






Punches / Chisels

The anvil end on heads of Snap-on® punches and chisels are machined to a modified parabolic curve. This design directs the striking force to the center of the tool head to allow slow metal displacement. The parabolic curve controls mushrooming to reduce chipping and splitting. Heads should be re-dressed to their original shape with hand files as necessary. The tough steel alloy is machined and differentially heat treated for optimum performance. The hardness of the striking head is reduced to help toughness and add qualities that result in a slower mushrooming of the striking surface.



	Stock No.	Hex Size, in.	Point/Edge, in.	Length in.
<i>Punch and Chisel Accessories</i>				
	PPC1A Chisel Gauge	—	—	2 5/8
	PPC5A Punch/Chisel Holder	—	—	6 15/16
<i>Center Punches</i>				
	PPC3A	5/16	1/8	5
	PPC4A	7/16	3/16	6
	PPC6B	5/8	5/16	7
	PPC714B	9/16	5/32	14
<i>Pin Punches</i>				
	PPC103A	9/32	3/32	4 7/32
	PPC104A	5/16	1/8	4 3/4
	PPC105A	3/8	5/32	5
	PPC106A	3/8	3/16	5 1/4
	PPC107A	3/8	7/32	5 1/4
	PPC108A	7/16	1/4	5 3/4
	PPC110A	1/2	5/16	5 1/4
	PPC112	9/16	3/8	5 1/4
<i>Starter Punches</i>				
	PPC203A	5/16	3/32	5 1/2
	PPC204A	3/8	1/8	5 3/4
	PPC205A	3/8	5/32	6
	PPC206A	7/16	3/16	6 1/4
	PPC208A	1/2	1/4	6 3/4
	PPC210A	9/16	5/16	7 1/4

	Stock No.	Hex Size, in.	Point/Edge, in.	Length in.
	PPC808A	1/4	1/4	5
	PPC812B	5/16	3/8	5 1/2
	PPC816B	7/16	1/2	6
	PPC820B	1/2	5/8	6 1/2
	PPC824B	5/8	3/4	7 1/4
	PPC828B	11/16	7/8	8
	PPC832B	7/8	1	9
	BPPC1878	7/8	1	9
	PPC820LB	1/2	5/8	16
<i>Long Flat Chisels</i>				
	PPC12B	3/8	5/16	6
<i>Half Round Nose Cape Chisels</i>				
	PPC13B	5/16	1/4	5 5/8
	PPC14B	3/8	5/16	6
<i>Cape Chisels</i>				
	PPC15B	7/16	7/32	6
	PPC19B	3/8	1/8	5 3/4
<i>Diamond Point Chisels</i>				



PPC250AK

PPC250AK Punch and Chisel Set

Includes the following 25 pcs. in C2700A Kit Bag:

PPC1A	PPC106A	PPC206A	PPC828B
PPC108A	PPC208A	PPC12B	PPC3A
PPC110A	PPC210A	PPC14B	PPC4A
PPC112	PPC812B	PPC15B	PPC103A
PPC203A	PPC816B	PPC19B	PPC104A
PPC204A	PPC820B		PPC105A
PPC205A	PPC824B		



PPC715A

PPC715A Punch and Chisel Set

Includes the following 16 pcs. in storage tray:

PPC1A	PPC104A	PPC203A	PPC208A
PPC3A	PPC105A	PPC204A	PPC812B
PPC4A	PPC106A	PPC205A	PPC816B
PPC103A	PPC108A	PPC206A	PPC820B



PPSD120K

PPSD120K Pin and Starter Punch Set

Includes the following 12 pcs. in C1203 Kit Bag:

PPC103A	PPC106A	PPC203A	PPC206A
PPC104A	PPC108A	PPC204A	PPC208A
PPC105A	PPC110A	PPC205A	PPC210A



PPC210AK

PPC210AK Punch and Chisel Set

Includes the following 22 pcs. in C2201A Kit Bag:

PPC1A	PPC105A	PPC203A	PPC210A
PPC3A	PPC106A	PPC204A	PPC812B
PPC4A	PPC108A	PPC205A	PPC816B
PPC103A	PPC110A	PPC206A	PPC820B
PPC104A	PPC112	PPC208A	PPC824B
		PPC5A	PPC828B



PPC710A

PPC710A Pinch and Chisel Set

Includes the following 11 pcs. in storage tray:

PPC1A	PPC105A	PPC205A	PPC816B
PPC4A	PPC106A	PPC206A	PPC820B
PPC103A	PPC203A	PPC812B	

PPC50AK Flat Chisel Set

Includes the following 5 pcs. in C0500 Kit Bag:

PPC812B	PPC820B	PPC828B
PPC816B	PPC824B	

PPC100AK Chisel Set

Includes the following 10 pcs. in C104B Kit Bag:

PPC812B	PPC824B	PPC13B	PPC15B
PPC816B	PPC828B	PPC14B	PPC19B
PPC820B	PPC12B		

PPCS60K Starter Punch Set

Includes the following 6 pcs. in C64B Kit Bag:

PPC203A	PPC205A	PPC208A
PPC204A	PPC206A	PPC210A



PPCD70K

PPCD70K Pin Punch Set

Includes the following 7 pcs. in C0709 Kit Bag:

PPC103A	PPC106A	PPC108A
PPC104A	PPC107A	PPC110A
PPC105A		

RELATED ITEMS

Drill Bits, pgs 285-289
Hammers, pgs 314-316











WARNING

- Do not use punches or chisels having chipped or mushroomed ends; dress dull edges or mushroomed ends to original shape with a hand file.
- Hammer head diameter should be approximately 3/8" larger than head of punch or chisel.
- Read additional safety precautions on pages 534 to 537.



Punches / Chisels

	Stock No.	Hex Size, in.	Point/Edge, in.	Length in.
<i>Roll Pin Punches</i> 	PPR2	—	1/16	3 5/32
	PPR2-1/2	—	5/64	3 1/2
	PPR3	—	3/32	3 29/32
	PPR4	—	1/8	4 1/4
	PPR5	—	5/32	4 5/8
	PPR6	—	3/16	5
	PPR7	—	7/32	5 3/8
	PPR8	—	1/4	5 3/4
	PPR10	—	5/16	6 1/8
	PPR12	—	3/8	6 1/8
	PPR14	—	7/16	6 1/8
PPR16	—	1/2	6 1/8	
<i>Long Pin Punches</i> 	PPC104LA	5/16	1/8	5 5/16
	PPC105LA	3/8	5/32	6 1/2
	PPC106LA	3/8	3/16	7 1/16
	PPC107LB	3/8	7/32	7 5/8
	PPC108LA	7/16	1/4	8 3/16
	PPC110LA	1/2	5/16	8 3/4
<i>Midget Punches and Chisels</i> 	PPC402A Pin Punch	9/32	1/16	3
	PPC403A Pin Punch	9/32	1/8	3 1/4
	PPC404A Center Punch	9/32	3/32	3 5/8
	PPC405A Starter Punch	9/32	1/16	3 3/4
	PPC408B Flat Chisel	—	5/16	4 1/8
	PPC406B Cape Chisel	9/32	3/16	3 7/8
	PPC407B Cape Chisel	9/32	5/32	4

	Stock No.	Hex Size, in.	Point/Edge, in.	Length in.
<i>Drift Pin Punches</i> 	PPC905B	3/8	5/32	8
	PPC908B	7/16	1/4	8 1/2
	PPC910B	1/2	5/16	9
	PPC912B	9/16	3/8	9 1/2
	1210B	5/8	5/16	12
	1512B	3/4	3/8	15
	1816B	7/8	1/2	18
<i>Bronze Pin Punches</i> 	PPB408A	—	1/4	4
	PPB612A	—	3/8	6
<i>Bronze Drift Punches</i> 	PPB816A	—	1/2	8
	PPB826A	—	13/16	8
	PPB1226A	—	13/16	12
<i>Bronze Tapered Punches</i> 	PPB1001A	5/8	3/8	8
	PPB1012A	—	3/8	10
	PPB1414A	—	7/16	14
<i>Bronze Round Punch</i> 	PPB1002A	—	3/4	10



PPRG80

PPRG80 Roll Pin Punch Guide Set.

Intended as a companion tool for the PPR708K Roll Pin Punch Set, the PPRG80 provides faster, safer pin installation. The pin guide is a vinyl sleeve uniting pin and punch to achieve perfect alignment during installation. Ideal for pin installation in tight quarters where two hands can't reach. Eliminates the need to start pin with hammer before applying punch. Eliminates hitting fingers with hammer. Use with Snap-on® Roll Pin Punches PPR2 thru PPR8 (1/16" to 1/4"). Can also be used with Snap-on® Pin Punches PPC103A thru PPC108A (3/32" to 1/4") and Long Pin Punches PPC104LA thru PPC108LA (1/8" to 1/4").



PPVP70AK

PPVP70AK Midget Punch and Chisel Set

Includes the following 7 pcs. in C0702 Kit Bag:

PPC402A PPC404A
PPC408B PPC407B
PPC403A PPC405A
PPC406B



PPR708K

PPR708K Roll Pin Punch Set

Includes the following 8 pcs. in C0802A Kit Bag:

PPR2 PPR4 PPR7
PPR2-1/2 PPR5 PPR8
PPR3 PPR6



LP30A

PPLT40AK Drift Pin Punch Set

Includes the following 4 pcs. in C0402 Kit Bag:

PPC905B PPC908B
PPC910B PPC912B

LP30A Drift Pin Punch Set

3 pcs. include:

1210B 1512B 1816B



PPCL60AK

PPCL60AK Long Pin Punch Set

Includes the following 6 pcs. in C0608 Kit Bag:

PPC104LA PPC106LA PPC108LA
PPC105LA PPC107LB PPC110LA



PPBL30AK

PPB30AK Bronze Punch Set

Includes the following 3 pcs. in C0300B Kit Bag:

PPB408A PPB612A PPB816A

PPBL30AK Bronze Punch Set

Includes the following 3 pcs. in C0301B Kit Bag:

PPB1012A PPB1226A PPB826A

PPB20AK Bronze Tapered Punch Set

Includes the following 2 pcs. in C0200B Kit Bag:

PPB1012A PPB1414A

Images shown may not be actual product but represents product or set which includes product.

Specialty Punches / Chisels

Soft Grip Punches and Chisels

The ergonomic soft grip handle provides a powerful grip, improves the thermal sensation in cold work environments and reduces strike vibration. Semi-spherical striking area controls mushrooming to help reduce chipping and splitting. Cutting edges on chisels are hand ground to consistently produce a quality edge. Black oxide coated to prevent chipping and maintain a secure fastener engagement. Manufactured from special alloy steel that is differentially heat treated to help toughness.

Stock No.	Description	Point/Edge, in.	Length, in.
PCSG812	Flat Chisel	3/8	6 1/8
PCSG816	Flat Chisel	1/2	6 1/8
PCSG820	Flat Chisel	5/8	6 1/8
PPSG4	Center Punch	3/16	6 1/8
PPSG103	Pin Punch	5/32	6 1/8
PPSG105	Pin Punch	5/32	6 1/2
PPSG106	Pin Punch	3/16	6 1/2
PPSG203	Starter Punch	3/32	6 1/8
PPSG205	Starter Punch	5/32	6 1/8
PPSG206	Starter Punch	3/16	6 1/8

PPCSG710 Soft Grip Punch and Chisel Set. Includes PPSG4 Center Punch, all PCSG Series Flat Chisels, all PPSG Series Pin Punches and all I Series Starter Punches (10 pcs) in storage tray.



PPC14LB

Oval Bearing Race Punches

Specially heat-treated, high-alloy steel makes these tools ideal for stubborn bearing races.

- PPC6LB** 7/16" hex stock, 7/16" x 15/64" oval point, 6" long.
- PPC10LB** 1/2" hex stock, 1/2" x 17/64" oval point, 10" long.
- PPC14LB** 9/16" hex stock, 9/16" x 19/64" oval point, 14" long.
- PPC20LB** 9/16" hex stock, 5/8" x 5/16" oval point, 20" long.
- PPC704A Punch Set.** Includes PPC6LB thru PPC20LB (4 pcs).



GA1

Bushing Cutter

GA1 Bushing Cutter (7 1/4" long). Made of 1/2" octagonal stock with a 7/16" x 1/8" bit. Curved bit pushes material away from work.



Automatic Centering Punches

YA900 Automatic Center Punch (4 3/4" long). Strikes blow when pressure is applied—no hammer needed. Cap adjusts force of blow. 7/16" diameter.

YA879 Heavy Duty Automatic Center Punch (5" long). Single-handed operation. Design eliminates need for striking with hammer. Adjustable spring tension cap. Hardened steel point is replaceable. 1/2" diameter.



YA8290A

Revolving Punch

YA8290A Revolving Punch. Punch round holes in leather, rubber, plastic, canvas, gaskets, and other similar materials. Six punch sizes included in tool: 5/64", 3/32", 7/64", 1/8", 9/64" and 5/32".

Gasket Punch Set

PGH8A Gasket Punch Set. Cuts holes in gaskets and other soft materials. Includes 5 3/8" long mandrel and ten punches: 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 3/4", 7/8", and 1" in a storage case.



PGH8A



DPFT528A

Transfer Punch Set

DPFT528A Transfer Punch Set. For transferring hole patterns. Set includes punches from 3/32" to 1/2" in 1/64" increments plus 17/32". Each punch is marked with its size and manufactured from tempered steel to promote long tool life. A metal index provides convenient storage. Punches are 4 7/8" in length.



GA237

Steel Stamping Sets

Heat-treated square stamp bodies. Stored in two-piece wooden containers.

Stock No.	Characters	Number Stamps	Figure Size, inches	Square Body, inches	Length, inches
GA237	0-9*	9	3/16	5/16	2 7/16
YA817	0-9*	9	1/8	1/4	2 3/8
GA238	A-Z**	27	3/16	5/16	2 7/16
YA818	A-Z**	27	1/8	1/4	2 3/8

*One stamp serves as both 6 and 9.

**Also includes stamp for period.



WARNING

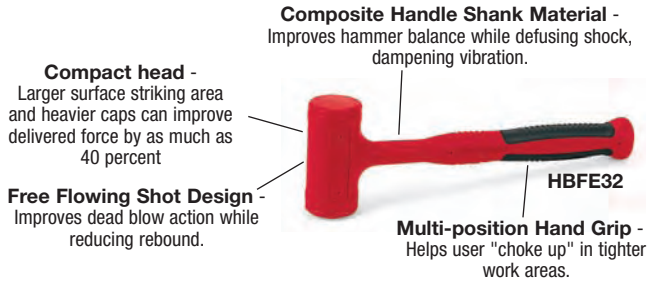
- Do not use punches or chisels having chipped or mushroomed ends; dress dull edges or mushroomed ends to original shape with a hand file.
- Hammer head diameter should be approximately 3/8" larger than head of punch or chisel.
- Read additional safety precautions on pages 534 to 537.



Hammers Dead Blow

HBFE Series Dead Blow Hammers

Dead Blow Hammers feature the Free-flowing Shot Design which improves dead blow action while reducing rebound.



Applications: Brake Rotors, Brake Drum Removal, Ball Joints (Tie Rod Removal), Tires, Seal Installation, Loosen Oil Pans and Covers, OE Rims, Axle Insertion, Piston Installation and Crank Shaft End Play.

Standard

Soft Grip Handle with ribbed, textured elastomer grip prevents hand slippage. Composite Handle Shank improves balance while defusing shock and dampening vibration. Improved Thermoplastic Urethane Material is non-sparking and resistant to most shop chemicals. High Visibility Red Color for easy identification.

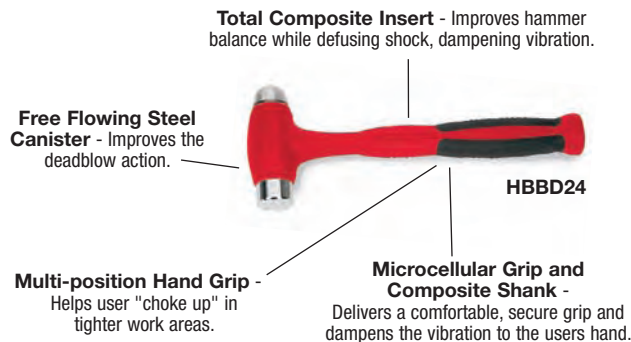
Stock No.	Weight	Head Length, inches (mm)	Face Dia., inches (mm)	Length, inches (mm)
HBFE16	16 oz.	3 1/4 (82)	1 9/16 (39)	12 (304)
HBFE24	24 oz.	3 3/4 (95)	1 3/4 (44)	12 3/4 (324)
HBFE32	32 oz.	4 1/4 (107)	2 (50)	13 1/2 (343)
HBFE48	48 oz.	4 3/4 (120)	2 1/4 (57)	15 (381)
HBFE56	56 oz.	5 7/16 (138)	2 3/4 (69)	15 3/4 (400)

HBFE103 Dead Blow Hammer Set

Includes HBFE24, HBFE32 and HBFE48 Dead Blow Hammers (3 pcs).

HBB Series Ball Peen Hammers

Dead Blow Hammers feature the Free-flowing Shot Design which improves dead blow action while reducing rebound.

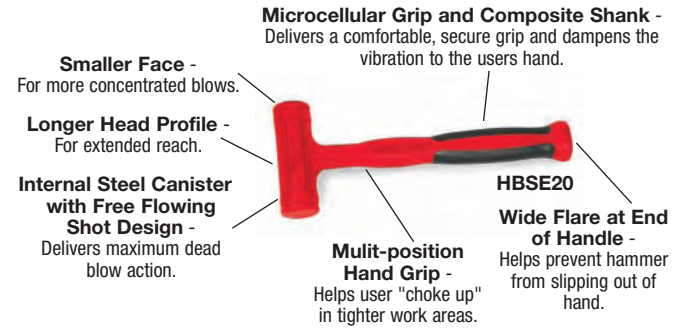


Applications: Rear Drums, Ball Joints, Tie Rods, U-Joints Rounded End, Track Bar Rounded End, Rounded End - Rivets and Punch and Chisel Applications.

Stock No.	Weight	Head Length, inches	Face Dia., inches	Length, inches
HBBD8	8 oz.	4	1	11 5/8
HBBD16	16 oz.	4 3/8	1 1/4	12 1/4
HBBD24	24 oz.	4 3/4	1 3/8	12 3/4
HBBD32	32 oz.	5 3/4	1 3/4	13 3/8
HBBD40	40 oz.	5 3/4	1 3/4	15 1/8

HBSE Series Slimline Dead Blow Hammers

Slimline Dead Blow incorporates our new microcellular soft grip handle, a softer more comfortable energy absorbing material.



Applications: Main Bearing Caps, Dust Caps, Smaller Objects, Custom Bikes, Tighter Applications that Standard Dead Blow Hammers will not fit and Extended Reach Applications.

Stock No.	Weight	Head Length, inches	Face Dia., inches	Length, inches
HBSE10	10 oz.	3 1/2	1 1/4	10 5/8
HBSE20	20 oz.	4 1/8	1 3/8	11 1/8
HBSE30	30 oz.	5 1/8	1 1/2	12 3/8



Sledge

Stock No.	Weight	Head Length, inches	Face Dia., inches	Length, inches
BC7B	5 lb.	7	2 3/4	20
BC110B	8 lb.	7	2 3/4	30
BC114B	11 lb. 8 oz.	8	3 1/4	36



Piston

One-piece urethane construction. Full length canister increases head strength. Made of material that won't damage the piston. Shot-filled head drastically reduces rebound.

Stock No.	Weight	Head Length, inches	Face Dia., inches	Length, inches
HLE24	24 oz.	7 3/4	5 1/2	12 3/4



Dual Face Drilling

- Dead Blow Hammers deliver sustained impact and maximum striking force with almost no rebound
- Composite handle shank improves the hammer balance while defusing shock
- Free-flowing steel head canister design improves dead blow action and reduces rebound
- Non-sparking, chemical resistant molded urethane covering
- Ribbed thumb rest allows user to choke up in tighter work areas
- Bright color for high visibility

Stock No.	Weight	Head Length, inches	Face Dia., inches	Length, inches
HSSD32	32 oz.	5 3/8	1 3/4-1 3/8	11 1/2

Soft Face Hammers

HBPT Series

Bronze Faced non-marring hammer ideally suited for work on bushings, gears, and transmissions.



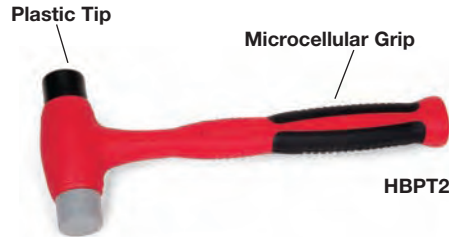
HBPT32

Applications: Bearings & Race Install, Pinion & Half Shafts, Distributor Rebuilds, Alternator & Starter Rebuilds, Seal Installation, Body Moldings and No Spark Applications.

Stock No.	Weight, oz.	Head Length, inches	Head Dia., inches	Length, inches
HBPT16	16	3 3/4	1 3/8	12
HBPT24	24	4 1/4	1 3/8	12
HBPT32	32	4 1/2	1 1/2	12 3/4

HBPT Series

Plastic tipped hammers used where metal to metal scratching or marring needs to be eliminated.



HBPT24

Applications: Transmission Work, Rear End Work, Metal Body Moldings and Light Tapping.

Stock No.	Head Length, inches	Weight, oz.	Length, inches	Soft Tip Stock No.	Hard Tip Stock No.
HBPT16	3 3/4	16	12	HPTS16	HPHT16
HBPT24	4 3/4	24	12 3/4	HPTS24A	HPHT24A



BF623

Soft Blow

Designed to reduce marring and denting. Use in assembly applications and on all types of surfaces including metal, glass, plastic and wood. Special polymer head resists dynamic fatigue, creep and compression set, even at extreme temperatures.



BF620C

Stock No.	Face Dimensions, inches	Head Color	Length, inches
BF623	1 7/8 x 2 1/8	Blue	12 1/2

BF620C Rubber Head Mallet. Solid rubber head is 3 3/4" long and 2 1/4" in diameter. 11" hardwood handle. Ideal for replacing hubcaps, bodywork, etc.



HSP16KT

Interchangeable Head

Shot loaded, dead blow hammer adds 35% more striking force with each swing by eliminating rebound and dampening vibration shock to the hand and forearm. 1 1/2" striking face diameter on each hammer head. Six interchangeable heads meet a number of various applications, including non-marring and non-sparking applications with selected head surfaces. Comfortable, non-slip handle grip. Set includes 10" fiberglass handle and storage case. 1" Head Extender is optional.

Stock No.	Description	Color	Weight, oz.
HSP16KT1	Hammer Handle	—	22
HSP16KT2	Soft Face	Brown	1.5
HSP16KT3	Medium Face	Red	1.4
HSP16KT4	Medium Hard Face	Cream	1.3
HSP16KT5	Hard Face	Black	1.3
HSP16KT6	Steel Face	Steel	2.2
HSP16KT7	Brass Face	Brass	2.2
HSP16KT8	Plastic Storage Case	Black	—
HSP16KT9	1" Head Extender	—	—

HSP16KT Dead Blow Set. Includes HSP16KT2 thru HSP16KT7 Hammer Heads plus HSP16KT1 Hammer Handle (7 pcs) in HSP16KT8 Storage Case.



HSPD16



BH232A

Combination

Combination Steel and Soft Face Dead Blow. One-piece urethane construction. Includes replaceable tips.

Stock No.	Head Length, inches	Weight, oz.	Tip Dia., inches	Length, inches	Soft Tip Stock No.	Hard Tip Stock No.
HSPD16	4 3/8	16	1 1/4	12 1/8	HPTS16	
BH232A	32	32	1 5/8	13	BH232-2	BH232-3
BH232-4	Optional nylon tip. (also available)					



HBR15

Brass (Fiberglass Handle)

Non-sparking / non-marring surface for many applications. Brass head absorbs blow and reduces rebound. Flat surface for even distribution of blow. Fiberglass handle for strength. Comfortable, non-slip handle grip.

Stock No.	Weight, lbs.	Length, inches
HBR15	1 1/2	12
HBR25	2 1/2	12



WARNING

- Do not use urethane hammers near liquid oxygen
- Do not use chipped, mushroomed, or cracked hammers.
- Strike squarely; avoid glancing blows.
- Read additional safety precautions on pages 534 to 537.



Hammers Ball Peen



BP16B

Hickory Handle

Stock No.	Weight, oz.	Handle Length, inches	Replacement Handle
BP2B	2	9 1/2	BPH2C
BP4B	4	10 1/2	BPH4C
BP8B	8	12 1/2	BPH8C
BP12B	12	13 1/2	BPH12C
BP16B	16	14 1/2	BPH16C
BP20B	20	15	BPH20C
BP24B	24	16	BPH20C
BP32B	32	16	BPH40C
BP40B	40	16 1/4	BPH40C
BP48B	48	16 1/4	BPH40C

ASME/ANSI B173.2

BP1004S Hammer Set. Includes BP8B, BP12B, BP16B, and BP24B (4 pcs).

Heavy-Duty

BC/BD/HD Series Heavy Duty Fiberglass

Dampens vibration and provides extra strength and safety. Handle is resistant to dry rot, warp or splintering.

Hammer head - Is epoxy welded to handle to withstand 8,000 pounds of pull.

Comfortable, Non-Slip Handle Grip - Delivers a comfortable, secure grip.

Fail-Safe Fiberglass Handles - Are strong and dampens vibrations.

HD4SG

BC4SG

BD4SG

Fiberglass Handle

Fiberglass handle dampens vibration and provides extra strength and safety. Handle is epoxy-welded to hammer head and will withstand 8,000 lbs. of pull. Handle is resistant to dry rot, warp or splintering. Comfortable, non-slip handle grip. Materials will resist most shop chemicals.

Stock No.	Description	Weight, lbs.	Striking Face Dia., inches	Handle Length, inches	Overall Length, inches	Replacement Handle
BC4SG	Cross Peen	4	1 1/2	12	14	BD4SG-1
BD4SG	Engineer	4	1 1/2	12	14	BD4SG-1
HD4SG	Hand Drilling	4	1 1/2	8 3/4	10 3/4	HD4SG-1

Hickory Handle

Stock No.	Description	Weight, oz.	Head Length, inches	Overall Length, inches	Replacement Handle
BH122D	Engineer	40	4 1/2	15	BPH40C
BH123D	Engineer	48	4 3/4	15	BPH40C
BH141A	Cross Peen	32	4 1/2	15	BPH20C
BH142A	Cross Peen	40	5	15	BPH40C
BH143A	Cross Peen	48	5 1/2	15	BPH40C
BH133B	Hand Drilling	48	4 1/2	10	BPH133

RELATED ITEMS

Punches and Chisels, pgs 311-313



BPN16B

Fiberglass Handle

Stock No.	Weight, oz.	Handle Length, inches	Replacement Handle	Previous Model Handle
BPN8B	8	11	BPNH8B	BP8-1
BPN12B	12	12	BPNH12B	BP12-1
BPN16B	16	13	BPNH12B	BP16-1
BPN24B	24	14	BPNH24B	BP24-1
BPN32B	32	16	BPNH24B	BP24-1

ASME/ANSI B173.2

BD Series Sledge Hammers

Engineered for safety.

Durable Handles - Will not dry rot, warp or splinter from exposure to the elements & resists most shop chemicals.

Handles - Have a tensile strength of 200,000 pounds per square inch.

Drop Forged Carbon Steel Heads - Are heat treated for durability & safety.

Fiberglass Handles - Are welded into the sledge eyehole to withstand 8,000 pounds of pull-apart force.

Ergonomic Grip - Provides a superior gripping surface, helping to dampen & absorb vibration.

BD10ESG

Sledge Fiberglass Handle

Stock No.	Weight, lbs. (kg)	Face Dia., in. (mm)	Handle Length, in. (mm)	Overall Length, in. (mm)	Replacement Handle
BD6ESG	6 (2.7)	1 5/8 (41.1)	16 (406.4)	18	BD6ESG-1
BD10ESG	10 (4.5)	2 (50.8)	29 (736)	32 (812.8)	BD8ESG-1



BH133B



BH141A



BH122D

Hacksaws Cutting



HS25



HS18A



HS20A



HSG319



HS5A



HS151

Hacksaws

HS25 Combination Saw. Can be used as hacksaw or bow saw. Small enough to fit in tool boxes. Ideal for plumbers and electricians. Easy to stow in car, boat, RV or backpack. Metal hand guard to prevent knuckle injuries. Blade protector for safety. Includes 12" (300mm) bi-metal hacksaw blade and wood cutting blade.

HS51TW Wood Cutting Blade. Wood cutting blade for HS25 Bow Saw.

HSG319 Bi-Mold Handle Hacksaw. Solid steel frame overmolded with a soft grip for comfortable use. Designed for 12" (300mm) blades. Blade tensioner discreetly blends with handle and won't get in the way. Positions for normal flush cutting or 55° angle.



HS50

Quick Cutter Hand Saws

Our "Quick Cutter" hand saw features our patented contoured screwdriver type handle for a secure grip. The saw holder keeps a tight hold on any of the three included blades. A turn of the knurled knob and you can easily switch blades. All components are neatly packaged in CO417 Kit Bag.

HS50 Quick Cutter Hand Saw. Red handle. Includes the following blades: HS14X1, HS18X1, HS24X1.

HS14X1 General Purpose Blade. For metal over 1/8", hard rubber, and fiber.

HS18X1 Fine Metal Cutting Blade. For metal 18 ga. to 1/8", nail embedded wood.

HS24X1 Heavy Metal Cutting Blade. For metal 18 ga. and under trim, and tubing, plus galvanized pipe under 18 ga.

HS18A Deluxe Hacksaw. Designed for 12" (300mm) blades. Blade storage inside the rectangular back section. Positions for normal flush cutting or 55° for angle or horizontal cutting. Blade tensioning device in handle. Built in hand guard for protection. Includes HSBM1224B 12" Blade.

HS20A Professional Hacksaw. Designed for 12" (300mm) blades. Allows very high blade tension for accurate and exact kerfs. Spring tensioned blade loading mechanism, strong rectangular back section for blade storage with an easy to handle retaining screw. Positions for normal flush cutting or 55° for angle or horizontal cutting. Can be used as a compass saw. Includes HSBM1224B 12" Blade.

HS5A Mini Hacksaw. Designed for 10" (250mm) blades. 8 1/4" frame fits in limited access areas. Easy to handle. Includes HSBM1024B 10" Blade.

HS151 Junior Frame Hacksaw. Designed for 6" blades. 9 1/2" long. Blade included.

HSM632 6" Replacement Blade (32 TPI). 1/4" wide, 32 teeth per inch, 6" length. Package of 10.

Hacksaw Blades

Manufactured of a shatter resistant bi-metal for a long life and fast, efficient cutting. Available in packages of 10 only.

Stock No.	Length, inches	Teeth per Inch
HSBM1018B	10	18
HSBM1024B	10	24
HSBM1032B	10	32
HSBM1214B	12	14
HSBM1218B	12	18
HSBM1224B	12	24
HSBM1232B	12	32

Knives / Scissors



CRKBP1



CRKBP11



CRKBP6



CRKBP16

Folding Knives

CRKBP1 M1 Lightfoot Design Knife. Cryogenic heat treated high carbon stainless steel blade for sharpness and edge durability. Machined Blue/Black G10 handle for strength and incredible gripping power even in wet or cold conditions. Mako Flipper opens blade quickly one handed. LAWKS™ safety makes a folding knife as safe as a fixed blade. Blade length: 3 1/8". Handle length: 4 1/2". Weighs 5.2 oz.

CRKBP11 M16 Carson Design Tanto Knife. Tanto blade design that provides a strong blade tip. AutoLawks® engages the locker liner safety automatically making the knife a virtual fixed blade. Lightening holes for easy carrying while still providing incredible strength. Adjustable pivot screw for easy blade adjustment. Blade length: 3". Handle length: 4". Weighs 2.4 oz.

CRKBP6 Cruiser Double Flippers Knife. Dual flippers for easy one hand opening and resulting in a true hit. Slim design for easy carry and deployment. Partially serrated clip point blade for detailed chores or heavy cutting. Floating stop pin adds incredible strength and makes it easy to clean. Blade length: 3 1/4". Handle length: 4 1/2". Weighs 4.6 oz.

CRKBP16 M16 Carson Design Spear Point Knife. Ti-Nitride coated partially serrated spear point blade for smooth cutting and rust prevention. Carson flipper for fast one hand opening. Pocket clip for easy carrying. Cryogenic heat treated high-carbon stainless steel blade for sharpness and edge durability. Blade length: 3 1/2". Handle length: 4 3/4". Weighs 3.7 oz.



YA114



KER1120

Scissors

YA114 Stainless Scissors. High quality stainless steel. Handles pull apart and fold into cutting position. Compact: 3" long.

KER1120 Taskmaster Shears. High carbon stainless steel blades are designed to hold their edge longer and sharpen quickly. Blades are permanently bonded to comfortable, non-slip handles. Overall length is 9" (23cm).



WARNING

- Read additional safety precautions on pages 534 to 537.
- Keep away from children.



Cutting Knives



KER1004RDSO



KER1060ART



KER1440



KER1470



KER1475



KER1550



KER1600



KER1620RDSO



KER1620ST



KER1660VIB



KER1670RD



KER1675BLKST



KER1720



KER1725



KER1730



KER1740



KER1745



KER1820

Lock Back Knives

KER1004RDSO Caribiner Tool. Five in one caribiner includes knife blade, slotted head screwdriver, Phillips® head screwdriver, bottle opener, and caribiner. Frame is AUS6A stainless steel. 3 1/4" partially serrated blade. 2.7 oz.

KER1060ART Black Horse II. Co-polymer handle features RealTree® hardwoods HD. 3 3/4" straight edge blade. 4.6 oz.

KER1440 Chubby. Blade is easily opened with one hand. Injected molded ZYTEL® handle with non-slip KRATON® inserts provides a sure gripping surface and resists most shop chemicals. Snap-on® logo molded in handle. Exclusive wrench clip adds style and is removable. 2 1/2" stainless steel straight edge blade. 4.3 oz.

KER1470 Storm. Thumb stud provides super smooth, one handed, manual opening. 3" stainless steel straight edge blade. 4.2 oz.

KER1470ST Storm. Same as KER1470 except blade is partially serrated. 4.2 oz.

KER1475 Storm II. Same as KER1470 except blade is 3 1/2". 5.8 oz.

KER1475ST Storm II. Same as KER1475 except blade is partially serrated. 5.8 oz.

KER1550 Black Out. SpeedSafe technology provides assisted opening. Removable pocket clip. 3 1/4" stainless steel straight edge blade. 4.0 oz.

KER1550ST Black Out. Same as KER1550 except blade is partially serrated. 4.0 oz.

KER1595 Speed Bump. Features stainless steel re-curve blade for high leverage cutting. SpeedSafe technology provides smooth opening. 3 5/8" straight edge blade. 1.7 oz.

KER1600 Chive. Bead blasted stainless steel handle. Removable pocket clip. 1 15/16" stainless steel straight edge blade. 1.9 oz.

KER1600BR Chive. Same as KER1600 except handle is black and red. 2.1 oz.

KER1620RDSO Scallion. Durable 6061-T6 anodized red aluminum handle with Snap-on® logo. Stainless steel liners. Safety tip lock. Removable pocket clip. 2 1/4" stainless steel straight edge blade. 2.3 oz.

KER1620BLSO Scallion. Same as KER1620RDSO except handle is blue. 2.3 oz.

KER1620ST Scallion. Same as KER1620RDSO except blade is partially serrated, handle is black and no Snap-on® logo on handle. 2.3 oz.

KER1660BB Leek. Handle is 6061-T6 anodized aluminum with smoked finish anodized black and blue. 3" straight edge blade. 3.1 oz.

KER1660BR Leek. Same as KER1660BB except handle is anodized black and red. 3.1 oz.

KER1660VIB Rainbow Leek. Same as KER1660BB but has a titanium oxide coating that produces a brilliant scratch resistant rainbow finish. 3.1 oz.

KER1670RD Blur. Anodized red aluminum handle. SpeedSafe assisted opening mechanism smoothly opens the knife with minimal effort. 3 3/8" straight edge blade. 4.2 oz.

KER1670RDST Blur. Same as KER1670RD except blade is partially serrated. 4.2 oz.

KER1670BLK Blur. Same as KER1670RD except handle is black. 4.2 oz.

KER1670BLKST Blur. Same as KER1670BLK except blade is partially serrated. 4.2 oz.

KER1675BLKST Rescue Blur. Anodized black aluminum handles are durable and lightweight. Carbide glass breaker tip for emergency use. 3 3/8" stainless steel straight edge blade. 4.2 oz.

KER1675RDST Rescue Blur. Same as KER1675BLKST except handle is red. 4.2 oz.

KER1720 JYD. One handed, index finger opening system pops the blade up out of the handle for easy deployment by either left and right handed knife users. A locking liner secures the blade in place. 3" stainless steel straight edge blade. 4.0 oz.

KER1720ST JYD. Same as KER1720 except blade is partially serrated. 4.0 oz.

KER1725 JYD II. Same as KER1720 with lighter weight G10 scales on handle. 5.2 oz.

KER1725ST JYD II. Same as KER1725 except blade is partially serrated. 5.2 oz.

KER1730 Groove. Handle features G-10 overlays that provide for an extra secure grip. One handed, index finger opening design like the KER1720. 3 1/2" stainless steel straight edge blade. 5.2 oz.

KER1740 NRG. Blade is held in the closed position until deployed by pulling on the extended tang located at the front of the spine. G10 scales on handle. 2 13/16" stainless steel straight edge blade. 2.2 oz.

KER1745 NRG II. Same as KER1740 except blade is 1 1/16" larger. 4.9 oz.

KER1820 Needs Work. Features the patented SpeedSafe assisted opening system for smooth, easy opening. A locking liner ensures the blade stays securely in place until the user closes it. Removable pocket clip. 3" stainless steel straight edge blade. 3.5 oz.

Knives Cutting

Utility Knives

YA403A Miniature Utility Knife. One spare blade stores in handle. 3 1/8" long.

YA403A-1 Replacement Blade. Replacement blade for YA403A Utility Knife.

PK100 Utility Knife. Retractable blade utility knife. Quick release, spring loaded handle provides fast, sure blade changes. No tools are required. Integrated hinged handle means no handle parts to get lost. Rubber grip on handle for comfort and control. Red handle with black grip. Three blade positions: open, half closed and closed. Includes PK100-1SP Blade Package.

PK100SB Utility Knife. Self retracting blade utility knife. Quick release, spring loaded handle provides fast, sure blade changes. Blade automatically retracts. Rubber grip on handle for comfort and control. Orange handle with black grip. Includes one (1) safety point, two notch blade.

PK100-1 Utility Knife Blades. Two notch replacement blades. Use with PK100 and PK100SB Utility Knives. Pack of 5.

PK100-1SP Utility Knife Blades. Two notch, safety point replacement blades. Use with PK100 and PK100SB Utility Knives. Pack of 5.

YA1860A Utility Knife Blades. 100 two notch, double pointed utility blades. Dispenser ejects blades one at a time. Blade guard in the ejector.

YA1850A Utility Knife Blades. 100 three notch, double pointed utility blades. Bulk packaging.

YA1800A Single Edge Razor Blades. 100 blades in a plastic dispenser. Blades have aluminum backs that can be shaped for special applications.

LBUK1 Lock Back Utility Knife. Lock back utility knife offers the convenience and good looks of a folding lock back knife with easily replaceable two notch razor blades. Other features include folding lock back blade, hardwood handle with belt clip, and thumb stud for one hand opening. Includes utility knife and leather pouch (both with Blue-Point® logo) plus 10 replacement blades. Uses PK100-1 (5 pack) or YA1860A (100 pack) replacement blades.

LBUK2 Lock Back Utility Knife. Thumb pad allows controlled application of pressure. Blades are easily replaced with a flip of a switch. Blade storage under spring loaded door. Includes leather pouch with belt loop plus 5 replacement blades. Uses PK100-1 (5 pack) or YA1860A (100 pack) replacement blades.

PK150 Auto-Loading Utility Knife. Exposed blade is easily removed or reversed with the push of a button. New blade is automatically loaded from 5 blade magazine. Cushioned handle provides comfort and control. Three blade positions: 1" exposure, 1/4" exposure and closed. High-viz yellow color. Uses standard two notch replacement blades (PK100-1 or YA1860A).

LBUK3 Lock Back Utility Knife. Solidly constructed lock back utility knife sports polished, stainless steel handle with TPR grips for durability and control. Two notch razor blades are easily removed and replaced with quick change switch. Includes a belt pouch and 10 titanium replacement blades. Uses PK100-1 (5 Pack) or YA1860A (100 pack) replacement blades.



PK80

Utility Knife Kit

PK80 Utility Knife Kit. Kit includes PK81 Quick Open Utility Knife, (1) PK85 Rotary Saw Blade, (1) metal saw blade and (1) wood saw blade in vinyl storage pouch.

PK81 Quick Open Utility Knife. Quick release, spring loaded handle provides fast, sure blade changes with no extra tools required. Integrated hinged handle means no handle parts to get lost. Rubber grip on handle for comfort and control.

PK82 Metal Saw Blades. Metal saw blades for PK81 Utility Knife. Pack of 3.

PK83 Wood Saw Blades. Wood saw blades for PK81 Utility Knife. Pack of 3.

PK84 Drywall Saw Blades. Drywall saw blades for PK81 Utility Knife. Pack of 3.

PK85 Rotary Saw Blade. Rotary saw blades for PK81 Utility Knife. Pack of 1.

PK86 Multi-Pack Blades. Assorted saw blades for PK81 Utility Knife. Contains three saw blades: (1) drywall, (1) metal and (1) wood.



YA405A

Hobby Knife

YA405A Hobby Knife. 5 1/2" long aluminum handle with bottom knurl and knurled brass nose cap. Includes the following blades: YA405-1, YA405-2, YA405-3, YA405-4.

YA405-1 23° Angle Blade. 23° angle.

YA405-2 50° Angle Blade. 50° angle.

YA405-3 Curved Edge Blade. Curved edge.

YA405-4 Straight Chisel Edge Blade. Straight chisel edge.



YA403A

LBUK2

PK100SB

PK150

PK100

LBUK1

LBUK3

YA1860A

YA580A

YA581A

Multi-Purpose Cutters

YA580A Multi-Purpose Cutter. Features auto locking, fully retractable blade. All metal body is black with blue cap and pocket clip. Includes one (1) premium steel 13 pt. snap blade. Overall length of 5 3/8" (136.5mm). Uses YA580A-1 Replacement Blades.

YA580A-1 Replacement Blades. Individual break off replacement blades for the YA580A and YA584A Multi-Purpose Cutters. Pack of 5.

YA581A Multi-Purpose Cutter. Has three blades with eight snap off points. Minimum blade wobble. Fully retractable.

YA581A-1 Blades. Replacement blades for YA581A. 10-pack.



WARNING

- Read additional safety precautions on pages 534 to 537.
- Keep away from children.



Cutting Knives



GAT10005



GAT10003



GAT10004



GAT80005



GAT8T001



GAT60204



GAT60016



GAT40001



KER2535

Sharpening Kits

GAT10005 Professional Knife Sharpening System. System features special knife clamp/angle guide for six precise sharpening angles and secure knife clamping to insure the most efficient blade-to-stone contact. Includes extra coarse, coarse, medium and fine honing stones, specially serrated knife blade sharpening stone, honing oil and custom case.

GAT10004 Diamond Hone Knife Sharpening System. Includes coarse, medium and fine honing monocrystalline diamond hones, honing oil and custom case. The special process of fusing diamonds to the metal substrate of the hones yields a sharpening instrument that will out perform any others. System features special knife clamp/angle guide for six precise sharpening angles and secure knife clamping to insure the most efficient blade-to-stone contact.

GAT10003 Standard Knife Sharpening System. System features special knife clamp/angle guide for six precise sharpening angles and secure knife clamping to insure the most efficient blade-to-stone contact. Includes coarse, medium and fine honing stones, honing oil and custom case.

GAT8T001 Tri Hone Knife Sharpening System. Premier three stone sharpening system features a coarse silicon carbide stone for setting the bevel on dull or badly damaged blades, a 100% Natural Arkansas medium stone for sharpening, a 100% Arkansas fine stone for polishing to produce the ultimate razor sharpness and honing oil. All stones are mounted on a natural wood triangle which provides an elevated work surface for ease of use.

GAT80005 Stone Knife Sharpening Kit. Includes block mounted 5" Natural Arkansas stone for sharpening, 3" Natural Arkansas fine stone for final honing, honing oil and storage case.

GAT60204 Pocket Knife Sharpener. The ultimate compact, lightweight sharpener for knives, fish hooks, darts and serrated edges. Special sharpener edge holds two rods and an angle guide to allow serrated blade sharpening at proper angle. Side-by-side rod feature promotes efficient sharpening of hooks, darts and other pointed instruments. High density alumina rods are removable for cleaning and repositioning. Measures 2.40" x 2.12" x .45".

KER2535 Blade Sharpener. Impregnated with 600 grit diamond coating bonded with nickel plating to a lightweight tube. Excellent sharpener for the repair of extremely dull blades. Length is 8.5" (20.3cm). Sheath length is 5 1/2" (12.7cm).

GAT60016 TRI-SEPS® Knife Sharpener. Triangular shaped, portable ceramic sharpener features built-in angle guide to quickly restore a razor edge to serrations, plain edges, entrenching tools, scissors, darts, fish hooks, ice picks and other pointed instruments. Includes bead chain and clasp. Made from premium grade 96% alumina ceramic. Overall length is 4 1/2" (115mm).

GAT40001 Carbide Knife Sharpener. Quickly and easily sharpen a wide variety of knives. Space age tungsten carbide blade delivers a sharp edge in seconds. Lightweight 6061 T6 aluminum body features a flat bottom and knurled handle with thumb and finger insets for stable positioning. Only a few passes puts a sharp edge on blade. Not recommended for serrated blades.

GAT12001 Clamp Mount. Knife sharpening accessory holds knife clamp/angle guide from GAT10004 and GAT10003 Systems to maximize ease of sharpening. Especially useful when sharpening large knives or many knives in succession. Can be permanently mounted to any work surface or C-Clamped to surface to maintain portability.

Scrapers / Putty Knives



PKNC300



CSA8CO



CSB12C



CSA300AR

Striking Scrapers

Striking cap is designed for hammering. Heavy duty blade extends through the handle and meets the cap to equally distribute the striking force. Thick, polished, high carbon steel for durability. Ergonomic soft grip handle for secure grip when striking. Can be used as a chisel or scraper.

Stock No.	Description	Blade Width, inches (mm)
PKNC125C2	Dual Bevel	1 1/4 (31.8)
PKNC150	Single Bevel	1 1/2
PKNC200	Single Bevel	2

PKNC300 Striking Scraper Set. Includes PKNC125C2, PKNC150 and PKNC200 Scrapers.

PKNC125C2 Striking Scraper (1-1/4"). Dual bevel design for two distinct blade lengths.

Rigid Carbon Scrapers

1/4" square shanks are flared to form scraping edge. Screwdriver type handle.

Stock No.	Handle Color	Length, inches	Blade Width, inches	Blade Style
CSA8C	Black	7 5/8	7/8	Straight
CSA8CO	Orange	7 5/8	7/8	Straight
CSA8CR	Red	7 5/8	7/8	Straight
CSA9C	Black	12 7/8	1/4	Straight
CSA10C	Black	12 7/8	1/2	Straight
CSA12C	Black	12 7/8	1	Straight
CSA12CO	Orange	12 7/8	1	Straight
CSA12CR	Red	12 7/8	1	Straight
CSA14C	Black	14	1 1/2	Straight
CSA14CO	Orange	14	1 1/2	Straight
CSA14CR	Red	14	1 1/2	Straight
CSB12C	Black	12 7/8	7/8	45° Angle

CSA400B Black Handle Set. CSA8C, CSA9C, CSA10C and CSA12C (4 pcs) in a storage tray.

CSA300A Black Handle Set. CSA8C, CSA12C and CSA14C (3 pcs) in a storage tray.

CSA300AO Orange Handle Set. CSA8CO, CSA12CO and CSA14CO (3 pcs) in a storage tray.

CSA300AR Red Handle Set. CSA8CR, CSA12CR and CSA14CR (3 pcs) in a storage tray.

Scrapers / Putty Knives



PKB500

Brass Putty Knives / Scrapers

Spring tempered, solid brass blades are non-marring, non-sparking, non-magnetic and non-corrosive. Soft molded rubber handles maximize hand grip, are easy to clean and are resistant to most solvents. Broad hilt design helps protect against hand slipping when scraping. Red and black handle color. Stiff blade style.

Stock No.	Handle Length, inches	Blade Length, inches	Blade Width, inches	Blade Style	Edge
PKB50	4 7/8	3 1/2	2	Stiff	Straight
PKB52	4 7/8	3 19/32	1 1/4	Stiff	Straight
PKB53	4 7/8	3 19/32	1 1/4	Stiff	Single Bevel

PKB500 Brass Blade Scraper Set. Set includes PKB50 and PKB52 Putty Knives plus PKB53 Chisel/Scraper.



PK50



Putty Knives / Scrapers

Features full length steel blades for strength and durability. Soft molded rubber handles maximize hand grip, are easy to clean and are resistant to most solvents. Broad hilt design helps protect against hand slipping when scraping. 4 7/8" handle length.

Stock No.	Handle Color	Blade Length, inches	Blade Width, inches	Blade Style	Edge
PK50	Red	3 1/2	2	Flexible	Straight
PK52	Red	3 19/32	1 1/4	Flexible	Straight
PK53	Red	3 19/32	1 1/4	Stiff Chisel	Single Bevel

PK500 Red Handle Set. PK50, PK52 and PK53 in a storage tray.



PK23A



Wooden Handle Putty Knife

Mirror finished hardened steel blade extends through hardwood handle, solidly riveted for durability. Redwood handle has metal bolster where handle meets blade.

Stock No.	Handle Material	Handle Length, inches	Blade Width, inches	Blade Style	Edge
PK23A	Maple	3 7/8	1 1/4	Heavy Chisel	Single Bevel



USS103

Knife Blade Scrapers

Remove gaskets, sealers and other caked on materials. Blade edge designed to work effectively in both push and pull directions. Stainless steel blades for durability. Polished blades cleanup easily. Comfortable composite handles feature a contour thumb stop for maximum control and a wide hilt for control. Handles are black with red accent.

Stock No.	Blade Style	Blade Length, inches	Length, inches
US710	Spoon	3 3/8	8
US711	Chisel Tip	2 1/2	7 1/8
US712	Oyster	2 1/8	6 3/4

USS103 Knife Blade Scraper Set. Includes US710, US711 and US712 in black pouch.



CS1



PK70



PKRS1



MS3000

Scrapers

CS1 Flexible Wire Carbon Scraper. The ten blades are made of oil tempered spring steel and firmly secured to the handle. A sliding ferrule is used to adjust to the required flexibility.

PK70 Multi-Purpose Scraper. Use for gasket removal, deburring, car body work and rust removal. Tungsten carbide blades are 2.5 times harder and up to 50 times more durable than hardened steel. Ergonomic handle reduces fatigue. Thumbgrip allows precision scraping.

PK70TRI Replacement Blade. For PK70.

PK70ROUND Replacement Blade. For PK70.

PK70DROP Replacement Blade. For PK70.

PK70PEAR Replacement Blade. For PK70.

MS400 Compact Scraper (4"). Removes stickers, molding paint and decals. Use with standard, single edge steel or plastic razor blades. Quick and easy blade changes. Angled head provides maximum leverage. 4" (101.6mm) long.

MS800 Standard Scraper (8"). Same as MS400 except 8" (203.2mm) long.

MS1300 Long Scraper (13"). Same as MS400 except 13" (330.2mm) long.

MS3000 Scraper Set. Includes MS400, MS800, MS1300 and MSRPACK5 in storage case.

PKRS1 Ergo Grip Razor Scraper. Features three blade positions: Closed (for safety during storage and transport), Open (holds blade securely when working) and Loading (permits quick and easy blade change. Rubberized contour grip provides comfort and a sure gripping service. Uses YA1800 Replacement Blades.



WARNING

- Read additional safety precautions on pages 534 to 537.



Files File Sets

Bastard Cut Sets / Soft Grip Handle

Additional mill file sizes are also available.

File Stock No.	Diameter, inches	Cut Length, inches	Overall Length, inches
<i>Round Files:</i>			
6R	7/32	—	6
8R	9/32	—	8
10R	3/8	—	10
12R	1/2	—	12
<i>Mill Files:</i>			
4MA	—	3 3/4	4
6MA	—	5 1/2	6
8MA	—	7 1/2	8
10MA	—	9 1/2	10
12MA	—	11 1/2	12
14MA	—	13 1/2	14
<i>Half Round Files:</i>			
6HR	—	—	6
8HR	—	—	8
10HR	—	—	10
12HR	—	—	12



Experience the comfort and control of our famous screwdriver handles.



SGHBF200A

SGHBF200A Red Handle Round File Set. Includes 6R, 8R, 10R and 12R Round Files (4 pcs) (6" to 12") plus two (2) SGHF614BR, one (1) SGHF615BR and one (1) SGHF616BR Soft Grip Handle in C0413A Kit Bag.



SGHBF400A

SGHBF400A Red Handle Half Round File Set. Includes 6HR, 8HR, 10HR and 12HR Half Round Files (4 pcs) (6" to 12") plus two (2) SGHF614BR, one (1) SGHF615BR and one (1) SGHF616BR Soft Grip Handle in C0415A Kit Bag.



SGHBF300A

SGHBF300A Red Handle Mill File Set. Includes 6MA, 8MA, 10MA and 12MA Mill Files (4 pcs) (6" to 12") plus one (1) SGHF614BR, one (1) SGHF615BR and one (1) SGHF616BR and one (1) SGHF617BR Soft Grip Handle in C0414A Kit Bag.



SGHBF500A

Mixed Sets / Soft Grip Handle

SGHBF500A Red Handle Mixed Set. Includes 8MA and 10MA Mill Files, 6T Three Square File and 8R Round File plus SGHF614BR Handle (2 each), SGHF615BR Handle (1 each) and SGHF616BR Handle (1 each) in C0416B Kit Bag.

Miniature Files / Plastic Handle

Miniature files for general use in small scale and delicate applications. Molded plastic handles provide maximum grip and comfort.

Stock No.	Description
HBF4MA	Hand File
HBF4W	Warding File
HBF4HR	Half Round File
HBF4SQ	Square File
HBF4R	Round File
HBF4T	Slim Taper Triangular File

HBF100 Mixed File Set. Includes HBF4MA, HBF4W, HBFSQ, HBF4HR, HBF4R and HBF4T (6 pcs) in a plastic pouch.



HBF100



Three Square Files

6T. 6" long, 5 1/2" cut length.
10T. 10" long, 9 1/2" cut length.



Chain Saw Files

Single cut
6CR. 6" long, 5/32" diameter
8CR. 8" long, 7/32" diameter.



Multi-Cut Flat File

10FMK. 10" long.



HBFN120A

Swiss Needle

HBFN120A Set. Twelve needle files with round, knurled handles. Each is 5 1/2" long and "0" cut for coarse filing. Packaged in a plastic pouch.

Stock No.		
5NRA	Round	●
5NHRA	Half Round	◐
5NFA	Flat	■
5NCA	Crossing	◊
5NKA	Knife	◄
5NSQA	Square	■
5NTSB	3 Square	▲
5NEA	Equaling	◄
5NBA	Barrette	◄
5NJA	Joint	◄
5NSA	Slitting	◄
5NMA	Marking	◄

HF611A File Handle. Plastic screwdriver collet-style handle for holding individual files in HBFN120 Set.

Accessories



Soft Grip Handles

For all bastard cut files listed on page 322. Feature twist-on threads for securely holding files.

Red



For Files

SGHF614BR	4MA, 6R, 6T, 6MA, 6HR, 8CR, 8R
SGHF615BR	8T, 8MA, 8HR, 10R
SGHF616BR	10T, 10MA, 10HR, 12R
SGHF617BR	12MA, 12HR



SGHF616BR



GA613

Wooden Twist-on Handles

Wooden twist-on handles with case hardened threaded steel inserts. Use on all bastard cut files on page 322.

Stock No.

For Files

GA613	4MA, 6CR, 8CR, 6R
GA614	6T, 6MA, 6HR, 8R
GA615	8T, 8MA, 8HR, 10R
GA616	10T, 10MA, 10HR, 12R
GA617	12MA, 12HR
GA618	14MA, 16MA



GA98A

Wooden Adjustable Jaw Handles

GA98A. Provides a large, comfortable grip for all bastard cut files. Adjustable jaws grip the file so it can't turn. Use on files 4" to 16" long. 4 1/2" long, 1" in diameter, 3/8" maximum opening.

YA337A File Cleaner. Bristle area of 3 1/2" x 1 1/2" with .013" (33 ga.) wire. Steel back, face, and frame with a handy pick for removing stubborn material between file teeth. Pick stores in handle when not in use. 7 5/8" long.



WARNING

- Read additional safety precautions on pages 534 to 537.



Mirrors / Pick Up Tools Mirrors



UIM2FL



GA294



GA295

Hinged Mirrors

UIM2FL Flexible Inspection Mirror. 32" aluminum shaft can easily be bent to any angle to view hard to see area. 2 1/4" mirror is encased in a rugged stainless steel head. All angle ball joint holds mirror head tightly at any angle. Textured cushion grip will not slip in wet or oily hands.

GA294 Rectangular Mirror. Has double ball joints that allow mirror to swivel a full 360°. Electrolytic plated copper backing. Features non-rotating telescoping rods. Vinyl grip. 2 1/8" x 3 1/2" mirror. Closed length is 11 1/4"; extended length is 15 1/4".

GA295 Round Mirror. Similar to GA294 except with a 2 1/4" diameter mirror. Closed length is 10"; extended length is 14".



GA51B



GA52B



GA53A

Stock No.	Overall Length, inches (mm)	Mirror Size, inches (mm)	Glass Replacement Mirror	Plastic Replacement Mirror
GA51B	16 1/2 (419.1)	1 11/16 x 2 9/16 (42.9 x 65.1)	GA51B1	GA51B1P
GA52B	11 (279.4)	1 3/16 x 1 1/2 (30.1 x 38.1)	GA52B1	—
GA53A	16 1/2 (419.1)	2 5/16 x 3 3/8 (58.7 x 85.7)	GA53A1	GA53A1P



PTM143



PTM157

Pocket Mirrors

PTM143 Round Pocket Mirror. Handle extends from 4 1/2" to 17". Mirror is 1 1/4" in diameter. Hinge mechanism allows 360° adjustment. Includes pocket clip.

CF143MA Round Pocket Magnifying Mirror. Handle extends from 4 1/2" to 17". Magnifying mirror is 1 1/4" in diameter. Hinge mechanism allows 360° adjustment. Includes pocket clip.

PTM147 Round Pocket Mirror. Handle extends from 4 1/2" to 17". Mirror is 3/4" in diameter. Hinge mechanism allows 360° adjustment. Includes pocket clip.

PTM157 Oval Pocket Mirror. Handle extends from 4 1/2" to 17". Mirror is 1" x 2" oval. Hinge mechanism allows 360° adjustment. Includes pocket clip.

Lighted Mirrors

YA5160A Lighted Adjustable Mirror. Mirror size is 1 1/8" x 2 1/8" with 1X magnification. Thumb wheel adjustment on handle. Light at base of 18" long flexible handle is powered by two AA batteries (included).

YA51601 Replacement Mirror. 1X.

YA51602 Replacement Mirror. 2X.

YA5160A3 Replacement Bulb.



YA5160A



UIM225



UIM2LM

Telescoping Mirrors

UIM125 Telescoping Inspection Mirror. 1 1/4" diameter mirror. 6 1/2" long, and extends to 35".

UIM225 Telescoping Inspection Mirror. 2 1/4" diameter mirror. 6 1/2" long, and extends to 35".

UIM325 Telescoping Inspection Mirror. 3 1/4" diameter mirror. 6 1/2" long, and extends to 29 1/2".

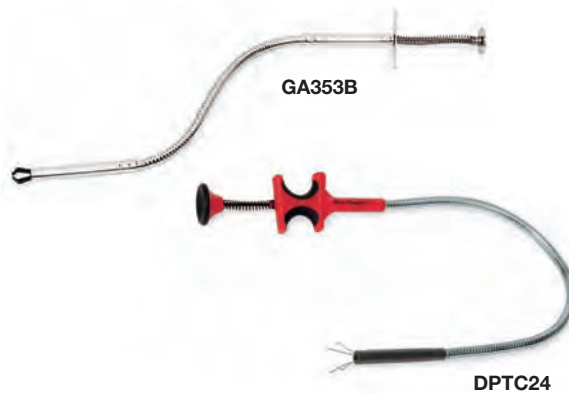
UIM2LM Magnifying Inspection Mirror. Stainless steel handle telescopes from 11 1/2" to 51 1/2". 2 1/4" magnifying mirror enlarges viewing area. All angle ball joint holds mirror head tightly at any angle. Textured cushion grip will not slip in wet or oily hands.



TKSS01MIR

TKSS01MIR Telescoping Hinged Steel Mirror. Steel mirror won't shatter if dropped. Hinged for accurate positioning. Telescopes from 7" (177.8mm) to 28 1/2" (723.9mm). Mirror surface is 3.12" x 2" (79.4 x 50.8mm). In retracted position, it will easily fit in shirt pocket. Comfortable handle is easily gripped with greasy hands.

Pick Up Tools **Mirrors / Pick Up Tools**



Claws (Flexible)

Stock No.	No. of Claws	Max. Jaw Opening, inches (mm)	Flexible Section Length, inches (mm)	Overall Length, inches (mm)
GA265A	2	1 (25.4)	8 (203.2)	17 3/4 (450.9)
YA837A	2	3/4" (19.1)	16 (406.4)	23 1/2 (596.9)
GA353B	4	1 (25.4)	8 (203.2)	17 1/2 (444.5)
DPTC24	4	1 1/4 (31.7)	24 (609)	—



Magnetic

Hinged Head Magnetic Pick Up Tools. Powerful magnets are fitted into the brass sleeve on these units. Adjustable hinged heads.

PTS5 Magnetic Pick Up Tool/Scribe. Magnet in one end and a replaceable carbide steel scribe tip at the other. Includes pocket clip. 5" long. Do not use as a prybar or punch.

PTIM5 Pick Up and Inspection Tool. Magnet end lifts 1 1/2 lbs. Length is 26 3/4" extended, closes to 5 7/8". Mirror end is 1 1/4" in diameter. With pocket clip.

PT5C Telescopic Magnetic Pick Up Tool. This 5 7/8" tool extends to 25 9/16". Magnet lifts up to 2 lbs. Includes pocket clip. Chrome. Lifetime Warranty.

PT5CBL Telescopic Magnetic Pick Up Tool. Same as PT5C except blue in color.

PHT5 Magnetic Pick Up Tool. Lifts 2.5 lbs. Chrome plated shaft extends from 5 1/2" to 25 1/2". Black cushion grip will not slip in oily or wet hands. Includes pocket clip.

PT7B Magnetic Pick Up Tool. Lifts 1 lb. and is 6" long.

ECFM20 Flexible Magnetic Pick Up Tool. 18" (457.2mm) flexible shaft gets in tight places. Flexible shaft will retain bent shape. Long lasting, bright LED light source. Anodized aluminum housing for lightweight and resistance to corrosion. Powerful neodymium magnet lifts 1.1 lbs (0.5 kg). Light emits through opening in magnet and 360° around magnet for full illumination. 2 function ON/OFF switch. Hook at handle end for hanging. Powered by three "N" alkaline 1.5V batteries (included).

PT40A Flexible Magnetic Pick Up Tool. Magnet lifts 3 1/2 lbs. Length is 21", including a 14" flexible section.

PT10C Pick Up Tool. Lifts 1 lb., 8 5/8" long.

PT28E Pick Up Tool. Lifts 2 lbs., 16 3/4" long, and extends to 26 3/4".

Aluminum head. Probe O.D. is .50".

PT30C Pick Up Tool. Lifts 6 1/2 lbs., 17" long, and extends to 27 1/8".

UPT15 Telescoping Magnetic Pick Up Tool. Lifts 2 lbs., 6 5/8" long, and extends to 33 1/4".

UPT35 Telescoping Magnetic Pick Up Tool. Lifts 4 1/2 lbs., 6 5/8" long, and extends to 33 1/4".

UPT50A Telescoping Magnetic Pick Up Tool. Lifts 10 lbs., 6 5/8" long, and extends to 33 1/4".

UPT65 Telescoping Magnetic Pick Up Tool. Perfect for retrieval of heavy ferrous objects in hard to reach areas. Goblet shaped magnetic head pushes the flux to the front of the magnet enabling the user to lift 16 lbs. Head shields the sides of the magnet from attaching to unwanted ferrous surfaces. Telescopes from 9" to 34 1/4" (229 to 870mm). Stainless steel handle is strong, lightweight and inhibits corrosion. Cushion textured pistol grip will not slip in wet or oily hands.

UPTM65K Magnetic Inspection Kit. Includes UPT65 Pick Up Tool and US225 Inspection Mirror in vinyl pouch.

US225 Inspection Mirror. Attaches to UPT65 Pick Up Tool. Dual ball adjustment provides infinite positioning. 2 1/4" (57.2mm) diameter.

DPTM24 Flexible Magnetic Pick Up Tool. In the retracted position, magnet will not adhere to untargeted ferrous metals. Depress plunger to expose magnet from shroud and grab desired object. 24" flexible shaft easily maneuvers through tight spots. Cushion grip handle provides comfort and control.

UPT2FL Flexible Magnetic Pick Up Tool. 29" aluminum shaft can be easily bent at any angle to retrieve dropped metal objects in hard to reach areas. Power cap slides over the magnet and shield its sides from attaching to unwanted metal surfaces. Will pick up 5lbs. with the power cap. Textured cushion pistol grip will not slip in wet or oily hands.



WARNING

- Read additional safety precautions on pages 534 to 537.



Prybars



SPBS12



SPBS704R



SPBS120



SPBS12G

RELATED ITEMS

Hammers, pgs 314-316



SPBS704O



Striking Prybars

Snap-on® striking prybars feature a patented ergonomic shape and contour handle matched to the blade length for optimum leverage. Blade extends through handle and makes contact with end cap to provide a solid striking force. Metal end cap allows user to strike the prybar with a hammer without damage to handle. High leverage design with smooth radius head provides maximum leverage with lifting and pulling back. The blade is manufactured from special alloy steel, precision forged and heat treated for optimum strength and durability. The blade has an industrial finish which helps protect against corrosion.

Stock No.	Handle Color	Square Shank, Tip Width,		Length, inches
		Inches	inches	
SPBS8	Black	1/4	7/16	8
SPBS8R	Red	1/4	7/16	8
SPBS8O	Orange	1/4	7/16	8
SPBS8G	Green	1/4	7/16	8
SPBS12	Black	3/8	5/8	12
SPBS12R	Red	3/8	5/8	12
SPBS12O	Orange	3/8	5/8	12
SPBS12G	Green	3/8	5/8	12
SPBS18	Black	7/16	23/32	18
SPBS18R	Red	7/16	23/32	18
SPBS18O	Orange	7/16	23/32	18
SPBS18G	Green	7/16	23/32	18
SPBS24	Black	7/16	13/16	24
SPBS24R	Red	7/16	13/16	24
SPBS24O	Orange	7/16	13/16	24
SPBS24G	Green	7/16	13/16	24
SPBS36	Black	5/8	1 1/8	36 5/8
SPBS36R	Red	5/8	1 1/8	36 5/8
SPBS36O	Orange	5/8	1 1/8	36 5/8
SPBS36G	Green	5/8	1 1/8	36 5/8

SPBS704R Striking Prybar Set (Red). SPBS8R, SPBS12R, SPBS18R and SPBS24R (8", 12", 18", 24") (4 pcs) in storage tray.

SPBS704O Striking Prybar Set (Orange). SPBS8O, SPBS12O, SPBS18O and SPBS24O (8", 12", 18", 24") (4 pcs) in storage tray.

SPBS704G Striking Prybar Set (Green). SPBS8G, SPBS12G, SPBS18G and SPBS24G (8", 12", 18", 24") (4 pcs) in storage tray.

SPBS704 Striking Prybar Set (Black). SPBS8, SPBS12, SPBS18 and SPBS24 (8", 12", 18", 24") (4 pcs) in storage tray.



PBMP703A



PBMP12A

Multi Position Prybars

Each prybar features 17 incremental angles of 15° to provide great job flexibility. High leverage design with smooth radius head provides maximum leverage while lifting. Manufactured from special alloy steel, precision forged and heat treated for optimum strength and durability. Industrial finish helps protect against corrosion. Patent pending.

Stock No.	Length, inches
PBMP8A	8
PBMP12A	12
PBMP16A	16
PBMP24A	24

PBMP703A Set. PBMP8A (8"), PBMP12A (12"), and PBMP16A (16") in storage tray.



UB222PK

Utility Bar

Small size provides access in tight quarters. Pull nails, tacks or staples. Pry open lids and drawers. Scrape paint, glue and gaskets. Chrome plated for corrosion protection.

UB222PK Miniature Utility Bar. 5 3/8" length. Pack of 10.

Prybars

"Rolling head" acts as fulcrum and provides leverage. The pointed end is useful in many aligning applications.

650

Stock No.	Stock, inches	Length, inches
650	5/16	6
1250	7/16	12
1650	9/16	16
2050	11/16	20

PBS704 Prybar Set. Includes 650 thru 2050 (4 pcs).



7030A

Close Quarter Bars

Designed to provide powerful leverage where space is at a premium. Ideal for aligning molds.

Stock No.	Stock, inches	Tip Width, inches	Length, inches
7030A	3/8	7/16	9
7031A	1/2	9/16	16
7032	5/8	3/4	18

Die Setter Bars

Designed for separating, scraping, or prying.

7035

Stock No.	Stock, inches	Tip Width, inches	Length, inches
7035	5/8	7/16	18
7037	3/4	9/16	30

Wrecking Bar

Has a slotted claw on "gooseneck" end and a chisel configuration on the other.

NPB124B

Stock No.	Stock, inches	Length, inches
NPB124B	3/4	24



2430C

BLPPB704



Pinch Bars

Pinch bar has a tapered point on one end and a chisel type edge on the other.

Stock No.	Stock, inches	Edge, inches	Length, inches
1412A	1/2	-	14
1658C	1/2	5/8	16
2420A	3/4	15/16	20
2430C	3/4	5/8	30
2438C	3/4	7/8	38
2842C	7/8	1	42

BLPPB704 Prybar Set. Set includes 1412A (14") and 2420A (20") Pinch Bars, 7031A Close Quarter Bar (16") and BPPC 1878 Flat Chisel (18"). All bars have a 100% black oxide finish.

Slate Bar

3260B

Stock No.	Stock, inches	Edge, inches	Length, inches
3260B	1	1/2	60

Prybar Rack

KR294APV Hang On Prybar Rack.

Hang up to four prybars or long tools with handles. Notched angle plate keeps tools from shifting. Suspend from roll cab or tool chest with 1/4" or more lip.



KR294APV

Awls, Hooks, and Picks



Awls and Hooks / Instinct™ Soft Grip

- Use for scribing, alignment, O-ring removal, piercing holes in leather or fabric and cleaning nooks and crannies
- Power: Wide tri-lobe design in the center of the handle and Snap-on's bolstered, special alloy steel blade give turning power when you need it
- Speed: Tip identifier on the crown helps you find the tool you want quickly
- Finesse: 6 specially designed curves and flutes with a round neck gives fingertip control, aids in spinning and prevents the tool from rolling on flat surfaces

Stock No	Description	Handle Color	Blade Length, inches	Overall Length, inches
SG4ASABR	Awl	Red	3 3/4	8
SG4ASHBR	Hook Tool	Red	3 3/4	8
SG5ASABR	Awl	Red	4 3/4	9 5/8
SG7ASABR	Awl	Red	5 3/4	10 5/8

SGASA104BR Awl and Hook Set. SG4ASABR, SG4ASHBR, SG5ASABR and SG7ASABR (4 pcs) in storage tray.



Long Miniature Awls, Hooks and Picks / Soft Grip

Use for scribing, alignment, O-ring removal, piercing holes in leather or fabric and cleaning nooks and crannies. Soft grip handles provide increased comfort and control while resisting most shop solvents. Sets packaged in plastic pouch. Blade length 8", 9 23/32" overall length.

Description	Red Handle Stock No.	Orange Handle Stock No.	Green Handle Stock No.
Long Mini Awl	SGL3ASA	SGL3ASAO	SGL3ASAG
Long Mini Hook	SGL3ASH	SGL3ASHO	SGL3ASHG
Long Mini Pick, 45° tip	SGL3ASH45	SGL3ASH45O	SGL3ASH45G
Long Mini Pick, 90° tip	SGL3ASH90	SGL3ASH90O	SGL3ASH90G
Complete Set	SGLASA204	SGLASA204O	SGLASA204G

Miniature Awls, Hooks and Picks / Soft Grip

Use for scribing, alignment, O-ring removal, piercing holes in leather or fabric and cleaning nooks and crannies. Soft grip handles provide increased comfort and control while resisting most shop solvents. Sets packaged in storage tray. 3 1/8" blade length, 6" long.

Description	Red Handle Stock No.	Orange Handle Stock No.	Green Handle Stock No.
Mini Awl	SG3ASABR	SG3ASABO	SG3ASABG
Mini Hook	SG3ASHBR	SG3ASHBO	SG3ASHBG
Mini Pick, 45°	SG3ASH45BR	SG3ASH45BO	SG3ASH45BG
Mini Pick, 90°	SG3ASH90BR	SG3ASH90BO	SG3ASH90BG
Complete Set	SGASA204A	SGASA204BO	SGASA204BG



Seal Removal Tools / Soft Grip

Rounded tip with a blended radius edge allows the easy removal of seals or O-rings while reducing the chance of damaging the seal or finished surface. Soft Grip contoured handle for comfort and control. Two tip configurations and two blade lengths handle most seal removal situations. Industrial black finish. Rounded tip won't prick your finger.

Applications:

- Transmissions
- Injectors and Fuel rail O-rings
- Oil pump drive shaft seals
- Fork seals and caliper dust boot assemblies on Harley-Davidson® and other motorcycles
- Steering racks and pumps
- Heater and vacuum hoses
- Inner tie rod rack boot and CV boot removal

Stock No.	Tip Style	Blade Length, inches	Overall Length, inches
SGSR1	Spoon	5 1/4	8
SGSR2	Spoon	2 1/2	5 11/32
SGSR3	Contoured	2 1/2	5 11/32
SGSR4	Contoured	5 1/4	8

SGSR104 Seal Remover Set. SGSR1 thru SGSR4 (4 pcs) in storage tray.



WARNING

- Read additional safety precautions on pages 534 to 537.
- Keep away from children.



Awls, Hooks, and Picks



Picks and Scribes

YA145 Pick Set. Includes a knurled handle and four screw in picks with different hook configurations. Comes in a clear plastic pouch.

- YA145-1 Straight Tip Pick.**
- YA145-2 O-Ring, 90° Tip Pick.**
- YA145-3 Hook Tip Pick.**
- YA145-4 Angle Tip Pick.**

YA149 Pick and Probe Set. Includes five 5 1/2" single ended and two 7" double ended probes made of tempered stainless steel.

- YA149-1 Straight Pointed Pick.**
- YA149-2 Curved With 90° Point Pick.**
- YA149-3 45° with Flat Tip Pick.**
- YA149-4 90° Pointed Pick.**
- YA149-5 Double Ended Short Pick.**
- YA149-6 Double Ended Long Curve Pick.**
- YA149-7 Half Circle Pointed Pick.**

YA338 Scribe. One end is straight; the other is hooked for picking O-rings and small parts. Nickel-plated steel tips. Knurled aluminum mid-section.

YA339 Scribe. One end is straight; the other has a 90° angle for detail work around small objects. Nickel plated steel tips. Knurled aluminum mid-section.

Picks and Scribes / Extra Long

Use these picks to separate wires, remove small fuses and O-rings, retrieve washers and loose parts too small to pick up with fingers or to mark metal or plastic surfaces. Heavy duty shank diameter is 0.02" thicker than standard picks for added durability and extended tool life. Extra length provides access to hard to reach areas. Textured cushion handle provides a sure grip, even with greasy hands. Six different styles provide the right tool for the right job. Each pick is 9 3/4" (247.7mm) long.

- PSLR4-1 Hook Pick.**
- PSLR4-2 90° Hook Pick**
- PSLR4-3 Straight Pick.**
- PSLR4-4 Complex Pick.**
- PSLR4-5 Combination Pick.**
- PSLR4-6 Double Angle Pick.**

PSLR4 Extra Long Pick Set. Includes PSLR4-1 thru PSLR4-4 (4 pcs) in vinyl storage pouch.

PSLR6 Extra Long Pick Set. Includes PSLR4-1 thru PSLR4-6 (6 pcs) in vinyl storage pouch.

Covers



JCKS6A



JCKS7A



JCK15D



JCK8



KAC1224TCA

Fender Covers

High density sponge rubber laminated to vinyl provides better protection and adherence to the fender. Less susceptible to creasing. Raised ribbing along center section provides tool holding space.

- JCKS6A Fender Cover.** Measures 21" wide by 30" long (533.4 x 762mm).
- JCKS7A Fender Cover.** Measures 22.5" wide by 30" long (571.5 x 762mm) for use on vehicles with broad fenders.
- JCK7D Fender Cover.** Measures 26" wide by 36" long (660.4 x 914.4mm) for use on shorter fenders of most new vehicles.
- JCK7DBL Fender Cover.** Measures 26" wide by 36" long (660.4 x 914.4mm) for use on shorter fenders of most new vehicles.
- JCK8 Fender Cover.** Measures 26" wide by 36" long. Non-slip, non absorbent surface conforms to the fender of any vehicle. Red material with white Snap-on® lettering. Easy to clean with soap and water.
- JCK15D Fender Cover.** Heavy duty vinyl material protects all surfaces. Measures 29" x 52" (742 x 1320mm). Red.

KAC1224TCA Motorcycle Gas Tank Cover. Fits Harley-Davidson® Dyna®, Softail and Touring models. Also fits various models of Yamaha, Victory, Triumph and Kawasaki plus many more. Protects the finish while you perform routine maintenance. Keeps dust and dirt off the gas tank. Non-marring cover uses a non-abrasive inner liner that won't slide off. Use on the tank any time, on or off the motorcycle.

Seat Covers SEATCOVER1

SEATCOVER1 Seat Cover. Made from 100% nylon with special stain protection impregnated in cloth. Resistant to grease and water. Will not tear when used over high headrests. Black with red trim and red Snap-on® logo.

CKM3020 Multi-Purpose Mat. Durable multi-purpose nylon mat offers paint and surface protection plus personal comfort. Can be used as fender cover, seat cover, floor mat or kneeling mat. Nylon front allows ease of movement when used as a seat cover. Webbed foam backing keeps mat from sliding on fender or seat back and provides a cushion when used as a kneeling mat. Large 31" x 18" size. Machine washable.

Creepers Creepers

Racing Creeper

JCW1000 Racing Creeper. Unique styling plus comfort in this revolutionary design. Side bolsters offer additional support and control. Features steel framework, integrated high density foam padding and durable vinyl exterior. Six 2 1/2" full radius aircraft quality ball bearing casters. Overall dimensions: 44 1/2"L x 22 1/2"W x 6"H. Weight: 25 lbs.



JCW1000



JCW60BL



JCW60R



JCW65BL



JCW65R

Standard Creepers

40" long steel frame creeper has low 3/4" ground clearance; unique drop in frame allows for ultimate shoulder clearance. Fully padded with high density 80 lb. foam; bed pad measures 1 3/4" thick, headrest pad measures 2 3/4" thick; covered with heavy duty vinyl. Pad is 11" wide x 39" long. Six 2 1/2" oil resistant, full ball bearing casters. Steel frame is 16 ga., 3/4" square tube stock. Overall dimensions: 40" L x 17" W x 4" D. Weight: 16 lbs.

JCW60BL Creeper. Black cover.

JCW60R Creeper. Red cover.

Adjustable Standard Creepers

Same features as JCW60 Standard Series plus adjustable headrest. Adjustment mechanism has three adjusting positions. Weight: 18 lbs.

JCW65BL Creeper. Black cover.

JCW65R Creeper. Red Cover.



JCW70BL



JCW70R



JCW75BL



JCW75R

Heavy Duty Creepers

40" long extra wide 22" steel frame creeper has low 1 3/8" ground clearance; unique drop in frame allows for ultimate shoulder clearance. Fully padded with high density 80 lb. foam; bed pad measures 1 3/4" thick, headrest pad measures 2 3/4" thick; covered with heavy duty vinyl. Pad is 13" wide x 39" long. Four 4" oil resistant, ball bearing casters. Steel frame is 16 ga., 1" square. Weight: 22 lbs.

Overall dimensions: 40" L x 22" W x 5 3/4" D.

JCW70BL Creeper. Black cover.

JCW70R Creeper. Red cover.



JCW42A

Heavy Duty Adjustable Creepers

Same features as JCW70 Standard Series plus adjustable headrest. Adjustment mechanism has three adjusting positions. Weight: 24 lbs.

JCW75BL Creeper. Black cover.

JCW75R Creeper. Red cover.



Specialty Creepers

JCW43A Multi Position Adjustable Creeper. 44" extra long steel frame creeper with seven different configurations. Upper frame adjusts to four positions for use as a lift back creeper; lower frame adjusts to three positions for stability as an adjustable creeper. Fully padded with 1 3/4" bed and 2 3/4" headrest for comfort. Six 2 1/2" oil resistant, ball bearing casters. Steel frame is 16 ga., 3/4" square. Weight: 28 lbs. Overall dimensions: 44"L x 18"W x 6 3/4"D.

JCW42A Folding Creeper/Seat Creeper. 40" long steel frame creeper easily converts to a seat for multi purpose use. Six 2 1/2" oil resistant, full ball bearing casters. Fully padded with 1 3/4" foam in the bed of the creeper and 2 3/4" foam in the headrest for comfort; large headrest provides excellent back support when in the seated position. Frame is 3/4", 16 ga. steel. Weight: 26 lbs. Overall creeper dimensions: 31 1/2"L x 17 1/2"W x 24"H. Seat Height: 17". Seat dimensions: 12"L x 11"W.



JCW43A



WARNING

- Do not stand on or use as a cart.
- Do not exceed weight capacity.
- Read additional safety precautions on pages 534 to 537.

Creepers Creepers



JCW80BL



JCW80R



JCW85BL



JCW85R

Bucket Seat Creepers with Drawer

Same features as JCW80 Series Seat Creepers but has wide bucket seat that measures 17 3/4"W x 10"D with an 8" back support. Seat is fully padded and covered with durable vinyl. Weight: 22 lbs.

JCW85BL Creeper. Black cover.

JCW85R Creeper. Red cover.

Seat Creepers with Drawer

Heavy duty seat with plastic drawer with 16 ga., 1" steel frame. Seat pad has plywood base, high density 80 lb. foam that measures 1 3/4" thick, and overall pad measures 10" x 14 1/4". Plastic drawer measures 9 7/8"L x 11 1/2"W x 1 3/4"D. Bottom 3 section storage tray has usable space of 11 3/4" x 11 3/4". Four 2 1/2" oil resistant, ball bearing casters. Overall dimensions: 14 1/4"W x 19"D x 15"H. Weight: 18 lbs.

JCW80BL Creeper. Black cover.

JCW80R Creeper. Red cover.



JCW95BL



JCW95R

Adjustable Bucket Seat Creepers

Same features as JCW90 Series Adjustable Seat Creepers but has wide bucket seat that measures 17 3/4"W x 10"D with an 8" back support. Seat is fully padded and covered with durable vinyl. Weight: 24 lbs.

JCW95BL Creeper. Black cover.

JCW95R Creeper. Red cover.



JCW8A



JCW9



Oval Tube Creepers

JCW8A Oval Tube Creeper. 40" long creeper is constructed of 16 ga. steel and has a unique drop in the shoulder area to provide for generous shoulder clearance; low 3/4" ground clearance. Fully padded with heavy duty foam for durability; pad measures 1 3/4" thick, headrest pad measures 2 3/4" thick, covered with heavy duty vinyl. Pad is 11" wide x 39" long. Four 2 1/2" oil resistant, full ball bearing casters. Weight: 18 lbs. Overall dimensions: 40"L x 17"W x 4"D.

JCW9 Oval Tube Creeper. Distinctive style, heavy duty mechanic's seat is constructed of heavy duty 16 ga. steel. Seat pad is supported by two support bars for additional strength; fully padded with heavy duty foam that measures 1 3/4" thick, and overall pad measures 7" x 14"; covered with heavy duty vinyl. Bottom storage tray measures 16 1/2" x 14". Four 2 1/2" oil resistant, full ball bearing casters. Weight: 18 lbs. Overall dimensions: 20 1/2"L x 17"W x 15"H.



JCW90BL

Adjustable Seat Creeper

Heavy duty 16 ga., 1" steel tube frame adjusts by pneumatic cylinder. Adjusts by hand lever from 14" to 19 1/4". Seat pad swivels 360 degrees, 13 3/4" round diameter seat pad is made of memory foam and is 2" thick. Steel storage tray measures 15" x 15" and has magnetic strip to hold small parts. Overall dimensions: 15"W x 15"D x 21 1/2"H in fully extended position. Weight: 22 lbs.

JCW90BL Adjustable Creeper. Black cover.



JCPW40A

Multi Terrain Creeper

JCPW40A Padded Creeper. Wide 13" pad with high density foam for ultimate comfort while working. Side rails help increase maneuverability. 6" Rubber tires provide a smooth ride over uneven surfaces – even outside in the dirt. Low ride height for maximum clearance. 1" square steel tubing makes this creeper the ultimate heavy duty, rugged creeper. Overall dimensions: 39"L x 29"W x 9 1/2"H



KRJC23APV

Creeper Hanger

KRJC23APV Creeper Hanger. Secures creepers to roll cabs. Hanger hooks over lip of roll cab and screws down. Adjustable to four different creeper widths. Two hook bolts and a lock rod are included so creeper can be padlocked (padlock not included). U.S. Patent 5,407,170 applies. 16 13/16" length. Black Textured Finish.

Micrometers and Sets **Measuring**



MIC103A



MIC1A



MIC1MA



MIC103MA

Digital Micrometers

Standard reading in .001" increments on both the handle and the easy-to-read digit display. Vernier style reading in .0001" increments. Features include a large easy to handle insulated frame, carbide tipped anvils, positive locking clamp and ratchet stop thimble.

Stock No.	Range, inches	Increments, inches
MIC1A	0-1	.0001
MIC2A	1-2	.0001
MIC3A	2-3	.0001
MIC4A	3-4	.0001
MIC5A	4-5	.0001

MIC103A SAE Set. MIC1A, MIC2A and MIC3A in fitted case with standards.

Metric Digital Micrometers

Standard reading in .01mm increments on both the handle and the easy-to-read digit display. Vernier style reading in .0001mm increments. Features include a large easy to handle insulated frame, carbide tipped anvils, positive locking clamp and ratchet stop thimble.

Stock No.	Range, mm	Increments, mm
MIC1MA	0-25	0.001
MIC2MA	25-50	0.001
MIC3MA	50-75	0.001
MIC4MA	75-100	0.001
MIC5MA	100-125	0.001

MIC103MA Digital Metric Micrometer Set. MIC1MA, MIC2MA and MIC3MA in fitted case with standards.



MICB1A

Outside Micrometers

Standard reading in .001" increments on handle. Vernier style reading in .0001" increments. Features include a large easy to handle insulated frame, carbide tipped anvils, positive locking clamp and ratchet stop thimble.

Stock No.	Range, inches	Increments, inches
MICB1A	0-1	.0001
MICB2A	1-2	.0001
MICB3A	2-3	.0001
MICB4A	3-4	.0001
MICB5A	4-5	.0001

MICB103A SAE Set. Includes MICB1A, MICB2A, MICB3A (3 pcs) in fitted case with standards.



MICINSIDE12

Inside Micrometer Set

MICINSIDE12 Inside Micrometer Set. Tubular Design. Range is 2" to 12" in .001" increments. Includes inside micrometer head and a series of coil spring pressure contact rods.



DM6

Depth Micrometer Set

DM6 Depth Micrometer Set. Measure depths of slots, counterbores, holes and keyways up to 6" in depth. 4" satin chrome base for greater stability. Graduated in .001" increments. Includes fitted storage case.

Stock No.	Range, inches	Increments, inches	Base Size, inches	No. of Rods
DM6	0-6	.001	4	6



MICED1A



Electronic Digital Micrometer

MICED1A Electronic Digital Micrometer. Display reads to 0.00005" (0.001mm). Zero set for absolute and incremental measuring modes. Auto shutoff after 10 minutes. Other features include insulated frame, hardened body, carbide tipped anvil, positive locking clamp and ratchet stop thimble.

Micrometer Test Gauges

These test gauges are used as micrometer standards. Accuracy meets Federal Specifications.

MIC22	1"	MIC2M2	25mm
MIC32	2"	MIC3M2	50mm
MIC42	3"		
MIC52	4"		



MIC22

Measuring Micrometers and Sets



MROUND4

Small Hole Gauge Set

MROUND4 Small Hole Gauge Set. Knurled knob at handle for size adjustment. Full round gauging surface with flat bottom. Set includes: .125 to .200" ga., 3 5/8" long; .200 to 300" ga., 3 7/8" long; .300 to 400" ga., 4" long; and .400 to 500" ga., 4 1/2" long.



MTEE6

Telescoping Gauges

MTEE6 Telescoping Gauges. Range is 5/16" to 6". Measurable depth is 4" to 5". Set of six is packaged in a plastic pouch.

Calipers / Magnetic Bases / Divider



MCAL6



CM6421



CM6506



MCAL12



PMF147A



PMTB133

Calipers

MCAL6 Electronic Digital Caliper. Gauge is 0" to 6" (0 to 150mm) in 0.0005" (0.01mm) resolutions. Use for inside, outside, depth and step measurements. Inch/metric conversion with one button. Large LCD display. Hardened stainless steel frame.

MCAL12 Electronic Digital Caliper. Essential tool for working on larger vehicles, trucks, tractors and earth moving equipment. Gauge is 0" to 12" (0 to 305mm) in 0.0005" (0.01mm) resolutions. Use for inside, outside, depth and step measurements. Inch/metric conversion with one button. Large LCD display with floating zero set. Locking nut and thumb roll for smooth action. Stainless steel jaws provide accurate measurement of inside features (ID), outside features (OD), grooves, slots, keyways and notches.

PMF147A U.S./Metric Dial Type Caliper. Gauge is 0" to 6" in high (0.001" increments) and metric (0.1mm increments). Includes storage case.

CM6421 Vernier Caliper. Range is 0" to 5" in .001" increments (0 to 150mm in .05mm increments). Includes knurled fine adjustment control and thumb lock screws.

CM6506 Slide Rule Caliper. Range is 0" to 4" in 1/16" increments (0 to 100mm in 10mm increments). Use both inside and outside measurements.

PMTB133 Dial Caliper. Range is 0" to 6" in .001" increments (0.100" range per revolution). Use for inside, outside, depth and step measurements. Thumb roller for precise adjustment. Adjustable dial. Constructed from stress relieved stainless steel with satin chrome finish.



PMF129



CM6416

Divider

PMF129 Divider. Spring type divider has virtually no torsion or side play. 6".

Magnetic Base

CM6416 Holder. Magnet has "on/off" switch. Base is 2 3/8" x 1 7/8" x 2 1/2". Post is 7" x 15/16". Rod is 6" x 25/64". Will grip flat or curved metal surfaces.

Levels

TL100A Torpedo Level. 9" precision measuring tool designed for close quarter work. Magnetic strips and v-grooving make it ideal for pipe and conduit work.

YA328A Angle Locator. Precise, accurate tool to determine angle measurements. Ideal for checking drive shaft angle. Red degree indicator located behind numbers for exact reading of graduations. English and metric scales molded into base of tool in 1/8" and DM. Large 1 7/8" x 7/8" magnet inserted in base for secure retention.



TL100A



YA328A

RELATED ITEMS

Cummins Injector Timing Gauges, pg 368
Disc Brake Gauges, pg 493
Cylinder Bore Gauges, pg 454

Timing / Telescoping / Dial Test Indicator Gauges **Measuring**

Timing Gauges

GA3625 Timing Gauge. Find top center without removing the cylinder head. Direct reading in all straight spark plug holes. Dial face can be rotated and locked for zero setting. Automatic revolution counter. Range: 0"-1". Graduations: 0.0005". Reading: 0-50. Includes gauge, two spark plug hole thread adaptors (14 and 18mm), 1" long contact point and foam lined storage box.

GA555MA Motorcycle Timing Gauge. Find top dead center without removing the cylinder head. Check ignition and cam timing without removing the fuel tank. Compact design for cramped quarters on many motorcycles. Range is 0 to 5mm in 0.01mm increments. Gauge has black dial face, yellow graduations and hands and red bezel. 12 and 14mm adaptors feature locking collars. Includes 1.5" (38.1mm) long, 0.19" (4.8mm) diameter and 2.0" (50.8mm) long, 0.19" (4.8mm) diameter contact points. Includes CM6549150 Storage Case.



GA3625



GA555MA



GA3400



GA3645



GA3450



GA3640



GA3634



GA3460

Dial Test Indicator Sets

GA3400 Universal Dial Test Indicator Set. Determine lash; measure runout of flywheels on torque converters; bushing or bearing wear, check crankshaft bearing wear. Includes jeweled bearing indicator with 1 1/2" diameter bezel and rear mounted plunger; two extra contacts (3/16" and 5/16" diameter); indicator holding rod; hole attachment for checking bores (.125 range); indicator C-clamp mounting and universal rod connector and tool post holder. Stored in CM6540050 Case.

GA3640 Long Range Dial Test Indicator Set. General use indicator set. Magnetic base attaches to flat surface. Checks ball joint, tie rod, cam and valve guide wear, and wheel rim, flywheel and disc brake runout. Features a large 2 1/4" diameter dial with 1" range. Dial is continuous with revolution counter. Bezel may be rotated for any setting point. Includes powerful magnetic base with post, stepped rod and clamps along with contact, rod connector and indicator holding clamp. Stored in CM6564050 Case.

GA3645 Long Range Dial Test Indicator Set. Checks ball joint, tie rod, cam and valve guide wear, and wheel rim, flywheel and disc brake runout. Features a large 2 1/4" diameter dial with 1" range. Dial is continuous with revolution counter. Bezel may be rotated for any setting point. Includes Sta-Firm Magnetic Base that conforms to any surface with more than 50 moveable feet. Base includes adjustable swivel clamp for post and rod. Stored in CM6564550 Case.

GA3634 Ball Joint/Disc Brake Test Indicator Set. Check ball joint wear, brake rotor runout, gear backlash and valve guide or camshaft wear. Special locking pliers clamp securely to any convenient object. Eliminates vibration problems and false readings by mounting directly on spindle. Includes CM6563450 Case.

Dial Test Indicator Set Specifications

Stock No.	Range	Graduations	Reading
GA3400	.200"	.001"	0-100
GA3640	1.00"	.0005"	0-50
GA3645	1.00"	.0005"	0-50
GA3634	1.00"	.0005"	0-50
GA3450	0.00" to 4.00"	.0005"	0-50
GA3460	0.00" to 1.00" (0.00" to 4.00" with extension)	.0005"	0-50

GA3450 Universal Pinion Depth Gauge. Allows quick and accurate pinion depth set for all aftermarket gear sets. Works on OEM gear sets with pre-measurement of pinion depth. Incorporates a swing arm assembly and indicator holder. Indicator and three precision setting masters. Gauge and components are stored in CM6547050 Case. GA3450 is also included in the GA3460 Master Rear Axle Set.

GA3460 Master Rear Axle Set. Use for rear end set up measurements on domestic and import cars and light trucks up to one ton. Measures gear backlash and run out, axle end play, pinion depth and end play and carrier assembly play. Includes the GA3450 Pinion Depth Gauge, Sta-Firm magnetic base with 50 moveable feet that conform to uneven surfaces, locking pliers base for non-metallic attachment, flexible gooseneck for use with either base and an assortment of extensions and contact points. All components housed in CM6566850 Storage Case.

Contact Points and Extensions

GA3601 Dial Indicator Extension. Use with Snap-on® GA3400, GA3634, GA3640 and GA3645 Dial Test Indicators. 4-48 female thread allows the extension of any contact point for special applications. 6" long.

GA3609 Contact Point Set. Use with Snap-on® GA3400, GA3634, GA3640 and GA3645 Dial Test Indicators. 4-48 female thread allows the extension of any contact point for special applications. Extensions can be joined together to extend reach. Contact points feature a polished tip with radius end and are manufactured from hardened steel. Set includes four (1") extensions, four contact points (0.2", 0.4", 0.6", 0.8") plus holder for all set components.



GA3601

GA3609

Measuring Feeler Gauges



FB335



FB310B



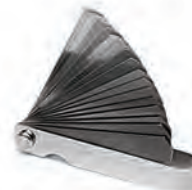
FB325A



FBL325A

General Use

Stock No.	No. of Blades	Blade Dimensions, inches	Blade Size	Increments	Description
FB310B	13	1/2 x 3 1/4	.001", .0015", .002" thru .008", .010", .012", .013", .015	—	Double stamped with U.S. and metric sizes.
FB325A	25	1/2 x 3	.0015", .002" thru .025"	.001"	General Use Feeler Gauge (25 blades)
FB335	35	1/2 x 3	.0015", .002" thru .035"	.001"	Swedish feeler blade steel.
FBL325A	25	1/2 x 12	.0015", .002" thru .021", .025", .027", .030", .040	.001"	Long blade, double stamped with U.S. and metric sizes.
FBM320	20	1/2 x 3	.05 thru 1mm	.05mm	Metric Feeler Gauge Set.



FBM320



FB316B



FB326B

Ignition

Stock No.	No. of Blades	Blade Dimensions, inches	Blade Size	Increments	Description
FB316B	18	1/4 x 1 3/4	.010", .012", .013", .015" thru .022", .024" thru .026", .028", .030", .032", .035"	.001"	Short Blade, Ignition/Spark Plug Gauge Set, double stamped with U.S. and metric sizes
FB326B	10	1/4 x 1 3/4	.008", .010", .012", .013", .015", .017", .018", .020", .022", .024" thru .026", .028", .030", .032", .035"	.001"	Double stamped with U.S. and metric sizes.



FB300A



FB308D



FB322



FBM322



FB328A

Bent And Step Blades

Stock No.	No. of Blades	Blade Dimensions, inches	Blade Size	Increments	Description
FB300A	25	1/2 x 3	.006" thru .030"	.001"	Feeler Gauge Set, blade ends are angled at 45°.
FB308D	12	1/2 x 3	.008"-.010", .011"-.013", .013"-.015", .014"-.016", .015"-.017", .017"-.019", .018"-.020", .020"-.022", .023"-.025", .025"-.027", .026"-.028", .028"-.030"	.001"	Step Feeler Gauge Set
FB322	22	1/2 x 3 3/8	.004"-.006" thru .025"-.027"	.001"	"Go-No Go" blades with 2 sizes each.
FB328A	2	1/2 x 3	.011"-.013", .013"-.015"	—	For valve adjustment on GM 8.2L engines, double stamped with U.S. and metric sizes.
FBM322	2	1/2 x 3 3/8	.20-.30mm, .40-.50mm	—	10 3/4" long bent handle.



FB307D

Diesel

Stock No.	No. of Blades	Blade Dimensions, inches	Blade Size	Increments	Description
FB307D	14	1/2 x 4 1/2	.008", .011" thru .014", .016" thru .018", .020", .023" thru .025", .027", .029"	.001"	Bent Blade Cummins Diesel, blade ends are bent at 90° angle; blades are secured on FB307C1 ring.

Feeler Gauges **Measuring**



FB305A



FB3330



FBP10



FBS5

Specialty Feeler Gauges

Stock No.	No. of Blades	Blade Dimensions, inches	Blade Size	Increments	Feature
FB305A	6	1/2 x 3	.006", .008", .010", .012", .013", .015"	.002"	Non-Magnetic, double stamped U.S. and metric sizes.

FB3330 Easy Grip Feeler Gauge Set. Non-magnetic double stamped with U.S. and metric sizes. Set includes ten feeler gauges with orange screwdriver type handles. Blades are 4" long and feature a 45° offset for use on valve tappets as well as air gapping applications. Set is displayed in the FB3330 Wood Box. Blades included are .010", .012", .014", .016", .018", .020", .022", .024", .027", and .030". Twenty-five blades are available in all (.006" thru .030") in .001" increments.

FBP10 Pocket Feeler Blade. Flat, ramp style feeler gauge handles full range of spark plug gapping requirements from .020 to .080". Reverse side has metric scale to 2mm. Includes pocket clip. Orange screwdriver type handle with pocket clip. 5 1/2" length.

Feeler / Gap Gauge Set

FBS5 Feeler and Gap Gauge Set. 5 piece set includes FB300A Bent Blade Feeler Gauge, FB305A Non-magnetic Feeler Gauge, and FB325A General Use Feeler Gauge, plus GA461C and FB360C Spark Plug Gap Gauges in the FBS5-1 Kit Bag.



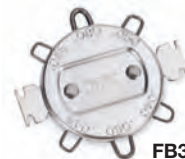
FB301A



FB302A



FB361A



FB360C



FB303B



GA461C



FB6B040

Spark Plug Gauges / Gappers

FB301A Wire Gap for Point Ignition Systems Gauge. Includes eight wires in sizes .020", .022", .025", .028", .030", .032", .035", and .040". Also includes an electrode bender.

FB302A Wire Gap for Aircraft, Motorcycle, and Small Engines Gauge. Similar to FB301A. Includes eight wires in sizes .015", .016", .018", .020", .025", .028", .030", and .035". Also includes an electrode bender.

FB303B Wire Gap for Electronic Ignition Systems Gauge. Similar to FB301A. Includes six wires in sizes .044", .045", .050", .054", .060", and .080". Also includes an electrode bender.

GA461C Gap for Point Ignition Systems Gauge. Includes six wires protruding 1/4" from edge of metal disc. Wire sizes included are .025", .030", .034", .035", .040" and .045". Has built in electrode bender. Double stamped with decimal and metric sizes.

FB360C Gap for Electronic Ignition Systems Gauge. Includes six wire sizes: .040", .044", .045", .050", .060", and .080". Double stamped with decimal and metric sizes.

FB361A Gapper Gauge. Pocket size gapper features an inclined ramp for setting gap. 1 1/2" in diameter. Range is .020" to .100". Double stamped with decimal and metric sizes.

Feeler Blades and Holder

FB6B0015 thru FB6B040 (12") Feeler Gauge Blades. Use in the FB312 holder. When ordering, blade size is stock number suffix; prefix is FB6B. Includes 34 blades as follows:

Stock No.	Blade Size, Inches	Stock No.	Blade Size, Inches
FB6B0015	.0015	FB6B017	.017
FB6B002	.002	FB6B018	.018
FB6B0025	.0025	FB6B019	.019
FB6B003	.003	FB6B020	.020
FB6B004	.004	FB6B021	.021
FB6B005	.005	FB6B022	.022
FB6B006	.006	FB6B023	.023
FB6B007	.007	FB6B024	.024
FB6B008	.008	FB6B025	.025
FB6B009	.009	FB6B026	.026
FB6B010	.010	FB6B027	.027
FB6B011	.011	FB6B028	.028
FB6B012	.012	FB6B029	.029
FB6B013	.013	FB6B030	.030
FB6B014	.014	FB6B032	.032
FB6B015	.015	FB6B035	.035
FB6B016	.016	FB6B040	.040

Decimal / Metric Conversion Chart

Decimal, inches	Metric, mm	Decimal, inches	Metric, mm	Decimal, inches	Metric, mm	Decimal, inches	Metric, mm	Decimal, inches	Metric, mm	Decimal, inches	Metric, mm
0.0010	0.025	0.007	0.178	0.015	0.381	0.023	0.584	0.031	0.787	0.042	1.067
0.0015	0.038	0.008	0.203	0.016	0.406	0.024	0.610	0.032	0.813	0.044	1.118
0.0020	0.051	0.009	0.229	0.017	0.432	0.025	0.635	0.033	0.838	0.046	1.168
0.0025	0.064	0.010	0.254	0.018	0.457	0.026	0.660	0.034	0.864	0.052	1.321
0.0030	0.076	0.011	0.279	0.019	0.483	0.027	0.686	0.035	0.889	0.054	1.372
0.0040	0.102	0.012	0.305	0.020	0.508	0.028	0.712	0.036	0.914	0.056	1.422
0.0050	0.127	0.013	0.330	0.021	0.533	0.029	0.737	0.038	0.965	0.060	1.524
0.0060	0.150	0.014	0.356	0.022	0.559	0.030	0.762	0.040	1.016	0.080	2.032

Measuring Measuring Sets / Straight Edges / Steel Rules



SQUARECOMB12

SQUAREB12

Measuring Sets

SQUAREB12 Machinist's Measuring Set. Set includes SQUAREB90 Sliding Head and RULER12BSQ Steel Rule in fitted storage case.

SQUARECOMB12 Combination Measuring Set. Set includes SQUAREB180 Protractor, RULER12BSQ Steel Rule plus SQUAREB90 and SQUAREB45 Sliding Heads in fitted storage case.

SQUAREB90 Sliding Head (90°). 90° square head with a bubble level and scriber points. Black wrinkle powder coat finish.

SQUAREB180 Protractor Head (180°). Protractor is graduated 180° in both directions. Includes bubble level. Black wrinkle powder coat finish.

RULER12BSQ Steel Rule (12"). Precision ground and hardened steel blade for greater accuracy. Satin chrome finish. Graduated in 1/8" and 1/16" increments on one side and 1/32" and 1/64" increments on the other.

SQUAREB45 Sliding Head (45°). Center head for 45° angles only. Black wrinkle powder coat finish.



GA438A

Precision Straight Edges

Use with feeler gauges to check for distortion in engine blocks, cylinder heads, flywheels, main bearing saddles, cam bearing saddles, cam covers and bell housings. Precision working edge ground to within .0002" per 12" in length. Great stability with .25" thickness and 1.50" width. Convenient hanging hole and edge protector.

GA435 18" long. GA438A 24" long. GA535 35" long.



RULER120



RULER602



RULER600



RULER601

Steel Rules

RULER120 U.S./Metric Steel Rule. 12" stainless steel rule. U.S. edge is in 1/32" increments for first 3", 1/16" increments for last 9". Metric edge is etched with mm and cm increments. Storage pouch has decimal equivalents printed on front.

RULER600 Steel Rule. 6" stainless steel rule. Graduated in 1/32" and 1/64" increments. Storage pouch has decimal equivalents printed on front.

RULER601 Steel Rule (6"). 6" stainless steel rule. Graduated in 1/10" and 1/50" increments on one side, 1/32" and mm increments on the other side. Storage pouch has decimal equivalents printed on front.

RULER602 U.S./Metric Pocket Rule (6"). 6" stainless steel rule with pocket clip. U.S. edge in 1/32" and 1/64" increments on one side, mm and cm increments on the other side. Storage pouch has decimal equivalents printed on front.

Tape Rules



All models feature a tape locking device. All models (except YA3600) have a belt clip.

Stock No.	Length	Case Color	Increments	Blade Width, inches	Case Dimensions, inches	Description
<i>U.S. Tape Rules</i>						
YASG153	12'	Red	16ths plus 16" stud markings	3/4	2 3/4 x 2 3/4	Inside dimension, diameter scale and decimal equivalents on back side
YASG155	25'	Red	16ths plus 16" stud markings	1	3 1/4 x 3 1/4	Rubber grip, active bumper, heavy duty spring
YASG155G	25'	Green	16ths plus 16" stud markings	1	3 1/4 x 3 1/4	Rubber grip, active bumper, heavy duty spring
YASG1550	25'	Orange	16ths plus 16" stud markings	1	3 1/4 x 3 1/4	Rubber grip, active bumper, heavy duty spring
YASG155CP	25'	Red	Inches, 16ths, centerfinding scale	1	3 1/4 x 3 1/4	Rubber grip, active bumper, heavy duty spring, patented centerfinding scale
YASG155EP	25'	Red	Inches, 16ths, with fractions	1	3 1/4 x 3 1/4	Rubber grip, active bumper, heavy duty spring, fractional read blade
YASG156	25'	Yellow	Inches, 16ths, with 16" stud markings, mm, cm	1	4 3/4 x 2 1/4 x 1 1/2	Rubber grip, active bumper, heavy duty spring for swift reaction
GA429A	100'	Yellow	16ths plus 16" stud markings	3/8	4 1/2 x 4 3/4	Rubber grip case with hand crank mechanism
<i>U.S./Metric Tape Rules</i>						
YASG155EM	25'	Red	Inches, 1/16", mm, cm	1	3 1/4 x 3 1/4	Rubber grip, active bumper, heavy duty spring, English and metric markings
YA3600	16'	Chrome	Inches, 16ths, mm, cm	3/4	2 1/2 x 2 1/2	Magnets on four sides, three pronged end tip
GA427A	10'	Black	Inches, 16ths, mm, cm	1/2	2 1/4 x 2 1/8	Compact all-purpose design
<i>Metric Tape Rules</i>						
YASGMM153	3M	Red	mm, cm	3/4	2 3/4 x 2 3/4	Rubber grip, active bumper, heavy duty spring
YASGMM154	5M	Red	mm, cm	3/4	2 3/4 x 2 3/4	Rubber grip, active bumper, heavy duty spring
YASGMM158	8M	Red	mm, cm	1	3 1/4 x 3 1/4	Rubber grip, active bumper, heavy duty spring

Rethreading Taps and Dies Thread Restoring



TRC3



TRF3



RTD15M

U.S. Tap and Die Sets

TRC3 U.S. Rethreading Tap Set (NC).

Includes six NC taps and twelve NC dies (18 pcs). All components have silver finish.

NC TAPS

TRT2520A, TRT3118A, TRT3716A, TRT4314A, TRT5013A, TRT5612A

NC DIES

TR2520A, TR3118A, TR3716A, TR4314A, TR5013A, TR5612A, TR6211A, TR7510A, TR8759A, TR10008A, TR11257A, TR12507A

TRF3 U.S. Rethreading Tap Set (NF).

Includes six NF taps and twelve NF dies (18 pcs). All components have black finish. Includes:

NF TAPS

TRT2528A, TRT3124A, TRT3724A, TRT4320A, TRT5020A, TRT5618A

NF DIES

TR2528B, TR3124B, TR3724B, TR4320B, TR5020B, TR5618B, TR6218B, TR7516A, TR8714A, TR10014A, TR11212A, TR12512A

Metric Tap and Die Sets

RTD15M Metric Rethreading Tap and Die Set. Includes seven metric dies and seven metric taps. Gold colored.

Dies

TDM51B, TDM53B, TDM54B, TDM55B, TDM56B, TDM57B, TRM1025-1

Taps

TRM1025-2, TRT51, TRT53, TRT54, TRT55, TRT56, TRT57

Thread Restorer File

TFM7530B

Color coding for rethreading taps and dies:
NC = Silver NF = Black Metric = Gold



RTD48



TRT4314A



TR5618B

Rethreading Tap and Die Set Components

Size	Stock No.	Size	Stock No.
Rethreading Taps		Rethreading Dies	
1/4"-20	TRT2520A	1/4"-20	TR2520A
5/16"-18	TRT3118A	5/16"-18	TR3118A
3/8"-16	TRT3716A	3/8"-16	TR3716A
7/16"-14	TRT4314A	7/16"-14	TR4314A
1/2"-13	TRT5013A	1/2"-13	TR5013A
9/16"-12	TRT5612A	9/16"-12	TR5612A
1/4"-28	TRT2528A	5/8"-11	TR6211A
5/16"-24	TRT3124A	3/4"-10	TR7510A
3/8"-24	TRT3724A	7/8"-9	TR8759A
7/16"-20	TRT4320A	1"-8	TR10008A
1/2"-20	TRT5020A	1 1/8"-7	TR11257A
9/16"-18	TRT5618A	1 1/4"-7	TR12507A
M6 x 1	TRT51	1/4"-28	TR2528B
M8 x 1.25	TRT53	5/16"-24	TR3124B
M10 x 1.5	TRT54	3/8"-24	TR3724B
M10 x 1.25	TRM1025-2	7/16"-20	TR4320B
M12 x 1.75	TRT55	1/2"-20	TR5020B
M12 x 1.5	TRT56	9/16"-18	TR5618B
M12 x 1.25	TRT57	5/8"-18	TR6218B
M10 x 1.00	TRT101	3/4"-16	TR7516A
M11 x 1.50	TRT11150	7/8"-14	TR8714A
M14 x 1.50	TRT14150	1"-14	TR10014A
		1 1/8"-12	TR11212A
		1 1/4"-12	TR12512A
		M6 x 1	TDM51B
		M8 x 1.25	TDM53B
		M10 x 1.5	TDM54B
		M10 x 1.25	TRM1025-1
		M12 x 1.75	TDM55B
		M12 x 1.5	TDM56B
		M12 x 1.25	TDM57B
		M10 x 1.00	TR101
		M11 x 1.50	TR11150
		M14 x 1.50	TR14150

RELATED ITEMS

Drill Bits, pgs 285-288

Extractors, pgs 343-347

U.S./Metric

Combination Tap and Die Sets

RTD48 U.S./Metric Master Rethreading Kit. Includes taps and dies. Also includes TF1124B and TFM7530B Thread Restorer Files. All components are neatly stored in a storage case (48 pcs).

Taps

TRT2520A, TRT3118A, TRT3716A, TRT4314A, TRT5013A, TRT5612A, TRT2528A, TRT3124A, TRT3724A, TRT4320A, TRT5020A, TRT5618A, TRT51, TRT53, TRT54, TRM1025-2, TRT55, TRT56, TRT57, TRT101, TRT11150, TRT14150

Dies

TR2520A, TR3118A, TR3124B, TR3716A, TR4314A, TR5013A, TR5612A, TR6211A, TR2528B, TR3724B, TR4320B, TR5020B, TR5618B, TR6218B, TDM51B, TDM53B, TDM54B, TRM1025-1, TDM55B, TDM56B, TDM57B, TR101, TR11150, TR14150

Thread Restorer File

TF1124B and TFM7530B

NOTE: Rethreading taps and dies renew existing threads; they are not for hardened threads; they are not for cutting new threads.

Thread Restoring Thread Restorer Files



TF1124B

For any diameter right- or left-hand threads. Removable vinyl handles.

TF1124B. 11, 12, 13, 14, 16, 18, 20, and 24 threads per inch.

TF1127B. 9, 10, 12, 16, 20, 27, 28, and 32 threads per inch.

TFM7530B. Pitches: .75, 1, 1.25, 1.50, 1.75, 2 and 3mm.



TTFM932A

TTFM932A Thread Restorer File Set. Includes three commonly needed files. Files feature a black industrial finish and comfortable red vinyl handles. The files included can service a range of 9 through 32 threads per inch and 0.75 through 3mm pitches. Includes TTFM932-1 Vinyl kit bag for storage.

Thread Chasers



TR20C



TR21A



TR25B

U.S. Thread Chaser Sets

TR20C U.S. External Thread Chaser Set. Includes a small rethreading tool with 1/2" to 5 3/4" diameter capacity for bolt threads and 1/4" to 4" capacity for pipe threads plus nine thread chasers.

TR21A U.S. External Thread Chaser Set. Includes a large rethreading tool with 5" to 14" diameter pipe thread capacity plus nine thread chasers.

TR25B U.S. Internal Thread Chaser Set. Includes a knurled handle internal thread chasing tool plus nine chasers.

Metric Thread Chaser Sets

TR20M Metric External Thread Chaser Set. Has the same rethreading tool as the TR20C U.S. Set, except it includes six metric chasers (7 pcs).

TR25M Metric Internal Thread Chaser Set. Includes a knurled handle thread chasing tool plus six metric chasers (7 pcs).

Thread Chaser Set Components

Stock No.	Thread Pitch
<i>U.S. Chaser</i>	
TR20-10	4 & 5
TR20-11	6 & 7
TR20-12	8 & 9
TR20-32	8R & 10R
TR20-13	10 & 11
TR20-14	11 1/2 & 12
TR20-15	13 & 14
TR20-16	16 & 18
TR20-17	20 & 24
<i>Metric Chaser</i>	
TR20-25	4.5 & 5mm
TR20-26	3.5 & 4mm
TR20-27	2.5 & 3mm
TR20-28	1.75 & 2mm
TR20-29	1.25 & 1.5mm
TR20-30	.75 & 1mm

Special Purpose Thread Restoring



RD8

Spindle Rethreading Set

RD8 Spindle Rethreading Set. For most imported or domestic front wheel drive vehicles. Complete with RD8-8 storage case.

- RD7-1 Rethreader Die. M24 x 1.5
- RD7-2 Rethreading Die. M24 x 2
- RD7-3 Rethreader Metric Die. M22 x 1
- RD7-4 Rethreading Die. M22 x 1.5
- RD7-5 Rethreader Metric Die. M20 x 1.5
- RD7-6 Rethreading Die. 3/4"-20
- RD7-7 Rethreading Die. 13/16"-20.
- RD7-9 Rethreading Die. M20 x 1.25



RD20

Master Spindle Rethreading Set

RD20 Master Spindle Rethreading Set. Repair and renew damaged threads on stub axles and spindles for most vehicles. Dies are manufactured from high tempered steel for strength and durability. Each die size is embossed in the case directly below each die for easy identification and selection. Application chart is included.

- RD7-1 Rethreader Die. M24 x 1.5
- RD7-2 Rethreading Die. M24 x 2
- RD7-3 Rethreader Metric Die. M22 x 1
- RD7-4 Rethreading Die. M22 x 1.5
- RD7-5 Rethreader Metric Die. M20 x 1.5
- RD7-6 Rethreading Die. 3/4"-20
- RD7-7 Rethreading Die. 13/16"-20.
- RD7-9 Rethreading Die. M20 x 1.25
- RD7-10 Spindle Rethreader Die. 3/4"-16NF
- RD7-11 Spindle Rethreader Die. 7/8"-14NF
- RD7-12 Spindle Rethreader Die. 1"-14NF
- RD7-13 Spindle Rethreader Die. 1 1/16"-24NF
- RD7-14 Metric Spindle Rethreader Die. M25-1.5
- RD7-15 Metric Spindle Rethreader Die. M27-2
- RD7-16 Spindle Rethreader Die. 27/32"-20NF
- RD7-17 Metric Spindle Rethreader Die. M16-1
- RD7-18 Metric Spindle Rethreader Die. M16-1.5
- RD7-19 Metric Spindle Rethreader Die. M18-1.5
- RD7-20 Metric Spindle Rethreader Die. M19-1.5
- RD7-21 Metric Spindle Rethreader Die. M20-1
- RD7-22 Storage Case

NOTE: Rethreading taps and dies renew existing threads; they are not for hardened threads; they are not for cutting new threads.



RD8LT

Light Truck Spindle Rethreading Set

RD8LT Light Truck Spindle Rethreading Set. For use on four wheel drive (front and rear axle housings) and medium to heavy duty two wheel drive trucks (rear axle). Restore axle housing and bearing/hub retention threads. Includes RD8LT-2 storage case.

- RD7-23 Rethreading Die. 2"-16
- RD7-24 Rethreading Die. M38-1.5
- RD7-25 Rethreading Die. 1 5/8"-16
- RD7-26 Rethreading Die. 1 13/16"-16
- RD7-27 Rethreading Die. Left Hand, 2"-16
- RD7-28 Rethreading Die. 2 1/8"-16
- RD7-29 Rethreading Die. 2 1/4"-16
- RD8LT-1 Driver. 2 5/8



TDM13A

Metric Spark Plug Hole Taps

Stock No.	Size
T10100	M10 x 1.00
T12125	M12 x 1.25
T14125	M14 x 1.25
T18150	M18 x 1.50
T2818	7/8"-18 NF

TDM13A Metric Spark Plug Hole Tap Set. Includes T10100 thru T18150 (4 pcs).



TDM101

Thread Gauge

TDM101 Metric Bolt and Thread Gauge. Bolt diameter range of 2.3 to 24mm (with inch/decimal equivalents). Thread gauge sizes: .35 to 3mm.



WARNING

- Read additional safety precautions on pages 534 to 537.



Threading Tap and Die Sets

An important feature of the dies in these sets (except GA541) is a small adjusting screw which changes the nominal size .003" under or over to give a tight or loose fit to your thread. Die size 1/4" to 1/2" and 7 to 12mm are a one-piece, 12-point design that can be turned with a 1" socket wrench (5/8" socket wrench for 3 to 6mm dies) when working in places where a normal die stock cannot be used. The three largest die stocks (TD10A, TD35, and TD40) are self-centering and adjust to the diameter of the bolt.

RELATED ITEMS

Extractors, Stud Removers, pgs 343-347



TD9902B



TD2500



GA541



TD2425



TDP6

U.S. Sets

TD9902B U.S. Tap and Die Set. Set includes T125 thru T129 NF Taps; T120 thru T124 NC Taps; T130 NPT Tap; DR019 thru DR043 NF Dies; D110, DR030 thru DR041 NC Dies; TD35 and TD40 Die Stocks; and TD98A Tap Wrench (25 pcs.) in storage case.

TD2425 Set. Set includes T100 thru T104 NC Taps; T105 thru T109 NF Taps; T110 NPT Tap, D010 thru D014 NC Dies; D015 thru D019 NF Dies; D021A thru D026 NPT Dies; TD3a and TD10A Die Stocks; TD4, TD50A and TD88A Tap Wrenches; TD1040 Screw Pitch gauge and TDS1 Screwdriver (41 pcs) in storage case.

TD2500 Set. Set includes taps from 4-40 thru 12-24, a TD3A Die Stock, and a TD4 Tap Wrench (14 pcs) in a wooden storage case.

TD9902 Set. Set includes all items in both TD9902A and TD2425 Sets (66 pcs).

GA541 Set. Set includes T105 thru T109 NF Taps and corresponding dies; T100 thru T104 NC Taps and corresponding dies; T111A thru T116 Machine Screw Taps and corresponding dies; T110 NPT Tap and corresponding die; GA541-1 and GA541-2 Die Stocks; TD4A, TD50 and TD88A Tap Wrenches; TD1040 Screw Pitch Gauge and TDS1 Die Adjusting Screwdriver (41 pcs) in storage case.

TDP6 Set. Set includes T110 thru T134 NPT Taps (1/8" to 1") (6 pcs) in TDP6-1 wood storage case.

Tap Stock No.	Die (Adjustable) Stock No.	Die (Non-Adjustable) Stock No.	Thread Size	Die Type
<i>National Fine Threads</i>				
T105	D015	GA541-1428	1/4"-28 NF	1" Double Hex Adjustable
T106	D016	GA541-51624	5/16"-24 NF	or
T107	D017	GA541-3824	3/8"-24 NF	1" Single Hex Non-Adjustable
T108	D018	GA541-71620	7/16"-20 NF	
T109	D019	GA541-1220	1/2"-20 NF	
—	DR019	—	1/2"-20 NF	1 1/2" Round Adjustable
T125	DR035	—	9/16"-18 NF	1 1/2" Round Adjustable
T126	DR036	—	5/8"-18 NF	1 1/2" Round Adjustable
T127	DR037	—	3/4"-16 NF	1 1/2" Round Adjustable
T128	DR042	—	7/8"-14 NF	2" Round Adjustable
T129	DR043	—	1"-14"	2" Round Adjustable
<i>National Coarse Threads</i>				
T100	D010	GA541-1420	1/4"-20 NC	1" Double Hex Adjustable
T101	D011	GA541-51618	5/16"-18 NC	or
T102	D012	GA541-3816	3/8"-16 NC	1" Double Hex Adjustable
T103	D013	GA541-71614	7/16"-14 NC	
T104	D014	GA541-1213	1/2"-13 NC	
—	DR014	—	1/2"-1 NC	1 1/2" Round Adjustable
T120	DR030	—	9/16"-12 NC	1 1/2" Round Adjustable
T121	DR031	—	5/8"-11	1 1/2" Round Adjustable
T122	DR032	—	3/4"-10 NC	1 1/2" Round Adjustable
T123	DR040	—	7/8"-9 NC	2" Round Adjustable
T124	DR041	—	1"-8 NC	2" Round Adjustable



Tap Stock No.	Die (Adjustable) Stock No.	Die (Non-Adjustable) Stock No.	Thread Size	Die Type
<i>Machine Screw Threads</i>				
T111A	D021A	GA541-440	4-40	5/8" Double Hex Adjustable
T112	D022	GA541-632	6-32	or
T113	D023	GA541-832	8-32	5/8" Single Hex Non-Adjustable
T114	D024	GA541-1024	10-24	
T115	D025	GA541-1032	10-32	
T116	D026	GA541-1224	12-24	
<i>Pipe Threads</i>				
T110	—	GA541-1827	1/8"-27 NPT	1" Double Hex Adjustable
—	—	D020	1/8"-27 NPT	1" Double Hex Non-Adjustable
T130	—	—	1/4"-18 NPT	—
—	—	DR033	1/4"-18 NPT	1 1/2" Round Non-Adjustable
T131	—	—	3/8"-18 NPT	—
T132	—	—	1/2"-14 NPT	—
T133	—	—	3/4"-14 NPT	—
T134	—	—	1"-11 1/2" NPT	—

Tap and Die Sets Threading

An important feature of the dies in these sets (except GAM541) is a small adjusting screw which changes the nominal size .003" under or over to give a tight or loose fit to your thread. Die size 1/4" to 1/2" and 7 to 12mm are a one-piece, 12-point design that can be turned with a 1" socket wrench (5/8" socket wrench for 3 to 6mm dies)

when working in places where a normal die stock cannot be used. The three largest die stocks (TD10A, TD35, and TD40) are self-centering and adjust to the diameter of the bolt. U.S. Fed. Spec. GGG-T-60 applies to taps; GGG-D-296B applies to dies.



GAM541

Metric Sets

TDM99117B Metric Tap and Die Set. Taps and dies from 14 to 24mm, two die stocks, a tap wrench, and a can of thread cutting fluid (25 pcs.) in a storage case. Similar in appearance TD9902B Set.

TDM117A Set. Set includes T305M thru T1217M Metric Taps; D305M thru D1217M Metric Dies; T110M BSP Tap; D020M BSP Die; TD3A and TD10A Die Stocks; TD4A, TD50 and TD88A Tap Wrenches; TDM100 Metric Thread Pitch Gauge; and TDS1 Die Adjusting Screwdriver (41 pcs) in a storage case.

TDM99117 Set. Includes all items in both TDM99117B and TDM117A Sets (66 pcs).

GAM541 Set. 40-piece set features 1" single hex non-adjustable dies from 3 to 12mm, a 1/8"-28 BSP die plus taps in the same sizes. Also includes a die stock, two T-handle tap wrenches, a thread pitch gauge, a drill/tap chart, and a midjet screwdriver, all in a storage case.

U.S. / Metric Combination Set

TD10A U.S./Metric Combination Set. Taps and dies from 1/4" to 1/2" in both NF and NC threads, taps and dies from 4-40 thru 12-24 in machine screw threads, taps and dies from 3 to 12mm in metric threads, a pipe thread tap and die, a BSP tap and die, plus two die stocks, three tap wrenches, two screw pitch gauges and die adjusting screwdriver (76 pcs.) in a TD10AMT storage case.

TD10A Deluxe Combination Set. Includes all components of the TD10A U.S./Metric Set plus 41-piece high speed steel drill bit set in fractional, metric, wire gauge and letter sizes and five spiral screw extractors. Each drill bit matches to corresponding tap size for correct fit. Set offers a complete assortment of high-carbon steel taps and dies in fractional and metric sizes. Tap/drill charts and tool diagrams included. Set packaged in a storage case.



TD10A



TD10A Deluxe



DR1415M



TD3A

Tap Stock No.	Die Stock No.	Thread Size	Die Type
<i>Metric Threads</i>			
T305M	D305M	M3-.50	5/8" Double Hex Adjustable
T407M	D407MA	M4-.70	5/8" Double Hex Adjustable
T4075M	D4075M	M4-.75	5/8" Double Hex Adjustable
T508M	D508MA	M5-.80	5/8" Double Hex Adjustable
T509M	D509M	M5-.90	5/8" Double Hex Adjustable
T610M	D610MA	M6-1.00	5/8" Double Hex Adjustable
T710M	D710M	M7-1.00	1" Double Hex Adjustable
T810M	D810M	M8-1.00	1" Double Hex Adjustable
T812M	D812M	M8-1.25	1" Double Hex Adjustable
T910M	D910M	M9-1.00	1" Double Hex Adjustable
T912M	D912M	M9-1.25	1" Double Hex Adjustable
T1012M	D1012M	M10-1.25	1" Double Hex Adjustable
T1015M	D1015M	M10-1.5	1" Double Hex Adjustable
T1115M	D1115M	M11-1.5	1" Double Hex Adjustable
T1215M	D1215M	M12-1.5	1" Double Hex Adjustable
T1217M	D1217M	M12-1.75	1" Double Hex Adjustable
T1412M	DR1412M	M14-1.25	1 1/2" Round Adjustable
T1415M	DR1415M	M14-1.5	1 1/2" Round Adjustable
T1420M	DR1420M	M14-2.0	1 1/2" Round Adjustable
T1615M	DR1615M	M16-1.5	1 1/2" Round Adjustable
T1620M	DR1620M	M16-2.0	1 1/2" Round Adjustable
T1815M	DR1815M	M18-1.5	1 1/2" Round Adjustable
T1825M	DR1825M	M18-2.5	1 1/2" Round Adjustable
T2025M	DR2025M	M20-2.5	2" Round Adjustable
T2215M	DR2215M	M22-1.5	2" Round Adjustable
T2420M	DR2420M	M24-2.0	2" Round Adjustable
T2430M	DR2430M	M24-3.0	2" Round Adjustable
T110M	D020M	1/8"-28 BSP	1" Double Hex Non-Adjustable

Accessories

Stock No.	Description
<i>Die Stock</i>	
GA541-1	For 5/8" single hex dies
TD3A	For 5/8" double hex dies
GA541-2	Adjustable for 1" single hex dies
TD10A	Self-centering for 1" double hex dies
TD35	Self-centering for 1 1/2" diameter round dies
TD40	Self-centering for 2" diameter round dies
<i>Tap Wrenches</i>	
TD4	Four-jaw, for 0 - 1/4" taps
TD6	Two-jaw, for 1/16" - 1/4" taps
TD7	Two-jaw, for 1/4" - 1/2" taps
TD50	Four-jaw, for 1/4" - 1/2" (M7-1.00 to M12-1.75) taps
TD88A	Clamp type, for 0 - 1/2" (M3-0.50 to M12-1.75) taps
TD98A	Clamp type, for 0 - 1" (M7-10 to M24-3.0) taps
<i>Thread Pitch Gauges</i>	
TD1040	U.S.
TDM100	Metric
<i>Screwdriver</i>	
TDS1	For adjusting dies



WARNING

- Do not use chrome or industrial finish hand tools with impact drivers.
- Read additional safety precautions on pages 534 to 537.



Threading Special Purpose



TDL8



TDL3



TB300C

Tap Sockets (1/4" - 3/8" Drive)

Stock No.	Square Drive, inches	Fits SAE Size Taps	Fits Metric Size Taps	Shank Dia., inches	Square Size, inches
TDL8-1	1/4	#1, #2, #3, #4, #5, #6	M1.6, M1.8, M2, M2.2, M2.5, M3, M3.15, M3.5	.141	.110
TDL8-2	1/4	#8	M4	.168	.131
TDL8-3	1/4	#10	M4.5, M5	.194	.152
TDL8-4	1/4	1/4"	M6, M6.3	.255	.191
TDL8-5	3/8	5/16", 7/16"	M7, M8	.323	.242
TDL8-6	3/8	3/8"	M10	.381	.286
TDL8-7	3/8	1/2"	M12, M12.5	.367	.275
TDL8-8	3/8	1/8" NPT	—	.437	.328

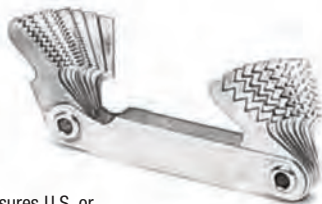
TDL8 Tap Socket Set. For use with ratchets and handles. Rubber O-rings hold taps securely in place. Black industrial finish. Includes eight sockets on TDL8-9 Socket Rail and Clips.

Tap Sockets (1/2" Drive)

Use in restricted areas where a T-handle won't easily fit. Manufactured to M. C. T. I. Standards. Black industrial finish.

Stock No.	Square Drive, inches	Fits SAE Size Taps	Fits Metric Size Taps	Shank Dia., inches	Square Size, inches
TDL31	1/2	5/8"	16mm	.480	.360
TDL32	1/2	11/16"	18mm	.542	.406
TDL33	1/2	3/4"	—	.590	.442

TDL3 Tap Socket Set. Includes TDL31 thru TDL33 (3 pcs).



TD1040

Thread Pitch Gauge

TD1040 Thread Pitch Gauge. Measures U.S. or sharp "V" threads. Includes 18 plated blades for the following thread sizes: 8, 9, 10, 11, 11 1/2, 12, 13, 14, 16, 18, 20, 24, 27, 28, 32, 36, 40, and 44 threads per inch.

Plug Taps and Dies

Stock No.	Thread Size	Thread Pitch	Die Type
<i>Tap</i>			
T111	4-36	Right Hand	—
T6310M	M6.33-1	Right Hand	—
T1010M	M10-1	Right Hand	—
T1112M	M11-1.25	Right Hand	—
T1212M	M12-1.25	Right Hand	—
T1412M	M14-1.25	Right Hand	1 1/16" Hex
T1415M	M14-1.5	Right Hand	1 1/16" Hex
T1420M	M14-2	Right Hand	1 1/16" Hex

<i>Die</i>			
D021	4-36	Right Hand	5/8" Dbl. Hex
D040	1/4"-18	Right Hand	1" Dbl. Hex
D147M	M4-7	Right Hand	1" Dbl. Hex
D158M	M5-8	Right Hand	1" Dbl. Hex
D161M	M6-1	Right Hand	1" Dbl. Hex
D1010M	M10-1	Right Hand	1" Dbl. Hex
D1112M	M11-1.25	Right Hand	1" Dbl. Hex
D1212M	M12-1.25	Right Hand	1" Dbl. Hex
D1615M	M16-1.5	Right Hand	1 1/4" Hex
D1615ML	M16-1.5	Left Hand	1 1/4" Hex

Bottoming Taps

TB300C Set. Allows blind holes to be tapped within one thread of bottom of hole.

TB5/16C Tap. 5/16"-18 NC thread size.

TB3/8C Tap. 3/8"-16 NC thread size.

TB7/16C Tap. 7/16"-14 NC thread size.

TB300F Set. Allows blind holes to be tapped within one thread of bottom of hole.

TB5/16F Tap. 5/16"-24 NF thread size.

TB3/8F Tap. 3/8"-24 NF thread size.

TB7/16F Tap. 7/16"-20 NF thread size.



YA577



TDW1000

Ratcheting Tap Wrenches

YA577 T-handle Tap Wrench. For taps up to 1/4". Ratchet in clockwise or counterclockwise direction. 3 3/8" long body, 3 15/16" handle.

YA578 T-handle Tap Wrench. For 1/4" to 1/2" taps. Ratchet in clockwise or counterclockwise direction. 4 3/8" long body, 4 3/4" handle.

TDW1000 Ratcheting Tap and Die Wrench. Cut and renew threads in confined areas. Bi-directional ratcheting action. Holds dies with 1" (25mm) diameter. Includes adaptors for hex and double hex. Also includes adaptors for most popular tap sizes: .250" (6.35mm), .290" (7.36mm), .335" (8.5mm) and .535" (13.58mm).

Stock No.	Thread Size	Thread Pitch	Die Type
<i>Die</i>			
D1620M	M16-2	Right Hand	1 1/4" Hex
D1810M	M18-1	Right Hand	1 7/16" Hex
D1815M	M18-1.5	Right Hand	1 7/16" Hex
D1815ML	M18-1.5	Left Hand	1 7/16" Hex
D1825M	M18-2.5	Right Hand	1 7/16" Hex
DR2015M	M20-1.5	Right Hand	2" Round
D2025M	M20-2.5	Right Hand	1 7/16" Hex
D2215M	M22-1.5	Right Hand	1 5/8" Hex
D2215ML	M22-1.5	Left Hand	1 5/8" Hex
D2415M	M24-1.5	Right Hand	1 13/16" Hex
D3015M	M30-1.5	Right Hand	2" Hex

Extractor Sets Extractors

Combination Extractor Sets



E1025

E1025 Extractor Set.

Extract broken screws from 1/4" to 1" diameter and standard pipe sizes 1/8" to 1". Packaged in a storage case. Includes the following components:

CSE405B	DBF1/2C	E1421	E3	E82
DBF1/8C	E34	E1521	E4	E83
DBF1/4A	E33A	E1621	E5	E84
DBF3/16C	E921	E1721	E6	E85
DBL1/4C	E1021	E1821	E7	
DBF5/16C	E1121	E3033	E8	
DBF11/32C	E1221	E1	E80	
DBF7/16C	E1321	E2	E81	

RELATED ITEMS

Rethreading Tools, pgs 337-339



E1020

E1020 Extractor Set.

Extracts broken screws from 1/4" to 1/2" diameter.

Comes in a storage case. 20 pcs include:

DBF1/8C	DBF5/16C	E1021	E1321	E1621	E1	E4
DBF3/16C	DBF11/32C	E1121	E1421	E1721	E2	E5
DBF1/4C	E921	E1221	E1521	E1821	E3	



EXD10

EXD10 Right Hand Extractor Set.

Right Hand. Includes five right-hand, mechanic's length cobalt drill bits and five spiral flute screw extractors in metal index.

11 pcs include:

DBCFS5/64	DBCFS19/64	EX4
DBCFS7/64	EX1	EX5
DBCFS5/32	EX2	
DBCFS1/4	EX3	



EXDL10

EXDL10 Left Hand Extractor Set.

Left Hand. Includes five left-hand, mechanic's length cobalt drill bits and five spiral flute screw extractors in metal index. 10 pcs include:

DBCL5/64A	DBCL19/64A	EX4
DBCL7/64A	EX1	EX5
DBCL5/32A	EX2	
DBCL1/4A	EX3	



EXD35

EXD35 Screw Extractor Set.

Quickly and easily extracts the toughest screws from 3/32" to 15/16" screw sizes (including metric sizes). Includes 16 left-hand mechanic's length cobalt drill bits, 13 multi-spline screw extractors and six spiral flute screw extractors in EXD35-1 storage case. 35 pcs include:

DBCL5/64A	DBCL19/64A	EX1	REX106A	REX114A
DBCL7/64A	DBCL5/16	EX2	REX107A	REX115A
DBCL1/8	DBCL11/32	EX3	REX108A	REX116A
DBCL5/32A	DBCL3/8	EX4	REX109A	
DBCL3/16	DBCL13/32	EX5	REX110A	
DBCL7/32	DBCL7/16	EX6	REX111A	
DBCL1/4A	DBCL15/32	REX104A	REX112A	
DBCL9/32	DBCL1/2	REX105A	REX113A	

Extractor Set Components. See pages 344-345 for component descriptions.

Stock No.	Stock No.	Stock No.	Stock No.	Stock No.	Stock No.
<i>Right Hand Drill Bits</i>	<i>Left Hand Drill Bits</i>	<i>Sleeve-Type Drill Guides</i>	<i>Straight Screw Extractors</i>	<i>Spiral Flute Screw Extractors</i>	<i>Stock No.</i>
CSE405B	DBCL5/64A	E34	E1		<i>Multi-Spline Screw Extractors (cont.)</i>
DBCFS5/64	DBCL7/64A	E33A	E2	EX1	REX110A
DBCFS7/64	DBCL1/8	<i>Solid Type Drill Guides</i>	E3	EX2	REX111A
DBCFS5/32	DBCL5/32A	E921	E4	EX3	REX112A
DBCFS1/4	DBCL3/16	E1021	E5	EX4	REX113A
DBCFS19/64	DBCL7/32	E1121	E6	EX5	REX114A
DBF1/8C	DBCL1/4A	E1221	E7	EX6	REX115A
DBL1/4C	DBCL9/32	E1321	E8	<i>Multi-Spline Screw Extractors</i>	REX116A
DBF3/16C	DBCL19/64A	E1421	E80	REX104A	
DBF1/4A	DBCL5/16	E1521	E81	REX105A	
DBF5/16C	DBCL11/32	E1621	E82	REX106A	
DBF11/32C	DBCL3/8	E1721	E83	REX107A	
DBF7/16C	DBCL13/32	E1821	E84	REX108A	
DBF1/2C	DBCL7/16		E85	REX109A	
	DBCL15/32				
	DBCL1/2				



WARNING

- Do not use chrome or industrial finish hand tools with impact drivers.
- Read additional safety precautions on pages 534 to 537.



Extractors

Extractor Tools



REX25B



REX10B



REX15B

Multi-Spline Extractor Sets

Shoulder prevents extractor from entering too deeply and expanding screw.

REX25B Multi-Spline Extractor Set. REX104A thru REX128A (25 pcs.) in REX25BMT Storage Case.

REX10B Multi-Spline Extractor Set. REX104A thru REX113A (10 pcs.) in REX10BMT Storage Case.

REX15B Multi-Spline Extractor Set. REX104A thru REX118A (15 pcs.) in REX15BMT Storage Case.



REX114A

Multi-Spline Extractors

Stock No.	Drill Size, inches	Bolt Size, inches	Pipe Size, inches	Hex Size, inches	Mark
REX104A	1/8	1/4	—	1/2	A
REX105A	5/32	5/16	—	1/2	B
REX106A	3/16	3/8	—	1/2	C
REX107A	7/32	7/16	—	1/2	D
REX108A	1/4	1/2	1/8	1/2	E
REX109A	9/32	9/16	—	1/2	F
REX110A	5/16	5/8	—	1/2	G
REX111A	11/32	11/16	1/4	1/2	H
REX112A	3/8	3/4	—	1/2	I
REX113A	13/32	13/16	—	1/2	J
REX114A	7/16	7/8	—	5/8	K
REX115A	15/32	15/16	3/8	5/8	L
REX116A	1/2	1	—	5/8	M
REX117A	17/32	1 1/16	—	5/8	N
REX118A	9/16	1 1/8	—	3/4	O
REX119A	19/32	1 3/16	—	3/4	P
REX120A	5/8	1 1/4	1/2	3/4	Q
REX121A	21/32	1 5/16	—	7/8	R
REX122A	11/16	1 3/8	—	7/8	S
REX123A	23/32	1 7/16	—	7/8	T
REX124A	3/4	1 1/2	—	7/8	U
REX125A	25/32	1 9/16	3/4	1	V
REX126A	13/16	1 5/8	—	1	W
REX127A	27/32	1 11/16	—	1	X
REX128A	7/8	1 3/4	—	1	Y



BEX13A

Hex Head Fastener Extractors

Use on most popular hex head fasteners from 1/4" to 1" (8 to 24mm). Sockets feature left hand spiral flutes for maximum gripping power. Manufactured from high carbon steel for maximum strength. External hex and square drive wrenching options for use with wrenches, impact wrenches and ratchet/socket combinations.

Stock No.	Square Drive, inches	Size, inches (mm)	External Hex, inches (mm)	Outside Dia., inches (mm)	Length, inches (mm)
BEX081	3/8	1/4 (6)	5/8 (15.9)	3/8 (9.5)	1 1/16 (27.0)
BEX101	3/8	5/16 (8)	5/8 (15.9)	7/16 (11.1)	1 1/16 (27.0)
BEX121	3/8	3/8 (10)	5/8 (15.9)	9/16 (14.3)	1 1/16 (27.0)
BEXM101	3/8	n/a (10)	3/4 (19.1)	5/8 (15.5)	1 1/16 (27.0)
BEX141	3/8	7/16 (11)	3/4 (19.1)	5/8 (15.9)	1 1/16 (27.0)
BEXM121	3/8	n/a (12)	3/4 (19.1)	23/32 (17.5)	1 1/16 (27.0)
BEX161	3/8	1/2 (12)	3/4 (19.1)	23/32 (17.9)	1 1/16 (27.0)
BEXM131	3/8	n/a (13)	3/4 (19.1)	23/32 (18.5)	1 1/16 (27.0)
BEX181	3/8	9/16 (14)	7/8 (22.2)	25/32 (19.4)	1 1/16 (27.0)
BEX201	3/8	5/8 (16)	7/8 (22.2)	7/8 (15.9)	1 1/16 (27.0)
BEXM171	3/8	n/a (17)	1 (25.4)	29/32 (23.0)	1 1/16 (27.0)
BEX221	3/8	11/16 (n/a)	1 (25.4)	15/16 (24.2)	1 1/16 (27.0)
BEX241	3/8	3/4 (19)	1 1/16 (27)	1 1/32 (26.2)	1 1/16 (27.0)
BEXW241	1/2	3/4 (19)	1 1/4 (31.8)	1 1/8 (28.6)	1 3/4 (44.5)
BEXW261	1/2	13/16 (21)	1 3/8 (34.9)	1 3/16 (30.2)	1 3/4 (44.5)
BEXW281	1/2	7/8 (22)	1 7/16 (36.5)	1 1/4 (31.8)	1 3/4 (44.5)
BEXW301	1/2	15/16 (24)	1 7/16 (36.5)	1 5/16 (33.3)	1 3/4 (44.5)
BEXW321	1/2	1 (n/a)	1 7/16 (36.5)	1 3/8 (34.9)	1 3/4 (44.5)

BEX13A Hex Head Fastener Extractor Set. Includes all 3/8" square drive BEX/BEXM sockets (13 pcs) (1/4" to 3/4", 8 to 19mm) in BEX13AMT Storage Case.

BEX5 Hex Head Fastener Extractor Set. Includes all 1/2" square drive BEXW sockets (5 pcs) (3/4" to 1", 19 to 24mm) in BEX5CASE Storage Case.

Power Fastener Extractors

Extracts hex head, socket head, round head and other fasteners. 1/4" universal hex shank is ideal for use with cordless, air or electric drills, impact wrenches, nut runners and hand tools. Power groove for use with quick change adaptors.

Maximum Gripping Power - Reverse spiral flutes hold on to the most elusive fastener heads.

Tougher than Tool Steel - High carbon steel ensures longer life and greater durability. Shear Resistant Shank - High carbon steel shank is larger than most fastener shanks and resists torsional shear.

Stock No.	Size, inches (mm)
BET76	3/16
BET78	1/4 (6)
BET710	5/16 (8)
BET712	3/8 (10)
BEMT710	(10)
BET714	7/16 (11)
BET716	1/2 (12)

BET7 Power Fastener Extractor Set. BET76 thru BET716 (7 pcs) (3/16" to 1/2") in storage case.



BET7



110STSY

External Drive Hex Head Slim Twist Sockets

110STSY External Drive Twist Socket Set. Quickly and easily remove damaged or rounded nuts and bolts, socket head cap screws in close quarters, and nuts threaded on long studs. Ideal for use for aircraft and exhaust systems applications.

Includes 10 external hex drive slim twist sockets for the following hex head fasteners: SAE: 3/8", 7/16", 5/8" and 3/4"

Metric: 9, 10, 11, 12, 13, 14, 15, 16, 17, and 19mm.

Sockets are stored on MSR1 Magnetic Socket Holder.

Right-Hand Fractional Drill Bits

Use right hand drill bits to make a hole in the broken screw before the extractor is inserted. Left-hand drill bits tend to loosen screws for easier removal.

Stock No.	Size, inches	Flute Length, inches	Overall Length, inches
CSE405B	5/8	3	6
DBF1/2C	1/2	2 1/4	4 3/4
DBF1/4C	1/4	2 1/2	4
DBF1/8C	1/8	1 3/8	3
DBF11/32C	11/32	2 3/4	4 1/2
DBF3/16C	3/16	2	3 1/2
DBF5/16C	5/16	2 5/8	4 1/2
DBF7/16C	7/16	1 7/8	4 1/4

Left-Hand Fractional Drill Bits (Cobalt)

Use right hand drill bits to make a hole in the broken screw before the extractor is inserted. Left-hand drill bits tend to loosen screws for easier removal.

Stock No.	Size, inches
DBCL5/64A	5/64
DBCL7/64A	7/64
DBCL5/32A	5/32
DBCL3/16	3/16
DBCL1/4A	1/4
DBCL9/32	9/32
DBCL19/64A	19/64
DBCL5/16	5/16
DBCL11/32	11/32
DBCL3/8	3/8
DBCL13/32	13/32
DBCL7/16	7/16
DBCL15/32	15/32
DBCL1/2	1/2



DBCL105A

DBCL105A Left Hand Drill Bit Set. DBCL5/64, DBCL7/64, DBCL5/32, DBCL1/4 and DBCL19/64 Drill Bits (5 pcs.) in a plastic pouch.

Tapered Bit Extractors

SR40K Tapered Bit Extractor Set.

Tapered ends have left-hand threads to bite deep into drilled studs. Square shafts for use with wrench. Set includes (4 pcs.) in C0407 Kit Bag.

SR4A	1/8"
SR10A	9/64"
SR14	7/32"
SR20	5/16"
C0407	Kit Bag



SR40K

Sleeve Bushing (in pairs)

Stock No.	Diameter, inches
E2133	21/32
E2933	29/32
E3033	15/16
E3133	31/32



E2133



E1



E6

Straight Screw Extractors

Stock No.	For Screw Dia. or Std. Pipe, inches	Drill Size, inches	Length, inches
Straight Screw, Hex Nut Type			
E1	1/4	1/8	2 5/16
E2	5/16	3/16	2 3/4
E3	3/8	1/4	3 1/16
E4	7/16	5/16	3 5/16
E5	1/2	11/32	3 3/4
E6	1/2	7/16	4 1/8
E7	3/4	1/2	4 1/2
E8	1	1/2	4 5/8



E80

Pipe Plug Extractors

Stock No.	For Screw Dia. or Std. Pipe, inches	Drill Size, inches	Length, inches
E80	1/8	16/64	2 1/4
E81	1/4	3/8	2 1/2
E82	3/8	1/2	2 3/4
E83	5/8	5/8	3
E84	3/4	13/16	3 1/4
E85	1	1 1/16	3 1/2

Extractor Tools Extractors

DBLS105A



Left-Hand Fractional Drill Bits (High Speed Steel)

Use right hand drill bits to make a hole in the broken screw before the extractor is inserted. Left-hand drill bits tend to loosen screws for easier removal.

Stock No.	Size, inches	Flute Length, inches	Overall Length, inches
Left-Hand			
DBLS1/8A	1/8	1 3/8	3
DBLS3/16A	3/16	2	3 1/2
DBLS1/4A	1/4	2 1/2	4
DBLS5/16A	5/16	2 5/8	4 1/2
DBLS11/32A	11/32	2 3/4	4 1/2

DBLS105A Left Hand Drill Bit Set.

DBLS1/8 thru DBLS11/32 (5 pcs.) in a plastic pouch.

Spiral Flute Screw Extractors

Designed to remove broken studs, bolts, socket screws and fittings. Aggressive left-hand spiral design for extra gripping power.



EX1

Stock No.	Use Drill Size	Removes Bolts and Screws
EX1	5/64"	3/32" to 5/32", 2.5 to 4mm, #3 to #6
EX2	7/64"	3/32" to 7/32", 4 to 6mm, #6 to #12
EX3	5/32"	7/32" to 9/32", 6 to 8mm, #12
EX4	1/4"	9/32" to 3/8", 1/8" NPT, 1/8" BSP, 8 to 10mm
EX5	19/64"	3/8" to 5/8", 1/4" NPT, 1/4" BSP, 10 to 16mm
EX6	13/32"	5/8" to 7/8", 3/8" NPT, 3/8" BSP, 16 to 22mm

Sleeve-Type Drill Guides

Use to center 1/4" diameter, 6" long drill bits (see DBL1/4A above). Parts are interchangeable to adapt to different screw or stud holes and depths up to 3 3/4".

- E34 Sleeve-Type 5/8" O.D.
- E33A Sleeve-Type 3/4" diameter
- E33B Sleeve Spacer (set of 4) 5/8" diameter

Solid-Type Drill Guides

Used for centering drills at a depth not exceeding 1".

Stock No.	Outside Dia., inches	For Drill Size, inches	Length, inches
E921	9/32	1/8	1 3/16
E1021	5/16	1/8	1 3/16
E1121	11/32	1/8	1 3/16
E1221	3/8	1/8	1 3/16
E1321	13/32	3/16	1 3/16
E1421	5/16	3/16	1 3/16
E1521	15/32	3/16	1 3/16
E1621	1/2	3/16	1 3/16
E1721	17/32	1/4	1 3/16
E1821	9/16	1/4	1 3/16



E921

Cam and Wedge Type Stud Removers



A50A

LA55A

A36A

A80A

A50A Stud Remover. 7/16" to 1" capacity. V-shaped rack grips stud. Grip releases when pressure is relieved. Uses 1/2" drive handle.

A50-4B Optional Rack. For 5/16" to 3/8" capacity.

A36A Stud Remover. 1/2" to 3/4" capacity. Knurled wheel grips stud. Driving shank extends through both sides of housing for bearing surface on each side of wheel. Uses 1/2" drive handle.

A80A Stud Remover. (1/4" to 1/2" capacity). Jaws grip when pressure is applied. Built-in ratchet action. Needs only 1 1/4" clearance. Use with 1/2" drive handle or 1" wrench.

LA55A Stud Remover. 9/16" to 1" capacity. Grip is released by turning tool in reverse direction. Works on wedge principle. Use with 3/4" drive handle. Includes 2 wedge sizes: LA55A2 and LA55A3.

LA54 Stud Remover. 1/4" to 5/8" capacity. Smaller version of LA55A. Includes 2 wedge sizes: LA54-2A and LA54-3A. Requires 1/2" drive handle.



WARNING

- Do not use chrome or industrial finish hand tools with impact drivers.
- Read additional safety precautions on pages 534 to 537.



Extractors Extractor Tools



YA769



All-In-One Extractor Set YA769 Extractor Set.

Extract broken screws from 1/4" to 1/2" diameter. Drill/extract with one tool. Left hand drill bit. For use in 3/8" drive reversible drill.

Stock No.	Extractor Size inches (mm)	Drilling Speed, rpm	Extracting Speed, rpm
YA769-1	1/4 (6)	700-800	350
YA769-2	5/16 (8)	650-750	470
YA769-3	3/8 (10)	600-700	350
YA769-4	1/2 (12)	475-575	350



YA789

YA789 Power Extractor Set.

Place extractor end of tool in drill chuck, set for reverse, and hole can be drilled. Next, insert drill side into chuck, exposing extractor end, and finish the job to remove broken screw. Packaged in YA789-5 storage case.

Stock No.	Bolt Grade	Bolt Size	Extractor Size	
			Fractional	Metric
YA789-1	#5, #6			M3
YA789-2	#8			M4
YA789-3		#10, #12		M5
YA789-4			1/4"	M6



YA2020



YA2020 Screw Extractor Set.

Easily extracts #6 to #14 damaged screws from wood, metal or plastic. Remove hex, Torx®, Phillips®, slotted or square head screws. Use with 1/4" quick disconnect or 1/4" hex hand or power tool. Works with a variety of screw materials from high speed tool steel to soft brass.



YA2019

YA2019 Screw Remover Set. Use to remove damaged Phillips®, Torx®, Pozidriv®, Slotted Internal Hex, Tri-Wing, Frearson and most Tamper resistant screws and fasteners. Tool bites into the damaged fastener in the reverse direction allowing the user to easily remove damaged screws. Use with variable speed reversing drill or 1/4" hex bit screw-driver. Set includes YA2019-1 thru YA2019-3 in storage case.

Stock No.	Extractor Size	
	Bolt Size	
YA2019-1	#6 - #8	
YA2019-2	#8 - #10	
YA2019-3	#10 - #12	

RELATED ITEMS

Drill Bits, pgs 285-288
Taps & Dies, pgs 337-342

Pipe Nipple Removers



CG500P



CG505P



CG508P

Pipe Nipple Remover Sets

NOTE: Avoid bottoming or shouldering studs to avoid shearing or damaging stud or workpiece.

CG500P Pipe Nipple Remover Set.

4 pcs include: CG500P1, CG500P2, CG500P3, and CG500-2.

CG505P Pipe Nipple Remover Set.

3 pcs include: CG505P1, CG505P2, CG505-1.

CG508P Pipe Nipple Remover Set.

3 pcs include: CG508P1, CG508P2, CG508.

Pipe Nipple Remover Set Components

Stock No.	Collet Size	Housing Stock No.
CG500P1	1/8" NPT	CG500-2
CG500P2	1/4" NPT	CG500-2
CG500P3	3/8" NPT	CG500-2
CG505P1	1/2" NPT	CG500-2
CG505P2	3/4" NPT	CG500-2
CG508P1	1" NPT	CG508-2
CG508P2	1 1/4" NPT	CG508-2

Stud Removers / Dowel Pin Pullers Extractors

Stud Removers

CG515B Stud Remover Set. 15 pcs include:

CG500-2 CG500-8 CG500-13
CG500-3 CG500-9 CG500-14
CG500-5 CG500-10 CG500-15
CG500-6 CG500-11 CG500-16
CG500-7 CG500-12 KRA150

CG500 Stud Remover Set. 4 pcs include:

CG500-8 CG500-12 CG500-2
CG500-10

CG5151 Master Stud and Dowel Puller Set.

60 pcs include:

CG250-8A CG500-40 CG500-18
CG250-9 CG500-42 CG500-20 thru -24
CG500-2 thru -16 CG500-43 CG500P1 thru P3
CG500H1 thru H3 CG500-48 CG503-1 thru -8
CG500-30 CG500-49 CG10F
CG500-33 CG500-54 CG325-6
CG500-36 CG500-55 CG503S1
CG500-37 CG500-60 CG503-9 thru -14
CG500-39 CG500-17

CG505 Stud Remover Set. 4 pcs include:

CG505-2 CG505-4 CG505-1
CG505-3

CGM515B Stud Remover Set. 15 pcs include:

CG500-30 CG500-40 CG500-54
CG500-33 CG500-42 CG500-55
CG500-36 CG500-43 CG500-60
CG500-37 CG500-48 CG500-61
CG500-39 CG500-49 CG500-2

CG5152 SAE Stud and Dowel Puller Set.

29 pcs include:

CG250-8A CG503-1 thru -8 CG325-6
CG250-9 CG10F CG5151-1
CG500-2 thru -16

CG5151-1 Storage Case.

Storage Case for CG5151, CG5152 and CG5153 Sets.



CG5153 Metric Stud and Dowel Puller Set.

29 pcs include:

CG250-8A CG500-42 CG325-6
CG250-9 CG500-43 CG503-9
CG500-2 CG500-48 CG503-10
CG500-30 CG500-49 CG503-11
CG500-33 CG500-54 CG503-12
CG500-36 CG500-55 CG503-13
CG500-37 CG500-60 CG503-14
CG500-39 CG503-1 CG5151-1
CG500-40 CG10F

Stud Remover Set Components

Tapered collets thread onto stud, even if only a few threads are exposed. Tightening the housing bolt draws the collet into the housing and clamps collet onto stud. Tools don't damage stud threads.

NOTE: Avoid bottoming or shouldering studs to avoid shearing or damaging stud or workpiece.



CG500-17



CG500-2

Stock No.	Collet Size	Stock No.	Collet Size	Stock No.	Collet Size	Stock No.	Collet Size	Stock No.	Collet Size	Stock No.	Collet Size
CG500-17	#10-24	CG500-12	1/2"-20	CG505-5	3/4"-16	CG508-1	1 1/8"-7	CG508-12	1 1/2"-8	CG500-48	M12-1.25
CG500-18	#10-32	CG500-13	9/16"-12	CG505-3	7/8"-9	CG508-9	1 1/8"-8	CG508-8	1 1/2"-12	CG500-49	M12-1.50
CG500-3	1/4"-20	CG500-14	9/16"-18	CG505-6	7/8"-14	CG508-2	1 1/8"-12	CG500-30	M6-1.00	CG500-54	M14-1.50
CG500-4	1/4"-28	CG500-15	5/8"-11	CG505-4	1"-8	CG508-3	1 1/4"-7	CG500-33	M7-1.00	CG500-55	M14-2.00
CG500-5	5/16"-18	CG500-16	5/8"-18	CG505-7	1"-14	CG508-10	1 1/4"-8	CG500-36	M8-1.00	CG500-60	M16-1.50
CG500-6	5/16"-24	CG500H1	3/8" Hex	CG505H1	5/8" Hex	CG508-4	1 1/4"-12	CG500-37	M8-1.25	CG500-61	M16-2.00
CG500-7	3/8"-16	CG500H2	7/16" Hex	CG505H2	11/16" Hex	CG508-5	1 3/8"-6	CG500-39	M9-1.00	CG500-2	Housing
CG500-8	3/8"-24	CG500H3	1/2" Hex	CG505H3	3/4" Hex	CG508-11	1 3/8"-8	CG500-40	M9-1.25	CG505-1	Housing
CG500-9	7/16"-14	CG500H4	9/16" Hex	CG505H4	13/16" Hex	CG508-6	1 3/8"-12	CG500-42	M10-1.25	CG508	Housing
CG500-10	7/16"-20	CG505-8	11/16"-16	CG505H5	7/8" Hex	CG508-7	1 1/2"-6	CG500-43	M10-1.50	KRA150	Metal Box
CG500-11	1/2"-13	CG505-2	3/4"-10								

Dowel Pin Puller Sets

CG503 Stud Remover Set.

11 pcs include:

CG10F CG503-4
CG250-8A CG503-5
CG250-9 CG503-6
CG503-1 CG503-7
CG503-2 CG503-8
CG503-3

CG503S Stud Remover Set.

5 pcs include:

CG503-1
CG250-8A
CG250-9
CG325-6
CG10F

CG513 Stud Remover Set.

6 pcs include:

CG513-2
CG4567-0
CG250-9
CG513-4
CG513-5
CG513-6

CGM503 Stud Remover Set.

11 pcs include:

CG10F CG503-9
CG503-1 CG503-10
CG250-8A CG503-11
CG250-9 CG503-12
CG325-6 CG503-13
CG503-14

CG503



Dowel Pin Puller Set Components

Stock No.	Collet Size
CG503-2	1/4"
CG503-3	5/16"
CG503-4	3/8"
CG503S1	3/8" Square
CG503-5	7/16"
CG503-6	1/2"
CG503-7	9/16"
CG503-8	5/8"
CG513-4	3/4"
CG513-5	7/8"
CG513S1	1/2" Square
CG513S2	5/8" Square
CG513-6	1"
CG503-9	6mm
CG503-10	8mm
CG503-11	10mm
CG503-12	12mm
CG503-13	14mm
CG503-14	16mm
CG503-1	Housing
CG513-1	Housing
CG513-2	Slide Screw
CG10F	Cross Bar
CG250-8A	Slide Screw, 5/8"-18 x 18 9/16"
CG45670	Slide Hammer, 10 lb
CG250-9	Slide Hammer, 2 lb
CG325-6	Nut
CG513-3	Nut



CG500-23

Heavy Duty Housing with Collet

NOTE: Collets are threaded to order; specify stud thread size when ordering. Example: CG510 1 3/4"-10 Collet.

Note: Avoid bottoming or shouldering studs to avoid shearing or damaging stud or workpiece.

CG510 For larger stud sizes 1 5/8" thru 2".

CG511 For larger stud sizes 2" thru 2 1/2".

CG512 For larger stud sizes 2 1/2" thru 3".

Serrated Collets

Serrated gripping portions are used to remove unthreaded studs that cannot be removed with standard collets due to lack of gripping surface.

NOTE: Avoid bottoming or shouldering studs to avoid shearing or damaging stud or workpiece.

Stock No.	Description
CG500-20	1/4" Collet
CG500-21	5/16" Collet
CG500-22	3/8" Collet
CG500-23	7/16" Collet
CG500-24	1/2" Collet
CG500-2	Housing



WARNING

• Read additional safety precautions on pages 534 to 537.

