

MISCELLANEOUS TOOLS.

No tool box is complete without an assortment of miscellaneous tools. Blackhawk™ by Proto® offer specialty automotive feeler gauges, engine, brake and wheel tools. Other tools such as a tubing bender, steel and wire scratch brushes, wire power tool brushes, scrapers, hacksaws and replacement blades complete the tool box.



Blackhawk[™]
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Miscellaneous Tools



NON-MAGNETIC FEELER GAUGE

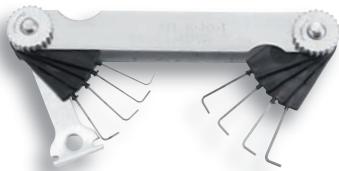
Item No.	Contents	SAE (Metric) Sizes
MT-1020-1	6 blades	.006" (.15 mm) .008" (.20 mm) .010" (.25 mm) .012" (.30 mm) .014" (.356 mm) .016" (.406 mm)



6 WIRE HIGH-ENERGY FEELER GAUGE

- For large gap, high energy ignition systems.
- Contains 6 wire gauges and a gap setting tool.
- Wire ends angled for use with electrodes set below the shell.

Item No.	Contents	SAE (Metric) Sizes
MT-1021A	6 wire gauges	.044" (1.12 mm) .045" (1.15 mm) .050" (1.25 mm) .054" (1.37 mm) .060" (1.52 mm) .080" (2.03 mm)



REGULAR SPARK PLUG WIRE GAUGE

Item No.	Contents	Sizes
MT-1040-1	1 Electrode bender 8 Wire gauges	.020", .025", .028", .030" .032", .034", .035", .040"



FEELER GAUGE

- Services domestic and foreign cars.

Item No.	Contents	Sizes
MT-1041	16, 1.75" x 0.25" blades	.011", .012", .013", .014" .015", .016", .017", .018" .019", .020", .022", .024" .025", .028", .030", .035"



Miscellaneous Tools

15 BLADE GO-NO-GO GAUGE

Item No.	Contents	Sizes
MT-1043	15, 3.31" x 0.5" blades	.006" (.152 mm) to .020" (.508 mm) (See chart for full details.)



22 BLADE GO-NO-GO IGNITION FEELER GAUGES

- High grade precision milled blades insure accurate readings.
- Metric and fractional sizes.

Item No.	Contents	Sizes
MT-1022	22, 3.31" x 0.5" blades	.004" (.101 mm) to .025" (.635 mm) (See chart for full details.)



ALL PURPOSE FEELER GAUGE

Item No.	Contents	Sizes
MT-1049	25, 3.31" x 0.5" blades	.0015", .002", .003", .004", .005" .006", .007", .008", .009", .010" .011", .012", .013", .014", .015" .016", .018", .020", .022", .024" .025", .028", .030", .032", .035"



BRAKE SPRING PLIER

- Comes with an adapter for lifting anchor pins.

Item No.	Length	Weight
PT-1262	14"	1.07 lbs.



Size Reference Chart			
SAE	Metric	SAE	Metric
.002"-.003"	.050 mm-.076 mm	.014"-.016"	.356 mm-.406 mm
.003"-.004"	.076 mm-.101 mm	.015"-.017"	.381 mm-.432 mm
.004"-.006"	.101 mm-.152 mm	.016"-.018"	.406 mm-.457 mm
.005"-.007"	.127 mm-.178 mm	.017"-.019"	.432 mm-.483 mm
.006"-.008"	.152 mm-.203 mm	.018"-.020"	.457 mm-.508 mm
.007"-.009"	.177 mm-.229 mm	.019"-.021"	.483 mm-.533 mm
.008"-.010"	.203 mm-.254 mm	.020"-.022"	.508 mm-.559 mm
.009"-.011"	.229 mm-.279 mm	.021"-.023"	.533 mm-.584 mm
.010"-.012"	.254 mm-.305 mm	.022"-.024"	.559 mm-.610 mm
.011"-.013"	.279 mm-.330 mm	.023"-.025"	.584 mm-.635 mm
.012"-.014"	.305 mm-.356 mm	.024"-.026"	.610 mm-.660 mm
.013"-.015"	.330 mm-.381 mm	.025"-.027"	.635 mm-.686 mm

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BALL JOINT SEPARATOR

- Made of alloy steel, this tool is built for rugged use.
- Comfort grip handle.
- Simply place prongs between ball joint and steering knuckle to easily separate the ball joint.

Item No.	Opening	Length	Weight
XT-1060	0.94"	11.88"	1.62 lbs.



SHOCK ABSORBER LINK SEPARATOR

- Helps to eliminate the tough job in separating shock absorber links and the tie rod joints.
- Insert the tapered wedge between the parts, hit the end of the tool with a hammer and the part is removed.

Item No.	Opening	Length	Weight
ZT-1550	0.75"	12"	1.52 lbs.



HOLDER RETRIEVER — FULLY FLEXIBLE

- For starting a nut or screw in an inaccessible spot or retrieving parts that fall into hard-to-reach places.

Item No.	Length	Weight
ZT-1180	13.5"	0.21 lbs.



TELESCOPING MAGNET TOOL

- Magnetic end for retrieving tools, parts or fasteners from hard-to-reach places.
- The end contains a powerful permanent magnet and is arranged on a pivot that can be rotated 120° right or left.
- The aluminum shaft with vinyl insulated handle provides a firm, secure grip.
- Extends from a telescoped 16-1/2" length to 27" fully extended.

Item No.	Length	Weight
ZT-1193	16.5"-27"	0.36 lbs.



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FLEXIBLE MAGNET TOOL

- Magnetic end for retrieving, flexible shaft for hard-to-reach places.
- Completely nickel plated.
- Flexible shaft.

Item No.	Length	Weight
ZT-1197	18"	0.18 lbs.



TELESCOPING INSPECTION MIRROR

- For fast visual inspection of all hidden areas.
- The double ball joint permits easy viewing at 360°.
- Mirror telescopes to 14".
- Specially designed non-rotating hex rod helps prevent mirror from swinging out of alignment.
- Mirror has a vinyl insulated handle.

Item No.	Length	Weight
ST-1250	14"	0.24 lbs.



5 PIECE SCREW EXTRACTOR SET

- Hand forged to ensure correct angle and grip.
- Used to remove broken studs, set screws, pipe and alemite fittings.

Item No.	Contents	Bolt Diameter	Drill Size	Overall Length	Weight
DT-55	DT-2601	1/4" to 5/16"	1/8"	2.38"	0.02 lbs.
	DT-2602	3/8"	3/16"	2.69"	0.03 lbs.
	DT-2603	7/16"	15/64"	2.94"	0.05 lbs.
	DT-2604	1/2" to 9/16"	5/16"	3.13"	0.08 lbs.
	DT-2605	5/8"	3/8"	3.38"	0.11 lbs.



STUD EXTRACTOR

- Extractor will remove or install 1/4" to 3/4" stud sizes.
- Constructed to permit gripping wheel to lay flush on flat surfaces to engage stud at lowest point if required without damage to stud threads.
- Drive socket extends through entire housing to prevent binding.

Item No.	Description	Weight
49980	Stud Extractor	1.11 lbs.



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TUBING BENDER

- Quickly and easily bends 3 sizes (3/16", 1/4", 5/16") of steel or 3/8" copper tubes.
- Bends up to 180°.
- Nylon form prevents kinking.
- Weight: 0.92 lbs.

Item No.	Length
ZT-1125	6"



HEAVY-DUTY WIRE WHEEL

- Use on power tools and bench grinders to remove dirt, carbon, rust, paint and scale from metal surfaces.
- Includes adapters for standard arbor holes.
- Safety glasses and protective clothing are recommended while using this brush.
- Weight: 1.68 lbs.

Item No.	Diameter	Width of Face	Arbor Hole	Max. Safe Free Speed
ZT-1305	6"	1.13"	0.50"	4500 RPM



CARBON CLEANING END BRUSH

- Removes hard carbon deposits as well as rust and paint from metal surfaces.
- Use with 1/4" drill for general metal cleaning.
- Safety glasses and protective clothing are recommended while using this brush.
- Weight: 0.18 lbs.

Item No.	Diameter Face	Diameter Shank	Max. Safe Free Speed
ZT-1301	0.75"	0.25"	20,000 RPM



HEAVY-DUTY KNOT END CLEANING BRUSH

- Heavy gauge wire twisted into strong knot ends for tough use.
- Use with 1/4" drill or flexible shaft equipment.
- Safety glasses and protective clothing are recommended while using this brush.
- Weight: 0.28 lbs.

Item No.	Diameter Face	Diameter Shank	Max. Safe Free Speed
ZT-1300	1.13"	0.25"	20,000 RPM



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HEAVY-DUTY SCRATCH BRUSH WITH SCRAPER

- Thick clusters of heavy gauge wire for heavy-duty use.
- 16 rows, 4 rows wide.
- 1-3/16" long wires, built-in steel scraper.
- Weight: 0.42 lbs.

Item No.	Overall Length
ZT-1312	10"



STEEL WIRE SCRATCH BRUSH

- A sturdy brush with 19 rows, 3 rows wide.
- 1-3/16" long wires.
- Weight: 0.34 lbs.

Item No.	Overall Length
ZT-1310	14"



CARBON SCRAPER

- Weight: 0.16 lbs.

Item No.	Width	Length
ZT-1111	1.25"	7.25"



DEGREASING SCRAPER

- Weight: 0.17 lbs.

Item No.	Width	Length
ZT-1112	1.25"	7.25"



GASKET SCRAPER

Item No.	Length	Weight
ZT-1102	11"	0.25 lbs.



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DELUXE ADJUSTABLE HACKSAW FRAME

- Our finest heavy-duty steel hacksaw frame guards against breakage of high-speed blades.
- Impact-resistant pistol grip handle.
- Adjustable frame locks on 10" and 12" blades.

Item No.	Weight
FT-1204	1.78 lbs.



ADJUSTABLE HACKSAW FRAME

- Handy adjustable hacksaw frame is ideal for general use.
- Adjustable frame locks on 10" and 12" blades.

Item No.	Weight
FT-1202	1.37 lbs.



HIGH SPEED HACKSAW BLADES

- A molybdenum high speed steel blade of superb quality and durability.
- Will cut nickel, high carbon steel and other tough alloys.

Item No.	Length	Width	Thickness	Teeth/in.	Pkg. Qty	Weight
FT-1103	12"	0.5"	.025"	18	10	0.04 lbs.



FLEXIBLE HACKSAW BLADE

- It is sometimes advisable to use these blades where cutting is to be done on surfaces that are not extremely hard and where the possibility of flexing occurs.

Item No.	Length	Width	Thickness	Teeth/in.	Pkg. Qty	Weight
FT-1124	12"	0.5"	.025"	24	10	0.04 lbs.

