade (9.75" x 11.25"). 10" socket. 47" ash handle.	born material off driveways	
D	44106	Good	Forward turned-step. #2, open-back, heavy-duty blade with crimp collar (9.25" x 11.5"). 9" socket. 48" ash handle.	or other hard surfaces.	
Е	40184	Good	Forward turned-step. 16-gauge, #2, open-back blade (9.25" x 11.5"). 9" socket. 48" ash handle.		
F	45161	Forward turned-step. 16 gauge, #2, open-back,		Transferring heavy, rocky materials	



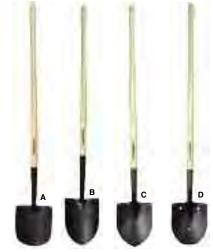
Key	Cat No	Level	Description	ldeal for
А	42008	Pro	No-step. #2, solid shank blade (9.75" x 11.25"). 10" socket. 27" ash handle with steel and wood D-grip.	
	55221	Pro	Forward turned-step. #2, solid shank blade (9.75" x 11.25"). 10" socket. 27" ash handle with steel and wood D-grip.	Moving loose
	42116	Pro	Forward turned-step. 14 gauge, #2, open-back blade (9.25" x 12"). Dual rivet, extended tab socket. 30" ash handle with steel and wood D-grip	garden material, sand, top soil or debris. It can also
В	42101	Pro	Rolled-step. 14 gauge, #2, open-back blade (9.25" x 12"). Dual rivet, extended tab socket. 30" ash handle with steel and wood D-grip	be used to shape beds, mix con- crete, level off
С	45168	Pro	Forward turned-step. 16 gauge, #2, open-back, heavy-duty blade with crimp collar (9.25" x 11.5"). 9" socket. 27" fiberglass handle with ergo D-grip.	areas that need to be flat or to scrape stubborn material off driveways
D	42523	Good	Forward turned-step. #2, open-back, heavy-duty blade with crimp collar (9.25" x 11.5"). 9" socket. 28" ash handle with steel and wood D-grip	or other hard surfaces.
Е	42106	Good	Forward turned-step. 16 gauge, #2, open-back blade (9.25" x 11.5"). 9" socket. 28" ash handle with poly	

# **Drain Spade**



Key	Cat No	Level	Description
Α	47602	Pro	Forward turned-step. 14-gauge, closed-back blade with crimp collar (4.75" x 14"). 9" socket. 48" fiberglass handle.
В	47604	Pro	Forward turned-step. 14-gauge, closed-back blade with crimp collar (4.75" x 16"). 9" socket. 30" fiberglass handle with cushion D-grip.
С	47117	Pro	Forward turned-step. 14-gauge, closed-back blade (4.75" x 16"). 9" socket. 48" ash handle.
	47103	Pro	Forward turned-step. 14-gauge, closed-back blade (4.75" x 16"). 9" socket. 29" ash handle with steel and wood D-grip.
D	47202	Pro	Forward turned-step. 14-gauge, closed-back blade (4.75" x 14"). 9" socket. 29" ash handle with steel and wood D-grip.
Е	E 47110		Forward turned-step. Solid shank blade (4.75" x 16"). 9" socket. 27" ash handle with steel and wood D-grip.
F	45170	Better	Forward turned-step. Open-back blade (4.75" x 16"). 9" socket. 27" fiberglass handle with ergo D-grip.
G	47105	Good	Forward turned-step. Open-back, heavy-duty blade with crimp collar (4.75 x 16). 9" socket. 27" ash handle with steel and wood D-grip.
Н	47108	Good	Forward turned-step. Open-back blade (4.75" x 16"). 9" socket. 27" ash handle with poly D-grip.
H	47107	Good	Forward turned-step. Open-back blade (4.75" x 14"). 9" socket. 27" ash handle with poly D-grip.

# Cap Rock, Irrigation, & Rice Shovels



Key	Cat No	Level	Description	Ideal For					
Α	40139	Pro	No step. Solid shank, #2 blade (9" x 9.75"). 9" socket. 44" ash handle.	Breaking up dense material such as clay, coral, rock and decomposed granite					
В	40116		No step. Solid shank, #2 blade (9" x 11.5"). 10" socket. 47" ash handle.	Clearing and digging					
С	40107	Good	Dallad aton Calid about #0 blade	irrigation ditches					
D	40108	Good	Rolled step. Solid shank, #2 blade (9" x 11"). 9" socket. 48" ash handle.	Digging in waterlogged soil					



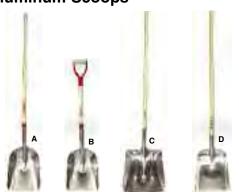
# **Union Tools-Ames-True Temper**

Nursery, Post, Roof & Border Spade Shovels | Aluminum Scoops

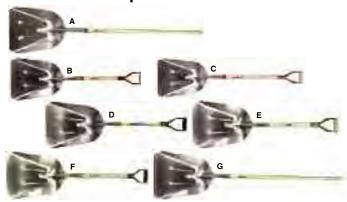


Key	Cat No	Level	Description	Ideal For	
A	46136	Pro	Forward turned-step. Solid shank (7.5" x 13"). Triple rivet, 14" steel strap socket. 27" ash handle with steel and wood D-grip.	Penetrating through hard, compacted soil	
В	48102	Pro	Forward turned-step. Solid shank blade (6.25" x 16"). Triple rivet, 9" socket. 27" ash handle with steel and wood D-grip.	Digging postholes and ditches	
С	48110	Pro	Forward turned-step. 14 gauge, (6.25" x 16"). 9" socket. 29" ash handle with steel and wood D-grip.		
	46141	Pro	Turned-step. (7.375" x 12") 9" socket. Welded fulcrum for leverage. 48" ash handle.	D	
D	46142	Pro	Turned-step. (7.375 x 12) 9" socket. Welded fulcrum for leverage. 30" ash handle with steel and wood D-grip.	Removing roof shingles	
E	46168	Better	Turned step. Open-back, heavy-duty blade with crimp collar (7.375" x 12") 9" socket. 48" fiberglass handle.	D	
F	45162	Better	Turned step. Open-back, heavy-duty blade with crimp collar (7.375" x 12") 9" socket. 27" fiberglass handle with ergo D-grip.	Digging or removing earth	
G	46108	Good	Turned step. Open-back blade with crimp collar (7.375" x 12") 9" socket. 28" ash handle with steel and wood D-grip.	Digging and removing earth. Garden trench work and trans- planting shrubs	
Н	46109	Good	Turned step. Open-back blade with crimp collar (7.375" x 12") 9" socket. 48" ash handle.	Confined areas between vegeta-	
ı	46173	Good	Turned step. Open-back blade (7.375" x 12") 9" socket. 28" ash handle with poly D-grip.	bles and closely planted flowers	

# Aluminum Scoops



L	Key	Cat No	Level	Description	Ideal For
	Α	50155	Pro	Aluminum. #2, .101" thick blade (11" x 14.5") 48" ash handle.	Moving and scooping grain, seed, feed,
	В	50154		Aluminum. #2, .101" thick blade (11" x 14.5") 31" ash handle with steel and wood D-grip.	fertilizers, and other granulated materials
	С	80100	Good	Aluminum. #2, ribbed blade (13.5" x 14.5") 46" ash handle.	Moving loose garden material, grain, sand, top soil or debris. Shaping beds, leveling
	D	79818	Good	Aluminum. Blade size (11" x 13.5") 46" ash handle.	off areas that need to be flat, removing snow and ice.



Key	Cat No	Level	Description	ldeal For
Α	53127	Pro	Aluminum. #10, .101" thick blade (14.5" x 17.75") 48" ash handle.	Moving and scooping grain,
	53130	Pro	Aluminum. #14, .101" thick blade (15.25" x 19.75") 31" ash handle with steel and wood D-grip.	seed, feed, fertilizers, and
В	53173	Pro	Aluminum. #14, .101" thick blade (15.25" x 19.75") 36" ash handle with steel and wood D-grip.	other granulated materials. Sturdy enough for
	53128	Pro	Aluminum. #12, .101" thick blade (14.75" x 18.75") 31" ash handle with steel and wood D-grip.	general clean-up or for moving
С	53123	Pro	Aluminum. #14. 40" extra long ash handle.	mulch, or soil.
D	53168	Better	Aluminum. #14, .077 thick blade with Dura-Torque® crimp collar (15.25" x 19.75") 29" fiberglass handle with D-grip.	
D	53166	Better	Aluminum. #12, .077 thick blade with Dura-Torque® crimp collar (14.75" x 18.75") 29" fiberglass handle with D-grip.	Moving and scooping grain, seed, feed, fertilizers, and other granulated materials. Sturdy
	53136	Good	Aluminum. #14, .077 thick blade with Dura-Torque® crimp collar (15.25" x 18.75") 29" ash handle with steel and wood D-grip.	
Е	53134	Good	Aluminum. #12, .077 thick blade with Dura-Torque® crimp collar (14.75" x 18.75") 29" ash handle with steel and wood D-grip.	
	53132	Good	Aluminum. #10, .077 thick blade with Dura-Torque® crimp collar (14.5" x 17.75") 29" ash handle with steel and wood D-grip.	enough for general clean-up or for moving
	53101	Good	Aluminum. #14, .077 thick blade (15.25" x 19.75") 29" ash handle with poly D-grip.	mulch, soil or even snow.
F	53102	Good	Aluminum. #12, .077 thick blade (14.75" x 18.75") 29" ash handle with poly D-grip.	
	53103	Good	Aluminum. #10, .077 thick blade (14.5" x 17.75") 29" ash handle with poly D-grip.	
G	53155	Good	Aluminum. #14, .077 thick blade (15.25" x 19.75") 48" ash handle.	

# **Steel Scoops**



Key	Cat No	Level	Description	ldeal For
A	82102	Pro	#2, carbon steel, heat-treated blade (11.5 x 14.5) 46" ash handle	Moving loose garden material, grain, sand, top soil or debris. Shaping beds or to scrape stubborn material, including heavy snow and ice, off driveways or other hard surfaces
В	50108	Pro	#2, carbon steel, heat-treated blade (11 x 15) 27" ash handle with steel and wood D-grip.	Moving grain, mulch, soil, sand or even snow. General clean-up, shaping beds, leveling off areas
С	50140	Good	#2, carbon steel, heat-treated blade (11 x 15) 48" ash handle.	that need to be flat or for scraping debris from hard surfaces.

# **Union Tools-Ames-True Temper**

# **Steel Scoops**



Key	Cat	Level	Description	ldeal For				
А	50143	Good	#6, carbon steel, heat treated blade (12 x 17) 27" ash handle with steel and wood D-grip.	debris from hard surfaces				
	50139	Good	#2, carbon steel, heat treated blade (11 x 15) 27" ash handle with steel and wood D-grip.					
В	59205	Good	#2, carbon steel, heat-treated blade (10" x 15.25") 48" ash handle					
	53121	Good	#12, ribbed, carbon steel, heat-treated blade (15" x 19") 27" ash handle with steel and wood D-grip					
С	53119	Good	#10, ribbed, carbon steel, heat-treated blade (14.5" x 18") 27" ash handle with steel and wood D-grip					
	53117	Good	#8, ribbed, carbon steel, heat-treated blade (14" x 17") 27" ash handle with steel and wood D-grip					
D	54246	Good	#2, blade, wide flared deep dish					
	54111	Good	#4, blade, wide flared deep dish (14.5" x 15.5") 27" ash handle with steel and wood D-grip	Transferring heavy-duty				
Ε	54109	Good	#2, blade, wide flared deep dish (14.5" x 15.5") 27" ash handle with steel and wood D-grip	materials such as coal				
	79804	Good	#4, blade, wide flared deep dish (14.5" x 15.5") 39" ash handle with steel and wood D-grip	and stone				
F	79805	Good	#2 blade (11.5" x 14.5") 46" ash handle	General purpose scoop, perfect for				
G	79809	Good	#2 blade (11.5" x 14.5") 39" ash handle with steel and wood D-grip	scooping grain, snow, mulch, and general purpose				

# Poly Scoops



Key	Cat No	Level	Description	ldeal For
Α	79771	Good	ABS poly, #12 blade (14.75" x 18.75") 48" ash handle	Moving and scooping grain, seed, feed,
В	79770	Good	ABS poly, #12 blade (14.75" x 18.75") 29" ash handle with poly D-grip	fertilizers, and other granulated materials. It's also a useful and
С	79772	Good	ABS poly blade. #12 head. 36" ash handle with power D-grip	versatile garden tool. It's sturdy enough for general clean-up
D	79722	Good	#12 head. 27" ash handle with power D-grip.	or for moving mulch, soil or even snow.

# **Scrapers**



Key	Cat No	Level	Description	Ideal For
Α	81104	Pro	Cold forged blade with sharp edge (4" x 9"). 54" ash handle.	
В	81109	Pro	Cold forged blade with sharp edge (7" x 9"). 54" ash handle.	Scrape ice, concrete or
С	81100	Pro	Cold forged blade with sharp edge (7" x 9"). 34" ash handle with cushion D-grip.	anything else from road or floor surfaces. Removing
D	81240	Pro	Forged, industrial gauge, solid shank blade (8.5" x 6.25"). 48" ash handle.	roofing, siding and flooring or chopping and removing roots or other garden
Е	78202 Pro	Pro	Forged, industrial gauge, socket pattern, forged blade (7" x 6"). 54" ash handle.	debris. Diggawn edging.
F	81106	Pro	Forged, industrial gauge, socket patter, forged blade (3.75" x 6"). 48" ash handle.	
G	83109	Good	Reversible, 14-gauge steel blade (24" x 6"). 8" taper-tight ferrule with cap. 60" ash handle.	Cleaning and scraping muck from stalls and barns.
Н	81102	Good	Forged, shank pattern blade (6" x 5"). Steel ferrule. 48" ash handle.	Chopping and removing roots or lawn edging.
	81103	Good	Welded, shank pattern blade (7" x 4"). Steel ferrule. 48" ash handle.	Removing roofing, siding or flooring or clearing ice from floor surfaces

# **Edgers**



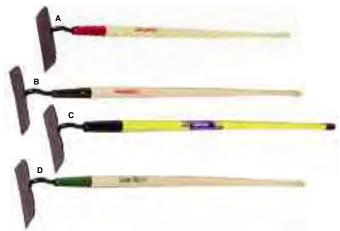
Key	Cat No	Level	Description	Ideal For
Α	61108	Pro	Turned-step. Industrial gauge, socket pattern blade (9" x 4.75"). 48" ash handle.	Cutting back grass or sod
В	61102	Good	Forged. Turned-step. Industrial gauge blade (9" x 4.75"). Steel ferrule. 48" hardwood handle.	that grows over the edges of flower beds and sidewalks
С	61104	Good	Dual wheel. Serrated, self-sharpening blade with reversible cutting edge (3" x 1.5"). 48" harwood handle.	Trimming edges along walkways, driveways
	61106	Good	Single wheel. Serrated, self-sharpening blade (3" x 1.5"), 48" hardwood handle.	and flower beds



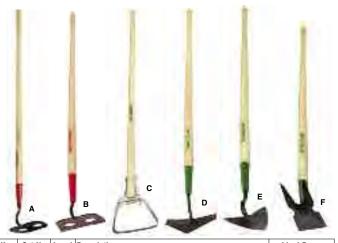


# **Union Tools-Ames-True Temper**

# Hoes

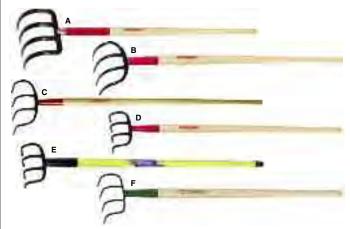


Key	Cat No	Level	Description	ldeal For
A	71112	Pro	Forged, gooseneck shank pattern with beveled blade (7" x 5.25"). Steel ferrule. 60" ash handle.	
	70110	Pro	Forged, gooseneck shank pattern with beveled blade (7" x 3.5"). 60" ash handle.	Channing or
В	67127	Pro	Forged, gooseneck shank pattern with beveled blade (7" x 3.5"). 54" ash handle.	Chopping or making furrows for planting, Clearing garden growth and
	67126	Pro	Forged, gooseneck shank pattern with beveled blade (6" x 3.5"). 54" ash handle.	
С	66129	Better	Forged, shank pattern with beveled blade (6.25" x 4.75"). Steel ferrule. 54" fiberglass handle.	weeding.
D	66105	Good	Forged, shank pattern with beveled blade (6.25" x 4.75"). Steel ferrule. 54" ash handle.	



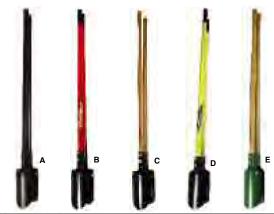
P	(ey	Cat No	Level	Description	ldeal For
	Α	66027	Pro	Forged, gooseneck shank pattern with perforated blade (7" x 4.5"). Steel ferrule. 54" ash handle.	
		66123	Pro	Forged, gooseneck shank pattern with perforated blade (7" x 4.5"). Steel ferrule. 54" ash handle.	Mixing concrete,
	В	66158	Pro	Forged, gooseneck shank pattern with perforated blade (10" x 6"). 8" Steel ferrule with cap. 66" ash handle.	plaster, spackling and mortar
		66157	Pro	Forged, gooseneck shank pattern with perforated blade (9" x 6"). 8" steel ferrule with cap. 66" ash handle.	
	С	68730	Good	Double-edged blade (1" x 6"). EZ-DUZ-IT push-pull action. 54" Hardwood handle.	Weeding and cultivating
	D	66146	Good	Forged, straight shank pattern blade (6.5"). Steel ferrule. 48" ash handle.	around plants
	Ε	66151	Good	Forged, gooseneck shank pattern blade (4.75" x 6.75"). Steel ferrule. 54" ash handle.	Cultivating soil between plants
	F	66924	Good	Welded, gooseneck shank pattern blade (4.75" x 6.625"). Steel ferrule. 48" ash handle.	and creating furrows for planting rows
	G	68107	Good	Shank pattern blade (3.75" x 9.375"). Steel ferrule. 48" ash handle.	close cultivation around existing plants

# **Cultivators**



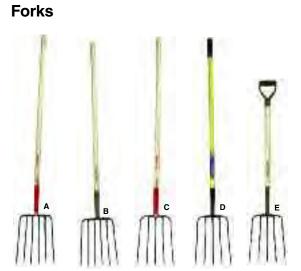
Key	Cat No	Level	Description	ldeal For
Α	75138	Pro	Forged, 4 broad oval tines with diamond points, head (7" x 7.5"). 8" steel ferrule with cap. 54" ash handle.	Digging or har- vesting potatoes and similar types of vegetables.
В	75144	Pro	Forged, 4 broad oval tines with diamond points, head (6" x 6.5"). Steel ferrule. 54" ash handle.	Transfering manure and loose material or general garden clean-up
С	75212	Pro	Forged, 4-tine head (8.5" x 9"). Steel ferrule. 60" ash handle.	transferring manure and other loose material
D	68115	Pro	Forged, 4 sharp, curved tine head (5"). Steel ferrule. 54" ash handle.	
F	68124	Better	Forged, 4 sharp, curved tine head (5"). Steel feruule. 54" fiberglass handle.	Cultivating, weeding, and aerating soil
G	68116	Good	Welded, 4 sharp, curved tine head (4.75"). Steel ferrule. 48" ash handle.	aoraanig 3011

# **Post Hole Diggers**

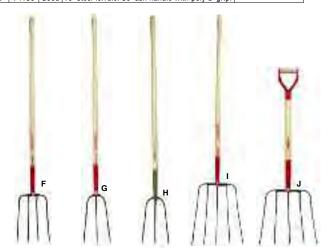


Key	Cat No	Level	Description	ldeal For
Α	78007	Pro	2 piece riveted high carbon steel blades. 48" hercules pattern, tubular steel handles. 6" point spread.	
В	78006	Pro	2 piece riveted high carbon steel blades. 48" hercules pattern, fiberglass handles. 6" point spread.	
С	78005	Pro	2 piece riveted high carbon steel blades. 8" hercules pattern, 48" wood handles. 6" point spread.	Digging post hole
С	78004	Pro	2 piece riveted high carbon steel blades. 48" atlas pattern, wood handles. 5.5" point spread.	and footings in all soil types
F	78003	Better	2 piece riveted high carbon steel blades. 48" atlas pattern, fiberglass handles. 5.5" point spread.	
G	78002	Good	1 piece high carbon steel blades. 48" wood handles. 5.5" point spread.	

# **Union Tools-Ames-True Temper**

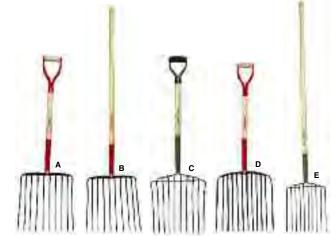


Key	Cat No	Level	Description	ldeal For
Α	74124	Pro	Forged, 6 oval tine head (9.5"). 10" steel ferrule with cap. 48" ash handle.	
В	74132	Good	Forged, 6 oval tine head (12.5" x 9.5"). 10" steel ferrule. 47" ash handle.	
В	74121	Good	Forged, 5 oval tine head (12.5" x 9.5"). 10" steel ferrule. 54" ash handle.	Transporting
В	74223	Good	Forged, 5 oval tine head (12.5" x 9"). 10" steel ferrule. 48" ash handle.	manure, mulch, and other loose.
В	74112	Good	Forged, 4 oval tine head (12.5" x 8.25"). 10" steel ferrule. 48" ash handle.	Great tool for picking or cleaning up
С	74113	Pro	Forged, 5 oval tine head (9" x 12.5"). 10" steel ferrule with cap. 8" ash handle.	manure, hay straw,
С	74114	Pro	Forged, 5 oval tines (9.5" x 12.5"), 10" steel ferrule with cap. 54" ash handle.	or barley.
D	74172	Bette r	Forged, 5 oval tine head (9" x 12.5"). 10" steel ferrule. 54" fiberglass handle.	
E	74156	Good	Forged, 5 oval tine head (12.5" x 9"). 10" steel ferrule. 36" ash handle with poly D-grip.	



Key	Cat No	Level	Description	ldeal For
F	74102	Pro	Forged, 4 oval tine head (8.25" x 12.5"). 10" steel ferrule with cap. 48" ash handle.	
G	73115	Pro	Forged, 3 oval tine head (7.25" x 12"). 10" steel ferrule with cap. 48" ash handle.	
Н	73121	Good	Forged, 3 oval tine head (12" x 7.25"). 8" steel ferrule. 48" ash handle.	Transferring manure, mulch, and other loose
1	73141	Pro	Forged, 5 oval tines 3.5" apart, head (14.5" x 18"). 10" steel ferrule with cap. 48" ash handle.	material
J	73145	Pro	Forged, 5 oval tines 3.25" apart, head (13" x 18.5"). 10" steel ferrule with cap. 34" ash handle with steel and wood D-grip.	

# **Forks**



Key	Cat No	D Level	Description	ldeal For
Α	76125	5 Pro	Forged, 10 oval tines 1.25" apart, head (16" x 16"). 10" steel ferrule with cap. 30" ash handle	
В	76126	S Pro	Forged, 10 oval tines 1.25" apart head (16" x 16"). 10" steel ferrule with cap. 48" ash handle.	Transferring
С	76134	4 Good	Welded, 10 round, welded tine head (16" x 14.75"). 30" ash handle with poly D-grip.	manure, mulch, and other loose
D	76144	1 Pro	Forged, 10 diamond tines 1.50" apart, head (15.75" x 16"). 10" steel ferrule with cap. 30"	material
Е	76200	Good	Welded, 10 round, welded tines (12.5" x 10.5"), 48" ash handle.	



Key	Cat No	Level	Description	ldeal For
F	76107	Pro	Forged, 10 square tines, 1" apart, head (10" x 13.5"). 10" steel ferrule with cap. 30" ash handle with steel and wood D-grip.	Transferring loose materials such as stones and mulch
G	72103	Pro	Forged, heavy-duty, 4 tine head (7.375" x 11.5"). 8" steel ferrule with cap. 30" ash handle with steel and wood D-grip.	
Н	72139	Better	Forged, 4 tine, heavy-duty head (7.375" x 11.5"). 8" steel ferrule with cap. 30" fiberglass handle with ergo D-grip.	Turning, digging, and loosening all types of soil
I	72105	Good	Forged, medium pattern, 4-tine head (6.625" x 10.5"). 30" ash handle with poly D-grip.	
J	76218	Good	Multi-purpose. 16T round, poly tines (11.5" x 13.75"). 52" wood handle.	Great for stall clean out



# **Union Tools-Ames-True Temper**

# **Bow Rakes**

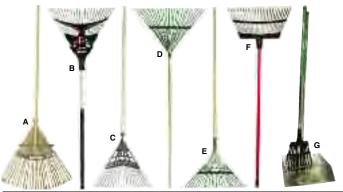


Key	Cat No	Level	Description	ldeal For
A	63184	Pro	One piece forged, extra thick end 15 teeth head (16" x 3.25"). 60" fiberglass handle.	
В	63141	Pro	One piece forged, extra thick end 15 teeth head (16" x 3.25"). 66" ash handle.	Loosening or breaking up compacted soil,
С	63131	Better	Welded, 16 teeh head. Steel ferrule. 54" fiberglass handle.	spreading mulch or other material
D	63089	Good	Welded, 14 teeth head (13.75" x 2.75"). Steel ferrule. 60" ash handle. Cushioned grip.	evenly and leveling areas before planting
E	63107	Good	Welded, 14 teeth head (13.75" x 2.75"). Steel ferrule. 54" ash handle.	

# Landscape Rakes F D D

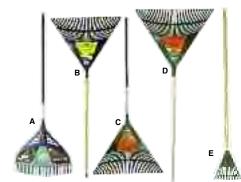
Key	Cat No	Level	Description	ldeal For
A	63122	Pro	One piece forged, 16 extra heavy straight teeth head (17.75" x 4"). 66" ash handle.	Leveling materials,
А	63121	Pro	One piece forged, 14 extra heavy straight teeth head (15.5" x 4"). 66" ash handle.	in a variety of applications
В	63125	Pro	Forged, 14 teeth head nailed to handle. (16" x 4"). 8" steel tube with cap. 60" handle.	Spreading asphalt
С	63110	Good	One piece forged, 14 curved-teeth head (15" x 3.25"). Steel ferrule. 66" ash handle.	Level materials such as gravel and soil
_	83154	Pro	(20" x 4"). Steel socket nailed to 60" handle.	Moving and
D	83148	Pro	(20" x 4"). Steel socket nailed to 60" handle.	leveling concrete
Е	63133	Pro	Wrap-around brace. 82" Powder-coated aluminum handle with 5.5" end grip.	
	63000	Pro	Wrap-around brace. 66" Powder-coated aluminum handle with 5.5" end grip.	Leveling quickly
F	63137	Pro	Wrap-around brace. 66" Powder-coated aluminum handle with 5.5" end grip.	and smoothly
	63136	Pro	Wrap-around brace. 66" Powder-coated aluminum handle with 5.5" end grip.	

# **Leaf Rakes**



Key	Cat No	Level	Description	ldeal For
Α	64153	Good	24" leaf rake, 26 tine head. 48" handle.	Raking Leaves
В	64461	Pro	24" poly-steel leaf rake, 22 galvanized steel tines. 48" wood handle with Dura-lock connector and cushion	
С	64025	Good	20" poly-steel leaf rake, 48" tap-in wood handle.	
D	64582	Good	24" steel leaf rake, 24 continuous steel tines. Heavy coil steel spring brace. 54" bolt-through wood handle.	Thatching and removing lawn
D	64430	Good	22" steel leaf rake, 22 continuous steel tines. Heavy coil steel spring brace. 48" tap-in wood handle.	clippings or other garden debris
E	64307	Pro	18" poly-steel lawn rake, 26 galvanized steel tines. 48" threaded tubular steel handle with vinyl covering and hanger cap.	
G	87000	Good	10-1/2" x 9-1/2" aluminum pan. 8" steel rake. 37" aluminum handles.	Dog waste cleanup, leafs and other materials

# **Poly Leaf Rakes**



Key	Cat No	Level	Description	Ideal For
Α	64136	Good	Adjustable head. 26 reinforced tines. 60" vinyl coated steel handle. Cushioned grip.	Raking and thatching applica- tions in damp and dry conditions
В	64180	Better	30 reinforced tines. 48" threaded fiberglass handle.	
С	64171	Good	30 reinforced tines. 48" threaded wood handle. Cushioned grip.	Collecting leaves, grass clippings,
U	64104	Good	24 reinforced tines. 48" threaded wood handle. Cushioned grip.	twigs, pine needles and
D	64169	Good	30 reinforced tines. 48" threaded wood handle.	acorns
U	64309	Good	15 reinforced tines. 22" threaded wood handle.	
E	64197	Good	10 reinforced tines. 43" tap-in wood handle.	Clearing leaves and debris out from under shrubs, fences and around plants

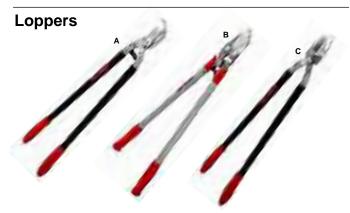
# **Union Tools®**

**Little Hog**® **and Li'L Pal**®

The Li'l pal is the ideal answer for those smaller jobs around the house, yard, campsite, or virtually anywhere space is tight.



Key	Cat No	Description
А	45107	Little Hog Round Point Shovel. 27.25" length, 5.875" width, 2.125" height. Tempered carbon steel blade, forward turned-step for secure foot placement, 18" North American ash handle, strong poly D-grip.
В	42162	Little Hog Mini Square Point Shovel. 6" width, 27.25" length, 2.375" height, 18" sturdy, stained North American ash handle, poly D-grip, forward turned-step, industrial gauge open-back blade.
С	66168	Rounded Edge Mortar Hoe. 6" height, 6.25" width, 22.125" length, 6.25" x 4.87" perforated blade, forged, gooseneck shank pattern, steel ferrule for strongest blade and handle connection, 18" North American ash handle.



Key	Cat No	Description
А	2354200	Heavy Duty Forged Bypass Lopper - 3 inch cutting capacity. Tri-lobe comfort grips. Fully forged, heat treated blades for strength. Shock reduction bumpers.
В	2353700	Bypass Lopper - 2 inch cutting capacity. Patented palm contour grips Compound action. Shock reduction bumpers.
С	2354100	Forged Anvil Lopper - 2 inch cutting capacity. Tri-lobe comfort grips. Fully forged, heat treated blades for strength. Shock reduction bumpers.

# **Shears**

Key	Cat No	Description	
		Draw Cut Grass Shears. 6 inch blades, draw-cut design,	
Α	2305800	black oxide blades, steel grips.	
		Professional Grass Shears. 7.5 inch blades,	
В	2343930	adjustable blade opening, comfort grips, professional design.	
		Forged Hedge Shears. 9 inch high carbon steel blades,	
C	2354600	tri-lobe comfort grips, gully heat treated blades	

# **Snow Shovels**



Key	Cat No	Description	
Α	1627100	18" mountain mover. Poly blade with steel wear strip (13.5" x 18"). Steel ergonomic handle with Poly D-grip. Quick connect system.	
В	1627200	8" mountain mover snow shovel. Poly blade with steel wear strip 13.5" x 18"). Steel core handle and poly D-grip. Quick connect system.	
С	1627400	18" mountain mover. Poly blade (13.5 x 18). Ash handle with Poly D-grip. Quick connect system.	
D	1681500	HDPE poly blade (14.25" x 17.75") for extreme cold temperatures. Ash handle and poly D-grip.	



Key	Cat No	Description	
Е	1573700	Poly blade (13" x 18"). Steel core handle with poly D-grip.	
F	1574600	Poly blade (14" x 18"). Steel core handle with poly D-grip.	
G	1575200	Poly blade (11" x 18"). Steel core handle with poly D-grip.	



Key	Cat No	Blade	Description	
Н	1641200	Aluminum	18" blade with steel wear strip (14.5" x 18"). Steel ergonomic handle with poly D-grip.	
1	1641000	Aluminum	18" blade with steel wear strip (14.5" x 18"). Steel core handle with poly D-grip.	
J	1640400	Aluminum	18" blade with steel wear strip (14.5" x 18"). Ash handle with poly D-grip.	
K	1640700	Steel	18" blade (14.5" x 18"). Ash handle with poly D-grip.	



# **Union Tools®/Warner**

# **Snow Pushers**



Key	Cat No	Blade	Description	
			24" Poly blade with steel wear strip (11" x 24").	
Α	1603500	Poly	steel core handle with poly D-grip.	
			24" Poly blade (11" x 24"). Ash handle with poly D-grip.	
В	1630400	Poly	Quick connect system.	
			30" Poly blade (11" x 30"). Ash handle with poly D-grip.	
С	1602100		Quick connect system.	



Key	Cat No	Blade	Description	
			24" blade with steel wear strip (11" x 24") and braces.	
Ε	1640000	Aluminum	Ash handle with poly D-grip.	
F	1642000	Aluminum	24" blade with steel wear strip (12" x 24"). Ash handle.	
G	1641900	Aluminum	24" blade (12" x 24"). Ash handle.	
Н	1639300	Steel	24" blade (10" x 24"). Ash handle with poly D-grip and braces.	
- 1	1644300	Steel	24" blade (10" x 24"). Ash handle and braces.	

# **Snow Tools**



Key	Cat No	Blade	Description	
Α	1600900	Poly	Poly blade with wear strip (23.5" x 30.5"). Adjustable handle.	
В	1634500		Poly blade (6.5" x 22"). Aluminum handle extends to 17'. Non-slip handle treatment for control.	
	1634600	_	5' aluminum extension pole for snow roof rake.	

# Warner

# **CUTLERY**

# 500 Series Solvent-Resistant Plastic Handles

Precision ground, high carbon full tang blades.



389	Glazier Knife.	519	4" Broad Knife. Stiff.
395	Double-ended Window Tool.	520	5" Broad Knife, Flexible,
399	Glazier Knife, Steel Head,	521	1-1/4" Putty Knife. Full Flexible
501	1-1/4" Chisel Ground Putty Knife.		Blade.
500	1-1/4" Chisel Ground Putty Knife.	522	
000	Steel Head.	523	3" Steel Head Scraper. Flexible.
502	1-1/4" Bent Putty Knife.	524	4" Steel Head Broad Knife.
503	1-1/2" Putty Knife. Chisel Ground.	525	
504	1-1/2" Putty Knife. Full Flexible Blade.	526	6" Steel Head Broad Knife.
506	1-1/4" Putty Knife. Flexible.	527	1-1/2" Putty Knife. Full Flexible
507	1-1/4" Putty Knife. Stiff.		Blade.
508	1-1/2" Putty Knife. Flexible.	528	2" Putty Knife. Full Flexible Blade.
509	1-1/2" Putty Knife. Stiff.	529	6" Broad Knife. Stiff.
510	2" Putty Knife. Flexible.	530	10" Broad Knife, Flexible.
511	2" Putty Knife. Stiff.	533	3" Scraper. Full Flexible Blade.
512	3" Scraper. Flexible.	535	4" Broad Knife. Full Flexible Blade.
515	3" Scraper. Stiff.	536	
517	3" Steel Head Scraper. Stiff.	537	6" Broad Knife, Full Flexible Blade.
518	4" Broad Knife, Flexible.	007	o broad Millo. Fall Floxible blade.
310	4 DIVAU KIIIIE. FIEXIDIE.		

# 300 Series Wood Handles

Hardwood handles. Full tang carbon steel blade.

301	1-1/4" Chisel Ground Putty Knife.	
306	1-1/4" Putty Knife. Flexible.	
307	1-1/4" Putty Knife. Stiff.	
310	2" Putty Knife. Flexible.	
314	3" Scraper. Flexible.	
315	3" Scraper. Stiff.	
318	4" Broad Knife. Flexible.	
320	6" Broad Knife Flevible	



# **Patcher**

442 Patcher. Tempered cutlery steel. Plated.



# Flooring Knife

High carbon cutlery steel. Comfortable handle.

370 Flooring Knife. 2-1/2" Blade. .050 Blade Thickness.



# **PAINTING TOOLS & EQUIPMENT**

# **Window Tool**

138 Glass Cutter.



# **Heavy Duty Glazier Knife**

389 Polypropylene Handle.



# Warner/Waterloo

# **Electric Mixers**

Heavy duty.

2 & 5 gallon. Fits 3/8" drill. 5 gallon. Fits 1/2" drill.

3-7/8" head.

345 Paint Mixer. Adjustable with Fan Blades. Fits 1/2" drill.

5 gallon. Fits any size drill. 1 gallon. Fits any size drill.



# WALLCOVERING TOOLS

# Razor Knives, Double Seam Cutters, **Cutters & Blades**

Some knives feature steel casings, comfortable plastic handles, and screw locking mechanism. Blades feature industrial ground cutting edges.

Double Seam Cutter with 1 blade.

490

Razor Knife. Plain. Heavy Duty Snap-Off Blade Knife. 119



# **Big Blade Wall** Strippers & Blades

Strips wallpaper. Scrapes paint. All metal construction. Replaceable 4" blade.

690 9" Handle.

691 5" Handle.

4" Stripper Blades. 5/Carded.



# Waterloo

# 3-Drawer Chest -Black — PP-2314BK

- · Padlock eves.
- Drawers lock when lid is closed.

	W x D x H (in.)
Overall Top Tray 3 Drawers	23.00 x 10.50 x 13.50 22.25 x 9.25 x 3.50 17.88 x 7.50 x 3.50



# Great Tool Organizer (GTO) — PP-1613BK

Padlock eye accepts padlock (Padlock not included)

	W x D x H (in.)
Overall	16.00 x 9.00 x 12.50



# 26" Plastic Hand Box — PP-2610BK

• Padlock eye accepts padlock (Padlock not included)

	W x D x H (in.)
Overall	26.00 x 10.00 x 9.80



# 23" Plastic Hand Box — PP-2610BK

 Padlock eye accepts padlock (Padlock not included)

	W x D x H (in.)
Overall	23.50 x 10.80 x 10.30



# 20" Plastic Hand Box — PP-2009BK

 Padlock eye accepts padlock (Padlock not included)

	W x D x H (in.)
Overall	20.00 x 10.30 x 9.00



# 17" Plastic Hand Box — PP-2009BK

• Padlock eye accepts padlock (Padlock not included)

	W x D x H (in.)
Overall	17.00 x 9.40 x 9.00



# 14" Plastic Hand Box — PP-1406BK

 Padlock eye accepts padlock (Padlock not included)

	W x D x H (in.)
Overall	14.00 x 8.00 x 6.30



# 20" 3 Drawer Portable Chest — MP-2012BK

• Padlock eye accepts padlock (Padlock not included)

	W x D x H (in.)
Overall	20.00 x 9.00 x 12.00
Top Tray 3 Drawers	20.25 x 8.00 x 5.00
3 Drawers	17.88 x 7.50 x 3.50



# 20" Hand Box With Metal

# **Tote** — MP-2009BK

· Padlock eye accepts padlock (Padlock not included)

	W x D x H (in.)
Overall	20.00 x 8.00 x 9.00



# 16" Hand Box With Plastic Tote — MP-1608BK

• Padlock eye accepts padlock (Padlock not included)

	W x D x H (in.)
Overall	16.10 x 7.00 x 7.50



# 26" 4 Drawer Chest Black— SCH-264BK-B Red—SCH-264RD-F

· Keyed external lock bar

	W x D x H (in.)
Overall	26.00 x 12.00 x 15.50
3 Drawers	22.05 x 10.70 x 1.80
1 Drawer	22.05 x 10.70 x 3.90





# Waterloo

# 26" 5 Drawer Cabinet Black - SCA-265BK-B 26" 5 Drawer Cabinet Red - SCA-265RD-F

· Keyed external lock bar

	W x D x H (in.)
Overall	26.50 x 18.00 x 32.00
1 Drawer	22.05 x 16.70 x 1.80
2 Drawers	22.05 x 16.70 x 3.90
2 Drawers	22.05 x 16.70 x 5.99



# 26" 5 Drawer Chest -SCH-265BK-B

- Lid Support
- Keyed external lock bar

	W x D x H (in.)
Overall	26.00 x 12.00 x 17.50
Top Tray	26.00 x 10.80 x 3.20
1 Drawers	22.05 x 10.70 x 3.90
4 Drawers	22.05 x 10.70 x 1.80



# 26" 4 Drawer Cabinet -

# SCA-264BK-B

- Top mat
- · Keyed external lock bar

	W x D x H (in.)
Overall	26.50 x 18.00 x 32.00
1 Drawers	22.05 x 16.70 x 3.90
3 Drawers	22.05 x 16.70 x 5.99



# 26" 2 Drawer Intermediate - SIN-262BK-B

Keyed external lock bar

	W x D x H (in.)
Overall	26.00 x 12.00 x 11.50
2 Drawers	22.05 x 10.70 x 3.90



# 26" 5 Drawer Tool Center With Panel — STC-265BK-B • Standard caster: 3" x 1"

- Standard caster load rating per unit: 300lbs
- Top mat
- · Keyed external lock bar

	W x D x H (in.)
Overall	26.50 x 14.00 x 43.50
Top Tray	26.00 x 10.80 x 3.20
2 Drawers	18.05 x 10.70 x 1.80
1 Drawer	18.05 x 10.70 x 3.90
2 Drawers	22.05 x 12.70 x 3.90
Panel Area	26.00 x 13.00 x 15.30



# 26" 7 Drawer Chest -

### SCH-267RD-F

· Keyed external lock bar

•	
	W x D x H (in.)
Overall	26.00 x 12.00 x 17.50
Top Tray	26.00 x 10.80 x 3.20
3 Drawers	6.64 x 10.70 x 1.80
3 Drawers	22.05 x 10.70 x 1.80
1 Drawer	22.05 x 10.70 x 3.90



# 26" 5 Drawer Cabinet -

# SCA-26514RD-F

- Standard caster: 4" x 2"
- Standard caster load rating per unit: 500lbs
- · Keyed external lock bar

	W x D x H (in.)
Overall	26.50 x 14.00 x 32.00
1 Drawer	22.05 x 12.70 x 1.80
2 Drawers	22.05 x 12.70 x 3.90
2 Drawers	22.05 x 12.70 x 5.99



# 26" 3 Drawer Intermediate— SIN-263RD-F

• Keyed external lock bar

	W x D x H (in.)
Overall	26.00 x 12.00 x 11.50
2 Drawers	22.05 x 10.70 x 1.80
1 Drawer	22.05 x 10.70 x 3.90



# 26" 6 Drawer Tool Center With Parts Bin-stc-266RD-F

- Standard caster: 3" x 1"
- Standard caster load rating per unit: 300lbs
- · Keyed external lock bar

	W x D x H (in.)
Overall	26.50 x 14.00 x 43.50
Top Tray	26.00 x 10.80 x 3.20
2 Drawers	22.05 x 12.70 x 3.90
4 Drawers	15.08 x 10.70 x 1.80
Panel Area	26.00 x 13.00 x 15.20
1	



# 26" 5 Drawer Chest— WCH-265BK Black WCH-265RD Red

- Lid support
- · Keyed external lock bar

	W x D x H (in.)
Overall	26.00 x 16.00 x 19.70
Top Tray	26.00 x 10.80 x 3.20
2 Drawers	22.30 x 14.60 x 1.90
3 Drawers	22.30 x 14.60 x 2.90



# 26" 6 Drawer Chest - WCH-266BK Black WCH-266RD Red

- Lid support
- · Keyed external lock bar

,	
	W x D x H (in.)
Overall	26.00 x 12.00 x 15.30
Top Tray	26.00 x 10.80 x 3.20
3 Drawers	6.65 x 10.70 x 1.90
2 Drawers	22.30 x 10.70 x 2.90
1 Drawer	22.30 x 10.70 x 2.90



# 26" 2 Drawer Intermediate –

# WIN-262BK Black WIN-262RD Red

· Keyed external lock bar

	W x D x H (in.)
Overall	26.00 x 16.00 x 10.50
2 Drawers	22.30 x 14.60 x 2.90



# **Waterloo**

# 26" 6 Drawer Cabinet - WCA-266BK Black

# WCA-266RD Red

- Standard caster: 4.5" x 1.5"
- Upgraded caster: 5" x 2"
- Standard caster load rating per unit: 700lbs
- Upgraded caster load rating per unit: 1,100lbs
- Keyed external lock bar

	W x D x H (in.)
Overall	26.50 x 18.00 x 41.00
2 Drawers	22.30 x 16.40 x 2.90
1 Drawer	22.30 x 16.40 x 4.10
3 Drawers	22.30 x 16.40 x 6.20



# 26" 5 Drawer Cabinet -

# WCA-265BK Black WCA-265RD Red

- Standard caster: 4.5" x 1.5"
- Upgraded caster: 5" x 2"
- Standard caster load rating per unit: 700lbs
- Upgraded caster load rating per unit: 1,100lbs
- Keyed external lock bar

	W x D x H (in.)
Overall	26.50 x 18.00 x 34.50
2 Drawers	22.30 x 16.40 x 2.90
1 Drawer	22.30 x 16.40 x 5.10
2 Drawers	22.30 x 16.40 x 6.20



# 41" 8 Drawer Chest—

# WCH-418BK Black WCH-418RD Red

- Lid support
- · Keyed external lock bar

	W x D x H (in.)
Overall	40.50 x 16.00 x 20.00
Top Tray	39.20 x 15.82 x 2.29
Left-3 Drawers	22.30 x 14.60 x 1.90
Left-1 Drawer	22.30 x 14.60 x 2.90
Left-1 Drawer	22.30 x 14.60 x 4.10
Right-2 Drawers	11.70 x 14.60 x 4.10
Right-1 Drawer	11.70 x 14.60 x 6.20
I	l .



# 41" 11 Drawer Cabinet -

# WCA-4111BK Black WCA-4111RD Red

- Standard caster: 4.5" x 1.5"
- Upgraded caster: 5" x 2"
- Standard caster load rating per unit: 700lbs
- Upgraded caster load rating per unit: 1,100lbs
- MDF top
- · Keyed external lock bar

	W x D x H (in.)
Overall	41.00 x 18.00 x 37.30
Center-1 Drawer	36.68 x 16.40 x 4.10
Left-1 Drawer	22.30 x 16.40 x 1.90
Left-4 Drawers	22.30 x 16.40 x 2.90
Left-1 Drawer	22.30 x 16.40 x 6.20
Right-1 Drawer	11.70 x 16.40 x 1.90
Right-2 Drawers	11.70 x 16.40 x 2.90
Right-1 Drawer	11.70 x 16.40 x 12.66





# 41" 8 Drawer Chest -PCH-418BK Black PCH-

# 418RD Red

- Gas Struts
- Keyed internal lock bar

	W x D x H (in.)				
Overall	40.5 x 18.00 x 20.00				
Top Tray	39.20 x 17.57 x 2.29				
Left-1 Drawer	22.37 x 16.40 x 1.90				
Left-1 Drawer	22.37 x 16.40 x 2.90				
Left-2 Drawers	22.37 x 16.40 x 4.10				
Right-1 Drawer	11.70 x 16.40 x 1.90				
Right-1 Drawer	11.70 x 16.40 x 2.90				
Right-2 Drawers	11.70 x 16.40 x 4.10				



# 41" 11 Drawer Cabinet—

# PCA-4111BK Black PCA-4111RD Red

- Standard caster: 5" x 2"
- Upgraded caster: 6" x 2"
- Standard caster load rating per unit: 1,100lbs
- Upgraded caster load rating per unit: 3,200lbs
- Thick rubber mat
- · Keyed internal lock bar

	W x D x H (in.)
Overall	41.00 x 20.00 x 41.00
Full Width-1 Drawer	36.68 x 16.40 x 1.90
Left-1 Drawer	22.37 x 16.40 x 1.90
Left-1 Drawer	22.37 x 16.40 x 2.90
Left-3 Drawers	22.37 x 16.40 x 6.20
Right-1 Drawer	11.70 x 16.40 x 1.90
Right-3 Drawers	11.70 x 16.40 x 2.90
Right-1 Drawer	11.70 x 16.40 x 12.66



# 52" 8 Drawer Chest -

# PCH-528BK Black PCH-528RD Red

- Gas Struts
- · Keyed internal lock bar

-	
	W x D x H (in.)
Overall	51.00 x 18.00 x 20.00
Top Tray	50.10 x 17.57 x 2.29
Left-1 Drawer	22.37 x 16.40 x 1.90
Left-1 Drawer	22.37 x 16.40 x 2.90
Left-2 Drawers	22.37 x 16.40 x 4.10
Right-1 Drawer	11.70 x 16.40 x 1.90
Right-1 Drawer	11.70 x 16.40 x 2.90
Right-2 Drawers	11.70 x 16.40 x 4.10



# 52" 11 Drawer Cabinet -

# PCA-5211BK Black PCA-5211RD Red

- Standard caster: 5" x 2"
- Upgraded caster: 6" x 2"
- Standard caster load rating per unit: 1,100lbs
- Upgraded caster load rating per unit: 3,200lbs
- Thick rubber mat
- Keyed internal lock bar

W x D x H (in.)
41.00 x 20.00 x 41.00
47.25 x 16.40 x 4.10
22.37 x 16.40 x 1.90
22.37 x 16.40 x 2.90
22.37 x 16.40 x 6.20
22.37 x 16.40 x 1.90
22.37 x 16.40 x 2.90
22.37 x 16.40 x 6.20



# 41" 11 Drawer Chest – PCH-4111SS Stainless Steel

- Lid support
- Keyed internal lock bar

	W x D x H (in.)				
Overall	42.5 x 18.00 x 20.00				
Top Tray	39.20 x 17.50 x 2.29				
Left-5 Drawers	22.37 x 16.40 x 1.90				
Left-1 Drawer	22.37 x 16.40 x 2.90				
Right-4 Drawers	11.70 x 16.40 x 1.90				
Right-1 Drawer	11.70 x 16.40 x 5.10				



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# **Waterloo/ Williams Tools**

# 41" 11 Drawer Cabinet -

# **PCA-4112SS Stainless Steel**

- Standard caster: 5" x 2"
- Upgraded caster: 6" x 2"
- Standard caster load rating per unit: 1,100lbs
- Upgraded caster load rating per unit: 3,200lbs
- Keyed internal lock bar

	W x D x H (in.)
Overall	42.50 x 18.00 x 40.50
Full Width-1 Drawer	33.68 x 16.40 x 4.10
Left-1 Drawer	22.37 x 16.40 x 1.90
Left-3 Drawers	22.37 x 16.40 x 2.90
Left-2 Drawers	22.37 x 16.40 x 6.20
Right-1 Drawer	11.70 x 16.40 x 1.90
Right-3 Drawers	11.70 x 16.40 x 2.90
Right-1 Drawer	11.70 x 16.40 x 12.66
	-



# 3-Drawer Utility Cart - SP-UC3BK

- Standard caster: 5" x 2
- · Standard caster load rating per unit: 500lbs
- Gas struts
- Tubular keyed lock

	W x D x H (in.)
Overall	34.00 x 21.00 x 37.00
Top Tray	29.88 x 19.00 x 5.00
2 Drawers	12.00 x 17.00 x 2.50
1 Drawer	25.50 x 17.00 x 2.50



# 5-Drawer Project Center With Power - SP-PC5BK

- Standard caster: 4" x 2"
- Standard caster load rating per unit: 500lbs
- Keyed external lock bar

	W x D x H (in.)						
Overall	29.00 x 20.00 x 34.50						
1 Drawer	ver 22.05 x 16.70 x 1.80						
2 Drawers	22.05 x 16.70 x 3.90						
2 Drawers	22.05 x 16.70 x 5.99						



# 3-Drawer Project Center -SP-PC3BK

- Standard caster: 4" x 2"
- Standard caster load rating per unit: 500lbs
- · Keyed external lock bar

	W x D x H (in.)
Overall	34.00 x 20.00 x 34.50
1 Drawer	22.05 x 16.70 x 1.80
2 Drawers	22.05 x 16.70 x 3.90
Panel Area	26.00 x 13.00 x 15.30



# 4 Drawer Workbench -SP-WB4RD

	W x D x H (in.)					
Overall	60.00 x 24.00 x 37.30					
2 Drawers	22.30 x 16.40 x 4.10					
2 Drawers	22.30 x 16.40 x 6.20					
Panel Area	24.40 x 16.50 x 19.60					



# 3 Drawer Workbench -SP-WB3RD

	W x D x H (in.)					
Overall	54.00 x 23.00 x 37.80					
1 Drawer	22.30 x 16.40 x 4.10					
2 Drawers	11.70 x 16.40 x 4.10					



# Steel Backwall System— SP-WBBWRD

\*Backwall system can be used with SP-WB3RD Workbench only



# Non Slip Drawer Liner Roll SP-LINER23BK

Carton contains 6 rolls

- Each roll: 22.5" W x 115" D
- Carton: 23.5" W x 9.5" D x 6.5" H



# Non Slip Drawer Liner Roll **SP-LINER17BK**

Carton contains 4 rolls

- Each roll: 16.5" W x 157" D
- Carton: 17" W x 11" D x 12" H



# **Williams Tools**

# **Master Service Set WSC-219**

Set Catalog #WSC-219, EDP #49032, 285.00 lbs.-129.27 kgs, 217 Tools with Roller Cabinet TC-605CAR, Tool Chests TB-6024R and TB-6001R

This 217 piece set provides all the tools necessary for general service and repair. Included are a wide variety of fractional wrenches, adjustable wrenches, popular 1/4", 3/8" and 1/2" drive fractional sockets and drive tools. An assortment of professional industrial tools such as pliers,

screwdrivers, hammers, punches and chisels round out his offering and make this one of Williams' most versatile sets.

Available with tool storage which includes 6 drawer drop front chest, 4 drawer step-up chest and a 5 drawer roller cabinet all with individual locks, or in "tools only" configuration, allowing you to choose other Williams top chests or roller cabinets.

Set Catalog #WSC-219T, EDP #49033, 77.73 Lbs.-35.26 Kgs., 217 Tools Only



### Contains:

56 Wrenches; 113 Sockets and Drive Tools; 7 Pliers; 15 Screwdrivers; 6 Hammers; 18 Punches, Chisels and Roll Bars;

2 Miscellaneous Tools



# **Williams Tools**

# Master Industrial Mechanic's & Machine Repair Set WSC-178

Set Catalog #WSC-178 EDP #49038, 500.00 Lbs.-226.80 Kgs, 178 Tools with Roller Cabinet TB-808, Tool Chest TB-8012

This 178 piece set is designed to provide the tools required to complete virtually any daily maintenance job quickly and safely. Included are a wide range of fractional wrenches, hand sockets and drive tools in 3/8", 1/2" and 3/4" sizes. C-clamps, pliers, screwdrivers,

hammers, punches, chisels and other mechanics tools are also included.

Available with tool storage which includes 12 drawer heavy duty chest and an 8 drawer heavy duty roller cabinet both with locks or in "tools only" configuration which allows the user to choose other Williams tool storage units. Set Catalog #WSC-178T, EDP #49039,156.65 Lbs.-71.06 Kgs., 178 Tools Only Contains:

54 Wrenches; 72 Sockets and Drive Tools; 8 Pliers; 12 Screwdrivers; 6 Hammers; 15 Punches, Chisels, Roll and Pinch Bars; 11 Miscellaneous Tools



# Metric Service Mobile Workshop Set MSC-230

Set Catalog #MSC-230 EDP #49452, 265.33 Lbs.-120.35 Kgs, 230 Tools with Roller Cabinet TC-609R and Tool Chest TB-6006R

This 230 piece set has all the required tools to do just about any repair or maintenance work from delicate service jobs to heavy repair or assembly jobs involving metric fasteners. Contains 1/4", 3/8" 1/2" hand sockets ranging from 4mm through 30mm along with drive tools and combination wrenches from 7mm through 24mm. Included also are metric 1/2" drive impact sockets ranging from 13mm through 30mm. A large assortment of pliers, screwdrivers, hammers, punches, chisels and torque wrench is also included. Available with tool storage which includes 6 drawer front chest with lock and 9 drawer roller cabinet with lock, or in "tools only" configuration, allowing you to choose other Williams top

Foot Note: Set Catalog #MSC-230T, EDP #49053, 80.33 Lbs.-36.44 Kgs. 230 Tools Only

chests or roller cabinets.

### Contains:

40Wrenches; 124 Sockets and Drive Tools; 12 Impact Sockets; 10 Pliers; 15 Screwdrivers; 8 Hammers; 20 Punches, Chisels and Roll Bars; 1

Miscellaneous Tool



# Base Industrial Mechanic's & Machine Repair Set WSC-106

Set Catalog #WSC-106 EDP #49042, 97.00 Lbs.-44.00 Kgs, 106 Tools with Tool Chest TB-6024R

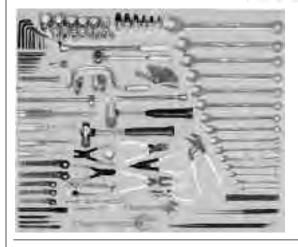
This very popular 106 piece set has a general assortment of hand tools that are required to perform basic maintenance and machine repair. Included are popular 1/4" and 1/2" fractional sockets and flat wrenches as well as a variety of pliers, screwdrivers, hammers, punches and chisels.

Available with a 6 drawer drop front chest with lock or in "tools only" configuration, thus allowing choices of Williams wide range of tool storage units. Set Catalog #WSC-106T, EDP #49043, 42.09

Lbs.-19.09 Kgs., 106 Tools Only

### Contains:

35 Wrenches; 43 Sockets and Drive Tools; 6 Pliers; 4 Screwdrivers; 4 Hammers; 7 Punches, Chisels and Pinch Bars; 7 Miscellaneous Tools



# Intermediate Industrial Mechanic's & Machine Repair Set WSC-153

Set Catalog #WSC-153 EDP #49044,180.00 Lbs.-81.65 Kgs, 153 Tools with Tool Chest TB-6010R

This 153 piece set provides all the tools required to service small to medium equipment. Included are an assortment of fractional wrenches and 1/4", 3/8" and 1/2" drive sockets. Also included are screw extractors and a feeler gauge set as well as c-clamps, pliers, screwdrivers, hammers,

punches and chisels. Available with a 10 drawer chest with lock or in "tools only" configuration. Set Catalog # WSC-153T, EDP # 49045,114.44 Lbs.-51.91 Kgs., 153 Tools Only

# Contains:

Pliers; 6 Screwdrivers; 5 Hammers; 12 Punches, Chisels, Pinch and Roll Bars; 9 Miscellaneous Tools







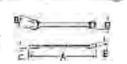


# **Williams Tools**

# **Combination Wrenches**

Combination Wrenches, Chrome Satin Finish, Standard Length, 12 Point

 SUPERTORQUE® box opening design allows application of higher torque without rounding or deforming hex fastener points. No contact is made at the corners. Instead, wrenching forces are placed on the flat surfaces behind the points.



- Meets or exceeds aerospace specification AS 954 for 12 point fasteners (as defined by AS 870) to provide accurate torque/tension relationship for precision application.
- May be used on all common hex (6 point) fasteners with considerable advantage over conventional box end wrenches to increase both hand tool flexibility and economy.
- Williams Satin Chrome Finish openings start with 1/4" and go all the way up to 3-1/2" the most comprehensive range in the industry.
- Box and open end openings are identical.

Cat. No.	EDP No.	Size (in)	A (in)	B (in)	C (in)	D (in)	E (in)	lbs.	kgs.
1178A	40395	1-9/16	21	3-1/4	11/16	2-11/32	29/32	3.2	1.5
1180*	40371	1-5/8	21-25/32	3-3/8	11/16	2-7/16	29/32	3.7	1.7
1182	40510	1-11/16	22-17/32	3-1/2	3/4	2-1/2	29/32	5.2	2.4
1184	40511	1-3/4	23-1/8	3-5/8	25/32	2-5/8	1-3/32	5.8	2.6
1186	40512	1-13/16	23-11/16	3-3/4	13/16	2-23/32	1-3/32	6.4	2.9
1188	40513	1-7/8	24-11/32	3-29/32	13/16	2-13/16	1-3/32	6.9	3.1
1190	40514	2	25-1/4	4	25/32	2-7/8	1-1/16	8.4	3.8
1191	40515	2-1/16	25-7/8	3-3/4	3/4	2-3/4	1-1/8	6.2	2.8
1192	40516	2-1/8	26-1/2	4-5/16	7/8	3-1/16	1-3/16	9.9	4.5
1193	40517	2-3/16	27	4-7/16	13/16	3-1/4	1-3/16	10.6	4.8
1194	40518	2-1/4	27-21/32	4-9/16	15/16	3-7/32	1-3/16	11.5	5.2
1195	40506	2-3/8	28-11/16	4-25/32	1-1/32	3-13/32	1-11/32	13.9	6.3
1197	40507	2-1/2	29-15/16	5-1/16	15/16	3-9/16	1-5/16	15.5	7.0
1198	40519	2-5/8	31-13/16	6-9/16	1-7/32	4-7/8	1-5/8	22.3	10.1
1198A	40520	2-3/4	31-13/16	6-9/16	1-7/32	4-7/8	1-5/8	22.6	10.3
1198B	40521	2-7/8	31-13/16	6-9/16	1-7/32	4-7/8	1-5/8	22.1	10.0
1198C	40522	2-15/16	31-13/16	6-9/16	1-7/32	4-7/8	1-5/8	21.4	9.7
1199	40523	3	31-13/16	6-9/16	1-7/32	4-7/8	1-5/8	21.4	9.7
1199A	40524	3-1/8	31-13/16	6-9/16	1-7/32	4-7/8	1-5/8	21.0	9.5
1199B	40525	3-3/8	31-13/16	6-9/16	1-7/32	4-7/8	1-5/8	19.6	8.9
1199C	40526	3-1/2	31-13/16	6-9/16	1-7/32	4-7/8	1-5/8	18.9	8.6

<sup>\*</sup>SUPERTORQUE® Opening

# **Construction Equipment Repair Set WSC-94**

Set Catalog #WSC-94 EDP #49040, 123.00 Lbs.-55.79 Kgs, 94 Tools with Tool Chest TS-6006R

This 94 piece set includes a range of the popular combination wrenches from 5/16" to 1-5/8" and sockets as well as drive tools in 3/8", 1/2" and 3/4" sizes. The larger drive sizes and an assortment of Williams' most popular pliers, screwdrivers, hammers, punches and chisels help make this set well suited for repair work on construction equipment.

Available with a 6 drawer chest with lock, or in a "tools only" configuration, allowing the user to choose other Williams storage units.

Set Catalog #WSC-94T, EDP #49041, 73.11 Lbs.-33.16 Kgs., 94 Tools Only **Contains:** 

19Wrenches; 5 Hammers; 56 Sockets and Drive Tools; 6 Punches, Chisels and Roll Bars; 4 Pliers; 1 Miscellaneous Tool; 3 Screwdrivers





# Combination Wrenches, Chrome Satin Finish, Midget Length, 6 Point



- Handles are shorter than the standard length allowing the user to torque the wrench with a larger arc.
- Head sizes still provide the larger, more rugged dimensions required for most industrial uses.
- · Box and open end openings are identical.

Cat. No.	EDP No.	Size (in)	A (in)	B (in)	C (in)	D (in)	E (in)	lbs.
MIDS4*	41288	1/8	2-23/32	11/32	1/8	7/32	1/8	.01
MIDS5*	41289	5/32	2-27/32	13/32	1/8	9/32	5/32	.02
MIDS6*	41290	3/16	2-31/32	7/16	1/8	5/16	5/32	.02
MIDS7*	41291	7/32	3-3/32	1/2	1/8	3/8	3/16	.02
MIDS8*	41292	1/4	3-7/32	17/32	5/32	13/32	3/16	.03
MIDS9*	41293	9/32	3-3/8	19/32	5/32	7/16	7/32	.03
MIDS10*	41294	5/16	3-1/2	21/32	5/32	1/2	7/32	.04
MIDS11*	41295	11/32	3-5/8	23/32	3/16	17/32	1/4	.05



SUPERTORQUE®, Opening

# Combination Wrenches, Chrome Satin Finish, Short Length, 12 Point

 Wrench lengths range in between the standard length and the midget length combination wrenches to offer a wider variety for all wrench uses.

· Box and open end openings are identical.

	.a opo		OP 0	go are				
Cat. No.	EDP No.	Size (in)	A (in)	B (in)	C (in)	D (in)	E (in)	lbs.
1158S*	40583	1/4	4-1/2	17/32	5/32	13/32	3/16	.04
1159S*	40584	5/16	4-27/32	21/32	5/32	1/2	7/32	.06
1160S*	40585	3/8	5-1/8	13/16	3/16	19/32	1/4	.08
1161S*	40586	7/16	5-7/16	29/32	7/32	21/32	5/16	.11
1162S*	40587	1/2	5-3/4	1-1/16	1/4	3/4	11/32	.14
1163S*	40588	9/16	6-1/16	1-3/16	9/32	27/32	3/8	.18
1164S*	40589	5/8	6-3/8	1-5/16	9/32	15/16	13/32	.22
1165S*	40590	11/16	6-11/16	1-13/32	5/16	1-1/32	7/16	.28
1166S*	40591	3/4	7	1-9/16	11/32	1-1/8	15/32	.35
1167AS*	40592	13/16	7-5/16	1-21/32	3/8	1-3/16	17/32	.40
1167S*	40593	7/8	7-19/32	1-13/16	3/8	1-9/32	9/16	.49
1168S*	40594	15/16	7-29/32	1-29/32	13/32	1-3/8	19/32	.59
1170S*	40595	1	8-7/32	2-1/32	7/16	1-15/32	21/32	.66
CLIDEDT		0			•			•



SUPERTORQUE®, Opening

# Catalog Set # WS-1172, 15 Combination Wrenches,

Chrome Satin Finish, In R-37 Roll EDP #49720 10.52 Lbs. - 4.77 Kgs.

Cat. No.	Description	Cat. No.	Description	
1159	5/16" - 12 Pt.	1167A	13/16" - 12 Pt.	1
1160	3/8" - 12 Pt.	1167	7/8" - 12 Pt.	l
1661	7/16" - 12 Pt.	1168	15/16" - 12 Pt	
1162	1/2"- 12 Pt.	1170	1" - 12 Ft.	1
1163	9/16" - 12 Pt.	1171	1-1/16" - 12 Pt.	l
1164	5/8" - 12 Pt	1172	1-1/8" - 12 Pt.	ŀ
1165	11/16" - 12 Pt.	1173	1-1/4" - 12 Pt.	
1166	3/4" - 12 Pt.	Set Cat	alog #WS-1172T	



Set Catalog #WS-1172T, EDP #49721, 9.66 Lbs.-4.38 Kgs., Tools Only. Call for information on more Wrench Set Combinations.

# **Metric Combination Wrenches**

# Metric Combination Wrenches, Chrome Satin Finish, Standard Length, 12 Point

 A highly versatile general purpose wrench offered in a wide range of metric opening sizes.



- New SUPERTORQUE® box opening design allows application of higher torque without rounding or deforming hex fastener points. No contact is made at the corners. Instead wrenching forces are placed on the flat surfaces behind the points.
- Meets or exceeds aerospace specification AS 954 for 12-point fasteners (as defined by AS 870) to provide accurate torque/tension relationship for precision application.
- May be used on all common metric hex (6 point) fasteners with considerable advantage over conventional box end wrenches to increase both hand tool flexibility and economy.



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# **Williams Tools**

# Metric Combination Wrenches, Chrome Satin Finish, Standard Length, 12 Point - Continued

No.    Cat.	EDP	Size	A	В	С	D	E			
XOEM-7								_	Lbs.	Kgs.
XOEM-8         40674         8         5-3/4         11/16         5/32         1/2         1/8         .06         .03           XOEM-9         40675         9         6-1/4         3/4         3/16         9/16         1/8         .09         .04           XOEM-10         40676         10         6-23/32         27/32         3/16         19/32         5/32         .11         .05           XOEM-11         40677         11         7-1/4         15/16         7/32         21/32         5/32         .15         .07           XOEM-12         40678         12         7-11/16         31/32         7/32         23/32         5/32         .17         .08           XOEM-13         40679         13         8-5/32         1-3/32         1/4         25/32         3/16         .20         .09           XOEM-14         40680         14         8-5/8         1-5/32         1/4         25/32         3/16         .20         .09           XOEM-15         40681         15         9-3/32         1-7/32         9/32         15/16         3/16         .32         .15           XOEM-17         40683         17         10-1/32 <t< td=""><td>XOEM-6</td><td>40672</td><td>6</td><td>4-7/16</td><td>1/2</td><td>5/32</td><td>13/32</td><td>3/16</td><td>.04</td><td>.02</td></t<>	XOEM-6	40672	6	4-7/16	1/2	5/32	13/32	3/16	.04	.02
XOEM-9								3/16		
X0EM-10   40676   10   6-23/32   27/32   3/16   19/32   5/32   .11   .05     X0EM-11   40677   11   7-1/4   15/16   7/32   21/32   5/32   .15   .07     X0EM-12   40678   12   7-11/16   31/32   7/32   23/32   5/32   .17   .08     X0EM-13   40679   13   8-5/32   1-3/32   1/4   25/32   3/16   .20   .09     X0EM-14   40680   14   8-5/8   1-5/32   1/4   27/32   3/16   .22   .10     X0EM-15   40681   15   9-3/32   1-7/32   9/32   29/32   3/16   .22   .10     X0EM-16   40682   16   9-1/2   1-5/16   9/32   15/16   3/16   .32   .15     X0EM-17   40683   17   10-1/32   1-3/8   9/32   1   7/32   .36   .16     X0EM-18   40684   18   10-1/2   1-15/32   5/16   1-1/16   3/16   .32   .15     X0EM-19   40685   19   11   1-9/16   11/32   1-1/8   7/32   .44   .20     X0EM-20   43035   20   11-1/2   1-5/8   11/32   1-5/32   7/32   .68   .31     X0EM-21   43036   21   11-3/32   1-23/32   3/8   1-1/4   1/4   .68   .31     X0EM-23   43038   23   12-7/8   7/8   13/32   1-13/32   1/4   .74   .34     X0EM-24   43039   24   13-9/32   1-15/16   13/32   1-3/8   1/4   .90   .41     X0EM-25   43040   25   14   2-1/32   7/16   1-1/12   9/32   1.1   .49     X0EM-27   43041   27   14-3/4   2-3/16   15/32   1-9/16   9/32   1.2   .55     X0EM-29   43047   29   15-17/32   2-5/16   15/32   1-5/32   5/16   1.5   .66     X0EM-32   43042   32   17   2-9/16   17/32   1-1/32   1/3   1.9   .85     X0EM-32   43042   32   17   2-9/16   17/32   1-1/32   1/3   1.9   .85     X0EM-32   43042   32   17   2-9/16   17/32   1-1/32   1/3   1.9   .85     X0EM-32   43042   32   17   2-9/16   17/32   1-1/32   1/3   1.9   .85     X0EM-32   43042   32   17   2-9/16   17/32   1-1/32   1/3   .9   .85     X0EM-32   43042   32   17   2-9/16   17/32   1-1/32   1/3   .9   .9	XOEM-8	40674	8	5-3/4	11/16	5/32	1/2	1/8	.06	.03
XOEM-11   40677   11   7-1/4   15/16   7/32   21/32   5/32   .15   .07     XOEM-12   40678   12   7-11/16   31/32   7/32   23/32   5/32   .17   .08     XOEM-13   40679   13   8-5/32   1-3/32   1/4   25/32   3/16   .20   .09     XOEM-14   40680   14   8-5/8   1-5/32   1/4   25/32   3/16   .22   .10     XOEM-15   40681   15   9-3/32   1-7/32   9/32   29/32   3/16   .28   .13     XOEM-16   40682   16   9-1/2   1-5/16   9/32   15/16   3/16   .32   .15     XOEM-17   40683   17   10-1/32   1-3/8   9/32   1   7/32   .36   .16     XOEM-18   40684   18   10-1/2   1-3/8   9/32   1   7/32   .36   .16     XOEM-19   40685   19   11   1-9/16   11/32   1-1/8   7/32   .44   .20     XOEM-20   43035   20   11-1/2   1-5/8   11/32   1-5/32   7/32   .68   .31     XOEM-21   43036   21   11-3/32   1-23/32   3/8   1-1/4   1/4   .68   .31     XOEM-22   43037   22   12-1/2   1-3/16   13/32   1-9/32   1/4   .74   .34     XOEM-23   43038   23   12-7/8   7/8   13/32   1-11/32   1/4   .90   .41     XOEM-24   43039   24   13-9/32   1-15/16   13/32   1-3/8   1/4   .88   .40     XOEM-25   43040   25   1/4   2-1/32   7/16   1-1/2   9/32   1.1   .49     XOEM-27   43041   27   14-3/4   2-3/16   15/32   1-9/16   9/32   1.2   .55     XOEM-29   43047   29   15-17/32   2-5/16   15/32   1-5/8   5/16   1.5   .66     XOEM-32   43042   32   17   2-9/16   17/32   1-1/32   11/32   1.9   .85     XOEM-32   43042   32   17   2-9/16   17/32   1-1/32   5/16   1.16   .73     XOEM-32   43042   32   17   2-9/16   17/32   1-1/32   5/16   1.16   .73     XOEM-34   43045   34   17-13/16   2-11/16   9/16   1-29/32   11/32   1.9   .94     XOEM-34   43045   34   17-13/16   2-11/16   9/16   1-29/32   11/32   1.9   .94     XOEM-34   43045   34   17-13/16   2-11/16   9/16   1-29/32   11/32   2.1   .94	XOEM-9		9	6-1/4	3/4	3/16	9/16	1/8	.09	.04
XOEM-12										
XOEM-13   40679   13   8-5/32   1-3/32   1/4   25/32   3/16   20   0.9     XOEM-14   40680   14   8-5/8   1-5/32   1/4   27/32   3/16   22   10     XOEM-15   40681   15   9-3/32   1-7/32   9/32   29/32   3/16   .22   .10     XOEM-16   40682   16   9-1/2   1-5/16   9/32   15/16   3/16   .32   .15     XOEM-17   40683   17   10-1/32   1-3/8   9/32   1   7/32   .36   .16     XOEM-18   40684   18   10-1/2   1-5/32   5/16   1-1/16   7/32   .44   .20     XOEM-19   40685   19   11   1-9/16   11/32   1-1/8   7/32   .48   .22     XOEM-20   43035   20   11-1/2   1-5/8   11/32   1-5/32   7/32   .68   .31     XOEM-21   43036   21   11-3/32   1-23/32   3/8   1-1/4   1/4   .68   .31     XOEM-22   43037   22   12-1/2   1-3/16   13/32   1-9/32   1/4   .74   .34     XOEM-23   43038   23   12-7/8   7/8   13/32   1-11/32   1/4   .90   .41     XOEM-24   43039   24   13-9/32   1-15/16   13/32   1-3/8   1/4   .88   .40     XOEM-25   43040   25   14   2-1/32   7/16   1-15/32   9/32   1.1   .52     XOEM-26   43048   26   14-15/16   2-3/32   7/16   1-15/32   9/32   1.1   .52     XOEM-27   43041   27   14-3/4   2-3/16   15/32   1-9/16   9/32   1.2   .55     XOEM-30   43044   30   16-1/4   2-7/16   1/2   1-23/32   5/16   1.5   .66     XOEM-32   43042   32   17   2-9/16   17/32   1-1/32   1/3   1.9   .85     XOEM-32   43042   32   17   2-9/16   17/32   1-1/3/2   11/3   2   .9     XOEM-32   43042   34   17-13/16   2-11/16   9/16   1-29/32   11/3   2   .9	X0EM-11	40677	11	7-1/4	15/16	7/32	21/32	5/32	.15	.07
X0EM-14   40680   14   8-5/8   1-5/32   1/4   27/32   3/16   .22   .10     X0EM-15   40681   15   9-3/32   1-7/32   9/32   29/32   3/16   .28   .13     X0EM-16   40682   16   9-1/2   1-5/16   9/32   15/16   3/16   .32   .15     X0EM-17   40683   17   10-1/32   1-3/8   9/32   1   7/32   .36   .16     X0EM-18   40684   18   10-1/2   1-15/32   5/16   1-1/16   7/32   .44   .20     X0EM-19   40685   19   11   1-9/16   11/32   1-1/8   7/32   .48   .22     X0EM-20   43035   20   11-1/2   1-5/8   11/32   1-5/32   7/32   .68   .31     X0EM-21   43036   21   11-3/32   1-23/32   3/8   1-1/4   1/4   .68   .31     X0EM-22   43037   22   12-1/2   1-3/16   13/32   1-9/32   1/4   .74   .34     X0EM-23   43038   23   12-7/8   7/8   13/32   1-11/32   1/4   .90   .41     X0EM-24   43039   24   13-9/32   1-15/16   13/32   1-3/8   1/4   .88   .40     X0EM-25   43040   25   14   2-1/32   7/16   1-1/2   9/32   1.1   .49     X0EM-27   43041   27   14-3/4   2-3/16   15/32   1-9/16   9/32   1.2   .55     X0EM-29   43047   29   15-17/32   2-5/16   15/32   1-5/8   5/16   1.5   .66     X0EM-32   43042   32   17   2-9/16   17/32   1-13/6   11/32   1.9   .85     X0EM-32   43042   32   17   2-9/16   17/32   1-13/16   11/32   1.9   .85     X0EM-32   43042   32   17   2-9/16   17/32   1-13/16   11/32   1.9   .85     X0EM-32   43042   32   17   2-9/16   17/32   1-13/16   11/32   1.9   .85     X0EM-34   43045   34   17-13/16   2-11/16   9/16   1-29/32   11/32   2.1   .94										
XOEM-15				8-5/32				3/16		
XOEM-16   40682   16   9-1/2   1-5/16   9/32   15/16   3/16   32   15   XOEM-17   40683   17   10-1/32   1-3/8   9/32   1   17/32   36   16   XOEM-18   40684   18   10-1/2   1-15/32   5/16   1-1/16   7/32   .44   .20   XOEM-19   40685   19   11   1-9/16   11/32   1-1/8   7/32   .48   .22   XOEM-20   43035   20   11-1/2   1-5/8   11/32   1-5/32   7/32   .68   .31   XOEM-21   43036   21   11-3/32   1-23/32   3/8   1-1/4   1/4   .68   .31   XOEM-22   43037   22   12-1/8   17/36   13/32   1-9/32   1/4   .74   .34   XOEM-23   43038   23   12-7/8   7/8   13/32   1-11/32   1/4   .90   .41   XOEM-24   43039   24   13-9/32   1-15/16   13/32   1-3/8   1/4   .88   .40   XOEM-25   43040   25   14   2-1/32   7/16   1-15/32   9/32   1.1   .49   XOEM-27   43041   27   14-5/46   2-3/32   7/16   1-15/32   9/32   1.1   .52   XOEM-27   43041   27   14-3/4   2-3/16   15/32   1-9/16   9/32   1.2   .55   XOEM-29   43047   29   15-17/22   2-5/16   15/32   1-5/8   5/16   1.5   .66   XOEM-30   43044   30   16-1/4   2-7/16   1/2   1-23/32   5/16   1.5   .66   XOEM-32   43042   32   17   2-9/16   17/32   1-13/16   11/32   1.9   85   XOEM-32   43045   34   17-13/16   2-11/16   9/16   1-29/32   11/32   2.1   .94   XOEM-34   43045   34   17-13/16   2-11/16   9/16   1-29/32   11/32   2.1   .94   XOEM-34   43045   34   17-13/16   2-11/16   9/16   1-29/32   11/32   2.1   .94   XOEM-34   43045   34   17-13/16   2-11/16   9/16   1-29/32   11/32   2.1   .94   XOEM-34   43045   34   17-13/16   2-11/16   9/16   1-29/32   11/32   2.1   .94   XOEM-34   43045   34   17-13/16   2-11/16   9/16   1-29/32   11/32   2.1   .94   XOEM-34   43045   34   17-13/16   2-11/16   9/16   1-29/32   11/32   2.1   .94   XOEM-34   43045   34   17-13/16   2-11/16   9/16   1-29/32   11/32   2.1   .94   XOEM-34   43045   34   17-13/16   2-11/16   9/16   1-29/32   11/32   2.1   .94   XOEM-34   43045   34   17-13/16   2-11/16   9/16   1-29/32   11/32   2.1   .94   XOEM-34   43045   34   17-13/16   2-11/16   9/16   1-29/32   11/32   2.1   .94   XOEM-34   43045   34   17-13/	X0EM-14	40680	14	8-5/8	1-5/32	1/4	27/32	3/16	.22	.10
X0EM-17   40683   17   10-1/32   1-3/8   9/32   1   7/32   .36   .16     X0EM-18   40684   18   10-1/2   1-15/32   5/16   1-1/16   7/32   .44   .20     X0EM-19   40685   19   11   1-9/16   11/32   1-1/8   7/32   .48   .22     X0EM-20   43035   20   11-1/2   1-5/8   11/32   1-5/32   7/32   .68   .31     X0EM-21   43036   21   11-3/32   1-23/32   3/8   1-1/4   1/4   .68   .31     X0EM-22   43037   22   12-1/2   1-3/16   13/32   1-9/32   1/4   .74   .34     X0EM-23   43038   23   12-7/8   7/8   13/32   1-11/32   1/4   .90   .41     X0EM-24   43039   24   13-9/32   1-15/16   13/32   1-3/8   1/4   .88   .40     X0EM-25   43040   25   14   2-1/32   7/16   1-1/2   9/32   1.1   .52     X0EM-26   43048   26   14-15/16   2-3/32   7/16   1-1/2   9/32   1.1   .52     X0EM-27   43041   27   14-3/4   2-3/16   15/32   1-9/16   9/32   1.2   .55     X0EM-29   43047   29   15-17/32   2-5/16   15/32   1-5/8   5/16   1.5   .66     X0EM-30   43044   30   16-1/4   2-7/16   17/32   1-13/16   11/32   1.9   .85     X0EM-32   43042   32   17   2-9/16   17/32   1-13/16   11/32   1.9   .85     X0EM-34   43045   34   17-13/16   2-11/16   9/16   1-29/32   11/32   2.1   .94	X0EM-15	40681		9-3/32	1-7/32	9/32	29/32	3/16	.28	.13
XOEM-18         40684         18         10-1/2         1-15/32         5/16         1-1/16         7/32         .44         .20           XOEM-19         40685         19         11         1-9/16         11/32         1-1/8         7/32         .48         .22           XOEM-20         43035         20         11-1/2         1-5/8         11/32         1-5/32         7/32         .68         .31           XOEM-21         43036         21         11-3/32         1-23/32         3/8         1-1/4         1/4         .68         .31           XOEM-22         43037         22         12-1/2         1-3/16         13/32         1-9/32         1/4         .74         .34           XOEM-23         43038         23         12-7/8         7/8         13/32         1-1/32         1/4         .90         .41           XOEM-24         43039         24         13-9/32         1-15/16         13/32         1-3/8         1/4         .88         .40           XOEM-25         43040         25         14         2-1/32         7/16         1-1/2         9/32         1.1         .49           XOEM-29         43047         29         15-17/										
X0EM-19   40685   19   11   1-9/16   11/32   1-1/8   7/32   .48   .22   X0EM-20   43035   20   11-1/2   1-5/8   11/32   1-5/32   7/32   .68   .31   X0EM-21   43036   21   11-3/32   1-23/32   3/8   1-1/4   1/4   .68   .31   X0EM-22   43037   22   12-1/2   1-3/16   13/32   1-9/32   1/4   .74   .34   X0EM-23   43038   23   12-7/8   7/8   13/32   1-11/32   1/4   .90   .41   X0EM-24   43039   24   13-9/32   1-15/16   13/32   1-3/8   1/4   .88   .40   X0EM-25   43040   25   14   2-1/32   7/16   1-1/2   9/32   1.1   .49   X0EM-26   43048   26   14-15/16   2-3/32   7/16   1-1/2   9/32   1.1   .49   X0EM-27   43041   27   14-3/4   2-3/16   15/32   1-9/16   9/32   1.2   .55   X0EM-29   43047   29   15-17/32   2-5/16   15/32   1-5/8   5/16   1.5   .66   X0EM-30   43044   30   16-1/4   2-7/16   1/2   1-23/32   5/16   1.6   .73   X0EM-32   43042   32   17   2-9/16   17/32   1-13/16   11/32   1.9   .85   X0EM-34   43045   34   17-13/16   2-11/16   9/16   1-29/32   11/32   2.1   .94	X0EM-17	40683	17	10-1/32	1-3/8	9/32	1	7/32	.36	.16
XOEM-20         43035         20         11-1/2         1-5/8         11/32         1-5/32         7/32         68         .31           NOEM-21         43036         21         11-3/32         1-23/32         3/8         1-1/4         1/4         .68         .31           XOEM-22         43037         22         12-1/2         1-3/16         13/32         1-9/32         1/4         .74         .34           XOEM-23         43038         23         12-7/8         7/8         13/32         1-9/32         1/4         .90         .41           XOEM-24         43039         24         13-9/32         1-15/16         13/32         1-3/8         1/4         .88         .40           XOEM-25         43040         25         14         2-1/32         7/16         1-15/32         9/32         1.1         .49           XOEM-26         43048         26         14-15/16         2-3/32         7/16         1-15/32         9/32         1.1         .49           XOEM-27         43041         27         14-3/4         2-3/16         15/32         1-9/16         9/32         1.2         .55           XOEM-39         43044         30 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>										
X0EM-21         43036         21         11-3/32         1-23/32         3/8         1-1/4         1/4         .68         .31           X0EM-22         43037         22         12-1/2         1-3/16         13/32         1-9/32         1/4         .74         .34           X0EM-23         43038         23         12-7/8         7/8         13/32         1-11/32         1/4         .90         .41           X0EM-24         43039         24         13-9/32         1-15/16         13/32         1-3/8         1/4         .88         .40           X0EM-25         43040         25         14         2-1/32         7/16         1-15/32         9/32         1.1         .49           X0EM-26         43048         26         14-15/16         2-3/32         7/16         1-1/2         9/32         1.1         .52           X0EM-27         43041         27         14-3/4         2-3/16         15/32         1-9/16         9/32         1.2         .55           X0EM-29         43047         29         15-17/32         2-5/16         15/32         1-5/8         5/16         1.5         .66           X0EM-30         43044         30							1-1/8			
XOEM-22         43037         22         12-1/2         1-3/16         13/32         1-9/32         1/4         .74         .34           XOEM-23         43038         23         12-7/8         7/8         13/32         1-11/32         1/4         .90         .41           XOEM-24         43039         24         13-9/32         1-15/16         13/32         1-3/8         1/4         .88         .40           XOEM-25         43040         25         14         2-1/32         7/16         1-15/32         9/32         1.1         .49           XOEM-26         43048         26         14-15/16         2-3/32         7/16         1-1/2         9/32         1.1         .52           XOEM-27         43041         27         14-3/4         2-3/16         15/32         1-9/16         9/32         1.2         .55           XOEM-30         43044         30         16-1/4         2-7/16         15/32         1-9/16         9/32         1.2         .55           XOEM-30         43044         30         16-1/4         2-7/16         1/2         1-2/3/2         5/16         1.5         .66           XOEM-32         43042         32	X0EM-20	43035	20	11-1/2	1-5/8	11/32	1-5/32	7/32	.68	.31
XOEM-23         43038         23         12-7/8         7/8         13/32         1-11/32         1/4         .90         .41           XOEM-24         43039         24         13-9/32         1-15/16         13/32         1-3/8         1/4         .88         .40           XOEM-25         43040         25         14         2-1/32         7/16         1-15/32         9/32         1.1         .49           XOEM-26         43048         26         14-15/16         2-3/32         7/16         1-1/2         9/32         1.1         .49           XOEM-27         43041         27         14-3/4         2-3/16         15/32         1-9/16         9/32         1.2         .55           XOEM-29         43047         29         15-17/32         2-5/16         15/32         1-5/8         5/16         1.5         .66           XOEM-30         43044         30         16-1/4         2-7/16         1/2         1-23/32         5/16         1.5         .66           XOEM-32         43042         32         17         2-9/16         17/32         1-13/16         11/32         1-13/16         11/32         1-13/16         11/32         1-13/16         11/3				11-3/32					.68	.31
XOEM-24         43039         24         13-9/32         1-15/16         13/32         1-3/8         1/4         .88         .40           XOEM-25         43040         25         14         2-1/32         7/16         1-15/32         9/32         1.1         .49           XOEM-26         43048         26         14-15/16         2-3/32         7/16         1-1/2         9/32         1.1         .52           XOEM-27         43041         27         14-3/4         2-3/16         15/32         1-9/16         9/32         1.2         .55           XOEM-30         43047         29         15-17/32         2-5/16         15/32         1-5/8         5/16         1.5         .66           XOEM-30         43044         30         16-1/4         2-7/16         1/2         1-23/32         5/16         1.6         .73           XOEM-32         43042         32         17         2-9/16         17/32         1-13/16         11/32         1.9         .85           XOEM-34         43045         34         17-13/16         2-11/16         9/16         1-29/32         11/32         2.1         .94										
XOEM-25         43040         25         14         2-1/32         7/16         1-15/32         9/32         1.1         .49           XOEM-26         43048         26         14-15/16         2-3/32         7/16         1-1/2         9/32         1.1         .52           XOEM-27         43041         27         14-3/4         2-3/16         15/32         1-9/16         9/32         1.2         .55           XOEM-30         43047         29         15-17/32         2-5/16         15/32         1-5/8         5/16         1.5         .66           XOEM-30         43044         30         16-1/4         2-7/16         1/2         1-23/32         5/16         1.6         .73           XOEM-32         43042         32         17         2-9/16         17/32         1-13/16         11/32         1.9         85           XOEM-34         43045         34         17-13/16         2-11/16         9/16         1-29/32         11/32         2.1         .94	X0EM-23	43038	23	12-7/8	7/8	13/32	1-11/32	1/4	.90	.41
X0EM-26         43048         26         14-15/16         2-3/32         7/16         1-1/2         9/32         1.1         .52           X0EM-27         43041         27         14-3/4         2-3/16         15/32         1-9/16         9/32         1.2         .55           X0EM-29         43047         29         15-17/32         2-5/16         15/32         1-5/8         5/16         1.5         .66           X0EM-30         43044         30         16-1/4         2-7/16         1/2         1-23/32         5/16         1.6         .73           X0EM-32         43042         32         17         2-9/16         17/32         1-13/16         11/32         1.9         .85           X0EM-34         43045         34         17-13/16         2-11/16         9/16         1-29/32         11/32         2.1         .94	X0EM-24			13-9/32	1-15/16	13/32	1-3/8		.88	.40
X0EM-27         43041         27         14-3/4         2-3/16         15/32         1-9/16         9/32         1.2         .55           X0EM-29         43047         29         15-17/32         2-5/16         15/32         1-5/8         5/16         1.5         .66           X0EM-30         43044         30         16-1/4         2-7/16         1/2         1-23/32         5/16         1.5         .66           X0EM-32         43042         32         17         2-9/16         17/32         1-13/16         11/32         1.9         .85           X0EM-34         43045         34         17-13/16         2-11/16         9/16         1-29/32         11/32         2.1         .94							1-15/32			
XOEM-29         43047         29         15-17/32         2-5/16         15/32         1-5/8         5/16         1.5         66           XOEM-30         43044         30         16-1/4         2-7/16         1/2         1-23/32         5/16         1.6         .73           XOEM-32         43042         32         17         2-9/16         17/32         1-13/16         11/32         1-13/2         1.1         9         .85           XOEM-34         43045         34         17-13/16         2-11/16         9/16         1-29/32         11/32         2.1         .94	X0EM-26	43048	26	14-15/16	2-3/32	7/16	1-1/2	9/32	1.1	.52
XOEM-30         43044         30         16-1/4         2-7/16         1/2         1-23/32         5/16         1.6         .73           XOEM-32         43042         32         17         2-9/16         17/32         1-13/16         11/32         1.9         .85           XOEM-34         43045         34         17-13/16         2-11/16         9/16         1-29/32         11/32         2.1         .94	XOEM-27	43041	27	14-3/4	2-3/16	15/32	1-9/16	9/32	1.2	.55
X0EM-32 43042 32 17 2-9/16 17/32 1-13/16 11/32 1.9 .85 X0EM-34 43045 34 17-13/16 2-11/16 9/16 1-29/32 11/32 2.1 .94										
XOEM-34   43045   34   17-13/16   2-11/16   9/16   1-29/32   11/32   2.1   .94	X0EM-30	43044	30	16-1/4	2-7/16	1/2	1-23/32	5/16	1.6	.73
		43042					1-13/16	11/32	1.9	.85
X0FM-36   43046   36   19-1/4   2-15/16   19/32   2-3/32   3/8   2.6   1.2				17-13/16	2-11/16	9/16			2.1	
7.52 55   55   55   55   7.5   7.6   10/0E   E 0/0E   0/0   E.0   1.E	X0EM-36	43046	36	19-1/4	2-15/16	19/32	2-3/32	3/8	2.6	1.2

# Metric Combination Wrenches, Chrome Satin Finish, Midget Length, 12 Point • Handles are shorter than the stan-

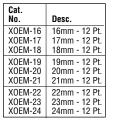
- Handles are shorter than the standard length, allowing the user to torque the wrench with a larger are.
- Head sizes still provide the larger, more rugged dimensions required for most industrial uses.

Cat.	EDP	Size	Α	В	С	D	E		
No.	No.	(mm)	(in)	(in)	(in)	(in)	(in)	Lbs.	Kgs.
MID-6M	41321	6	3-5/32	1/2	1/8	13/32	3/16	.03	.01
MID-7M	41322	7	3-11/32	9/16	5/32	7/16	3/16	.03	.01
MID-8M	41323	8	3-15/32	21/32	5/32	1/2	1/4	.04	.02
MID-9M	41324	9	3-21/32	23/32	3/16	17/32	1/4	.05	.02
MID-10M	41325	10	3-27/32	13/16	7/32	19/32	9/32	.07	.03
MID-11M	41326	11	4-1/16	15/16	7/32	21/32	5/16	.09	.04
MID-12M	41327	12	4-3/16	1	1/4	21/32	5/16	.10	.05
MID-13M	41328	13	4-11/32	1-1/16	1/4	25/32	11/32	.12	.05
MID-14M	41329	14	4-9/16	1-3/16	9/32	27/32	11/32	.14	.06
MID-15M	41330	15	4-11/16	1-1/4	9/32	29/32	13/32	.17	.08
MID-16M	41331	16	4-25/32	1-9/32	5/16	15/16	13/32	.19	.09
MID-17M	41332	17	4-31/32	1-3/8	5/16	1	7/16	.22	.10
MID-18M	41333	18	5-1/8	1-3/8	5/16	1-1/32	15/32	.24	.11
MID-19M	41334	19	5-9/32	1-9/16	5/16	1-1/8	15/32	.28	.13

# MID-19M | 41334 | 19 | 5-9/32 | 1-9/16 | 5/16 | 1-1/8 Catalog Set #MWS-18, 18 Metric Combination Wrenches, Chrome Satin Finish. in R-30 and R-23 Roll

EDP #43080, 8.64 Lbs. - 3.92 Kgs.

Cat. No.	Desc.
XOEM-7	7mm - 12 Pt.
XOEM-8	8mm - 12 Pt.
XOEM-9	9mm - 12 Pt.
X0EM-10	10mm - 12 Pt.
X0EM-11	11mm - 12 Pt.
X0EM-12	12mm - 12 Pt.
X0EM-13	13mm - 12 Pt.
X0EM-14	14mm - 12 Pt.
X0EM-15	15mm - 12 Pt.





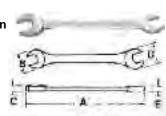
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# **Open-End Wrenches**

Open End Wrench, Double Head 15° Angle, Chrome Satin Finish, Standard Length

- Two openings In each wrench.
- 45° degree chamfer allows easy access.
- Continuous arc design minimizes spreading and is stronger than "V" design.

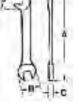


Cat. No.	EDP No.	Size (in)	A (in)	B (in)	C (in)	D (in)	E (in)	Lbs.	Kgs.
1020	40185	1/4 x 5/16	4-1/16	9/16	5/32	11/16	3/16	.05	.02
1721	40550	5/16 x 3/8	4-11/16	11/16	3/16	27/32	7/32	.08	.04
1723	40552	3/8 x 7/16	5-5/16	13/16	7/32	31/32	1/4	.11	.05
1725	40554	7/16 x 1/2	5-31/32	15/16	1/4	1-1/16	1/4	.14	.06
1725B	40556	1/2 x 9/16	6-19/32	1-3/32	1/4	1-7/32	9/32	.18	.08
1727	40557	9/16 x 5/8	7-9/32	1-7/32	9/32	1-11/32	5/16	.31	.14
1027B	40099	5/8 x 11/16	7-31/32	1-11/32	5/16	1-15/32	11/32	.32	.15
1729	40558	5/8 x 3/4	8-9/32	1-11/32	5/16	1-19/32	11/32	.33	.15
1729B	40561	11/16 x 3/4	8-21/32	1-15/32	11/32	1-19/32	11/32	.33	.15
1731	40559	3/4 x 13/16	9-11/32	1-19/32	3/8	1-23/32	3/8	.50	.24
1731A	40560	3/4 x 7/8	9-11/16	1-19/32	3/8	1-27/32	13/32	.52	.24
1731B	40562	13/16 x 7/8	10-1/32	1-23/32	3/8	1-27/32	13/32	.55	.25
1033A	40112	7/8 x 15/16	10-3/4	1-27/32	13/32	1-31/32	13/32	.84	.38
1033C	40113	15/16 x 1	11-1/2	1-31/32	13/32	2-3/32	7/16	.84	.38
1037	40119	1-1/16 x 1-1/4	12-15/16	2-7/32	7/16	2-5/8	1/2	1.4	.63
1037B	40121	1-1/8 x 1-3/16	13-23/32	2-3/8	15/32	2-15/32	15/32	1.4	.64
1038	40122	1-1/4 x 1-5/16	15-9/32	2-19/32	1/2	2-23/32	17/32	2.5	1.2
1038A	40123	1-3/8 x 1-7/16	16-7/8	2-27/32	17/32	2-31/32	9/16	2.8	1.3
1039B	40124	1-1/2 x 1-5/8	18-29/32	3-1/8	9/16	3-3/8	19/32	3.2	1.4

# Open End Wrenches, Double Head, 15° and 75° Angle, Electronic Miniature Length, Chrome Finish

- Excellent wrench for fast turning of fasteners in limited clearance areas.
- Same opening in each end.

Cat. No.	EDP No.	Size (in)	A (in)	B (in)	C (in)	D (in)	E (in)	Lbs.	Kgs.	
1112	40314	3/16	3-1/8	15/32	3/32	15/32	3/32	.02	.01	١
1113	40315	13/64	3-1/8	15/32	3/32	15/32	3/32	.02	.01	И
1114	40316	7/32	3-1/8	15/32	3/32	15/32	3/32	.02	.01	
1115	40317	15/64	3-1/8	15/32	3/32	15/32	3/32	.02	.01	
1116	40318	1/4	3-1/8	15/32	3/32	17/32	3/32	.02	.01	l
1118	40319	9/32	3-5/8	9/16	1/8	17/32	1/8	.03	.02	
1120	40320	5/16	3-5/8	9/16	1/8	9/16	1/8	.03	.02	
1122	40321	11/32	4-1/8	23/32	5/32	23/32	5/32	.04	.02	l
1124	40322	3/8	4-1/8	23/32	5/32	23/32	5/32	.04	.02	
1128	40323	7/16	4-5/8	29/32	3/16	29/32	3/16	.07	.03	
1132	40324	1/2	4-9/16	15/16	3/16	15/16	5/32	.06	.03	l
1136	40325	9/16	5-3/32	1-1/8	3/16	1-3/32	3/16	.10	.05	l
1140	40326	5/8	5-1/16	1-1/8	3/16	1-1/8	3/16	.10	.05	



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# **Williams Tools**

# Open End Wrenches, Single Head, 15° Angle, Black Finish

- Precision forged and fully heat-treated for a lifetime of dependable performance.
- 15° angle head permits complete nut rotation in a 30° arc.
- Black oxide finish provides resistance to corrosions in industrial use.

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Cat. No.	EDP No.	Size (in)	A (in)	B (in)	C (in)	Lbs.	Kgs.	ì
BW-1A	30004	1/4	4	29/32	1/4	.08	.04	
BW-2	30006	5/16	4	29/32	1/4	.08	.04	
BW-700	31159	3/8	4	29/32	1/4	.08	.04	
BW-701	31160	7/16	4-1/2	1-3/32	9/32	.12	.05	2
BW-1	30005	1/2	4-1/2	1-3/32	9/32	.10	.05	
BW-702	31161	9/16	6-1/2	1-1/2	3/8	.30	.14	
BW-703	31162	5/8	6-1/2	1-1/2	3/8	.29	.13	
BW-3	30007	11/16	6-1/2	1-1/2	3/8	.28	.13	
BW-704	31163	3/4	8	1-29/32	15/32	.40	.18	
BW-705	31164	13/16	8	1-29/32	15/32	.38	.17	
BW-5	30009	7/8	8	1-29/32	15/32	.36	.16	
BW-6	30010	15/16	10-3/8	2-15/32	9/16	1.2	.55	
BW-706	31165	1	10-3/8	2-15/32	9/16	1.2	.54	
BW-7	30012	1-1/16	10-3/8	2-15/32	9/16	1.2	.54	
BW-707	31166	1-1/8	12	2-7/8	21/32	1.3	.58	
BW-8	30013	1-1/4	12	2-7/8	21/32	1.3	.57	
BW-8A	30014	1-5/16	12	2-7/8	21/32	1.2	.56	
BW-708A	31167	1-3/8	12	2-7/8	21/32	1.2	.55	
BW-9	30015	1-7/16	14-7/8	3-9/16	13/16	3.1	1.4	
BW-709	31168	1-1/2	14-7/8	3-9/16	13/16	3.1	1.4	
BW-10	30016	1-5/8	14-7/8	3-9/16	13/16	3.1	1.4	
BW-10A	30017	1-11/16	14-7/8	3-9/16	13/16	3.1	1.4	
BW-11	30018	1-13/16	18	4-3/8	15/16	5.5	2.5	
BW-11A	30019	1-7/8	18	4-3/8	15/16	5.2	2.4	
BW-12	30020	2	18	4-3/8	15/16	5.1	2.3	
BW-12A	30021	2-1/16	18	4-3/8	15/16	5.2	2.4	
BW-13	30022	2-3/16	21	4-7/8	1-1/8	8.8	4.0	
BW-13A	30023	2-1/4	21	4-7/8	1-1/8	8.3	3.8	
BW-14	30024	2-3/8	23	5-3/4	1-1/8	10.2	4.6	
BW-14A	30025	2-7/16	23	5-3/4	1-1/8	10.5	4.7	
BW-15	30026	2-9/16	25	6-1/4	1-1/4	15.1	6.8	
BW-15A	30027	2-5/8	25	6-1/4	1-1/4	14.9	6.7	
BW-16	30028	2-3/4	27	6-5/8	1-3/8	15.8	7.2	
BW-16A	30029	2-15/16	27	6-5/8	1-3/8	15.2	6.9	
BW-17A	30032	3	30	7-3/4	1-7/16	21.3	9.6	
BW-17	30031	3-1/8	30	7-3/4	1-7/16	22.4	10.1	

# Catalog Set #WS-1142P, 13 Open End Wrenches and Piler in R-20 Roll

8-1/4

Cat. No.	Description
1112	3/16"
1113	13/64"
1114	7/32"
1115	15/64"
1116	1/4"
1118	9/32"
1120	5/16"
1122	11/32"
1124	3/8"
1128	7/16"
1132	1/2"
1136	9/16"
1140	5/8"
PL-1 519	Utility Superjoint Pliers, 5"

BW-18A

BW-18

30034

3-3/8 3-1/2

- Miniature Electronic, Chrome Finish EDP # 49286, 2.83 Lbs.-1.28 Kgs.

39.0

17.7

1-9/16

1-9/16



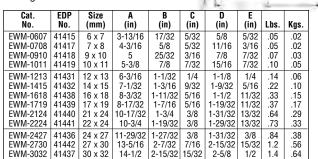
Set Catalog #WS-1142PT, EDP #49284, .71 Lbs.-.32 Kgs., Tools Only

# **Metric Open End Wrenches**

Metric Open End Wrench, Double Head 15° Angle, Chrome Satin Finish.

Standard Length

- Two openings in each wrench.
- 45° degree chamfer allows easy access
- Continuous arc design minimizes spreading and is stronger than "V" design.



# **Box Wrenches**

behind the points.

# Box End Wrenches, Double Head, 60° Offset Angle, Chrome-Satin Finish, Standard Length, 12 Point

- SUPERTORQUE® box opening design allows application of higher torque without rounding or deforming hex fastener points. No contact is made at the corners. Instead wrenching forces are placed on the flat surfaces
- Double offset for turning clearance.
- Different opening in each end clearly marked on handle.

Cat. No.	EDP No.	Size (in)	A (in)	B (in)	C (in)	D (in)	E (in)	Lbs.	Kgs.
8720	41074	1/4 x 5/16	6-7/16	13/32	1/4	15/32	9/32	.10	.05
8723	41054	3/8 x 7/16	7-5/8	9/16	5/16	21/32	5/16	.20	.09
8725	41055	7/16 x 1/2	8-3/16	21/32	11/32	3/4	11/32	.28	.13
8725B	41057	1/2 x 9/16	8-25/32	3/4	3/8	27/32	3/8	.30	.14
8727	41058	9/16 x 5/8	9-3/8	27/32	13/32	29/32	13/32	.38	.17
8727A	41059	5/8 x 11/16	9-31/32	29/32	7/16	1	7/16	.44	.20
8729	41060	5/8 x 3/4	10-1/4	15/16	7/16	1-3/32	7/16	.50	.23
8729A	41061	11/16 x 13/16	10-27/32	1	15/32	1-3/16	15/32	.50	.23
8731A	41062	3/4 x 1/8	11-7/16	1-3/32	17/32	1-9/32	17/32	.68	.31
8033A	41040	7/8 x 15/16	13	1-9/32	9/16	1-3/8	9/16	1.0	.44
8033C	41041	15/16 x 1	13-31/32	1-3/8	19/32	1-7/16	19/32	2.0	.93

# Ratcheting Box Wrenches, Straight Pattern, Chrome Finish, 6 and 12 Point

- Allows turning of fastener without removal of wrench.
- A must for applications where access is limited.
- · Different opening sizes in each end

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Cat. No.	EDP No.	Size (in)	Points	A (in)	B (in)	(in)	D (in)	E (in)	Lbs.	Kgs.
RB-810 RB-1214 RB-1618	97362 97363 97364		9 6 6	4-1/4 5-1/2 6-3/4	19/32 25/32 1	3/8 3/8 1/2	11/16 7/8 1-5/32	3/8 3/8 1/2	.12 .18 .30	.05 .08 .14
RB-1820 RB-2022 RB-2024	97368 97365 97366		12 12 12	8-1/8 8-1/8 8-1/8	1-5/16 1-5/16 1-5/16	1/2 1/2 1/2	1-7/16 1-7/16 1-7/16	1/2 1/2 1/2	.46 .44 .42	.21 .20 .19
RB-2428 RB-3036 RB-3440	97367 97384 97385	-,	12 12 12	15-1/8	1-13/32 1-21/32 1-29/32	1/2 9/16 9/16		1/2 9/16 9/16	.48 1.4 1.3	.22 .62 .58

# **Williams Tools**

# Ratcheting Box Wrenches, Offset Pattern, Chrome Finish, 12 Point

- Box ends offset 25°.
- · Different size openings in each end.



	ual.	EUP	Size	, A.	D	, U	ע	.E.			
	No.	No	(in)	(in)	(in)	(in)	(in)	(in)	Lbs.	Kgs.	
	RB0-810	97389	1/4 x 5/16	4-1/4	19/32	3/8	21/32	3/8	.12	.05	1
	RB0-1214	97390	3/8 x 7/16	5-7/16	25/32	3/8	7/8	3/8	.18	.08	
	RB0-1618	97391	1/2 x 9/16	6-3/4	1	1/2	1-5/32	1/2	.30	.14	
	RB0-2022	97392	5/8 x 11/16	8	1-5/16	1/2	1-7/16	1/2	.46	.21	
	RB0-2024	97393	5/8 x 3/4	8	1-5/16	1/2	1-7/16	1/2	.56	.26	
	RB0-2226	97395	11/16 x 13/16	9-1/8	1-13/32	1/2	1-9/16	1/2	.54	.25	
	RB0-2428	97394	3/4 x 7/8	9-1/8	1-13/32	1/2	1-9/16	1/2	.52	.24	1
	RB0-2630	97396	13/16 x 15/16	9-1/8	1-13/32	1/2	1-9/16	1/2	.64	.29	
- 1											J

# Catalog Set #WS-8700, 8 Box End Wrenches In R-23 Roll

- 600 Angle, Chrome Satin Finish

EDP #49541, 6.97 Lbs.-3.16 Kgs.

Cat. No.	Desc. (in)
8720	1/4 x 5/16
8723	3/8 x 7/16
8725B	1/2 x 9/16
8729A	11/16 x 13/16
8731A	3/4 x 7/8
8033C	15/16 x 1



# Catalog Set #WS-12, 5 Straight Pattern Ratcheting Box Wrenches In R-3 Roll

- Straight Pattern

EDP #49560. 1.70 Lbs.-.77 Kgs.

Cat. No.	Description
RB-810	1/4 x 5/16 - 6 Pt.
RB-1214	1/4 x 5/16 - 6 Pt. 3/8 x 7/16 - 6 Pt.
RB-1618	1/2 x 9/16 - 6 Pt.
RB-2022	5/8 x 11/16 - 12 Pt. 3/4 x 7/8 - 12 Pt.
RB-2428	3/4 x 7/8 - 12 Pt.

Set Catalog #WS-12T, EDP #49558, 1.50 Lbs.-.68 Kgs., Tools Only



5 Offset Ratcheting **Box Wrenches** In R-3 Roll - Offset Pattern

Cat. No. Description RB0-810 1/4 x 5/16 - 12 Pt. RB0-1214 3/8 x 7/16 - 12 Pt. RBO-1618 1/2 x 9/16 - 12 Pt. RBO-2022 5/8 x 11/16 - 12 Pt RBO-2428 3/4 x 7/8 - 12 Pt.

EDP #97397, 1.76 Lbs.-.80 Kgs.

Set Catalog #WS-5T, EDP #97427, 1.58 Lbs.-.72 Kgs., Tools Only

# **Metric Box Wrenches**

# Metric Ratcheting Box Wrench, Straight Pattern, Chrome Finish, 6 and 12 Point

- Allows turning of fastener without removal of wrench.
- A must for applications where access is limited.
- Different opening sizes in each end.



Cat. No.	EDP No.	Size (mm)	Points	A (in)	B (in)	C (in)	D (in)	E (in)	Lbs.	
RBM-0708	97376	7 x 8	6	4-1/4	11/32	3/8	11/16	3/8	.12	.05
RBM-0910	97377	9 x 10	6	5-1/2	7/8	3/8	7/8	3/8	.16	.07
RBM-1112	97378	11 x 12	6	6-7/8	1-3/16	1/2	1-1/8	1/2	.30	.14
RBM-1314	97379	13 x 14	6	6-7/8	1-3/16	1/2	1-1/8	1/2	.30	.14
RBM-1517	97380	15 x 17	12	8-1/8	1-7/16	1/2	1-7/16	1/2	.44	.20
RBM-1618	97381	16 x 18	12	8-1/8	1-7/16	1/2	1-7/16	1/2	.44	.20
RBM-1921	97383	19 x 21	12	9-1/4	1-9/16	1/2	1-9/16	1/2	.50	.23

# Flare Nut Wrenches

Flare Nut Wrenches, Double Split Box Head, 15° Offset Angle, Chrome Finish, 6 and 12 Point

 Designed for close quarter work on tubing or pipe without marring fittings.



Cat. No.	EDP No.	Size (in)	A (in)	B (in)	C (in)	D (in)	E (in)	Lbs.	Kgs.
XFN-0810 XFN-1214 XFN-1618	43049 43050 43051	3/8 x 7/16	5-13/16	25/32	1/4 5/16 3/8	5/8 27/32 1	9/32 11/32 13/32	.22 .30 .44	.10 .14 .20
XFN-2432*	43053	5/8 x 11/16 3/4 x 1 7/8 x 1-1/8	9-1/2	1-3/32 1-1/4 1-7/16	7/16 1/2 9/16	3/16 19/32 1-3/4	15/32 5/8 11/16	.54 .65 .92	.24 .29 .42

# Ratcheting Flare Nut Wrenches, Nickel Finish, 12 Point

- Designed for use on 6 and 12 point tube fittings, fasteners, valves and compression fittings.
- Unique design requires only 30° rotation for ratcheting action.
- High carbon steel jaws snap open, then close around fastener with 6 point contact.
- · Prevents distortion of thin-walled fittings.
- · Allows easy access to tight locations.
- · Corrosive-proof, high luster nickel finish.

Cat. No.	EDP No.	Size (in)	Length (in)	Head Dia.(in)	Head Tkns.(in)	Lbs.	Kgs.
RFW-12	43224	3/8	5-3/8	1	5/16	.16	.08
RFW-14	43225	7/16	5-3/8	1	5/16	.16	.08
RFW-16	43226	1/2	5-3/8	1	5/16	.16	.08
RFW-18	43227	9/16	7-1/4	1-1/32	3/8	.31	.14
RFW-20	43228	5/8	7-1/4	1-1/32	3/8	.31	.14
RFW-22	43229	11/16	7-1/4	1-1/32	3/8	.31	.14
RFW-24	43230	3/4	7-1/4	1-1/32	3/8	.31	.14
RFW-26	43231	13/16	9-5/16	1-5/8	1/2	.52	.24
RFW-28	43232	7/8	9-5/16	1-5/8	1/2	.52	.24
RFW-30	43233	15/16	9-5/16	1-5/8	1/2	.52	.24
RFW-32	43234	1	9-5/16	1-5/8	1/2	.52	.24

# **Metric Flare Nut** Wrenches

Double Split Box Head, 15° Offset Angle, Chrome Finish, 6 Point

· Designed for close quarter work on tubing

or pipe v	or pipe without marring littings.													
Cat. No.	EDP No.	Size (in)	A (in)	B (in)	C (in)	D (in)	E (in)	Lbs.	Kgs.					
MFN-911	43055	9 x 11	6-3/4	13/16	11/32	15/16	13/32	.22	.10					
MFN-1012	43056	10 x 12	6-3/4	13/16	3/8	29/32	13/32	.22	.10					
MFN-1314	43057	13 x 14	7-5/8	1	3/8	1-3/32	13/32	.30	.14					
MFN-1517	43058	15 x 17	8-7/8	1-3/32	7/16	1-7/32	1/2	.44	.20					

# **Industrial Wrench**

Construction Wrenches, Single Head, Open End 15° Angle, Black Finish

- 15° angled open end with straight tapered (spud) handle.
- Tapered (spud) handle designed to locate and align bolt and rivet holes.

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Cat. No.	EDP No.	Size (in)	A (in)	B (in)	C (in)	D (in)	Lbs.	Kgs.
204A	30368	3/4	12	1-23/32	15/32	6-3/4	.64	.29
205 206 206B	30369 30371 30372	7/8 15/16 1	14-1/4 14-3/4 13-1/8	2-1/16 2-1/8 2-3/32	19/32 19/32 1/2	7-7/8 7-7/8 7-7/8	1.1 1.2 1.4	.49 .53 .65
207 207A 208A 209 209A 211 211A	30373 30374 30376 30377 30378 30381 30382	1-1/16 1-1/8 1-5/16 1-7/16 1-1/2 1-13/16 1-7/8	16-9/16 17 19 21-1/8 18-3/4 25 25-1/8	2-7/16 2-9/16 2-27/32 3-3/8 2-3/4 4-1/2 4-9/16	21/32 11/16 3/4 27/32 13/16 1-1/32 1-1/16	9-1/4 9-1/4 10-1/4 11-1/2 11-1/2 13-1/2 13-1/2	1.7 1.6 2.3 4.1 4.0 8.4 7.9	.78 .72 1.0 1.9 1.8 3.8 3.6





# **Williams Tools**

# Metric Box Wrenches, Double Head, 10° Offset Angle, Chrome Satin Finish, Standard Length, 12 Point

- SUPERTORQUE®, box opening design allows application of higher torque without rounding or deforming hex fastener points. No contact is made at the corners. Instead wrenching forces are placed on the flat surfaces behind the points.
- Different opening in each end clearly marked on handle.

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Cat. No.	EDP No.	Size (mm)	A (in)	B (in)	C (in)	D (in)	E (in)	Lbs.	Kgs.
BWM-0810	41490	8 x 10	7-5/16	1/2	9/32	19/32	5/16	.14	.06
BWM-1011	41491	10 x 11	7-31/32	19/32	5/16	21/32	11/32	.18	.08
BWM-1012	41492	10 x 12	8-3/16	19/32	5/16	23/32	11/32	.18	.08
BWM-1113	41493	11 x 13	8-5/8	21/32	11/32	25/32	3/8	.22	.10
BWM-1213	41494	12 x 13	8-27/32	25/32	11/32	25/32	3/8	.26	.12
BWM-1214	41495	12 x 14	9-1/16	23/32	11/32	13/16	13/32	.26	.12
BWM-1315	41496	13 x 15	9-1/2	25/32	3/8	7/8	13/32	.30	14
BWM-1415	41497	14 x 15	9-3/4	13/16	13/32	7/8	13/32	.32	.15
BWM-1417	41498	14 x 17	9-25/32	13/16	13/32	31/32	15/32	.34	.15
BWM-1618	41499	16 x 18	10-27/32	15/16	7/16	1-1/32	15/32	.52	.24
BWM-1719	41500	17 x 19	11-9/32	31/32	15/32	1-3/32	1/2	.56	.25
BWM-1821	41501	18 x 21	11-15/16	1-3/32	15/32	1-3/16	17/32	.60	.27
BWM-1922	41502	19 x 22	12-3/8	1-3/32	1/2	1-1/4	9/16	.72	.33
BWM-2124	41503	21 x 24	13-1/4	1-3/16	17/32	1-11/32	19/32	.90	.41
BWM-2224	41504	22 x 24	13-15/32	1-1/4	9/16	1-11/32	19/32	.92	.42
BWM-2427	41505	24 x 27	14-19/32	1-11/32	19/32	1-17/32	21/32	1.1	.52
BWM-2730	41506	27 x 30	15-29/32	1-17/32	21/32	1-11/16	11/16	1.5	.67
BWM-3032	41507	30 x 32	17-1/32	1-11/16	11/16	1-25/32	23/32	1.8	.83

# **Adjustable Wrenches**

# Adjustable Wrenches, Cobalt Finish

- Cobalt finish has over twice the rust protection in both salt fog and water fog environments without the environmentally hazardous components of chrome/nickel protection.
- Will not chip or peel as chrome/nickel finishes will.
- Cobalt finish process coats more completely, uniformly, efficiently and with less electricity, further adding to its environmental appeal.

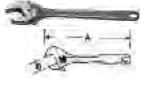
Cat. No.	EDP No.	A (in)	B (in)	Head Tkns. (in)	Lbs.	Kgs.
AC-4	60008C	4	17/32	9/32	.12	.05
AC-6	60175C	6	13/16	3/8	.24	.11
AC-8	60176C	8	1	7/16	.46	.21
AC-10	60177C	10	1-3/16	9/16	.82	.37
AC-12	60178C	12	1-11/32	11/16	1.4	.63
AC-15	60179C	15	1-23/32	13/16	2.8	1.3
AC-18	60006C	18	2-5/32	1-1/16	4.4	2.0
AC-24	60007C	24	2-15/32	1-9/32	6.8	3.1



# Adjustable Wrenches, Black Finish

• Drop forged, heat-treated industrial finish with satin finish handles for firm, safe grip.

Cat. No.	EDP No.	A (in)	B (in)	Head Tkns.(in)	Lbs.	Kgs.
AB-4	60080	4	17/32	9/32	.12	.05
AB-6X	60181	6	13/16	3/8	.24	.11
AB-8X	60182	8	1	7/16	.46	.21
AB-10X	60183	10	1-3/16	9/16	.82	.37
AB-12X	60184	12	1-11/32	11/16	1.4	.63
AB-15X	60185	15	1-23/32	13/16	2.8	1.3
AB-18	60086	18	2-5/32	1-1/16	4.4	2.0
AB-24	60196	24	2-15/32	1-9/32	6.8	3.1



# Adjustable Construction Wrench

- One wrench covers a wide range of fastener sizes up to 1-13/16"
- Tapered (spud) handle designed to locate and align bolt and rivet holes.

							-
Cat. No.	EDP No.	Size (in)	(in)	B (in)	Head Tkns.(in)	Lbs.	Kgs.
ABCN-12A	60088	1-1/2	15	1-13/16	23/32	2.14	.97

Repair Kit is Catalog #ABCN-12ARK, EDP #60278

# Striking Face Wrenches, Straight Pattern, Black Finish, 12 Point

- Specifically designed for rugged industrial applications.
- Straight handle design resists springing while allowing the fastener to turn easier.

No.         No         (in)         (in)         (in)         (in)         Lbs.         Kgs.           SFH-1808B         40759         1-1/4         8-1/4         2-5/16         1         1.6         .73           SFH-1808A         40750         1-5/16         8-1/4         2-5/16         1         1.6         .73           SFH-1809A         40760         1-5/16         8-1/4         2-5/16         1         1.5         .68           SFH-1809A         40761         1-7/16         8-1/4         2-5/16         1         1.5         .68           SFH-1810A         40762         1-1/2         8-1/4         2-5/16         1         1.4         .64           SFH-1810A         40764         1-11/16         10         2-15/16         1-1/4         3.5         1.6           SFH-1811A         40765         1-13/16         10         2-15/16         1-1/4         3.3         1.5           SFH-1811A         40766         1-7/8         10         2-15/16         1-1/4         3.3         1.5           SFH-1811A         40768         2-3/16         12         4-1/8         1-1/2         7.7         3.5           SFH-18181	Cat.	EDP	Size	Α	В	C		
SFH-1808         40759         1-1/4         8-1/4         2-5/16         1         1.6         .73           SFH-1808A         40760         1-5/16         8-1/4         2-5/16         1         1.6         .73           SFH-1809A         40761         1-7/16         8-1/4         2-5/16         1         1.5         .68           SFH-1810P         40762         1-1/2         8-1/4         2-5/16         1         1.4         .64           SFH-1810         40763         1-5/8         10         2-15/16         1-1/4         3.5         1.6           SFH-1810         40763         1-11/16         10         2-15/16         1-1/4         3.5         1.6           SFH-1811         40765         1-13/16         10         2-15/16         1-1/4         3.3         1.5           SFH-1811         40765         1-7/8         10         2-15/16         1-1/4         3.3         1.5           SFH-1813         40766         1-7/8         10         2-15/16         1-1/4         3.3         1.5           SFH-1813         40769         2-3/14         12         4-1/8         1-1/2         7.7         3.5           SFH-1815	No.	No	(in)	(in)	(in)	(in)	Lbs.	Kgs.
SFH-1808A         40760         1-5/16         8-1/4         2-5/16         1         1.6         .70           SFH-1809A         40761         1-7/16         8-1/4         2-5/16         1         1.5         .68           SFH-1809A         40762         1-1/2         8-1/4         2-5/16         1         1.5         .68           SFH-1810         40762         1-1/2         8-1/4         2-5/16         1         1.4         .64           SFH-1810         40764         1-11/16         10         2-15/16         1-1/4         3.5         1.6           SFH-1811A         40765         1-13/16         10         2-15/16         1-1/4         3.3         1.5           SFH-1811A         40766         1-7/8         10         2-15/16         1-1/4         3.3         1.5           SFH-1812         40767         2         12         4-1/8         1-1/2         7.8         3.5           SFH-1813         40768         2-3/16         12         4-1/8         1-1/2         7.6         3.5           SFH-1814         40770         2-3/8         12         4-1/8         1-1/2         7.0         3.2           SFH-1815								
SFH-1809         40761         1-7/16         8-1/4         2-5/16         1         1.5         68           SFH-1809A         40762         1-1/2         8-1/4         2-5/16         1         1.4         64           SFH-1810         40762         1-1/2         8-1/4         2-5/16         1         1.4         .64           SFH-1810A         40764         1-11/16         10         2-15/16         1-1/4         3.5         1.6           SFH-1811         40765         1-13/16         10         2-15/16         1-1/4         3.3         1.5           SFH-1811A         40767         2         12         4-1/8         1-1/2         8.1         3.7           SFH-1812         40767         2         12         4-1/8         1-1/2         7.8         3.5           SFH-1813         40769         2-1/4         12         4-1/8         1-1/2         7.8         3.5           SFH-1814         40770         2-3/8         12         4-1/8         1-1/2         7.6         3.5           SFH-1815A         40772         2-5/8         12         4-1/8         1-1/2         7.0         3.2           SFH-1816B         407				, .				
SFH-1809A         40762 40763         1-1/2 1-5/8         8-1/4 10         2-5/16 2-15/16         1         1.4         6.4           SFH-1810         40763         1-5/8         10         2-15/16         1-1/4         3.5         1.6           SFH-1810A         40764         1-11/16         10         2-15/16         1-1/4         3.6         1.6           SFH-1811         40766         1-13/16         10         2-15/16         1-1/4         3.3         1.5           SFH-1811A         40766         1-7/8         10         2-15/16         1-1/4         3.3         1.5           SFH-1813         40767         2         12         4-1/8         1-1/2         7.8         3.5           SFH-1813A         40769         2-1/4         12         4-1/8         1-1/2         7.8         3.5           SFH-1813A         40770         2-3/8         12         4-1/8         1-1/2         7.0         3.5           SFH-1815         40771         2-9/16         12         4-1/8         1-1/2         7.0         3.2           SFH-1816         40772         2-3/8         12         4-1/8         1-1/2         7.0         3.2								_
SFH-1810         40763         1-5/8         10         2-15/16         1-1/4         3.5         1.6           SFH-1810A         40764         1-11/16         10         2-15/16         1-1/4         3.6         1.6           SFH-18111         40765         1-13/16         10         2-15/16         1-1/4         3.3         1.5           SFH-1811A         40765         1-7/8         10         2-15/16         1-1/4         3.3         1.5           SFH-1812         40767         2         12         4-1/8         1-1/2         7.8         3.5           SFH-1813         40769         2-3/16         12         4-1/8         1-1/2         7.8         3.5           SFH-1813A         40769         2-1/4         12         4-1/8         1-1/2         7.7         3.5           SFH-1815A         40771         2-9/16         12         4-1/8         1-1/2         7.0         3.2           SFH-1815         40771         2-9/16         12         4-1/8         1-1/2         7.0         3.2           SFH-1816         40772         2-5/8         12         4-1/8         1-1/2         7.0         3.2           SFH-1816								
SFH-1810A         40764         1-11/16         10         2-15/16         1-1/4         3.6         1.6           SFH-1811         40765         1-13/16         10         2-15/16         1-1/4         3.3         1.5           SFH-1811A         40766         1-7/8         10         2-15/16         1-1/4         3.3         1.5           SFH-1811A         40767         2         12         4-1/8         1-1/2         7.8         3.5           SFH-1813         40768         2-3/16         12         4-1/8         1-1/2         7.8         3.5           SFH-1813A         40769         2-1/4         12         4-1/8         1-1/2         7.6         3.5           SFH-1814         40770         2-3/8         12         4-1/8         1-1/2         7.6         3.5           SFH-1815         40771         2-9/16         12         4-1/8         1-1/2         7.0         3.2           SFH-1816         40772         2-5/8         12         4-1/8         1-1/2         7.0         3.2           SFH-1816         40773         2-3/4         17-1/4         5-1/4         2         6.7         3.0           SFH-1816B								
SFH-1811         40765         1-13/16         10         2-15/16         1-1/4         3.3         1.5           SFH-1811A         40766         1-7/8         10         2-15/16         1-1/4         3.3         1.5           SFH-1812         40767         2         12         4-1/8         1-1/2         8.1         3.7           SFH-1813         40768         2-3/16         12         4-1/8         1-1/2         7.7         3.5           SFH-1814         40770         2-3/8         12         4-1/8         1-1/2         7.0         3.5           SFH-1815         40771         2-9/16         12         4-1/8         1-1/2         7.0         3.2           SFH-1816         40772         2-5/8         12         4-1/8         1-1/2         7.0         3.2           SFH-1816B         40772         2-5/8         12         4-1/8         1-1/2         7.0         3.2           SFH-1816B         40773         2-3/4         17-1/4         5-1/4         2         6.7         3.0           SFH-1817A         40774         3-1/8         17-1/4         5-1/4         2         17.3         7.9           SFH-1818A         <								_
SFH-1811A         40766         1-7/8         10         2-15/16         1-1/4         3.3         1.5           SFH-1812         40767         2         12         4-1/8         1-1/2         8.1         3.7           SFH-1813         40768         2-3/16         12         4-1/8         1-1/2         7.8         3.5           SFH-1813A         40769         2-1/4         12         4-1/8         1-1/2         7.7         3.5           SFH-1814         40770         2-3/8         12         4-1/8         1-1/2         7.0         3.5           SFH-1815         40771         2-9/16         12         4-1/8         1-1/2         7.0         3.2           SFH-1815A         40772         2-5/8         12         4-1/8         1-1/2         7.0         3.2           SFH-1816B         40773         2-3/4         17-1/4         5-1/4         2         17.9         8.1           SFH-1817A         40775         3         17-1/4         5-1/4         2         17.7         8.0           SFH-1817A         40774         3-1/8         17-1/4         5-1/4         2         17.3         7.9           SFH-1818A         4								
SFH-1812         40767         2         12         4-1/8         1-1/2         8.1         3.7           SFH-1813         40768         2-3/16         12         4-1/8         1-1/2         7.8         3.5           SFH-1813A         40769         2-1/4         12         4-1/8         1-1/2         7.7         3.5           SFH-1814         40770         2-3/8         12         4-1/8         1-1/2         7.6         3.5           SFH-1815         40771         2-9/16         12         4-1/8         1-1/2         7.0         3.2           SFH-1815A         40772         2-5/8         12         4-1/8         1-1/2         7.0         3.2           SFH-1816         40773         2-3/4         17-1/4         5-1/4         2         6.7         3.0           SFH-1816B         41227         2-15/16         17-1/4         5-1/4         2         17.7         8.0           SFH-1817         40775         3         17-1/4         5-1/4         2         17.3         7.9           SFH-1818A         40777         3-3/8         17-1/4         5-1/4         2         17.3         7.9           SFH-1819B         407								
SFH-1813         40768         2-3/16         12         4-1/8         1-1/2         7.8         3.5           SFH-1813A         40769         2-1/4         12         4-1/8         1-1/2         7.6         3.5           SFH-1814         40770         2-3/8         12         4-1/8         1-1/2         7.6         3.5           SFH-1815         40771         2-9/16         12         4-1/8         1-1/2         7.0         3.2           SFH-1815A         40772         2-5/8         12         4-1/8         1-1/2         7.0         3.2           SFH-1815A         40772         2-5/8         12         4-1/8         1-1/2         7.0         3.2           SFH-1816B         41227         2-15/16         17-1/4         5-1/4         2         6.7         3.0           SFH-1817A         40774         3-1/8         17-1/4         5-1/4         2         17.3         7.9           SFH-1818A         40777         3-3/8         17-1/4         5-1/4         2         17.3         7.9           SFH-1818A         40777         3-3/8         17-1/4         5-1/4         2         17.7         7.1           SFH-1818B								_
SFH-1813A         40769         2-1/4         12         4-1/8         1-1/2         7.7         3.5           SFH-1814         40770         2-3/8         12         4-1/8         1-1/2         7.6         3.5           SFH-1815         40772         2-9/16         12         4-1/8         1-1/2         7.0         3.2           SFH-1815A         40772         2-5/8         12         4-1/8         1-1/2         7.0         3.2           SFH-1816         40773         2-3/4         17-1/4         5-1/4         2         6.7         3.0           SFH-1816B         41227         2-15/16         17-1/4         5-1/4         2         17.9         8.1           SFH-1817         40775         3         17-1/4         5-1/4         2         17.7         8.0           SFH-1817         40774         3-1/8         17-1/4         5-1/4         2         17.3         7.9           SFH-1818A         40776         3-1/2         17-1/4         5-1/4         2         15.7         7.1           SFH-1819B         40780         3-3/4         18         6-1/4         2-3/8         23.8         10.8           SFH-1819P								
SFH-1814         40770         2-3/8         12         4-1/8         1-1/2         7.6         3.5           SFH-1815         40771         2-9/16         12         4-1/8         1-1/2         7.0         3.2           SFH-1815A         40772         2-5/8         12         4-1/8         1-1/2         7.0         3.2           SFH-1816B         40773         2-3/4         17-1/4         5-1/4         2         6.7         3.0           SFH-1816B         41227         2-15/16         17-1/4         5-1/4         2         17.9         8.1           SFH-1817A         40775         3         17-1/4         5-1/4         2         17.7         8.0           SFH-1818A         40777         3-3/8         17-1/4         5-1/4         2         17.3         7.9           SFH-1818A         40777         3-3/8         17-1/4         5-1/4         2         16.2         7.4           SFH-1819B         40780         3-3/4         18         6-1/4         2-3/8         23.8         10.8           SFH-1819B         40778         3-7/8         18         6-1/4         2-3/8         23.3         10.6           SFH-1819A								
SFH-1815         40771         2-9/16         12         4-1/8         1-1/2         7.0         3.2           SFH-1815A         40772         2-5/8         12         4-1/8         1-1/2         7.0         3.2           SFH-1816         40773         2-3/4         17-1/4         5-1/4         2         6.7         3.0           SFH-1816B         41227         2-15/16         17-1/4         5-1/4         2         17.9         8.1           SFH-1817A         40775         3         17-1/4         5-1/4         2         17.3         7.9           SFH-1818A         40777         3-3/8         17-1/4         5-1/4         2         16.2         7.4           SFH-1818B         40776         3-1/2         17-1/4         5-1/4         2         16.2         7.4           SFH-1819B         40780         3-3/4         18         6-1/4         2-3/8         23.8         10.8           SFH-1819D         40778         3-7/8         18         6-1/4         2-3/8         23.3         10.6           SFH-1819A         40781         4-1/2         18         6-1/4         2-3/8         24.0         11.3           SFH-1819A								
SFH-1815A         40772         2-5/8         12         4-1/8         1-1/2         7.0         3.2           SFH-1816         40773         2-3/4         17-1/4         5-1/4         2         6.7         3.0           SFH-1816B         41227         2-15/16         17-1/4         5-1/4         2         17.9         8.1           SFH-1817A         40775         3         17-1/4         5-1/4         2         17.3         7.9           SFH-1818         40777         3-3/8         17-1/4         5-1/4         2         17.3         7.9           SFH-1818         40776         3-1/2         17-1/4         5-1/4         2         15.7         7.1           SFH-1819B         40780         3-3/4         18         6-1/4         2-3/8         23.8         10.8           SFH-1819D         40778         3-7/8         18         6-1/4         2-3/8         23.3         10.6           SFH-1819D         40781         4-1/2         18         6-1/4         2-3/8         24.8         11.3           SFH-1819A         40779         4-1/4         18         6-1/4         2-3/8         24.0         10.9           SFH-1820B								
SFH-1816         40773         2-3/4         17-1/4         5-1/4         2         6.7         3.0           SFH-1816B         41227         2-15/16         17-1/4         5-1/4         2         17.9         8.1           SFH-1817A         40775         3         17-1/4         5-1/4         2         17.7         8.0           SFH-1817         40774         3-1/8         17-1/4         5-1/4         2         17.3         7.9           SFH-1818A         40777         3-3/8         17-1/4         5-1/4         2         16.2         7.4           SFH-1818         40776         3-1/2         17-1/4         5-1/4         2         15.7         7.1           SFH-1819B         40780         3-3/4         18         6-1/4         2-3/8         23.8         10.8           SFH-1819D         40778         3-7/8         18         6-1/4         2-3/8         23.8         10.6           SFH-1819A         40781         4-1/8         18         6-1/4         2-3/8         24.0         10.9           SFH-1819A         40783         4-1/2         20         7         2-13/8         24.0         10.9           SFH-1820B								
SFH-1816B         41227         2-15/16         17-1/4         5-1/4         2         17.9         8.1           SFH-1817A         40775         3         17-1/4         5-1/4         2         17.7         8.0           SFH-1817         40774         3-1/8         17-1/4         5-1/4         2         17.3         7.9           SFH-1818A         40777         3-3/8         17-1/4         5-1/4         2         16.2         7.4           SFH-1818         40776         3-1/2         17-1/4         5-1/4         2         15.7         7.1           SFH-1819B         40780         3-3/4         18         6-1/4         2-3/8         23.8         10.8           SFH-1819D         40778         3-7/8         18         6-1/4         2-3/8         23.3         10.6           SFH-1819C         40781         4-1/8         18         6-1/4         2-3/8         24.0         10.9           SFH-1819A         40793         4-1/2         18         6-1/4         2-3/8         24.0         10.9           SFH-1820B         40783         4-1/2         20         7         2-13/6         31.5         14.3								
SFH-1817A         40775         3         17-1/4         5-1/4         2         17.7         8.0           SFH-1817         40774         3-1/8         17-1/4         5-1/4         2         17.3         7.9           SFH-1818A         40777         3-3/8         17-1/4         5-1/4         2         16.2         7.4           SFH-1818         40776         3-1/2         17-1/4         5-1/4         2         15.7         7.1           SFH-1819B         40780         3-3/4         18         6-1/4         2-3/8         23.8         10.8           SFH-1819D         40778         3-7/8         18         6-1/4         2-3/8         23.3         10.6           SFH-1819C         40781         4-1/8         18         6-1/4         2-3/8         24.0         10.3           SFH-1819A         40779         4-1/4         18         6-1/4         2-3/8         24.0         10.9           SFH-1820B         40783         4-1/2         20         7         2-13/6         31.5         14.3								
SFH-1817         40774         3-1/8         17-1/4         5-1/4         2         17.3         7.9           SFH-1818A         40777         3-3/8         17-1/4         5-1/4         2         16.2         7.4           SFH-1818         40776         3-1/2         17-1/4         5-1/4         2         15.7         7.1           SFH-1819B         40780         3-3/4         18         6-1/4         2-3/8         23.8         10.8           SFH-1819         40778         3-7/8         18         6-1/4         2-3/8         23.3         10.6           SFH-1819C         40781         4-1/8         18         6-1/4         2-3/8         24.8         11.3           SFH-1819A         40779         4-1/4         18         6-1/4         2-3/8         24.0         10.9           SFH-1820B         40783         4-1/2         20         7         2-13/16         31.5         14.3								
SFH-1818A         40777 3-1/2         3-3/8 17-1/4         17-1/4 5-1/4         5-1/4 2         2 15.7         16.2 7.1         7.4 7.1           SFH-1818         40776         3-1/2         17-1/4         5-1/4         2         15.7         7.1           SFH-1819B         40780         3-3/4         18         6-1/4         2-3/8         23.8         10.8           SFH-1819         40778         3-7/8         18         6-1/4         2-3/8         23.3         10.6           SFH-1819C         40781         4-1/8         18         6-1/4         2-3/8         24.8         11.3           SFH-1819A         40779         4-1/4         18         6-1/4         2-3/8         24.0         10.9           SFH-1820B         40783         4-1/2         20         7         2-13/16         31.5         14.3			-					
SFH-1819B         40780         3-3/4         18         6-1/4         2-3/8         23.8         10.8           SFH-1819         40778         3-7/8         18         6-1/4         2-3/8         23.3         10.6           SFH-1819C         40781         4-1/8         18         6-1/4         2-3/8         24.8         11.3           SFH-1819A         40779         4-1/4         18         6-1/4         2-3/8         24.0         10.9           SFH-1820B         40783         4-1/2         20         7         2-13/16         31.5         14.3								
SFH-1819B         40780         3-3/4         18         6-1/4         2-3/8         23.8         10.8           SFH-1819         40778         3-7/8         18         6-1/4         2-3/8         23.3         10.6           SFH-1819C         40781         4-1/8         18         6-1/4         2-3/8         24.8         11.3           SFH-1819A         40779         4-1/4         18         6-1/4         2-3/8         24.0         10.9           SFH-1820B         40783         4-1/2         20         7         2-13/16         31.5         14.3						2		
SFH-1819         40778         3-7/8         18         6-1/4         2-3/8         23.3         10.6           SFH-1819C         407781         4-1/8         18         6-1/4         2-3/8         24.8         11.3           SFH-1819A         40779         4-1/4         18         6-1/4         2-3/8         24.0         10.9           SFH-1820B         40783         4-1/2         20         7         2-13/16         31.5         14.3								
SFH-1819C         40781         4-1/8         18         6-1/4         2-3/8         24.8         11.3           SFH-1819A         40779         4-1/4         18         6-1/4         2-3/8         24.0         10.9           SFH-1820B         40783         4-1/2         20         7         2-13/16         31.5         14.3								
SFH-1819A         40779         4-1/4         18         6-1/4         2-3/8         24.0         10.9           SFH-1820B         40783         4-1/2         20         7         2-13/16         31.5         14.3						, -		
SFH-1820B   40783   4-1/2   20   7   2-13/16   31.5   14.3								
SFH-1820   40/82   4-5/8   20   /  2-13/16   29.54   13.40								
	SFH-1820	40782	4-5/8	20	7	2-13/16	29.54	13.40



# **Metric Striking Face Wrenches**

# Metric Striking Face Wrenches, Offset Pattern, Black Finish, 12 Point

- Offset handle designed close to head to provide clearance in confined areas.
- Williams' expanded line of offset striking face wrenches, up to 108mm, provides the most extensive line on the market.

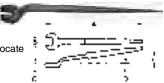
Cat. No.	EDP No.	Size (in)	A (in)	B (in)	C (in)	Lbs.	Kgs.
8807	41126	27	11	2-1/16	7/8	2.8	1.3
8808B	41222	30	11	2-1/16	7/8	2.8	1.3
8808	41128	32	11	2-1/16	7/8	2.7	1.2
8808A	41129	33	11	2-1/16	7/8	2.7	1.2
8808C	41125	35	12-1/2	2-13/16	1-3/16	6.4	2.9
8809B	41223	36	12-1/2	2-13/16	1-3/16	6.5	2.9
8809A	41131	38	12-1/2	2-13/16	1-3/16	6.3	2.9
8810	41132	41	12-1/2	2-13/16	1-3/16	6.3	2.8
8810A	41133	43	12-1/2	2-13/16	1-3/16	6.2	2.8
8811B	41146	44	12-1/2	2-13/16	1-3/16	6.0	2.7
8811	41134	46	12-1/2	2-13/16	1-3/16	6.0	2.7
8812B	41224	50	14	3-11/16	1-3/8	9.5	4.3
8812	41136	51	14	3-11/16	1-3/8	9.5	4.3
8813B	41148	54	14	3-11/16	1-3/8	9.2	4.2
8813	41137	55	14	3-11/16	1-3/8	9.1	4.2
8813A	41138	57	14	3-11/16	1-3/8	9.3	4.2
8814A	41149	59	14	3-11/16	1-3/8	8.9	4.0
8814	41139	60	14	3-11/16	1-3/8	8.9	4.0
8815B	41150	64	16	4-5/8	1-3/4	15.8	7.2
8815	41140	65	16	4-5/8	1-3/4	15.9	7.2
8815A	41141	67	16	4-5/8	1-3/4	15.7	7.1
8816	41142	70	16	4-5/8	1-3/4	15.5	7.0
8816C	41151	73	16	4-5/8	1-3/4	14.6	6.6
8816B	41143	75	16	4-5/8	1-3/4	14.8	6.7
8817A	41145	76	16	4-5/8	1-3/4	14.6	6.6
8817	41144	80	16	4-5/8	1-3/4	14.3	6.5
8818A	41280	85	18-1/4	6-1/4	2	28.6	13.0
8818	41281	89	18-1/4	6-1/4	2	28.0	12.7
8819B	41282	95	18-1/4	6-1/4	2	27.2	12.3
8819	41283	98	18-1/4	6-1/4	2	26.6	12.1
8819C	41284	105	18-1/4	6-1/4	2	25.5	11.6
8819A	41285	108	18-1/4	6-1/4	2	25.1	11.9



# **Williams Tools**

# Structural Wrenches, Single Head, Open End, Offset Handle, Black Finish

- Long offset handle designed for clearance of obstructions while providing greater leverage.
- Tapered (spud) handle designed to locate and align bolt and rivet holes.



Cat. No.	EDP No.	Size (in)	A (in)	B (in)	C (in)	D (in)	E (in)	Lbs.	Kgs.
1904A	43089	3/4	12	1-7/8	7/16	7-7/8	7/8	.72	.33
1905	43092	7/8	14-1/2	2-3/16	17/32	9-3/8	1	1.3	.60
1906	43091	15/16	14-1/2	2-3/16	17/32	9-3/8	1	1.3	.59
1906B	43093	1	14-1/2	2-3/16	17/32	9-3/8	1	1.3	.58
1907	43094	1-1/16	17	2-7/16	5/8	11	1-1/8	1.9	.87
1907A	43095	1-1/8	17	2-7/16	5/8	11	1-1/8	1.9	.86
1908	43096	1-1/4	19	2-3/4	11/16	12-3/8	1-1/4	3.0	1.4
1908A	43097	1-5/16	19	2-3/4	11/16	12-3/8	1-1/4	2.9	1.3
1909 1909A 1910 1911 1911A	43098 43099 43100 43102 43103	1-7/16 1-1/2 1-5/8 1-13/16 1-7/8	21 21 23 25 25	3-1/8 3-1/8 3-5/8 4-7/16 4-7/16	3/4 3/4 7/8 1	13-1/2 13-1/2 14-1/2 15-1/2 15-1/2	1-3/4 1-3/4 1-1/2 1-5/8 1-5/8	3.9 3.9 5.3 7.7 7.5	1.8 1.8 2.4 3.5 3.4
1912	43104	2	25	4-7/16	1	15-1/2	1-5/8	7.0	3.2

# **Striking Face Wrenches**

Striking face wrenches are designed to be struck by a hammer on the anvil area in order to loosen frozen fasteners or to set and tighten fasteners. Anvils are proportional to opening sizes. Special heat treating provides maximum durability for long life.

# Striking Face Wrenches, Offset Pattern, Black Finish, 12 Point

- Offset handle designed close to head to provide clearance in confined areas.
- Williams' expanded line of offset striking face wrenches, up to 4-1/4", provides the most extensive line on the market.



Cat. No.	EDP No.	Size (in)	A (in)	C (in)	B (in)	Lbs.	Kgs
8807	41126	1-1/16	11	2-1/16	7/8	2.8	1.3
8807A	41127	1-1/8	11	2-1/16	7/8	2.8	1.1
8808B	41222	1-3/16	11	2-1/16	7/8	2.8	1.3
8808	41128	1-1/4	11	2-1/16	7/8	2.7	1.2
8808A	41129	1-5/16	11	2-1/16	7/8	2.7	1.2
8808C	41125	1-3/8	12-1/2	2-13/16	1-3/16	6.4	2.9
8809	41130	1-7/16	12-1/2	2-13/16	1-3/16	6.5	2.9
8809A	41131	1-1/2	12-1/2	2-13/16	1-3/16	6.3	2.9
8810	41132	1-5/8	12-1/2	2-13/16	1-3/16	6.3	2.8
8810A	41133	1-11/16	12-1/2	2-13/16	1-3/16	6.2	2.8
8811B	41146	1-3/4	12-1/2	2-13/16	1-3/16	6.0	2.7
8811	41134	1-13/16	12-1/2	2-13/16	1-3/16	6.0	2.7
8811A	41135	1-7/8	12-1/2	2-13/16	1-3/16	5.9	2.7
8812A	41147	1-15/16	14	3-11/16	1-3/8	9.5	4.3
8812	41136	2	14	3-11/16	1-3/8	9.5	4.3
8813B	41148	2-1/8	14	3-11/16	1-3/8	9.2	4.2
8813	41137	2-3/16	14	3-11/16	1-3/8	9.1	4.2
8813A	41138	2-1/4	14	3-11/16	1-3/8	9.3	4.2
8814A	41149	2-5/16	14	3-11/16	1-3/8	8.9	4.0
8814	41139	2-3/8	14	3-11/16	1-3/8	8.9	4.0
8815B	41150	2-1/2	16	4-5/8	1-3/4	15.8	7.2
8815	41140	2-9/16	16	4-5/8	1-3/4	15.9	7.2
8815A	41141	2-5/8	16	4-5/8	1-3/4	15.7	7.1
8816	41142	2-3/4	16	4-5/8	1-3/4	15.5	7.0
8816C	41151	2-7/8	16	4-5/8	1-3/4	14.6	6.6
8816B	41143	2-15/16	16	4-5/8	1-3/4	14.8	6.7
8817A	41145	3	16	4-5/8	1-3/4	14.6	6.6
8817	41144	3-1/8	16	4-5/8	1-3/4	14.3	6.5
8818A	41280	3-3/8	18-1/4	6-1/4	2	28.6	13.0
8818	41281	3-1/2	18-1/4	6-1/4		28.0	12.7
8819B	41282	3-3/4	18-1/4	6-1/4	2	27.2	12.3
8819	41283	3-7/8	18-1/4	6-1/4	2	26.6	12.1
8819C 8819A	41284 41285	4-1/8 4-1/4	18-1/4 18-1/4	6-1/4 6-1/4	2	25.5 25.1	11.6 11.3
00 19A	41200	4-1/4	10-1/4	υ-1/4	2	20.1	11.3

# Metric Striking Face Wrenches, Straight Pattern, Black Finish, 12 Point

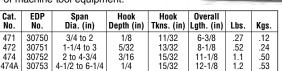
- Specifically designed for rugged industrial applications.
- Straight handle design resists springing while allowing the fastener to turn easier.

Cat.	EDP	Size	Α	В	C		
No.	No.	(mm)	(in)	(in)	(in)	Lbs.	Kgs.
SFH-1808B	41228	30	8-1/4	2-5/16	1	1.6	.74
SFH-1808	40759	32	8-1/4	2-5/16	1	1.6	.73
SFH-1808A	40760	33	8-1/4	2-5/16	1	1.6	.70
SFH-1809B	41225	36	8-1/4	2-5/16	1	1.5	.68
SFH-1809A	40762	38	8-1/4	2-5/16	1	1.4	.64
SFH-1810	40763	41	10	2-15/16	1-1/4	3.5	1.6
SFH-1810A	40764	43	10	2-15/16	1-1/4	3.6	1.6
SFH-1811 SFH-1811A	40765 40766	46 47	10 10	2-15/16 2-15/16	1-1/4 1-1/4	3.3	1.5 1.5
SFH-1812B		_					_
SFH-1812	41226 40767	50 51	12 12	4-1/8 4-1/8	1-1/2 1-1/2	8.3 8.1	3.7 3.8
SFH-1813	40768	55	12	4-1/8	1-1/2	7.8	3.5
SFH-1813A	40769	57	12	4-1/8	1-1/2	7.7	3.5
SFH-1814	40770	60	12	4-1/8	1-1/2	7.7	3.5
SFH-1815	40771	65	12	4-1/8	1-1/2	7.0	3.2
SFH-1815A	40772	67	12	4-1/8	1-1/2	7.0	3.2
SFH-1816	40773	69	17-1/4	5-1/4	2	6.7	3.0
SFH-1816B	41227	75	17-1/4	5-1/4	2	17.9	8.4
SFH-1817A	40775	76	17-1/4	5-1/4	2	17.7	8.0
SFH-1817	40774	80	17-1/4	5-1/4	2 2	17.3	7.9
SFH-1818A	40777	85	17-1/4	5-1/4		16.2	7.4
SFH-1818	40776	89	17-1/4	5-1/4	2	15.7	7.1
SFH-1819B	40780	95	18	6-1/4	2-3/8	23.8	10.8
SFH-1819	40778	98	18	6-1/4	2-3/8	23.3	10.6
SFH-1819C SFH-1819A	40781 40779	105 108	18 18	6-1/4 6-1/4	2-3/8 2-3/8	24.8 24.0	11.3 10.9
SFH-1820B	40779	114	20	7	2-3/6		14.3
SFH-1820	40782	117	20	7	2-13/16	29.5	13.4
111 1020	70702	117		'	2 10/10	23.0	10.4

# **Spanner Wrenches**

# **Adjustable Hook Spanner Wrenches**

- Hook is an integral part of the jaw.
- Designed for adjusting collars, lock nuts, rings, etc., on various types of machine tool equipment.



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# 474B 30758 6-1/8 to 8-3/4 5/16 1 Fixed Pin Spanner Wrenches

- Pin end is forged integral with wrench and machined to finished diameter.
- Designed for many applications including machine tools and material handling equipment.

Cat. No.	EDP No.	Span Dia. (in)	Pin Dia. (in)	Pin Lgth. (in)	Overall Lgth. (in)	Lbs.	Kgs.	1
452	30698	1	3/16	3/16	4	.09	.04	P
453	30699	1-1/4	13/64	3/16	4-1/2	.13	.06	
454	30700	1-1/2	7/32	7/32	5	.14	.06	
455	30701	1-3/4	15/64	7/32	5-1/2	.21	.10	Ш
456	30702	2	1/4	1/4	6	.22	.10	
457	30703	2-1/4	17/64	1/4	6-1/2	.34	.15	
458	30704	2-1/2	9-32	9/32	7	.45	.21	Ш
459	30705	2-3/4	19/64	9/32	7-1/2	.43	.19	
460	30706	3	5/16	5/16	8	.64	.29	
461	30707	3-1/4	21/64	5/16	8-1/2	.66	.30	
462	30708	3-1/2	11/32	5/16	9	.96	.44	
463	30709	3-3/4	23/64	3/8	9-1/2	.85	.39	
464	30710	4	3/8	7/16	10	1.1	.52	
466	30711	5	7/16	7/16	12	2.0	.91	
468	30712	6	1/2	1/2	14	2.7	1.2	

# Adjustable Pin Spanner Wrenches

 Designed for adjusting collars, lock nut rings and bearings.

Cat. No.	EDP No.	Span Dia. (in)	Pin Dia. (in)	Pin Length (in)	Overall Length (in)	Lbs.	Kgs.
0-471	30741	3/4 to 2	1/8	1/8	6-3/8	.27	.12
0-471A	30744	3/4 to 2	3/16	5/32	6-3/8	.27	.12
0-472	30742	1-1/4 to 3	3/16	3/16	8-1/8	.52	.24
0-472A	30748	1-1/4 to 3	1/4	7/32	8-1/8	.51	.23
0-474	30743	2 to 4-3/4	1/4	1/4	11-3/8	.96	.44
0-474A	30745	4-1/2 to 6-1/4	3/8	1/4	12	1.1	.50





# Williams Tools

# **Fixed Face Spanner Wrenches**

- Pins are integrally forged with wrench and machined to finished diameter.
- Designed for turning packing glands, adjustable rollers, etc.

Cat. No.	EDP No.	Span Dia. (in)	Pin Dia. (in)	Pin Lgth. (in)	Overall Lgth. (in)	Lbs.	Kgs.
418	30649	1	3/16	3/16	4-1/2	.12	.06
420	30650	1-1/4	7/32	7/32	5	.15	.07
422	30651	1-1/2	7/32	7/32	5-1/2	.20	.09
424	30652	1-3/4	7/32	7/32	6	.29	.13
426	30653	2	1/4	1/4	6-1/2	.35	.16
428	30654	2-1/4	1/4	1/4	7	.50	.23
430	30655	2-1/2	9/32	9/32	7-1/2	.48	.24
432	30656	2-3/4	9/32	9/32	8	.55	.25
434	30657	3	5/16	5/16	8-1/2	.62	.28
436 438 440 442	30658 30659 30660 30661	3-1/4 3-1/2 3-3/4 4	5/16 5/16 3/8 3/8	5/16 5/16 3/8 3/8	9-1/8 9-3/4 10-3/8 11	.71 .71 1.0 1.1	.32 .32 .50

# Adjustable Face Spanner Wrenches

- · Adjustable for applications with varying center to center dimensions.
- · Designed for servicing adjusting collars, lock nut rings and bearings.

Cat. No.	EDP No.	Span Dia. (in)	Pin Dia. (in)	Pin Lgth. (in)	Overall Lgth. (in)	Lbs.	Kgs.
482	30754	2	3/16	1/4	6-1/4	.33	.15
483	30755	3	1/4	1/4	8-1/8	.60	.28
484	30756	4	5/16	1/2	10-3/8	1.46	.66

# 1/4" Drive Tools

# **Chrome Reversible Ratchet with Knurled Grip**

- Double pawl design with 80 teeth action provides a 4-1/2° ratcheting angle.
- · Shift lever reverses action instantly.
- Knurled handle provides a non-slip grip.

Cat. No.	EDP No.	Length (in)		Kgs.
M-52A	58025	5	.22	.10

Repair Kit is Catalog #M-52ARK, EDP #58027

### **Chrome Flex Handle with Knurled Grip**

- Flex member flexes more than 110° in either direction from upright position.
- · Knurled handle provides a non-slip grip.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
M-42A	50082	5-11/16	.24	.11

Repair Kit is Catalog #M-42RK, EDP #54053

# **Chrome Speeder with Knurled Revolving Grip**

Designed for increased speed in turning nuts or fasteners.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
M-15	50004	16	.70	.32

# **Chrome Sliding T-Handle**

- · Designed to provide additional leverage in turning nuts or fasteners.
- 1/4" male adapter slides on bar for flexibility.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
M-20A	50022	4-5/8	.10	.05

### **Chrome Extensions**

- Designed to be used with a ratchet and socket to access hard to reach areas.
- Expanded range of lengths provide the user a wide choice.
- · Provided with ball and spring holding mechanism.

	Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
	M-102	50027	2	.06	.03
	M-104	50029	4	.10	.05
	M-115	50030	6	.15	.07
	M-110	50032	10	.23	.10
L	M-124	50005	24	.73	.33
_					

### Flexible Extension

· Designed for low torque applications which require access to obstructed areas.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
MFE-6	50098	6	.09	.04

# Sockets, Deep Length, 6-Point

· Designed for maximum clearance on long hex bolts.



Cat. No.	EDP No.	Socket Size (in)	A (in)	Туре	B (in)	C (in)	D (in)	Bolt Clearance Dia. (in)	F (in)	Lbs.
MD-604	51217	1/8	2	1	15/32	1/4	5/32	3/32	1-7/16	.04
MD-605	51218	5/32	2		15/32	5/16	5/32	5/32	1-9/16	.04
MD-606	51219	3/16	2	- 1	15/32	5/16	3/16	3/16	1-9/16	.05
MD-607	51222	7/32	2	1	15/32	11/32	7/32	7/32	1-9/16	.04
MD-608	50051	1/4	2		15/32	3/8	7/32	7/32	1-9/16	.05
MD-609	50052	9/32	2	1	15/32	13/32	1/4	9/32	1-9/16	.05
MD-610	50108	5/16	2	Ī	15/32	7/16	9/32	9/32	1-9/16	.06
MD-611	50110	11/32	2	- 11	1/2	1/2	9/32	11/32	-	.06
MD-612	50112	3/8	2	Ш	17/32	17/32	9/32	3/8	-	.08
MD-614	50114	7/16	2	Ш	19/32	19/32	3/8	13/32	-	.08
MD-616	50116	1/2	2	- 11	11/16	11/16	3/8	15/32	-	.11
MD-618	51221	9/16	2	l II	3/4	3/4	3/8	17/32	-	.15

# **Universal Sockets. 6-Point**

Skt

(in)

3/8 1-5/16

1/2

EDP Size Lgth.

No.

51507

51508 7/16 1-5/16

MU-610 51506 5/16

Cat.

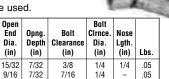
MU-612

MU-614

MU-616 51509

· Designed for use in tight confines where a conventional socket cannot be used.

(in) Type



5/16

.06 3/8

.06

15/32

# 1-7/16 Hex Bit Sockets, Short Length

1-5/16

• Two piece design allows worn bits to be replaced.

End

Dia.

(in)

9/16

9/16

9/16 9/16 9/32

9/16

- · Sockets are chrome plated.
- · Hex bits provided in black industrial finish.
- 6-32 x 3/16" cup screw used to retain bit within the socket up to MA-7.
- 8-32 x 3/16" cup screw used to retain bit within socket on MA-8 and MA-10.

Cat. No.	EDP No.	Bit Size (in)	Socket Length (in)	Socket Dia. (in)	Overall Length (in)	Lbs.	Kgs.	Replacement Bits
MA-050	51225	.050	1	9/16	1-13/16	.07	.03	A-050
MA-2	51226	1/16	1	9/16	1-13/16	.06	.03	A-2
MA-2-1/2	51227	5/64	1	9/16	1-13/16	.09	.04	A-2-1/2
MA-3	51026	3/32	1	9/16	1-13/16	.05	.02	A-3
MA-3-1/2	51228	7/64	1	9/16	1-13/16	.07	.03	A-3-1/2
MA-4	51027	1/8	1	9/16	1-13/16	.07	.03	A-4
MA-4-1/2	51229	9/64	1	9/16	1-13/16	.08	.03	A-4-1/2
MA-5	51028	5/32	1	9/16	1-13/16	.07	.03	A-5
MA-6	51029	3/16	1	9/16	1-13/16	.07	.03	A-6
MA-7	51030	7/32	1	9/16	1-13/16	.07	.03	A-7
MA-8	51230	1/4	1	9/16	1-13/16	.08	.04	A-8
MA-10	51045	5/16	1	9/16	1-13/16	.08	.04	A-10

# Hex Bit Sockets, Long Length

- Two piece design allows worn bits to be replaced.
- · Sockets are chrome plated.
- Hex bits provided in black industrial finish.
- 6-32 x 3/16" cup screw used to retain bit within the socket up to MA-7L.
- 8-32 x 3/16" cup screw used to retain bit within socket on MA-8L and MA-10L.

Cat. No.	EDP No.	Bit Size (in)	Socket Length (in)	Socket Dia. (in)	Overall Length (in)	Lbs	Kgs.	Replacement Bits
MA-050L	51350	.050	1	9/16	2-3/8	.07	.03	A-050L
MA-2L	51351	1/16	1	9/16	2-7/8	.07	.03	A-2L
MA-2-1/2L	51352	5/64	1	9/16	2-7/8	.07	.03	A-2-1/2L
MA-3L	51353	3/32	1	9/16	2-7/8	.07	.03	A-3L
MA-3-1/2L	51354	7/64	1	9/16	2-7/8	.07	.03	A-3-1/2L
MA-4L	51355	1/8	1	9/16	2-7/8	.07	.03	A-4L
MA-4-1/2L	51356	9/64	1	9/16	3-3/4	.08	.04	A-4-1/2L
M-5L	51357	5/32	1	9/16	3-3/4	.08	.04	A-5L
MA-6L	51358	3/16	1	9/16	3-3/4	.08	.04	A-6L
MA-7L	51359	7/32	1	9/16	3-3/4	.09	.04	A-7L
MA-8L	51360	1/4	1	9/16	4-5/8	.12	.05	A-8L
MA-10L	51361	5/16	1	9/16	4-5/8	.15	.07	A-10L

# **Williams Tools**

# Spinner Handle with Plastic Grip

- Screwdriver type handle.
- 1/4" drive female square drive in end of handle can be used with ratchet as an extension.

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-		15-	~	-
Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
M-106	50028	6	.17	.07

### **Chrome Adapters**

· Adapters make it possible to use drivers of one drive size with sockets of the next larger drive size.

				-		
Cat. No.	EDP No.	Lgth. (in)	Male End (in)	Female End (in)	Lbs.	Kgs.
MB-130	50100	1	3/8	1/4	.04	.02



# **Black Adapters**

· Black oxide finish.

Cat. No.	EDP No.	Lgth. (in)	Male End (in)	Female End (in)	Lbs.	Kgs.
MB-130B	50100B	1	3/8	1/4	.04	.02
MB-131BA	50101B	1-1/8	1/4	3/8	.06	.03



# **Chrome Universal Joint**

• Designed to drive sockets at offset angles.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
M-140A	50007	1-3/8	.05	.02



# 1/4" Drive Fractional Sockets

# Sockets, Standard Length, 6 Point

• Designed for close, confined areas with hex fasteners.

Cat.	EDP	Socket Size	A	В	С	D	Е	Bolt Clearance	F	
No.	No.	(in)	(in)	(in)	(in)	(in)	(in)	Dia. (in)	(in)	Lbs.
M-604	51215	1/8	7/8	15/32	7/32	1/8	17/32	1/8	7/16	.02
M-605	51216	5/32	7/8	15/32	7/32	1/8	17/32	5/32	7/16	.02
M-606	50040	3/16	7/8	15/32	7/32	1/8	17/32	3/16	7/16	.02
M-607	50041	7/32	7/8	15/32	7/32	1/8	17/32	7/32	7/16	.02
M-608	50042	1/4	7/8	15/32	7/32	1/8	17/32	7/32	7/16	.02
M-609	50043	9/32	7/8	15/32	7/32	1/8	17/32	1/4	7/16	.02
M-610	50107	5/16	7/8	15/32	7/32	1/8	17/32	1/4	7/16	.03
M-611	50109	11/32	7/8	1/2	1/2	11/32	17/32	11/32	-	.03
M-612	50111	3/8	7/8	9/16	9/16	15/32	17/32	3/8	-	.04
M-614	50113	7/16	7/8	5/8	5/8	15/32	17/32	7/16	-	.04
M-616	50115	1/2	7/8	11/16	11/16	15/32	17/32	1/2	-	.05
M-618	51214	9/16	7/8	3/4	3/4	1/2	17/32	17/32	-	.07
M-620	51223	5/8	31/32	27/32	27/32	9/16	5/8	9/16	-	.09



# Sockets, Standard Length, 8 Point

• Designed for both square & double square fasteners.

Cat.	EDP No.	Socket Size (in)	A (in)	Туре	B (in)	C (in)	D (in)	E (in)	Bolt Clearance Dia. (in)		Lbs.
M-808	50039	1/4	7/8	- 1	15/32	7/16	1/4	17/32	1/4	7/16	.03
M-810	50044	5/16	7/8	Ш	9/16	9/16	9/32	17/32	1/4	-	.04
M-812	50045	3/8	7/8	ll ll	21/32	21/32	5/16	17/32	3/8	-	.05



# Sockets, Standard Length, 12 Point

. Designed for quick engagement on either 6 or 12 point fasteners.

Cat. No.	EDP No.	Socket Size (in)	A (in)	Туре	B (in)	C (in)	D (in)	E (in)	Bolt Clearance Dia. (in)	F (in)	Lbs.
M-1208 M-1210 M-1211	50768 50046 50047	1/4 5/16 11/32	7/8 7/8 7/8	    	15/32 15/32 1/2	3/8 7/16 1/2	7/32 9/32 9/32	17/32 17/32 17/32	7/32 7/32 11/32	7/16 – –	.02 .02 .03
M-1212 M-1214 M-1216 M-1218	50049 50050	7/16 1/2	7/8 7/8 7/8 7/8 29/32	       	17/32 19/32 11/16 3/4	17/32 19/32 11/16 3/4	9/32 3/8 3/8 3/8	17/32 17/32 17/32 17/32	3/8 7/16 1/2 7/32	1 1 1 1	.04 .04 .05 .07



# Sockets, Deep Length, 12-Point

• Designed for maximum clearance on either 6 or 12 point long holts

long t	Julia.										
Cat. No.	EDP No.	Socket Size (in)	A (in)	Туре	B (in)	C (in)	D (in)	E (in)	Bolt Clearance Dia. (in)	F (in)	Lbs
MD-1210	50053	5/16	2	1	15/32	7/16	9/32	1-11/16	9/32	1-9/16	.06
MD-1211	50054	11/32	2	II	1/2	1/2	9/32	1-21/32	11/32	-	.06
MD-1212	50055	3/8	2	Ш	17/32	17/32	9/32	1-21/32	3/8	-	.07
MD-1214	50056	7/16	2	II	19/32	19/32	3/8	1-21/32	13/32	-	.12
MD-1216	50008	1/2	2	II	11/16	11/16	3/8	1-21/32	15/32	-	.11
MD-1218	51220	9/16	2	ll ll	3/4	3/4	3/8	1-21/32	17/32	-	.14

# Hex Bit Sockets, Ball End, Short Length

- Ball end hex bits are more versatile than standard hex bits by allowing more of an angled alignment between fastener and bit.
- Two piece design allows worn bits to be replaced.
- · Sockets are chrome plated.
- Hex bits provided in black industrial finish.
- 8-32 x 3/16" cup screw is used to retain bit within the socket.

			_	-				
Cat.	EDP	Bit	Socket	Socket	Overall			Replacement
No.	No.	Size (in)	Lgth.(in)	Dia.(in)	Lgth.(in)	Lbs.	Kgs.	Bit
MA-3HB	51405	3/32	1	9/16	1-13/16	.06	.03	A-3HB
MA-4HB	51406	1/8	1	9/16	1-13/16	.07	.03	A-4HB
MA-4-1/2HB	51407	9/64	1	9/16	1-13/16	.07	.03	A-4-1/2HB
MA-5HB	51408	5/32	1	9/16	1-13/16	.07	.03	A-5HB
MA-6HB	51409	3/16	1	9/16	1-13/16	.07	.03	A-6HB
MA-7HB	51410	7/32	1	9/16	1-13/16	.07	.03	A-7HB
MA-SHR	51/11	1/4	1 1	0/16	1-13/16	nα	∩4	Δ-8HR

### Slotted Screw Bit Sockets

- Two piece design allows worn bits to be replaced.
- Sockets are chrome plated.
- · Slotted bits provided in black industrial finish
- 8-32 x 3/16" cup screw is used to retain bit within the socket.

Cat. No.	EDP No.	Bit Size (in)	Socket Lgth. (in)	Socket Dia. (in)	Overall Lgth. (in)	Lbs.	Kgs.	Replacement Bit
MA-10-1S	51200	3/16 x .032	1	9/16	2-1/16	.08	.04	ASB-1
MA-10-2S	51201	7/32 X .040	1	9/16	2-1/16	.08	.04	ASB-2
MA-10-3S	51202	9/32 X .045	1	9/16	2-1/16	.08	.04	ASB-3
MA-10-4S	51203	5/16 X .055	1	9/16	2-1/16	.08	.04	ASB-4

# **Phillips Screw Bit Sockets**

- Two piece design allows worn bits to be replaced.
- Sockets are chrome plated.
- Phillips bits provided in black industrial finish.
- 8-32 x 3/16" cup screw is used to retain bit within the socket

Cat. No.	EDP No.	Bit Size	Socket Lgth. (in)	Socket Dia.(in)	Overall Lgth.(in)	Lbs.	Kgs.	Replacement Bit
MA-10-1P	51204	No. 1	1	9/16	1-3/4	.08	.04	APB-1
MA-10-2P	51205	No. 2	1	9/16	1-3/4	.08	.04	APB-2
MA-10-3P	51206	No. 3	1	9/16	1-3/4	.08	.04	APB-3
MA-10-4P	51207	No. 4	1	9/16	1-3/4	.08	.04	APB-4

# Torx Bit Socket Drivers, Standard Length

- Two piece design allows worn bits to be replaced.
- · Sockets are chrome plated.

• 8-32 X 3/16" cup screw is used to retain bit within the socket

VVILIIIII	1116 300	NOL.				*		
Cat. No.	EDP No.	Bit Size	Socket Lgth.(in)	Socket Dia.(in)	Overall Lgth.(in)	Lbs.	Kgs.	Replacement Bit
MA-6T	51165	T6	1	9/16	1-19/32	.07	.03	X6A1-W
MA-7T	51166	T7	1	9/16	1-19/32	.07	.03	X7A1-W
MA-8T	51167	T8	1	9/16	1-19/32	.07	.03	X8A1-W
MA-9T	51168	T9	1	9/16	1-19/32	.07	.03	X9A1-W
MA-10T	51169	T10	1	9/16	1-19/32	.07	.04	X10A1-W

# Set Catalog #WSM-19, 19 Tools In TB-30 Box

EDP # 50060, 2.15 Lbs. - .98 Kgs. Cat. No. Description Reversible Ratchet with Knurled Grip Flex Handle with Knurled Grip M-52A M-42A M-102 Extension, 2" M-115 Extension, 6' Spinner Handle M-140A Universal Joint M-606 Standard Length Socket, 6 Pt. 3/16" Standard Length Socket, 6 Pt. 7/32' Standard Length Socket, 6 Pt. 1/4" M-607 M-608 M-609 Standard Length Socket, 6 Pt. 9/32 M-610 Standard Length Socket, 6 Pt 5/16" M-611 Standard Length Socket, 6 Pt. 11/32' Standard Length Socket, 6 Pt. 3/8" Standard Length Socket, 6 Pt. 7/16" M-612 M-614 M-616 Standard Length Socket, 6 Pt. 1/2" M-618 Standard Length Socket, 6 Pt. 9/16

Standard Length Socket, 8 Pt. 1/4" Standard Length Socket, 8 Pt. 5/16"

Standard Length Socket, 8 Pt. 3/8"



M-810 M-812



# **Williams Tools**

# Set Catalog #WSM-25, 25 Tools in TB-30 Box EDP 50026, 3.32 Lbs.-1.51 Kgs.

Cat. No.	Description
M-52A M-102	Reversible Ratchet with Knurled Grip Extension, 2"
M-115	Extension, 6"
M-106 M-140A	Spinner Handle Universal Joint
M-606	Standard Length Socket, 6 Pt. 3/16"
M-607	Standard Length Socket, 6 Pt. 7/32"
M-608 M-609	Standard Length Socket, 6 Pt. 1/4" Standard Length Socket, 6 Pt. 9/32"
M-610	Standard Length Socket, 6 Pt. 5/16"
M-611 M-612	Standard Length Socket, 6 Pt. 11/32" Standard Length Socket, 6 Pt. 3/8"
M-614	Standard Length Socket, 6 Pt. 7/16"
M-616 M-618	Standard Length Socket, 6 Pt. 1/2" Standard Length Socket, 6 Pt. 9/16"
MD-606	Deep Length Socket, 6 Pt. 3/16"
MD-607 MD-608	Deep Length Socket, 6 Pt. 7/32" Deep Length Socket, 6 Pt. 1/4"
MD-609	Deep Length Socket, 6 Pt. 9/32"
MD-610 MD-611	Deep Length Socket, 6 Pt. 5/16" Deep Length Socket, 6 Pt. 11/32"
MD-612	Deep Length Socket, 6 Pt. 3/8"
MD-614	Deep Length Socket, 6 Pt. 7/16"
MD-616	Deep Length Socket, 6 Pt. 1/2"
MD-618	Deep Length Socket, 6 Pt. 9/16"



# 1/4" Drive Metric Sockets

# Metric Sockets, Standard Length, 6 Point

 Designed for close, confined areas with metric hex fasteners.



Cat. No.	EDP No.	Skt. Size (mm)	A (in)	Туре	B (in)	C (in)	D (in)	E (in)	Bolt Clearance Dia.(in)	F (in)	Lbs.	Kgs.
MM-604	50848	4	7/8		15/32	1/4	3/16	17/32	5/32	7/16	.02	.01
MM-605	50849	5	7/8		15/32	5/16	3/16	17/32	5/32	7/16	.02	.01
MM-605.5	50850	5.5	7/8		15/32	11/32	3/16	17/32	7/32	7/16	.02	.01
MM-606	50851	6	7/8		15/32	3/8	7/32	17/32	7/32	7/16	.02	.01
MM-607	50852	7	7/8		15/32	13/32	1/4	17/32	1/4	7/16	.02	.01
MM-608	50853	8	7/8		15/32	7/16	9/32	17/32	1/4	7/16	.02	.01
MM-609	50854	9	7/8		1/2	1/2	1/2	17/32	5/16	-	.02	.01
MM-610	50855	10	7/8		9/16	9/16	1/2	17/32	3/8	-	.03	.01
MM-611	50856	11	7/8		19/32	19/32	1/2	17/32	13/32	-	.03	.01
MM-612	50857	12	7/8		21/32	21/32	1/2	17/32	7/16	-	.05	.02
MM613	50858	13	7/8		11/16	11/16	15/32	17/32	15/32	-	.05	.02
MM-614	50859	14	29/32		3/4	3/4	1/2	17/32	17/32	-	.07	.03

### Metric Sockets, Deep Length, 6 Point

 Designed for maximum clearance on long metric bolts.



Cat.	EDP	Skt. Size	A		В	C	D	E	Bolt Clearance	F		
No.	No.	(mm)		Type	(in)	(in)	(in)	(in)	Dia.	(in)	Lbs.	Kgs.
MMD-604	50864	4	2	1	15/32	9/32	3/16			9/16	.04	.02
MMD-605	50865	5	2	- 1	15/32	5/16	3/16	1-21/32	5/32	9/16	.05	.02
MMD-605.5	50866	5.5	2	-	15/32	5/16	7/32	1-21/32	7/32	9/16	.04	.02
MMD-606	50867	6	2	- 1	15/32	3/8	7/32	1-21/32	7/32	9/16	.05	.02
MMD-607	50868	7	2	1	15/32	13/32	1/4	1-21/32	1/4	9/16	.05	.02
MMD-608	50869	8	2	- 1	15/32	15/32	9/32	1-21/32	1/4	9/16	.06	.03
MMD-609	50870	9	2	Ш	1/2	1/2	9/32	1-21/32	5/16	_	.06	.03
MMD-610	50871	10	2	H	9/16	9/16	9/32	1-21/32	3/8	-	.07	.03
MMD-611	50872	11	2	II	19/32	19/32	3/8	1-21/32	13/32	-	.09	.04
MMD-612	50873	12	2	Ш	21/32	21/32	3/8	1-21/32	7/16	_	.10	.05
MMD-613	50874	13	2	II	11/16	23/32	3/8	1-21/32	15/32	-	.12	.05
MMD-614	50875	14	2	Ш	3/4	3/4	7/16	1-21/32	17/32	_	.15	.07

# 3/8" DRIVE TOOLS

# **Chrome Reversible Ratchet with Knurled Grip**

- Double pawl design with 82 teeth action provides less than a 4-1/2° ratcheting angle.
- · Shift lever reverses action instantly.
- Knurled handle provides a non-slip grip.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
B-52	50192	7-3/8	.58	.26
B-53	58069	10-1/4	.86	.39



### Chrome Reversible Ratchet with Plastic Handle

- Double pawl design with 82 teeth action provides a 4-1/2° ratcheting angle.
- Shift lever reverses action instantly.
- Four sided fluted large plastic handle provides a firm comfortable grip while allowing more driving power.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
B-52P	51494	9	.70	.32
B-53P	51498	11-1/2	.96	.44



Repair Kit is Catalog #B-52RK, EDP #51347

# Chrome Flex Head Reversible Ratchet with Knurled Grip

- Flex head swings in either direction 90°.
- Double pawl design with 82 teeth action provides less than a 4-1/2° ratcheting angle.
- Shift lever reverses action instantly.
- · Knurled handle provides a non-slip grip.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
B-54	50485	9-1/2	.77	.35

Repair Kit is Catalog #B-52RK, EDP #51347 Flex Member Repair Kit is Catalog #B-54RK, EDP #54049

# Chrome Flex Head Reversible Ratchet with Plastic Grip

- Flex head swings in either direction 90°.
- Double pawl design with 82 teeth action provides less than a 4-1/2° ratcheting angle.
- Shift lever reverses action instantly.
- Four sided fluted large plastic handle

provides a firm comfortable grip while allowing more driving power.

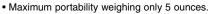
 Cat. No.
 EDP No.
 Lgth. (in)
 Lbs.
 Kgs.

 B-54P
 51495
 10-1/4
 .88
 .40

Ratchet Repair Kit is Catalog #B-52RK, EDP #51347 Flex Member Catalog # B-54RK, EDP #54049

# Palmster Ratchet

- For work in confined spaces.
- Pocket sized ratchet with industrial strength durability.



- Length, closed: 2-5/16", open 3-7/8".
- $\bullet$  Double pawl design with 82 teeth action provides less than a 4-1/2° ratcheting angle.
- Torque capacity for ratchet assembly is + 1,800 inch pounds.

Cat. No.	EDP No.	Open Lgth.(in)	Closed Lgth.(in)	Width (in)	Lbs.	Kgs.
BSP-52	54045	3-3/16	2-11/32	1-11/16	.34	.15

# **Chrome Flex Handle with Knurled Grip**

- Flex member flexes more than 110° in either direction from upright position.
- Knurled handle provides a non-slip grip.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
B-40A	50130	8-9/16	.19	.09



# **Chrome Speeder with Knurled Grip**

- Designed for increased speed in turning nuts or fasteners.
- Knurled handle provides a non-slip grip.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
B-15	50126	18	1.3	.61





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# **Williams Tools**

# **Chrome Sliding T Handle**

- Designed to provide additional leverage in turning nuts or fasteners.
- 3/8" male adapter slides on bar for flexibility.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
B-20A	50127	7-15/16	.27	.12



# **Chrome Ratchet Spinner**

• Designed for use between ratchet and socket to spin nuts faster by hand.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
B-70	50036	1-1/4	.16	.07



# **Chrome Extensions**

- Designed to be used with a ratchet and socket to access hard to reach
- Broad range of lengths provide the user a wide choice.
- · Provided with ball and spring holding mechanism.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
B-101	50364	1-1/2	.88	.05
B-108	50138	3	.11	.07
B-110	50139	6	.23	.10
B-115	50140	10	.49	.22
B-118	50141	20	1.1	.50



### Flexible Extension

 Designed for low torque applications which require access to obstructed areas.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
BFE-8	51247	8	.18	.08



# **Chrome Adapters**

• Adapters make it possible to use drivers of one drive size with sockets of the next larger drive size.

Cat. No.	EDP No.	Lgth. (in)	Male End (in)	Female End (in)	Lbs.	Kgs.
BS-130	50143	1-5/16	1/2	3/8	.10	.05



# **Black Adapters**

- · Black oxide finish.
- Adapters make it possible to use drivers of one drive size with sockets of the next larger drive size.

Cat. No.	EDP No.	Lgth. (in)	Male End (in)	Female End (in)	Lbs.	Kgs.
BS-130B	50143B	1-5/16	1/2	3/8	.10	.05



# **Extension Adapter**

- · Black oxide finish.
- · Adapter extension in one tool.

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Cat. No.	EDP No.	Lgth. (in)	Male End (in)	Female End (in)	Lbs.	Kgs.	
BS-05B BS-12B	50183 50184	5 12	3/8 3/8	1/2 1/2	.46 .71	.21 .32	

# **Chrome Universal Joint**

· Designed to drive sockets at offset angles.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
B-140A	50145	2	.14	.06



# **Black Universal Joint**

- · Black oxide finish.
- · Designed to drive sockets at offset angles.

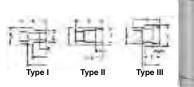
Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
BB-104A	50145B	2	.14	.06



# 3/8" Drive Fractional Sockets (cont.)

# Sockets, Deep Length, 6 Point

· Designed for max. clearance on long hex



**Hand Tools** 

Cat. No.	EPD No.	Skt. Size (in)	A (in)	Туре	B (in)	C (in)	D (in)	E (in)	Bolt Clearance Dia.(in)	F (in)	Lbs.
BD-608	50708	1/4	2-1/8	ı	11/16	13/32	1/4	1-11/16	7/32	1-5/8	.07
BD-610	50709	5/16	2-1/8		11/16	7/16	9/32	1-11/16	5/16	1-5/8	.08
BD-611	50710	11/32	2-1/8	1	11/16	1/2	1/4	1-11/16	11/32	1-5/8	.08
BD-612	50711	3/8	2-1/8	1	11/16	9/16	5/16	1-11/16	3/8	1-5/8	.09
BD-614	50712	7/16	2-1/8		11/16	5/8	3/8	1-11/16	7/16	1-5/8	.12
BD-616	50713	1/2	2-1/8	Ш	23/32	23/32	7/16	1-11/16	15/32	_	.13
BD-618	50714	9/16	2-3/8	Ш	25/32	25/32	7/16	1-9/16	17/32	-	.16
BD-620	50715	5/8	2-3/8	ll ll	27/32	27/32	1/2	1-9/16	19/32	_	.20
BD-622	50716	11/16	2-5/8	Ш	15/16	15/16	17/32	1-3/4	21/32	_	.27
BD-624	50717	3/4	2-5/8	Ш	1	1	5/8	1-3/4	23/32	-	.30
BD-626	50718	13/16	2-3/4	ll ll	1-1/16	1-1/16	11/16	1-27/32	25/32	_	.34
BD-628	50720	7/8	2-3/4	Ш	1-5/32	1-5/32	23/32	1-27/32	27/32	_	.42
BD-630	50721	15/16	2-3/4	II	1-1/4	1-1/4	25/32	2-1/32	27/32	-	.50
BD-632	50722	1	2-3/4	II	1-5/16	1-5/16	13/16	2-1/32	31/32	-	.50

# Sockets, Deep Length, 12 Point

• Designed for max. clearance on long 6 or 12 point bolts.



Cat. No.	EPD No.	Skt. Size (in)	A (in)	Туре	B (in)	C (in)	D (in)	E (in)	Bolt Clearance Dia.(in)	F (in)	Lbs.
BD-1208	50188	1/4	2-1/8		11/16	13/32	7/32	1-11/16	5/16	1-5/8	.07
BD-1210	50189	5/16	2-1/8		11/16	15/32	1/4	1-11/16		1-5/8	.08
BD-1212	50190	3/8	2-1/8		11/16	9/16	9/32	1-11/16		1-5/8	.10
BD-1214	50162	7/16	2-1/8		11/16	5/8	9/32	1-11/16	7/16	1-5/8	.11
BD-1216	50163	1/2	2-1/8		23/32	23/32	11/32	1-11/32	15/32	-	.13
BD-1218	50164	9/16	2-3/8		25/32	25/32	9/16	1-9/16	17/32	-	.17
BD-1220 BD-1222 BD-1224	50165 50166 20167	5/8 11/16 3/4	2-3/8 2-5/8 2-5/8	       	27/32 15/16 1	27/32 15/16 1	19/32 5/8 21/32	1-9/16 1-11/16 1-11/16			.19 .27 .30
BD-1226	20168	13/16	2-3/4		1-1/16	1-1/16	11/16	2-1/32	25/32	1 1 1 1	.32
BD-1228	50191	7/8	2-3/4		1-5/32	1-5/32	3/4	2-1/32	27/32		.40
BD-1230	50193	15/16	2-3/4		1-1/4	1-1/4	13/16	2-1/32	27/32		.48
BD-1232	50194	1	2-3/4		1-5/16	1-15/16	27/32	2	31/32		.49

# **Spark Plug Sockets 6 Point**

- Rubber insert holds plug and prevents damage to spark plug insulator.
- · External hex allows socket to be turned by wrench in confined applications.

Cat. No.	EPD No.	Skt. Size (in)	Male Hex	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	Lbs.
				2-11/32 2-11/32					1-15/16 1-15/16	.32 .19

# **Universal Sockets, 12 Point**

· Designed for use in tight confines where a conventional socket cannot be used.



Cat. No.	EPD No.	Skt. Size (in)	Lgth. (in)	Туре	Drive End Dia. (in)	Open End Dia. (in)	Opng. Depth (in)	Bolt Clear- ance (in)	Bolt Clrnce. Dia. (in)	Nose Lgth. (in)	Lbs.
BU-1212	50169	3/8	1-25/32		3/4	1/2	1/4	1/2	5/16	15/64	.12
BU-1214	50170	7/16	1-25/32		3/4	5/8	1/4	1/2	11/32	15/64	.12
BU-1216	50171	1/2	1-25/32		3/4	11/16	5/16	9/16	11/32	9/32	.12
BU-1218	50172	9/16	1-25/32	II	3/4	3/4	11/32	5/8	11/32	17/32	.13
BU-1220	50173	5/8	1-25/32	III	3/4	7/8	13/32	11/16	11/32	17/32	.12
BU-1222	50174	11/16	2	III	3/4	15/16	7/16	23/32	11/32	17/32	.14
BU-1224	50175	3/4	2-1/8	l III	3/4	1	17/32	13/16	11/32	5/8	.17

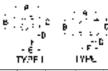


# **Williams Tools**

# 3/8" Drive Fractional Sockets

# Sockets, Standard Length, 6 Point

· Designed for close, confined areas with hex fasteners.





Cat. No.	EPD No.	Skt. Size (in)	A (in)	Туре	B (in)	C (in)	D (in)	E (in)	Bolt Clearance Dia.(in)	F (in)	Lbs.
B-608	50148	1/4	1-1/32	- 1	11/16	13/32	7/32	7/16	7/32	13/32	.04
B-610	50196	5/16	1-1/32	ı	11/16	7/16	1/4	7/16	9/32	15/32	.04
B-611	50197	11/32	1-1/32	ı	11/16	1/2	9/32	7/16	5/16	1/2	.04
B-612	50198	3/8	1-1/32	1	11/16	9/16	9/32	11/32	11/32	9/16	.04
B-614	50199	7/16	1-1/32	ı	11/16	5/8	5/16	9/16	11/32	5/8	.05
8-616	50200	1/2	1-1/32	Ш	23/32	23/32	11/32	9/16	11/32	_	.05
B-618	50201	9/16	1-1/32	Ш	25/32	25/32	9/16	19/32	17/32	_	.07
B-620	50202	5/8	1-1/8	П	27/32	27/32	19/32	5/8	5/8	_	.08
B-622	50203	11/16	1-5/32	Ш	15/16	15/16	5/8	5/8	21/32	_	.12
B-624	50204	3/4	1-3/16	Ш	1	1	21/32	11/16	23/32	_	.14
B-626	50769	13/16	1-1/4	П	1-1/16	1-1/16	11/16	23/32	25/32	_	.16
B-628	50770	7/8	1-9/32	Ш	1-5/32	1-5/32	3/4	25/32	27/32	_	.21
B-630	50788	15/16	1-3/8	Ш	1-1/4	1-1/4	13/16	27/32	29/32	_	.25
B-632	50789	1	1-13/32	II	1-5/16	1-5/16	27/32	7/8	31/32	_	.28

# Sockets, Standard Length, 4 and 8 Point

- 4-point socket designed for use on 1/8" pipe and drain plugs.



<ul> <li>8-point sockets designed for both s</li> </ul>	quare
and double square fasteners.	

Cat. No.	EPD No.	Skt. Size (in)	A (in)	Туре	B (in)	C (in)	D (in)	E (in)	Bolt Clearance Dia.(in)	F (in)	Lbs.
B-409*	50195	9/32	1-1/32	Ш	11/16	9/16	5/16	17/32	3/16	1/2	.07
BD-808	50135	1/4	29/32	Ш	21/32	15/32	7/32	13/32	5/32	7/16	.09
BD-810	50136	5/16	29/32	ll l	21/32	9/16	1/4	13/32	1/4	7/16	.09
BD-812	50137	3/8	15/16	Ш	11/16	41/64	9/32	7/16	5/16	15/32	.08
BD-814	50158	7/16	1	Ш	23/32	23/32	9/32	1/2	5/16	_	.10
BD-816	50159	1/2	1	Ш	29/32	29/32	5/16	1/2	13/32	_	.14
BD-818	50160	9/16	1-1/8	Ш	1	1	13/32	5/8	17/32	_	.15
BD-820	50161	5/8	1-1/8	Ш	1-1/16	1-1/16	7/16	5/8	19/32	-	.20

# Sockets, Standard Length, 12 Point

• Designed for quick engagement on either 6 or 12 point fasteners.



Cat. No.	EPD No.	Skt. Size (in)	A (in)	Туре	B (in)	C (in)	D (in)	E (in)	Bolt Clearance Dia.(in)	F (in)	Lbs.
B-1208	50767	1/4	1-1/32	1	11/16	13/32	7/32	9/16	7/32	17/32	.04
B-1210	50149	5/16	1-1/32	1	11/16	7/16	1/4	9/16	17/64	17/32	.04
B-1211	50150	11/32	1-1/32	1	11/16	1/2	9/32	9/16	21/64	17/32	.04
B-1212	50151	3/8	1-1/32	1	11/16	9/16	9/32	9/16	11/32	17/32	.05
B-1214	50152	7/16	1-1/32	1	11/16	5/8	5/16	9/16	11/32	17/32	.05
B-1216	50153	1/2	1-1/32	ll ll	23/32	23/32	11/32	3/8	3/8	-	.06
B-1217	50205	17/32	1-1/32	Ш	25/32	25/32	13/32	3/4	1/2	-	.09
B-1218	50154	9/16	1-1/32	- 11	25/32	25/32	9/16	19/32	17/32	-	.06
B-1219	50206	19/32	1-1/32	ll ll	25/32	25/32	9/16	9/16	9/16	-	.08
B-1220	50155	5/8	1-1/8	Ш	27/32	27/32	19/32	5/8	19/32	_	.08
B-1222	50156	11/16	1-5/32	- 11	15/16	15/16	5/8	5/8	11/16	-	.11
B-1224	50157	3/4	1-3/16	ll ll	1	1	11/16	11/16	23/32	-	.14
B-1226	50207	13/16	1-1/4	Ш	1-1/16	1-1/16	11/16	11/16	25/32	_	.16
B-1228	50208	7/8	1-9/32	- 11	1-5/32	1-5/32	25/32	25/32	7/8	-	.20
B-1230	50842	15/16	1-3/8	- 11	1-1/4	1-1/4	13/16	27/32	29/32	-	.23
B-1232	50843	1	1-13/32	- 11	1-5/16	1-5/16	27/32	7/8	1	-	.26

# Hex Bit Sockets, Short Length

- Two piece design allows worn bits to be replaced.
- · Sockets are chrome plated.
- Hex bits provided in black industrial finish.
- 6-32 x 3/16" cup screw used to hold bit within the socket up to BA-7.
- 8-32 x 3/16" cup screw used to hold bit within the socket on BA-8 and up.

Cat.	EDP	Bit	Skt.	Skt.	Overall	Lbs.	Replacement
No.	No.	Size (in)	Lgt.(in)	Dia.(in)	Lgth.(in)		Bits
BA-3	51031	3/32	1-1/8	23/32	1-15/16	.11	A-3
BA-4	51032	1/8	1-1/8	23/32	1-15/16	.10	A-4
BA-5	51033	5/32	1-1/8	23/32	1-15/16	.11	A-5
BA-6	51034	3/16	1-1/8	23/32	1-15/16	.10	A-6
BA-7	51035	7/32	1-1/8	23/32	1-15/16	.12	A-7
BA-8	51036	1/4	1-1/8	23/32	1-15/16	.11	A-8
BA-10	51037	5/16	1-1/8	23/32	1-15/16	.12	A-10
BA-12	51038	3/8	1-1/8	23/32	2-1/4	.13	A-12

# Hex Bit Sockets, Long Length

- Two piece design allows worn bits to be replaced.
- · Sockets are chrome plated.
- · Hex bits provided in black industrial finish.
- 6-32 x 3/16" cup screw used to hold bit within the socket.
- 8-32 x 3/16" cup screw used to hold bit within the socket on BA-8L and up.

Cat.	EDP	Bit	Skt.	Skt.	Overall	Lbs.	Replacement
No.	No.	Size (in)	Lgt.(in)	Dia.(in)	Lgth.(in)		Bits
BA-3L	51265	3/32	1-1/8	23/32	2-15/16	.11	A-3L
BA-4L	51266	1/8	1-1/8	23/32	3-3/4	.12	A-4L
BA-5L	51267	5/32	1-1/8	23/32	3-3/4	.12	A-5L
BA-6L	51268	3/16	1-1/8	23/32	3-3/4	.13	A-6L
BA-7L	51269	7/32	1-1/8	23/32	3-3/4	.13	A-7L
BA-8L	51270	1/4	1-1/8	23/32	4-11/16	.16	A-8L
BA-10L	51271	5/16	1-1/8	23/32	4-11/16	.20	A-10L
BA-12L	51272	3/8	1-1/8	23/32	5-11/16	.26	A-12L

# Hex Bit Sockets, Ball End, Short Length

- · Ball end hex bits are more versatile than standard hex bits by allowing more of an angled alignment between fastener and bit.
- Two piece design allows worn bits to be replaced.
- Sockets are chrome plated.
- Hex bits provided in black industrial finish.
- 8-32 x 3/16" cup screw used to hold bit

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	Cat. No.	EDP No.	Bit Size (in)	Skt. Lgt.(in)	Skt. Dia.(in)	Overall Lgth.(in)	Lbs.	Replacement Bits
ĺ	BA-3HB	51538	3/32	1-1/8	25/32	1-15/16	.10	A-3HB
	BA-4HB	51539	1/8	1-1/8	25/32	1-15/16	.12	A-4HB
	BA-5HB	51540	5/32	1-1/8	25/32	1-15/16	.12	A-5HB
	BA-7HB	51541	7/32	1-1/8	25/32	1-15/16	.12	A-7HB
	BA-8HB	51542	1/4	1-1/8	25/32	1-15/16	.12	A-8HB
	BA-10HB	51543	5/16	1-1/8	25/32	1-15/16	12	A-10HB

2-1/4

A-12HB

# **Slotted Screw Bit Sockets**

BA-12HB | 51544 | 3/8 | 1-1/8 | 25/32

- Bell end hex bits are more versatile than standard hex bits by allowing more of an angled alignment between fastener and bit.
- Two piece design allows worn bits to be replaced.
- · Sockets are chrome plated.
- Hex bits provided in black industrial finish.
- 8-32 x 3/16" cup screw used to hold bit within the socket.

Cat. No.	EDP No.	Bit Size (in)	Skt. Lgt.(in)	Skt. Dia.(in)	Overall Lgth.(in)	Lbs.	Replacement Bits
BA-10-15	51273	3/16 x .032	1-1/8	23/32	2-5/32	.13	ASB-1
BA-10-28	51274	7/32 x .040	1-1/8	23/32	2-5/32	.13	ASB-2
BA-10-38	51275	9/32 x .045	1-1/8	23/32	2-5/32	.13	ASB-3
BA-10-45	51276	5/16 x .055	1-1/8	23/32	2-5/32	.13	ASB-4

# **Phillips Screw Bit Sockets**

- Two piece design allows worn bits to be replaced.
- · Sockets are chrome plated.
- · Hex bits provided in black industrial finish.
- 8-32 x 3/16" cup screw used to hold bit within the socket.

Cat. No.	EDP No.	Bit Size	Skt. Lgt.(in)	Skt. Dia.(in)	Overall Lgth.(in)	Lbs.	Replacement Bits
BA-10-1P	51227	#1	1-1/8	23/32	1-15/16	.12	APB-1
BA-10-2P	51278	#2	1-1/8	23/32	1-15/16	.12	APB-2
BA-10-3P	51279	#3	1-1/8	23/32	1-15/16	.13	APB-3
BA-10-4P	51280	#4	1-1/8	23/32	1-15/16	.13	APB-4

# **Williams Tools**

# Catalog #WSB-13, 8 Short Hex Bit Sockets in TBT-13 Tray 92179,1.34 Lbs.-.63 Kgs.

02170,1	02 17 0, 110 1 2501 100 11go.								
Cat. No.	Description								
BA-3	Hex Bit Socket, Short Length, 3/32"								
BA-4 BA-5	Hex Bit Socket, Short Length, 1/8" Hex Bit Socket, Short Length, 5/32"								
BA-6	Hex Bit Socket, Short Length, 3/16"								
BA-7	Hex Bit Socket, Short Length, 7/32"								
BA-8	Hex Bit Socket, Short Length, 1/4"								
BA-10 BA-12	Hex Bit Socket, Short Length, 5/16" Hex Bit Socket, Short Length, 3/8"								
	,								



Catalog #WSB-13T, EDP #92177, .90 Lbs.-.29 Kgs., Tools Only.

# Catalog # WSB-4, 15 Tools in TB-35 Box EDP #94032, 4.97 Lbs.-2.25 Kgs.

Cat. No.	Description
B-52	Reversible Ratchet with Knurled Grip, 7-3/8"
B-40A	Flex Handle with Knurled Grip
B-108	Extension, 3"
B-110	Extension, 6"
B-140A	Universal Joint
B-1208	Standard Length Socket, 12 Pt. 1/4"
B-1210	Standard Length Socket, 12 Pt. 5/16"
B-1211	Standard Length Socket, 12 Pt. 11/32"
B-1212	Standard Length Socket, 12 Pt. 3/8"
B-1214	Standard Length Socket, 12 Pt. 7/16"
B-1216	Standard Length Socket, 12 Pt. 1/2"
B-1218	Standard Length Socket, 12 Pt. 9/16"
B-1220	Standard Length Socket, 12 Pt. 5/8"
B-1222	Standard Length Socket, 12 Pt. 11/16"
B-1224	Standard Length Socket, 12 Pt. 3/4"



Catalog #WSB-4T, EDP #94030, 1.98 Lbs.-.90 Kgs. - Tools Only

# Set Catalog #WBSP-19HTX, 19 Piece Palmster Set in Molded Case EDP #94039, 1.26 Lbs. - .57 Kgs.

Cat. No.	Description
BSP-52	Palmster Ratchet
B-108 BP-8	Extension, 3" Magnetic Bit Holder
X15H2-W	Torx Insert Bit, T15
X20H2-W	Torx Insert Bit, T20
X25H2-W	Torx Insert Bit, T25
X30H2-W	Torx Insert Bit, T30
PA1A1-W	Phillips ACR Anti-Cam Out Insert Bit #1
PA2A1-W (2 Pcs.)	Phillips ACR Anti-Cam Out Insert Bit #2
PA3A1-W	Phillips ACR Anti-Cam Out Insert Bit #3
ACR5-6	Slotted ACR Anti-Cam Out Insert Bit, 5-6
ACR6-8	Slotted ACR Anti-Cam Out Insert Bit, 6-8
ACR8-10	Slotted ACR Anti-Cam Out Insert Bit, 8-10
ACR10-12	Slotted ACR Anti-Cam Out Insert Bit, 10-12
B-608	Standard Length Socket, 6 Pt. 1/4"
B-610	Standard Length Socket, 6 Pt. 5/16"
B-612	Standard Length Socket, 6 Pt. 3/8"
B-614	Standard Length Socket, 6 Pt. 7/16"



# Set Catalog # WSB-22, 22 Tools in TB-4A Box EDP 50209,6.84 Lbs3.10 Kgs.

Cat. No.	Description	
B-52 B-108 B-110	Reversible Ratchet with Knurled Grip, 7 Extension, 3" Extension, 6"	7-3/8"
B-140A B-612 B-614	Universal Joint Standard Length Socket, 6 Pt. 3/8" Standard Length Socket, 6 Pt. 7/16"	de la padioprimi
B-616 B-618 B-620	Standard Length Socket, 6 Pt. 1/2" Standard Length Socket, 6 Pt. 9/16" Standard Length Socket, 6 Pt. 5/8"	ACCOUNT WIND
B-622 B-624 B-626	Standard Length Socket, 6 Pt. 11/16" Standard Length Socket, 6 Pt. 3/4 " Standard Length Socket, 6 Pt. 13/16"	
B-628 BD-612 BD-614	Standard Length Socket, 6 Pt. 7/8" Deep Length Socket, 6 Pt. 3/8" Deep Length Socket, 6 Pt. 7/16"	
BD-616 BD-618 BD-620	Deep Length Socket, 6 Pt 1/2" Deep Length Socket, 6 Pt. 9/16" Deep Length Socket, 6 Pt. 5/8"	
BD-622 BD-624 BD-626 BD-628	Deep Length Socket, 6 Pt. 11/16" Deep Length Socket, 6 Pt. 3/4" Deep Length Socket, 6 Pt. 13/16" Deep Length Socket, 6 Pt. 7/8"	

# Set Catalog WSB-1 9, 24 Tools in TB-35 Box EDP 94054, 6.90 Lbs.-3.12 Kgs.

Cat. No.	Description	7
B-52 B-40A B-108	Reversible Ratchet with Knurled Grip, 7-3/8" Flex Handle with Knurled Grip Extension, 3"	
B-110 B-140A B-608	Extension, 6" Universal Joint Standard Length Socket, 6 Pt. 1/4"	- Completel
B-610 B-611 B-612	Standard Length Socket, 6 Pt. 5/16" Standard Length Socket, 6 Pt. 11/32" Standard Length Socket, 6 Pt. 3/8"	account of the
B-614 B-616 B-618	Standard Length Socket, 6 Pt. 7/16" Standard Length Socket, 6 Pt. 1/2" Standard Length Socket, 6 Pt. 9/16"	
B-620 B-622 B-624	Standard Length Socket, 6 Pt. 5/8" Standard Length Socket, 6 Pt. 11/16" Standard Length Socket, 6 Pt. 3/4"	Set Catalog #WSB-19T, EDP #94052, 2.53 Lbs 1.14 Kgs., Tools Only
BD-612 BD-614 BD-616	Deep Length Socket, 6 Pt. 3/8" Deep Length Socket, 6 Pt. 7/16" Deep Length Socket, 6 Pt. 1/2"	
BD-618 BD-620 BD-622	Deep Length Socket, 6 Pt. 9/16" Deep Length Socket, 6 Pt. 5/8" Deep Length Socket, 6 Pt. 11/16"	
BD-624 BD-626 BD-628	Deep Length Socket, 6 Pt. 3/4" Deep Length Socket, 6 Pt. 13/16" Deep Length Socket, 6 Pt. 7/8"	
		_

# Set Catalog #WSB-33, 33 Tools in TB-4A Box EDP #50132, 9.74 Lbs.-4.42 Kgs.

	<b>.</b> . ,	
Cat. No.	Description	
B-52 B-40A B-108	Reversible Ratchet with Knurled Grip, 7-3/8" Flex Handle with Knurled Grip Extension, 3"	
B-110 B-115 B-15	Extension, 6" Extension, 10" Speeder, 16-13/16"	morin
B-140A B-1212 B-1214	Universal Joint Standard Length Socket, 12 Pt. 3/8" Standard Length Socket, 12 Pt. 7/16"	NAME
B-1216 B-1218 B-1220	Standard Length Socket, 12 Pt. 1/2" Standard Length Socket, 12 Pt 9/16" Standard Length Socket, 12 Pt. 5/8"	
B-1222 B-1224 B-1226	Standard Length Socket, 12 Pt. 11/16" Standard Length Socket, 12 Pt. 3/4" Standard Length Socket, 12 Pt. 13/16"	
B-1228 BD-808 BD-810	Standard Length Socket, 12 Pt. 7/8" Standard Length Socket, 8 Pt. 1/4" Standard Length Socket, 8 Pt. 5/16"	
BD-812 BD-1212 BD-1214		
BD-1216 BD-1218 BD-1220	Deep Length Socket, 12 Pt. 9/16"	
BD-1222 BD-1224 BD-1226	Deep Length Socket, 12 Pt. 3/4"	
BD-1228 BU-1214 BU-1216	Universal Socket, 12 Pt. 7/16"	
BU-1218 BU-1220 BU-1224	Universal Socket, 12 Pt. 5/8"	

**19** 



# **Williams Tools**

# 3/8" Drive Metric Sockets

Metric Sockets, Standard Length, 6 Point

 Designed for close, confined areas with metric hex fasteners.



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		Skt.			_		_	_	Bolt	_		
Cat. No.	EDP No.	Size (mm)	A (in)	Туре	B (in)	C (in)	D (in)	E (in)	Clearance Dia.(in)	F (in)	Lbs.	Kqs.
BM-605.5 BM-606	51503 51500	5.5	1-1/32		11/16 11/16	13/32	7/32 7/32	9/16 9/16	3/16 7/32	17/32 17/32	.04	.02
BM-607	51501	7	1-1/32	i	11/16	13/32	7/32	9/16	7/32	17/32	.05	.02
BM-608 BM-609 BM-610	51502 51517 51518	8 9 10	1-1/32 1-1/32 1-1/32	 	11/16 11/16 11/16	15/32 1/2 9/16	1/4 9/32 9/32	9/16 9/16 9/16	9/32 11/32 11/32	17/32 17/32 17/32	.04 .04 .05	.02 .02 .02
BM-611 BM-612 BM-613	51519 51520 51521		1-1/32 1-1/32 1-1/32	  - 	11/16 11/16 23/32	5/8 21/32 23/32	9/32 11/32 11/32	9/16 9/16 9/16	11/32 11/32 3/8	17/32 17/32 -	.05 .04 .06	.02 .02 .03
BM-614 BM-615 BM-616	51522 51523 51524	14 15 16	1-1/32 1-1/32 1-1/8	=======================================	25/32 13/16 27/32	25/32 13/16 27/32	7/16 19/32 19/32	17/32 19/32 5/8	17/32 9/16 19/32	- - -	.06 .07 .07	.03 .03 .03
BM-617 BM-618 BM-619	51525 51526 51527	17 18 19	1-5/32 1-5/32 1-3/16	===	29/32 31/32 1	29/32 31/32 1	5/8 5/8 21/32	5/8 21/32 11/16	5/8 11/16 23/32	1 1	10 .12 .14	.05 .05 .06
BM-620 BM-621 BM-622	51528 51529 51530	20 21 22	1-7/32 1-1/4 1-9/32		1-1/32 1-1/8 1-5/32	1-1/32 1-1/8 1-5/32	11/16 23/32 3/4	23/32 23/32 3/4	3/4 13/16 13/16	- - -	.14 .16 .17	.06 .07 .08
BM-623 BM-624	51531 51532	23 24	1-5/16 1-3/8	II II	1-3/16 1-1/4	1-3/16 1-1/4	3/4 13/16	25/32 27/32	7/8 7/8	-	.20 .26	.09 .12

# Metric Sockets, Standard Length, 12 Point

 Designed for quick engagement on either metric 6 or 12 point fasteners.



0-4	EDP	Skt. Size	А		В	С	D	E	Bolt	F		
Cat. No.	No.	(mm)	(in)	Туре	_	(in)	(in)	(in)	Clearance Dia.(in)	(in)	Lbs.	Kgs.
BM-1206	50752	6	1-1/32	- 1	11/16	3/8	7/32	9/16	7/32	17/32	.05	.02
BM-1207	50753	7	1-1/32		11/16	13/32	7/32	9/16	7/32	17/32	.04	.02
BM-1208	50754	8	1-1/32	- 1	11/16	15/32	1/4	9/16	9/32	17/32	.04	.02
BM-1209	50755	9	1-1/32	1	11/16	17/32	9/32	9/16	11/32	17/32	.04	.02
BM-1210	50756	10	1-1/32		11/16	9/16	9/32	9/16	11/32	17/32	.04	.02
BM-1211	50757	11	1-1/32	1	11/16	5/8	9/32	9/16	11/32	17/32	.05	.02
BM-1212	50758	12	1-1/32	Т	11/16	21/32	11/32	9/16	11/32	17/32	.05	.02
BM-1213	50759	13	1-1/32	l II	23/32	23/32	11/32	9/16	1/2	_	.06	.03
BM-1214	50760	14	1-1/32	l II	25/32	25/32	7/16	17/32	17/32	-	.06	.03
BM-1215	50761	15	1-3/32	II	13/16	13/16	19/32	19/32	9/16	-	.07	.03
BM-1216	50762	16	1-1/8	l II	27/32	27/32	19/32	5/8	19/32	-	.07	.03
BM-1217	50763	17	1-5/32	l II	29/32	29/32	5/8	5/8	5/8	-	.10	.05
BM-1218	50764	18	1-5/32	II	31/32	31/32	5/8	21/32	11/16	-	.12	.05
BM-1219	50765	19	1-3/16	l II	1	1	21/32	11/16	23/32	-	.14	.06
BM-1220	51510	20	1-7/32	II	1-1/32	1-1/32	11/16	23/32	3/4	-	.14	.06
BM-1221	51511	21	1-1/4	Ш	1-3/32	1-1/8	23/32	23/32	13/16	-	.16	.07
BM-1222	51512	22	1-9/32	l II	1-1/8	1-5/32	3/4	3/4	13/16	-	.17	.08
BM-1223	51535	23	1-5/16	II	1-3/16	1-3/16	3/4	25/32	7/8	-	.20	.09
BM-1224	51536	24	1-3/8	Ш	1-1/4	1-1/4	13/16	27/32	7/8	-	.23	.10
BM-1226	51537	26	1-7/16	l II	1-11/32	1-11/32	27/32	7/8	15/16	_	.26	.12

# Metric Sockets, Deep Length, 6 Point

• Designed for max clearance on long metric hex bolts.



Cat. No.	EDP No.	Skt. Size (mm)	A (in)	Туре	B (in)	C (in)	D (in)	E (in)	Bolt Clearance Dia.(in)	F (in)	Lbs.	Kgs.
BMD-606	51372	6	2-1/8	- 1	11/16	13/32	7/32	1-11/16	7/32	1-5/8	.07	.03
BMD-607	51373	7	2-1/8	1	11/16	13/32	9/32	1-11/16	1/4	1-5/8	.07	.03
BMD-608	51374	8	2-1/8	1	11/16	15/32	9/32	1-11/16	5/16	1-5/8	.09	.04
BMD-609	51378	9	2-1/8	I	11/16	1/2	9/32	1-11/16	11/32	1-5/8	.08	.04
BMD-610	51380	10	2-1/8	1	11/16	9/16	5/16	1-11/16	3/8	1-5/8	.10	.05
BMD-611	51381	11	2-1/8	1	11/16	5/8	3/8	1-11/16	7/16	1-5/8	.10	.05
BMD-612	51382	12	2-1/8	- 1	11/16	21/32	13/32	1-11/16	15/32	1-5/8	.11	.05
BMD-613	51383	13	2-1/8	ll l	23/32	23/32	13/32	1-5/8	17/32	-	.13	.06
BMD-614	51384	14	2-3/8	II	25/32	25/32	13/32	1-9/16	17/32	-	.17	.08
BMD-615	51385	15	2-3/8	Ш	13/16	13/16	13/32	1-9/16	17/32	-	.19	.09
BMD-616	51386	16	2-3/8	ll l	27/32	27/32	13/32	1-9/16	19/32	_	.20	.09
BMD-617	51387	17	2-21/32	- II	29/32	29/32	1/2	1-13/16	5/8	-	.26	.12
BMD-618	51388	18	2-21/32	II	31/32	31/32	1/2	1-13/16	21/32	-	.30	.14
BMD-619	51389	19	2-21/32	ll l	1	1	5/8	1-15/16	23/32	-	.30	.14
BMD-620	51398	20	2-21/32	ll l	1-1/32	1-1/32	5/8	1-15/16	25/32	_	.33	.15
BMD-622	51400	22	2-7/8	П	1-5/32	1-5/32	5/8	2-5/32	7/8	-	.40	.18
BMD-623	51401	23	2-7/8	II	1-3/16	1-3/16	1/2	2-5/32	27/32	-	.46	.21
BMD-624	51402	24	2-7/8	Ш	1-1/4	1-1/4	9/16	2-5/32	15/16	-	.50	.23
BMD-625	51403	25	2-7/8	II	1-9/32	1-9/32	9/16	2-1/8	31/32	-	.56	.25
		1	1									

# 1/2" Drive Tools

# **Chrome Reversible Ratchet with Knurled Grip**

- Double pawl design with 82 teeth action provides less than a 4-1/2° ratcheting angle.
- · Shift lever reverses action instantly.
- Knurled handle provides a non-slip grip.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
S-52	50213	11-1/4	1.4	.63
S-53	50705	15	1.6	.74



# Chrome Reversible Linemen's Ratchet with Knurled Grip

- $\bullet$  Double pawl design with 82 teeth action provides less than a 4-1/2  $^{\rm o}$  ratcheting angle.
- Special thumb shift lever for operators using gloves.
- Knurled handle provides a non-slip grip.

1 1114	nou no	and pi	ovido	o a m	ni onp grip	-	
Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.	A		0
	51449 51452	11-1/4 15	1.4 1.7	.64 .74			

# **Black Reversible Construction Ratchet**

- Black oxide finish.
- Tapered handle designed for lining up bolt holes.
- Shift lever reverses action instantly.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
BS-71C	58152	15	2.4	1.11



# **Chrome Flex Handle with Knurled Grip**

- Flex member flexes more than 110° in either direction from upright position.
- Knurled handle provides a non-slip grip.

	Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.	
Г	S-40A	50083	10-3/8	1.4	.63	ľ
Ŀ	S-41A	50223	15-3/4	1.9	.86	
_						•



# **Chrome Flex Handle with Plastic Handle**

- Flex member flexes more than 110° in either direction from upright position.
- Four sided fluted large plastic handle provides a firm comfortable grip while allowing more driving power.

Cat. No.		Lgth. (in)	Lbs.	Kgs.	11-11-11
S-40AP	51514	12-1/8	1.5	.68	



# **Williams Tools**

# **Chrome Sliding T Handle**

- Designed to provide additional leverage in turning nuts or fasteners.
- 1/2° male adapter slides on bar for flexibility.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
S-20A	50220	12	.99	.45



# **Chrome Speeder with Knurled Grip**

- Designed for increased speed in turning nuts or fasteners.
- Knurled handle provides a non-slip grip.

	Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
1	S-10A	50218	13-5/8	1.4	.61
	S-15A	50219	18-1/16	1.6	.76



# **Chrome Ratchet Spinner**

· Designed for use between ratchet and socket to spin nuts faster by hand.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
S-70	50706	1-9/16	.27	.12



# **Chrome Stud Remover**

- Knurled wheel
- · Design to allow both sides of side of wheel.

	drivin	ıg shaı	nk to extend through ng surface on each	6
Lgth. (in)	Lbs.	Kgs.		-
2 7/16	11	EO		

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
S-60D	50455	2-7/16	1.1	.50

# **Chrome Drag Link Sockets**

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
SB-30	50297	1-5/8	.17	.08
SB-40	50298	1-11/16	.27	.13



# **Chrome Extensions**

- Designed to be used with a ratchet and socket to access hard to reach areas.
- Broad range of lengths provide the user a wide choice.
- Provided with ball and spring holding mechanism.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
S-102P	50360	2	.29	.13
S-110P	50230	6	.46	.21
S-115P	50231	10	.88	.40
S-121P	50232	21	1.8	.83



# **Chrome Adapters**

· Adapters make it possible to use drivers of one drive size with sockets of the next larger drive size.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
SH-130	50233	1-15/16	.30	.14



# **Black Adapter**

- · Black oxide finish.
- · Adapters make it possible to use drivers of one drive size with sockets of the next larger drive size.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
SH-130B SH-131B			.30 .43	.14 .20



# **Chrome Universal Joint**

• Designed to drive sockets at offset angles.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
S-140A	50235	2-11/16	.32	.15



# **Black Universal Joint**

- · Black oxide finish.
- Designed to drive sockets at offset angles.

Cat. No.	EDP No.	Lgth. (in)	Lbs.	Kgs.
SB-140A	50235B	2-23/32	.32	.15



# 1/2" Drive Sockets

# Sockets, Standard Length, 6 Point

• Designed for close, confined areas with hex fasteners.



Cat. No.	EDP No.	Skt. Size (in)	A (in)	Туре	B (in)	C (in)	D (in)	E (in)	Bolt Clear. Dia.(in)	F (in)	Lbs.	Kgs.
ST-612	50380	3/8	1-1/2	1	29/32	19/32	5/16	7/8	5/16	23/32	.12	.05
ST-614 ST-616	50381 50382	7/16 1/2	1-1/2 1-1/2		29/32 29/32	21/32 3/4	3/8 3/8	7/8 7/8	3/8 7/16	23/32	.12	.05 .06
ST-618 ST-619	50383 50384	9/16 19/32	1-1/2 1-1/2	I	29/32 29/32	13/16 7/8	3/8 3/8	7/8 7/8	1/2 17/32	23/32 23/32	.13 .13	.06 .06
ST-620	50385	5/8	1-1/2	i	29/32	29/32	9/16	7/8	9/16	-	.14	.06
ST-622 ST-624	50387 50388	11/16 3/4	1-1/2 1-1/2	II	31/32 1-1/32	31/32 1-1/32	13/16 13/16	27/32 27/32	5/8 11/16	1 1	.15 .18	.08 .08
ST-625 ST-626	50389 50390	25/32 13/16	1-1/2 1-1/2	==	1-1/16 1-1/8	1-1/16 1-1/8	13/16 13/16	27/32 27/32	23/32 11/16	-	.24 .25	.11 .11
ST-628	50391	7/8	1-1/2	ii	1-3/16	1-3/16	13/16	13/16	3/4	_	.27	.12
ST-630 ST-632	50392 50393	15/16 1	1-17/32 1-9/16	II II	1-9/32 1-11/32	1-9/32 1-11/32	13/16 27/32	27/32 7/8	13/16 7/8	-	.31 .39	.14 .18
ST-634	50396	1-1/16	1-11/16	Ш	1-7/16	1-7/16	31/32	1	15/16	-	.47	.21
ST-636 ST-640	50397 50398	1-1/8 1-1/4	1-3/4 1-7/8	II II	1-1/2 1-11/16	1-1/2 1-11/16	1-1/32 1-1/8	1-1/16 1-5/32	1 1-1/8	-	.50 .78	.23 .36

# Sockets, Standard Length, 8 Point

• Designed for both square and double square fasteners.



		Skt.							Bolt			
Cat.	EDP	Size.	Α		В	C	D	E	Clear.	F		
No.	No.	(in)	(in)	Type	(in)	(in)	(in)	(in)	Dia.(in)	(in)	Lbs.	Kgs.
ST-812	50369	3/8	1-1/2	T.	7/8	23/32	5/16	27/32	5/16	7/8	.13	.06
ST-814	50370	7/16	1-1/2	- 1	7/8	13/16	3/8	27/32	5/16	7/8	.15	.07
ST-816	50371	1/2	1-1/2	Ш	29/32	29/32	13/32	27/32	11/32	_	.16	.07
ST-818	50372	9/16	1-1/2	ll l	31/32	31/32	7/16	27/32	7/16	_	.23	.10
ST-820	50374	5/8	1-1/2	Ш	1-1/16	1-1/16	1/2	27/32	7/16	-	.28	.13
ST-822	50375	11/16	1-1/2	Ш	1-3/16	1-3/16	1/2	27/32	17/32	-	.32	.15
ST-824	50376	3/4	1-1/2	Ш	1-9/32	1-9/32	9/16	13/16	23/32	-	.39	.18
ST-826	50379	13/16	1-5/8	Ш	1-7/16	1-7/16	9/16	31/32	27/32	_	.51	.23
ST-828	50377	7/8	1-3/4	Ш	1-1/2	1-1/2	5/8	1-1/16	15/16	-	.61	.28
ST-830	50363	15/16	1-13/16	II	1-5/8	1-5/8	11/16	1-1/8	1-1/32	_	.70	.32
ST-832	50378	1	1-15/16	Ш	1-11/16	1-11/16	11/16	1-1/4	1-1/32	-	.76	.34
ST-834	50365	1-1/16	1-15/16	Ш	1-3/4	1-3/4	23/32	1-1/8	13/16	-	.96	.44
ST-836	50366	1-1/8	2	Ш	1-13/16	1-13/16	3/4	1-3/16	13/16	_	1.0	.46
ST-840	50367	1-1/4	2	Ш	2	2	25/32	1-3/16	1	-	1.3	.58

### Sockets, Standard Length, 12 Point

· Designed for quick engagement on either 6 or 12 point fasteners.



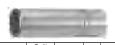
Cat. No.	EDP No.	Skt. Size (in)	A (in)	Туре	B (in)	C (in)	D (in)	E (in)	Bolt Clear. Dia.(in)	F (in)	Lbs.	Kgs.
ST-1212	50247	3/8	1-1/2	-	29/32	19/32	5/16	7/8	11/32	23/32	.12	.05
ST-1214	50248	7/16	1-1/2	1	29/32	21/32	3/8	7/8	13/32	23/32	.12	.05
ST-1216	50249	1/2	1-1/2	- 1	29/32	3/4	3/8	7/8	15/32	23/32	.12	.05
ST-1218	50250	9/16	1-1/2	-	29/32	13/16	3/8	7/8	15/32	23/32	.13	.06
ST-1219	50251	19/32	1-1/2	1	29/32	7/8	3/8	7/8	15/32	23/32	.13	.06
ST-1220	50252	5/8	1-1/2	Ш	29/32	29/32	9/16	7/8	15/32	-	.12	.05
ST-1221	50253	21/32	1-1/2	Ш	31/32	31/32	19/32	7/8	15/32	-	.12	.05
ST-1222	50254	11/16	1-1/2	Ш	31/32	31/32	13/16	27/32	5/8	-	.18	.08
ST-1224	50255	3/4	1-1/2	Ш	1-1/32	1-1/32	13/16	27/32	23/32	-	.18	.08
ST-1225	50256	25/32	1-1/2	Ш	1-1/16	1-1/16	13/16	27/32	3/4	-	.23	.10
ST-1226	50257	13/16	1-1/2	Ш	1-1/8	1-1/8	13/16	27/32	25/32	-	.30	.14
ST-1228	50258	7/8	1-1/2	Ш	1-3/16	1-3/16	13/16	13/16	7/8	-	.30	.14
ST-1230	50259	15/16	1-17/32	Ш	1-9/32	1-9/32	13/16	27/32	29/32	-	.32	.15
ST-1231	50260	31/32	1-9/16	Ш	1-5/16	1-5/16	27/32	7/8	15/16	-	.34	.15
ST-1232	50261	1	1-9/16	Ш	1-11/32	1-11/32	27/32	7/8	31/32	-	.37	.17
ST-1234	50262	1-1/16	1-11/16	Ш	1-7/16	1-7/16	31/32	1	1-1/16	-	.43	20
ST-1236	50263	1-1/8	1-3/4	Ш	1-1/2	1-1/2	1-1/32	1-1/16	1-1/8	-	.48	.22
ST-1238	50264	1-3/16	1-3/4	Ш	1-5/8	1-5/8	1	1-1/32	1-5/32	-	.62	.28
ST-1240	50265	1-1/4	1-7/8	Ш	1-11/16	1-11/16	1-1/8	1-5/32	1-1/4	-	.70	.32
ST-1242	50340	1-5/16	1-7/8	Ш	1-3/4	1-3/4	1-1/32	1-5/32	1-9/32	-	.75	.34
ST-1244	50341	1-3/8	2-1/16	Ш	1-13/16	1-13/16	1	1-5/16	1-11/32	-	.85	.39
ST-1246	50342	1-7/16	2-1/4	Ш	1-15/16	1-15/16	1-1/32	1-1/2	1-1/8	-	1.1	.48
ST-1248	50343	1-1/2	2-1/4	Ш	2	2	1-1/16	1-1/2	1-1/8	-	1.1	.50



# **Williams Tools**

### Sockets, Deep Length, 6 Point

 Designed for maximum clearance on long hex bolts.



		Skt.			_		_	_	Bolt	_		
Cat. No.	EDP No.	Size (in)	A (in)	Туре	B (in)	C (in)	D (in)	E (in)	Clear. Dia.(in)	F (in)	Lbs.	Kgs.
SD-616	51145	1/2	3-1/4	1	29/32	3/4	13/32	2-19/32	15/32	2-15/32		.13
SD-618	51146		3-1/4		29/32	13/16	7/16	2-19/32		2-15/32	.30	.14
SD-620	51147	5/8	3-1/4	Ш	29/32	29/32	15/32	2-7/16	19/32	_	.30	.14
SD-622	51148	11/16	3-1/4	Ш	31/32	31/32	17/32	2-11/32	21/32	_	.32	.15
SD-624			3-1/4	- II	1-1/16	1-1/16	19/32	2-5/16	23/32	-	.38	.17
SD-626	50719	13/16	3-1/4	Ш	1-1/8	1-1/8	21/32	2-9/32	25/32	_	.44	.20
SD-628	51150	7/8	3-1/4	Ш	1-3/16	1-3/16	23/32	2-9/32	27/32	-	.53	.24
SD-630	51151	15/16	3-1/4	- II	1-9/32	1-9/32	3/4	2-9/32	29/32	-	.65	.30
SD-632	51152	1	3-1/4	Ш	1-11/32	1-11/32	3/4	2-1/4	1	_	.74	.34
SD-634	51153	1-1/16	3-1/4	Ш	1-7/16	1-7/16	25/32	2-1/4	1-1/32	_	.84	.38
SD-636	51154	1-1/8	3-1/4	Ш	1-1/2	1-1/2	25/32	2-1/4	1-3/32	-	.86	.39

# Sockets, Deep Length, 12 Point

 Designed for maximum clearance on long 6 or 12 point bolts.



Cat. No.	EDP No.	Skt. Size (in)	A (in)	Туре	B (in)	C (in)	D (in)	E (in)	Bolt Clear. Dia.(in)	F (in)	Lbs.	Kgs.
SD-1216 SD-1218 SD-1220	50269 50270 50272	1/2 9/16 5/8	3-1/4 3-1/4 3-1/4	 	29/32 29/32 29/32	3/4 13/16 29/32	13/32 7/16 15/32	2-19/32 2-19/32 2-7/16	15/32 15/32 19/32	2-15/32 2-15/32 -		.13 .13 .12
SD-1222 SD-1224 SD-1225	50273 50274 50394	11/16 3/4 25/32	3-1/4 3-1/4 3-1/4	II II II	31/32 1-1/16 1-1/16	31/32 1-1/16 1-1/16	17/32 19/32 21/32	2-11/32 2-5/16 2-9/32	21/32 23/32 25/32	-	.31 .38 .45	.14 .17 .20
SD-1226 SD-1228	50275 50276	13/16 7/8	3-1/4 3-1/4	II II	1-1/8 1-3/16	1-1/8 1-3/16	21/32 23/32	2-9/32 2-9/32	25/32 27/32	-	.45 .52	.20 .24
SD-1230 SD-1232 SD-1234 SD-1236	50278 50279 50280 50281	15/16 1 1-1/16 1-1/8	3-1/4 3-1/4 3-1/4 3-1/4	       	1-9/32 1-11/32 1-7/16 1-1/2	1-9/32 1-11/32 1-7/16 1-1/2	3/4 3/4 3/4 25/32	2-9/32 2-1/4 2-1/4 2-1/4	29/32 1 1-1/16 1-3/32	- - -	.66 .62 .79 .81	.30 .28 .36 .37

# Hex Bit Sockets, Short Length

- Two piece design allows worn bits to be replaced.
- Sockets are chrome plated.
- Hex bits provided in black industrial finish.
- 8-32 x 3/16" cup screw is used to hold bit within the Socket.

Cat. No.	EDP No.	Bit Size (in)	Skt. Lgth. (in)	Skt. Dia. (in)	Overall Lgth. (in)	Lbs.	Kgs.	Rplcmt. Bits
SA-8	51039	1/4	1-1/2	7/8	2-5/32	.22	.10	A-8
SA-10	51040	5/16	1-1/2	7/8	2-5/32	.22	.10	A-10
SA-12	51041	3/8	1-1/2	7/8	2-5/16	.25	.11	A-12
SA-16	51042	1/2	1-1/2	1-1/16	2-3/8	.37	.16	A-16
SA-18	51043	9/16	1-3/4	1-1/16	2-1/2	.40	.18	A-18
SA-20	51044	5/8	1-3/4	1-1/16	2-13/32	.42	.19	A-20



# Hex Bit Sockets, Long Length

- Two piece design allows worn bits to be replaced.
- Sockets are chrome plated.
- Hex bits provided in black industrial finish.
- 8-32 x 3/16" cup screw is used to hold bit within the Socket.

Cat. No.	EDP No.	Bit Size (in)	Skt. Length (in)	Skt. Dia. (in)	Overall Length (in)	Lbs.	Kgs.	Rplcmt. Bits
SA-8L	51060	1/4	1-1/2	7/8	5	.24	.11	A-8L
SA-10L	51061	5/16	1-1/2	7/8	5	.28	.13	A-10L
SA-12L	51062	3/8	1-1/2	7/8	6	.36	.16	A-12L
SA-16L	51063	1/2	1-1/2	1-1/16	6	.58	.26	A-16L
SA-18L	51064	9/16	1-3/4	1-1/16	6-11/16	.75	.34	A-18L
SA-20L	51065	5/8	1-3/4	1-1/16	6-11/16	.82	.37	A-20L



- Two piece design allows worn bits to be replaced.
- Sockets are chrome plated.
- Hex bits provided in black industrial finish.

Cat. No.	EDP No.	Bit Size (in)	Skt. Length (in)	Skt. Dia. (in)	Overall Length (in)	Lbs.	Kgs.	Rplcmt. Bits
SA-10-1S	51066	3/16 x .032	1-1/2	7/8	2-13/32	.22	.10	ASB-1
SA-10-2S	51067	7/32 x .040	1-1/2	7/8	2-13/32	.22	.10	ASB-2
SA-10-3S	51068	9/32 x .045	1-1/2	7/8	2-13/32	.22	.10	ASB-3
SA-10-4S	51069	5/16 x .055	1-1/2	7/8	2-13/32	.22	.10	ASB-4

# **Phillips Screw Bit Sockets**

- Two piece design allows worn bits to be replaced.
- · Sockets are chrome packed.
- Hex bits provided in black industrial finish.

Cat. No.	EDP No.	Bit Size	Skt. Length (in)	Skt. Dia. (in)	Overall Length (in)	Lbs.	Kgs.	Rplcmt. Bits
SA-10-1P	51070	#1	1-1/2	29/32	2-1/4	.21	.10	APB-1
SA-10-2P	51071	#2	1-1/2	29/32	2-1/4	.21	.10	APB-2
SA-10-3P	51072	#3	1-1/2	29/32	2-1/4	.21	.10	APB-3
SA-10-4P	51073	#4	1-1/2	29/32	2-1/4	.21	.10	APB-4



# Set Catalog# WSS-15, 6 Short Hex Bit Sockets In TBT-13 Tray EDP #94102, 2.32 Lbs.-1.05 Kgs.

Description
Hex Bit Socket, Short Length, 1/4"
Hex Bit Socket, Short Length, 5/16"
Hex Bit Socket, Short Length, 3/8"
Hex Bit Socket, Short Length, 7/16"
Hex Bit Socket, Short Length, 9/16"
Hex Bit Socket, Short Length, 5/8"



Set Catalog WSS-15T, EDP # 94100, 1.88 Lbs.-.85 Kgs., Tools Only

# Set Catalog # WSS-4, 17 Tools In TB-35 Box

EDP 95066, 9.35 Lbs.-4.24 Kgs.

Cat. No.	Description
S-52	Reversible Ratchet w/Knurled Grip
S-102P	Extension, 2-1/2"
S-115P	Extension, 10"
ST-1212	Std. Length Socket, 12 Pt. 3/8"
ST-1214	Std. Length Socket, 12 Pt. 7/16"
ST-1216	Std. Length Socket, 12 Pt. 1/2"
ST-1218	Std. Length Socket, 12 Pt. 9/16"
ST-1220	Std. Length Socket, 12 Pt. 5/8"
ST-1222	Std. Length Socket, 12 Pt. 11/16"
ST-1224	Std. Length Socket, 12 Pt. 3/4"
ST-1226	Std. Length Socket, 12 Pt. 13/16"
ST-1228	Std. Length Socket, 12 Pt. 7/8"
ST-1230	Std. Length Socket, 12 Pt. 15/16"
ST-1232	Std. Length Socket, 12 Pt. 1"
ST-1234	Std. Length Socket, 12 Pt. 1-1/16"
ST-1236	Std. Length Socket, 12 Pt. 1-1/8"
ST-1240	Std. Length Socket, 12 Pt. 1-1/4"



Set Catalog WSS-4T, EDP # 95067, 6.36 Lbs.-2.88 Kgs., Tools Only

# Set Catalog # WSS-5, 22 Tools in TB-7 Box

EDP # 95068, 18.71 Lbs.-8.49 Kgs.

Cat. No.	Description
S-52	Reversible Ratchet w/Knurled Grip
S-41A	Flex Handle w/Knurled Grip
S-20A	Sliding T Handle
S-15A	Speeder, 18-3/4"
S-102P	Extension, 2-1/2"
S-110P	Extension, 6"
S-115P S-140A ST-1212	Extension, 10" Universal Joint Std. Length Socket, 12 Pt. 3/8"
ST-1214	Std. Length Socket, 12 Pt. 7/16"
ST-1216	Std. Length Socket, 12 Pt. 1/2"
ST-1218	Std. Length Socket, 12 Pt. 9/16"
ST-1220	Std. Length Socket, 12 Pt. 5/8"
ST-1222	Std. Length Socket, 12 Pt. 11/16"
ST-1224	Std. Length Socket, 12 Pt. 3/4"
ST-1226	Std. Length Socket, 12 Pt. 13/16"
ST-1228	Std. Length Socket, 12 Pt. 7/8"
ST-1230	Std. Length Socket, 12 Pt. 15/16"
ST-1232 ST-1234 ST-1236 ST-1240	Std. Length Socket, 12 Pt. 1" Std. Length Socket, 12 Pt. 1-1/16" Std. Length Socket, 12 Pt. 1-1/8" Std. Length Socket, 12 Pt. 1-1/4"



Set Catalog # WSS-5T, EDP # 95069, 12.93 Lbs.-5.86 Kgs., Tools Only



# **Williams Tools**

# Set Catalog # WSS-8, 38 Tools in TB-7 Box

EDP # 94202, 27.76 Lbs.-12.59 Kgs.

Cat. No. Description						
S-52	Reversible Ratchet w/Knurled Grip					
S-41A	Flex Handle w/Knurled Grip					
S-15A	Speeder, 18-3/4"					
S-102P	Extension, 2-1/2"					
S-110P	Extension, 6"					
S-115P	Extension, 10"					
S-70	Ratchet Spinner					
S-140A	Universal Joint					
ST-1212	Std. Length Socket, 12 Pt. 3/8"					
ST-1214	Std. Length Socket, 12 Pt. 7/16"					
ST-1216	Std. Length Socket, 12 Pt. 1/2"					
ST-1218	Std. Length Socket, 12 Pt. 9/16"					
ST-1220	Std. Length Socket, 12 Pt. 5/8"					
ST-1222	Std. Length Socket, 12 Pt. 11/16"					
ST-1224	Std. Length Socket, 12 Pt. 3/4"					
ST-1226	Std. Length Socket, 12 Pt. 13/16"					
ST-1228	Std. Length Socket, 12 Pt. 7/8"					
ST-1230	Std. Length Socket, 12 Pt. 15/16"					
ST-1232	Std. Length Socket, 12 Pt. 1"					
ST-1234	Std. Length Socket, 12 Pt. 1-1/16"					
ST-1236	Std. Length Socket, 12 Pt. 1-1/8"					
ST-1238	Std. Length Socket, 12 Pt. 1-3/16"					
ST-1240	Std. Length Socket, 12 Pt. 1-1/4"					
ST-1242	Std. Length Socket, 12 Pt. 1-5/16"					
ST-1244	Std. Length Socket, 12 Pt. 1-3/8"					
ST-1246	Std. Length Socket, 12 Pt. 1-7/16"					
ST-1248	Std. Length Socket, 12 Pt. 1-1/2"					
SD-1216	Deep Length Socket, 12 Pt. 1/2"					
SD-1218	Deep Length Socket, 12 Pt. 9/16"					
SD-1220	Deep Length Socket, 12 Pt. 5/8"					
SD-1222	Deep Length Socket, 12 Pt. 11/16"					
SD-1224	Deep Length Socket, 12 Pt. 3/4"					
SD-1226	Deep Length Socket, 12 Pt. 13/16"					
SD-1228	Deep Length Socket, 12 Pt. 7/8"					
SD-1230	Deep Length Socket, 12 Pt. 15/16"					
SD-1232	Deep Length Socket, 12 Pt. 1"					
SD-1234	Deep Length Socket, 12 Pt. 1-1/16"					
SD-1236	Deep Length Socket, 12 Pt. 1-1/8"					



Set Catalog # WSS-8T, EDP # 94200, 22.02 Lbs.-9.99 Kgs., Tools Only

# Metric Sockets, Deep Length, 12 Point

 Designed for maximum clearance on long metric 6 or 12-point bolts.



Cat.	EDP	Skt. Size	Α		В	С	D	Е	Bolt Clear.	F		
No	No.	(mm)	(in)	Туре	(in)	(in)	(in)	(in)	Dia.	(in)	Lbs.	Kgs.
SMD-1213	50346	13	3-1/4	-	29/32	25/32	13/32	2-15/32	15/32	2-19/32	.26	.12
SMD-1214	50347	14	3-1/4		29/32	27/32	13/32	2-15/32	15/32	2-19/32	.31	.14
SMD-1215	50348	15	3-1/4	- II	29/32	7/8	13/32	2-15/32	15/32	_	.31	.14
SMD-1216	50349	16	3-1/4	Ш	29/32	29/32	15/32	2-7/16	17/32	_	.33	.15
SMD-1217	50350	17	3-1/4	- II	31/32	31/32	1/2	2-11/32	5/8	_	.36	.16
SMD-1218	50351	18	3-1/4	- II	1	1	17/32	2-11/32	21/32	_	.38	.17
SMD-1219	50352	19	3-1/4	Ш	1-1/32	1-1/32	9/16	2-5/16	11/16	_	.41	.19
SMD-1221	50353	21	3-1/4	- II	1-1/8	1-1/8	21/32	2-5/16	3/4	_	.51	.23
SMD-1222	50354	22	3-1/4	Ш	1-3/16	1-3/16	23/32	2-9/32	13/16	_	.53	.24
SMD-1224	50355	24	3-1/4	Ш	1-9/32	1-9/32	3/4	2-9/32	7/8	_	.61	.28
SMD-1227	50356	27	3-1/4	ll ll	1-7/16	1-7/16	3/4	2-1/4	1	_	.80	.36
SMD-1230	50357	30	3-1/4	II	1-5/8	1-5/8	13/16	2-1/4	1-3/32	_	.92	.42

# 3/4" Drive Tools

Chrome Reversible Ratchet Fed. Spec.: GGG-W-641E, ANSI B107.10M

- Single pawl provides 24 tooth action.
- · Shift lever reserves action instantly.
- · Ball and spring provides socket retention.

Cat. No.	EDP No.	Length (in)	Lbs.	Kgs.	• Ca
H-51	50416	20-1/4	6.24	2.83	

Rugged high strength torque capacity.

Repair Kit is Catalog #H-51RK, EDP #50544

# **Chrome Flex Handle with Knurled Grip**

Fed. Spec.: GGG-W-641E, ANSI B107.10M

- Flex member flexes more than 110° in either direction from upright position.
- · Knurled handle provides a non-slip grip.

Cat. No.	EDP No.	Length (in)	Lbs.	Kgs.	
H-41A	50413	20	4.24	1.92	



# 1/2" Drive Metric Sockets

# Metric Sockets, Standard Length, 12 Point

 Designed for quick engagement on either metric 6 or 12 point fasteners.





Cat.	EDP	Skt. Size	A		В	С	D	E	Bolt Clear.	F		
No.	No.	(mm)	(in)	Туре	(in)	(in)	(in)	(in)	Dia.(in)	(in)	Lbs.	Kgs.
STM-1210	50309	10	1-1/2	ı	29/32	19/32	5/16	7/8	11/32	23/32	.12	.05
STM-1211	50310	11	1-1/2	1	29/32	11/16	5/16	7/8	13/32	23/32	.12	.05
STM-1212	50311	12	1-1/2	ı	29/32	23/32	13/32	7/8	7/16	23/32	.12	.05
STM-1213	50312	13	1-1/2	- 1	29/32	25/32	3/8	7/8	15/32	23/32	.12	.05
STM-1214	50313	14	1-1/2	- 1	29/32	27/32	3/8	7/8	15/32	23/32	.12	.05
STM-1215	50314	15	1-1/2	Ш	29/32	7/8	3/8	7/8	15/32	23/32	.12	.05
STM-1216	50315	16	1-1/2	II	29/32	29/32	9/16	7/8	15/32	-	.13	.06
STM-1217	50316	17	1-1/2	Ш	31/32	31/32	9/16	7/8	15/32	-	.16	.07
STM-1218	50317	18	1-1/2	Ш	1	1	13/16	27/32	15/32	-	.18	.08
STM-1219	50318	19	1-1/2	II	1-1/32	1-1/32	13/16	27/32	23/32	-	.18	.08
STM-1220	50319	20	1-1/2	Ш	1-1/16	1-1/16	13/16	27/32	23/32	-	.21	.10
STM-1221	50320	21	1-1/2	Ш	1-1/8	1-1/8	13/16	27/32	3/4	-	.24	.11
STM-1222	50321	22	1-1/2	Ш	1-3/16	1-3/16	13/16	27/32	25/32	-	.26	.12
STM-1223	50322	23	1-1/2	Ш	1-1/4	1-1/4	25/32	13/16	27/32	-	.30	.14
STM-1224	50323	24	1-17/32	Ш	1-9/32	1-9/32	13/16	27/32	7/8	-	.32	.15
STM-1225	50324	25	1-9/16	II	1- 5/16	1-5/16	13/16	7/8	15/16	-	.34	.15
STM-1226	50325	26	1-5/8	Ш	1-3/8	1-3/8	29/32	15/16	31/32	-	.36	.16
STM-1227	50326	27	1-23/32	Ш	1-7/16	1-7/16	31/32	1	1	-	.46	.21
STM-1228	50327	28	1-3/4	Ш	1-1/2	1-1/2	1	1-1/16	1-1/32	-	.42	.19
STM-1229	50328	29	1-3/4	Ш	1-9/16	1-9/16	1-1/32	1-1/16	1-1/16	-	.47	.21
STM-1230	50329	30	1-3/4	Ш	1-5/8	1-5/8	1-1/32	1-1/32	1-3/32	-	.63	.29
STM-1232	50331	32	1-7/8	II	1-11/16	1-11/16	1-1/8	1-5/32	1-3/16	-	.68	.31
STM-1234	50333	34	2-1/16	Ш	1-3/4	1-3/4	7/8	1-7/16	1	-	.81	.37
STM-1236	50335	36	2-1/16	Ш	1-15/16	1-15/16	7/8	1-7/16	1-13/32	-	.92	.42

<sup>\*</sup> Manufactured by KNIPEX of Germany for J.H. Williams.

### Chrome Sliding T Handle Fed. Spec.: GGG-W-641E, ANSI B107.10M

- Designed to provide leverage in turning nuts or fasteners.
- 3/4" male adapter slides on bar for flexibility.
- Adapter provided with ball and spring in male end.

Cat. No.	EDP No.	Length (in)	Lbs.	Kgs.
H-20A	50412	19-1/4	2.66	1.21



# Chrome Extensions Fed. Spec.: GGG-W-641E, ANSI B107.10M

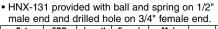
- Designed to be used with a ratchet and socket to access hard to reach areas
- Four side detent provided in female end and ball and spring in male end.

Cat. No.	EPD No.	Length (in)	Lbs.	Kgs.
H-104	50417	3	.70	.32
H-110	50418	8	1.76	.80
H-115	50419	16	3.34	1.51



# Chrome Adapters Fed. Spec.: GGG-W-641E, ANSI B107.10M

- Adapters make it possible to use drivers of one drive size with sockets of the next larger drive size.
- HNX-130 provided with four side detent on 1/2" female end and plunger and spring on 3/4" male end.



Cat. No.	EDP No.	Length (in)	Female End (in)	Male End (in)	Lbs.	Kgs.
HNX-130	50424	3	3/4	1	.68	.31
HNX-131	50404	3-1/16	1	3/4	.86	.39

Chrome Universal Joint Fed. Spec.: GGG-W-641E, ANSI B107.10M

- · Designed to drive sockets at offset angles.
- Male end provided with ball and spring.

ware er	ia piovi	aca with	ban ar	ia opin
Cat. No.	EPD No.	Length (in)	Lbs.	Kgs.
H-140A	50406	4-1/16	1.20	.54





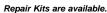
# **Williams Tools**

### **Black Universal Joint**

Fed. Spec.: GGG-W-641E, ANSI B107.10M

• Black oxide finish.

Cat. No.	EPD No.	Length (in)	Lbs.	Kgs.	
HB-140A	50406B	4-1/4	1.20	.54	





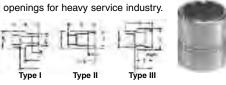
# 3/4" Drive Fractional Sockets

# Sockets, Standard Length, 12 Point

Fed. Spec.: GGG-W-641E, ANSI B107.1

• Wide range of 12 point openings for heavy service industry.

· Four sided detent in drive end provides socket retention



Cat. No.	EDP No.	Skt. Size (in)	A (in)	Туре	B (in)	C (in)	D (in)	E (in)	Bolt Clear. Dia.	F (in)	Lbs.	Kgs.
H-1224	50461	3/4	2	I	1-7/16	1-1/8	17/32	1-1/4	11/16	13/16	.42	.19
H-1226	50844	13/16	2		1-7/16	1-7/32	9/16	1-1/4	11/16	13/16	.44	.20
H-1228	50426	7/8	2		1-7/16	1-5/16	19/32	1-1/4	11/16	13/16	.48	.22
H-1230	50427	15/16	2		1-7/16	1-3/8	21/32	1-1/4	11/16	13/16	.48	.22
H-1231	50428	31/32	2		1-7/16	1-13/32	11/16	1-1/4	11/16	13/16	.52	.24
H-1232	50429	1	2-1/16		1-7/16	1-15/32	11/16	1-5/16	11/16	25/32	.50	.23
H-1234 H-1236 H-1238	50430 50431 50432	1-1/16 1-1/8 1-3/16	2-1/8 2-3/16 2-1/4		1-1/2 1-1/2 1-1/2	1-9/16 1-5/8 1-11/16	3/4 13/16 27/32	1-5/32 1-7/32	1-1/32 1-1/8 1-5/32	7/8 29/32 31/32	.54 .68	.24 .31 .35
H-1240 H-1242 H-1244	50433 50434 50435	1-1/4 1-5/16 1-3/8	2-1/4 2-5/16 2-5/16	    	1-1/2 1-5/8 1-5/8	1-3/4 1-7/8 1-15/16	27/32 27/32 7/8	1-11/32 1-13/32	1-9/32	15/16	.82 1.00 1.08	.37 .45 .49
H-1246	50436	1-7/16	2-3/8		1-5/8	2	15/16	1-7/16	1-1/4	1	1.40	.64
H-1248	50437	1-1/2	2-1/2		1-5/8	2-1/8	1	1-9/16	1-1/4	1-1/8	1.44	.65
H-1250	50408	1-9/16	2-5/8		1-3/4	2-3/16	1-5/32	1-11/16	1-3/8	1-1/4	1.62	.73
H-1252	50438	1-5/8	2-5/8		1-3/4	2-1/4	1-5/32	1-11/16	1-3/8	1-1/4	1.56	.71
H-1254	50439	1-11/16	2-3/4		1-25/32	2-3/8	1-3/16	1-13/16	1-3/8	1-3/8	1.88	.85
H-1256	50440	1-3/4	2-3/4		1-3/4	2-7/16	1-3/16	1-13/16	1-3/8	1-3/8	1.40	.64
H-1258 H-1260 H-1264	50441 50442 50443	1-13/16 1-7/8 2	2-7/8 3 3-1/8	      	1-3/4 1-3/4 1-3/4	2-1/2 2-9/16 2-3/4	1-1/4 1-5/16 1-5/16		1-5/16 1-5/16 1-5/16		1.32 1.42 1.56	.60 .64 .71
H-1266	50444	2-1/16	3-1/8	III	1-3/4	2-3/4	1-3/8	2-3/16	1-5/16	1-11/16	2.26	1.03
H-1268	50445	2-1/8	3-1/4	III	1-3/4	2-15/16	1-7/16	2-5/16		1-13/16	1.82	.83
H-1270	50446	2-3/16	3-1/4	III	1-3/4	2-15/16	1-1/2	2-5/16		1-13/16	1.98	.90
H-1272	50447	2-1/4	3-3/8	III	1-3/4	3-1/8	1-1/2	2-7/16	1-1/4	1-7/8		1.01
H-1274	50845	2-5/16	3-1/2	III	1-3/4	3-1/4	1-5/8	2-9/16	1-1/4	2		1.11
H-1276	50846	2-3/8	3-5/8	III	1-3/4	3-1/4	1-3/4	2-11/16	1-1/4	2-1/8		1.19

# Sockets, Deep Length, 6 Point Fed. Spec.: ANSI B107.1

- Designed for heavy service and maximum clearance on long bolts.
- Four sided detent in drive end provides socket retention.



Cat.	EDP	Skt. Size	Α		В	С	D	E	Bolt Clear.	F		
No.	No.	(in)	(in)	Туре	(in)	(in)	(in)	(in)	Dia.	(in)	Lbs.	Kgs.
HD-628	51291	7/8	3-1/2	1	1-7/16	1-5/16	5/8	2-1/2	3/4	2-5/16	.82	.37
HD-630	51292	15/16	3-1/2	1	1-7/16	1-3/8	21/32	2-1/2	3/4	2-5/16	.82	.37
HD-632	51293	1	3-1/2	Ш	1-1/2	1-7/16	23/32	2-1/2	13/16	2-5/16	.80	.36
HD-634	51294	1-1/16	3-1/2	Ш	1-1/2	1-9/16	3/4	2-1/2	15/16	2-7/32	1.12	.51
HD-636	51295	1-1/8	3-1/2	Ш	1-1/2	1-5/8	13/16	2-1/2	1-1/16	2-7/32	1.18	.54
HD-640	51296	1-1/4	3-1/2	II	1-1/2	1-3/4	1	2-1/2	1-1/8	2-3/16	1.32	.60
HD-642	51297	1-5/16	3-1/2	Ш	1-5/8	1-7/8	1	2-1/2	1-1/4	2-3/16	.17	.08
HD-644	51298	1-3/8	3-1/2	Ш	1-5/8	1-15/16	1	2-9/16	1-1/4	2-3/16	1.68	.76
HD-646	51299	1-7/16	3-1/2	Ш	1-5/8	2	1	2-9/16	1-3/8	2-1/8	1.92	.87
HD-648	51300	1-1/2	3-1/2	Ш	1-5/8	2-1/16	1-1/4	2-9/16	1-3/8	2-1/8	2.04	.93
HD-652	51301	1-5/8	3-1/2	Ш	1-3/4	2-1/4	1-3/8	2-9/16	1-3/8	2-1/8	2.30	1.04

# Set Catalog # WSH-3, 18 Tools in TB-9T Box

EDP # 59314, 46.44 Lbs.-21.04 Kgs.

Cat. No.	Description
H-51	Reversible Ratchet
H-41A	Flex Handle with Knurled Grip
H-104	Extension, 3"
H-110	Extension, 8"
H-115	Extension, 15-1/2"
H-140A	Universal Joint
H-1232	Standard Length Socket, 12 Pt. 1"
H-1234	Standard Length Socket, 12 Pt. 1-1/16"
H-1236	Standard Length Socket, 12 Pt. 1-1/8"
H-1240	Standard Length Socket, 12 Pt. 1-1/4"
H-1242	Standard Length Socket, 12 Pt. 1-5/16"
H-1246	Standard Length Socket, 12 Pt. 1-7/16"
H-1248	Standard Length Socket, 12 Pt. 1-1/2"
H-1252	Standard Length Socket, 12 Pt. 1-5/8"
H-1254	Standard Length Socket, 12 Pt. 1-11/16"
H-1258	Standard Length Socket, 12 Pt. 1-13/16"
H-1260	Standard Length Socket, 12 Pt. 1-7/8"
H-1264	Standard Length Socket, 12 Pt. 2"



Set Catalog #WSH-3T, EDP #59315, 31.82 Lbs.-14.43 Kgs., Tools Only

# Set Catalog #WSH-5, 39 Tools in TB-12 Box

EDP #59354, 81.46 Lbs36.94 Kgs.						
Cat. No.	Description					
H-51A H-A1	Reversible Ratchet Head Handle w/Knurled Grip for H-51A Head					
H-41A	Flex Handle w/Knurled Grip					
H-20A	Sliding T Handle					
H-104	Extension, 3"					
H-110	Extension, 8"					
H-115 H-140A H-1224	Extension, 15-1/2" Universal Joint Standard Length Socket, 12 Pt. 3/4"					
H-1226	Std. Length Socket, 12 Pt. 13/16"					
H-1228	Std. Length Socket, 12 Pt. 7/8"					
H-1230	Std. Length Socket, 12 Pt. 15/16"					
H-1232	Std. Length Socket, 12 Pt. 1"					
H-1234	Std. Length Socket, 12 Pt. 1-1/16"					
H-1236	Std. Length Socket, 12 Pt. 1-1/8"					
H-1240	Std. Length Socket, 12 Pt. 1-1/4"					
H-1242	Std. Length Socket, 12 Pt. 1-5/16"					
H-1246	Std. Length Socket, 12 Pt. 1-7/16"					
H-1248 H-1252 H-1254	Std. Length Socket, 12 Pt. 1-1/2" Std. Length Socket, 12 Pt. 1-5/8" Std. Length Socket, 12 Pt. 1-11/16"					
H-1258	Std. Length Socket, 12 Pt. 1-13/16"					
H-1260	Std. Length Socket, 12 Pt. 1-7/8"					
H-1264	Std. Length Socket, 12 Pt. 2"					
H-1266	Std. Length Socket, 12 Pt. 2-1/16"					
H-1270	Std. Length Socket, 12 Pt. 2-3/16"					
H-1272	Std. Length Socket, 12 Pt. 2-1/4"					
H-1276	Std. Length Socket, 12 Pt. 2-3/8"					
HD-628	Deep Length Socket, 6 Pt. 7/8"					
HD-630	Deep Length Socket, 6 Pt. 15/16"					
HD-632	Deep Length Socket, 6 Pt. 1"					
HD-634	Deep Length Socket, 6 Pt. 1-1/16"					
HD-636	Deep Length Socket, 6 Pt. 1-1/8"					
HD-640	Deep Length Socket, 6 Pt. 1-1/4"					
HD-642	Deep Length Socket, 6 Pt. 1-5/16"					
HD-644	Deep Length Socket, 6 Pt. 1-3/8"					
HD-646	Deep Length Socket, 6 Pt. 1-7/16"					
HD-648	Deep Length Socket, 6 Pt. 1-1/2"					
HD-652	Deep Length Socket, 6 Pt. 1-5/8"					



Set Catalog # WSH-5T, EDP # 59355, 61.64 Lbs.-27.95 Kgs., Tools Only.



# **Williams Tools**

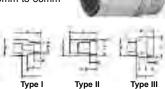
Type III

### 3/4" Drive Metric Sockets

Metric Sockets, Standard Length, 12-Point Fed. Spec.: ANSI B107.5

• Available in wide size range from 19mm to 60mm designed for heavy duty service.

· Four sided detent in drive end provides socket retention.



Cat.	EDP No.	Skt. Size (mm)	A (in)	Туре	B (in)	C (in)	D (in)	E (in)	Bolt Clear. Dia.	F (in)	Lbs.	Kgs.
		` ′		турс						<u>`</u>		_
HM-1219	53611	19	2		7/16	1-1/8	9/16	1-1/32	11/16	13/16	.42	.19
HM-1222	53612	22	2		7/16	1-1/4	5/8	1-1/32	11/16	13/16	.50	.23
HM-1224	53613	24	2	-1	7/16	1-3/8	21/32	1-1/32	11/16	13/16	.52	.25
HM-1227	53614	27	2	Ш	1-1/2	1-9/16	3/4	1-1/32	1-1/16	11/16	.54	.24
HM-1230	53615	30	2-7/32	II	1-1/2	1-5/8	13/16	1-7/32	1-3/16	27/32	.77	.35
HM-1232	53616	32	2-1/4	Ш	1-1/2	1-3/4	7/8	1-5/16	1-5/16	7/8	.84	.38
HM-1235	53617	35	2-5/16	Ш	1-5/8	1-15/16	29/32	1-13/32	1-7/16	7/8	1.08	.49
HM-1236	53618	36	2-5/16	l II	1-5/8	1-15/16	29/32	1-13/32	1-1/4	7/8	1.42	.64
HM-1238	53619	38	2-1/2	II	1-5/8	2-1/16	1	1-19/32	1-9/16	1-1/16	1.50	.68
HM-1241	53620	41	2-5/8	Ш	1-3/4	2-3/16	1-1/16	1-23/32	1-13/32	1-3/16	1.60	.73
HM-1246	53621	46	3-1/8	III	1-3/4	2-7/16	1-3/16	1-31/32	1-13/32	1-11/16	1.44	.65
HM-1250	53622	50	3	III	1-3/4	2-5/8	1-5/16	2-3/32	1-13/32	1-13/32	1.58	.72
HM-1254	53723	54	3-1/4	Ш	1-3/4	2-7/8	1-15/32	2-1/8	1-13/32	1-21/32	1.82	.83
HM-1255	53624	55	3-1/4	III	1-3/4	2-29/32	1-15/32	2-11/32	1-13/32	1-21/32	2.06	.93
HM-1260	53625	60	3-5/8	Ш	1-3/4	3-1/4	1-3/4	2-23/32	1-3/4	2-1/8	3.90	1.77

### Chrome Extensions Fed. Spec.: GGG-W-641E, ANSI B107.10M

- Designed to be used with a ratchet and socket to access hard to reach areas.
- Provided with a drilled hole for positive socket engagement.

Cat. No.	EDP No.	Length (in)	Lbs.	Kgs.
X-110	50501	8	4.06	1.84
X-115	50502	16	7.48	3.39



### Sockets, Standard Length, 12 Point

Fed. Spec.: GGG-W-641E, ANSI B107.1

Skt

· Drilled hole in drive end provides positive and secure engagement needed for heavier sockets.



Cat. No.	EDP No.	Size (in)	A (in)	Туре	B (in)	C (in)	D (in)	E (in)	Clear. Dia.	F (in)	Lbs.	Kgs.
X-1234	50506	1-1/16	2-1/4	- 1	2	1-5/8	3/4	1-1-16	13/16	1-1/4	1.23	.56
X-1236	50507	1-1/8	2-1/4		2	1-3/4	3/4	1-1-16	13/16	1-1/4	1.28	.58
X-1240	50508	1-1/4	2-3/8		2	1-29/32	3/4	1-1/8	13/16	1-1/4	1.26	.57
X-1242	50547	1-5/16	2-1/2	Ш	2	2	13/16	1-9/32	15/16	_	1.46	.66
X-1244	50509	1-3/8	2-1/2	l II	2	2-1/16	7/8	1-11/32	1-13/32	_	1.40	.64
X-1246	50510	1-7/16	2-5/8	ll l	2	2-3/16	1	1-15/32	1-1/2	—	1.54	.70
X-1248	50511	1-1/2	2-3/4	Ш	2	2-1/4	1	1-19/32	1-9/16	_	1.64	.74
X-1252	50512		2-7/8	ll l	2	2-3/8	1-1/8		1-11/16		2.34	1.06
X-1258	50513	1-13/16	3-1/8	l II l	2-1/8	2-5/8	1-1/4	1-31/32	1-7/16	2-3/16	2.88	1.31
X-1260	50514		3-1/4	Ш	2-1/8	2-9/16	1-7/16	2-3/32	1-7/16	2-5/16	1.70	.77
X-1264	50515	2	3-3/8	III	2-1/8	2-3/4	1-1/2	2-1/4	1-7/16	2-7/16	2.08	.94
X-1268	50516	2-1/8	3-1/2	III	2-1/4	3-1/8	1-1/2	2-11/32	1-7/16	2-9/16	2.36	1.07
X-1270	50517	2-3/16	3-5/8	Ш	2-1/4	3-1/8		2-15/32	2-1/4	2-11/16		1.14
X-1272	50518	2-1/4	3-3/4	III	2-1/4	3-1/4	1-5/8	2-5/8	2-11/32	2-23/32		1.23
X-1276	50519	2-3/8	3-7/8	III	2-1/4	3-3/8	1-5/8	2-3/4	2-3/8	2-13/16	2.78	1.26
X-1280	50520	2-1/2	4-1/8	III	2-1/4	3-1/2	1-3/4	2-31/32	2-1/2	3-1/16	3.32	1.51
X-1282	50521	2-9/16	4-1/8	III	2-1/4	3-9/16	1-13/16	2-31/32	2-9/16	3-3/16	3.44	1.56
X-1284	50522	2-5/8	4-1/4	III	2-1/4	3-5/8	1-7/8	3-3/32	2-5/8	3-1/8	3.30	1.50
X-1288	50523	2-3/4	4-1/2	Ш	2-1/4	3-3/4	2	3-3/8	2-3/4	3-9/16	3.70	1.68
X-1294	50524	2-15/16	4-27/32	III	2-1/4	4	2-1/8	3-23/32	2-15/16	3-25/32	4.20	1.91
X-1296	50528	3	4-7/8	III	2-1/4	4-1/8	2-1/8	3-3/4	3	3-27/32		2.04
X-12100	50525	3-1/8	4-31/32	III	2-1/4	4-1/4	2-1/8	3-27/32	3-1/8	3-29/32	5.00	2.27

# Set Catalog # WSX-4, 27 Tools in TB-12 Box EDP # 59304, 106.61 Lbs.-48.35 Kgs.

Cat. No.	Description
X-51A X-41B	Reversible Ratchet Flex Handle with Knurled Grip
X-41B X-20B	Sliding Handle
X-20C	Adapter for Sliding Handle
X-110	Extension, 9"
X-115	Extension, 18"
X-1234	Std. Length Socket, 12 Pt. 1-1/16"
X-1236	Std. Length Socket, 12 Pt. 1-1/8"
X-1240	Std. Length Socket, 12 Pt. 1-1/4"
X-1242	Std. Length Socket, 12 Pt. 1-5/16"
X-1244	Std. Length Socket, 12 Pt. 1-3/8"
X-1246	Std. Length Socket, 12 Pt. 1-7/16"
X-1248	Std. Length Socket, 12 Pt. 1-1/2"
X-1252	Std. Length Socket, 12 Pt. 1-5/8"
X-1258	Std. Length Socket, 12 Pt. 1-13/16"
X-1260	Std. Length Socket, 12 Pt. 1-7/8"
X-1264	Std. Length Socket, 12 Pt. 2"
X-1268	Std. Length Socket, 12 Pt. 2-1/8"
X-1270	Std. Length Socket, 12 Pt. 2-3/16"
X-1272	Std. Length Socket, 12 Pt. 2-1/4"
X-1276	Std. Length Socket, 12 Pt. 2-3/8"
X-1280	Std. Length Socket, 12 Pt. 2-1/2"
X-1282	Std. Length Socket, 12 Pt. 2-9/16"
X-1284	Std. Length Socket, 12 Pt. 2-5/8"
X-1288	Std. Length Socket, 12 Pt. 2-3/4"
X-1294	Std. Length Socket, 12 Pt. 2-15/16"
X-12100	Std. Length Socket, 12 Pt. 3-1/8"



Set Catalog #WSX-4T, EDP #59305, 86.79 Lbs.-39.36Kgs., Tools Only.

# 3/8" Drive Impact Drive Tools

Impact Extension Fed. Spec.: GGG-W-660A; ANSI B107.2

· Supplied with spring plunger retention.



Impact Adapter Fed. Spec.: GGG-W-660A; ANSI B107.2

· Supplied with spring plunger.

No.

			0			
Cat. No.	EDP No.	Square Female (in)	Square Male (in)			Kgs.
2-4A	52074	3/8	1/2	1-1/4	.09	.04



### Impact Universal Joint

Fed. Spec.: GGG-W-660A; ANSI B107.2

• Unique design supplied with a sleeve over the ball area to provide maximum safety.

Cat. No.	EDP No.	Square Female (in)	Square Male (in)			Kgs.
2-140B	53495	3/8	3/8	2-1/4	.26	.12



### **Hand Impact Driver**

· Delivers cam action impact when struck with a hammer for loosening or tightening fasteners.

Cat. No.	EDP No.	Length (in)	Shank Dia. (in)	Lbs.	Kgs.
BHMD-30	51318	5	1-1/4	1.10	.50



# 3/8" Drive Impact Socket Sets

Catalog Set #WS-2-8, 8 Impact Standard Length Sockets on Rail and Clips EDP #59742, 1.01 Lbs. - .46 Kgs.

• Popular 3/8" drive standard length impact sockets, assembled on a rail and clip for easier accessibility.

	•	
Cat. No.	Description	
2-610 2-612 2-614	Standard Length Impact Socket, 6 Pt. 5/16 Standard Length Impact Socket, 6 Pt. 3/8 Standard Length Impact Socket, 6 Pt. 7/16	
2-616 2-618 2-620	Standard Length Impact Socket, 6 Pt. 1/2 Standard Length Impact Socket, 6 Pt. 9/16 Standard Length Impact Socket, 6 Pt. 5/8	
2-622 2-624	Standard Length Impact Socket, 6 Pt. 11/16 Standard Length Impact Socket, 6 Pt. 3/4	



Set Catalog # WS-2-8T, EDP # 59743, 91 Lbs.-.41 Kgs., Tools Only.



# **Williams Tools**

# 3/8" Drive Impact Sockets

# Impact Sockets, Standard Length, 6 Point

Fed. Spec.: GGG-W-660A; ANSI B107.2

 Flank drive design allows the socket to contact the fastener on the flats of the opening rather than the corners.





Cat. No.	EDP No.	Size (in)	Type	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	Lbs.	Kqs.
2-608	52259	1/4		1-1/32	11/16	1/2	7/32	9/16	7/32	.05	.02
2-610 2-612	52260 52261	5/16 3/8		1-1/32 1-1/32	11/16 11/16	1/2 5/8	1/4 9/32	9/16 9/16	7/32 7/32	.06 .07	.03
2-614	52262	7/16	Ш	1-1/16	11/16	21/32	9/32	19/32		.07	.03
2-616	52263	1/2	Ш	1-3/32	3/4	3/4	5/16	19/32	_	.09	.04
2-618	52264	9/16	ll l	1-1/8	13/16	13/16	9/16	19/32	_	.12	.05
2-620	52265	5/8	Ш	1-5/32	29/32	29/32	19/32	5/8	_	.13	.06
2-622	52266	11/16	Ш	1-3/16	31/32	31/32	19/32	5/8	_	.14	.06
2-624	52267	3/4	Ш	1-1/4	1-1/16	1-1/16	21/32	11/16	_	.23	.10

### Impact Sockets, Deep Length, 6 Point

Fed. Spec.: GGG-W-660A; ANSI B107.2

- Flank design reduces the possibility of fastener rounding.
- Deep length sockets most commonly used to access recessed fasteners.

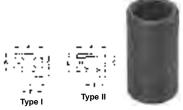


Cat.	EDP No.	Size (in)	Туре	A (in)	B (in)	C (in)	D (in)	E (in)	Bolt. Clear. Dia.	F (in)	Lbs.	Kgs.
12-610 12-612 12-614	52270 52271 52272	5/16 3/8 7/16		2-1/8 2-1/8 2-1/8	11/16 11/16	1/2 5/8 21/32	1/4 9/32 11/32	1-21/32 1-5/8 1-5/8	9/32 11/32 11/32	1-5/8 1-5/8 1-5/8	.11 .12 .13	.05 .05 .06
12-616 12-618 12-620	52273 52274 52275	1/2 9/16 5/8	II II II	2-1/8 2-3/8 2-1/8	13/16	3/4 13/16 29/32	3/8 7/16 15/32	1-15/32 1-1/2 1-1/2	7/16 17/32 5/8	_	.17 .19 .24	.08 .09 .11
12-622 12-624 12-626	52276 52277 52278	11/16 3/4 13/16	II II	2-5/8 2-5/8 2-3/4	1-1/16	31/32 1-1/16 1-1/8	1/2 9/16 9/16	1-19/32 1-19/32 1-25/32	21/32 23/32 25/32		.26 .28 .33	.12 .13 .15
12-628 12-630 12-632	52279 52280 52281	7/8 15/16 1		2-3/4 2-3/4 2-3/4	1-9/32	1-3/16 1-9/32 1-11/32	19/32 19/32 5/8	1-7/8 1-15/16 2	27/32 29/32 1		.36 .41 .46	.16 .19 .21

# 3/8" Drive Metric Impact Sockets

### Metric Impact Sockets, Standard Length, 6 Point

 Designed for power and impact use, the flank drive design provides less stress on the corners of the socket.



Cat.	EDP	Size		Α	В	С	D	E	Bolt. Clear.	F		
No.	No.	(mm)	Туре	(in)	(in)	(in)	(in)	(in)	Dia.	(in)	Lbs.	Kgs.
2M-607	54336	7	- 1	1-1/32	11/16	7/16	7/32	9/16	1/4	17/32	.08	.04
2M-608	52254	8	- 1	1-1/32	11/16	1/2	1/4	9/16	9/32	17/32	.08	.04
2M-609	54338	9	-1	1-1/32	11/16	9/16	9/32	9/16	11/32	17/32	.06	.03
2M-610	52255	10	- 1	1-1/32	11/16	5/8	9/32	9/16	11/32	17/32	.07	.03
2M-611	54340	11	- 1	1-1/32	11/16	21/32	9/32	19/32	11/32	9/16	.08	.04
2M-612	54341	12	II	1-1/16	23/32	23/32	9/32	9/16	11/32	_	.10	.05
2M-613	52256	13	Ш	1-1/16	25/32	25/32	9/32	19/32	3/8	_	.08	.04
2M-614	54343	14	- II	1-3/32	13/16	13/16	9/16	19/32	1/2	_	.13	.06
2M-615	52257	15	- II	1-3/32	27/32	27/32	9/16	19/32	9/16	_	.11	.05
2M-616	54362	16	II	1-1/8	29/32	29/32	19/32	5/8	19/32	_	.16	.07
2M-617	54344	17	- II	1-5/32	31/32	31/32	19/32	5/8	5/8	_	.19	.09
2M-618	54363	18	- II	1-5/32	1	1	5/8	21/32	11/16	_	.17	.08
2M-619	52258	19	Ш	1-3/16	1-1/16	1-1/16	21/32	11/16	23/32	_	.17	.08

### Metric Impact Sockets, Deep Length, 6 Point

- Flank design reduces the possibility of fastener rounding.
- Deep length sockets most commonly used to access recessed fasteners.



Cat.	EDP	Size		A	В	С	D	E	Bolt Clear.	F		
No.	No.	(mm)	Туре	(in)	(in)	(in)	(in)	(in)	Dia.	(in)	Lbs.	Kgs.
12M-607	52249	7	Τ	2-1/8	11/16	7/16	9/32	1-11/16	1/4	1-5/8	.11	.05
12M-608	52250	8	1	2-1/8	11/16	1/2	1/4	1-11/16	9/32	1-5/8	.11	.05
12M-609	52224	9	1	2-1/8	11/16	9/16	9/32	1-11/16	11/32	1-5/8	.12	.05
12M-610	52251	10	Т	2-1/8	11/16	5/8	9/32	1-11/16	11/32	1-5/8	.13	.06
12M-611	52226	11	ll ll	2-1/8	11/16	21/32	21/64	1-11/16	11/32	1-5/8	.13	.06
12M-612	52227	12	ll l	2-1/8	23/32	23/32	3/8	1-23/32	7/16	_	.14	.06
12M-613	52252	13	II	2-1/8	25/32	25/32	7/16	1-3/8	15/32	_	.18	.08
12M-614	52228	14	ll l	2-3/8	13/16	13/16	13/32	1-9/16	1/2	_	.18	.08
12M-615	52253	15	II	2-3/8	27/32	27/32	13/32	1-9/16	9/16	_	.18	.08
12M-616	52229	16	- II	2-3/8	29/32	29/32	13/32	1-9/16	19/32	_	.19	.09
12M-617	52230	17	ll l	2-5/8	31/32	31/32	7/16	1-3/4	5/8	_	.24	.11
12M-618	52231	18	ll l	2-5/8	1	1	7/16	1-3/4	11/16	_	.26	.12
12M-619	52232	19	II	2-5/8	1-1/16	1-1/16	9/16	1-3/4	23/32	_	.28	.13
12M-621	52233	21	ll ll	2-5/8	1-5/32	1-5/32	1/2	1-3/4	25/32	_	.37	.17
12M-624	52234	24	II	2-7/8	1-5/16	1-5/16	19/32	1-31/32	29/32	_	.41	.19
				•								

# 1/2" Drive Impact Tools

### **Impact Extension**

Fed. Spec.: GGG-W-660A; ANSI B107.2

• Square drive supplied with spring plunger.



Cat. No	EDP No.	Length (in)	Square Female (in)	Square Male (in)	Lbs.	Kgs.
4-102	56429	3-1/2	1/2	1/2	.20	.09
4-105A	53176	5	1/2	1/2	.30	.14
4-110A	53181	10	1/2	1/2	.41	.19

### **Impact Adapter**

Fed. Spec.: GGG-W-660A; ANSI B107.2

- The 4-5A adapter is supplied with a spring plunger in the male drive.
- The 4-6 adapter has a thru pin hold which should be used with a retainer pin and O-ring or Williams RET RING<sup>®</sup>.

Cat. No	EDP No.	Square Female (in)	Square Male (in)	Lgth. (in)	Lbs.	Kgs.
4-2A	52075	1/2	3/8	2-1/4	.15	.07
4-6	51085	1/2	3/4	1-1/4	.30	.14



### **Impact Universal Joint**

Fed. Spec.: GGG-W-660A; ANSI B107.2

• Unique design supplied with a sleeve over the ball area to provide maximum safety.

Cat. No	EDP No.	Square Female (in)	Square Male (in)	Lgth. (in)	Lbs.	Kgs.			
4-140B	53509	1/2	1/2	2-1/4	.62	.30			



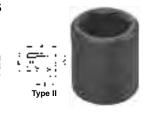
# **Williams Tools**

# 1/2" Drive Impact Sockets

### Impact Sockets, Standard Length, 6 Point

Fed. Spec.: GGG-W-660A; ANSI B107.2

• Flank drive design provides for longer socket life by allowing the fastener to contact the flats rather than the corner of the socket.



Cat.	EDP	Size		A	В	С	D	E	Bolt. Clear.	F		
No.	No.	(in)	Туре	(in)	(in)	(in)	(in)	(in)	Dia.	(in)	Lbs.	Kgs.
4-612	53321	3/8	ı	1-1/2	29/32	19/32	1/4	7/8	11/32	11/16	.13	.06
4-614	53298	7/16	ı	1-1/2	29/32	23/32	5/16	7/8	13/32	11/16	.14	.06
4-616	53296	1/2	- 1	1-1/2	29/32	13/16	13/32	7/8	15/32	11/16	.14	.06
4-618	53295	9/16	Ш	1-1/2	29/32	7/8	13/32	7/8	15/32	11/16	.16	.07
4-620	53299	5/8	ll ll	1-1/2	31/32	31/32	15/32	7/8	1/2	l —	.21	.10
4-622	53300	11/16	Ш	1-1/2	1-1/16	1-1/16	13/16	27/32	5/8	<b> </b>	.26	.12
4-624	53301	3/4	Ш	1-1/2	1-1/8	1-1/8	13/16	27/32	11/16	_	.27	.12
4-626	53338	13/16	ll ll	1-1/2	1-5/16	1-1/4	13/16	13/16	25/32	l —	.34	.15
4-628	53297	7/8	Ш	1-1/2	1-3/8	1-5/16	13/16	13/16	7/8	_	.34	.15
4-630	53302	15/16	Ш	1-3/4	1-7/16	1-3/8	1-1/32	1-1/16	15/16	_	.44	.20
4-632	53336	1	ll ll	1-3/4	1-7/16	1-7/16	1-1/32	1-1/16	1	l —	.48	.22
4-634	53339	1-1/16	Ш	2	1-9/16	1-9/16	1-1/4	1-9/32	1-1/32	—	.54	.25
4-636	53371	1-1/8	П	2	1-5/8	1-5/8	1-1/4	1-9/32	1-1/8	_	.66	.30
4-638	53372	1-3/16	Ш	2	1-11/16	1-11/16	1-1/4	1-9/32	1-5/32	l —	.71	.32
4-640	52071	1-1/4	Ш	2	1-3/4	1-3/4	13/16	1-9/32	1-7/32	<b>—</b>	.80	.36

Type I

### Impact Sockets, Deep Length, 6 Point

Fed. Spec.: GGG-W-660A, ANSI B107.2

- Flank drive design reduces the possibility of fastener rounding.
- · Deep length sockets most commonly used to access recessed fasteners or used on nuts where bolts protrude.

Cat.	EDP	Size		Α	В	C	D	E	Bolt. Clear.	F		
No.	No.	(in)	Type	(in)	(in)	(in)	(in)	(in)	Dia.	(in)	Lbs.	Kgs.
14-612	53271	3/8	- 1	3-1/4	29/32	19/32	3/8	2-11/16	5/16	2-15/32	.28	.13
14-614	53200	7/16	- 1	3-1/4	29/32	23/32	15/32	2-11/16		2-15/32	.31	.14
14-616	53201	1/2	ı	3-1/4	29/32	13/16	1/2	2-11/16	13/32	2-15/32	.32	.15
14-618	53202	9/16	Ш	3-1/4	29/32	7/8	9/16	2-11/16	1/2	2-15/32	.32	.15
14-620	53203	5/8	Ш	3-1/4	31/32	31/32	5/8	2-11/16	1/2	—	.46	.21
14-622	53354	11/16	=	3-1/4	1-1/16	1-1/16	11/16	2-11/16	9/16	_	.53	.24
14-624	53234	3/4	- II	3-1/4	1-1/8	1-1/8	27/32	2-11/16	11/16	_	.63	.29
14-626	53272	13/16	Ш	3-1/4	1-1/4	1-1/4	29/32	2-11/16	3/4	—	.78	.35
14-628	53273	7/8	Ш	3-1/2	1-5/16	1-5/16	31/32	2-15/16	25/32	_	.79	.36
14-630	53204	15/16	Ш	3-1/2	1-3/8	1-3/8	31/32	2-15/16	27/32	_	.97	.44
14-632	53274	1	Ш	3-1/2	1-7/16	1-7/16	1-3/32	2-15/16	29/32	—	.97	.44
14-634	53196	1-1/16	Ш	3-1/2	1-9/16	1-9/16	1-3/32	2-15/16	31/32	—	1.08	.49
14-636	53197	1-1/8	II	3-1/2	1-5/8	1-5/8	1-3/32	2-15/16	1-1/16		1.16	.53
14-640	53198	1-1/4	Ш	3-1/2	1-11/16	1-3/4	1-3/32	2-15/16	1-1/16		1.44	.65
14-644	54200	1-3/8	Ш	3-1/2	1-1/2	2	29/32	2-7/8	1-1/16	_	1.88	.85

### Set Catalog #WS-4-13TR, 13 Impact Sockets in TBT-26 Tray EDP #59753, 5.62 Lbs. - 2.55 Kgs.

Cat. No.	Description	1
4-614 4-616 4-618	Standard Length Socket, 6 Pt. 7/16" Standard Length Socket, 6 Pt. 1/2" Standard Length Socket, 6 Pt. 9/16"	
4-620 4-622 4-624	Standard Length Socket, 6 Pt. 5/8" Standard Length Socket, 6 Pt. 11/16" Standard Length Socket, 6 Pt. 3/4"	
4-626 4-628 4-630	Standard Length Socket, 6 Pt. 13/16" Standard Length Socket, 6 Pt. 7/8" Standard Length Socket, 6 Pt. 15/16"	
4-632 4-634 4-636 4-640	Standard Length Socket, 6 Pt. 1" Standard Length Socket, 6 Pt. 1-1/16" Standard Length Socket, 6 Pt. 1-1/8" Standard Length Socket, 6 Pt. 1-1/4"	



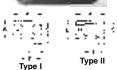
Set Catalog # WS-4-13T, EDP #59754, 4.78 Lbs.-2.18 Kgs., Tools Only

# 1/2" Drive Metric Impact Sockets

### Metric Impact Sockets, Standard Length, 6 Point

 Metric impact sockets are made from industrially tested alloy, forged and heattreated to withstand the constant shock associated with electric and air powered drive tools.





Cat. No.	EDP No.	Size (mm)	Туре	A (in)	B (in)	C (in)	D (in)	E (in)	Bolt. Clear. Dia.	F (in)	Lbs.	Kgs.
4M-610	54346	10	1	1-1/2	29/32	19/32	1/4	7/8	11/32	23/32	.14	.06
4M-611	54347	11		1-1/2	29/32	23/32	5/16	7/8	13/32	23/32	.14	.06
4M-612	54348	12	l	1-1/2	29/32	25/32	3/8	7/8	7/16	23/32	.14	.06
4M-613	54349	13	1	1-1/2	29/32	27/32	13/32	7/8	15/32	23/32	.16	.07
4M-614	54350	14	- II	1-1/2	29/32	7/8	7/16	7/8	15/32	23/32	.16	.07
4M-615	54356	15	Ш	1-1/2	15/16	15/16	7/16	7/8	15/32	_	.22	.10
4M-616	54357	16	Ш	1-1/2	31/32	31/32	15/32	7/8	15/32	_	.24	.10
4M-617	54351	17	II	1-1/2	1	1	1/2	7/8	15/32	—	.22	.11
4M-618	54358	18	Ш	1-1/2	1-1/16	1-1/16	27/32	27/32	21/32	_	.28	.13
4M-619	54352	19	Ш	1-1/2	1-1/8	1-1/8	13/16	27/32	11/16	_	.28	.13
4M-620	54368	20	- II	1-1/2	1-3/16	1-3/16	13/16	27/32	23/32	l —	.28	.13
4M-621	54359	21	H	1-1/2	1-1/4	1-1/4	13/16	27/32	3/4	_	.32	.15
4M-622	54353	22	Ш	1-1/2	1-5/16	1-5/16	13/16	27/32	13/16	_	.36	.16
4M-623	54361	23	Ш	1-3/4	1-5/32	1-5/32	1-1/32	1-3/32	27/32	l —	.40	.18
4M-624	54354	24	Ш	1-3/4	1-3/8	1-3/8	1-1/16	1-3/32	7/8	_	.42	.19
4M-627	54355	27	Ш	1-31/32	1-9/16	1-9/16	1-1/4	1-9/32	1	_	.60	.27
4M-630	54360	30	II	1-31/32	1-11/16	1-11/16	1-1/4	1-9/32	1-3/32	_	.60	.27

### Metric Impact Sockets, Deep Length, 6 Point

 Williams has expanded their 1/2" drive metric impact socket line to accommodate the metric user.



Cat. No.	EDP No.	Size	Tuno	A (in)	B (in)	C (in)	D (in)	E (in)	Bolt. Clear. Dia.	F (in)	Lbs.	Kqs.
		(mm)	Type	(in)	(in)	(in)	(in)	(in)	_	` '		_
14M-610	56386	10		3-1/4	29/32	19/32	9/32	2-9/16		2-15/32	.30	.14
14M-611	56486	11		3-1/4	29/32	23/32	21/64	2-9/16	13/32	2-15/32	.32	.15
14M-612	56586	12		3-1/4	29/32	49/64	23/64	2-9/16	7/16	2-15/32	.34	.15
14M-613	56387	13	Т	3-1/4	29/32	53/64	25/64	2-9/16	15/32	2-15/32	.34	.15
14M-614	56487	14	l II	3-1/4	29/32	7/8	13/32	2-9/16	15/32	2-15/32	.34	.15
14M-615	56388	15	ll l	3-1/4	15/16	15/16	13/32	2-7/64	33/64	_	.48	.22
14M-616	56488	16	Ш	3-1/4	31/32	31/32	29/64	1-31/32	17/32	_	.48	.22
14M-617	56588	17	l II	3-1/4	1	1	27/64	1-31/32	39/64	_	.54	.24
14M-618	56389	18	Ш	3-1/4	1-1/16	1-1/16	1/2	1-31/32	21/32	_	.54	.24
14M-619	56391	19	=	3-1/4	1-1/4	1-1/4	35/64	1-61/64	11/16	_	.64	.29
14M-620	56491	20	l II	3-1/4	1-3/16	1-3/16	35/64	1-61/64	23/32	_	.64	.29
14M-621	56591	21	ll l	3-1/4	1-1/4	1-1/4	35/64	1-61/64	3/4	_	.80	.36
14M-622	56400	22	II	3-1/2	1-5/16	1-5/16	35/64	2-7/64	51/64	_	.80	.36
14M-623	56403	23	l II	3-1/2	1-11/32	1-11/32	5/8	2-7/64	53/64	_	.80	.36
14M-624	56401	24	ll l	3-1/2	1-3/8	1-3/8	5/8	2-7/64	7/8	_	1.00	.45
14M-626	56402	26	II	3-1/2	1-1/2	1-1/2	1	2-7/64	15/16	_	1.14	.52
14M-627	56397	27	ll l	3-1/2	1-1/2	1-1/2	1	2-7/64	31/32	_	1.12	.51
14M-630	53020	30	ll l	3-1/2	1-11/22	1-11/22	1	2-7/8	1-1/16	_	1.34	.61
14M-632	53199	32	Ш	3-1/2	1-3/4	1-3/4	1	2-7/8	1-1/8	_	1.42	.64
14M-634	54209	34	l II	3-1/2	2	2	1	2-7/8	1-1/4	_	1.98	.90
14M-635	54210	35	ll l	3-1/2	2	2	1-1/4	2-7/8	1-1/4	_	1.98	.90
14M-636	54152	36	ll l	3-1/2	2	2	1-3/16	2-31/32	1-1/2	_	1.95	.89

# 3/4" Drive Impact Drive Tools

3/4

### **Impact Extension**

53169 53170

Fed. Spec.: GGG-W-660A; ANSI B107.2

· Supplied with a thru pin hole for use W RI

3/4

	with retainer pin and O-ring or Williams RET RING®.									
Cat. No.	EDP No.	Square Female (in)	Square Male (in)	Length (in)	Lbs.	Kgs.				

9-3/4 12-3/4 .72 1.15

6-107

6-110



# **Williams Tools**

### **Impact Adapter**

EDP

No.

51093

53190

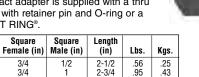
Cat.

6-4A 6-7

Fed. Spec.: GGG-W-660A; ANSI B107.2

Square

- The 6-4A impact adapter is supplied with a spring plunger in the male drive.
- The 6-7 impact adapter is supplied with a thru hole for use with retainer pin and O-ring or a Williams RET RING®.



# **Impact Universal Joint**

Fed. Spec.: GGG-W-660A; ANSI B107.2

• Williams 3/4" drive impact universal joint has a 55° range.

00 10	ango.					
Cat. No.	EDP No.	Square Female (in)	Square Male (in)	Length (in)	Lbs.	Kgs.
6-140B	52191	3/4	3/4	3-1/2	1.24	.56

1/2

### **RET RING® One-Piece Impact Socket Retainer**

· Designed for quick application and positive retention of impact sockets to square or spline drives. Made from oil resistant material.

Cat. No.	EDP No.	Dia. (in)	Lbs.	Kgs.
6-1X	55342	1-7/16	.012	.005
6-2X	55329	1-5/8	.012	.005



### **Impact Retainer Pins**

• Should be used with all 3/4" drive impact sockets and drive tools.

Cat. No.	EDP No.	Dia. (in)	Length (in)	Lbs.	Kgs.	For Use On
6-2B	53144	3/16	1-1/4	.24	.11	3/4": 6-620 thru 6-640, 16-624 thru 16-640
6-2C	53145	3/16	1-1/2	.26	.12	3/4": 6-642 thru 6-654, 16-642 thru 16-652, Universal Joint, Adapters

### Impact O-Ring

- Must be used with all 3/4" drive impact sockets and drive tools.
- Made of material compounded for resistance to oils.

Cat. No.	EDP No.	Dia. (in)	Lbs.	Kgs.	For Use On				
6-1A	55344	1-1/4	.08	.04	All 3/4" Impact Sockets,				
					Universal Joint,				
					Adapters And Extensions				



# 3/4" Drive Impact Sockets

Impact Sockets, Standard Length, 6 Point Fed. Spec.: GGG-W-660A; ANSI B-107.2

- Flank drive design provides for longer socket life by allowing the fastener to contact the flats rather than the corner of the
- · Must be used with a retainer pin and O-ring or a Williams RET

RING®.





									Bolt			
Cat. No.	EDP No.	Size (in)	Туре	A (in)	B (in)	C (in)	D (in)	E (in)	Clear. Dia.(in)	F (in)	Lbs.	Kgs.
6-618A	53608	9/16	.ypu	2	1-5/8	(,	17/32	1-1/32	1/2	1	.54	.24
6-620A	53207	5/8		2	1-5/8	1-3/32	17/32	1-1/32	1/2		.54	.24
6-622A	53069	11/16	!!	2	1-5/8	1-5/32	17/32	1-1/32	1/2	1	.54	.24
6-624A	53070	3/4		2 2	1-5/8	1-1/4	17/32	1-1/32	11/16	1	.54	.24
6-626A	53072	13/16	- 1		1-5/8	1-3/8	17/32	1-1/32	11/16		.58	.26
6-628A	53073	7/8	II	2	1-5/8	1-1/2	19/32	1-1/32	11/16	1	.74	.34
6-630A	53074	15/16	II	2	1-5/8	1-9/16	21/32	1-1/32	11/16	1	.72	.33
6-632A	53075	1	II	2	1-5/8	1-5/8	11/16	1-1/32	11/16	_	.75	.34
6-634A	53076	1-1/16	Ш	2	1-5/8	1-11/16	3/4	1-1/32	1-1/16	1-5/16	.80	.36
6-636	53077	1-1/8	Ш	2-1/8	1-5/8	1-3/4	3/4	1-5/32	1-1/8	1-7/16	.96	.44
6-638	53104	1-3/16	III	2-1/8	1-5/8	1-7/8	3/4	1-5/32	1-3/16	1-7/16	1.02	.46
6-640	53078	1-1/4	III	2-1/8	1-3/4	2	13/16	1-5/32	1-1/4	1-7/16	1.04	.47
6-642	53079	1-5/16	III	2-1/8	1-3/4	2-1/32	7/8	1-5/32	1-5/16	1-7/16	1.20	.54
6-644	53080	1-3/8	III	2-1/4	1-3/4	2-1/8	7/8	1-9/32	1-3/8	1-9/16	1.26	.57
6-646	53081	1-7/16	III	2-1/4	1-3/4	2-3/16	7/8	1-9/32	1-7/16	1-9/16	1.36	.62
6-648	53082	1-1/2	III	2-1/4	1-3/4	2-1/4	15/16	1-9/32	1-1/2	1-9/16	1.42	.64
6-650	53609	1-9/16	III	2-3/8	1-3/4	2-11/32	15/16	1-13/32	1-9/16	1-11/16	1.46	.66
6-652	53083	1-5/8	III	2-3/8	1-3/4	2-13/32	1	1-13/32	1-5/8	1-11/16	1.60	.73
6-654	53084	1-11/16	III	2-9/16	1-3/4	2-15/32	1-1/32	1-19/32	1-7/16	1-7/8	1.70	.77
6-656	53610	1-3/4	III	2-9/16	1-3/4	2-17/32	1-1/32	1-19/32	1-3/4	1-7/8	1.72	.78
6-658	53627	1-13/16	Ш	2-5/8	1-3/4	2-19/32	1-1/8	1-21/32	1-13/16	1-15/16	1.78	.82
6-660	53628	1-7/8	III	2-3/4	1-3/4	2-5/8	1-1/8	1-13/16	1-7/16	2-1/16	1.98	.90
6-662	53630	1-15/16	Ш	2-3/4	1-3/4	2-3/4	1-1/8	1-3/4	1-7/16	2-1/16	2.06	.93
6-664	53631	2	Ш	1-3/4	1-3/4	2-13/16	1-1/8	1-13/16	1-7/16	2-3/16	2.22	1.00

### Impact Sockets, Deep Length, 6 Point

Fed. Spec.: GGG-W-660A; ANSI B-107.2



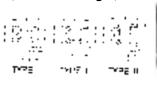
												_
Cat. No.	EDP No.	Size (in)	Туре	A (in)	B (in)	C (in)	D (in)	E (in)	Bolt Clear. Dia.(in)	F (in)	Lbs.	Kgs
16-624 16-626	53287 53288	3/4 13/16	Ì	3	1-5/8 1-5/8	1-1/4 1-7/16	9/16 5/8	2-1/32 2-1/32	9/16 9/16	3/4 3/4	1.08 1.10	.49 .50
16-628	53289	7/8	II	3	1-5/8	1-7/16	5/8	2-1/32	5/8	3/4	1.04	.47
16-630	53290	15/16	II	3	1-5/8	1-5/8	5/8	2-1/32	5/8	—	1.20	.54
16-632	53260	1	II	3	1-5/8	1-5/8	11/16	2-1/32	21/32	—	1.10	.50
16-634	53291	1-1/16		3	1-5/8	1-11/16	11/16	2-1/32	3/4	2-5/16	1.38	.63
16-636	53292	1-1/8		3	1-5/8	1-3/4	3/4	2-1/32	13/16	2-5/16	1.44	.65
16-638	53049	1-3/16		3-3/16	1-3/4	1-15/16	3/4	2-7/32	1-3/16	2-1/2	1.64	.74
16-640	53293	1-1/4	III	3-1/4	1-3/4	1-15/16	7/8	2-9/32	1-1/4	2-9/16	1.78	.81
16-642	53178	1-5/16	III	3-1/4	1-3/4	2	7/8	2-9/32	1-9/32	2-9/16	1.96	.88
16-644	52112	1-3/8	III	3-1/4	1-3/4	2-1/8	7/8	2-9/32	1-3/8	2-9/16	2.06	.93
16-646	53180	1-7/16		3-1/2	1-3/4	2-1/8	7/8	2-17/32	1-13/32	2-13/16	1.96	.72
16-648	53179	1-1/2		3-1/2	1-3/4	2-1/4	15/16	2-17/32	1-1/2	2-13/16	1.88	.85
16-650	53636	1-9/16		3-1/2	1-3/4	2-5/16	15/16	2-17/32	1-9/16	2-13/16	2.00	.91
16-652	53177	1-5/8		3-1/2	1-3/4	2-7/16	15/16	2-17/32	1-5/8	2-13/16	2.24	2.24
16-654	53638	1-11/16		3-1/2	1-3/4	2-1/2	1	2-17/32	1-11/16	2-13/16	2.50	1.22
16-656	53639	1-3/4		3-1/2	1-3/4	2-1/2	1	2-17/32	1-3/4	2-13/16	2.36	1.07
16-658	53640	1-13/16	III	3-3/4	1-3/4	2-5/8	1-1/16	2-3/4	1-13/16	2-25/32	2.80	1.27
16-660	53597	1-7/8	III	3-3/4	1-3/4	2-11/16	1-1/8	2-3/4	1-7/8	2-25/32	2.88	1.31
16-664	53598	2	III	3-3/4	1-3/4	2-3/16	1-1/8	2-3/4	2	2-25/32	3.42	1.55

# Williams Tools

# 3/4" Drive Metric Impact Sockets

Metric Impact Sockets, Standard Length, 6 Point

· Williams has retooled their 3/4" drive metric impact socket line to give the user a true metric socket for their needs.

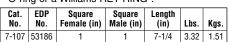


Cat. No.	EDP No.	Size (mm)	Туре	A (in)	B (in)	C (in)	D (in)	E (in)	Bolt Clear. Dia.(in)	F (in)	Lbs.	Kgs.
6M-617A 6M-619A 6M-622A	55176	17 19 22	1 1	2 2 2	1-5/8 1-5/8 1-5/8	1-5/32 1-1/4 1-1/2	17/32 17/32 19/32	1-1/32 1-1/32 1-1/32	1/2 11/16 11/16	1 1 1	.54 .54 .74	.24 .24 .34
6M-624A 6M-627A 6M-630	55178 55179	24 27 30	II II	2 2 2-3/32	1-5/8 1-5/8 1-5/8	1-35/64 1-11/16 1-27/32	11/32 3/4 47/64	1-1/32 1-1/32 1-1/8	11/16 1-1/16 47/64	1 1-5/16 1-13/32	.74 .82 1.00	.34 .37 .45
6M-635	53085 55182 53637	32 35 36		2-1/8 2-1/4 2-1/4	1-3/4 1-3/4 1-3/4	2 2-1/8 2-1/8	13/16 7/8 7/8	1-3/16 1-5/16 1-5/16	1-1/4 1-3/8 1-13/32	1-7/16 1-9/16 1-9/16	1.02 1.20 1.44	.46 .54 .65
	55183 53103	38 41	III III	2-1/4 2-5/8	1-3/4 1-3/4	2-1/4 2-19/32	15/16 1-1/8	1-5/16 1-21/32	1-1/2 1-13/16	1-13/16 1-15/16	1.52 1.52	.69 .69

### 1" Drive Impact Drive Tools Impact Extension

Fed. Spec.: GGG-W-660A; ANSI B107.2

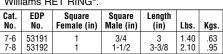
- · Supplied with a thru hole on the drive end.
- Must be used with a retainer pin and O-ring or a Williams RET RING®.



### **Impact Adapter**

Fed. Spec.: GGG-W-660A; ANSI B107.2

• Williams 1" drive adapters are supplied with a thru hole for use with a retainer pin and O-ring or a Williams RET RING®





# **RET RING® One-Piece Impact Socket Retainer**

- Designed for quick application and positive retention of impact sockets to square or spline drives.
- · Made from oil resistant material.

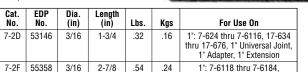
Cat. No.	EDP No.	Dia. (in)	Lbs.	Kgs.
7-1X	55343	1-3/4	.018	.008
7-2X	55330	1-15/16	.018	.008
7-3X	55331	2-1/8	.020	.009
7-4X	55332	2-1/2	.022	.010
7-5X	55333	2-5/8	.024	.010

RET RING® is a trademark of Continental Air Tool.



### **Impact Retainer Pins**

• Should be used with 1" drive impact sockets and drive tools.



### **Impact O-Ring**

- Should be used with 1" drive impact sockets and drive tools.
- · Made of material compounded for resistance to oils.

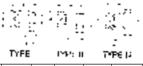
Cat. No.	EDP No.	Dia. (in)	Lbs.	Kgs	For Use On
7-1B	55345	2	.22	.10	1": 7-624 thru 7-6116, 17-634 thru 17-676, 1" Universal Joint, 1" Adapter, 1" Extension
7-1C	55268	3-1/4	.36	.16	1": 7-6118 thru 7-6184, 17-678 thru 17-6184



17-678 thru 17-6184

### 1" Drive Impact Sockets

Impact Sockets, Standard Length, 6 Point Fed. Spec.: GGG-W-





7.624         53208         3/4         I         2.1/8         2.1/8         1.7/16         11/16         15/16         3/4         7/8         1.13         5.1           7.628         53209         13/16         I         2.1/8         2.1/8         1.1/16         15/16         3/4         7/8         1.13         5.1           7.628         53201         18         1.2/18         2.1/8         1.1/16         1.1/16         3/4         7/8         1.13         5.1           7.632         53081         1.1         1.2         1.4         2.18         1.11/16         1.1/16         3/4         7/8         1.15         5.2           7.636         53089         1.1/8         1         2.1/4         2.1/8         1.7/8         11/16         1.1/16         3/4         7.6         1.16         3.4         1.3/16         1.1         0.1         6.1/4         2.1/8         1.1/16         1.1/16         1.1         1.1         5.6         7.7         7.6         1.1         1.5         5.2         7.6         1.1         1.6         7.8         1.1         1.1         5.6         7.7         7.6         1.1         1.1         5.6         7.7		ANSI	B107.2		TYFE		PP: II	7*	PE IJ	4	_		9
7-826         53209         13/16         1         2.1/8         2.1/8         1.7/16         11/16         15/16         3/4         7/8         1.13         51           7-682         53201         15/16         1         2.1/8         2.1/8         2.1/12         11/16         3/4         7/8         1.13         51           7-633         53081         1         1         2.1/4         2.1/8         1-1/16         3/4         7/8         1.16         3.4           7-634         53088         1-1/16         1         2.1/4         2.1/8         1-1/16         1.1         1.1         6.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         2.1         2.1/8         1.1         1.1         1.1         2.1         2.1/8         1.1         1.1         3.1         2.1         2.1         3.4         1.1         1.1         1.1         2.1         2.1         2.1         3.4         1.1         1.1         1.1         3.1         3.2         3.3         4.1				Туре						Clear.		Lbs.	Kgs.
7-620         53210         7/8         I         2-1/8         2-1/8         1-1932         5/8         15/16         3/4         7/8         1.13         1.5           7-630         53211         15/16         I         2-1/8         2-1/8         1-11/16         1.1/16         1.1/16         3/4         7/8         1.14         5.2           7-638         53088         1-1/16         I         2-1/4         2-1/8         1-1/16         1.1/16         1.1/16         3/4         7/8         1.16         3.3         1.7         1.1         1.2         1.2         1.2         1.1         1.2         1.2         1.2         1.1         1.2         1.2         1.2         1.1         1.1         1.0         1.0         3.3         1.1         1.1         1.0         1.0         3.3         1.1         1.0         1.0         3.3         1.1         1.0         3.1         1.0         1.1         1.1         1.5         1.0         3.3         1.1         1.5         1.0         3.3         1.1         1.5         5.0         3.3         1.1         1.5         5.0         3.3         3.1         1.0         3.3         3.3         3.3         3.3													
7-630         53211         5776         1         2 - 1/8         2 - 1/8         1 - 1/16         1 - 1/16         1 - 2 - 1/4         2 - 1/8         1 - 1/16         1 - 1/16         3/4         7/8         1, 15         5.2         7-632         53088         1 - 1/16         1 - 2 - 1/4         2 - 1/8         1 - 1/16         1 - 1/16         3/4         7/8         1, 16         5.3         7.78         1, 16         1.3         7/8         1, 16         1 - 1/16         1 - 1/16         3/4         7/8         1, 16         1 - 1/16         1 - 1/16         3/4         7/8         1, 16         1 - 1/16         1 - 1/16         3/4         7/8         1, 16         1 - 1/1													
7-6361         53088         1-1/16         I         2-1/4         2-1/8         1-7/8         11/16         1-1/16         3/4         7/8         1.0         2-1/4         2-1/8         1-7/8         11/16         1-1/16         13/16         7/8         1.20         3-4         2-1/8         2-1/8         2-1/8         1-1/16         1-1/16         13/16         7/8         1.40          3-4         2-1/8         2-1/8         2-1/8         2-1/8         2-1/8         2-1/8         2-1/8         2-1/8         2-1/8         2-1/8         2-1/16         7/8         1-5/16         1-1         1.1         1.56         7/7         1.40          1.57         1.1         1.56         7         7         7         4.1         1.56         7         7         8         1.576         1.576         1.578         1.1         1.56         7         7         8         1.576         1.578         1.1         1.56         7         8         1.577         1.578         1.579         1.578         1.177         8         1.579         1.578         1.505         1.578         1.579         1.578         1.505         1.578         1.579         1.578         1.579	7-630												
7.636         50099         1-1/8         I         2-1/4         2-1/8         1-7/8         11/16         1-1/16         13/16         7/8         1.20         5.64           7-640         53090         1-1/14         II         2-1/4         2-1/8         2-1/8         1-1/16         11/16         11/16         11/16         17/8         1.06         7.78         1.06         7.78         1.06         7.78         1.06         7.78         1.06         7.77         1.06         7.77         1.06         7.77         1.06         7.77         1.06         7.77         1.06         7.77         1.06         7.77         1.06         7.77         1.06         7.77         1.06         7.77         1.06         7.77         1.06         7.76         1.06         7.76         1.16 <td>7-632</td> <td></td>	7-632												
7-680   550064   1-31/16   III   2-11/2   2-1/8   2-1/8   2         3/4   1-31/16   13/16   7/8   1.40   2         3/4   1-31/16   13/16   7/8   1.40   2         3/7   3/4   1-31/16   15/16   1         1.50   3.73   3.74													
7-644   53091   1-5/16   II   2-1/2   2-1/8   2-1/16   7/8   1-5/16   1-3/8     1.56   .77   .744   53092   1-3/8   II   2-1/2   2-1/8   2-1/18   7/8   1-5/16   1-3/8     1.57	7-638												.64
7-646 53093 1-7/16 II	7-640											_	
7-646         \$3093         1-7/16         II         2-1/2         2-1/4         2-1/32         1-1/5         1-1/2         1-5/8         2.9         2.9         2-1/4         2-1/32         1-1/5         1-1/5         1-5/8         2.0         2.9         2-1/4         2-3/8         1-1/16         1-15/32         1-1/9         1-5/8         2.0         2.9         2-1/4         2-3/8         1-1/16         1-15/8         1-19/2         1-5/8         2.0         2.9         2.7         1-65/8         1-19/16         1-5/8         2.0         3.9         7-655         55006         1-3/4         III         2-3/8         2-3/8         2-3/8         1-5/8         1-7/32         1-1/16         1-1/76 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td></td<>											1		
7-680         \$3094         1-1/12         II         2-5/8         2-1/4         2-1/32         15/16         1-15/32         1-1/16         1-19/16         1-5/8         2.9         2.9         2-1/4         2-3/8         1-1/16         1-19/16         1-5/8         2.0         3.3           7-652         \$3095         1-5/8         III         2-3/4         2-1/4         2-3/8         1-1/16         1-5/8         1-19/16         1-5/8         1-3/4         2.03         3.2           7-656         \$3096         1-11/16         III         2-3/8         2-3/8         1-3/16         1-15/8         1-17/8         2.22         1.0           7-665         \$5076         1-3/16         III         2-15/16         2-3/8         2-3/4         1-3/16         1-23/32         1-7/16         1-15/16         2.1         2.7         1-66         55073         1-17/16         1-16/16         1-16         1-16         1-16         1-17/16         1-16/16         1-16         1-17/8         1-16         1-3/8         1-15/16         1-16         1-16         1-16         1-16         1-17/16         1-16         1-16         1-16         1-16         1-16         1-16         1-16         1-16													.83
7-652   53095   1-5/8   III   2-3/4   2-1/4   2-3/8   1-1/16   1-5/8   1-19/32   1-3/4   2.03   9.92   9.07   9.05	7-648		1-1/2	Ш		2-1/4			1-15/32	1-1/2	1-5/8		
7-654         \$3096         \$1-11/16         III         \$2-3/8         \$2-3/8         \$2-19/32         \$1-11/16         \$1-7/32         \$1-3/4         \$2.08         \$2-5/8         \$1-5/32         \$1-23/32         \$1-7/16         \$1-7/8         \$2.22         \$1.01           7-6565         \$5097         \$1-13/16         \$11-23/8         \$2-3/4         \$1-3/16         \$1-23/32         \$1-3/16         \$1-7/16         \$1-7/8         \$2.22         \$1.01           7-660         \$5098         \$1-7/8         III         \$2-15/16         \$2-3/8         \$2-3/4         \$1-3/16         \$1-23/32         \$1-7/16         \$1-15/16         \$2.16         \$9.8           7-664         \$5099         \$2         III         \$3-1/8         \$1-3/32         \$1-3/32         \$1-15/16         \$2.36         \$3         \$1-9/32         \$1-3/32         \$1-15/16         \$2.36         \$3         \$1-9/32         \$1-3/32         \$1-17/26         \$2-1/8         \$2.31         \$1.07         \$1-666         \$3000         \$2-1/16         \$11         \$3-1/8         \$1-3/32         \$1-3/32         \$1-1/82         \$2-1/8         \$2.1         \$1.02         \$1-3/8         \$3-1/8         \$1-9/32         \$1-3/32         \$1-1/8         \$2-1/8         \$3.04	7-650												.93
7-656   55076   1-3/16   III   2-7/18   2-3/18   2-5/18   1-5/26   1-23/32   1-13/16   1-17/16   2-12   1-17/16   1-15/16   2-15/16   2-3/18   2-3/14   1-3/16   1-23/32   1-13/16   1-15/16   2-16   1-18/16   2-15/16   2-3/18   2-3/14   1-3/16   1-23/32   1-3/16   1-15/16   2-16   1-18/16   2-16/1													
7-650													1.01
7-666   53090   2   III   3-1/16   2-3/18   2-3/14   1-3/16   1-23/32   1-3/18   1-15/16   2.38   1.07   7-666   53090   2   III   3-1/18   2-3/8   3   1-9/32   1-31/32   1-13/32   2-1/8   2.28   1.03   7-668   55303   2-1/8   III   3-1/14   2-3/8   3   1-9/32   1-31/32   1-1/2   2-1/8   2.27   1.22   7-668   55303   2-1/8   III   3-1/14   2-3/8   3-1/8   1-9/32   1-31/32   1-5/8   2-1/4   3.00   1.36   7-670   53101   2-3/16   III   3-5/16   2-3/8   3-1/8   1-9/32   1-31/32   1-5/8   2-5/16   3.12   1.42   7-672   53102   2-1/4   III   3-5/16   2-3/8   3-1/4   1-7/16   2-5/32   1-5/8   2-5/16   2.98   1.35   7-674   55304   2-5/16   III   3-1/2   2-3/8   3-1/4   1-7/16   2-5/32   1-3/4   2-1/2   3.38   1.55   7-676   55066   2-3/8   III   3-1/2   2-3/8   3-1/2   1-1/2   2-1/32   1-3/4   2-1/2   3.38   1.55   7-678   55305   2-7/16   III   3-1/2   2-3/8   3-1/2   1-1/2   2-1/32   1-3/4   2-1/2   3.08   1.75   7-680   55232   2-1/2   III   3-5/8   2-3/8   3-1/2   1-1/2   2-11/32   1-3/4   2-1/2   2-5/8   3.86   1.75   7-682   55232   2-1/2   III   3-5/8   2-3/8   3-1/2   1-5/8   2-15/32   2-9/16   2-5/8   3.86   1.75   7-684   55233   2-5/8   III   3-7/8   2-3/8   3-3/4   1-13/16   2-15/32   2-9/16   2-5/8   3.86   1.75   7-685   55306   2-11/16   III   3-7/8   2-3/8   3-3/4   1-13/16   2-15/32   2-3/4   2-7/8   4.90   2.22   7-690   55307   2-13/16   III   4   2-3/8   4   1-13/16   2-15/32   2-3/4   2-7/8   4.90   2.22   7-690   55308   2-1/8   III   4-3/16   2-3/8   4   1-13/16   2-15/16   2-3/8   3-1/8   3-1/8   2-1/32   7-6100   55311   3-1/8   III   4-3/16   2-3/8   4   1-13/16   2-15/16   2-3/8   3-3/8   7-610   55311   3-1/8   III   4-3/4   2-3/8   4-1/8   2-1/16   2-3/8   3-3/8   7-1/2   2-3/6   3-3/8   3-1/8   3-3/8   3-1/6   2-3/8   3-3/8   7-610   55313   3-1/4   III   4-3/4   2-3/8   4-1/4   2-1/16   3-5/16   2-3/8   3-3/8   7-1/2   2-3/8   3-1/6   3-1/32   2-3/8   3-3/8   7-1/6   3-3/32   3-3/4   1-13/12   2-5/8   3-3/8   7-1/6   3-3/8   3-3/8   3-1/6   3-1/32   2-3/8   3-3/8   3-1/6   3-1/32   3-3/	7-658		1-13/16	Ш	2-15/16					1-13/16	1-15/16	2.14	.97
7-664   53099   2   III   3-1/8   2-3/8   3   1-9/32   1-3/32   1-1/3/32   2-1/8   2.28   1.05   7-666   53100   2-1/16   III   3-1/8   2-3/8   3.1   1-9/32   1-31/32   1-1/2   2-1/8   2.74   1.27   7-667   53101   2-3/16   III   3-1/4   2-3/8   3-1/4   1-7/16   2-5/32   1-5/8   2-1/4   3.0   1.36   7-670   53101   2-3/16   III   3-5/16   2-3/8   3-1/4   1-7/16   2-5/32   1-5/8   2-5/16   3.12   1.42   7-672   53102   2-1/4   III   3-5/16   2-3/8   3-1/4   1-7/16   2-5/32   1-5/8   2-5/16   3.12   1.42   7-674   55304   2-5/16   III   3-1/2   2-3/8   3-1/4   1-1/16   2-5/32   1-5/8   2-5/16   3.12   1.42   7-675   55066   2-3/8   III   3-1/2   2-3/8   3-1/2   1-1/2   2-11/32   1-3/4   2-1/2   3.38   1.55   7-676   55066   2-3/8   III   3-1/2   2-3/8   3-1/2   1-1/2   2-11/32   1-3/4   2-1/2   3.38   1.55   7-680   55232   2-1/2   III   3-5/8   2-3/8   3-1/2   1-1/2   2-11/32   1-3/4   2-1/2   4.00   1.81   7-680   55232   2-9/16   III   3-5/8   2-3/8   3-3/4   1-5/8   2-5/16   1-7/8   2-5/8   3.86   1.77   7-681   55238   2-9/16   III   3-5/8   2-3/8   3-3/4   1-5/8   2-5/16   1-7/8   2-5/8   3.80   1.72   7-682   55238   2-9/16   III   3-5/8   2-3/8   3-3/4   1-13/16   2-15/32   2-9/6   2-5/8   3.80   1.72   7-684   55233   2-5/8   III   3-5/8   2-3/8   3-3/4   1-13/16   2-15/32   2-9/6   2-5/8   3.80   1.72   7-685   55307   2-13/16   III   4   2-3/8   4   1-13/16   2-15/32   2-9/6   3-6/4   7-690   55307   2-13/16   III   4   2-3/8   4   1-13/16   2-11/16   2   3   6.40   2.90   7-691   55310   3   III   4-3/8   2-3/8   4-1/4   2-1/16   3-5/16   2-3/8   3-3/8   7-10   7-6108   55313   3-1/8   III   4-3/4   2-3/8   4-1/4   2-1/16   3-5/16   2-3/8   3-3/8   7-10   3-2/8   7-6108   55313   3-1/8   III   4-3/4   2-3/8   5-1/2   2-1/16   3-5/16   2-3/8   3-3/8   7-10   3-2/8   7-6108   55313   3-1/8   III   4-3/4   2-3/8   5-1/2   2-1/16   3-5/32   2-3/8   3-3/8   7-10   3-2/8   7-6108   55313   3-13/16   III   4-3/4   2-3/8   5-1/2   2-1/16   3-5/32   2-3/8   3-3/8   7-10   3-2/8   7-6108   55313   3-13/16   III	7-660												.98
7-666													1.07
7-670   53101   2-3/16   III   3-5/16   2-3/8   3-1/4   1-7/16   2-5/32   1-5/8   2-5/16   3.12   1.4½   7-672   53102   2-1/4   III   3-5/16   2-3/8   3-1/4   1-7/16   2-5/32   1-5/8   2-5/16   2.98   3.16   7-674   55304   2-5/16   III   3-1/2   2-3/8   3-1/2   1-1/2   2-11/32   1-3/4   2-1/2   3.38   1.52   7-676   55066   2-3/8   III   3-1/2   2-3/8   3-1/2   1-1/2   2-11/32   1-3/4   2-1/2   3.46   1.57   7-678   55305   2-7/16   III   3-1/2   2-3/8   3-1/2   1-1/2   2-11/32   1-3/4   2-1/2   3.46   1.57   7-682   55228   2-9/16   III   3-5/8   2-3/8   3-1/2   1-1/2   2-11/32   2-1/2   2-5/8   3.66   1.57   7-682   55232   2-1/2   III   3-5/8   2-3/8   3-1/2   1-1/2   2-11/32   2-1/2   2-5/8   3.66   1.57   7-682   55238   2-9/16   III   3-5/8   2-3/8   3-3/4   1-5/8   2-15/32   2-9/16   2-5/8   3.66   1.77   7-682   55233   2-5/8   III   3-5/8   2-3/8   3-3/4   1-13/16   2-15/32   2-1/2   2-7/8   5.94   2.66   7-688   55225   2-3/4   III   3-7/8   2-3/8   3-3/4   1-13/16   2-15/32   2-2/78   4.90   2-5/8   7-690   55307   2-13/16   III   4-2/3/8   4-1/4   2-1/16   3-1/16   2-1/16   2-3/8   3-1/8	7-666		2-1/16	Ш					1-31/32				1.24
7-672 53102 2-1/4 III 3-5/16 2-3/8 3-1/4 1-7/16 2-5/32 1-5/8 2-5/16 2.98 1.35 7-674 55304 2-5/16 III 3-1/2 2-3/8 3-3/8 1-1/2 2-5/32 1-3/4 2-1/2 3.38 1.57 7-676 55066 2-3/8 III 3-1/2 2-3/8 3-1/2 1-1/2 2-11/32 1-3/4 2-1/2 3.48 1.57 7-678 55305 2-7/16 III 3-1/2 2-3/8 3-1/2 1-1/2 2-11/32 1-3/4 2-1/2 3.46 1.57 7-678 55305 2-7/16 III 3-5/8 2-3/8 3-1/2 1-5/8 2-15/32 2-1/2 2-5/8 3.86 1.75 7-680 55232 2-1/2 III 3-5/8 2-3/8 3-1/2 1-5/8 2-15/32 2-1/2 2-5/8 3.86 1.75 7-680 55232 2-1/2 III 3-5/8 2-3/8 3-1/2 1-5/8 2-15/32 2-1/2 2-5/8 3.86 1.75 7-682 55228 2-9/16 III 3-5/8 2-3/8 3-3/4 1-5/8 2-15/32 2-9/16 2-5/8 3.0 1.75 7-684 55233 2-5/8 III 3-5/8 2-3/8 3-3/4 1-5/8 2-5/16 1-7/8 2-5/8 3.80 1.75 7-685 55262 2-1/16 III 3-7/8 2-3/8 3-3/4 1-13/16 2-15/32 2 2-7/8 4.90 2.22 7-690 55307 2-13/16 III 4-3/18 2-3/8 4 1-13/16 2-11/16 2 3 6.40 2.22 7-690 55308 2-7/8 III 4 2-3/8 4 1-13/16 2-11/16 2 3 6.48 2.86 7-694 55309 2-15/16 III 4-3/16 2-3/8 4-1/2 2-1/16 3-5/16 2-3/8 3-3/8 7.60 5.5312 3-1/4 III 4-3/8 2-3/8 4-1/2 2-1/16 3-5/16 2-3/8 3-3/8 6.46 2.27 7-6100 55313 3-1/8 III 4-3/8 2-3/8 4-1/2 2-1/16 3-5/16 2-3/8 3-3/8 7.12 3.22 7-6100 55313 3-3/8 III 4-3/8 2-3/8 4-1/2 2-1/16 3-5/16 2-3/8 3-3/8 6.46 2.27 7-6105 55312 3-1/4 III 4-3/4 2-3/8 5-3/8 1-1/2 2-1/6 3-5/16 2-3/8 3-3/8 7.12 3.22 7-6106 55313 3-3/8 III 4-3/4 2-3/8 5-1/8 2-1/4 3-5/16 2-3/8 3-3/8 6.46 2.27 7-6105 55312 3-1/4 III 4-3/8 2-3/8 5-1/8 2-3/8 3-1/3/2 2-3/2 2-3/4 2-7/8 9.06 4.11 7-6116 55315 3-5/8 III 5-1/6 2-3/8 5-1/8 2-3/8 3-2/3/2 2-3/4 2-1/6 13-5/6 2-3/8 3-3/8 6.46 2-3/8 7-6120 55000 3-3/4 III 5-1/6 2-3/8 5-1/8 2-3/8 3-2/3/2 2-3/8 3-3/8 11.22 5.06 7-6130 54248 4-1/16 III 5-3/8 2-3/8 5-1/8 2-3/8 3-2/3/2 2-3/8 3-3/8 11.22 5.06 7-6130 54248 4-1/16 III 5-3/8 2-3/8 5-1/8 2-3/8 3-2/3/2 2-3/8 3-3/8 11.22 5.06 7-6130 54248 4-1/16 III 5-3/8 2-3/8 5-1/1/2 2-9/16 3-25/32 3-3/8 3-5/6 15.06 7.16 7-6130 54248 4-1/16 III 5-3/8 2-3/8 5-1/1/2 2-9/16 3-25/32 3-3/8 3-5/6 15.00 6.6 7-6132 54252 4-1/8 III 5-5/8 2-3/8 5-1/8 2-3/8 3-25/32 3-3/8 3-5/6 15.00 6.6 7-6133 54248 4-1/16 III 5-5/8 2-3/8 5-1	7-668												1.36
7-674   55304   2-5/16   III   3-1/2   2-3/8   3-3/8   1-1/2   2-5/32   1-3/4   2-1/2   3.38   1.5/6   55066   2-3/8   III   3-1/2   2-3/8   3-1/2   1-1/2   2-11/32   1-3/4   2-1/2   3.46   1.5/6   1.5/7   1.5/8   55305   2-7/16   III   3-1/2   2-3/8   3-1/2   1-1/2   2-11/32   1-3/4   2-1/2   4.00   1.5/7   1.5/8   55232   2-1/2   III   3-5/8   2-3/8   3-1/2   1-5/8   2-15/32   2-1/2   2-5/8   3.66   1.7/7   1.5/8   55232   2-1/2   2-5/8   3.66   1.7/7   1.5/8   55232   2-1/2   2-5/8   3.66   1.7/7   1.5/8   55232   2-9/16   III   3-5/8   2-3/8   3-1/2   1-5/8   2-15/32   2-9/16   2-5/8   3.66   1.7/7   1.5/8   55230   2-5/8   III   3-5/8   2-3/8   3-3/4   1-13/16   2-15/32   2-9/16   2-5/8   3.80   1.7/7   1.5/8   55205   2-3/4   III   3-7/8   2-3/8   3-3/4   1-13/16   2-15/32   2   2-7/8   5.94   2.5/7   1.5/8   55225   2-3/4   III   3-7/8   2-3/8   3-3/4   1-13/16   2-15/32   2   2-3/8   3-1/8   4.90   2.2/7   1.5/8   2-5/8   3.5/8   1-5/8   2-5/16   3-1/8		_											
7-678   55305   2-7/16   III   3-1/2   2-3/8   3-1/2   1-1/2   2-11/32   2-1/2   2-1/2   2-5/8   3.66   7-680   55232   2-1/2   III   3-5/8   2-3/8   3-5/8   2-1/5/8   2-15/32   2-1/2   2-5/8   3.66   1.76   2-5/8   3.66   1.76   2-5/8   3.66   1.76   2-5/8   3.66   1.76   2-5/8   3.66   1.76   2-5/8   3.66   1.76   2-5/8   3.66   1.76   2-5/8   3.66   1.76   2-5/8   3.66   1.76   2-5/8   3.66   1.76   2-5/8   3.66   1.76   2-5/8   3.66   1.76   2-5/8   3.66   1.76   2-5/8   3.66   1.76   2-5/8   3.66   1.76   2-5/8   3.66   1.76   2-5/8   3.60   1.76   2-6/8   3.60   1.76   2-6/8   3.60   1.76   2-6/8   3.60   1.76   2-6/8   3.60   1.76   2-6/8   3.60   1.76   2-6/8   3.60   1.76   2-6/8   3.60   1.76   2-6/8   3.60   1.76   2-6/8   3.60   1.76   2-6/8   3.60   1.76   2-6/8   3.60   1.76   2-6/8   3.60   1.76   2-6/8   3.60   1.76   2-6/8   3.60   1.76   2-6/8   3.60   1.76   2-6/8   3.60   1.76   2-6/8   3.60   1.76   2-6/8   3.60   1.76   2-6/8   3.60   2.76   3.60	7-674												1.53
7-682   55228   2-1/12   III   3-5/8   2-3/8   3-1/2   1-5/8   2-15/32   2-1/2   2-5/8   3.86   1.77   7-682   55228   2-9/16   III   3-5/8   2-3/8   3-5/8   1-5/8   2-15/32   2-9/16   2-5/8   3.70   1.68   7-684   55233   2-5/8   III   3-5/8   2-3/8   3-3/4   1-13/16   2-15/32   2   2-7/8   3.80   1.77   7-686   55306   2-11/16   III   3-7/8   2-3/8   3-3/4   1-13/16   2-15/32   2   2-7/8   3.80   1.77   7-689   55307   2-13/16   III   4   2-3/8   3-3/4   1-13/16   2-11/32   2   2-7/8   4.90   2.22   7-690   55308   2-7/8   III   4   2-3/8   4   1-13/16   2-11/16   2   3   6.40   2.24   7-692   55308   2-7/8   III   4   4-3/16   2-3/8   4   1-13/16   2-11/16   2   3   6.40   2.94   7-694   55309   2-15/16   III   4-3/16   2-3/8   4-1/8   2-1/32   2-11/16   2-15/16   3-1/8   5.96   2.77   7-696   55310   3   III   4-3/8   2-3/8   4-1/8   2-1/32   2-11/16   2-15/16   3-1/8   5.96   2.77   7-6100   55311   3-1/8   III   4-3/8   2-3/8   4-1/2   2-1/16   3-5/16   2-3/8   3-3/8   6.46   2.93   7-6104   55312   3-1/4   III   4-3/4   2-3/8   4-1/2   2-1/16   3-5/16   2-3/8   3-3/8   6.46   2.93   7-6105   55313   3-3/8   III   4-3/4   2-3/8   4-1/2   2-1/16   3-5/16   2-3/8   3-3/8   6.46   2.93   7-6108   55313   3-3/8   III   4-3/4   2-3/8   4-1/2   2-1/4   3-5/16   2-1/2   2-39/64   7-94   3-6/16   7-6116   55315   3-5/8   III   4-3/4   2-3/8   5-5/16   2-1/4   3-5/16   2-1/2   2-3/8   3-8/8   6.46   2-3/8   7-6112   55313   3-3/4   III   5-1/6   2-3/8   5-1/8   2-3/8   3-2/1/32   2-3/4   2-1/6   3-1/6   10.50   7-6120   55000   3-3/4   III   5-3/6   2-3/8   5-1/8   2-3/8   3-2/3/2   2-3/4   2-5/8   3-5/32   11.22   5.06   7-6122   55137   3-13/16   III   5-5/8   2-3/8   5-1/4   2-9/16   3-25/32   2-3/4   3-15/6   11.66   5.06   7-6122   55137   3-13/16   III   5-5/8   2-3/8   5-1/4   2-9/16   3-25/32   2-3/4   3-15/6   11.66   5.06   7-6122   55137   3-13/16   III   5-5/8   2-3/8   5-1/2   2-9/16   3-25/32   2-3/4   3-15/6   11.66   5.06   7-6132   54252   4-1/8   III   5-5/8   2-3/8   5-1/8   2-3/8   3-25/32   2-	7-676			Ш									1.57
7-682         55228         2-9/16         III         3-5/8         2-3/8         3-5/8         1-5/8         2-15/32         2-9/16         2-5/8         3.70         1.68           7-684         55230         2-5/8         IIII         3-5/8         2-3/8         3-3/4         1-5/8         2-15/32         2         2-7/8         3.80         1.77           7-688         55225         2-3/8         IIII         3-7/8         2-3/8         3-3/4         1-13/16         2-15/32         2         2-7/8         5.94         2.76           7-690         55307         2-13/16         III         4         2-3/8         4         1-13/16         2-11/16         2         3         6.40         2.90           7-692         55307         2-17/16         III         4         2-3/8         4-1/4         2-1/16         2-11/16         2         3         6.40         2.90           7-692         55309         2-15/16         III         4         2-3/8         4-1/4         2-1/10         2-11/16         2-15/16         3-1/8         18         2.8           7-694         55310         3         III         4-3/8         2-3/8         4-1/2         <	7-678												1.81
7-684         55233         2-5/8         III         3-5/8         2-3/8         3-3/4         1-5/8         2-5/16         1-7/8         2-5/8         3.80         1.77           7-686         55306         2-11/16         III         3-7/8         2-3/8         3-3/4         1-13/16         2-15/32         2         2-7/8         5.94         2.22           7-680         55307         2-13/16         III         4         2-3/8         4         1-13/16         2-11/16         2         3         6.40         2.92           7-692         55308         2-7/8         III         4         2-3/8         4         1-13/16         2-11/16         2         3         6.40         2.92           7-699         55308         2-7/8         III         4         2-3/8         4-1/4         2-1/12         2-11/16         2-15/16         3-1/8         7.06         2.57           7-699         55310         3-1/4         III         4-3/8         2-3/8         4-1/4         2-1/16         3-5/16         2-3/8         3-3/8         7.06         2.23         3-3/8         7.12         3.23           7-6104         55312         3-1/4         III         <													1.68
7-688   55225   2-3/4   III   3-7/8   2-3/8   3-3/4   1-13/16   2-21/32   2-3/4   2-7/8   4.90   2.22   2-7/600   55307   2-13/16   III   4   2-3/8   4   1-13/16   2-11/16   2   3   6.40   2.98   7-692   55309   2-15/16   III   4-3/16   2-3/8   4-1/8   2-1/32   2-11/16   2-15/16   3-1/8   5.96   2.70   2-76100   55310   3   III   4-3/8   2-3/8   4-1/4   2-1/16   3-5/16   2-3/8   3-3/8   6.46   2.98   2-7/6100   55311   3-1/8   III   4-3/8   2-3/8   4-1/4   2-1/16   3-5/16   2-3/8   3-3/8   6.46   2.98   2-7/6100   55312   3-1/4   III   4-3/8   2-3/8   4-1/4   2-1/16   3-5/16   2-3/8   3-3/8   6.46   2.98   2-7/6100   55313   3-3/8   III   4-3/8   2-3/8   4-1/2   2-1/16   3-5/16   2-3/8   3-3/8   6.46   2-3/8   2-7/6100   55313   3-3/8   III   4-2/3/32   2-3/8   4-1/2   2-1/16   3-1/32   2-3/8   3-3/8   7.12   3.25   7-6110   55313   3-3/8   III   4-3/4   2-3/8   5-3/6   2-1/4   3-5/16   2-1/2   2-3/964   7.94   3.60   7-6120   55313   3-3/8   III   4-3/4   2-3/8   5   2-5/16   3-11/32   2-1/2   2-3/964   7.94   3.60   7-6120   55313   3-3/4   III   4-3/4   2-3/8   5-5/16   2-7/16   3-13/32   2-3/4   2-1/32   2-5/8   3.60   4.17   7-6120   55090   3-3/4   III   5-1/16   2-3/8   5-1/8   2-3/8   3-21/64   2-5/8   3-23/64   11.10   5.06   7-6120   55125   3-15/16   III   5-3/16   2-3/8   5-1/3   2-9/16   3-25/32   2-3/4   3-1/8   II   2-3/8   5-3/16   2-9/16   3-25/32   3-3/4   3-1/8   11.24   5.10   7-6120   55125   3-15/16   III   5-3/8   2-3/8   5-1/1/2   2-9/16   3-25/32   2-7/8   3-15/64   15.06   7.10   7-6124   55125   3-15/16   III   5-3/8   2-3/8   5-1/1/2   2-9/16   3-25/32   2-7/8   3-15/64   15.06   7.10   7-6132   54226   4-1/8   III   5-3/8   2-3/8   5-1/1/2   2-9/16   3-25/32   2-7/8   3-15/64   15.06   7.10   7-6132   54225   4-1/8   III   5-3/8   2-3/8   5-1/1/2   2-9/16   3-25/32   2-7/8   3-33/64   15.06   7.10   7-6132   54225   4-1/8   III   5-3/8   2-3/8   5-9/16   2-9/16   3-25/32   3-1/8   3-3/64   15.06   7.10   7-6132   54225   4-1/8   III   5-3/8   2-3/8   5-9/16   2-9/16   3-25/32   3-1/	7-684	_											1.72
7-690 55307 2-13/16 III 4 2-3/8 4 1-13/16 2-11/16 2 3 6.40 2.90   7-692 55308 2-7/8 III 4 2-3/8 4 1-13/16 2-11/16 2 3 6.18 2.80   7-693 55309 2-15/16 III 4 2-3/8 2-3/8 4-1/8 2-1/32 2-11/16 2-15/16 3-1/8 5.96 2.80   7-606 55310 3 III 4-3/8 2-3/8 4-1/4 2-1/16 3-5/16 2-3/8 3-3/8 7.06 3.20   7-6100 55311 3-1/8 III 4-3/8 2-3/8 4-1/4 2-1/16 3-5/16 2-3/8 3-3/8 6.46 2.93   7-6100 55311 3-1/4 III 4-3/8 2-3/8 4-1/4 2-1/16 3-5/16 2-3/8 3-3/8 6.46 2.93   7-6100 55313 3-3/8 III 4-2/3/2 2-3/8 4-1/4 2-1/16 3-5/16 2-3/8 3-3/8 6.46 2.93   7-6100 55313 3-3/8 III 4-2/3/2 2-3/8 4-1/4 2-1/16 3-5/16 2-3/8 3-3/8 7.12 3.23   7-6100 55313 3-3/8 III 4-2/3/2 2-3/8 4-5/8 2-1/4 3-5/16 2-1/2 2-3/8 6.46 2.93   7-6102 55314 3-1/2 III 4-3/4 2-3/8 5-5/16 2-1/4 3-11/32 2-3/8 2-1/9/2 10.50 4.76   7-6112 55314 3-1/2 III 4-3/4 2-3/8 5-5/16 2-1/4 3-11/32 2-5/8 2-19/32 10.50 4.76   7-6120 55090 3-3/4 III 5-1/16 2-3/8 5-1/8 2-3/8 3-1/4 2-5/8 3-5/32 11.22 5.08   7-6124 55100 3-7/8 III 5-1/4 2-3/8 5-1/4 2-9/16 3-25/32 2-3/4 3-1/8 11.24 5.10   7-6124 55100 3-7/8 III 5-1/4 2-3/8 5-1/4 2-9/16 3-25/32 2-3/4 3-1/8 11.24 5.10   7-6125 55127 3-15/16 III 5-3/8 2-3/8 5-1/4 2-9/16 3-25/32 2-3/4 3-1/8 11.24 5.10   7-6126 55125 3-15/16 III 5-3/16 2-3/8 5-1/4 2-9/16 3-25/32 2-3/8 3-3/16 10.76 4.88   7-6128 55124 4 III 5-3/8 2-3/8 5-1/2 2-9/16 3-25/32 2-7/8 3-15/64 15.60   7-6130 54248 4-1/16 III 5-3/8 2-3/8 5-1/2 2-9/16 3-25/32 2-7/8 3-15/64 15.60   7-6130 54248 4-1/16 III 5-3/8 2-3/8 5-1/2 2-9/16 3-25/32 2-7/8 3-15/64 15.60   7-6130 54248 4-1/16 III 5-3/8 2-3/8 5-1/2 2-3/8 3-25/32 2-7/8 3-15/64 15.60   7-6130 54248 4-1/4 III 5-3/8 2-3/8 5-1/2 2-5/8 3-25/32 3-1/8 3-3/64 15.00   7-6146 54259 4-1/8 III 5-5/8 2-3/8 5-1/3 2-3/8 3-25/32 3-1/8 3-3/64 15.00   7-6148 54279 4-3/8 III 5-1/2 2-3/8 5-3/4 2-5/8 3-25/32 3-1/8 3-3/32 19.00   7-6148 54280 4-9/16 III 5-5/8 2-3/8 6-2-3/8/6 3-25/32 3-1/8 3-3/32 19.00   7-6148 54280 4-9/16 III 5-5/8 2-3/8 6-2-3/8/6 3-25/32 3-1/8 3-3/32 19.00   7-6148 54280 4-9/16 III 5-5/8 5-6/8 2-3/8 6-2-25/8 3-25/32 3-1/8 3-3/32 2-2/8 2-2/8 3-1/8 3-3	7-686 7-688												2.69 2.22
7-694 55309 2-15/16 III 4-3/16 2-3/8 4-1/8 2-1/32 2-11/16 2-15/16 3-1/8 5.96 2.76 7-696 55310 3 III 4-3/8 2-3/8 4-1/4 2-1/16 3-5/16 2-3/8 3-3/8 7.06 2.76 7-6100 55311 3-1/8 III 4-3/8 2-3/8 4-1/4 2-1/16 3-5/16 2-3/8 3-3/8 7.06 2.36 7-6104 55312 3-1/4 III 4-3/8 2-3/8 4-1/2 2-1/16 3-1/32 2-3/8 3-3/8 7.12 3.25 7-6108 55313 3-3/8 III 4-23/32 2-3/8 4-5/8 2-1/4 3-5/16 2-1/2 2-3/64 7.04 7-6108 55313 3-3/8 III 4-23/32 2-3/8 4-5/8 2-1/4 3-5/16 2-1/2 2-3/64 7.04 7-6108 55313 3-3/8 III 4-3/4 2-3/8 5-2/14 3-1/1/32 2-1/2 2-5/8 9.06 4.77 7-6116 55315 3-5/8 III 4-3/4 2-3/8 5-2/16 3-11/32 2-1/2 2-5/8 9.06 4.77 7-6116 55315 3-5/8 III 4-3/4 2-3/8 5-5/16 2-7/16 3-13/32 2-3/4 2-15/16 13.30 6.03 7-6120 55000 3-3/4 III 5-1/16 2-3/8 5-3/8 2-3/8 3-21/64 2-5/8 3-5/32 11.22 5.06 7-6120 55100 3-7/8 III 5-1/16 2-3/8 5-1/8 2-3/8 3-25/32 2-3/4 3-1/8 11.24 5.16 7-6120 55100 3-7/8 III 5-5/16 2-3/8 5-1/4 2-9/16 3-25/32 3-3/16 10.76 4.88 7-6128 55100 3-7/8 III 5-3/8 2-3/8 5-1/4 2-9/16 3-25/32 3-3/64 15.30 6.03 7-6130 54248 4-1/16 III 5-3/8 2-3/8 5-1/4 2-9/16 3-25/32 2-3/8 3-3/64 15.30 6.03 7-6130 54248 4-1/16 III 5-3/8 2-3/8 5-1/2 2-9/16 3-25/32 3-3/64 15.30 6.03 7-6130 54248 4-1/16 III 5-3/8 2-3/8 5-1/2 2-9/16 3-25/32 3-3/8 3-5/64 15.60 7.10 7-6130 54248 4-1/16 III 5-3/8 2-3/8 5-1/2 2-9/16 3-25/32 3-3/8 3-5/16 10.76 4.88 7-6132 54252 4-1/8 III 5-3/8 2-3/8 5-1/2 2-9/16 3-25/32 3-3/8 3-5/16 10.76 4.88 7-6132 54252 4-1/8 III 5-3/8 2-3/8 5-1/2 2-9/16 3-25/32 3-3/8 3-5/16 10.76 4.88 7-6132 54252 4-1/8 III 5-3/8 2-3/8 5-1/2 2-9/16 3-25/32 3-3/8 3-5/16 10.76 4.88 7-6132 54252 4-1/8 III 5-3/8 2-3/8 5-1/2 2-9/16 3-25/32 3-3/8 3-5/16 10.76 4.88 7-6144 55055 4-1/2 III 5-5/8 2-3/8 6 2-3/8/3 3-25/32 3-1/8 3-5/16 18.04 18.06 18.04 18.16 18.	7-690	_											2.90
7-696   55310   3	7-692												2.80
7-6104 55311 3-1/8 III 4-3/8 2-3/8 4-1/4 2-1/16 3-5/16 2-3/8 3-3/8 6.46 2.93 7-6104 55312 3-1/4 III 4-3/8 2-3/8 4-1/2 2-1/16 3-1/32 2-3/8 3-3/8 7.12 3.25 7-6108 55313 3-3/8 III 4-23/32 2-3/8 4-5/8 2-1/4 3-1/32 2-3/8 2-3/64 7.94 7-6112 55314 3-1/2 III 4-3/4 2-3/8 4-3/4 2-1/4 3-11/32 2-1/2 2-3/64 7.94 7-6116 55315 3-5/8 III 4-3/4 2-3/8 5-5/16 2-7/16 3-11/32 2-5/8 2-19/32 10.50 7-6116 55315 3-5/8 III 4-3/4 2-3/8 5-5/16 2-7/16 3-11/32 2-5/8 2-19/32 10.50 7-6120 55090 3-3/4 III 5-1/16 2-3/8 5-3/8 2-17/32 3-9/16 2-5/8 3-5/32 11.22 7-6120 55137 3-13/16 III 5-1/16 2-3/8 5-3/8 2-17/32 3-9/16 2-5/8 3-23/64 11.16 5.06 7-6124 55100 3-7/8 III 5-1/4 2-3/8 5-1/4 2-9/16 3-25/32 3-3/3 3-3/16 11.76 5.06 7-6124 55100 3-7/8 III 5-1/4 2-3/8 5-1/4 2-9/16 3-25/32 3-3/3 3-3/16 10.76 4.88 7-6128 55124 4 III 5-3/8 2-3/8 5-1/2 2-9/16 3-25/32 2-7/8 3-15/64 15.60 7-6128 55124 4 III 5-3/8 2-3/8 5-1/2 2-9/16 3-25/32 3-3/3 3-3/16 10.76 4.88 7-6130 54248 4-1/16 III 5-3/8 2-3/8 5-1/2 2-9/16 3-25/32 2-7/8 3-15/64 15.60 7-6130 54248 4-1/16 III 5-3/8 2-3/8 5-1/2 2-9/16 3-25/32 3-3/3 3-3/16 10.76 4.88 7-6130 54248 4-1/16 III 5-1/2 2-3/8 5-1/2 2-1/32 2-1/3/2 3-25/32 3-3/3 3-3/16 10.76 4.88 7-6130 54248 4-1/16 III 5-1/2 2-3/8 5-1/2 2-1/32 2-1/3/2 3-25/32 3-3/3 3-3/64 15.30 6.9. 7-6136 55101 4-1/4 III 5-1/2 2-3/8 5-1/2 2-1/3/2 3-25/32 3-3/8 3-5/16 17.18 7-6136 55101 4-1/4 III 5-1/2 2-3/8 5-3/16 2-21/32 3-25/32 3-3/8 3-5/16 17.18 7-6140 54279 4-3/8 III 5-1/2 2-3/8 5-3/16 2-21/32 3-25/32 3-3/8 3-5/16 18.04 8.18 7-6140 54279 4-3/8 III 5-5/8 2-3/8 6 2-3/8/4 3-25/32 3-1/8 3-3/9/4 18.06 8.18 7-6145 55050 4-9/16 III 5-5/8 2-3/8 6 2-3/8/4 3-25/32 3-1/8 3-3/9/4 18.06 8.18 7-6146 54280 4-9/16 III 5-5/8 2-3/8 6 2-3/8/4 3-25/32 3-1/8 3-3/3/2 19.00 8.76 7-6146 54280 4-9/16 III 5-5/8 5-8/8 2-3/8 6 2-3/8/4 3-2/3/2 3-1/8 3-3/3/2 19.00 8.76 7-6146 54280 4-9/16 III 5-5/8 5-8/8 2-3/8 6 2-3/8/4 3-2/3/2 3-1/2 3-3/3/2 22.00 10.0 7-6148 55002 4-5/8 III 5-3/4 5 6-6/8 2-3/8/4 3-2/3/2 3-1/2 3-3/3/2 22.00 10.0 7-6148 55002 4-5/8 III 5-3/4 5 6-6/8 2-5/8/4 3-2/3/2 3-1/2 3-3/3/2 2													
7-6104   55312   3-1/4   III   4-3/8   2-3/8   4-1/2   2-1/16   3-1/32   2-3/8   3-3/8   7.12   3.23   7-6108   55313   3-3/8   III   4-28/32   2-3/8   4-3/8   2-1/4   3-5/16   2-1/2   2-39/64   7.94   3-7/6112   55314   3-1/2   III   4-3/4   2-3/8   5-5/16   3-11/32   2-1/2   2-5/8   2-19/82   10.50   4.76   7-6112   55315   3-5/8   III   4-3/4   2-3/8   5-5/16   2-7/16   3-13/32   2-3/4   2-15/16   13.30   6.03   7-6120   55090   3-3/4   III   5-1/16   2-3/8   5-1/8   2-3/8   3-21/64   2-5/8   3-5/32   11.22   5.03   3-3/64   11.12   5.14   3-13/22   3-1/8   3-5/32   11.22   5.03   3-3/64   11.12   5.14   3-13/22   3-1/8   3-5/32   3-1/6   3-13/22   3-1/8   3-5/32   3-1/6   3-13/22   3-1/8   3-3/64   3-1/8	7-696												2.93
7-6112 55314 3-1/2 III 4-3/4 2-3/8 4-3/4 2-1/4 3-11/32 2-1/2 2-5/8 9.06 4.11 7-6116 55315 3-5/8 III 4-3/4 2-3/8 5 7-6120 55090 3-3/4 III 5-1/16 2-3/8 5-5/16 2-7/16 3-13/32 2-3/8 3-5/36 11.22 5.00 7-6122 55137 3-13/16 III 5-1/16 2-3/8 5-1/8 2-3/8 3-21/64 2-5/8 3-5/36 11.22 5.00 7-6122 55137 3-13/16 III 5-1/16 2-3/8 5-1/8 2-3/8 3-21/64 2-5/8 3-5/36 11.22 5.00 7-6124 55100 3-7/8 III 5-1/4 2-3/8 5-1/8 2-3/8 3-21/64 2-5/8 3-23/64 11.16 5.06 7-6124 55100 3-7/8 III 5-1/4 2-3/8 5-1/2 2-9/16 3-25/32 3-3/16 10.76 4.88 7-6126 55125 3-15/16 III 5-5/16 2-3/8 5-1/2 2-9/16 3-25/32 2-7/8 3-3/16 10.76 4.88 7-6130 55124 4 III 5-3/8 2-3/8 5-1/2 2-9/16 3-25/32 2-7/8 3-3/64 15.66 7.10 7-6130 54248 4-1/16 III 5-3/8 2-3/8 5-1/2 2-9/16 3-25/32 2-7/8 3-3/64 15.66 7.10 7-6130 54248 4-1/16 III 5-3/8 2-3/8 5-1/2 2-9/16 3-25/32 3-3-3/64 15.66 7.10 7-6130 54248 4-1/16 III 5-3/8 2-3/8 5-1/2 2-9/16 3-25/32 3-3-3/46 15.66 7.10 7-6130 54248 4-1/16 III 5-1/2 2-3/8 5-1/2 2-9/16 3-25/32 3-3/8 3-3/64 15.00 6.94 7-6130 54248 4-1/16 III 5-1/2 2-3/8 5-1/2 2-9/16 3-25/32 3-3/8 3-3/64 15.00 6.94 7-6130 54248 4-1/16 III 5-1/2 2-3/8 5-1/2 2-9/16 3-25/32 3-1/8 3-3/64 15.00 6.94 7-6130 54248 4-1/16 III 5-1/2 2-3/8 5-13/16 2-21/32 3-25/32 3-1/8 3-3/64 15.00 6.94 7-6130 54248 4-1/16 III 5-1/2 2-3/8 5-3/4 2-5/8 3-25/32 3-1/8 3-3/64 15.00 6.94 7-6130 54279 4-3/16 III 5-1/2 2-3/8 5-3/4 2-5/8 3-25/32 3-1/8 3-3/16 11.04 6.816 7-6140 54279 4-3/8 III 5-5/8 2-3/8 6 2-3/8 6 2-3/8 3-25/32 3-1/8 3-3/64 18.00 8.15 7-6140 54279 4-3/8 III 5-5/8 2-3/8 6 2-3/8 6 2-5/8 3-25/32 3-1/8 3-3/9/2 19.10 8.75 7-6146 54280 4-9/16 III 5-5/8 2-3/8 6 2-3/8 6 2-5/8 3-25/32 3-1/8 3-3/32 19.00 8.62 7-6146 54280 4-9/16 III 5-5/8 2-3/8 6 2-3/8 6 2-5/8 3-25/32 3-1/8 3-3/32 19.00 8.62 7-6146 54280 4-9/16 III 5-5/8 2-3/8 6 2-3/8 6 2-5/8 3-25/32 3-1/8 3-3/32 19.00 8.62 7-6146 54280 4-9/16 III 5-5/8 2-3/8 6 2-3/8 6 2-5/8 3-25/32 3-1/8 3-3/32 22.00 10.0	7-6104												3.23
7-6116   55315   3-5/8   III   4-3/4   2-3/8   5   2-5/16   3-11/32   2-5/8   2-19/32   10.50   4.76   7-6118   54276   3-11/16   III   4-3/4   2-3/8   5-5/16   2-7/16   3-13/32   2-3/4   2-15/16   13.30   6.05   7-6120   55197   3-13/16   III   5-11/6   2-3/8   5-1/8   2-3/8   3-21/64   2-5/8   3-23/64   11.16   5.06   7-6124   55100   3-7/8   III   5-1/16   2-3/8   5-1/4   2-9/16   3-25/32   2-3/4   3-1/8   11.24   5.10   7-6126   55125   3-15/16   III   5-5/16   2-3/8   5-1/4   2-9/16   3-25/32   2-3/4   3-1/8   11.24   5.10   7-6126   55125   3-15/16   III   5-5/16   2-3/8   5-1/4   2-9/16   3-25/32   2-3/4   3-1/8   11.24   5.10   7-6128   55124   4   III   5-3/8   2-3/8   5-1/2   2-9/16   3-25/32   2-7/8   3-3/16   10.76   4.88   7-6128   55124   4   III   5-3/8   2-3/8   5-1/2   2-9/16   3-25/32   2-7/8   3-15/64   15.60   7.10   7-6136   54248   4-1/16   III   5-3/8   2-3/8   5-1/2   2-9/16   3-25/32   2-7/8   3-15/64   15.60   7.65   7-6136   54252   4-1/8   III   5-3/8   2-3/8   5-1/2   2-9/16   3-25/32   2-7/8   3-7/32   16.96   7.65   7-6136   54278   4-5/16   III   5-1/2   2-3/8   5-3/4   2-2/8   3-13/62   3-3/8   3-5/16   17.18   7-6136   54278   4-5/16   III   5-1/2   2-3/8   5-3/1/6   2-21/32   3-25/32   3-3/8   3-5/16   17.18   7-6146   54279   4-3/8   III   5-5/8   2-3/8   6   2-3/64   3-25/32   3-1/8   3-39/64   18.06   8.15   7-6146   54280   4-9/16   III   5-5/8   2-3/8   6   2-43/64   3-25/32   3-1/8   3-33/62   19.00   8.76   7-6146   54280   4-9/16   III   5-5/8   2-3/8   6   2-25/8   3-25/32   3-1/8   3-33/2   19.00   8.76   7-6146   54280   4-9/16   III   5-5/8   2-3/8   6   2-25/8   3-25/32   3-1/8   3-33/2   19.00   8.76   7-6146   54280   4-9/16   III   5-5/8   2-3/8   6   2-25/8   3-25/32   3-1/8   3-33/32   19.00   8.76   7-6165   54282   4-7/8   III   6-1/2   5   7   3   4-3/16   3-1/2   3-3/32   21.60   9.80   7-6156   54282   4-7/8   III   6-1/2   5   7   3   3-9/16   4-4/64   4-1/4   2-9/8   11.76   7-6160   54282   4-7/8   III   6-1/2   5   7   3   3-9/16   4-4/64   4-1/4   2	7-6108												3.60
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7-6130 54248 4-1/16 III 5-3/8 2-3/8 5-1/2 2-15/32 2-19/32 3 3-3/64 15.30 6.94 7-6132 54252 4-1/8 III 5-3/8 2-3/8 5-9/16 2-9/16 3-25/32 2-7/8 3-7/32 16.96 7.66 7.66 55/101 4-1/4 III 5-1/2 2-3/8 6 2-3/8/6 3-25/32 2-7/8 3-7/32 16.96 7.66 7.66 55/101 4-1/4 III 5-1/2 2-3/8 5-3/4 2-5/8 3-25/32 3-1/8 3-5/16 17.18 7.75 7-6136 55/101 4-1/4 III 5-1/2 2-3/8 5-13/16 2-21/32 3-25/32 3-1/8 3-5/16 17.18 7.75 7-6136 55/101 4-1/4 III 5-1/2 2-3/8 5-13/16 2-21/32 3-25/32 3-1/8 3-39/64 18.06 8.15 7-6140 54279 4-3/8 III 5-5/8 2-3/8 5-27/32 2-5/8 3-25/32 3-1/8 3-39/64 18.06 8.15 7-6144 55095 4-1/2 III 5-5/8 2-3/8 6 2-3/8/6 3-25/32 3-1/8 3-39/64 18.06 8.15 7-6144 55095 4-1/2 III 5-5/8 2-3/8 6 2-3/8/6 3-25/32 3-1/8 3-19/32 19.00 8.62 7-6146 54280 4-9/16 III 5-5/8 2-3/8 6 2-5/8 3-25/32 3-1/8 3-13/32 19.00 8.62 7-6146 54280 4-9/16 III 5-5/8 2-3/8 6 2-3/8/8 3-1/2 3-3/8 3-17/2 2-20/8 2-20/8 3-25/32 3-1/8 3-3/3/2 2-20/8 6-1/2 2-3/4 3-1/2 3-3/8 3-17/2 2-20/8 2-20/8 6-1/2 2-3/4 3-1/2 3-3/8 3-17/2 2-20/8 2-20/8 6-1/2 2-3/4 3-1/2 3-3/8 3-17/2 2-20/8 6-1/2 2-3/4 3-1/2 3-3/8 3-17/2 2-20/8 6-1/2 2-3/4 3-1/2 3-3/8 3-17/2 2-20/8 6-1/2 2-3/4 3-1/2 3-3/8 3-17/2 2-20/8 6-1/2 2-3/4 3-1/2 3-3/8 3-17/2 2-20/8 6-1/2 2-3/4 3-1/2 3-3/8 3-17/2 2-20/8 6-1/2 2-3/4 3-1/2 3-3/8 3-17/2 2-20/8 6-1/2 2-3/4 3-1/2 3-3/8 3-17/2 2-20/8 6-1/2 2-3/4 3-1/2 3-3/8 3-17/2 2-20/8 6-1/2 2-3/4 3-1/2 3-3/8 3-17/2 2-20/8 6-1/2 2-3/4 3-1/2 3-3/8 3-17/2 2-20/8 6-1/2 2-3/4 3-1/2 3-3/8 3-17/2 3-3/	7-6124												4.88
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	7-6128			Ш			5-1/2					15.66	7.10
7-6134 54277 4-3/16 III 5-1/2 2-3/8 6 2-33/64 3-55/64 3 3-41/64 17.76 8.06 7-6136 55101 4-1/4 III 5-1/2 2-3/8 5-3/4 2-5/8 3-25/32 3-1/8 3-5/16 17.18 7.76 18.5 54278 4-5/16 III 5-1/2 2-3/8 5-13/16 2-21/32 3-25/32 3-3/8 3-5/16 18.04 8.18 7-6140 54279 4-3/8 III 5-5/8 2-3/8 5-27/32 2-5/8 3-25/32 3-1/8 3-39/64 18.06 8.18 7-6142 54335 4-7/16 III 5-5/8 2-3/8 6 2-43/64 3-25/32 3-1/8 3-39/64 18.06 8.18 7-6144 55095 4-1/2 III 5-5/8 2-3/8 6 2-28/8 3-25/82 3-1/8 3-13/32 19.00 8.18 7-6146 54280 4-9/16 III 5-5/8 5-6 6-1/2 2-3/4 3-1/2 3-3/8 3-13/32 19.00 8.76 7-6146 54280 4-9/16 III 5-5/8 5-6 6-1/2 2-3/4 3-1/2 3-3/8 3-13/32 19.00 8.76 7-6146 55102 4-5/8 III 5-3/4 5 6-1/2 2-3/4 3-25/32 3-1/8 3-25/32 2.2.0 10.0 7-6148 55102 4-5/8 III 5-3/4 5 6-3/3/2 3-1/16 3-25/32 3-1/2 3-23/32 2.160 9.80 7-6156 54282 4-7/8 III 5-3/4 5 6-5/8 2-5/764 3-29/32 3-1/2 3-23/32 2.2.0 10.0 9.80 7-6156 54283 4-7/8 III 5-3/4 5 6-5/8 2-5/764 3-29/32 3-1/2 3-23/32 2.2.0 10.0 9.80 7-6156 54282 4-7/8 III 5-3/4 5 7 3 4-3/16 3-1/2 4-7/32 24.88 11.2 7-61676 54284 5-3/8 III 6-1/2 5 7 3 3-9/16 4-5/16 4-43/64 4-1/4 25.94 11.7 25.94 11.7													6.94
7-6136 55101 4-1/4 III 5-1/2 2-3/8 5-3/4 2-5/8 3-25/32 3-1/8 3-5/16 17.18 7.75/6136 54278 4-5/16 IIII 5-1/2 2-3/8 5-3/16 2-21/32 3-25/32 3-3/8 3-5/16 18.04 8.18/7-6140 54279 4-3/8 III 5-5/8 2-3/8 5-27/32 2-5/8 3-25/32 3-1/8 3-39/64 18.06 8.18/7-6142 54335 4-7/16 III 5-5/8 2-3/8 6 2-5/8 3-25/32 3-1/8 3-39/64 18.06 8.18/7-6142 55095 4-1/2 III 5-5/8 2-3/8 6 2-5/8 3-25/32 3-1/8 3-39/32 19.10 8.62/7-6146 54280 4-9/16 III 5-5/8 5 6-1/2 2-3/4 3-1/2 3-3/8 3-17/32 22.20 10.0 7-6148 55102 4-5/8 III 5-5/4 5 6-13/32 3-1/16 3-25/32 3-1/8 3-25/32 2.0-1/2 3-23/32 20.94 9.76-6156 54282 4-7/8 III 5-5/4 5 6-5/8 2-5/764 3-29/32 3-1/2 3-23/32 20.94 9.76-6156 54282 4-7/8 III 6-1/2 5 7 3 4-3/16 3-1/2 3-3/16 2-2.2 4-8/8 III 6-1/2 5 7-1/2 3-9/16 4-5/16 4-43/64 4-1/4 25.94 11.7													8.06
7-6140 54279 4-3/8 III 5-5/8 2-3/8 5-27/32 2-5/8 3-25/32 3-1/8 3-39/64 18.06 8.15 7-6142 54335 4-7/16 III 5-5/8 2-3/8 6 2-43/64 3-25/32 2-5/8 3-19/32 19.18 8.77 6-144 55095 4-9/16 III 5-5/8 2-3/8 6 2-5/8 3-25/32 3-1/8 3-13/32 19.00 8.62 7-6146 54280 4-9/16 III 5-5/8 5 6-1/2 2-3/4 3-1/2 3-3/8 3-17/32 22.20 10.0 7-6148 55102 4-5/8 III 5-3/4 5 6-1/2 2-3/4 3-1/2 3-3/8 3-17/32 22.20 10.0 7-6149 55102 4-5/8 III 5-3/4 5 6-1/2 2-3/4 3-1/2 3-2/32 2-1/2 3-2/3/2 22.0 10.0 7-6156 54282 4-7/8 III 6-3/4 5 7 3 3-29/32 3-1/2 3-23/32 22.20 10.0 7-6160 54283 5 III 6-1/2 5 7 3 4-3/16 3-1/2 4-7/2 24.88 11.2 7-6172 54284 5-3/8 III 6-1/2 5 7-1/2 3-9/16 4-5/16 4-43/64 4-1/4 25.94 11.7	7-6136												7.79
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	7-6138												8.18
7-6144   55095   4-1/2   III   5-5/8   2-3/8   6   2-5/8   3-25/32   3-1/8   3-13/32   19.00   8.62   7-6146   54280   4-9/16   III   5-5/8   5   6-1/2   2-3/4   3-1/2   3-3/8   3-17/32   22.20   10.0   7-6148   55102   4-5/8   III   5-3/4   5   6-13/32   3-1/16   3-25/32   3-1/8   3-25/32   21.60   7-6152   54281   4-3/4   III   5-3/4   5   6-5/8   2-57/64   3-29/32   3-1/2   3-23/32   20.94   7-6156   54282   4-7/8   III   6   5   7   3   3-29/32   3-1/2   3-31/2   22.26   10.1   7-6160   54283   5   III   6-1/4   5   7   3   4-3/16   3-1/2   4-7/32   24.88   11.2   7-6172   54284   5-3/8   III   6-1/2   5   7-1/2   3-9/16   4-5/16   4-43/64   4-1/4   25.94   11.7													
7-6146 54280 4-9/16 III 5-5/8 5 6-1/2 2-3/4 3-1/2 3-3/8 3-17/32 22.20 10.0 7-6148 55102 4-5/8 III 5-3/4 5 6-13/32 3-1/16 3-25/32 3-1/8 3-25/32 21.60 9.80 7-6152 54281 4-3/4 III 5-3/4 5 6-5/8 2-57/64 3-29/32 3-1/2 3-23/32 20.94 9.80 7-6156 54282 4-7/8 III 6 5 7 3 3-29/32 3-1/2 3-31/32 22.26 10.1 7-6160 54283 5 III 6-1/4 5 7 3 4-3/16 3-1/2 4-7/32 24.88 11.2 7-6172 54284 5-3/8 III 6-1/2 5 7-1/2 3-9/16 4-5/16 4-43/64 4-1/4 25.94 11.7													8.62
7-6152 54281 4-3/4 III 5-3/4 5 6-5/8 2-57/64 3-29/32 3-1/2 3-23/32 20.94 9.50 7-6156 54282 4-7/8 III 6-1/4 5 7 3 4-3/16 3-1/2 3-31/32 22.26 10.1 7-6160 54283 5 III 6-1/4 5 7 3 4-3/16 3-1/2 4-7/32 24.88 11.2 7-6172 54284 5-3/8 III 6-1/2 5 7-1/2 3-9/16 4-5/16 4-43/64 4-1/4 25.94 11.7			4-9/16				6-1/2						10.07
7-6156 54282 4-7/8 III 6 5 7 3 3-29/32 3-1/2 3-31/32 22.26 10.1 7-6160 54283 5 III 6-1/4 5 7 3 4-3/16 3-1/2 4-7/32 24.88 11.2 7-6172 54284 5-3/8 III 6-1/2 5 7-1/2 3-9/16 4-5/16 4-43/64 4-1/4 25.94 11.7	7-6148												9.80
7-6160 54283 5 III 6-1/4 5 7 3 4-3/16 3-1/2 4-7/32 24.88 11.2 7-6172 54284 5-3/8 III 6-1/2 5 7-1/2 3-9/16 4-5/16 4-43/64 4-1/4 25.94 11.7													9.50
7-6172   54284   5-3/8   III   6-1/2   5   7-1/2   3-9/16   4-5/16   4-43/64   4-1/4   25.94   11.7		_											11.29
/-6184   54285   5-3/4   III   6-1/2   5   8-1/4   3-9/16   4-1//32   4   4-9/32   31.08   14.1	7-6172	54284	5-3/8	Ш	6-1/2	5	7-1/2	3-9/16	4-5/16	4-43/64	4-1/4	25.94	11.77
	/-b184	54285	5-3/4	III	b-1/2	5	გ-1/4	3-9/16	4-1//32	4	4-9/32	31.08	14.10



# **Williams Tools**

### Impact Sockets, Deep Length, 6 Point

Fed. Spec.: GGG-W-660A; ANSI B107.2

• One of the most complete offerings of 1" drive deep length impact

sockets provides versatility for long stem bolts.



Cat. No.	EDP No.	Size (in)	Туре	A (in)	B (in)	C (in)	D (in)	E (in)	Bolt. Clear. Dia.(in)	F (in)	Lbs.	Kgs.
17-634	55167	1-1/16	Ť	3	2-1/8	1-3/4	3/4	1-13/16	3/4	7/8	2.68	1.22
17-636	55229	1-1/8	-1	3	2-1/8	1-13/16	3/4	1-13/16	13/16	7/8	2.68	1.22
17-640	55269	1-1/4	Ш	3-1/4	2-1/8	2-1/16	7/8	2-1/16	1-7/32	1	2.56	1.16
17-642	55230	1-5/16	II	3-1/4	2-1/8	2-1/16	7/8	2-1/16	1-1/8	1	2.46	1.12
17-644 17-646	55270 55271	1-3/8 1-7/16	II II	3-1/4 3-1/4	2-1/8	2-1/16 2-1/4	7/8 29/32	2-1/16 2-3/32	1-3/8 1-13/32	1 2-1/4	2.34	1.06
17-648	55227	1-1/2	III	3-1/2	2-1/4	2-3/8	1	2-11/32	1-15/32	2-1/2	2.82	1.28
17-652	55077	1-5/8	III	3-5/8	2-1/4	2-3/8	1	2-1/2	1-19/32	2-5/8	2.96	1.34
17-654	55273	1-11/16	Ш	3-5/8	2-3/8	2-1/2	1-1/8	2-7/16	1-21/32	2-5/8	3.24	1.47
17-656	55274	1-3/4	III	3-7/8	2-3/8	2-3/4	1-1/8	2-11/16	1-7/16	2-7/8	3.76	1.71
17-658 17-660	55275 55276	1-13/16 1-7/8	III	3-7/8 3-7/8	2-3/8 2-3/8	2-3/4 2-3/4	1-3/16 1-3/16	2-11/16 2-11/16	1-7/16 1-7/16	2-7/8 2-7/8	3.28 3.48	1.49 1.58
17-662	55277	1-15/16		4-1/8	2-3/8	3	1-1/4	2-11/16	1-7/16	3-1/8	3.74	1.70
17-664	55278	2	l iii	4-1/8	2-3/8	3	1-5/16	2-15/16	1-7/16	3-1/8	3.74	1.70
17-666	55279	2-1/16	III	3-7/8	2-3/8	3	1-5/16	2-15/16	1-1/2	3-1/8	4.18	1.90
17-668	55280	2-1/8	Ш	4-3/8	2-3/8	3-1/4	1-5/16	3-3/16	1-5/8	3-3/8	4.86	2.20
17-670	55281	2-3/16	III	4-3/8	2-3/8	3-1/4	1-1/2	3-3/16	1-5/8	3-3/8	4.64	2.10
17-672	55282	2-1/4	III	4-3/8	2-3/8	3-1/4	1-1/2	3-3/16	1-5/8	3-3/8	4.58	2.08
17-674 17-676	55283 55078	2-5/16 2-3/8	III	4-1/2 4-1/2	2-3/8 2-3/8	3-1/2 3-1/2	1-1/2 1-1/2	3-5/16 3-5/16	1-7/16 2	3-1/2 3-1/2	5.48 5.60	2.49 2.54
17-678	55088	2-7/16	III	4-1/2	2-3/8	3-1/2	1-1/2	3-7/32	1-3/4	3-1/2	6.78	3.08
17-680	55099	2-1/2	III	4-1/2	2-3/8	3-1/2	1-5/8	3	2-1/2	3-1/2	6.60	2.99
17-682	55133	2-9/16	III	4-7/8	2-3/8	3-5/8	1-5/8	3-1/2	2	3-7/8	5.86	2.66
17-684	55106	2-5/8	Ш		2-3/8	3-3/4	1-5/8	3-11/32	2	3-11/16	5.98	2.71
17-686	54297	2-11/16	III	4-11/16	2-3/8	3-3/4	1-13/16	2-1/2	2	3-11/16	7.14	3.24
17-688 17-690	55108	2-3/4 2-13/16	III	5-1/8 5-1/8	2-3/8 2-3/8	3-3/4 4	1-3/4 1-13/16	3-5/8 2-27/32	2	4-1/8 4-1/8	7.18 9.48	3.26 4.30
17-692	55136	2-7/8	III	4-7/8	2-3/8	4	1-13/16	3-9/16	2	3-7/8	9.40	4.26
17-694	55097	2-15/16	iii	4-7/8	2-3/8	4-1/8	2-1/32	2-11/16	2	3-7/8	9.18	4.16
17-696	55098	3	Ш	5-1/8	2-3/8	4-1/4	2-1/32	3-7/8	2-3/8	4-1/8	10.60	4.81
17-6100	55096	3-1/8	Ш	5-1/8	2-3/8	4-3/8	2-1/32	3-1/32	2-3/8	4-1/8	10.28	4.66
17-6104	55135	3-1/4	III	5-3/8	2-3/8	4-1/2	2-1/32	3-1/32	2-3/8	4-3/8	10.84	4.92
17-6108	54255 55104	3-3/8	III	5-1/2 5-1/2	2-3/8	4-5/8 4-3/4	2-1/4	3-5/16	2-1/2	4-1/2 4-1/2	12.52	5.68 6.35
17-6112 17-6116	55104	3-1/2	 	5-1/2	2-3/8	4-3/4 5	2-1/4 2-5/16	4-3/32 4-3/32	2-1/2 2-5/8	4-1/2 4-1/2	16.06	7.28
17-6118		3-11/16	iii		2-3/8	5-5/16	2-7/16	3-7/8	2-3/4	4-17/32	16.88	7.66
17-6120	54253	3-3/4	Ш	5-9/16	2-3/8	5-1/4	2-1/4	3-19/32	2-13/16	4-9/16	17.46	7.92
17-6122		3-13/16	III		2-3/8	5-3/8	2-17/32	4-11/32	2-5/8	4-31/32	17.98	8.16
17-6124	54263	3-7/8	III	5-9/16	2-3/8	5-1/4	2-9/16	3-5/8	3	4-9/16	16.62	7.54
17-6126 17-6128	54265 54268	3-15/16 4	III	6-1/16 6-1/8	2-3/8 2-3/8	5-1/2 5-1/2	2-13/32 2-17/32	4-13/32 4-3/32	3 2-7/8	5-1/16 5-1/8	15.74 22.12	7.14 10.03
17-6130	54300	4-1/16	iii	6-1/8	2-3/8	5-1/2	2-15/32	4-1/2	3	5-5/32	21.24	9.63
17-6132	54301	4-1/8	Ш	6-1/8	2-3/8	5-17/32	2-17/32	4-3/32	2-7/8	5-1/8	23.52	10.67
17-6134	54333	4-3/16	Ш	6-7/32	2-3/8	6	2-1/2	4-9/16	3	5-7/32	25.30	11.48
17-6136	54270	4-1/4	Ш	6-9/32	2-3/8	5-3/4	2-5/8	4-9/16	3-1/8	5-9/32	25.86	11.73
17-6138	54302	4-5/16	III	6-11/32	2-3/8	5-13/16	2-21/32	4-5/8	3-3/8	5-11/32	25.64	11.63
17-6140 17-6142	54303 54304	4-3/8 4-7/16	III	6-13/32 6-13/32	2-3/8	5-27/32	2-5/8 2-21/32	4-9/16 4-9/16	3-1/8 2-5/8	5-13/32 5-13/32	25.26 26.76	11.46 12.14
17-6144	54305	4-1/10		7	2-3/8	6	2-3/4	5	3-1/8	6	26.86	12.14
17-6144	54306	4-9/16	iii	7-1/8	3-1/4	6-1/2	2-3/4	4-19/32	3-3/8	6-1/8	26.26	
17-6148	54264	4-5/8	≡	7-1/8	3-1/4	6-13/16	2-13/16	4-3/32	3-1/2	6-1/8	29.36	
17-6152	54307	4-3/4	Ш	6-3/4	3-1/4	6-5/8	2-29/32	4-29/32	3-1/2	5-3/4	33.36	15.13
17-6156	54308	4-7/8	III	7-1/4	3-1/4	7	3	5-5/32	3-1/2	6-1/4	30.50	13.83
17-6160	54309	5	III	7-3/4	3-1/4	7	3	5-21/32	3-1/2	6-3/4		14.90
17-6172 17-6184	54310 54311	5-3/8 5-3/4	III	8 8	3-1/4 3-1/4	7-1/2 8-1/4	3-9/16 3-9/16	5-25/32 6-1/32	3-21/32 4	7 7	37.58 45.80	17.05
17-0104	J4011	J-J/4	1111	U	J-1/4	0-1/4	0-3/10	0-1/02	7	'	73.00	20.11

# 1-1/2" Drive Impact Drive Tools

### **Impact Adapter**

• Male drive end utilizes a thru hole which should be used with a retainer pin and O-ring or a Williams RET RING®.

Cat. No.		Square Female (in)	Square Male (in)		Lbs.	Kgs.
8-7	53193	1-1/2	1	4-1/4	5.10	2.31



RET RING® One-Piece Impact Socket Retainer
• Designed for quick application and positive retention of impact sockets to square or spline drives.

· Made from oil resistant material.

Cat. No.	EDP No.	Dia. (in)	Lbs.	Kgs.
8-1X	55334	2-7/8	.038	.017
8-2X 8-3X	55335 55336	3-3/8 3-7/8	.044	.020
8-4X	55337	4-3/8	.048	.022



### **Impact Retainer Pins**

 Should be used with 1-1/2" drive impact sockets and drive tools.

Cat. No.	EDP No.		· ,	Lbs.	Kgs.	For Use On
8-2E	53147	1/4	2-7/8	.94	.43	1-1/2": Fits all sizes

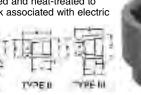
# 1-1/2" Drive Impact Sockets

## Impact Sockets, Standard Length, 6 Point

Fed. Spec.: GGG-W-660A: ANSI B107.2

 Industrially tested alloy, forged and heat-treated to withstand the constant shock associated with electric and air powered

drive tools provides a complete line of 1-1/2" drive impact sockets.





									Bolt.		
Cat. No.	EDP No.	Size (in)	Туре	A (in)	B (in)	C (in)	D (in)	E (in)	Clear. Dia. (in)	F (in)	Lbs.
8-646	53212	1-7/16	1	3-1/31	3-1/4	2-7/8	57/64	1-25/64	1-7/16	1-7/32	4.86
8-648	53107	1-1/2	ı	3-3/32	3-1/4	2-7/8	29/32	1-7/16	1-31/64	1-17/64	4.92
8-652	53108	1-5/8	ı	3-3/16	3-1/4	2-29/32	1-1/32	1-9/16	1-5/8	1-21/64	5.04
8-654	53109	1-11/16	1	3-1/4	3-1/4	2-31/32	1-1/16	1-9/16	1-11/16	1-39/64	5.12
8-658	53110	1-13/16		3-21/64	3-1/4	3-3/32	1-5/32	1-11/64	1-13/16	1-5/8	4.98
8-660	53111	1-7/8	Ι	3-3/8	3-1/4	3-5/32	1-7/32	1-3/4	1-7/8	1-23/32	5.22
8-664	53112	2	1	3-7/16	3-1/4	3-1/2	1-9/32	1-13/16	2	1-51/64	5.02
8-666	53213	2-1/16	Ш	3-1/2	3-1/4	3-1/2	1-13/32	1-55/64	2-1/16	1-55/64	5.62
8-668	53126	2-1/8	II	3-9/16	3-1/4	3-1/2	1-27/64	1-59/64	2-1/8	1-59/64	5.74
8-670	53113	2-3/16	Ш	3-21/32	3-1/4	3-1/2	1-7/16	2	2-3/16	2-1/64	5.56
8-672	53114	2-1/4	II	3-3/4	3-1/4	3-9/16	1-17/32	2-1/8	2-1/4	2-1/8	5.44
8-676	53115	2-3/8	III	3-7/8	3-1/4	3-25/32	1-9/16	2-1/4	2-3/8	2-17/64	6.38
8-678	53214	2-7/16	III	3-15/16	3-1/4	3-25/32	1-9/16	2-19/64	2-7/16	2-5/16	6.72
8-682	53116	2-9/16	III	4-1/32	3-1/4	3-29/32	1-5/8	2-13/32	2-9/16	2-3/64	7.10
8-684	53117	2-5/8	III	4-3/32	3-1/4	4	1-11/16	2-15/32	2-5/8	2-7/64	7.40
8-688	53118	2-3/4	III	4-7/32	3-1/4	4-5/32	1-13/16	2-7/16	2-3/4	2-15/64	7.86
8-694	53119	2-15/16	III	4-3/8	3-1/4	4-3/8	1-29/32	2-3/4	2-5/8	2-23/64	8.56
8-696	53120	3	III	4-7/16	3-1/4	4-7/16	1-5/16	2-27/32	2-5/8	2-13/32	9.98
8-6100	53121	3-1/8	III	4-9/16	3-1/4	4-5/8	2	3	2-5/8	2-1/2	9.56
8-6108	53122	3-3/8	III	4-3/4	3-1/4	4-15/16	2-7/32	3-1/8	2-5/8	2-43/64	12.22
8-6112	53123	3-1/2	III	4-29/32	3-1/4	5-1/16	2-5/16	3-1/4	2-5/8	2-13/16	12.50
8-6116	55079	3-5/8	III	5-1/8	3-1/4	5-1/4	2-13/32	3-7/16	2-5/8	3	17.80
8-6120	55080	3-3/4	III	5-1/8	3-1/4	5-3/8	2-15/32	3-1/2	2-5/8	3-1/32	17.30
8-6124	55081	3-7/8	III	5-1/4	3-1/4	5-17/32	2-9/16	3-5/8	2-5/8	3-5/32	18.94
8-6128	55082	4	III	5-13/32	3-1/4	5-21/32	2-5/8	3-25/32	2-5/8	3-9/32	19.96
8-6132	55083	4-1/8	III	5-9/16	3-1/4	5-13/16	2-3/4	3-59/64	2-5/8	3-7/16	20.98
8-6136	55084	4-1/4	III	5-11/16	3-1/4	5-31/32	2-13/16	4-1/16	2-5/8	3-9/16	21.42
8-6140	54250	4-3/8	III	5-27/32	3-1/4	6-3/32	2-29/32	4-7/32	2-5/8	3-21/32	22.58
8-6144	55094	4-1/2	III	6	3-1/4	6-1/4	3-1/32	4-3/8	2-5/8	3-15/16	24.04
8-6148	55093	4-5/8	III	6-1/16	3-1/4	6-13/16	3-1/16	4-7/16	3-1/2	4-3/32	26.10
8-6152	55091	4-3/4	III	6-1/8	3-1/4	6-9/16	3-1/8	4-1/2	2-5/8	4	26.50
8-6156	54251	4-7/8	III	6-3/4	3-1/4	7	3-1/8	5-7/64	3-1/2	4-19/32	26.88
8-6160	55092	5	III	6-3/4	3-1/4	7-1/8	3-1/16	5-7/64	3-1/2	4-9/16	31.70
8-6172	55085	5-3/8	Ш	7	3-1/4	7-5/16	3-1/4	5-1/8	4	4-29/32	36.08
8-6184	54254	5-3/4	III	7	3-1/4	7-5/8	3-1/2	5-1/8	3-3/4	4-7/8	36.25
8-6196	54242	6-1/8	Ш	7-1/4	5	8-1/2	3-11/16	5-3/8	4-1/2	5-1/16	35.56
8-6208	54243	6-1/2	Ш	7-1/2	5	9-1/4	3-1/2	5-5/8	5	5-9/64	46.75
8-6220	54286	6-7/8	III	7-7/8	5	9-1/4	3-7/8	6	4-3/4	5-33/64	53.26
8-6232	54256	7-1/4	Ш	8-1/8	5	10	4-1/2	6-1/4	5-1/2	5-49/64	71.70
8-6244	54287	7-5/8	III	8-1/4	5	10-3/4	4-13/16	6-3/8	6-1/2	5-57/64	88.20
8-6256	54288	8	Ш	8-3/8	5	11	5-1/16	6-1/2	7	6-1/64	94.50

# **Williams Tools**

# 2-1/2" Drive Impact Drive Tools

# Impact Retainer Pins

 Should be used with 2-1/2" drive impact sockets and drive tools.

Cat. No.	EDP No.	Dia. (in)	Length (in)	Lbs.	Kas.	For Use On
9-2G	55359	5/16	2-7/8	2.22	1.00	2-1/2": Fits all sizes

### **Impact O-Rings**

- Must be used with 2-1/2" drive impact sockets and drive tools.
- · Made of material compounded for resistance to oils.

Cat. No.	EDP No.	Dia. (in)	Lbs.	Kgs.	For Use On
9-1D	55630	4-1/8	.50	.23	2-1/2": Fits all sizes



# **C-Clamps**

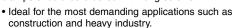
CC-10LAAW CC-12AAW 84163 10-3/8 84164 12-3/8

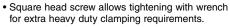
84165 12-3/8

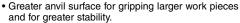
### **Heavy Service C-Clamps**

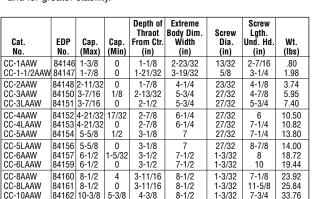
Fed. Spec.: GGG-C-406D

Especially designed for heavy duty service, frames are drop-forged and heat-treated for maximum strength and reduced "springing." Screws are made of special grade steel and are heat-treated for added strength not found in case hardened screws. To tighten, the square headed screw must be turned with a wrench. Where zero capacity is desired, clamps should be ordered with long screws.









4-5/16 4-7/16

0 7-1/4 8-1/2 9-1/2 1-3/32 1-3/32 14-3/8 8-1/4 36.70 39.10

### **Deep Throat C-Clamps with Copper Screw**

Fed. Spec.: GGG-C-406D

Williams CC-400 series deep throat C-Clamps are manufactured to the highest standards of the industry. Ideal for welding as well as general purpose applications.

- I-beam design for added strength.
- Drop-forged and heat-treated for maximum strength and greater rigidity.
- Highly resistant to "springing".
- Copper plated screw to resist welding splatter.



Cat. No.	EDP No.	Cap. (Max)	Cap. (Min)	Dpt. of Thraot From Ctr. (in)	Extreme Body Dim. Length (in)	Extreme Body Dim. Width (in)	Screw Dia. (in)	Wt. (lbs)
CC-402 CC-403 CC-404	84056 84057 84058	2 3 4	0 0 0	2-11/32 2-3/4 3-3/16	5-5/16 6-3/4 8-3/8	4 4-5/8 5-3/8	1/2 1/2 3/4	1.30 2.04 3.50
CC-406 CC-408 CC-410 CC-412	84059 84060 84061 84062	6 8 10 12	0 0 0	4-1/8 5-3/16 6 6-1/2	11 13-1/2 16-1/4 18-3/4	6-1/4 7-1/2 8-5/8 9-1/2	3/4 3/4 3/4 7/8	5.42 6.90 11.66 15.04

### **Chain Wrenches**

Forged Handled is fully heat-treated. Ideal for use in close quarters and where space is at a premium. Successive "bites" can be taken without removal of wrench from the work piece.

- Fully adjustable to fit any shape pipe.
- Forged handle for greater strength.
- Chain available separately order as CW-4-1.



Cat. No.	EDP No.	Cap. Pipe. Dia. (Min)	Cap. Pipe Dia. (Max)	Handle Length (in)	Chain Length (in)	Wt (lbs)
CW-4	15022	3/8	4	11	15	1.74

Replacement Chain Catalog #CW-4-1, EDP #15023

## **Original Chain Pipe Tong**

Fed. Spec.: GGG-W-00651D-1

The "original" Williams Chain Pipe Tong is still the favorite tong for general work. Chain swings from the center and can be used on either side of the jaws, which reduces tooth wear. Flat link chains are heat-treated for greater strength and reliability.

- Fully adjustable to fit any shape pipe.
- Heat-treated chains for greater strength.



Cat. No.	EDP No.	Pipe Min. (in)	Dia. Max (in)	Tong Length (in)	Chain Length (in)	Loading Cap (lbs.)	Wt. (lbs)
CT-12	10003	1/4	2-1/2	27	18-1/2	13,800	9.48
CT-13	10004	3/4	4	38-1/8	25	17,600	17.42
CT-13-1/2	10005	1	6	46-1/4	33	20,000	23.98
CT-14	10006	1-1/2	8	50-1/2	40-3/4	22,000	31.00
CT-15	10007	2	12	67	56	31,000	52.00

19

Hand Tool



# **Williams Tools/Wilton Tool Group**

# Flange-Jacks

Williams Flange Jacks exert tremendous pressure with minimum effort.

- Ideal for working on pipe lines and other applications involving flanges.
- · Makes gasket removal fast and easy.
- Flanges are separated smoothly and evenly without damage to flange faces.
- · Flange Jacks are sold only in pairs.
- Eliminates costly shutdowns.
- Eliminates danger from flying wedges and sparks caused by hammer blows.
- · Ideal for hard to get at locations.

Cat. No.	EDP No.	*125 Lb. Cast Iron	*150 Lb. Steel	*250 Lb. Cast Cast Iron	*300 Lb. Steel	Wt. (Ibs)
FJ-20 (1 pair)		2 to 20	2 to 20	1 to 12	3/4 to 12	13.00
FJ-30 (1 pair)		16 to 48	18 to 24	12 to 30	12 to 24	45.00

<sup>\*</sup> Diameter Capacity in Inches-Standard Raised Face Flanges

# **Machine Shop Tools**

### **Set-Up Wedges**

 Set-up wedges are used for setting-up work on planers, shapers, milling machines and other similar applications.

Cat. No.	EDP No.	Length (in)	Width (in)	Thick End (in)	Wt. Lbs.
WG-3	77004	3	1	1/4	.12
WG-5	77005	5	1	1/2	.35
WG-6	77006	6	1-1/4	3/4	.58



### **Miscellanous Tools**

### **Gasket Scraper**

- Designed for removing gaskets and carbon.
- Comfortable four-sided yellow plastic handle.
- Blade coated to resist corrosion.

Cat. No.	EDP No.	Blade Lgth.(in)	Overal Lgth.(in)	Blade Width (in)	Wt. (lbs)
GSC-12	91135	8-7/8	13	1-1/2	.58

### Master Feeler Gauge Set GS-1

Fed. Spec.: GGG-G-17B, Type VIII, Class I, Style A,B

- 25 blades 3-5/16 X 1/2" in the following thickness: .0015, .002, .003, .004, .005, .006, .007, .008, .009, .010, .011, .012, .013, .014, .015, .016, .018, .020, .022, .024, .025, .028, .030, .032 and .035.
- Both decimal and equivalent metric size etched in each blade.
- Gauges supplied in holder with knurled lock-nut which allows the user to select the required blade size and lock it into position.

Cat.	EDP	Thickness	No. of	Wt.
No.	No.		Blades	(lbs)
GS-1	99298	.0015 thru 1/32	25	.21



### Standard Feeler Gauge Set GS-2

Fed. Spec.: GGG-G-17B, Type VIII, Class I, Style A, B

- 10 blades 3 x 1/2" in the following thickness': .002, .003, .004, .005, .006, .007, .008, .010, .012, and .015.
- Both decimal and equivalent metric size etched in each blade.
- Gauges supplied in holder with knurled lock-nut which allows the user to select the required blade size and lock it into position.

			•	
Cat. No.	EDP No.	Thickness (in)	No. of Blades	Wt. (lbs)
GS-2	99299	002 - 015	10	07



### Combination Feeler Gauge Set GS-3

- · Contains total of 22 blades.
- 10 blades 3 x 1/2" in the following thickness: .002, .003, .004, .005, .006, .007, .008, .010, .013, and .015.
- 12 blades 1-3/4 x 1/4" in the following thickness': .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, .022, and .025.
- · Overall length 5".
- Both decimal and equivalent metric size etched in each blade.
- Gauges supplied in holder with knurled lock-nut which allows the user to select the required blade size and lock it into position.

				O. G.
EDP No.	Thickness (in)			3116
99300	.002025	22	.10	1
	No.	No. (in)	No. (in) Blades	No. (in) Blades (lbs)

### Piston Feeler Gauge Set GS-4

- 8 blades 9 x 1/2" in the following thickness': .002, .003, .004, .005, .006, .008, .010 and .015.
- Both decimal and equivalent metric size etched in each blade.
- Gauges supplied in holder with knurled lock-nut which allows the user to select the required blade size and lock it into position.

Cat.	EDP	Thickness	No. of	Wt.
No.	No.	(in)	Blades	(lbs)
GS-4	99301	.002015	8	.15



# Wilton Tool Group

### **VISES**

# Wilton Combination Pipe & Bench Vises

Built for the toughest applications - Plant Maintenance - Oil Field Service - Heavy Construction

- The "workhorse" of the Wilton Vise Line-Up
- Perfect to handle any workholding jobs your maintenance or construction crew encounter
   Massivate Built
- Massively Built
- Tool Steel Serrated Top Jaws & Pipe Jaws
- Hardened steel jaw inserts machine serrated, replaceable jaws assure a positive hold.
- 2) Self-centered pipe jaws hardened steel jaws hold up to 6" pipe safely, securely.
- 3) 60,000 PSI tensile ductile iron body parts for mass & strength
- 4) Large Anvil.
- 5) Enclosed construction keeps lubrication in, contaminants out.
- 6) Locking swivel base with double lockdowns for non-slip hold in any position.
- 7) Alloy steel slide-bar added strength and keyed for a precision fit. NOTE: 5 Year Guarantee. Meets all Government specifications

	UPC	Jaw	Jaw	Throat	Pipe Jaw	Net	Replacem	nent Parts:
Cat. No.	Item No.	Width (in)	Opening (in)	Depth (in)	Cap. (in)	Wt. (lbs.)	Steel Top Jaws	Steel Pipe Jaws
C-0 C-1	10200 10225	3-1/2 4-1/2	5 6	4-1/2 4-3/4	1/8 - 2-1/2 1/8 - 3-1/2	50.5 78.05	2904960	2905140
C-2	10225	5	7	5-5/16		100.00	2905000 2903240	2900770 2900830
C-3	10275	6	9	6-5/8	1/4 - 6	204.00	2907370	2907600

# **Wilton Tool Group**

### Wilton All-Weather Vises

Applications: Perfect for permanent outdoor use. Mounting on Utility or Maintenance Trucks. Construction Sites. Pipeline Projects. Oil Field Service.

- Features Wilton's regular rust inhibiting finish, then sprayed with a clear automotive acrylic lacquer.
- · Heavy zinc plating & rust inhibitor treated vise jaws, pipe jaws, spindle assembly & lock nuts.
- 1) Hardened steel jaw inserts machine serrated, replaceable jaws assure a positive
- 2) Self-centered pipe jaws hardened steel jaws hold up to 6" pipe safely, securely.
- 3) 600,000 PSI tensile ductile iron body parts for mass & strength
- 4) Large Anvil.
- 5) Enclosed construction keeps lubrication in, contaminants out.
- 6) Locking swivel base with double lockdowns for non-slip hold in any position.
- 7) Alloy steel slide-bar added strength and keyed for a precision fit.

NOTE: 5 Year Guarantee. Meets all Government specifications

	UPC	Jaw	Jaw	Throat	Pipe Jaw	Net	Replacer	nent Parts:
Cat. No.	Item No.	Width (in)	Opening (in)	Depth (in)	Cap. (in)	Wt. (lbs.)	Steel Top Jaws	Steel Pipe Jaws
AW35 AW45	10400 10500		5 6	4-1/2 4-3/4	1/8 - 2-1/2 1/8 - 3-1/2	50.7 78.35	2905040 2907430	2905130 2907420

# Wilton Machinists' **Stationary Base** Vises

- 1) Available with smooth jaws
- 2) Same outstanding features as swivel base vises
- 3) Can be readily converted to swivel base type with the addition of Wilton's Swivel Assembly

NOTE: 5 Year Guarantee. Meets all Government specifications

Cat. No.	UPC Item No.	Jaw Width (in)	Jaw Opeing (in)	Throat Depth (in)	Net Wt. (lbs.)					
Swivel Bas	Swivel Base									
300S 350S 400S 450S 500S 600S 800S	10006 10011 10016 10021 10026 10031 10036	3 3-1/2 4 4-1/2 5 6 8	4-3/4 5-1/4 6-1/2 7-1/2 8 10 12	2-5/8 2-3/4 3-1/2 4 4-1/2 5-1/2 5-13/16	29.25 43.55 62.10 71.25 96.00 156.00 238.00					
Stationary	/ Base									
300N 350N 400N 450N 500N 600N 800N	10056 10066 10076 10086 10096 10106 10116	3 3-1/2 4 4-1/2 5 6 8	4-3/4 5-1/4 6-1/2 7-1/2 8 10 12	2-5/8 2-3/4 3-1/2 4 4-1/4 5-1/2 5-13/16	25.10 34.40 54.10 62.35 88.20 88.60 218.00					

nepiacement raits.	
Steel Top Jaws	Ī
Swivel Base	
2903080	Ī
2904960	
2904980	
2905000	
2905000	
2903280	
2904940	
Stationary Base	
2903080	Ī
2904960	
2904980	
2905000	
2905000	
2903280	
2904940	

Renlacement Parte

### Wilton Tradesman Vises

**Stationary Base Model** 

• Same outstanding features as Tradesman Swivel Base Models

### **Pedestal Base for Swivel Base Models**

- Perfect for 1755 & 1765 Tradesman Swivel base models
- 33-1/2" Tall Base
- Made from fabricated steel



Cat. No.	UPC Item No.	Jaw Width (in)	Jaw Opeing (in)	Throat Depth (in)	Pipe Jaw Cap. (in)	Net Wt. (lbs.)			
Swivel B	Swivel Base								
1745	63199	4-1/2	4	3-1/4	1/4 - 2-1/2	41.20			
1755	63200	5-1/2	5	3-3/4	1/4 - 3	51.55			
1765	63201	6-1/2	6-1/2	4	1/4 - 3-1/2	70.95			
1780A	63202	8	7	4-3/4	1/8 - 3-1/2	111.00			
159V	63185	Pedestal	Base fits	s models	1755 & 1765	54.95			



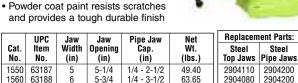
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2904170

# Wilton High Visibility Safety Vise

Wilton High-Vis Vises conform to OSHA standards for physical hazards regulation #1910.144. Each vise have a heavy-duty casting built for rugged use and extended life. Lifetime lubrication means the grease is permanently sealed in for trouble-free service.

- Safety color conforms to OSHA standard for physical hazards; Regulation #1910.144
- Replaceable serrated top jaws and pipe jaws
- 360° swivel base and double lockdowns
- · Fully enclosed spindle and nut
- · Large anvil work surface
- and provides a tough durable finish



#### No. 1/4 - 2-1/2 1/4 - 3-1/2 1550 63187 5-1/4 49 40 1560 63188 63.65 2904080

### Wilton Mechanics' Vises

Wilton Mechanics Vises have a heavy-duty casting built for rugged use and extended life. Lifetime lubrication means the grease is permanently sealed in for trouble-free service.

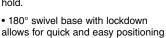
- Swivel base rotates 360° and has double lockdowns ensuring maximum stability
- · Powder coat paint resists scratches and provides a tough durable finish
- Replaceable hardened steel top and pipe jaws
- Large anvil work surface

Cat. No.	UPC Item No.	Jaw Width (in)	Jaw Opening (in)	Throat Depth (in)	Pipe Jaw Cap. (in)	Net Wt. (lbs.)
744	21300	4	4-1/2	3-7/16	1/4 - 2	36.45
745	21400	5	5-1/4	3-3/4	1/4 - 2-1/2	52.80
746	21500	6	5-3/4	4-1/8	1/4 - 3-1/2	69.35

t		Replacement Parts: Steel Steel					
٠,							
.)		Top Jaws	Pipe Jaws				
5		2904040	2904200				
10		2904110	2904200				
15		2904080	2904200				

# Wilton Utility Workshop Vise

Wilton Shop Vises have heavy-duty castings with a 30,000 PSI ductile iron body built for rugged use and extended life. Each has the capability of handling pipe as well as mounting to the bench with 3 mounting posts providing more stability and secure



- Powder coat paint resists scratches and provides a tough durable surface
- Built-in pipe jaws handle various pipe sizes
- Large anvil work surface
- · Perfect for general clamping applications
- · Rugged and versatile yet moderately priced vises

Cat. No.	UPC Item No.	Jaw Width (in)	Jaw Opening (in)	Throat Depth (in)	Pipe Jaw Cap. (in)	Net Wt. (lbs.)
674	11126	4-1/2	4	3-1/2	1/8 - 2	19.40
675	11127	5-1/2	5	4	1/8 - 2-1/2	29.20
676	11128	6-1/2	5-1/2	5	1/8 - 2-1/2	41.85
656HD	00191	6	6	6	1/8 - 3	62.60
648HD	11800	8	7-1/2	8	1/8 - 3	86.20

Replacement Parts:
Steel Top Jaws
76654S41
11127S41
11128S41
11106S41
29004130

**Hand Tools** 



# **Wilton Tool Group**

# VISE ASSESSORIES: Wilton Magnefix Vise Jaw Caps

### Temporary Work-Holding Systems

- Designed to protect both the vise jaws and the workpiece from marring and distortion during any clamping application.
- · Caps are constructed from a hardened aluminum alloy with two built-in circular permanent magnets on the backside which holds the product securely to the vise.
- The caps are magnetic towards the vise side to prevent steel filings from attaching themselves to the jaws and keep the clamped part from becoming magnetized.

**Aluminum** 

Rubber

**Jaw Caps** 

A-4

A-4.5

A-5.5

A-6.5

F-4.5

F-6

R-3

R-4.5

R-5.5

R-5.5

P-4.5

P-5.5 P-6

P-6.5

P-5

R-5

R-6

Model F

Model R -

A-6

LIPC

Item No.

14826

14828

14829

14830

14871

14831

14874

14834

14835

14836

14837

14838

14840

14841

14842

14872

14843

14875

14846

14847

14848

14873 14849

14876

Model P - Prism Magnefix Jaw Caps

Model A - Standard Aluminum Magnefix

Prism

Net Wt.

(lbs.)

0.4

0.25 0.35

0.45

Caps

0.3

0.2

0.25

0.35

0.3

0.45

0.25

0.2

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Width (in)

4-1/2

5-1/2

6-1/2

4-1/2

Rubber Face Magnefix Jaw Caps

4-1/2

5

5-1/2

6-1/2

4-1/2

5-1/2

6-1/2

- Fiber Face Magnefix Jaw

### Model A - Aluminum Magnefix Jaw Caps

- · Aluminum alloy design includes 6 grooves to compensate for the unevenness of the workpiece
- · Deeper Vee-Groove ensures more secure clamping of circular work pieces.
- Use together with Rubber Magnefix Jaw Caps when clamping taper pins and spherical parts

### Model F - Fiber Face **Magnefix Jaw Caps**

- · Aluminum alloy with laminated fiber cover to prevent the absorption of outside materials
- Heat parts rapidly by concentrating heat into part
- · Use on workpieces to avoid distortion and clamping marks

### Model R - Rubber Face **Magnefix Jaw Caps**

- Aluminum alloy with synthetic rubber cover
- Jaw Cap conforms to workpiece and grips firmly without slipping while protecting work surface
- · Use in combination with Aluminum and Prism Jaw Caps to clamp taper pins or tapered work-

#### Model P - Prism Magnefix Jaw Caps

- Jaw construction includes a 120°, horizontal Vee-Groove, 3 vertical Vee-Grooves and a 90° groove for marking out and center punching
- Ideal for light tapping and thread cutting applications

# Wilton Copper Jaw Caps

### Permanent or Temporary Work-Holding

- Designed to avoid marring the surface of softer metals and to protect jaw face. HPC:
- 100% Copper Jaw Caps have polished faces and pliable copper extensions for a sure-grip fit on any make vise.



	No.	Item No.	Width (in)	(lbs)
	404-3	24403	3	0.40
	404-3-1/2	24404	3-1/2	0.55
	404-4	24405	4	0.90
	404-4-1/2	24406	4-1/2	0.85
	404-5	24407	5	1.20
	404-5-1/2	63203	5-1/2	1.55
	404-6	24408	6	2.40
	404-6-1/2	63204	6-1/2	2.50
	404-8	24409	8	4.40
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# Wilton Drill Press Vises:

### **Versatile Drill Press Vises**

Wilton Versatile Drill Press Vises are constructed of high grade cast iron. Hardened jaws come standard with v-grooves for horizontal and vertical clamping of round objects.

- · Made from high grade cast iron
- Ground vise bed for smooth, consistent jaw movement
- Hardened top V-groove jaws
- · Rugged design and large workload capacity

Cat. No.	UPC Item No.	Jaw Width (in)	Jaw Opening (in)	Jaw Depth (in)	Net Wt. (Ibs)						
Continu	Continuous Nut										
1335 1345 1360	63238 63239 63240	3 4 5	2-3/4 4 5	1-7/8 2-1/8 2-1/8	5.90 11.85 19.35						
Rapid /	Acting No	ıt									
1435 1445 1460	63241 63242 63243	3-1/2 4-1/2 6	4-1/4 4-3/4 6-3/4	1-3/4 1-7/8 2-1/8	10.85 15.25 28.50						



#### **Cam Action Drill Press Vises**

A simple push or pull on the center bar knob sets the jaw in position. Then an easy press on the locking lever cams the jaw ahead 3/32", exerting a holding pressure that is adjustable from 400 to 1100 lbs.

- Simple push or pull on the center bar knob sets the jaw in position
- · Easy press locking lever cams the jaw ahead 3/32", exerting a holding pressure that is adjustable from 400 to 1100 lbs
- Base is designed for clear through drilling applications
- Unique top locking lever can be raised or lowered to tighten or loosen against the work piece.



Cat. No.	UPC Item No.	Jaw Width (in)	Jaw Opening (in)	Jaw Depth (in)	Overall Height (in)	Net Wt. (lbs.)
1203	13400	3	1-1/4	3	2-3/4	10.15
1204	13401	4	1-5/16	4-11/16	3-1/4	17.7
1206	13402	6	1-13/16	6-3/16	3-3/4	35.4
1208	13403	8	2	8-3/16	4-7/16	53.35

### Milling Machine Vises

Complete with swivel base, the 50S and 60S are ideal for milling, tapping and drilling operations. Two bolt lugs make mounting easy and vise can also be mounted on its stationary base.

- · Swivel base is finely graduated for accurate set up of workpieces requiring accurate clamping.
- High-carbon steel jaws.
- · High quality steel main screw utilizes a fine Acme thread for strength.



Cat. No.	UPC Item No.	Description	Jaw Width (in)	Jaw Opening (in)	Jaw Depth (in)	Overall Height (in)	Ship. Wt. Lbs. Ea.
50S	12365	Milling Vise w/swivel base		3-1/4	1-5/8	5-1/8	40
60S	12370	Milling Vise w/swivel base		4-3/8	1-7/8	5-9/16	63

# **Wilton Tool Group**

### Verti-Lock® Machines Vises

- The ductile alloy vise body with flame-hardened bed provides solid work support, accuracy, and longevity
- The fixed jaw is rated at 85,000 PSI and the annealed, surface ground sliding jaw at 70,000 PSI
- Totally enclosed vise screw is cut from special alloy steel, hardened and ground
- The vise and optional swivel base have coolant troughs to channel fluid out of your way



### **Swivel Base**

- This optional swivel base has coolant troughs to channel fluid out of your way.
- · Designed to fit the 1250N Vise for more versatility

Cat. No.	UPC Item No.	Jaw Width	Jaw Opening	Type Of Base	Net Wt. (lbs.)
Machine V	ises				
1250N	12390	5	4-1/2	Stationary	50.00
1275N	63186	7	7-1/2	Stationary	75.25
1280N	12375	8	7-1/2	Stationary	164.00
Swivel Bas	es				
5S	12285	5		Swivel	20.00
6S*	12290	6		Swivel	25.5
8S	12295	8		Swivel	48.15

# Wilton 400 Series C-Clamps

This is Wilton's number one C-Clamp line.

- · Industry's top choice for maintenance, production and repair operations
- · Drop-forged steel frame, regular-duty with extra deep-throat
- Black oxide coated spindles and Perma-pad® resist corrosion, and are replaceable
- · Innovative frame geometry for maximum strength

#### **Specifications**

#### Replacement Parts

Cat. No.	UPC Item No.	Opening Cap. (in)	Throat Depth (in)	Spindle Dia. (in)	Min. Proof Test (lbs.)	Net Wt. (lbs.)	Perma- Pad Complete	Spindle Assy.
402	14214	0 - 2-1/8	2-1/4	9/16	3500	1.55	2901300	1701080
403	14228	0 - 3	2-1/2	9/16	3500	2.05	2901300	1701160
404	14242	0 - 4-1/4	3-1/4	3/4	6200	3.60	2901310	1700150
406	14256	0 - 6-1/16	4-1/8	3/4	6600	4.90	2901310	1700170
408	14270	0 - 8-1/4	5	3/4	6900	7.95	2901310	1700190
410	14284	2 - 10-1/8	6	3/4	8000	11.15	2901310	1700190
412	14298	2 - 12-1/4	6-5/16	7/8	9300	14.05	2901310	1700220
400 Serie	es with V	VILTON-GRIP	™ Handle	s				
404 STG	63153	0 - 4-1/4	3-1/4	3/4	6200	3.55	2901310	1700150
406 STG	63154	0 - 6-1/16	4-1/8	3/4	6600	5.35	2901310	1700170
408 STG	63155	0 - 8-1/4	5	3/4	6900	8.03	2901310	1700190

# Wilton 400SF **Hi-Visibility Safety** C-Clamps

Drop Forged, Regular Duty, Extra Deep Throat

- Drop-forged, regular-duty with extra deep-throat
- · Coated in high-visibility yellow which conforms to the OSHA safety color standard for physical hazards regulation no. 1910.144
- · Powder-coated paint resists scratches and corrosion while providing a tough, durable finish
- · Spindles are precision cut alloy steel, single lead, acme threaded for continuous smooth operation; black-oxide coated for corrosion resistance

### Specifications

### Replacement Parts

Cat. No.	UPC Item No.	Opening Cap. (in)	Throat Depth (in)	Spindle Dia. (in)	Min. Proof Test (lbs.)	Net Wt. (lbs.)	Perma- Pad Complete	Spindle Assy.
402-SF	14300	0 - 2-1/8	2-1/4	9/16	3500	1.4	2901300	1701080
403-SF	14301	0 - 3	2-1/2	9/16	3500	1.85	2901300	1701160
404-SF	14302	0 - 4-1/4	3-1/4	3/4	6200	3.5	2901310	1700150
406-SF	14303	0 - 6-1/16	4-1/8	3/4	6600	5.15	2901310	1700170
408-SF	14305	0 - 8-1/4	5	3/4	6900	7.4	2901310	1700190
410-SF	14306	2 - 10-1/8	6	3/4	8000	11.15	2901310	1700190
412-SF	14307	2 - 12-1/4	6-5/16	7/8	9300	14.95	2901310	1700220

### 4400 Series C-Clamps

Drop forged, regular duty, extra deep throat.

- The "square-throat" design of the 4400 series means greater capacity and more versatility
- The Wilton 4" 4400 model offers more throat depth than most conventional 6" clamps, and the 6" and 8" models yield 37% more throat depth than standard deep-throat C-Clamps



#### Specifications

Replacement Parts

-								
Cat. No.	UPC Item No.	Opening Cap. (in)	Throat Depth (in)	Spindle Dia. (in)	Min. Proof Test (lbs.)	Net Wt. (lbs.)	Perma- Pad Complete	Spindle Assy.
4404	14350	0 - 4	4	3/4	4100	4.65	2901310	1700150
4406	14375	0 - 6	5	3/4	5400	6.20	2901310	1700170
4408	14400	2 - 8	6	3/4	5900	10-1/2	2901310	1700170

# Wilton Copper Plated L-Clamps

L-Clamps fit a wide variety of applications, Perfect for jobs that require clamping wide or high parts, or where extreme throat depth is necessary.

- Forged sliding arm design reduces clamping setup time
- New hex nut design makes replacing pads and spindles easy
- Copper plated spindles and Perma-Pads" resist welding spatter
- · Ergonomic Wilton-Grip provides comfort, speed and visibility



_								
Specifica	tions						Replacen	ent Part
Cat. No.	UPC Item No.	Nominal Opening Cap. (in)	Throat Depth (in)	Nominal Rail Size (in)	Nom. Clamping Pressure (lbs.)	Net Wt. (lbs.)	Perma- Pad Complete	Spindle Assy.
Light Duty	L-Clam	ps with W	ilton-Gr	rip™ Handles				
6306P STG	63249	6	3	5/8 x 5/16	1000	1.35	2901330	1701090
6308P STG	63250	8	4	3/4 x 3/8	1000	2.25	2909990	1701750
6310P STG	63251	10	4-3/4	7/8 x 7/16	1500	3.25	2909990	1701750
6312P STG	63252	12	5-1/2	1 x 15/32	1600	4.85	2909980	1701750
6316P STG	63253	16	4-3/4	1 x 15/32	1600	5.35	2909980	1701760
6302P STG	63254	20	4-3/4	1 x 15/32	1600	5.65	2909980	1701760
6324P STG	63255	24	4-3/4	1 x 15/32	1600	6.50	2909980	1701760
6332P STG	63256	32	4-3/4	1-11/16 x 1/2	2000	8.60	2909980	1701760
6304P STG		40	4-3/4	1-11/16 x 1/2	2000	6.60	2909980	1701760
6348P STG	63258	48	4-3/4	1-11/16 x 1/2	2000	11.50	2909980	1701760
Regular Du	ity L-Cla	mps with	Wilton-	Grip™ Handles				
6410P STG	63259	10	4-3/4	1-3/16 x 9/16	2600	6.05	2909980	1701770
6412P STG	63260	12	4-3/4	1-3/16 x 9/16	2600	6.95	2909980	1701770
6416P STG	63261	16	4-3/4	1-3/16 x 9/16	2600	7.60	2909980	1701770
6420P STG	63262	20	4-3/4	1-3/16 x 9/16	2600	8.75	2909980	1701770
6432P STG	63263	32	4-3/4	1-3/16 x 9/16	2600	10.70	2909980	1701770
6400P STG	63264	40	4-3/4	1-3/16 x 9/16	2600	12.45	2909980	1701770

Heavy Dut	ty L- Clam	ıps						
6125P	63267	12	7	1-9/16 x 3/4	4800	12.50	2909970	1701780
6516P	63268	16	7	1-9/16 x 3/4	4800	13.55	2909970	1701780
6520P	63269	20	7	1-9/16 x 3/4	4800	15.20	2909970	1701780
6524P	63270	24	7	1-9/16 x 3/4	4800	15.85	2909970	1701780
6532P	63271	32	7	1-9/16 x 3/4	4800	18.95	2909970	1701780
6540P	63272	40	7	1-9/16 x 3/4	4800	21.60	2909970	1701780
6548P	63273	48	7	1-9/16 x 3/4	4800	25.45	2909970	1701780

### **Economy Series L-Clamps**

- Versatile, economy series L-Clamps are designed for economical repetitive clamping.
- · Economy series offers generous throat depth, substantial clamping pressure with a competitive price.
- · Swivel pads are cold pressed on to provide secure clamping.
- · Black oxide spindle acts as a rust inhibiter.



							-
Cat. No.	UPC Item No.	Nominal Opening Cap. (in)	Throat Depth (in)	Nominal Rail Size (in)	Nominal Clamping Pressure (lbs)	Nominal Spindle Dia.(in)	Net Wt. (lbs)
606	63056	6	4-3/4	7/8 x 7/16	1500	1/2	2.40
608	63057	8	4-3/4	7/8 x 7/16	1500	5/8	2.50
610	63058	10	4-3/4	1-3/16 x 9/16	2600	5/8	5.45
612	63059	12	4-1/4	1-3/16 x 9/16	2600	3/4	5.50
616	63191	16	4-3/4	1-3/16 x 9/16	2600	3/4	6.70
620	63192	20	4-3/4	1-3/16 x 9/16	2600	3/4	7.35
624	63193	24	4-3/4	1-3/16 x 9/16	2600	3/4	8.15

**Hand Tools** 



# **Wilton Tool Group/ Wright Tools**

- "0" Series Extra Heavy DutyThe extra heavy duty models are designed to stand up to the demands of heavy industrial applications like those encountered in ship building.
- With minimum proof test lbs. ranging up to 40,000 lbs., machined, square spindle heads stand up to heavy wrench tightening use.
- · Special quality steels are utilized in the forged construction of the frames, while spindles are machined from a single piece of square, cold drawn steel, hardened and tempered and are black oxide coated.



#### **Specifications**

Replacement Parts

Cat. No.	UPC Item No.	Opening Cap. (in)	Throat Depth (in)	Spindle Dia. (in)	Min. Proof Test (lbs.)	Net Wt. (lbs.)	Spindle Assy.
1 F.C.	14518	0 - 1-3/8	1-3-32	7/16	5600	0.95	9037250
1-1/2 F.C.	14527	0 - 1-7/8	1-7/16	5/8	8750	1.80	9037660
2 F.C.	14536	0 - 2-3/8	2-3/4	3/4	12500	4.40	9037670
3 F.C.	14545	0 - 3-3/8	2-5/16	7/8	16250	6.85	9037270
4 F.C.	14554	0 - 4-1/2	2-3/4	7/8	20000	10.30	9037280
5 F.C.	14563	0 - 5-1/2	3-1/8	7/8	23800	13.60	9037290
6 F.C.	14572	0 - 6-1/2	3-3/8	1-1/8	27500	18.95	9037810
8 F.C.	14581	0 - 8-1/2	3-5/8	1-1/8	31250	25.95	9037310
10 F.C.	14590	0 - 10-1/2	3-15/16	1-1/8	35000	36.40	9037320
12 F.C	14599	0 - 12-1/4	4-1/4	1-1/8	40000	43.70	9037330

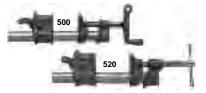
- Regular Duty "I" Bar Clamp
   A rapid acting powerful clamp designed and constructed for hard, everyday production work.
- Patented, quick action, no slip clutches are 3/4" apart and formed in the web for greater bar strength
- High strength ductile slide cannot slip or bind, easily released
- Steel handle, with comfortable wood crank handle for fast clamping
- Bar dimension is 7/16" x 1-1/2" x 5/32", screw diameter is 5/8"
- Throat depth is 1-13/16"



Cat. No.	UPC Item No.	Opening Cap. (ft)	Load Cap. (lbs)	Net Wt. (lbs)
21801	21801	2	6000	7.75
21802	21802	2-1/2	6000	7.75
21803	21803	3	6000	8.30
21804	21804	4	6000	10.25
21805	21805	5	6000	13.10
21806	21806	6	6000	13.80

# Steel Pipe Clamp **Fixtures**

Designed for use on any length 1/2" or 3/4" pipe.



Cat.	UPC Item No.	Pipe Size (in)	Screw Dia. (in)	Clamp Face (in)	Ship. Case Qty.	Ship Wt. Ea. (Ibs)
500	14824	3/4	5/8	1-3/4	12	2-3/4
520	14825	1/2	1/2	1-1/2	12	1-3/4

# 90° Steel Angle Clamps

The 90° angle clamp is made of high quality cast iron.

- The copper plated spindle pivots allowing the moveable jaw to securely grip parts at 90°
- · Slotted holes are provided in the base for convenient workbench mounting
- · For added precision, work surfaces, including base, are milled

Cat. No.	UPC Item No.	Cap. Miter (in)	Jaw Ht. (in)	Jaw Length (in)	Net Wt. (lbs.)
AC-325	64000	3-11/32	1-3/8	4-1/8	10.55
AC-326	64002	4-3/8	2-3/8	4-1/8	21.40



# **Wright Tools**

### Wrench Sets:

### 14 Pieces - Combination Set No.714 12 Pt. Combination Wrenches

Pt. No.	Desc.	Pt. No	Desc.
1112	3/8	1128	7/8
1114	7/16	1130	15/16
1116	1/2	1132	1
1118	9/16	1134	1-1/16
1120	5/8	1136	1-1/8
1122	11/16	1140	1-1/4
1124 1126	3/4 13/16	714-Roll	Denim Tool Roll



### 18 Pieces - Combination Set No.758 12 Pt. Metric Combination Wrenches

Pt. No	Desc.	Pt. No	Desc.
11-07mm	7mm	11-17mm	17mm
11-08mm	8mm	11-18mm	18mm
11-09mm	9mm	11-19mm	19mm
11-10mm	10mm	11-20mm	20mm
11-11mm	11mm	11-21mm	21mm
11-12mm	12mm	11-22mm	22mm
11-13mm 11-14mm 11-15mm 11-16mm	13mm 14mm 15mm 16mm	11-23mm 11-24mm 758-Roll	23mm 24mm Denim Tool Roll



### **Crowfoot Wrenches:**

### 3/8" Drive Open-End Crowfoot Wrenches

Part No.	Nom. Size A (in)	B (in)	C (in)	D (in)
1012	3/8	3/4	1-1/8	13/64
1014	7/16	7/8	1-1/4	13/64
1016	1/2	31/32	1-3/8	1/4
1018	9/16	1-1/8	1-1/2	1/4
1020	5/8	1-1/4	1-19/32	5/16
1022	11/16	1-11/32	1-23/32	21/64
1024	3/4	1-17/32	1-13/16	21/64
1026	13/16	1-19/32	1-15/16	21/64
1028	7/8	1-3/4	2	11/32
1032	1	2-1/16	2-1/4	11/32



### Metric 3/8" Drive Open-End Crowfoot Wrenches

Part	Nom. Size	B	C	D
No.	A (mm)	(mm)	(mm)	(mm)
10-10mm	10	19.84	30.16	5.16
10-11mm	11	22.23	32.15	5.16
10-12mm	12	24.60	34.93	6.35
10-13mm	13	24.60	34.93	6.35
10-14mm	14	29.37	34.13	6.35
10-15mm	15	29.37	38.89	7.14
10-16mm	16	31.75	41.28	8.33
10-17mm	17	35.32	42.86	8.33
10-18mm	18	35.32	44.45	8.33
10-19mm	19	39.69	45.24	8.73



# **Wright Tools**

### 3/8" Drive Crowfoot Wrench - Flare Nut 12 Pt.

Part No.	Nom. Size (in)	Width of Slot A (in)	Dia. of Head B (in)	Length C (in)	Thkns. of Head D (in)
1060	5/8	15/32	15/16	47/64	11/16
1062	11/16	17/32	1-1/32	25/32	11/16
1064	3/4	9/16	1-1/8	53/64	23/32
1066	13/16	5/8	1-13/64	7/8	23/32
1068	7/8	11/16	1-19/64	15/16	3/4
1070	15/16	25/32	1-3/8	15/16	3/4
1072	1	3/4	1-29/34	1-1/64	25/32
1074	1-1/16	25/32	1-17/32	1-3/64	25/32



#### 1/2" Drive Crowfoot Wrench - Flare Nut 12 Pt.

Part No.	Nom. Size (in)	Width of Slot A (in)	Dia. of Head B (in)	Thkns. of Head D (in)
1080	1-1/8	27/32	1-5/8	7/8
1081	1-3/16	29/32	1-11/16	7/8
1082	1-1/4	15/16	1-25/32	7/8
1083	1-5/16	31/32	1-27/32	7/8
1084	1-3/8	1-1/16	1-15/16	15/16
1085	1-7/16	1-1/16	2	15/16
1086	1-1/2	1-1/8	2-1/16	15/16
1087	1-9/16	1-5/32	2-5/32	15/16
1088	1-5/8	1-7/23	2-7/32	15/16
1089	1-11/16	1-5/16	2-5/16	1
1090	1-3/4	1-5/16	2-3/8	1
1091	1-13/16	1-11/16	2-15/32	1
1092	1-7/8	1-3/8	2-9/16	1-1/16
1093	1-15/16	1-7/16	2-5/8	1-1/16
1094	2	1-9/16	2-23/32	1-1/16



# **Adjustable Wrenches:**

### 3-in-1 Tool/Engineer's Pipe Wrench

8" Pipe Wrench, flat face, used as a hammer, valve wheel wrench. Used in refineries, chemical plants, etc., on hand-operated valve wheels.

Part	Length	Max. Pipe	Overall
No.	(in)	Dia. (in)	Length (in)
9456	8	1	9-1/2



# Construction - Structural 12 Pt. **Spud Handle Box Wrenches**

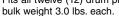
### **Black Industrial Finish**

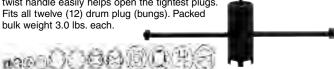
Part No.	Nom. Size (in)	A (in)	B (in)	C (in)	L (in)
1756	13/16	1-15/32	11/16	1-25/32	12
1758	7/8	1-15/32	11/16	1-25/32	12
1760	15/16	1-5/8	13/16	1-61/64	12
1762	1	1-5/8	13/16	1-61/64	12
1764	1-1/16	1-53/64	7/8	2-9/64	15
1766	1-1/8	1-53/64	7/8	2-9/64	15
1770	1-1/4	2-5/64	15/16	2-21/64	17
1772	1-5/16	2-5/64	15/16	2-21/64	17
1776	1-7/16	2-3/8	1-1/8	2-3/4	21
1778	1-1/2	2-3/8	1-1/8	2-3/4	21
1782	1-5/8	2-5/8	1-3/16	2-7/8	22
1784	1-11/16	2-5/8	1-3/16	2-7/8	22
1788	1-13/16	2-29/32	1-1/4	3	23
1790	1-7/8	2-29/32	1-1/4	3	23
1794	2	3-5/32	1-3/8	3-5/32	24-1/2
1795	2-3/16	3-15/32	1-1/2	3-1/2	26
1796	2-3/8	3-23/32	1-5/8	3-11/16	28
1797	2-9/16	3-29/32	1-3/4	3-13/16	30
1798	2-3/4	4-5/32	1-7/8	3-29/32	30



# **Drum Cap Opening Tool**

Description: Drum Can Opening Tool. Fits 55 & 30 gallon drums. Removes "screw-in" style plugs (caps) for most steel & plastic drums w/large & small plugs. Handy, built-in "two-hand" twist handle easily helps open the tightest plugs.





### 1/4" Drive Sockets:



### Special 8-Pt. Standard Sockets

Special 8-Pt. Combination Socket Exclusive w/Wright. The Only Socket That Turns Both Hex & Square Nuts.

Wright's special 8 point socket that fits both types of nuts interchangeably, providing full bearing & snug fit.

Part No.	Nom. Size (in)	Shape	L (in)	Ds (in)	Dd (in)	Bd (in)
2308	1/4	Ш	1	7/16	_	1/8
2310	5/16	ll ll	1	9/16	_	9/64
2312	3/8	II	1	5/8	-	5/32



### 3/8" Drive Sets:

### 10 Pieces - 3/8" & 1/2" Drive Hex Bit Socket Set No.311

3/8" Drive 1/2" Drive **Hex Bit Sockets Hex Bit Sockets** Part Nom. Nom. No. Size (in) No. Size (in) 3204 1/8 4216 1/2 3205 3206 3/16 4220 5/8 3207 58 Metal 3208 3210 5/16



# 3/8" Drive Metric, & Impact & Power Socket Sets:

### 9 Pieces - 3/8" & 1/2" Drive Hex Bit Metric Socket Set No. 360

Part No.	Desc.	Part No.	Desc.
32-04mm	4mm	32-10mm	10mm
32-05mm	5mm	32-12mm	12mm
32-06mm	6mm	32-14mm	14mm
32-07mm	7mm	32-18mm	18mm
32-08mm	8mm	16	Metal Box



### 8 Pieces - 6-Pt. Standard Impact Socket Set No. 313

Part No.	Desc.		Part No.	Desc.
3810 3812 3814	5/16 3/8 7/16		3820 3822 3824	5/8 11/16 3/4
3816 3818	1/2 9/16	ľ	70	Metal Tray



### 8 Pieces - 6-Pt. Deep Impact Socket Set No. 314

Part No.	Desc.	Part No.	Desc.
3910	5/16	3920	5/8
3912 3914	3/8 7/16	3922 3924	11/16 3/4
3916	1/2	72	Metal Tray
3018	9/16		





# **Wright Tools**

### 3/8" Drive Sockets:



### Special 8-Pt. Standard Sockets

Part No.	Nom. Size (in)	Shape	L (in)	Ds (in)	Dd (in)	Bd (in)
3308 3310 3312	1/4 5/16 3/8	=	1-7/64 1-7/64 1-7/64	15/32 9/16 5/8	5/8 5/8 5/8	1/8 9/64 5/32
3314 3316 3318	7/16 1/2 9/16	==	1-7/64 1-7/64 1-7/64	3/4 13/16 15/16	-	7/32 17/64 21/64
3320 3322 3324	5/8 11/16 3/4	===	1-7/64 1-7/64 1-7/64	1-1/16 1-9/64 1-13/64		3/8 3/8 7/16
3326 3328	13/16 7/8	II	1-11/64 1-15/64	1-1/4 1-3/8	-	29/64 1/2



# 1/2" Drive Impact Sockets:

### 13 Pieces - 6-Pt. Standard Impact Socket Set No. 415

Desc.		Part No.	Desc.
7/16		4828	7/8
1/2		4830	15/16
9/16		4382	1
5/8		4834	1-1/16
11/16		4836	1-1/8
3/4		4840	1-1/4
13/16		151	Metal Tray
	7/16 1/2 9/16 5/8 11/16 3/4	7/16 1/2 9/16 5/8 11/16 3/4	Desc.         No.           7/16         4828           1/2         4830           9/16         4382           5/8         4834           11/16         4836           3/4         4840



### 14 Pieces - 6-Pt. Deep Impact Socket Set No. 407

Part No.	Desc.		Part No.	Desc.
4912	3/8		4928	7/8
4914	7/16		4930	15/16
4916	1/2		4932	1
4918	9/16		4934	1-1/16
4920	5/8		4936	1-1/8
4922	11/16		4940	1-1/4
4924	3/4		85	Metal Tray
4926	13/16	ľ		



# 1/2" Drive Metric Impact Sockets:

# 12 Pieces - 6-Pt. Standard Metric Impact Socket Set No. 460

Part No.	Desc.	Part No.	Desc.
48-10mm 48-11mm 48-12mm	10mm 11mm 12mm	48-17mm 48-18mm 48-19mm	17mm 18mm 19mm
48-13mm 48-14mm	13mm 14mm	48-20mm 48-21mm	20mm 21mm
48-15mm 48-16mm	15mm 16mm	63	Metal Tray

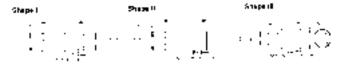


### 16 Pieces - 6-Pt. Deep Metric Impact Socket Set No. 467

Part No.	Desc.	Part No.	Desc.
49-10mm	10mm	49-19mm	19mm
49-11mm	11mm	49-20mm	20mm
49-12mm	12mm	49-21mm	21mm
49-13mm	13mm	49-22mm	22mm
49-14mm	14mm	49-23mm	23mm
49-15mm	15mm	49-24mm	24mm
49-16mm 49-17mm 49-18mm	16mm 17mm 18mm	49-27mm 65	27mm Metal Tray



# 1/2" Drive Sockets:



### Special 8-Pt. Standard Sockets

	Part No.	Size (in)	Shape	L (in)	Ds (in)	Dd (in)	Bd (in)
Γ	4312	3/8	1	1-15/32	47/64	13/16	5/32
	4314	7/16	II	1-15/32	13/16	_	7/32
	4316	1/2	II	1-15/32	7/8	-	17/64
Г	4318	9/16	II	1-15/32	31/32	-	21/64
	4320	5/8	II	1-15/32	1-1/16	-	3/8
	4322	11/16	II	1-15/32	1-11/64	-	3/8
Г	4324	3/4	- II	1-15/32	1-1/4	-	7/16
1	4326	13/16	II	1-9/16	1-5/16	_	1/2
	4328	7/8	III	1-5/8	1-13/32	1-3/32	35/64
Г	4330	15/16	III	1-11/16	1-37/64	1-1/8	5/8
	4332	1	III	1-3/4	1-21/32	1-1/8	21/32
	4334	1-1/16	Ш	1-7/8	1-47/64	1-3/16	3/4
Г	4336	1-1/8	III	2	1-53/64	1-1/4	_
L	4340	1-1/4	Ш	2-18	1-61/64	1-1/4	_



# Special 8-Pt. Combination Sockets for Both Square Fasteners & Hex Fasteners

This exclusively designed socket is the only one for use on both SQUARE & HEX fasteners. Competitor designs look similar & can turn square nuts but NOT both. There is no need to buy 2 sockets of any particular size when ONE will do the job.

Wright's SPECIAL 8 PT. design is the only socket that fits both types of nuts interchangeably.

These DUAL purpose sockets provide full bearing & snug fit on both square & hex fasteners. A set of Wright's SPECIAL 8 PT. sockets should be added to every set of tools.

One Socket Drive Both Square and Hex Nuts or Same Size

# 3/4" Drive Impact Sockets:



#### 8-Pt. Double Square Impact (Railroad) Sockets

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Part No.	Nom. Size (in)	Ret- Ring	Shape	L (in)	Ds (in)	Dd (in)	Bd (in)
6856	3/4	6581	II	2-1/8	1-5/8	_	1/2
6866	13/16	6582	l II	2-1/8	1-11/16	_	1/2
6868	7/8	6582	l II	2-1/8	1-3/4	-	1/2
6870	15/16	6582A	- II	2-1/8	1-13/16	_	35/64
6872	1	6582A	l II	2-1/8	2	_	35/64
6874	1-1/16	6582A	III	2-1/4	2-1/8	1-29/32	5/8
6876	1-1/8	6582A	III	2-1/4	2-1/4	2-1/8	11/16
6878	1-3/16	6582A	III	2-1/2	2-5/16	1-29/32	3/4
6880	1-1/4	6582A	III	2-1/2	2-7/16	1-29/32	3/4
6882	1-5/16	6582A	III	2-5/8	2-1/2	1-29/32	49/64
6886	1-7/16	6582A	III	2-3/4	2-23/32	1-29/32	7/8



### **Hex Bit Sockets**

Part No.	Nom. Size (in)	Ret- Ring	Shape	L (in)	Ds (in)	Dd (in)	Bd (in)
6218	9/16	6581	IV	3-9/32	1	1-5/8	1-3/16
6220	5/8	6581	IV	3-1/4	1-3/32	1-5/8	1-5/32
6224	3/4	6581	IV	3-11/32	1-15/64	1-5/8	1-1/4
6228	7/8	6581	IV	3-1/2	1-1/2	1-5/8	1-3/8
6232	1	6581	IV	3-5/8	1-5/8	-	1-1/2





# **Wright Tools - Cougar**

### **Metric Hex Bit Sockets**

Part	Nom.	Ret-	Shape	L	Ds	Dd	Bd
No.	Size (mm)	Ring		(in)	(in)	(in)	(in)
62-14mm		6581	IV	83.34	25.40	41.28	34.93
62-17mm		6581	IV	83.34	30.16	41.28	34.93
62-19mm		6581	IV	83.34	31.75	41.28	34.93
62-22mm	22	6581	IV	95.25	34.93	41.28	34.93
62-24mm	24	6581	IV	95.25	39.69	41.28	34.93



# 1" Drive Impact Sockets:

Stage (		Smape I		Prese III
-	-	L	•	
1 .	5 1 1	1.1	•	
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				v : ·

### 8-Pt. Double Square Impact (Railroad) Sockets

Part No.	Nom. Size (in)	Ret- Ring	Shape	L (in)	Ds (in)	Dd (in)	Bd (in)
8807	7/8	6583	- 1	2-9/16	1-3/4	2	45/64
8808	1	6581A	ll ll	2-11/16	2-1/16	-	47/64
8809	1-1/8	6581A	Ш	2-11/16	2-1/4	2-3/32	49/64
8810	1-3/16	6581A	III	2-11/16	2-1/4	2-3/32	21/32
8810A	1-5/16	6581A	III	2-11/16	2-1/2	2-3/32	49/64
8811	1-3/8	6581A	Ш	2-11/16	2-1/2	2-3/32	49/64
8811A	1-7/16	6584	Ш	2-11/16	2-3/4	2-19/64	2-7/8
8812	1-1/2	6584	Ш	2-11/16	2-3/4	2-5/16	55/64
8813	1-5/8	6584	Ш	3-1/2	3-1/4	2-7/16	1
8815	1-13/16	6585	Ш	3-1/2	3-1/4	2-13/32	1-1/16
8816A	2	6585	Ш	3-1/2	-	2-13/32	1-7/32
8817	2-3/16	6587	III	3-1/2	3-23/32	2-3/4	1-9/32

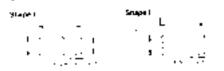


### 8-Pt. Double Square Deep Impact (Railroad) Sockets

Part	Nom.	Ret-	Shape	L	Ds	Dd	Bd
No.	Size (in)	Ring		(in)	(in)	(in)	(in)
8924R	3/4	6583		3	1-21/32	2	7/16
8928R	7/8	6583		3	1-13/16	2	1/2
8934R	1-1/16	6581A		3-1/4	2-1/16	2-1/16	5/8
8936R 8938R 8942R	1-1/8 1-3/16 1-5/16	6581A 6581A 6584	III III	3-1/4 3-1/4 3-1/2	2-1/4 2-1/4 2-1/2	2-1/8 2-1/8 2-1/4	21/32 21/32 49/64
8946R 8952R 8980R	1-7/16 1-5/8 2-3/16	6585 6585 6587	III III	3-1/2 3-3/4 4	2-3/4 2-63/64 3-53/64	2-27/64 2-27/64 2-3/4	7/8 1 1-3/8



# 1-1/2" and 2-1/2" Drive Castellated/ **Spanner Sockets:**





### Standard Length Castellated/Spanner **Sockets**

Part No.	Nom. Size (in)	Ret- Ring	Shape	L (in)	Ds (in)	Dd (in)	Bd (in)
84836C	2-1/4	84575	III	3-3/8	3-1/2	3-1/4	9/16
84840C	2-1/2	84575	III	3-7/16	3-7/8	3-1/4	9/16
84844C	2-3/4	84575	Ш	3-1/2	4-1/4	3-1/4	11/16
84848C	3	84575	Ш	3-9/16	4-5/8	3-1/4	11/16
84856C	3-1/2	84575	III	3-7/8	5-3/8	3-1/4	15/16



### **Deep Length Castellated/Spanner Sockets**

Part No.	Nom. Size (in)	Ret- Ring	Shape	L (in)	Ds (in)	Dd (in)	Bd (in)
85818C	2-1/4	85576	85577	I	3-7/8	5	9/16
85840C	5	85576	85577	III	5	5	1-1/16



# 1/4" Drive Socket Sets:

### 1/4" Cougar Set A21 (13 Pieces)

Size (in)	6-Pt. Std.
3/16	E2006
7/32	E2007
1/4	E2008
9/32	E2009
5/16	E2010
11/32	E2011
3/8	E2012
7/16	E2014
1/2	E2016



1/4" Drive Ratchets, Handles & Attachments: Pt. No. Description Ratchet, Quick Release, Oval Head E2403 Extension, 3' Extension, 6" E2406 Spinner, w/female end E2442

### 1/4" Cougar Set A22 (21 Pieces)

Size (in)	6-Pt. Std.	6-Pt. Deep
3/16 7/32	E2006 E2007	_
1/4	E2008	E2508
9/32 5/16 11/32	E2009 E2010 E2011	E2509 E2510 E2511
3/8 7/16 1/2	E2012 E2014 E2016	E2512 E2514 E2516



1/4" Drive Ratchets, Handles & Attachments: E2426 E2403 Ratchet, Quick Release, Oval Head Extension, 3" Extension, 6" E2406 Spinner, w/female end Universal Joint

### 1/4" Cougar Set A26 (13 Pieces)

Size (mm)	6-Pt. Std.			
4	M2004			
5	M2005			
6	M2006			
7	M2007			
8	M2008			
9	M2009			
10	M2010			
11	M2011			
12	M2012			
13	M2013			



1/4" Drive Ratchets, Handles & Attachments: Description Pt. No. Ratchet, Quick Release, Oval Head Extension, 3" E2426 E2403 Spinner, w/female end

### 1/4" Cougar Set A27 (21 Pieces)

	-	
Size (mm)	6-Pt. Std.	6-Pt. Deep
5	M2005	_
6	M2006	_
7	M2007	M2507
8	M2008	M2508
9	M2009	M2509
10	M2010	M2510
11	M2011	M2511
12	M2012	M2512
13	M2013	M2513



1/4" Drive Ratchets, Handles & Attachments: Description Ratchet, Quick Release, Oval Head Extension, 3" Extension, 6" E2406 Spinner, w/female end Universal Joint E2475

Note: All socket sets are assembled in metal box w/plastic insert.



# **Wright Tools - Cougar**

# 3/8" Drive Socket Sets:

3/8" Cougar Set A31 (13 Pieces)

Size (in)	6-Pt. Std.
3/8	E3112
7/16	E3114
1/2	E3116
9/16	E3118
5/8	E3120
11/16	E3122
3/4	E3124
13/16	E3126
7/8	E3128



Description	Pt. No.
Ratchet, Quick Release, Oval Head	E3426
Extension, 3"	E3403
Extension, 6"	E3405
Sparkplug Socket, 5/8"	E3590

# 3/8" Cougar Set A32 (18 Pieces)

Size (in)	6-Pt. Std.	6-Pt. Deep
3/8	E3012	E3512
7/16 1/2	E3014 E3016	E3514 E3516
9/16	E3018	E3518
5/8	E3010	E3510 E3520
11/16	E3022	E3522
3/4	E3024	E3524



3/8" Drive Ratchets, Handles & Attachments: Description

Ratchet, Quick Release, Oval Head Extension, 3" Extension, 6" E3405 Sparkplug Socket, 5/8" E3590

### 3/8" Cougar Set A33 (25 Pieces)

Size	6-Pt. Std.	12-Pt. Deep
(in)	1/4" Drive	3/8" Drive
3/16	E2006	-
7/32	E2007	-
1/4	E2008	-
9/32 5/16 11/32	E2009 E2010 E2011	_ _ _ _
3/8	E2012	E3112
7/16	E2014	E3114
1/2	E2016	E3116
9/16 5/8 11/16	1 1 1	E3118 E3120 E3122
3/4 13/16 7/8		E3124 E3126 E3128



# 1/4" Drive Ratchets, Handles

& Attachments:	
Description	Pt. No.
Extension, 3"	E2403
Spinner w/female end	F2442

### 3/8" Drive Ratchets, Handles & Attachments: Description

Ratchet, Quick Release, Oval Head	E3426
Extension, 3"	E3403
Extension, 6"	E3405
Adapter, 3/8" F x 1/4" M	E3452
Sparkplug Socket, 5/8"	E3590

### 3/8" Cougar Set A34 (21 Pieces)

Size (in)	12-Pt. Std.	12-Pt. Deep
3/8	E3112	E3612
7/16	E3114	E3614
1/2	E3116	E3616
9/16 5/8	E3118 E3120	E3618 E3620
11/16	E3122	E3622
3/4	E3124	E3624
13/16	E3126	E3626
7/8	E3128	_



8/8" Drive Ratchets, Handles & Attac	nments:
Description	Pt. No.
Ratchet, Quick Release, Oval Head	E3426
Extension, 3"	E3403
Extension, 6"	E3405
Sparkplug Socket 5/8"	F3590

## 3/8" Cougar Set A36 (18 Pieces)

Size (mm)	6-Pt. Std.
7	M3007
8	M3008
9	M3009
10	M3010
11	M3011
12	M3012
13	M3013
14	M3014
15	M3015
16	M3016
17	M3017
18	M3018
19	M3019



3/8" Drive Ratchets, Handles & Attachments:

Description	Pt. NO.
Ratchet, Quick Release, Oval Head	E3426
Flex Handle	E3435
Extension, 3"	E3403
Extension, 6"	E3405
Sparkplug Socket, 5/8"	E3590

# 1/2" Drive Socket Sets:

# 1/2" Cougar Set A41 (16 Pieces)

Size (in)	12-Pt. Std.
7/16	E4114
1/2	E4116
9/16	E4118
5/8	E4120
11/16	E4122
3/4	E2124
13/16	E4126
7/8	E4128
15/16	E4130
1	E4132
1-1/16	E4134
1-1/8	E4136
1-1/4	E4140



1/2" Drive Ratchets, Handles & Attachments:

Description	Pt. No.
Ratchet, Quick Release, Oval Head	E4426
Extension, 6"	E4406
Extension, 10"	E4410

### 1/2" Cougar Set A46 (14 Pieces)

_			
Size (mm)	12-Pt. Std.		
10	M4110		
12	M4112		
13	M4113		
14	M4114		
15	M4115		
17	M4117		
18	M4118		
19	M4119		
20	M4120		
21	M4121		
24	M4124		



1/2" Drive Ratchets, Handles & Attachments:

Description	Pt. No
Ratchet, Quick Release, Oval Head	E4426
Extension, 6"	E4406
Extension, 10"	E4410



#### **Hand Tools**

# **Urrea/Young Brothers**

### **URREA**

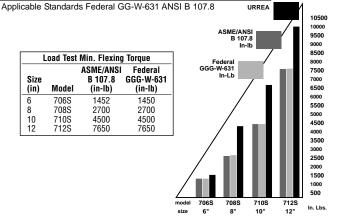
### **BLACK Adjustable Wrenches**

BLACK adjustable wrenches are very versatile tools, since the size of their opening can be changed by opening or closing a movable jaw using an adjustable toothed bar system. This makes it possible to tighten or loosen almost any type of fastener.

When using an adjustable wrench, it is recommended that the force always be applied by pulling and not pushing, so that the load is always on the fixed jaw of the wrench.

Their BLACK finish protects them against corrosion and eliminates the risk of releasing small chromium particles.

	(A) Max. Opening		(L) Length		Wt.	Torsion Resistace ANSI B107.8
No.	(in)	(mm)	(in)	(mm)	(lbs)	(in.lbs)
704S	1/2	12.7	4	101.6	0.11	600
706S	15/16	23.8	6	152.4	0.24	1450
708S	1	25.4	8	203.2	0.53	2700
710S	1-1/8	28.5	10	254.0	0.83	4500
712S	1-5/16	33.3	12	304.8	1.45	7650
715S	1-11/16	42.8	15	381.0	3.27	15,000
718S	2-1/16	52.3	18	457.2	5.09	20,000
724S	2-7/16	61.9	24	609.6	7.48	25,000



# **Adjustable Wrench Sets with Case:**



No. 795 3-Piece Set of Chrome-Plated **Adjustable Wrenches** 

	A Max. O	A Max. Opening		L ength
No.	(in)	(mm)	(in)	(mm)
708	1	25.4	8	203.2
710	1-1/8	28.5	10	254.0
712	1-5/16	33.3	12	304.8
E506	Vinyl Case			



3-Piece **Adjustable Wrenches** 

	A Max. O	A Max. Opening		L ength
No.	(in)	(mm)	(in)	(mm)
708-G	1	25.4	8	203.2
710-G	1-1/8	28.5	10	254.0
712-G	1-5/16	33.3	12	304.8
E506	Vinvl Case			

# **Young Brothers**

### Machine-made Steel Stamps

More marks, per dollar with this economical quality steel stamp. Sharp characters in Gothic style ensure deep, clear impressions. One thumb

### Letter Sets (27 Characters)

			Size of Steel	
Item	Size	Wt.	Sq.	Length
Code	(in)	(lbs)	(in)	(in)
01271	1/16	1-1/2	1/4	2-3/8
02271	3/32	1-1/2	1/4	2-3/8
03271	1/8	1-1/2	1/4	2-3/8
05271	3/16	2	5/16	2-7/16
06271	1/4	3	3/8	2-5/8
08271	3/8	6	1/2	2-7/8
09271	1/2	10-3/4	5/8	3-3/8



### Figure Sets (9 Characters)

			Size o	f Steel
Item	Size	Wt.	Sq.	Length
Code	(in)	(lbs)	(in)	(in)
01091	1/16	1/2	1/4	2-3/8
02091	3/32	1/2	1/4	2-3/8
03091	1/8	1/2	1/4	2-3/8
05091	3/16	3/4	5/16	2-7/16
06091	1/4	1	3/8	2-5/8
08091	3/8	2	1/2	2-7/8
09091	1/2	4-3/4	5/8	3-3/8



# Round face-Full Character Steel Stamps

The cutting edge of the character is 1/32" radius, with a 40-degree bevel. Rounded character stamp makes low stress impressions suitable for use anywhere metal strength is critical. The aircraft, missile, oil supply and nuclear power industries depend on these stamps to avoid risk of fracture from too sharp an imprint. Character identification and size, three thumb grooves.



### Letter Sets (27 Characters)

		. (~. \	J.I.a.	4010.0
			Size	of Steel
Item	Size	Wt.	Sq.	Length
Code	(in)	(lbs)	(in)	(in)
03275	1/8	2-1/4	5/16	2-1/2
05275	3/16	3	3/8	2-3/4
06275	1/4	4-1/2	7/16	3
07275	5/16	6	1/2	3
08275	3/8	8	9/16	3-1/8
09275	1/2	18-1/2	3/4	3-3/4

### Figure Sets (9 Characters)

			Size o	f Steel
Item	Size	Wt.	Sq.	Length
Code	(in)	(lbs)	(in)	(in)
03095	1/8	3/4	5/16	2-1/2
05095	3/16	1	3/8	2-3/4
06095	1/4	1-1/2	7/16	3
07095	5/16	2	1/2	3
08095	3/8	2-1/2	9/16	3-1/8
09095	1/2	6-3/4	3/4	3-3/4

## Round face-Dot design Steel Stamps

The cutting edge of the character is 1/32" radius, with a 40-degree bevel. For use in aircraft, missile, oil supply and nuclear power industries and other applications where lowest stress impressions are critical. Round face - dot design eliminates risk of fracture from too sharp an impression. Character identification and size, three thumb grooves.



### Letter Sets (27 Characters)

		. •		
			Size o	f Steel
Item	Size	Wt.	Sq.	Length
Code	(in)	(lbs)	(in)	(in)
03276	1/8	2-1/4	5/16	2-1/2
05276	3/16	3	3/8	2-3/4
06276	1/4	4-1/2	7/16	3 3-1/8
08276	3/8	8	9/16	

Figure Sets (9 Characters)

_		. •		•
			Size o	f Steel
Item Code	Size (in)	Wt. (lbs)	Sq. (in)	Length (in)
03096	1/8	3/4	5/16	2-1/2
05096	3/16	1	3/8	2-3/4
06096	1/4	1-1/2	7/16	3
08096	3/8	2-1/2	9/16	3-1/8

**19**-213



# **Young Brothers**

Vound Bhos

### **Brass Stencils**

Adjustable and interlocking. Gothic style characters for horizontal composition. Stencils adjust quickly for perfect character alignment, spacing and clean, bold characters. Use for marking shipments, making signs and other identification.

### **Single Characters**

To order Single Characters, use item code for set size plus character required. Sizes 1/2 In. through 6-In. standard.

### A) Figures Only/Single Sets - 15 Pieces

1 2 3 4 5 6 7 8 9 0 0, 1 Beginner, 1 Plain Ender, 1 Period and 1 Dash

#### B) Letters Only/Single Sets - 33 Pieces

A B C D E F G H I J K L M N O P Q R S T U V X Y Z &, 1 Beginner, 1 Period Ender, 1 Spacer, 1 Period, 1 Comma and 1 Dash

### C) Letter and Figure Sets - 45 Pieces

A B C D E F G H I J K L M N O P Q R S T U V X Y Z & 1 2 3 4 5 6 7 8 9 0, 1 Beginner, 1 Plain Ender, 1 Period Ender, 2 Spacers, 1 Period, 1 Comma and 1 Dash

# D) Letter and Figure Sets - 77 Pieces

AA BB CC DD EE FF GG HH II JJ KK LL MM NN OO PP Q RR SS TT UU V WW X Y Z & 11 22 33 44 55 66 77 88 99 00, 1 Beginner, 1 Period Ender, 1 Plain Ender, 2 Spaces, 2 Periods, 1 Comma and 1 Dash.

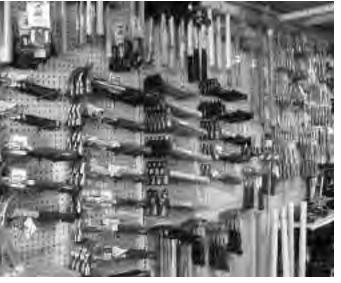
### E) Letter and Figure Sets - 92 Pieces

AAA BB CC DD EEE FF GG HH III JJ KK LL MM NNN OOO PP Q RR SSS TT UU VV WW XX YY ZZ && 111 22 33 44 55 66 77 88 99 000, 1 Beginner, 1 Period Ender, 1 Plain Ender, 3 Spacers, 2 Periods, 1 Comma and 1 Dash.

	Α		В		3	D		E	
Item	Size	Item	Size	Item	Size	Item	Size	Item	Size
Code	(in)	Code	(in)	Code	(in)	Code	(in)	Code	(in)
50158	1/2	50338	1/2	50458	1/2	50778	1/2	50928	1/2
75158	3/4	75338	3/4	75458	3/4	75778	3/4	75928	3/4
01158	1	01338	1	01458	1	01778	1	01928	1
15158	1-1/2	15338	1-1/2	15458	1-1/2	15778	1-1/2	15928	1-1/2
02158	2	02338	2	02458	2	02778	2	02928	2
25158	2-1/2	25338	2-1/2	25458	2-1/2	25778	2-1/2	25928	2-1/2
03158	3	03338	3	03458	3	03778	3	03928	3
04158	4	04338	4	04458	4	04778	4	04928	4
05158	5	05338	5	05458	5	05778	5	05928	5
06158	6	06338	6	06458	6	06778	6	06928	6









# **Torque Wrenches**

# **Metal Handle Click Type Torque Wrench**

Metal Handle Dual Scale. The metal handle series offers the user a rugged, industrial strength torque wrench able to withstand the rigors of professional use. Handles are lightly knurled for a tough, non-slip grip. There are 21 models of metal handle micrometer adjustable torque wrenches available.



### Features:

- · Dual scale, calibrated dual direction.
- · Positive lock with spring loaded pull down lock ring.
- Fast, accurate and easy to set.
- · Easy-to-read laser marked scales.
- Most feature quick release buttons which provide good socket retention as well as easy socket removal.
- Accuracy: ±3% CW ±4% CCW of indicated value, CW, from 20% to 100% of full scale.
- Individually serialized with matching certificate of calibration traceable to N.I.S.T.

Cat No	Drive Size	English Range	Incr	Nm Range	Incr	A (in)	B (in)	C (in)	D (in)	Wt (lbs)
in. lb.										
501MRMH	1/4	10-50	1	1.4-5.4	.06	10.15	1.06	0.93	1.06	0.85
1501MRMH	1/4	20-150	1	2.5-15.3	0.12	10.15	1.06	.93	1.06	0.90
1502MRMH	3/8	20-150	1	2.8-15.3	0.12	10.15	1.06	.93	1.06	0.90
2002MRMH	3/8	30-200	1	4.0-22.0	0.12	10.15	1.06	.93	1.06	0.85
2502MRMH	3/8	30-250	1	4.0-27.7	0.12	11.25	1.06	.93	1.06	0.95
7502MRMH	3/8	100-750	5	14.1-81.9	0.6	16.00	1.43	1.20	1.40	2.50
10002MRMH	3/8	150-1000	5	19.8-110.2	0.6	16.00	1.43	1.20	1.40	2.50
25003MRMH	1/2	300-2500	10	39.6-276.9	1.2	18.00	1.70	1.40	1.40	3.20
ft. lb.										
752MFRMH	3/8	5-75	.5	10.2-98.3	.7	16.00	1.43	1.20	1.40	2.50
1002MFRMH	3/8	10-100	.5	16.9-132.2	.7	16.00	1.43	1.20	1.40	2.55
1503MFRMH	1/2	20-150	1	34-197	1.4	19.00	1.70	1.40	1.40	3.15
2503MFRMH	1/2	30-250	1	47-332	1.4	24.40	1.70	1.40	1.40	3.15
4004MFRMH	3/4	80-400	5	85-491	3.4	34.25	2.50	2.10	1.40	10.30
6004MFRMH	3/4	100-600	5	169-779	6.8	42.00	2.50	2.00	1.15	11.85
10005MFRMH*	1	200-1000	5	305-1322	6.8	70.00	3.00	3.00	1.50	25.10
20005MFMHSS**	1	300-2000	10	N/A	N/A	108.50	3.15	4.25	1.65	48.75

\*Note: Supplied with one extension handle and is packed in a metal box. 
\*\*Note: Supplied with two extension handles, fixed/non-ratcheting head and is packed in a sturdy cardboard box.

# Torque Multipliers with Handles

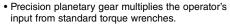
- Provides the operator with nut-turning power that requires only a fraction of the force required when using conventional tools.
- Input and output rotation is in the same direction.
- Reaction bar rotation is opposite to input direction and must rest securely against a rigid object to withstand the generated reaction force.
- By removing 4 screws, heads may be easily dissembled for inspection, cleaning and lubrication.

Cat No.	EDP No.	Max Output Ft. Lbs.	Multi- plicaion Ratio*	Approx. Ft. Lbs. Rq'd for Max. Output	Input Female Sq. (in)	Output Male Sq. (in)	Head Thkns. Incld. Tang (in)	Head Dia. (in)	Overall Lgth. Incld. Reaction Bar (in)	Wt. (lbs)
TM-750LW	51453	1000	3.6 to 1	275	1/2	3/4	3-9/32	3-1/2	22-1/2	5.9
TM-1000	51454	2000	3.6 to 1	550	3/4	1	4-3/8	3-17/32	24	11.4
TM-1500	51455	4000	3.9 to 1	1150	1	1-1/2	6-1/8	5-3/16	28-7/8	23.1
TM-2000	51464	8000	4.6 to 1	1915	1	1-1/2	6-1/4	6-1/2	31	45.8
TM-2500	51456	12000	5.4 to 1	2200	1	2-1/2	7-1/4	7-1/4	30	69.2

\*Multipliers are mechanical devices which have frictional losses. A 10% factor was included in the multiplication ratio. For higher accuracy of multiplication ratio, output of unit should be checked on torque tester.

# Torque Multiplier with Planetary-Gear Mechanism

- Designed where high torques are neccessary for fastening or breaking out stubborn fasteners.
- Allows operator safe and easy means of producing torque for job requirements.



 Can also multiply the torque from air-driven (non-impact) wrenches.

Cat No	Max Output ft lbs	Input Cap	Gear Ratio	Torque Ratio	Input Female Sq	Output Sq Size	Overall Length	Head Height Sq to Top	Head Dia
TM-290	750	227	4:1	3:3:1	1/2	3/4	8-1/2	3-1/4	2-13/16
TM-391	1200	200	6:3:1	6:0:1	1/2	3/4	19-39/64	4	3-15/16
TM-392	2200	162	15:0:1	13:6:1	1/2	1	19-39/64	5-3/4	4-1/16
TM-393	3200	173	20:25:1	18:5:1	1/2	1	19-39/64	6-1/2	4-1/16
TM-394	5000	189	29:25:1	26:5:1	1/2	1-1/2	14-29/32	8-3/4	5-5/8
TM-395	8000	154	60:1	52:0:1	1/2	1-1/2	15-13/64	10-3/4	5-13/16

\*Multipliers are mechanical devices which have frictional losses. A 10% factor was included in the multiplication ratio. For higher accuracy of multiplication ratio, output of unit should be checked on torque tester.