

## Automotive

## 22 BLADE STEP CUT FEELER GAUGE SET

-"Go and no-go" blades $1 / 2$ " wide by $3-5 / 16$ " long in holder.

- Each blade has two different thicknesses.
-Sizes include: .004/.006", .005/.007", .006/.008", .007/.009", .008/.010, .009/.011", .010/.012", .011/.013", .012/.014", .013/.015", $.014 / .016^{\prime \prime}, .015 / .017^{\prime \prime}, .016 / .018^{\prime \prime}, .017 / .0199^{\prime \prime}, .018 / .020^{\prime \prime}, .019 / .021$ ", .020/.022", .021/.023", .022/.024", .023/.025", .024/.026", .025/.027".
- Blades etched with both decimal size and metric equivalent.

| Product | Weight <br> lbs. |
| :--- | :--- |
| ID No. | .18 |

## 25 BLADE MASTER FEELER GAUGE SET

- Contains twenty-five short blades in holder.
-Includes all short blade sizes .0015" thru .040" except .019".
- Blades etched with both decimal size and metric equivalent.

| Product | Weight |
| :--- | :--- |
| ID No. | lbs. |
| J000AA | 0.19 |



## 9 BLADE STANDARD FEELER GAUGE SET

- Contains 9 short blades in holder.
-Short blades in sizes $.003^{\prime \prime}, .004^{\prime \prime}, .005 ", .006$ ", .008 ", $.010^{\prime \prime}, .012^{\prime \prime}$, .015", .018", in No. 000C holder.
- Blades etched with both decimal size and metric equivalent.

| Product | Weight <br> ID No. |
| :--- | :--- |
| J000A | 0.07 |



## 25 BLADE LONG FEELER GAUGE SET

- $1 / 2^{\prime \prime}$ wide by $12^{\text {" long blades in steel blade holder. }}$
-Sizes: . $0015^{\prime \prime}, .002^{\prime \prime}, .003^{\prime \prime}, .004^{\prime \prime}, .005^{\prime \prime}, .006$ ", .007", . $008^{\prime \prime}, .009 ", .010^{\prime \prime}$, . $011^{\prime \prime}, .012^{\prime \prime}, .013^{\prime \prime}, .014^{\prime \prime}, .015^{\prime \prime}, .016^{\prime \prime}, .017^{\prime \prime}, .018^{\prime \prime}, .019^{\prime \prime}, .020^{\prime \prime}, .021 "$ " .025", .027", .030", .040".
- Blades etched with both decimal size and metric equivalent.

| Product <br> ID No. | Weight <br> lbs. |
| :--- | :--- |
| J000TL | 0.72 |



## Automotive

## 12 BLADE LONG FEELER GAUGE SET

- Blades $1 / 2^{2}$ wide by $12^{\prime \prime}$ long in steel holder.
-Includes sizes: . 0015 ", . 002 ", . 003 ", . 004 ", . 005 ", .006", . 008 ", . 010 ", .012", .014", .015", .020".
- Blades etched with both decimal size and metric equivalent.

| Product <br> ID No. | Weight <br> lbs. |
| :--- | :--- |
| JO00SL | 0.30 |

## 25 BLADE METRIC FEELER GAUGE SET

- $1 / 2^{\prime \prime} \times 3-5 / 16^{\prime \prime}$ metric blades in steel holder.
- Sizes: $0.04 \mathrm{~mm}, 0.05 \mathrm{~mm}, 0.06 \mathrm{~mm}, 0.07 \mathrm{~mm}, 0.08 \mathrm{~mm}, 0.09 \mathrm{~mm}$, $0.10 \mathrm{~mm}, 0.15 \mathrm{~mm}, 0.20 \mathrm{~mm}, 0.25 \mathrm{~mm}, 0.30 \mathrm{~mm}, 0.35 \mathrm{~mm}, 0.40 \mathrm{~mm}$, $0.45 \mathrm{~mm}, 0.50 \mathrm{~mm}, ~ 0.55 \mathrm{~mm}, 0.60 \mathrm{~mm}, 0.65 \mathrm{~mm}, 0.70 \mathrm{~mm}, 0.75 \mathrm{~mm}$, $0.80 \mathrm{~mm}, 0.85 \mathrm{~mm}, 0.90 \mathrm{~mm}, 0.95 \mathrm{~mm}, 1.00 \mathrm{~mm}$.

| Product | Weight <br> Ibs. |
| :--- | :--- |
| ID No. | 0.22 |



## 16 BLADE OVERHEAD VALVE FEELER GAUGE SET

- $1 / 2^{\text {" }}$ wide bent gauges for setting overhead valves.
-Includes sizes .009 ", $.010^{\prime \prime}, .011^{\prime \prime}, .014^{\prime \prime}, .015^{\prime \prime}, .016^{\prime \prime}, .0177^{\prime \prime}, .018$ ", $.019^{\prime \prime}$, .020", . $021^{\prime \prime}, .023^{\prime \prime}, .024^{\prime \prime} .025^{\prime \prime} .026^{\prime \prime}, .027^{\prime \prime}$.
-Blades are etched with both the decimal size and metric equivalent.
- Blades are offset at a right angle to help protect hands from a hot manifold while setting an overhead value.

| Product <br> ID No. | Weight <br> lbs. |
| :--- | :--- |
| JOOOR | 0.25 |



## 11 BLADE BENT FEELER GAUGE SET

-Blades $1 / 2^{\prime \prime}$ wide by $4-3 / 16^{\prime \prime}$ in sizes .006 ", .008", .010 ", . 011 ", .012 ", .013", .014", .015", .018", .019", .020".
-Blades are etched with both the decimal size and metric equivalent.

| Product <br> ID No. | Weight <br> Ibs. |
| :--- | :--- |
| JO00M | 0.13 |

## Automotive

## 15 BLADE METRIC FEELER GAUGE SET

- Steel blade holder contains one each of the following $1 / 2^{\prime \prime} \times 3-5 / 15^{\prime \prime}$ blades; $0.06 \mathrm{~mm}, 0.07 \mathrm{~mm}, 0.08 \mathrm{~mm}, 0.10 \mathrm{~mm}, 0.15 \mathrm{~mm}, 0.20 \mathrm{~mm}, 0.25 \mathrm{~mm}$, $0.30 \mathrm{~mm}, 0.35 \mathrm{~mm}, 0.40 \mathrm{~mm}, 0.45 \mathrm{~mm}, 0.50 \mathrm{~mm}, 0.55 \mathrm{~mm}, 0.60 \mathrm{~mm}, 0.70 \mathrm{~mm}$.

| Product | Weight |
| :--- | :--- |
| ID No. | lbs. |
| J00MM15 | 0.13 |



## 9 BLADE METRIC FEELER GAUGE SET

- $1 / 2^{\prime \prime} \times 3-5 / 16$ " blades in steel holder.
- Includes sizes: $0.06 \mathrm{~mm}, 0.10 \mathrm{~mm}, 0.15 \mathrm{~mm}, 0.20 \mathrm{~mm}, 0.30 \mathrm{~mm}$, $0.35 \mathrm{~mm}, 0.40 \mathrm{~mm}, 0.50 \mathrm{~mm}, 0.60 \mathrm{~mm}$.

| Product | Weight <br> ID No. |
| :--- | :--- |
| J00MM9 | 0.09 |



## 6 BLADE NON-MAGNETIC FEELER GAUGE SET

- Contains non-magnetic brass feeler blades for checking the air gap in electronic ignition systems for all weather conditions.
-Each blade is $1 / 2^{\prime \prime}$ wide, $3-5 / 16^{\prime \prime}$ long in sizes .006 ", $.008{ }^{\prime \prime}, .010^{\prime \prime}$, .012", .014", .016".
- Etched with both decimal sizes and metric equivalents.

| Product <br> ID No. | Weight <br> lbs. |
| :--- | :--- |
| J000BR | 0.08 |



## SHORT BLADE HOLDER

- Large enough to accommodate all 26 short blades.

| Product <br> ID No. | Weight <br> lbs. |
| :--- | :--- |
| JOOOC | 0.05 |



## Automotive

## 10 BLADE IGNITION FEELER GAUGE SET

- Blades $1 / 4$ " wide by $1-3 / 4$ " in holder.
-Includes sizes .013", .015", . $0177^{\prime \prime}, .018^{\prime \prime}, .020 ", ~ .025 ", ~ .030 ", ~$ .032", .035" .040".
- Etched with both decimal sizes and metric equivalent.

| Product <br> ID No. | Weight <br> lbs. |
| :--- | :--- |
| JOOOD | 0.06 |



## HIGH ENERGY SPARK PLUG GAP GAUGE SET

- For use in setting gaps and spark plugs with high energy ignition systems.
- Includes blade holder, electrode bender and six bent wire gauges in sizes .044", .045", , 050", .054", .060", .080".
- Gauges marked with both decimal sizes and metric equivalent.

| Product | Weight <br> ID No. |
| :--- | :--- |
| Ibs. |  |
| J000 J | 0.08 |



## SPARK PLUG GAP GAUGE SET

- Spark plug electrode bender and eight bent wire gauges in sizes .020 ", $.0255^{\prime \prime}, .028^{\prime \prime}, .030^{\prime \prime}, .032^{\prime \prime}, .034^{\prime \prime} .035^{\prime \prime} .040 "$.
- Gauges marked with both decimal sizes and metric equivalent.

| Product | Weight <br> ID No. |
| :--- | :--- |
| J000K | .07 |



## LONG BLADE HOLDER

- Large enough to accommodate all 28 long blades.

| Product <br> ID No. | Weight <br> lbs. |
| :--- | :--- |
| J000L | .13 |



## Automotive

FEELER GAUGES - SHORT BLADE


FEELER GAUGES - LONG BLADE


BUDD WHEEL DEEP LENGTH IMPACT SOCKETS

| Product ID No. | in. | in. | B | C | L | Weight lbs. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J07524-LS | 1-1/2" | 3/4" | 2-1/4" | 1-5/8" | 4" | 2.96 lbs . |
| J09924LS | 1-1/2" | No. 5 Spline | 2-3/8" | 2-3/8" | 4-3/16" | 3.20 lbs . |
| J10024LS | 1-1/2" | $1{ }^{\prime \prime}$ | 2-3/8" | 2-3/8" | $4{ }^{\prime \prime}$ | 3.80 lbs . |



## Automotive

SET NO. J3200C - 13 PC. IGNITION SET

- Satin finish provides corrosion resistance and a slip resistant grip.
$-15^{\circ}$ and $60^{\circ}$ angle heads combined with the same opening size on both ends allows the wrench to be used in four different turning angles.
- Standard open end wrench configuration.
- Weight: . 67 lbs.


| Product <br> ID No. | Contents | $\mathrm{O}^{15^{\circ}}$ | $\mathrm{O}^{60^{\circ}}$ | Length |
| :---: | :---: | :---: | :---: | :---: |
| J3200C | J3210 | 13/64" | 15/64" | $3{ }^{\prime \prime}$ |
|  | J3211 | 15/64" | 13/64" | $3{ }^{\prime \prime}$ |
|  | J3215 | 7/32" | 1/4" | 3" |
|  | J3216 | 1/4" | 7/32" | 3 " |
|  | J3220 | 9/32" | 5/16" | 3-1/2" |
|  | J3221 | 5/16" | 9/32" | 3-1/2" |
|  | J3225 | 11/32" | 3/8" | 3-3/4" |
|  | J3226 | 3/8" | 11/32" | 3-3/4" |
|  | J000D | Ignition Gauge Set |  |  |
|  | J235 | Midget Angle Nose Pliers |  |  |
|  | J2302 | Ignition Point File |  |  |
|  | J9853 | Screw Starter |  |  |
|  | ST-1150S | Screwdriver, 2 " $\times 1 / 8^{\prime \prime}$ Slotted |  |  |
|  | J25TR10C | Tool Roll |  |  |

SET NO. J3200B - 5 PC. IGNITION SET

- Satin finish provides corrosion resistance and a slip resistant grip.
$-15^{\circ}$ and $60^{\circ}$ angle heads combined with the same opening size on both ends allow the wrench to be used in four different turning angles.
- Standard open end wrench configuration.
- Weight: . 47 lbs.

| Product ID No. | Contents | $0^{15^{\circ}}$ | $\mathrm{C}^{60^{\circ}}$ | Length |
| :---: | :---: | :---: | :---: | :---: |
| J3200B | J3210 | 13/64" | 15/64" | 3" |
|  | J3215 | 7/32" | 1/4" | 3" |
|  | J3220 | 9/32" | 5/16" | 3-1/2" |
|  | J3225 | 11/32" | 3/8" | $3-3 / 4{ }^{\prime \prime}$ |
|  | J235 | Midget Angle Nose Pliers |  |  |



This set is packaged in a standard shipping box, not in a tool roll as pictured.

## Automotive

SET NO. J3200D - 9 PC. IGNITION SET

- Satin finish provides corrosion resistance and a slip resistant grip.
$-15^{\circ}$ and $60^{\circ}$ angle heads combined with the same opening size on both ends allow the wrench to be used in four different turning angles.
- Standard open end wrench configuration.
- Weight: . 47 lbs.

| Product ID No. | Contents | $15^{\circ}$ | $60^{\circ}$ | Length |
| :---: | :---: | :---: | :---: | :---: |
| J3200D | J3210 | 13/64" | 15/64" | $3{ }^{\prime \prime}$ |
|  | J3211 | 15/64" | 13/64" | 3" |
|  | J3215 | 7/32" | 1/4" | 3" |
|  | J3216 | 1/4" | 7/32" | 3" |
|  | J3220 | 9/32" | 5/16" | 3-1/2" |
|  | J3221 | 5/16" | 9/32" | 3-1/2" |
|  | J3225 | 11/32" | 3/8" | 3-3/4" |
|  | J3226 | 3/8" | 11/32" | $3-3 / 4{ }^{\prime \prime}$ |
|  | J235 | Midget Angle Nose Pliers |  |  |
|  | J25TR09C | Tool Roll |  |  |

## IGNITION POINT FILE

- Tungsten file for spark plugs, distributors and other electrical contact points.
- Has chisel tip and smooth extended grip.

| Product <br> ID No. | Length | Weight <br> lbs. |
| :--- | :--- | :--- |
| J2302 | $5-1 / 4^{4}$ | .01 |

## MIDGET ANGLE NOSE PLIERS

- Nose angled for easy access.
- Angled teeth provide superior gripping power over standard right angled teeth.
- Plastisol grips for added comfort.

| Product     <br> ID No. L A B C Weight |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| lbs. |  |  |  |  |  |
| J235 | $4-1 / 16^{\prime \prime}$ | $3 / 4^{\prime \prime}$ | $5 / 8^{\prime \prime}$ | $11 / 64^{\prime \prime}$ | .10 |



## Automotive

## GASKET SCRAPER AND CARBON SCRAPER

- Ideal for removing gaskets and carbon.
-Comfortable, four sided handle.

| Product <br> ID No. | Blade Width | Length In | Weight <br> lbs. |
| :--- | :--- | :--- | :--- |
| J2336 | $1-1 / 2^{\prime \prime}$ | $12^{\prime \prime}$ | .30 |

## GASKET AND CARBON SCRAPER

- Narrow, angled blade for access into tight areas.
- Ideal for removing gaskets and carbon.
-Comfortable, four sided handle.

| Product <br> ID No. | Blade Width | Length | Weight <br> lbs. |
| :--- | :--- | :--- | :--- |
| J2338 | $1-1 / 16^{\prime \prime}$ | $11^{\prime \prime}$ | .38 |

## FLEXIBLE CARBON SCRAPER

- Excellent for removing carbon from contoured or flat surfaces.
-Flexibility of ten individual spring steel blades is regulated with sliding steel band.
-Weight: 30

| Product <br> ID No. | Blade Width | Blade <br> Length | Weight <br> lbs. |
| :--- | :--- | :--- | :--- |
| J2337 | $7 / 8^{\prime \prime}$ | $9^{\prime \prime}$ | .30 |



## COTTER PIN PULLER

- Precision formed curves provide excellent leverage in prying out cotter pins quickly and easily.
- Large plastic handle.

| Product <br> ID No. | Blade Length | Weight <br> lbs. |
| :--- | :--- | :--- |
| J2306 | $7-3 / 4^{\prime \prime}$ | .25 |

## Automotive

## PISTON RING COMPRESSOR

-Wide band has ratchet mechanism to prevent breakage and slippage.

- Includes ell handle.

| Product <br> ID No. | Bland Width | Diameter <br> Range | Weight <br> lbs. |
| :--- | :--- | :--- | :--- |
| J2316 | $3-1 / 2^{\prime \prime}$ | $2-1 / 8^{\prime \prime}$ to $5^{\prime \prime}$ | .70 |



## BATTERY POST AND TERMINAL CLEANER

| Product <br> ID No. | Length | Weight <br> lbs. |
| :--- | :--- | :--- |
| J2320 | $3-15 / 16^{\prime \prime}$ | 0.14 lbs. |

## BATTERY TERMINAL SPREADER AND REAMER

- Plastisol grips for added comfort.

| Product <br> ID No. | Length | Weight |
| :--- | :--- | :--- |
| lbs. |  |  |

BRAKE ADJUSTING TOOL

| Product <br> ID No. | Length | Weight <br> lbs. |
| :--- | :--- | :--- |
| J2006 | $6-19 / 32^{\prime \prime}$ | 0.27 lbs. |



## Automotive

## OIL FILTER WRENCH

- Handle swivels to avoid obstructions.
- Stainless steel band for added strength.

| Product <br> ID No. | Diameter <br> Capacity | Length | Weight <br> lbs. |
| :--- | :--- | :--- | :--- |
| J3006 | $3-1 / 2^{\prime \prime}$ to $3-7 / 8^{\prime \prime}$ | $8-1 / 2^{\prime \prime}$ | .81 |
| J3007 | $2-7 / 8^{\prime \prime}$ to $3-1 / 4^{\prime \prime}$ | 8 8' | .81 |
| J3008 | $4-1 / 8^{\prime \prime}$ to $4-1 / 2^{\prime \prime}$ | $9-1 / 2^{\prime \prime}$ | .88 |

## FLEXIBLE RETRIEVING AND HOLDING TOOLS

- Designed to position or retrieve small objects.
- Spring loaded plunger actuates jaws at end of flexible casing.

| Product | Length | Weight <br> ID No. |
| :--- | :--- | :--- |
| Ibs. |  |  |

## POCKET MAGNETIC RETRIEVING TOOL

- Versatile telescoping handle and all-angle ball joint.

| Product <br> ID No. | Length | Weight |
| :--- | :--- | :--- |
| Ibs. |  |  |
| J2375 | $16-3 / 4^{4}$ to $26-3 / 4^{\prime \prime}$ | .40 |

## POCKET MAGNETIC RETRIEVING TOOL

- Aluminum head that contains a neodymium magnet.
- All angle ball joint.
- Magnet can lift up to 1-1/2 lbs.
- Pocket clip.

| Product <br> ID No. | Length | Weight |
| :--- | :--- | :--- |
| lbs. |  |  |
| J2376A | $8^{\prime \prime}$ | 0.08 lbs. |

## Automotive

## FLEXIBLE MAGNETIC RETRIEVING TOOLS

-Retrieves small objects from hard to reach places.

- Push button allows reaching an object before energizing the magnet.

| Product <br> ID No. | Strength | Length | Weight <br> lbs. |
| :--- | :--- | :--- | :--- |
| J2377 | 1.5 lbs | $19-1 / 2^{\prime \prime}$ | .27 |
| J2378 | 3.0 lbs. | $24-1 / 2^{\prime \prime}$ | .37 |



## CIRCULAR INSPECTION MIRROR

-Versatile all-angle ball joint.

| Product <br> ID No. | Mirror Size | Length | Weight <br> lbs. |
| :--- | :--- | :--- | :--- |
| J2370 | $7 / 8^{\prime \prime}$ Dia. | $7-1 / 2^{\prime \prime}$ | .08 |
| J2374 | 1-1/4 Dia. | $8^{\prime \prime}$ | .09 |

## OVAL INSPECTION MIRROR

- Versatile all-angle ball joint.

| Product <br> ID No. | Mirror Size | Length | Weight <br> lbs. |
| :--- | :--- | :--- | :--- |
| J2371 | $1^{\prime \prime} \times$ 2" $^{2}$ | $8-3 / 4^{\prime \prime}$ | .08 |

## TELESCOPIC CIRCULAR INSPECTION MIRROR

- Versatile all-angle ball joint.
- Features telescoping handle.

| Product |  | Weight |  |
| :--- | :--- | :--- | :--- |
| ID No. | Mirror Size | Length | lbs. <br> J2372 |
| $2-1 / 4^{\prime \prime}$ Dia. | 10 to $14^{\prime \prime}$ | .25 |  |.

## Automotive



## TELESCOPIC RECTANGULAR INSPECTION MIRROR

- Versatile all-angle ball joint.
- Features telescoping handle.
-With pocket clip.

| Product <br> ID No. | Mirror Size | Length | Weight <br> lbs. |
| :--- | :--- | :--- | :--- |
| J2373 | $2-1 / 8^{\prime \prime} \times 3-1 / 2^{\prime \prime}$ | $11-1 / 4^{\prime \prime}$ to $15-1 / 2^{\prime \prime}$ | .30 |



## BRAKE PLIERS - ALL-PURPOSE

- Easily installs and removes brake shoe retaining spring on drum brakes.
- Socket end removes spring from anchor stud.
- Notched and installs spring on anchor.

| Product <br> ID No. | Length | Weight <br> lbs. |
| :--- | :--- | :--- |
| J217 | $12-7 / 8^{\prime \prime}$ | 1.05 |



## HOSE CLAMP PLIERS

- Installs and removes wire spring tension clamps.
- Two position jaws grip full range of clamp sizes.
- Plastisol grips for added comfort.

| Product <br> ID No. | Length | Weight <br> lbs. |
| :--- | :--- | :--- |
| J252G | $7-3 / 4^{"}$ | .56 |

## Automotive

SET NO. J7099A - 3/8" DRIVE 13 PC. HAND IMPACT DRIVER SET

- Designed to loosen hard to turn bolts and nuts.
- Hand Impact Driver has heavy-duty spring for added torque.
- Popular interchangeable bits are packaged in plastic blow molded box for easy storage.
-Weight: 2.36 lbs .

| Product ID No. | Contents | Description | Length |
| :---: | :---: | :---: | :---: |
| J7099A | J7099 | Driver Hand Impact 3/8" Dr. | 5-1/2" |
|  | J60002 | Bit Insert 1 Phillips ${ }^{\text {® }} 1 / 4$ " Hex | $1{ }^{\prime \prime}$ |
|  | J60008 | Bit Insert 2 Phillips ${ }^{\text {® }} 1 / 4$ " Hex | $1{ }^{\prime \prime}$ |
|  | J60020 | Bit Insert 3 Phillips ${ }^{\text {® }} 1 / 4$ " Hex | $1{ }^{\prime \prime}$ |
|  | J60202 | Bit Insert 4F-5R Slot 1/4" Hex | $1^{\prime \prime}$ |
|  | J60208 | Bit Insert 10F-12R Slot 1/4" Hex | $1{ }^{\prime \prime}$ |
|  | J60050 | Bit Insert 1 Phillips ${ }^{\text {® }}$ 5/16" Hex | 1-1/4" |
|  | J60052 | Bit Insert 2 Phillips ${ }^{\text {® }}$ 5/16" Hex | 1-1/4" |
|  | J60054 | Bit Insert 3 Phillips ${ }^{\text {® }} 5 / 16^{\prime \prime}$ Hex | 1-1/4" |
|  | J60256 | Bit Insert 10F-12R Slot 5/16" | 1-1/2" |
|  | J60262 | Bit Insert 14F-16R Slot 5/16" Hex | 1-1/2" |
|  | J6930 | Bit Holder Power 3/8" Dr. 5/16" | 1-5/16" |
|  | J6931 | Bit Holder | 1-1/4" |

## 3/8" DRIVE SPARK PLUG SOCKETS - 6 POINT

- With rubber insert.

| Product ID No. | in. | L | Width | Weight lbs. |
| :---: | :---: | :---: | :---: | :---: |
| J5020-50 | 5/8" | 2-1/2" | 0.19 | 0.21 lbs . |
| J5026HPA | 13/16" | 2-1/2" | 0.30 | 0.35 lbs . |

## 3/8" DRIVE UNIVERSAL SPARK PLUG SOCKETS - 6 POINTS

- With rubber insert.

| Product ID No. | in. | B | C | D | L | Weight lbs. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J5020-70 | 5/8" | 27/32" | 27/32" | 3/8" | 3-1/2" | 0.26 lbs . |
| J5026-50 | 13/16" | 1-1/16" | 23/32" | 1/4" | 3-3/8" | 0.34 lbs . |

Mes


## Automotive

## FACOM ${ }^{\circledR}$ STUD EXTRACTORS EXTERNAL CAM / KNURL TYPE

- Turn extractor with a ratchet, wrench or socket to engage the cam and stud, then pull out stud.

EobFGOM.
$\bullet 1 / 2^{"}$ and $1 / 4$ " drive capacity.

- Knurled wheel grips stud when pressure is applied.
- Hex drive can be driven with wrench or ratcheting tool.
- Ideal for bolts with rusted, corroded or stripped threads.
- Heavy duty finish.

| Product <br> ID No. | Length In | Weight <br> lbs. |
| :--- | :--- | :--- |
| FA-286A | $2-5 / 32^{\prime \prime}$ | 0.86 |
| FA-286.PL | $2-15 / 16^{\prime \prime}$ | 2.11 |



SET NO. FA-287B.JS5 - FACOM ${ }^{\circledR} 5$ PC. STUD EXTRACTOR ROLLER SET

- 5 Stud drivers for sizes M6, M7, M8, M9 and M10.
- Supplied in a CKS rack.
-Weight: 2.58 lbs.

| Product <br> ID No. | Contents | Capacity | Capacity mm | Length | Weight lbs. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| FA-287B.JS5 | FA-287B. 6 | 13/32" | 6 | 2-3/4" | 0.38 |
|  | FA-287B. 7 | 15/32" | 7 | 2-3/4" | 0.38 |
|  | FA-287B. 8 | 9/16" | 8 | 2-3/4" | 0.38 |
|  | FA-287B. 9 | 5/8" | 9 | 3-5/32" | 0.56 |
|  | FA-287B. 10 | 1/4" | 10 | $3-5 / 32$ " | 0.55 |

## FACOM ${ }^{\circledR}$ STUD EXTRACTORS INTERNAL CAM / ROLLER TYPE

- Designed to grip studs using cam assemblies.
-Capacity ranging from $6-16 \mathrm{~mm}$.
- 1/2" drive.
- Full polish finish.

| Product <br> ID No. | Capacity <br> $[\mathrm{In}]$ | Capacity <br> $[\mathrm{mm}]$ | Length <br> In | Weight <br> Ibs. |
| :--- | :--- | :--- | :--- | :--- |
| FA-287B.6 | $13 / 32^{\prime \prime}$ | 6 | $2-3 / 4^{\prime \prime}$ | 0.38 |
| FA-287B.7 | $15 / 32^{\prime \prime}$ | 7 | $2-3 / 4^{\prime \prime}$ | 0.38 |
| FA-287B.8 | $9 / 16^{\prime \prime}$ | 8 | $2-3 / 4^{\prime \prime}$ | 0.38 |
| FA-287B. | $5 / 8^{\prime \prime}$ | 9 | $3-5 / 32^{\prime \prime}$ | 0.56 |
| FA-287B.10 | $1 / /^{\prime \prime}$ | 10 | $3-5 / 32^{\prime \prime}$ | 0.55 |
| FA-287B.12 | $9 / 32^{\prime \prime}$ | 7 | $3-5 / 32^{\prime \prime}$ | 0.53 |
| FA-287B.14 | $5 / 16^{\prime \prime}$ | 8 | $2-15 / 16^{\prime \prime}$ | 0.76 |
| FA-287B.16 | $11 / 32^{\prime \prime}$ | 9 | $2-15 / 16^{\prime \prime}$ | 0.69 |



## Automotive

SET NO. FA-289 - FACOM ${ }^{\circledR} 3$ PC. NUT SPLITTER

- Supplied in a plastic tray.
-Weight: 1.19 lbs.

| Product <br> ID No. |  |  |  |
| :--- | :--- | :--- | :--- |
| FA-289 | Contents | Item Description | Length |
|  | FA-28.19 | Nut Splitter 19mm | $4-11 / 32^{\prime \prime}$ |
|  | FA-289.V1 | Nut Splitter 30mm | $4-29 / 32^{\prime \prime}$ |
|  |  |  |  |



## FACOM ${ }^{\circledR}$ NUT SPLITTERS

- Removes frozen, corroded or rusted nuts.
-4 parts to choose from with nut capacity ranging from 2 mm minimum to 46 mm maximum across flats.
-Will not damage bolt threads.
-3 Replacement chisel point screws available.


| Product | External | Internal |  | Maximum | Minimum | Weight |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ID No. | Diameter | Diameter | Length | Screw Size | Screw Size | lbs. |
| FA-289.19 | $1-1 / 4^{\prime \prime}$ | $3 / 4^{\prime \prime}$ | $4-11 / 32^{\prime \prime}$ | 8 | 2 | 0.59 |
| FA-289.30 | $1-31 / 32^{\prime \prime}$ | $1-1 / 8^{\prime \prime}$ | $4-29 / 32^{\prime \prime}$ | 16 | 10 | 0.71 |
| FA-289.36 | $2-7 / 16^{\prime \prime}$ | $1-7 / 16^{\prime \prime}$ | $8-1 / 16^{\prime \prime}$ | 20 | 16 | 2.5 |
| FA-289.54 | $3-1 / 2^{\prime \prime}$ | $1-31 / 32^{\prime \prime}$ | $9-9 / 32^{\prime \prime}$ | 30 | 20 | 6.14 |

## FACOM ${ }^{\circledR}$ NUT SPLITTERS - SPARE SCREWS

| Product <br> ID No. | Length | Weight <br> lbs. |
| :--- | :--- | :--- |
| FA-289.V1 | $3-15 / 16^{\prime \prime}$ | 0.24 |
| FA-298.V2 | $6-1 / 2^{1}$ | 0.84 |
| FA-289.V3 | $7-15 / 32^{\prime \prime}$ | 1.77 |

## COMPRESSION TESTER

- Hold in type for quick accurate compression readings.
-Dual scale indicates both psi and metric values ( $0-300 \mathrm{psi}, 0$ to $20 \mathrm{~kg} / \mathrm{cm} 2$ ).
-Weight: 1.2 lbs .

| Product |  | Weight |
| :--- | :--- | :--- |
| ID No. | Length | lbs. |
| JCT21 | $6-1 / 2^{\prime \prime}$ | 1.2 lbs. |



## Automotive

## COMPRESSION GAUGE PARTS FOR JCT21

| Product |  | Length | Weight <br> lbs. |
| :--- | :--- | :--- | :--- |
| ID No. | Description | Leng. | 0.39 lbs. |
| JCTG1 | Gauge Compression 2-1/2" | $3-1 / 2^{" 1}$ | 0.03 lbs. |
| JCT21-8 | Rubber Compression Cone | $1-1 / 2^{\prime \prime}$ | 0.29 lbs. |

## COMPRESSION TESTER

- Includes compression gauge, 0 -ring, compression gauge and instructional pamphlet.
- Flexible hose and quick-disconnect coupler permit fast, easy engagement of threaded fitting into spark plug hole.
- Gauge has convenient side release valve and dual reading scale for both psi and metric values ( 0 to $300 \mathrm{psi}, 0$ to $20 \mathrm{~kg} / \mathrm{cm} 2$ ).
- Equipped with neoprene " 0 " rings for positive finger-tight seal.
- Includes adapters for regular 18 mm spark plugs and for regular and long 14 mm spark plugs.


| Product <br> ID No. | Description | Length | Weight <br> Ibs. |
| :--- | :--- | :--- | :--- |
| JCTR10 | Compression Tester | $10-29 / 32^{\prime \prime}$ | 1.08 lbs. |

## COMPRESSION GAUGES PARTS FOR JCTR10

| Product | Lem Description | Length | Weight <br> lbs. |
| :--- | :--- | :--- | :--- |
| ID No. | Item | $7 / 16^{\prime \prime}$ | 0.01 lbs |
| JCTR10-7A | 0 Ring | Gauge Compression 2-1/2" | $3-1 / 2^{\prime \prime}$ |
| JCTG1 | 0.39 lbs. |  |  |
| JCTR10RK | Compression Tester Repair Kit | $22-5 / 16^{\prime \prime}$ | 0.8 lbs. |



## COMPRESSION TESTER

- Includes compression gauge, 0 -ring, compression gauge and instructional pamphlet.

| Product <br> ID No. | Item Description | Length | Weight <br> lbs. |
| :--- | :--- | :--- | :--- |
| JCTR20 | Compression Tester | $11-29 / 32^{\prime \prime}$ | 1.06 lbs. |



## Automotive

COMPRESSION GAUGE PARTS FOR JCTR20

| Product <br> ID No. | Item Description | Wength | Weight <br> lbs. |
| :--- | :--- | :--- | :--- |
| JCTR20-4C | Gauge Compression 2/Side | $2-5 / 16^{\prime \prime}$ | 0.35 lbs. |
| JCTR20RK | Compression Tester Repair Kit $9-11 / 2^{\prime \prime}$ | 0.48 lbs. |  |

## FACOM ${ }^{\circledR}$ MONKEY WRENCHES

- Sturdy, wide-opening tools for heavyduty work on farms and building sites.
- Body and gear in hardened steel.

| Product <br> ID No. | Size |  | Jaw <br> Length | Jaw <br> Depth | Thickness |
| :--- | :--- | :--- | :--- | :--- | :--- |
| FA-105.230 | $2-3 / 8^{\prime \prime}$ | $9-1 / 16^{\prime \prime}$ | $1-25 / 32^{\prime \prime}$ | $25 / 32^{\prime \prime}$ | 1.15 lbs. |
| FA-105.280 | $2-3 / 4^{\prime \prime}$ | $11-1 / 2^{\prime \prime}$ | $1-11 / 32^{\prime \prime}$ | $21 / 32^{\prime \prime}$ | 1.79 lbs. |
| FA-105.375 | $3-1 / 8^{\prime \prime}$ | $14-23 / 32^{\prime \prime}$ | $1-25 / 32^{\prime \prime}$ | $7 / 8^{\prime \prime}$ | 3.36 lbs. |



SET NO. J9500B - 10 PC. SCREW EXTRACTOR SET
-Weight: 4.5 lbs .


## SET N0. J9500A - 5 PC. SCREW EXTRACTOR SET

-Weight: 0.28 lbs .

| Product |  |  |  |
| :--- | :--- | :--- | :--- |
| ID No. | Contents | Description | Length |
| J9500A | J9521 | $1 / 8^{\prime \prime}$ | $2-5 / 16^{\prime \prime}$ |
|  | J9522 | $3 / 16^{\prime \prime}$ | $2-5 / 8^{\prime \prime}$ |
|  | J9523 | $7 / 32^{\prime \prime}$ | $2-7 / 8^{\prime \prime}$ |
|  | J9524 | $5 / 16^{\prime \prime}$ | 3 " |
|  | J9525 | $3 / 8^{\prime \prime}$ | $3-1 / 4^{\prime \prime}$ |
|  | J25TR49C | Tool Roll 5 Pockets | $6-3 / 32^{\prime \prime}$ |

## Automotive

## SCREW EXTRACTORS

- Drive into end of broken pipe or fitting.
- Use tap holder or wrench on extractor to turn out broken part.
- Size stamped on extractor refers to drill bit size to be used with that extractor.

| Product ID No. | U.S.S. | D | A | B | L | Weight lbs. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J9521 | 1/4", 5/16" | $1 / 8{ }^{\prime \prime}$ | $1 / 8{ }^{\prime \prime}$ | 3/16" | 2-5/16" | 0.02 |
| J9522 | $3 / 8{ }^{\prime \prime}$ | 3/16" | 11/64" | 3/16" | 2-5/8" | 0.02 |
| J9523 | 7/16" | 7/32" | 13/64" | 1/4" | 2-7/8" | 0.05 |
| J9524 | 1/2", 9/16" | 5/16" | 19/64" | 5/16" | 3" | 0.07 |
| J9525 | 5/8" | 3/8" | 11/32" | $3 / 8{ }^{\prime \prime}$ | 3-1/4" | 0.12 |
| J9525B | 3/4" | 15/32" | $1 / 8{ }^{\prime \prime}$ | 1/8" | 3-7/8" | 0.18 |
| J9526 | 7/8" | 9/16" | 1/2" | 1/2" | 4-1/5" | 0.29 |
| J9527 | 1"11/8" | 21/32" | 19/32" | 5/8" | 4-7/8" | 0.47 |
| J9528 | 1-1/4", 1-3/8" | 13/16" | 23/32" | 3/4" | $5-3 / 8^{\prime \prime}$ | 0.72 |
| J9529 | 1-1/2" | 1-1/16" | 31/32" | $1{ }^{\prime \prime}$ | 5-1/2" | 1.30 |

## SET NO. J69X00-10 PC. BOLT EXTRACTOR SOCKET SET

- Proto ${ }^{\oplus}$ Bolt Extractor Sockets make it easy to remove rusted, rounded or damaged nuts and bolts.
-The working end has $18-30$ teeth in a hexagonal configuration to help grip rounded hexagonal fasteners, round head bolts and pan head screws.
- Low profile design helps gain access to fasteners in tight spaces.
-The non-working hex-shaped end can be turned with wrenches or sockets.
- Proto ${ }^{\circledR}$ Bolt Extractor Sockets can be used in combination with other drive tools (such as extensions, universal joints or ratchets with short arc swings) to help reach fasteners in difficult locations.
-Through-hole design helps gain access to fasteners at the end of
 long bolts or studs.
- Can be used on SAE or metric fasteners.
- Sets provided in mar-resistant tool holders.
-Weight: 0.87 lbs .

| Product <br> ID No. | Contents | Description |
| :--- | :--- | :--- |
| J69X00 | J69X09 | Xtr Skt 7mm 1/4", 9/32" |
|  | J69X10 | Xxt Skt 8mm 5/16" |
|  | J69X11 | Xtr Skt 9mm 11/32" |
|  | J69X12 | Xtr Skt 3/8" |
|  | J69X13 | Xtr Skt 10mm |
|  | J6914 | Xtr Skt 1mm 7/16" |
|  | J69X15 | Xtr Skt 12mm |
|  | J69X16 | Xtra Skt 13mm 1/2" |
|  | J69X18 | Xtr Skt 14mm 9/16" |
|  | J69X20 | Xtr Skt 15mm 16mm 5/8" |



## Automotive

## SET N0. J69X01-5 PC. B0LT EXTRACTOR SOCKET SET

- Proto ${ }^{\oplus}$ Bolt Extractor Sockets make it easy to remove rusted, rounded or damaged nuts and bolts.
-The working end has 18-30 teeth in a hexagonal configuration to help grip rounded hexagonal fasteners, round head bolts and pan head screws.
- Low profile design helps gain access to fasteners in tight spaces.
-The non-working hex-shaped end can be turned with wrenches or sockets.
- Proto ${ }^{\circledR}$ Bolt Extractor Sockets can be used in combination with other drive tools (such as extensions, universal joints or ratchets with short arc swings) to help reach fasteners in difficult locations.
-Through-hole design helps gain access to fasteners at the end of long bolts or studs.
- Can be used on SAE or metric fasteners.
- Sets provided in mar-resistant tool holders.
-Weight: 0.40 lbs .

| Product <br> ID No. | Contents | Description |
| :--- | :--- | :--- |
| J69X01 | J69X09 | Xtr Skt 7mm 1/4", 9/32" |
|  | J69X10 | Xxt Skt 8mm 5/16" |
|  | J6911 | Xtr Skt 9mm 11/32" |
|  | J69X12 | Xtr Skt 3/8" |
|  | J69X13 | Xtr Skt 10mm |

## SET NO. J69X02-5 PC. BOLT EXTRACTOR SOCKET SET

- Proto ${ }^{\circledR}$ Bolt Extractor Sockets make it easy to remove rusted, rounded or damaged nuts and bolts.
-The working end has $18-30$ teeth in a hexagonal configuration to help grip rounded hexagonal fasteners, round head bolts and pan head screws.
- Low profile design helps gain access to fasteners in tight spaces.
-The non-working hex-shaped end can be turned with wrenches or sockets.

- Proto ${ }^{\circledR}$ Bolt Extractor Sockets can be used in combination with other drive tools (such as extensions, universal joints or ratchets with short arc swings) to help reach fasteners in difficult locations.
-Through-hole design helps gain access to fasteners at the end of long bolts or studs.
- Can be used on SAE or metric fasteners.
- Sets provided in mar-resistant tool holders.
-Weight: 0.49 lbs.

| Product <br> ID No. | Contents | Description |
| :--- | :--- | :--- |
| J69X02 | J69914 | Xtr Skt 11mm 7/16" |
|  | J69915 | Xtr Skt 12mm |
|  | J69916 | Xtra Skt 13mm 1/2" |
|  | J69918 | Xtr Skt 14mm 9/16" |
|  | J69X20 | Xtr Skt 15mm 16mm 5/8" |

## Automotive

## BOLT EXTRACTOR SOCKETS

- Proto ${ }^{\oplus}$ Bolt Extractor Sockets make it easy to remove rusted, rounded or damaged nuts and bolts.
-The working end has 18-30 teeth in a hexagonal configuration to help grip rounded hexagonal fasteners, round head bolts and pan head screws.
- Low profile design helps gain access to fasteners in tight spaces.
-The non-working hex-shaped end can be turned with wrenches or sockets.
- Proto ${ }^{\circledR}$ Bolt Extractor Sockets can be used in combination with other drive tools (such as extensions, universal joints or ratchets with short arc swings) to help reach fasteners in difficult locations.

- Through-hole design helps gain access to fasteners at the end of long bolts or studs.
- Can be used on SAE or metric fasteners.

| Product <br> ID No. | Approximate <br> Bolt Size | Size <br> (mm) | B inches | C inches | D inches | $\begin{aligned} & \mathrm{L} \\ & \text { inches } \end{aligned}$ | Weight lbs. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J69X09 | 1/4", $9 / 32{ }^{\prime \prime}$ | 7 mm | 9/16" | 5/8" | 7/16" | $3 / 4 "$ | 0.05 lbs . |
| J69X10 | 5/16" | 8 mm | 9/16" | 5/8" | 7/16" | $3 / 4{ }^{\prime \prime}$ | 0.04 lbs . |
| J69X11 | 11/32" | 9 mm | 5/8" | 11/16" | 7/16" | 3/4" | 0.06 lbs . |
| J69X12 | $3 / 8{ }^{\prime \prime}$ | - | 5/8" | 11/16" | 7/16" | $3 / 4$ " | 0.05 lbs . |
| J69X13 | 13/32" | 10 mm | 3/4" | 13/16" | 7/16" | 3/4" | 0.08 lbs . |
| J69X14 | 7/16" | 11 mm | 3/4" | 13/16" | 7/16" | $3 / 4$ " | 0.07 lbs . |
| J69X15 | 15/32" | 12 mm | 7/8" | 7/8" | 7/16" | 3/4" | 0.08 lbs . |
| J69X16 | $1 / 2^{\prime \prime}$ | 13 mm | 7/8" | 7/8" | 7/16" | $3 / 4$ " | 0.08 lbs . |
| J69X18 | 9/16" | 14 mm | 29/32" | 15/16" | 7/16" | 3/4" | 0.09 lbs . |
| J69X20 | 5/8" | 15 mm , | 29/32" | 15/16" | 7/16" | $3 / 4$ " | 0.08 lbs . |



SET N0. J4041 - BATTERY CABLE AND SMALL BEARING PULLER

- Uses toggle-type action to grip onto all standard post battery terminals.
- Pulls small bearings and gears with 1 " reach and spread.
- Weight: 65 lbs.



## SET NO. J4053 - PULLEY PULLER

- For removing single and two-groove pulleys from alternators and power steering pumps.
- Two position yoke permits pulling bearings on both standard and heavy-duty alternators.
- Weight: 2.10 lbs.



## Automotive

## SET NO. J4059 - CLOSE QUARTERS PILOT BEARING PULLER

- Designed to pull flywheel pilot bearings with inside diameters $1 / 2^{\prime \prime}$ to $1-1 / 2^{\prime \prime}$.
- Removes bearings and bushings from starters, generators, magnetos and small electric motors.
-Weight: 2.30 lbs .



## SET NO. J4001G - HUB PULLER

- Pulls wheel hubs on cars and light trucks.
- Legs are drilled for $9 / 16$ " studs.
- Unit can be used without legs as a cap screw puller with bolts up to $1 / 2^{\prime \prime}$.
- J4001T Steel Storage Box
-Weight: 13.00 lbs .

| Product <br> ID No. | Contents | Description |  |
| :--- | :--- | :--- | :--- |
| J4001 | J4001B | Hub Crossarm | 1 |
|  | J4001J | Hub Leg | 3 |
|  | J4001S | Forcing Screw | 1 |
|  | J4001ST | Puller Tip | 1 |
|  | J4001T | Puller Box | 1 |
|  | J4001W | Striking Wrench | 1 |



## SET NO. J5040-10-WAY PROTO-EASETM ADVANTAGE SLIDE HAMMER PULLER SET

- Slide hammer puller set packaged in a convenient plastic blow molded carrying/storage case.
-Weight: 25 lbs .


## SET NO. J5049 - REVERSIBLE JAW SLIDE HAMMER PULLER

- Versatile puller which will accomplish many pulling jobs involving gears, bearings, outer races, grease retainers, oil seals, etc.
- Either two or three puller jaws may be used to handle "inside" pulling jobs such as bearing cups and outer racers, as well as regular "outside" pulling jobs.
- The 5 lb . slide hammer can be removed and used independently.
- Weight: 11 lbs.
- Overall Length: 27"

| 2-Jaw Spread |  |  | 3-Jaw Spread |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Inside | Outside |  | Inside |  | Outside |  |  |
| Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. |
| $1-1 / 4^{\prime \prime}$ | $3-1 / 2^{\prime \prime}$ | $1^{\prime \prime}$ | $4-1 / 2^{\prime \prime}$ | $1-1 / 2^{\prime \prime}$ | $4-1 / 4^{\prime \prime}$ | $1-1 / 2^{\prime \prime}$ | $4-1 / 2^{\prime \prime}$ |

