



HOLDING AND CUTTING

Protition Instance I sh



PLIERS LOCKING PLIERS RETAINING PLIERS SPECIALTY PLIERS C-CLAMPS KNIVES



HOLDING AND CUTTING

10

PLIERS

Proto offers a broad range of professional pliers: Tongue & Groove, Slip Joint, Cutting, Holding, Locking, Retaining Ring, Electronic and other specialty styles. All pliers are manufactured from high quality alloy steel and heat treated for maximum strength and durability.

POWER-TRACK II™ TONGUE & GROOVE PLIERS

- Proto offers a wide range of tongue & groove pliers with sizes ranging from 4-5/8" – 16-7/8", and maximum openings ranging from 15/32" – 4-1/16".
- Precision milled undercut groove joint provides smooth interlocking action and powerful non-slip performance.
- The groove joint absorbs the full gripping force. The more force exerted on the plier handle, the better the groove interlocks.
- Applied force is transmitted to the interlocking grooves, not the holding screw.
- Undercut grooves are centered to prevent jaw misalignment at applied load. Jaws will not twist.
- Multi-groove design allows parallel jaw openings in multiple positions.
- Angled teeth provide superior gripping power over standard right angle teeth.
- Teeth in jaws provide a tight, firm grip even on pipe or rounded fasteners and fittings.
- Forged and heat treated from high strength alloy steel provides stronger jaws, with sharp durable teeth.
- Thin tapered jaws provide access for use in tight areas.
- Jaws are set at 45° from handle line for better access in tight areas and a comfortable, natural twist angle.
- Special fasteners ensures permanent assembly, yet allows easy adjustment of the joint.
- Plastisol grips for added comfort.

RETAINING RING PLIERS

- Proto Retaining Ring Pliers are designed to provide ease and reliability in installing/removing retaining rings without lost motion or damage to the rings. Internal pliers are designed for installing rings in a "bore" and external pliers are for installing rings on a shaft.
- Patented Convertible design permits quick change-over to work internal or external rings.
- Long "curved" handle design is engineered to reduce fatigue.
- Precision formed, induction hardened tips for accurate fit and long wear.
- Tips engage rings securely and hold proper alignment to prevent rings from flying loose.
- Each plier will accommodate several ring sizes within a given range. Refer to the pliers selection chart.
- Plastisol coated handles, many with air cushioned grips, for added comfort.
- Grips are clearly marked for easy identification.

C-CLAMPS

C-Clamps are holding tools that free the users hands or provide pressure while cutting, drilling, or fastening multiple pieces. Proto C-Clamps are engineered for the toughest clamping jobs and are designed to hold securely up to there rated capacities.

PROTO C-CLAMP FEATURES

• Frames hot forged from special alloy steel and heat-treated for maximum strength and toughness.

- Large machined anvil on frame to insure a flat contact are for gripping big pieces, yet permit precision clamping on small or irregular pieces.
- Each C-Clamp features a black industrial finish.
- Through hardened screws to assure longer life and greater strength under loads, resisting warping or breakage.
- To ensure you have the right C-Clamp for the job, Proto offers a selection of Heavy Services, Standard Services Deep Throat, and Standard Service Extra Deep Throat C-Clamps to meet your industrial clamping needs.

EYE BOLTS

• Size, traceability markings, cavity number, forging code, and heattreat code are included on every forged eyebolt.

- Forged from special bar quality fine grain domestic carbon steel.
- Heat-treated for strength and desired properties.

PLIER SAFETY

- Use safety goggles.
- Serious eye injury is possible.
- Do not use pliers with cushion grips on electrical circuits. There is no insulation.
- Do not use extenders cheater bars onplier handles.
- Shield yourself and bystanders when using retaining ring pliers. Flying objects possible.
- Instructions:

-Cut wire back in jaws. Not at tip. -Prevent exposure to excessive heat.

C-CLAMP SAFETY

- Use safety goggles. Serious eye injury is possible.
- Do not use a damaged c-clamp. Replace bent screws and missing pressure pads
- Do no use c-clamp to pull or lift
- Disconnect electricity when working on electrical parts.
- Instructions:
 - -Apply clamping force perpendicular.
 -Engage pressure pad and anvil fully.
 -Prevent slipping. Keep tools clean.
 -Maintain your balance.







POWER-TRACK II™—NATURAL FINISH

- · Precision milled undercut groove joint provides interlocking feature for powerful non-slip performance.
- Special fastener ensures permanent assembly, yet allows for easy adjustment.
- Angled teeth provide superior gripping power over standard right angled teeth.

• Plastisol grips for added comfort.

| Product | | | | | | Weigh | t |
|---------|----------|---------|----------|---------|--------|-------|--------------------------|
| ID No. | L | MAX. | А | В | С | lbs. | |
| 261SG | 4-5/8" | 15/32" | 7/8" | 13/16" | 3/16" | .15 | Forged Undercut |
| 262SG | 7-1/16" | 1-1/8" | 1-3/8" | 1-3/4" | 5/16" | .48 | Meets ergonomic criteria |
| 263SG | 9-9/16" | 1-1/2" | 1-5/8" | 2-1/16" | 5/16" | .88 | |
| 260SG | 10-3/16" | 2-1/8" | 1-15/16" | 2-3/4" | 13/32" | 1.00 | |
| 264SG | 12" | 2-5/8" | 2-1/4" | 2-3/4" | 3/8" | 1.81 | |
| 265SG | 16-7/8" | 4-1/16" | 3-3/8" | 4-1/8" | 17/32" | 3.50 | |

Fed'l Specs.: GGG-P-471E

<u>_</u>

ERGONOMICS



COMBINATION PLIERS

- Has two jaw positions and shear type wire cutter. • Plastisol grips for added comfort.
- Product Weight ID No. L А В С lbs. 275G 5-13/16" 1-5/16" 7/8" 9/32" .24 Plastisol Dipped Handles

| 276 276G | 6-1/2" 6-9/16" | 1-3/4" 1-3/4" | 1-3/16" 1-3/16" | 3/8" 3/8" | .52 .52 | Plastisol Dipped Handles |
|-------------|-------------------|------------------|--------------------|--------------|------------|--------------------------|
| 278 | 8" | 1-3/4" | 1-13/64" | 3/8" | .67 | |
| 278G | 8-1/16" | 1-3/4" | 1-13/64" | 3/8" | .67 | Plastisol Dipped Handles |
| 280 | 9-1/2" | 2-3/8" | 1-7/64" | 15/32" | 1.00 | |
| 280G | 9-9/16" | 2-3/8" | 1-7/16" | 15/32" | 1.00 | Plastisol Dipped Handles |
| | | | | | | |

k

Fed'l Specs.: GGG-P-471E

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 ID No. | L | A | В | С | Weight Ibs. | |
|-------------------|---------|------|------|--------|----------------|--|
| 235 | 4-1/16" | 3/4" | 5/8" | 11/64" | .10 | |



THIN NOSE PLIERS

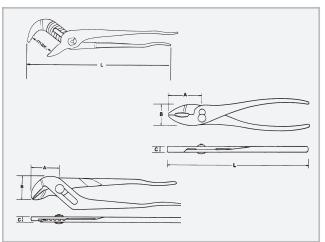
• Easy access to tight areas.

- Has two jaw positions and shear type wire cutter.
- Plastisol grips for added comfort.

| Product | | | | | Weight | | |
|---------|----------|----------|---------|-------|--------|--|--|
| ID No. | L | A | В | С | lbs. | | |
| 202G | 6-11/16" | 1-15/16" | 1-1/16" | 3/16" | .47 | | |
| | | | | | | | |

Fed'l Specs.: GGG-P-471E

REFERENCE MEASUREMENT KEY





284

www.stanleyproto.com





DIAGONAL CUTTING PLIERS

- Induction hardened cutting edges.
- Thin narrow jaws for access in tight areas.

| | Plastisol grips for added comfort. | | | | | | | | | | |
|-------------------|------------------------------------|--------|--------|--------|----------------|--------------------------|--|--|--|--|--|
| Product ID No. | L | А | В | C | Weight Ibs. | | | | | | |
| 285G | 4-5⁄8" | 13⁄32" | 7/16" | 1/4" | .13 | | | | | | |
| 204G | 4-7/16" | 18⁄32" | 9⁄16" | 5⁄16" | .22 | | | | | | |
| 204SG | 4-7/16" | 18⁄32" | 9⁄16" | 5⁄16" | .22 | Coil Springs | | | | | |
| 205G | 5-1/16" | 3⁄4" | 19⁄32" | 3⁄8" | .24 | | | | | | |
| 206G | 6-1/16" | 13⁄16" | 3⁄4" | 7/16" | .40 | | | | | | |
| 207G | 7-5⁄16" | 1" | 7/8" | 15⁄32" | .50 | Meets Ergonomic criteria | | | | | |

Fed'l Specs.: GGG-P-468A ANSI Spec.: B107.11M

6



DIAGONAL CUTTING PLIERS—ANGLED HEAD

- Angled head for work in confined areas.
- Flush cutting.
- · Plastisol grips for added comfort.

| Product ID No. | L | А | В | С | Weight Ibs. | |
|-------------------|--------|------|---------|-------|----------------|--|
| 210AHG | 8-1/8" | 3/4" | 1-7/32" | 5/32" | .64 | |



DIAGONAL CUTTING PLIERS—HEAVY-DUTY

- Induction hardened cutting edge.
- Powerful leverage cuts heavy wire with ease.

| Plastisol grips for added comfort. | | | | | | | | | |
|------------------------------------|---------|---------|---------|--------|----------------|--------------------------|--|--|--|
| Product ID No. | I | Δ | В | C | Weight Ibs. | | | | |
| 209G | 7-5⁄16" | 2-5/32" | 7/8" | 1/2" | .58 | Meets Ergonomic criteria | | | |
| 210G | 8-1/2" | 3⁄4" | 1-7/32" | 15⁄32" | .64 | | | | |

Fed'l Specs.: GGG-P-468A ANSI Spec.: B107.11

6



DIAGONAL PLASTIC CUTTING PLIERS

- · Adjusting set screw allows fast, precise cutting and prevents cutting edges from damaging each other.
- Coil spring for reduced hand fatigue.
- Induction hardened cutting edges .
- · Plastisol grips for added comfort.

| Product ID No. | L | А | В | С | Weight Ibs. |
|-------------------|---------|------|--------|-------|----------------|
| 212G | 6-1/16" | 3⁄4" | 3⁄4" | 7/16" | .39 |
| 213G | 7-5⁄16" | 1" | 29/32" | 1/2" | .53 |

DIAGONAL CUTTING PLIERS

LONG REACH—HIGH LEVERAGE—ANGLED HEAD

- · Extra long handle provides high leverage cutting capabilities with less user effort.
- 30° angled head for hard to reach areas.
- Wide handle contour for less fatigue.
- Plastisol grips for added comfort.



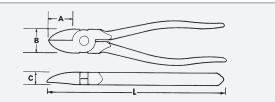


DIAGONAL CUTTING PLIERS LONG REACH—GRIPPING TIP

- Cutting and gripping capabilities in one tool
- · Serrated gripping surface at tips
- · Plastisol grips for added comfort

| Product ID No. | L | A | В | С | Weight Ibs. | |
|-------------------|---------|--------|--------|--------|----------------|--|
| 246G | 11-1/8" | 27/32" | 63/64" | 25/64" | .74 | |

REFERENCE MEASUREMENT KEY





ERGONOMICS







LINEMAN'S PLIERS

- For utility linemen, wiring and electrical equipment installation, and maintenance.
- Induction hardened cutting edges and diamond serrated jaws.
- Built-in insulation crusher
- · Plastisol grips for added comfort.

| Product ID No. | L | А | В | C | Weight Ibs. | |
|-------------------|--------|--------|---------|------|----------------|--|
| 268G | 8-5/8" | 1-1/2" | 1-3/16" | 5/8" | .98 | |

Fed'l Specs.: GGG-W-471E ANSI Spec.: B107.20M



LINEMAN'S PLIERS—NEW ENGLAND STYLE

- Slim rounded nose for easy access in restricted spaces.
- · Diamond serrated jaws.
- · Plastisol grips for added comfort.

| Product ID No. | L | А | В | С | Weight Ibs. | |
|-------------------|---------|---------|--------|------|----------------|--|
| 266G | 6-3/16" | 1-3/32" | 29/32" | 1/2" | .50 | |
| 267G | 7-1/4" | 1-9/32" | 1-1/8" | 1/2" | .67 | |

Fed'l Specs.: GGG-W-471E ANSI Spec.: B107.20M



LINEMAN'S PLIERS—HIGH LEVERAGE

- Jaws have offset rivet for increased leverage.
- Designed for cutting No. 8 and other large wires. 5 • Diamond serrated jaws. ERGONOMICS • Plastisol grips for added comfort. Product Weight С В ID No L А lbs. 269G 9-1/4" 1-3/16" 1-3/32" 5/8" 1.10

Fed'l Specs.: GGG-W-471E ANSI Spec.: B107.20M



LINEMAN'S PLIERS—PIPE JAW

- · Serrated flat nose jaws with toothed pipe grip.
- Plastisol grips for added comfort.

| Product ID No. | L | А | В | С | Weight Ibs. | |
|-------------------|--------|--------|---------|--------|----------------|--|
| 268PJG | 8-3/8" | 1-3/4" | 1-1/16" | 17/32" | .87 | |



IRONWORKERS PLIERS

- Designed to tie and cut wire associated with reinforcing bar.
- Hook bend in handle to reduce slippage when gripping and pulling.
- · Coil spring holds jaws open, yet close easily.
- Plastisol grips for added comfort.

| Product ID No. | L | А | В | С | Weight Ibs. | |
|-------------------|--------|---------|---------|------|----------------|--|
| 269WSG | 9-1/4" | 1-9/16" | 1-9/32" | 5/8" | 1.16 | |

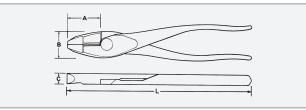


END CUTTING PLIERS—HIGH LEVERAGE

- · Semi-flush cutting in areas inaccessible to side cutting pliers.
- · High leverage for easy cutting of most wires and nails.
- · Plastisol grips for added comfort.

| Product ID No. | L | А | В | С | Weight Ibs. | |
|-------------------|-------|------|-------|--------|----------------|--|
| 272G | 8-1/4 | 5/16 | 1-3/4 | 1-3/16 | .90 | |

Fed'l Specs.: GGG-N-350A ANSI Spec.: B107.11M











NEEDLE NOSE PLIERS—LONG REACH

- Extra long handle allows greater access to confined, restricted areas.
- Improved fulcrum point provides more holding power at the tip

| | ss gripping ol grips for | | nfort. | | | ERGONOMICS |
|-------------------|-----------------------------|----------|--------|--------|----------------|------------|
| Product ID No. | L | А | В | С | Weight Ibs. | |
| 240G | 11-9/16" | 2-13/16" | 23/32" | 13/32" | .63 | |



NEEDLE NOSE PLIERS—LONG EXTRA THIN

- Extra slim-nose pliers for light precision work.
- Designed for gripping, looping, and twisting wire in confined areas.
- Plastisol grips for added comfort.

| Product ID No. | L | А | В | С | Weight Ibs. | |
|-------------------|---------|---------|------|-------|----------------|--|
| 223G | 6-5/32" | 2-5/32" | 1/2" | 9/32" | .20 | |

Fed'l Specs.: GGG-W-471E ANSI Spec.: B107.20M



NEEDLE NOSE PLIERS

Diamond serrated jaws.

• Plastisol grips for added comfort.

| Product ID No. | L | А | В | С | Weight Ibs. | |
|-------------------|---------|----------|--------|-------|----------------|-------------|
| 282BSG | 4-7/8" | 1-3⁄16" | 7/16" | 1/4" | .16 | Coil Spring |
| 282G | 4-7/8" | 1-3⁄16" | 7/16" | 1/4" | .16 | |
| 229-03G | 5-9⁄16" | 1-11/16" | 1/2" | 9⁄32" | .23 | |
| 220G | 6-5⁄8" | 1-7/8" | 11⁄16" | 3⁄8" | .35 | |

Fed'l Specs.: GGG-W-471E ANSI Spec.: B107.20M



NEEDLE NOSE PLIERS WITH SIDE CUTTER

Induction hardened cutting edges.

| Diamond serrated ja | WS. |
|---|-----|
|---|-----|

| Plastis | ol grips fo | or added c | omfort. | | | ERGONOMIC |
|-----------------------------|-------------|------------|---------|-------|----------------|---------------------------|
| Product ID No. | L | A | В | С | Weight Ibs. | |
| 229-01G | 5-9⁄16" | 1-11/16" | 1⁄2" | 9⁄32" | .23 | Coil Spring |
| 226G | 6-5⁄8" | 1-7/8" | 11/16" | 3⁄8" | .34 | Meets ergonomics criteria |
| 226-01G | 7-1/2" | 2-5/8" | 3⁄4" | 3⁄8" | .40 | Coil Spring |

Fed'l Specs.: GGG-P-471E ANSI Spec.: B107.13M



NEEDLE NOSE PLIERS—LONG REACH—BENT NOSE

- Extra long handle allows greater access to confined, restricted areas.
- Improved fulcrum point provides more holding power at the tip with less gripping effort.
- Bent nose design to reach around obstructions.

• Plastisol grips for added comfort.

| Product ID No. | L | А | В | С | Weight Ibs. | |
|-------------------|---------|---------|--------|--------|----------------|--|
| 241G | 11-3/8" | 2-9/16" | 23/32" | 13/32" | .62 | |



NEEDLE NOSE PLIERS—LONG THIN

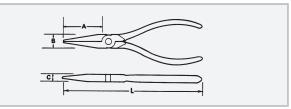
• Very thin nose allows access into minimum clearance areas.

• Diamond serrated jaws.

• Plastisol grips for added comfort.

| | • | lbs. | |
|-----------------------------------|--------|------|--|
| 222G 6-1/16" 2-1/8" 11/16" | 11/32" | .28 | |

Fed'l Specs.: GGG-W-471E ANSI Spec.: B107.13M





PROTO



NEEDLE NOSE PLIERS—BENT NOSE

- \bullet Nose bent to 78° angle to reach around obstructions.
- Very thin nose allows access into minimum clearance areas.
- Diamond serrated jaws.
- Plastisol grips for added comfort.

| Product ID No. L | A | В | С | lbs. | |
|---------------------|--------|------|------|------|--|
| 225G 6-5/16 | 1-5/8" | 3/4" | 3/8" | .42 | |

Fed'l Specs.: GGG-W-471E ANSI Spec.: B107.13M



NEEDLE NOSE PLIERS—LONG

- Long handle for added leverage.
- Diamond serrated jaws.
- Plastisol grips for added comfort.

| Product ID No. | L | А | В | C | Weight Ibs. | |
|-------------------|----------|---------|--------|-------|----------------|----------------------|
| 228G | 7-25/32" | 1-9/16" | 17/32" | 7/16" | .38 | |
| | | | | | Fed | l Specs.: GGG-W-471E |

ANSI Spec.: B107.13M



DUCKBILL PLIERS

- Wide, flat nose for better grip than standard needle nose pliers.
- Diamond serrated jaws.
- Long handle for added leverage.
- Plastisol grips for added comfort.

| Product ID No. | L | А | В | С | Weight Ibs. | |
|-------------------|----------|---------|--------|-------|----------------|----------------------|
| 227G | 7-25/32" | 1-9/16" | 17/32" | 7/16" | .38 | |
| | | | | | Fed | l Specs.: GGG-W-471E |

ANSI Spec.: B107.13M



SET OF 291R 3 PC. LOCKING PLIERS SET

• Weight: 2.51 lbs.

| 0 | | | |
|---------|----------|--------------|--------|
| Set No. | Contents | Description | Length |
| 291R | 2901R | Straight Jaw | 7" |
| | 292R | Curved Jaw | 10" |
| | 286LN | Long Nose | 6" |
| | 2484 | Tool Pouch | — |



LOCKING PLIERS WITH WIRE CUTTERS CURVED JAW

- Can be used as hand vise, pipe wrench, clamp and pliers.
- Jaws lock in holding position with applied pressure up to one ton.
- Quick release removes pressure instantly.
- Curved jaw applies pressure on all points of any style nut or bolt.
- Special adjusting screw works twice as fast.

| Product ID No. | Length | Jaw Thickness | Jaw Adjustment | Weight Ibs. | |
|-------------------|--------|------------------|-------------------|----------------|--|
| 277WR | 4" | 7/32" | 15⁄16" | .21 | |
| 293WR | 5" | 1⁄4" | 1-1/4" | .35 | |
| 294WR | 7" | 5⁄16" | 1-5⁄8" | .72 | |
| 292WR | 10" | 7/16" | 1-7/8" | 1.24 | |

Fed'l Specs.: GGG-W-471E ANSI Spec.: B107.13M

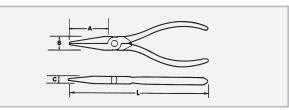


LOCKING PLIERS—CURVED JAW

• Curved jaw applies pressure on all points of any style nut or bolt.

| Product ID No. | Length | Jaw Thickness | Jaw Adjustment | Weight Ibs. | |
|-------------------|--------|------------------|-------------------|----------------|--|
| 290R | 7" | 5/16" | 1-5/8" | .73 | |
| 292R | 10" | 7/16" | 1-7/8" | 1.34 | |

Fed'l Specs.: GGG-W-00649











LOCKING PLIERS—LONG NOSE

- Long nose design for access in tight areas.
- · Heat treated alloy steel for maximum toughness and durability.
- Adjusting screw provides precise pressure.
- Guarded release trigger provides safety (against accidental opening) as well as quick release.

| Product ID No. | Length | Jaw Thickness | Jaw Adjustment | Weight Ibs. | |
|-------------------|--------|------------------|-------------------|----------------|--|
| 284LN | 4" | 1⁄8" at tip | 1-5⁄8" at tip | .22 | |
| | | 1⁄4" at base | 11⁄16" at base | | |
| 286LN | 6" | 5⁄32" at tip | 2-1⁄4" at tip | .38 | |
| | | 5⁄16" at base | 1-5⁄16" at base | | |
| 289LN | 9" | 3⁄16" at tip | 2-7/8" at tip | .78 | |
| | | 13⁄32" at base | 15⁄16" at base | | |

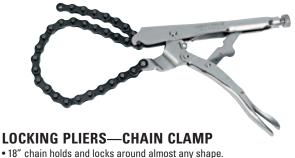


LOCKING PLIERS—WELDING CLAMP

- U-shaped jaws for visibility and working space.
- Hold work in proper alignment.
- · Heat treated alloy steel for maximum toughness and durability.
- Adjusting screw provides precise pressure.
- Guarded release trigger provides safety (against accidental opening) as well as quick release.

| Product ID No. | Length | Jaw Width | Throat Depth | Weight Ibs. | |
|-------------------|--------|--------------|-----------------|----------------|--|
| 261R | 9" | 2-3/4" | 1-5/8" | 1.56 | |

Fed'l Specs.: GGG-W-00649



- Heat treated alloy steel for maximum toughness and durability.
- Adjusting screw provides precise pressure.
- Guarded release trigger provides safety (against accidental opening) as well as quick release.
- Handles pipe from 3⁄4"-6" O.D.

| Product ID No. | Length | Chain Length | Weight Ibs. | |
|-------------------|--------|-----------------|----------------|--|
| 262R | 9" | 18" | 1.88 | |



LOCKING PLIERS—STRAIGHT JAW

- Straight jaws allow for maximum contact on flat, square or hex work.
- Heat treated alloy steel for maximum toughness and durability.
- Adjusting screw provides precise pressure.
- Guarded release trigger provides safety (against accidental opening) as well as quick release.

| Product ID No. | Length | Jaw Thickness | Jaw Adjustment | Weight Ibs. | |
|-------------------|--------|------------------|-------------------|----------------|--|
| 291R | 7" | 1/2" | 1-1/8 | .79 | |
| 293R | 10" | 5/8" | 1-5/8" | 1.17 | |

Fed'l Specs.: GGG-W-00649



LOCKING PLIERS—C-CLAMP

- Wide opening jaws provide greater versatility in clamping a wide variety of shapes.
- Heat treated alloy steel for maximum toughness and durability.
- Adjusting screw provides precise pressure.
- Guarded release trigger provides safety (against accidental opening) as well as quick release.

| Product ID No. | Length | Throat Depth | Jaw Adjustment | Weight Ibs. | |
|-------------------|--------|-----------------|-------------------|----------------|--|
| 265R | 6" | 1/2" | 0 - 2-1/8 | .47 | |
| 266R | 11" | 2-5/8" | 0 - 4" | 1.75 | |
| | | | | | |

Fed'l Specs.: GGG-W-00649



LOCKING PLIERS—SHEET METAL CLAMP

- Makes bending, forming and crimping jobs easier.
- · Heat treated alloy steel for maximum toughness and durability.
- · Adjusting screw provides precise pressure.
- Guarded release trigger provides safety (against accidental opening) as well as quick release.

| Product ID No. | Length | Jaw Width | Throat Depth | Weight Ibs. | |
|-------------------|--------|--------------|-----------------|----------------|--|
| 260R | 8" | 3-1/8" | 1-3/4" | 1.19 | |

Fed'l Specs.: GGG-W-00649





PROTO



SET NO. 360B 12 PC. CONVERTIBLE RETAINING RING PLIERS SET

• Convenient blow molded carrying case includes storage for spare rings.

• Ring range: External (Shaft) 1/4"- 3-11/32";Internal (Bore) 3/8" - 3"

| Product ID No. | Contents | Tip Size | Tip Angle | Length | |
|-------------------|----------|----------|-----------|----------|--------------------------|
| 360R | 399 | .038 | 0° | 5-7/8" | Meets ergonomic criteria |
| | 370 | .038 | 45° | 5-3/4" | |
| | 371 | .038 | 90° | 5-11/16" | |
| | 372 | .047 | 0° | 5-7/8" | |
| | 373 | .047 | 45° | 5-3/4" | |
| | 374 | .047 | 90° | 5-11/16" | |
| | 385 | .070 | 0° | 7-1/2" | |
| | 375 | .070 | 45° | 7-3⁄8" | |
| | 376 | .070 | 90° | 7-1/8" | |
| | 377 | .090 | 0° | 9-1/4" | |
| | 378 | .090 | 45° | 9" | |
| | 379 | .090 | 90° | 8-5/8" | |



SET NO. 360A 6 PC. CONVERTIBLE RETAINING RING PLIERS SET

 Convenient blow molded carrying case includes storage for space rings.

Ring range: External (Shaft) 1/4"- 3-11/32"; Internal (Bore) 3/8" - 3"
Weight: 2.10 lbs.

| Product ID No. | Contents | Tip Size | Tip Angle | Length | |
|-------------------|----------|----------|-----------|----------|--------------------------|
| 360A | 399 | .038 | 0° | 5-7/8" | Meets ergonomic criteria |
| | 371 | .038 | 90° | 5-11/16" | |
| | 372 | .047 | 0° | 5-7/8 | |
| | 374 | .047 | 90° | 5-11/16" | |
| | 385 | .070 | 0° | 7-1/2" | |
| | 376 | .070 | 90° | 7-1/2" | |

SET NO. 380 RETAINING RING PLIERS SET WITH REPLACEMENT TIPS



- Includes one internal and one external plier.
 Covers Ring Range: External 1/4"-2".
- Internal 38"-2". • Contains 16 interchangeable tips (4 of each listed below).
- Pliers overall length 6-1/4".
- Weight: 64 lbe

| • weight: | .04 IDS. |
|-----------|----------|
| Draduat | |

| Product ID No. | Tip Size | Tip Angle | |
|-------------------|------------|--------------|--|
| 380 | .038 | 90° | |
| | .047 | 45° | |
| | .047 | 0° | |
| | .070 | 0° | |
| | Donlocomon | + Tine, 200T | Includes 16 replacement tine listed shows in plastic how |

Replacement Tips: 380T – Includes 16 replacement tips listed above in plastic box

SET NO. 361 RETAINING RING PLIERS SET WITH REPLACEMENT TIPS

• Includes one internal and one external plier.

- Convenient blow molded carrying case
- includes storage for spare rings.
- Custom grip handles for added comfort.
- Contains 16 interchangeable tips listed below.
- Covers Ring Range: External 1-1/2" 3-3/4". Internal 2-7/16" 4".
- Spring loaded ratchet mechanism minimizes operator fatigue by allowing ring to be compressed or expanded through gradual "moves" and locks at desired size. Heavy and large rings are safely and easily controlled.
- Pliers overall length 9-1/2".

• Weight: 2.5 lbs.

| Product ID No. | Tip Size | Tip Angle | Tip Size | Tip Angle | |
|-------------------|----------|-------------|------------------------|----------------|-------------------------|
| 380 | .108 | 0° | .120 | 0° | |
| | .108 | 15° | .120 | 15° | |
| | .108 | 45° | .120 | 45° | |
| | .108 | 90° | .120 | 90° | |
| | | Replacement | Tips: 362 – Includes 2 | 2 each .108 ti | ps in 0°, 15°, 45°, 90° |

cement Tips: 362 – Includes 2 each .108 tips in 0°, 15°, 45°, 90° 363 – Includes 2 each .120 tips in 0°, 15°, 45°, 90°

SET NO. 360C

4 PC. CONVERTIBLE RETAINING RING PLIERS SET

- Patented plier design permits quick change-over to work internal or external rings.
- Pliers have no screws to tighten.
- Pliers have a return spring to reduce fatigue and facilitate operation.
- Pliers have air cushioned grips which spreads loads across the hand increasing comfort.
- Ring range: External (Shaft) 1/4"- 2""; Internal (Bore) 3/8" 2"
 Weight: 1.26 lbs.

Product

<u>_</u>

ERGONOMICS

| Product ID No. | Contents | Tip Size | Tip Angle | Length | |
|-------------------|----------|----------|-----------|--------|--------------------------|
| 360C | 399L | .038 | 18° | 6" | Meets ergonomic criteria |
| | 371L | .038 | 90° | 5-3⁄4" | |
| | 385L | .070 | 18° | 7-1/4" | Meets ergonomic criteria |
| | 376L | .070 | 90° | 6-3⁄4" | |



FRGONOMICS





RETAINING RING PLIERS—CONVERTIBLE

• Converts from internal to external or vice versa, when pivot screw is moved to adjacent tapped hole.

• Use with either External or Internal Retaining Rings.

• Fixed tips are precision formed and induction hardened for accurate fit and long wear.

• Use the largest diameter tip that will fit the retaining ring being removed or installed.

RETAINING RING SERIES RETAINING RING SERIES **EXTERNAL** INTERNAL Shaft Bore Product Tip Tip Dia. Ander Dash Dia. Ander-Dash ID No. Length Indust. Truarc Indust Truarc Size Inches Angle Inches ton No. ton No. 1/4 - 43/64 1400 3100 5100 –25 thru–66 3/8 - 9/16 N1300 3000-X N5000 -37 thru-56 Meets ergonomic criteria 399 0° .038 5-7/8 1401 5101 3001-X N5001 1/4 - 3/64 3101 -25 thru-66 3/8 - 9/16 N1301 -37 thru-56 370 45° .038 5-3/4" 1/2 - 25/32 1408 4100 5108 -50 thru-78 3/8 - 9/16 N1302 N5002 -37 thru-56 371 90° .038 5-11/16 1/8 - 5/32 -12 thru-25 1308 4000 1440 5555 3⁄4 – 1 5008 -75 thru-100 11/16 - 7/8 1400 3100 5100 -68 thru-87 5/8 - 1.02 N1300 3000-X N5000 –62 thru–102 372 0° .047 5-7/8 11/16 - 7/8 1401 3101 5101 -68 thru-87 5/8 - 1.02N1301 3001-X N5001 -62 thru-102 373 45° .047 5-3/4" 13/16 – 1 5108 -81 thru-100 1 - 1.02 N5002 -100 thru-102 1408 N1302 374 90° .047 5-11/16 3/16 - 1/4 1440 4100 5555 -31, - 37 11/16 - 1-3/8 1308 4000 5008 -106 thru-137 -106 thru-175 15/16 - 1-7/16 1400 3100 5100 -93 thru-143 1-1/16 - 1-3/4N1300 3000-X N5000 385 0° .070 7-1/2 15/16 - 1-7/16 1401 3101 5101 -93 thru-143 1-1/16 - 1-3/4 N1301 3001-X N5001 -106 thru-175 375 45° .070 7-3/8 $1 - 1 - \frac{7}{16}$ 1402 5102 -100 thru-143 1-1/16 - 1-3/4 N1302 N5002 -106 thru-175 376 90° .070 7-1/8" 1 - 1/16, 2 1408 4100 5108 -106 thru-200 1-7/16 – 2 4000 5008 -143 thru-200 1308 7/16 - 3/4 1440 5555 -43 thru-75 1-7/16 - 2 1308 4000 5008 -143 thru-200 $1 - \frac{1}{2} - \frac{3 - \frac{1}{2}}{2}$ 1401 3100 5100 -150 thru-350 1-13/16 - 3N1300 3000-X N5000 -181 thru-300 377 0° .090 9-1/4" 1-1/2 - 3-1/2 1402 5102 -150 thru-350 1-13/16 - 3 N1301 3001-X N5001 -181 thru-300 378 45° 090 **9**" $1 - \frac{1}{2} - \frac{1 - \frac{3}{4}}{4}$ 3101 5101 -150 thru-175 1-13/16 - 3N1302 N5002 -181 thru-300 379 90° .090 8-5⁄8" 2-5/32 - 3-11/32 1408 4101 5108 –215 thru–334 2-1/16 - 3 1308 4000 5008 -206 thru-300

PLIERS SELECTION PROCEDURE

Anderton, Industrial, and Truarc are retaining ring manufacturers. Their ring part numbers are listed to help you select the proper pliers. The Dash No. is the size of the ring for the shaft or bore. For example, if you needed to select pliers for a Truarc 5100-68 ring, you would choose either a 372, 373, or 374 after selecting the tip angle that best meets your application.



LARGE RETAINING RING PLIERS—INTERNAL/EXTERNAL

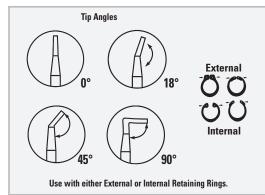
- Spring loaded ratchet mechanism minimizes operator fatigue by allowing the ring to be compressed or expanded through gradual "moves" and then locks at the desired size without continued pressure on the handles. Heavy and large rings are safely and easily controlled.
- Replaceable tips in 0°, 45° and 90° make it possible to remove and install rings in most applications.

| Produc No. | t Tip Angle | Tip Size | Length | Shaft Dia. in. (External) | Bore Dia. in. (Internal) | Indus. | Truarc | Dash No. | |
|---------------|----------------|-------------|---------|---------------------------------|--------------------------------|--------|--------|---------------|--|
| 364 | 0° | .120 | 16-1/2" | | 3-1/16 - 6 | 3000X | 5000 | -306 thru-625 | |
| 304 | U | .120 | 10-1/2 | | 3-5⁄32 - 4 | 4000 | 5008 | -315 thru-400 | |
| 205 | 0° | 100 | 16-1/2" | 3-35/64 - 6-1/2 | 2 | 3100 | 5100 | -354 thru-650 | |
| 365 | U | .120 | 10-1/2 | 3-1/2 - 4 | | 4100 | 5108 | -350 thru-400 | |

REPLACEMENT TIPS 364-T0, 0° Tips. 364-T45, 45° Tips. 364-T90, 90° Tips. Fed'l Specs.: GGG-P-480E ANSI Spec.: B107.19

NOTE: When selecting retaining ring pliers always choose the largest diameter tip that will fit the retaining ring being removed or installed.

REFERENCE MEASUREMENT KEY



Toll Free Customer Service Number: 1-800-800-TOOL Customer Service FAX Number: 1-770-385-3708





Fed'l Specs.: GGG-P-480E ANSI B107.19

FROTO[®]



RETAINING RING PLIERS—EXTERNAL

- Used with External Retaining Rings.
- Fixed Tips are precision formed and induction hardened for accurate fit and long wear.

| Product No. | Tip Angle | Tip Size | Length | Shaft Dia. in. | Ander- ton | Indus. | Truarc | Dash No. |
|----------------|--------------|-------------|--------|-------------------|---------------|--------|--------|---------------|
| | | | | 1/4 - 21/32 | 1400 | 3100 | 5100 | -25 thru-66 |
| 391 | 0° | .038 | 6-1/8" | 1/4 - 21/32 | 1401 | 3101 | 5101 | -25 thru-66 |
| 397 | 90° | .038 | 6-1/8" | 1/2 – 1 | 1408 | 4100 | 5108 | -50 thru-78 |
| | | | | 1/8 – 5/32 | 1440 | — | 5555 | -12 thru-25 |
| | | | | 15⁄16 – 17⁄16 | 1400 | 3100 | 5100 | -93 thru-143 |
| | | | | 15/16 - 1-7/16 | 1401 | 3100 | 5101 | -93 thru-143 |
| 393 | 0° | .070 | 6-7⁄8" | 1 - 17/16 | 1402 | — | 5102 | -100 thru-143 |
| | | | | 1-1/16 – 2 | 1408 | 4100 | 5108 | -106 thru-200 |
| | | | | 7/16 – 3/4 | 1440 | - | 5555 | -43 thru-75 |
| | | | | 1-1/2 - 3-1/2 | 1400 | 3100 | 5100 | -150 thru-350 |
| 395 | 0° | .115 | 9-1/8" | 1-1/2 - 3-1/2 | 1401 | 3101 | 5101 | -150 thru-350 |
| | | | | 1-1/2 - 3-1/2 | 1402 | _ | 5102 | -150 thru-350 |
| | | | | 2-1/8 - 3-11/32 | 1408 | 4100 | 5108 | –215 thru–334 |

Fed'l Specs.: GGG-P-480 ANSI Spec.: B107.19

ERGONOMICS



RETAINING RING PLIERS—INTERNAL

- Used with Internal Retaining Ring.
- Fixed Tips are precision formed and induction hardened for accurate fit and long wear.

| accu | i ate in | . unu i | ung we | sui. | | | | EROONOMICS |
|----------------|--------------|-------------|--------|------------------|---------------|--------|--------|---------------|
| Product No. | Tip Angle | Tip Size | Length | Bore Dia. in. | Ander- ton | Indus. | Truarc | Dash No. |
| | | | | 1/4 – 5/16 | N1300 | 3000-X | N5000 | –25 thru–31 |
| 390 | 0° | .025 | 5-3⁄8" | 1/4 – 5/16 | N1301 | 3001-X | N5001 | -25 thru-31 |
| | - | | | 1/4 - 5/16 | N1302 | — | N5002 | –25 thru–31 |
| | | | | 5⁄8 | 1308 | 4000 | 5008 | -62 |
| | | | | 3⁄8 – 9⁄16 | N1300 | 3000-X | N5000 | -37 thru-56 |
| 389 | 0° | .038 | 5-3⁄8" | 3⁄8 – 9⁄16 | N1301 | 3001-X | N5001 | -37 thru-56 |
| 398 | 45° | .038 | 5-3⁄8" | 3⁄8 – 9⁄16 | N1302 | _ | N5002 | -37 thru-56 |
| | | | | 3⁄4 – 1 | 1308 | 4000 | 5008 | -75 thru-100 |
| | | | | 1-1/16 - 1-3/4 | N1300 | 3000-X | N5000 | –106 thru–175 |
| 392* | 0° | .070 | 6-1/2" | 1-1/16 - 1-3/4 | N1301 | 3001-X | N5001 | -106 thru-175 |
| JJ 2 | 0 | .070 | 0 1/2 | 1-1/16 - 1-3/4 | N1302 | — | N5002 | -106 thru-175 |
| | | | | 1-7/16 – 2 | 1308 | 4000 | 5008 | -143 thru-200 |
| | | | | 1-13⁄16 – 3 | N1300 | 3000-X | N5000 | –181 thru–300 |
| | 0° | 000 | 01 | 1-13/16 – 3 | N1301 | 3001-X | N5001 | -181 thru-300 |
| 394 | 0° | .090 | 9" | 1-13/16 – 3 | N1302 | — | N5002 | -181 thru-300 |
| | | | | 2-1/16 - 3 | 1308 | 4000 | 5008 | -206 thru-300 |
| | | | | | | | | |

k

Fed'l Specs.: GGG-P-480 ANSI Spec.: B107.19 *Meets ergonomic criteria



LOCK RING—"HORSESHOE" WASHER PLIERS

• For spreading both soft iron "horseshoe" lock washers used on brakes and tempered steel lock rings used on gear and bearing shafts.

• Plastisol grips for added comfort.

| Product ID No. | Length | Weight Ibs. | |
|-------------------|----------|----------------|--|
| 250G | 7-13/16" | .49 | |
| | | | |

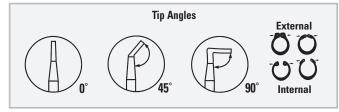
Fed'l Specs.: GGG-P-480E



LOCK RING PLIERS—PARALLEL JAW

- For removal of lock snap rings used on bearing shafts.
- Compound leverage simplifies removal.
- Jaw tips are indented to hold ring ends and prevent breakage.
- Jaws spread 11/4".
- Plastisol grips for added comfort.

| Product ID No. | Length | Weight Ibs. | | | | |
|-------------------|----------|----------------|--|--|--|--|
| 251G | 10-9/16" | .68 | | | | |











5 IN 1 MULTI-PURPOSE PLIERS

- Strips 10-22 AWG American Wire Gauge.
- Crimps insulated and non-insulated terminals for 10-22 AWG wire.
- Crimps non-insulated 7mm and 8mm auto ignition wire.
- Cuts screw/bolt sizes 4-40, 5-40, 6-32, 8-32, 10-32, 10-24.
- Cuts copper wire.
- Plier nose designed to grip, bend, and pull wire.

| Plastisc | ol grips for | added con | nfort. | | |
|-------------------|--------------|----------------|--------|--|--|
| Product ID No. | Length | Weight Ibs. | | | |
| 298 | 8-1/4" | .50 | | | |



WIRE STRIPPER

- Strips wire sizes 22,24,26,28, and 30 AWG- American Wire Gauge.
- Wire cutter.
- Plier nose for pulling and looping wire.
- Automatic spring return.
- Plastisol grips for added comfort.

| Product ID No. | Length | Weight Ibs. | |
|-------------------|---------|----------------|--|
| 296 | 6-1/16" | .21 | |



WIRE STRIPPER/CRIMPER

- Strips 10-22 AWG American Wire Gauge.
- · Box style crimp.
- Crimps insulated and non-insulated terminals for 10-22 AWG.
- Crimps non-insulated 7mm and 8mm auto ignition wire.
- Cuts screw/bolt sizes 4-40, 5-40, 6-32, 8-32, 10-32, 10-24.
- Anvil type wire cutter for cutting copper wire.
- Plastisol grips for added comfort.

| 1 100000 | in grips for | | nort. |
|-------------------|--------------|----------------|-------|
| Product ID No. | Length | Weight Ibs. | |
| 299 | 8-5/8" | .45 | |



WIRE STRIPPER

- Strips wire sizes 10, 12, 14, 16, 18 and 20 AWG American Wire Gauge.
- Wire cutter for copper wire.
- · Plier nose for pulling and looping wire.
- Spring return and convenient handle lock.
- Plastisol grips for added comfort.

| Product ID No. | Length | Weight Ibs. | |
|-------------------|---------|----------------|--|
| 297 | 6-1/16" | .21 | |

Fed'l Specs.: GGG-S-665C



FLAT CABLE STRIPPING PLIERS

- Automatic Wire Stripper for flat electrical cable.
- Strips outer sheathing as well as insulation from single wires.
- Stripper automatically adjusts to the diameter of the wire.
- Cutting blades never touch the conductors preventing damage to the wire.
- Spring action returns handle to ready position reducing fatigue.

| Product ID No. | Length | Capacity | Weight Ibs. | |
|-------------------|--------|----------|----------------|--|
| 295 | 6-1/2" | 8-13 AWG | .26 | |



CABLE CUTTER

- Cuts up to 3/0 fine stranded copper battery cable
- (not for use on steel cable).
- Precision ground blades minimize deflection.
- Positive fastener maintains pressure on matching cutting surfaces.
- Plastisol grips for added comfort.

| Product ID No. | Length | Weight Ibs. | |
|-------------------|--------|----------------|--|
| 288 | 7-1/2" | .56 | |









SAFETY WIRE TWISTER PLIERS

- Safety wire is often used in aviation and other applications where vibration may cause fasteners to back out.
- Heat treated cutting edges for cutting tough stainless steel safety wire.
- Flat top diamond serrations on jaws hold wire securely and resist nicking.
- Diagonal nose allows access in tight work areas.
- Automatic spring return feature speeds operation and reduces fatigue.
- 190 designed for wire sizes .020" .041".

| • 19 | 1. 192. | 195 de: | sianed f | or wire | sizes | .020" - | .060". |
|------|---------|---------|----------|---------|-------|---------|--------|

| · 151, 152, 155 designed for whe sizes .020000. | | | | |
|---|---|---------|----------------|--------------------------|
| Product ID No. | Description | Length | Weight Ibs. | |
| 190 | Wire twister pliers - 6" | 8-3/8" | .59 | |
| 191 | Wire twister pliers - 9" | 10-3/8" | .85 | |
| 192 195 | Automatic wire twister pliers - 9" Automatic wire twister pliers - | 10-3/8" | .85 | Meets ergonomic criteria |
| | left hand twist - 9" | 10-3/8" | 85 | |

Fed'l Specs.: GGG-W-340B ANSI Spec.: B107.18M



SAFETY WIRE TWISTER PLIERS—REVERSIBLE

- Reversible safety wire pliers provide right and left twist capability often eliminating the need for a second plier.
- Meet SAE Aerospace Standard AS 567 Twister Requirements.
- Provide all of the features of Standard Proto Safety Wire Pliers.
- 196 designed for wire sizes .020" .041".
- 197 designed for wire sizes .020" .060".

| Product ID No. | Description | Length | Weight Ibs. |
|-------------------|--|--------|----------------|
| 196 | Reversible, automatic wire twister pliers - 6" | 8-3/4" | .60 |
| 197 | Reversible, automatic wire twister pliers - 9" | 11" | .88 |

k

SAFETY WIRE TWISTER—DEEP REACH

• Designed for access into close clearance areas.

| Product ID No. | Description | Length | Weight Ibs. |
|-------------------|--------------------------|---------|----------------|
| 193 | Deep wire twister pliers | 18-1/8" | .43 |



SET NO. 194 3 PC. SAFETY WIRE TWISTER PLIERS SET

• Contains three different twisters to cover almost any application.

• Inc ludes 6" and 9" wire twister pliers and deep reach pliers.

•Packed in handy, durable plastic storage case.

• Weight: 3.32 lbs.

| Set No. | Contents | Description | Length | |
|---------|----------|--------------------------|---------|--|
| 194 | 190 | Wire twister pliers - 6" | 8-3/8" | |
| | 191 | Wire twister pliers - 9" | 10-3/8" | |
| | 193 | Deep reach wire twister | 18-7/8" | |









BRAKE PLIERS—ALL-PURPOSE

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

| | a ona mota | no opinig | |
|-------------------|------------|----------------|--|
| Product ID No. | Length | Weight Ibs. | |
| 217 | 12-7/8" | 1.05 | |



BATTERY TERMINAL SPREADER AND REAMER

| Plastiso | l grips for | added comfort |
|------------------------------|-------------|---------------|
| Product | | Weight |
| ID No. | Length | lbs. |



SOFT JAW—CANNON PLUG PLIERS

- Capacity of 3/4" to 2-1/2".
- Four position pivot design provides greater concentricity.
- Replaceable urethane padded jaws protect work piece from marking or scratching

| ded comfort. |
|--------------|
| |

| Product ID No. | Length | Weight Ibs. | Replaceable Jaw-Pair | |
|-------------------|--------|----------------|----------------------|--|
| 253G | 6-1/2" | .54 | 253GRK | |



HOSE CLAMP PLIERS

- Installs and removes wire spring tension clamps.
- Two position jaws grip full range of clamp sizes.

| Plastisol grips | s for added comfort. |
|-------------------------------------|----------------------|
| Product | Weight |

| ID No. | Length | lbs. | |
|--------|--------|------|--|
| 252G | 7-3/4" | .56 | |
| | | | |



OVAL HEAD CUTTER

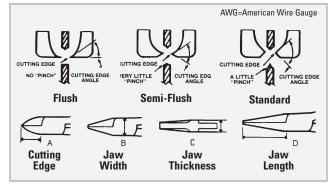
| Product | Description | | | | | | Wire | Capacity |
|---------|-------------|--------|------|------|------|------|--------|----------|
| ID No. | of Cut | Length | А | В | С | D | Copper | Hard |
| 28300 | Flush | 5-1/4" | .788 | .551 | .354 | .788 | 12 AWG | 21 AWG |



ANGLED HEAD CUTTER

| • 28° ang | led head. | | | | | | | |
|-----------|-------------|--------|------|------|---|------|--------|----------|
| Product | Description | | | | | | Wire | Capacity |
| ID No. | of Cut | Length | А | В | С | D | Copper | Hard |
| 28270 | Flush | 4-1/4" | .473 | .394 | - | .394 | 16 AWG | 26 AWG |

REFERENCE MEASUREMENT KEY



295





SET NO. 9511 11 PC. INSULATED TOOL SET

- The Proto Line of insulated pliers meet the stringent standards VDE 0682/201, EN 60900 and ASTM-F 1505-94 for electrical safety up to 1000V AC with the added safety of the injection molding process by which the plastic material of the handles is connected with the steel.
- Tested to 10,000 Volts, Rated to 1000V AC/1500V DC.
- Convenient zipper case for storage and transport.

| Set No. | Contents | Description | Length | |
|---------|----------|--------------------------------|----------|--|
| 9511 | 9501 | Phillips No. 1 Screwdriver | 6-3/4" | |
| | 9502 | Phillips No. 2 Screwdriver | 8" | |
| | 9503 | Phillips No. 3 Screwdriver | 10-1/4" | |
| | 9514 | Standard Tip Screwdriver 5/32" | 4" | |
| | 9515 | Standard Tip Screwdriver 7/32" | 5" | |
| | 9516 | Standard Tip Screwdriver 1/4" | 6" | |
| | 9517 | Standard Tip Screwdriver 5/16" | 7" | |
| | 181 | Linesman Plier | 8" | |
| | 184 | Diagonal Plier | 6-19⁄64" | |
| | 186 | Needle Nose Plier | 6-3⁄4" | |
| | 187 | Needle Nose Plier | 8" | |
| | 9511SC | Zipper Case | | |

(AC1000V)



LINEMAN'S PLIERS—INSULATED

- Tested to 10,000 Volts, Rated to 1000V AC/1500V DC.
- Molded handles provide wear resistance.
- Meet ASTM F1505-94, IEC 900/EN 60900, VDE 0680/201.
- Safety orange for quick identification.

| Product ID No. | L | А | В | С | lbs. | |
|-------------------|----|---------|---------|--------|------|--|
| 180 | 7" | 1-9/16" | 1-1/32" | 25/64" | .62 | |
| 181 | 8" | 2" | 1-7/64" | 13/32" | .74 | |
| | | | | | | |

k

(AC1000V)



DIAGONAL CUTTING PLIERS—INSULATED

- Tested to 10,000 Volts, Rated to 1000V AC/1500V DC.
- Molded handles provide wear resistance.
- Meet ASTM F1505-94, IEC 900/EN 60900, VDE 0680/201.

• Safety orange for quick identification.

| Product ID No. | L | А | В | С | lbs. | |
|-------------------|----------|--------|---------|--------|------|---------------|
| 182 | 7" | 25/32" | 63/64" | 25/64" | .56 | High Leverage |
| 183 | 8" | 25/32" | 1-5/64" | 13/32" | .72 | High Leverage |
| 184 | 6-19/64" | 25/32" | 53/64" | 25/64" | .50 | |
| 185 | 7" | 63/64" | 29/32"" | 29/64" | .62 | |

(AC1000V)

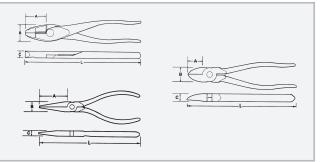


NEEDLE NOSE PLIERS—INSULATED

- Tested to 10,000 Volts, Rated to 1000V AC/1500V DC.
- Molded handles provide wear resistance.
- Meet ASTM F1505-94, IEC 900/EN 60900, VDE 0680/201.
- Safety orange for guick identification.

| Product ID No. | L | А | В | С | lbs. | |
|-------------------|--------|--------|--------|--------|------|--|
| 186 | 6-3/4" | 2" | 5/8" | 3/8" | .38 | |
| 187 | 8" | 2-3/4" | 43/64" | 25/64" | .46 | |

(AC1000V)









C-CLAMPS—HEAVY SERVICE STANDARD SCREW

• Designed for heavy service applications where the strength of the extra heavy service C-clamp is not required.

• Clamps have a high strength steel frame with a hardened forcing screw.

• Forcing screws are fitted with impact resistant pads.

| Product ID No. | С | т | D | Min. Test Load Pounds | lbs. |
|-------------------|----------|--------|------|--------------------------|------|
| 102GS | 0"-2" | 1-3⁄8" | 1/2" | 7,500 | 1.3 |
| 103GS | 0"-3" | 1-3⁄4" | 5⁄8" | 8,750 | 2.6 |
| 104GS | 0"-41/8" | 2" | 3⁄4" | 10,000 | 4.1 |
| 106GS | 2"-6" | 2-1/4" | 3⁄4" | 11,250 | 5.9 |
| 108GS | 4"-8" | 2-1/4" | 3⁄4" | 12,500 | 6.9 |
| 110GS | 6"-10" | 2-3⁄8" | 3⁄4" | 13,750 | 8.0 |
| 112GS | 8"-12" | 2-5⁄8" | 7/8" | 15,000 | 11.6 |
| 115GS | 10"-15" | 2-1/2" | 7/8" | 16,250 | 15.0 |
| 118GS | 12"-18" | 2-7/8" | 7/8" | 17,500 | 18.2 |

CID A-A-429C



C-CLAMPS—STANDARD SERVICE DEEP THROAT SPATTER RESISTANT FULL LENGTH SCREW

• Forcing screw and pad are plated with copper to resist welding spatter.

- Hot forged for strength and hard use.
- · Forcing screw has heavy rolled Acme thread allowing the screw to turn easily under pressure and is less susceptible to damage.
- Forcing screw has a sliding T handle and an impact resistant pad.

| Product ID No. | С | т | D | Min. Test Load Pounds | lbs. |
|-------------------|--------|--------|------|--------------------------|------|
| 402S | 0"-2" | 2" | 1/2" | 3,300 | 1.3 |
| 403S | 0"-3" | 2-3/8" | 1/2" | 3,500 | 2.0 |
| 404S | 0"-4" | 2-3⁄4" | 3⁄4" | 4,100 | 3.5 |
| 406S | 0"-6" | 3-5/8" | 3⁄4" | 5,400 | 5.0 |
| 408S | 0"-8" | 4-1/2" | 3⁄4" | 5,900 | 7.0 |
| 410S | 0"-10" | 5-3/8" | 3⁄4" | 6,200 | 10.5 |
| 412S | 0"-12" | 5-3⁄4" | 7/8" | 9,300 | 15.5 |

CID A-A-429C



C-CLAMPS—STANDARD SERVICE DEEP THROAT FULL LENGTH SCREW

• Standard service, deep throat style is the most versatile and popular.

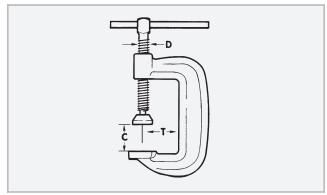
• Hot forged for strength and hard use.

- · Forcing screw has heavy rolled Acme thread allowing the screw to turn easily under pressure and is less susceptible to damage.
- Forcing screw has a sliding T handle and an impact resistant pad.

| 0"-2" 0"-3" 0"-4" | 2" 2-3⁄8" 2-3⁄4" | 1/2" 1/2" | 3,500 3,500 | 1.3 2.0 |
|-------------------------|------------------------|-------------------------------|---|---|
| | | | | |
| 0"-4" | 0.0//I" | 0.41 | | |
| 0 1 | Z-3/4 | 3⁄4" | 6,500 | 3.5 |
| 0"-6" | 3-5⁄8" | 3⁄4" | 6,600 | 5.0 |
| 0"-8" | 4-1/2" | 3⁄4" | 6,900 | 7.0 |
| 0"-10" | 5-3⁄8" | 3⁄4" | 8,000 | 10.5 |
| 0"-12" | 5-3⁄4" | 7/8" | 9,500 | 15.5 |
| | 0"-8" 0"-10" | 0"-8" 4-1/2" 0"-10" 5-3/8" | 0"-8" 4-1/2" 3/4" 0"-10" 5-3/8" 3/4" | 0"-8" 4-1/2" 3/4" 6,900 0"-10" 5-3/8" 3/4" 8,000 |

CID A-A-429C

REFERENCE MEASUREMENT KEY





297





C-CLAMPS—STANDARD SERVICE EXTRA DEEP THROAT FULL LENGTH SCREW

- Up to 32% more throat depth than standard deep throat clamps.
- Hot forged for strength and hard use.
- Forcing screw has heavy rolled Acme thread.
- Full length forcing screw.

| Product ID No. | С | т | D | Min. Test Load Pounds | lbs. |
|-------------------|-------|--------|------|--------------------------|------|
| 424 | 0"-4" | 3-5⁄8" | 3⁄4" | 4,100 | 4.8 |
| 426 | 0"-6" | 4-3⁄4" | 3⁄4" | 5,400 | 7.0 |
| 428 | 0"-8" | 5-5⁄8" | 3⁄4" | 5,900 | 9.8 |

CID A-A-429C



C-CLAMPS—STANDARD SERVICE EXTRA DEEP THROAT SPATTER RESISTANT FULL LENGTH SCREW

- Forcing screw and pad are plated with copper to resist welding spatter.
- Up to 32% more throat depth than standard deep throat clamps.
- Hot forged for strength and hard use.
- Forcing screw has heavy rolled Acme thread.
- Full length forcing screw.

| Product ID No. | c | т | D | Min. Test Load Pounds | d Ibs. |
|-------------------|-------|--------|------|--------------------------|--------------|
| 424S | 0"-4" | 3-5⁄8" | 3⁄4" | 4,100 | 4.8 |
| 426S | 0"-6" | 4-3/4" | 3⁄4" | 5,400 | 7.0 |
| 428S | 0"-8" | 5-5⁄8" | 3⁄4" | 5,900 | 9.8 |
| | | | | | 010 4 4 4000 |

k

CID A-A-429C

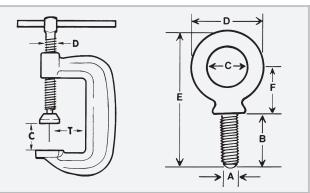


FORGED EYE BOLTS

- Maximum load ratings for eye bolts are drastically reduced when loading at an angle.
- Angular loads should be avoided whenever possible.
- For angular loads of 15° or more, consult ANSI B18.15.
- Certified mercury free.

| Thread Size | Shank | E) | | Overall | Center Eye | Rated | |
|-------------|---|--|--|--|--|--|--|
| | 0 | | | 0 | | | |
| (A) | (B) | (U) | (D) | (E) | (F) | lbs. | lbs. |
| 1⁄4-20 | 1.00 | .69 81 | 1.19 | 2.22 | .69 81 | 500 | .05 |
| | | .81 | | 2.66 | .88 | | |
| 5⁄16-18 | 1.12 | .94 | 1.44 | 2.97 | 1.00 | 900 | .10 |
| 3⁄8-16 | 1.25 | .94 1.06 | 1.69 | 3.09 3.47 | 1.06 1.09 | 1,300 | .16 |
| 7/16-14 | 1.38 | 1.00 | 1 81 | 3.41 | 1.19 | 1 800 | .24 |
| 1/10/14 | 1.00 | | 1.01 | | | 1,000 | .21 |
| 1/2-13 | 1.50 | 1.12 | 2.12 | 4.19 | 1.31 | 2,400 | .35 |
| 0 4 0 4 0 | 4 75 | 1.31 | 0.50 | 4.56 | 1.59 | 0.000 | 47 |
| 9/16-12 | 1./5 | 1.44 | 2.56 | 4.94 | 1.72 | 3,200 | .47 |
| 5⁄8-11 | 1.75 | 1.31 1.44 | 2.56 | 4.56 4.94 | 1.59 1.72 | 4,000 | .67 |
| 3/4-10 | 2.00 | 1.44 | 2.81 | 5.06 | 1.72 | 5 000 | 1.00 |
| 3410 | 2.00 | | 2.01 | | | 3,000 | 1.00 |
| 7/8-9 | 2.25 | 1.69 | 3.19 | 5.75 6.19 | 2.03 | 7,000 | 1.63 |
| | | 1.69 | | 6.44 | 2.22 | | |
| 1-8 | 2.50 | | 3.56 | | | 9,000 | 2.22 |
| 1-1/8-7 | 2.75 | 1.94 2.06 | 4.06 | 7.31 7.75 | 2.59 2.78 | 12,000 | 3.40 |
| | | 2.12 | | 8.00 | 2.84 | | |
| 1-1/4-7 | 3.00 | 2.25 | 4.44 | 8.44 | 3.03 | 15,000 | 4.44 |
| 1-1/2-6 | 3.50 | 2.44 2.56 | 5.19 | 9.22 9.72 | 3.19 3.44 | 21,000 | 7.36 |
| | | 2.75 | | 10.50 | 3.88 | | |
| 1-3⁄4-5 | 3.75 | 3.00 | 6.00 | 11.12 | 4.12 | 28,000 | 11.35 |
| 2-4-1/2 | 4.00 | 3.06 3.44 | 6.88 | 11.53 12.22 | 4.25 4.50 | 38,000 | 16.70 |
| | 5/16-18 3/8-16 7/16-14 1/2-13 9/16-12 5/8-11 3/4-10 7/8-9 1-8 1-1/8-7 1-1/4-7 1-1/2-6 1-3/4-5 | (A) (B) 1/4-20 1.00 5/16-18 1.12 3/8-16 1.25 7/16-14 1.38 1/2-13 1.50 9/16-12 1.75 5/8-11 1.75 3/4-10 2.00 7/8-9 2.25 1-8 2.50 1-1/8-7 2.75 1-1/4-7 3.00 1-1/2-6 3.50 1-3/4-5 3.75 | $ \begin{array}{c cccc} (A) & (B) & (C) \\ \hline 14-20 & 1.00 & .81 \\ \hline 5/16-18 & 1.12 & .94 \\ \hline 38-16 & 1.25 & 1.06 \\ \hline 7/16-14 & 1.38 & 1.00 \\ \hline 7/16-14 & 1.38 & 1.00 \\ \hline 7/16-14 & 1.38 & 1.12 \\ \hline 1/2-13 & 1.50 & 1.25 \\ \hline 9/16-12 & 1.75 & 1.31 \\ \hline 9/16-12 & 1.75 & 1.44 \\ \hline 5/8-11 & 1.75 & 1.44 \\ \hline 5/8-11 & 1.75 & 1.44 \\ \hline 3/4-10 & 2.00 & 1.56 \\ \hline 7/8-9 & 2.25 & 1.69 \\ \hline 1-8 & 2.50 & 1.81 \\ \hline 1-1/8-7 & 2.75 & 2.06 \\ \hline 1-1/4-7 & 3.00 & 2.25 \\ \hline 1-1/2-6 & 3.50 & 2.56 \\ \hline 1-3/4-5 & 3.75 & 3.00 \\ \hline 3.06 \\ \hline \end{array} $ | $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | (A) (B) (C) (D) (E) (F) lbs. $14-20$ 1.00 $\stackrel{69}{.81}$ 1.19 2.22 $\stackrel{69}{.81}$ 500 $5/16-18$ 1.12 $\stackrel{94}{.94}$ 3.09 1.00 900 $38-16$ 1.25 1.06 1.69 3.47 1.09 $1,300$ $7/16-14$ 1.38 1.12 1.81 3.41 1.19 2.44 $7/16-14$ 1.38 1.12 2.12 4.19 1.44 2.400 $9/16-12$ 1.75 1.31 2.56 4.94 1.72 3.200 $58-11$ 1.75 1.44 2.56 4.94 1.72 3.200 $58-11$ 1.75 1.44 2.56 4.94 1.72 3.200 $34-10$ 2.00 1.56 2.81 5.50 1.91 5.000 $7.8-9$ 2.25 1.69 6.44 2.22 7.000 $1-68$ |

ASTM A 489 ANSI B 18.15











AVIATION SNIPS

- Available in straight, left or right models.
- Compound leverage multiplies handle pressure and increases control for intricate cutting.
- Serrated blades for maximum grip of the material being cut.
- Color coded vinyl grips.

| Product ID No. | Cuts | Handle Color | Overall Length | Blade Length | Weight Ibs. | |
|-------------------|----------|-----------------|-------------------|-----------------|----------------|--|
| 303L | Left | Red | 10" | 1-3/8" | .94 | |
| 303R | Right | Green | 10" | 1-3/8" | .94 | |
| 303S | Straight | Yellow | 10" | 1-3/8" | .96 | |

Fed'l Specs.: GGG-S-291F ANSI B107.16



CIRCULAR CUTTING SNIPS

• Duckbill snips are designed for circle and odd shaped radius cutting.

• Plastisol grips for added comfort.

| Product ID No. | Overall Length | Blade Length | Weight Ibs. | |
|-------------------|-------------------|-----------------|----------------|-------------------|
| 307 | 7" | 1-1/2" | .45 | |
| 310 | 10" | 2" | .95 | |
| 312 | 12-3/4" | 2-3/4" | 1.61 | |
| | | | | F 11 0 000 0 001F |

Fed'l Specs.: GGG-S-291F



HEAVY-DUTY SNIPS

Designed for making straight and moderately irregular cuts.

| 1 | • ٢ | Iastisol | grips | s tor | added | comfort. | |
|---|-----|----------|-------|-------|-------|----------|--|
| | | | | | | | |

| Product ID No. | Overall Length | Blade Length | Weight Ibs. | | |
|-------------------|-------------------|-----------------|----------------|------|--|
| 334 | 14" | 3-7/8" | 3.02 | | |
| 336 | 16" | 2-1/2" | 3.63 | | |
| | | | | | |

Fed'l Specs.: GGG-S-291F ANSI B107.16



AVIATION SNIPS—OFFSET

- Available in left or right models.
- Compound leverage multiplies handle pressure and increases control.
- Offset handle keeps hands above working area for cutting ease and comfort.
- Serrated blades for maximum grip of the material being cut.

| Product | | Handle | Overall | Blade | Weight | |
|---------|-------|--------|---------|--------|--------|--|
| ID No. | Cuts | Color | Length | Length | lbs. | |
| 303LS | Left | Red | 10" | 1-1/4" | 1.00 | |
| 303RS | Right | Green | 10" | 1-1/4" | 1.00 | |

Fed'l Specs.: GGG-S-291F ANSI B107.16



STRAIGHT CUTTING SNIPS

• Designed for all straight cutting including inside and outside corners.

Plastisol grips for added comfort.

| Product ID No. | Overall Length | Blade Length | Weight Ibs. | |
|-------------------|-------------------|-----------------|----------------|--|
| 317 | 7" | 1-1/2" | .48 | |
| 320 | 10" | 2" | .93 | |
| 322 | 12-3/4" | 2-3/4" | 1.64 | |

Fed'l Specs.: GGG-S-291F



MINIATURE SNIPS

- Excellent lightweight shears for electronics assembly and repair work.
- Ideal for cutting gasket material, shim stock and tin plate.
- Cuts light piano wire and cold rolled sheet to .025".
- Coil spring increases production and reduces hand fatigue on repetitive cutting procedures.
- · Plastisol grips for added comfort.

| Product ID No. | Overall Length | Blade Length | Weight Ibs. | | |
|-------------------|-------------------|-----------------|----------------|--|--|
| 306 | 10" | 1-1/8" | .29 | | |







MULTI-PURPOSE TOOL

- 15 functions including pliers with wire cutter, cross cut saw, taper grind blade, sheepfoot blade, can & bottle opener, ruler, and screwdriver bits provide versatility.
- Locking handle securely positions and safely locks each blade or implement for safety.
- Stainless steel construction for heavy-duty use and long life.
- Nylon belt pouch for convenient storage.
- Wide handle design for added comfort.

| Product ID No. | Length | Weight Ibs. | |
|-------------------|--------|----------------|--|
| 18575 | 5-5/8" | .56 | |



LOCKBACK KNIFE—WITH LEATHER SHEATH

- 400 grade stainless steel blade.
- Laminated hardwood handle with heavy-duty lock springs.
- Solid one piece brass bolster and liner provide additional strength.

| Product | Closed Position | Weight | |
|---------|-----------------|--------|--|
| ID No. | Overall Length | Ibs. | |
| 18545 | 5" | .57 | |



COMMEMORATIVE LOCKBACK KNIFE

- Commemorative sculptured brass handle.
- Unique artwork features the Proto logo on one side, a selection of Proto tools on the reverse side.

| Product | Closed Position | Weight | |
|---------|-----------------|--------|--|
| ID No. | Overall Length | Ibs. | |
| 18510 | 3" | .16 | |



ELECTRICIAN'S KNIFE

- Spear blade.
- Stripping blade.
- Self-locking combination screwdriver, insulation cutter and wire scraper blade.

| Product | Closed Position | Weight | |
|---------|-----------------|--------|--|
| ID No. | Overall Length | Ibs. | |
| 18535 | 3-3/4" | .32 | |



ELECTRICIAN'S KNIFE

- Spear blade.
- Self-locking combination screwdriver, insulation cutter and wire scraper blade.

| Product | Closed Position | Weight | |
|---------|-----------------|--------|--|
| ID No. | Overall Length | Ibs. | |
| 18500 | 3-3/4" | .24 | |



PRUNING KNIFE

| Product | Closed Position | Weight | |
|---------|-----------------|--------|--|
| ID No. | Overall Length | Ibs. | |
| 18505 | 4-3/4" | .26 | |





- tolerances available in the knife industry today.
- •1/2" serrated, stainless steal blade.
- Liner locking blade.
- · Lightweight 6061 aircraft aluminum handle with an anodized military gray finish.
- Stainless steel bead blasted pocket clip.

| Product | Closed Position | Blade | Blade | |
|---------|-----------------|---------|-----------|--|
| ID No. | Overall Length | Length | Thickness | |
| 18585 | 4-1/2" | 3-3/16" | 1/8" | |

O CION C

TACTICAL FOLDER

- Designed by Fred Carter.
- · Built using the highest quality precision engineered and CNC machined parts.

FROTO 10

- The handle is made of 6061-T6 aircraft aluminum with a 40 Rockwell hardness anodized coated finish.
- Recessed liner spring for a slim profile.
- · Bead blasted stainless steel pocket clip.
- CryoEdge® treated, 440 Stainless Steel Blade.
- · Blade features ball bearing detente for secure blade closure.
- Ambidovtrous thumbetud

| Product | Closed Position | Blade | Blade | |
|---------|-----------------|---------|-----------|--|
| ID No. | Overall Length | Length | Thickness | |
| 18580 | 4-5/16" | 3-1/16" | 3/32" | |



MICRO FOLDER

- · Constructed using all precision laser cut parts with CNC grinding set to the closest tolerances available in the knife industry today.
- Bead blasted, 440 Stainless Steel Blade.
- Liner locking blade.
- Lightweight 6061-T6 aircraft aluminum handle with an anodized military gray finish.
- · Bead blasted stainless steel pocket clip.
- . Thumbstud for one-handed opening.

| Product | Closed Position | Blade | Blade | |
|---------|-----------------|--------|-----------|--|
| ID No. | Overall Length | Length | Thickness | |
| 18590 | 4" | 2-7/8" | 1/8" | |





