Toll Free 1 800 563 1293

POPP®
INSTRUCTION MANUAL
PRG 540
Pneumatic Blind Rivet Tool
PRG 540 AIR-HYDRAULIC POP RIVET TOOL

SECTION I—GENERAL INFORMATION

The PRG 540 is an Air-Hydraulic tool suitable for setting all "POP" Rivets up to and including 1/4" Monel Rivets. The PRG 540 is equipped to handle various Nosepieces (See Table 1, page 8, for specific sizes available). The main castings are made of high tensile aluminum, and replacement parts are interchangeable.

SECTION II—OPERATION

The following description gives a brief summary of the events that follow when the Trigger is depressed.

1. When Trigger PRG 540-101 is squeezed, Valve PRG 540-36 is moved down off its seat, allowing air to flow up Valve Sleeve PRG 540-32.
2. Air flows through supply hole of PRG 540-32 into bottom of Intensifier Chamber PRG 540-29 to force Air Piston PRG 540-27 up.
3. As Air Piston PRG 540-27 moves up, Ram PRG 540-24 forces Hydraulic Fluid into upper cylinder to act on Hydraulic Piston PRG 540-12.
4. As Hydraulic Piston PRG 540-12 moves rearward, Jaws PRG 540-46 grip Mandrel of the Rivet and pull it until Rivet is set.

5. When Trigger PRG 540-101 is released, Valve PRG 540-36 resets and shuts off air supply. Exhaust Tube PRG 540-33 lifts off Valve PRG 540-36 and allows the air to flow up Exhaust Tube PRG 540-33.
6. Jaws PRG 540-46, Jaw Guide PRG 740-11A and Hydraulic Piston PRG 540-12 are returned to normal position by the Return Spring PRG 540-104. This opens Jaws PRG 540-46 and releases the broken mandrel.
7. As Hydraulic Piston PRG 540-12 returns, it forces oil back through Ram Sleeve PRG 540-5 which in turn returns Ram PRG 540-24 and Air Piston PRG 540-27 to their normal position.

SECTION III—CARE AND MAINTENANCE

A. GENERAL

For greater efficiency and prolonged life from this tool, a regular service procedure should be established and maintained. This procedure should be carried out daily, prior to operating the tool.

The following points should be checked.

1. Check connection between Pulling Head Adapter PRG 540-21 and Piston Rod PRG 540-14 for tightness.
2. Clean Jaws PRG 540-46, Jaw Guide PRG 740-11A, and Jaw Pusher PRG-14 by following the procedure outlined as follows:
   a. Remove Nose Housing PRG 540-22 along with Nosepiece.

NOTE

For alternate method of cleaning and lubricating tool, use Jaw Lube PRG 510-130 following directions on container. Disassembly of the tool is NOT required.

e. Reassemble and cycle a few times to check operation before using.
3. Make sure Nose Housing PRG 540-22 and Nosepiece PRN are securely fastened.

B. HYDRAULIC FLUID REPLACEMENT

1. MINOR HYDRAULIC FLUID LOSS

Be sure that tool is making a full and normal stroke to the rear, such that the head of the Hydraulic Piston PRG 540-12 is aligned approximately with the rear of Handle PRG 540-31. Eventually there may be a gradual loss or leakage of enough oil to cause a shortening of the stroke. This shortening will vary with the individual tools due to the number and size of Rivets being set, but will, on the average, occur after more than 50,000 Rivets have been set. When this condition eventually occurs, proceed as follows:

a. Disconnect tool from air supply.
b. Remove Nosepiece PRN and Fill Screw PRG 540-122.
c. Screw a 3/8"-24 Screw (approx. 1 inch long) in place of Nosepiece PRN until Hydraulic Piston PRG 540-12 is moved approx. 1/4" to the rear.

DATA

Weight of tool ........................................ 4½ lbs. (approx.)
Centerline of Nosepiece to top of tool ............ 1 in.
Length including Deflector .......................... 9 in. (approx.)
Length with Deflector collapsed .................. 7½ in. (approx.)
Stroke ................................................................ 11/16 in.
Hydraulic Oil .............................................. PRG540-130
(Consult Table II, Page 8, for commercial equivalent)
Air Pressure .................................................. 85 PSIG (5.8 BAR) Max.
CAUTION
Do not turn this screw in far enough to force Hydraulic Piston to the end of its normal stroke.
d. Add PRG540-130 Hydraulic Fluid through Fill Screw hole a drop at a time, so that Fill Screw hole does not get "plugged" with oil.

NOTE
Care should be taken to allow the air bubbles to rise out of the oil.
e. Insert Fill Screw PRG 540-122 and new Fill Washer PRG 540-102. Tighten securely.
f. Remove 3/8-24 screw. Reconnect air supply and cycle tool several times. Disconnect air supply again.
g. Loosen Fill Screw PRG 540-122 slightly to allow excess oil to be forced out and to return Hydraulic Piston PRG 540-12 to its normal position. Visually inspect tool to see if Jaw Guide PRG 740-11A is seated against inside of Nose Housing PRG 540-22.
h. Replace Nosepiece PRN and tighten securely.

NOTE
In some cases where the tool has been operated for some time without sufficient oil, a foam of oil may flow out when Fill Screw PRG 540-122 is loosened or removed. If practical, allow tool to stand upright for an hour or more to allow this foam to settle and then follow the above steps for filling. If tool must be used immediately, follow the above steps for filling but push the Hydraulic Piston PRG 540-12 back about 1/2 inch with the 3/8-24 screw to replace more of the foamed oil. It is desirable, but not essential that all of the oil foam be eliminated.

2. Major Hydraulic Fluid Loss
If the tool has had major fluid loss, as will occur in repairs to the Restrictor Housing Seal PRG 540-4 or Ram Sleeve PRG 540-5, replace the Hydraulic Fluid as follows:

NOTE
Handle assembly must be assembled including all internal parts as well as the Jaw pulling mechanism, Nose Housing, Fill Screw and Seal, Air Line, Valve and Sleeve Retainer Plate before adding Hydraulic Fluid. DO NOT put Ram into Ram Sleeve at this point.
a. While holding Handle Assembly upside down in a vise, fill Ram Sleeve to within 1/4" of top with Hydraulic Fluid PRG540-130 or equivalent.
b. Thread a 3/8-24 screw (approx. 1" long) in place of the Nosepiece PRN until Hydraulic Piston assembly is moved approximately 5/8" to the rear.
c. Unscrew the 3/8-24 screw slowly and stop turning when oil level in Ram Sleeve stops rising.

NOTE
As the oil has now displaced air in the piston chamber, the oil level will be considerably lower.
d. Repeat steps a. through c. above and observe that all air has been removed from system by noting air bubbles rising in oil.
e. If air is still being expelled, repeat steps b. and c.
f. After all air has been eliminated and the oil level is maintained to within 1/2" from top of sleeve (push Hydraulic Piston Rod to insure its full return to forward position), carefully insert Ram and Air Piston assembly into Ram Sleeve.
g. Push Ram half-way down and while holding in this position, thread in the 3/8-24 screw until resistance is felt.

NOTE
At this point the Ram will be mechanically held in the partially compressed position, facilitating completion of assembly.
h. Replace Intensifier Chamber PRG 540-29 over Air Piston and locate in place on Pins. Holding the two sections together, invert assembly to upright position in vise. Secure in place with eight Intensifier Chamber Screws PRG 540-123 and eight Lock Washers PRG 540-120.
i. Remove excess oil and complete assembly following steps in Section III, para. B1 f-h.

C. AIR LINE REPLACEMENT
If the Air Line PRG 540-39 becomes damaged, repair or replace it by the following procedure:
1. Remove Air Line "O" Clamp PRG 540-45 by cutting or deforming the two ears.
2. Remove Air Line from Air Line Fitting PRG 540-38. Cut Air Line back beyond damaged area or replace with new Air Line.
3. Place new Clamp PRG 540-45 on Air Line.
4. Insert new or repaired line over Air Line Fitting.

NOTE
Dipping Air Line in hot water will facilitate insertion onto Air Line Fitting.
4. Tighten new Clamp PRG 540-45 in place by squeezing with pliers on both ears.

SECTION IV—DISASSEMBLY AND ASSEMBLY

A. GENERAL
In assembling or disassembling this tool, care should be taken that foreign matter does not get into the oil and air seals of the tool. When ordering replacement parts, order by part number shown on page 10.

CAUTION
Shut off air supply to the tool before proceeding with any assembly or disassembly procedures.

IMPORTANT
Lubricate ALL Seals and Seal surfaces before installation.
B. AIR PISTON AND AIR PISTON SEAL

NOTE
To assist in tool disassembly, follow steps in Section III, par. B1, a-c, threading the ¾-24 screw in ½".

1. Disassembly
   a. Unscrew eight Intensifier Chamber Screws PRG 540-123 and remove Lock Washers PRG 540-120.
   b. Remove Intensifier Chamber PRG 540-29. This can be facilitated by tipping Chamber in order for it to slide more easily on the Air Piston Seal.
   c. Remove Air Piston PRG 540-27 and remove Air Piston Retainer PRG 540-19 from Ram PRG 540-24 if it is to be replaced.
   d. Remove Air Piston Block PRG 540-28 from Air Piston.

2. Assembly
   b. Insert Air Piston Retainer PRG 540-119 into groove provided in end of Ram 540-24.
   d. Coat inside of Intensifier Chamber PRG 540-29 with a light film of Lubriplate 130AA or equivalent.
   e. Check to see that Intensifier Chamber Seal PRG 540-118 is in place in Sleeve Retainer Plate PRG 540-7A.
   f. Place Intensifier Chamber PRG 540-29 in place over Air Piston PRG 540-27 and secure with eight Intensifier Chamber Screws PRG 540-123 and Lock Washers PRG 540-120. Check location of two Dowel Pins PRG 540-106 when positioning Intensifier Chamber PRG 540-29.

C. RAM AND RAM SEALS

1. Disassembly
   a. Remove Intensifier Chamber. See Section IV, par. B1, a and b.

   NOTE
   Stand tool upside down to prevent oil from running out of Ram Sleeve when Ram is removed.

2. Assembly
   a. Place Ram Seal Backup Ring PRG 540-25 and Ram Seal (flat side down) PRG 540-26A on tapped end of Ram PRG 540-24 in that order.
   b. Place Ram Seal Retaining Washer PRG 540-113 and Lock Washer PRG 540-120 on Ram PRG 540-24 and secure with Ram Screw PRG 540-100.
   c. Insert Ram and Air Piston assembly into Ram Sleeve PRG 540-5. Care should be taken not to damage Ram Seal.
   d. Replace Intensifier Chamber PRG 540-29 per Section IV, par. B2, d-f.
   e. Recharge tool with hydraulic oil per Section III, par. B1.

D. RAM SLEEVE AND
   RESTRICTOR HOUSING SEAL

1. Disassembly
   a. Remove Ram PRG 540-24 per Section IV, par. C1, a and b. Pour out Hydraulic Fluid from Ram Sleeve.
   b. Remove three Retainer Plate Screws PRG 520-100 and Lock Washers PRG 540-120. Sleeve Retainer Plate PRG 540-7A and Intensifier Chamber Seal PRG 540-118.
   c. Remove Ram Sleeve PRG 540-5 taking care not to scratch or score polished inside surface of Sleeve.

   NOTE
   If these cannot be jarred loose for removal, then remove Hydraulic Piston Rod and Seal Sleeve Assemblies and push them out with a rod through the Fill Screw hole.

2. Assembly
   a. Place Restrictor Housing Seal PRG 540-4 on Restrictor Housing PRG 540-3 and place assembly on squared end of Ram Sleeve PRG 540-5.
   b. Place Restrictor PRG 540-2 in recess of Restrictor Housing.
   c. Open Lubriplate 130AA or equivalent sparingly to outer surface of Restrictor Housing Seal PRG 540-4 and the top outer edge of the Restrictor Housing PRG 540-3. Place Restrictor Seat PRG 540-112 on top of Restrictor Housing and push down firmly.

   NOTE
   The surface tension of the Lubriplate 130AA will aid to keep the Restrictor Seat in place during insertion into the Handle Assembly.
   d. Turn Handle Assembly PRG 540-31 upright and using finger tips as a guide, carefully insert Ram Sleeve assembly upward into Handle until Restrictor Housing is seated in place. When properly installed, the Ram Sleeve PRG 540-5 should protrude no more than .050 of an inch from bottom of Handle.
   e. Install new Sleeve Retainer Plate PRG 540-7A and secure with three Retainer Plate Screws PRG 520-100 and Lock Washers PRG 540-120.

E. AIR VALVE

1. Disassembly
   a. Remove Sleeve Retainer Plate per Section IV, par. D1, a and b. Including removal of Hydraulic Fluid from Ram Sleeve.

   To aid in removal of Valve Plug, hold hand over plug and carefully blow out parts with short air burst from nozzle held at end of air line.
2. Assembly
a. Insert Trigger Return Spring PRG 545-3 into Exhaust Tube PRG 540-33.
b. Insert Valve PRG 540-36 into Valve Sleeve PRG 540-32.
d. Replace Sleeve Retainer Plate per Section IV, par. D2, e.
e. To complete assembly see Section III, par. B2.

F. TRIGGER AND EXHAUST TUBE
1. Disassembly
a. Remove Valve Assembly per Section IV, par. E1.
b. Remove Ram Sleeve per Section IV, par. D1, c, being sure not to disturb Restrictor Housing PRG 540-3 or Restrictor Housing Seal PRG 540-4.
d. Pull up on Trigger and Exhaust Tube assembly to release Exhaust Tube from Valve Sleeve. Tilt Handle rearwards and drop Trigger assembly out through Ram Sleeve hole at bottom of Handle casting.
e. Remove Exhaust Tube Pin PRG 540-106 by filing off one of the peened ends and push pin out.

NOTE
Valve Sleeve is assembled and cemented to Handle PRG 540-31 at the factory and is not removed during normal servicing of the tool.

2. Assembly
a. Connect Toggle PRG 540-34 and Exhaust Tube PRG 540-33 with Exhaust Tube Pin PRG 540-106. Peen over pin on both ends.

NOTE
In peening Pin, DO NOT restrict free movement of parts.
b. Connect Trigger PRG 540-101 and Toggle PRG 540-34 with Toggle Pin PRG 520A-4. Hold assembly so that end of Toggle Pin is resting on flat metal surface and stake in place (both ends).
c. Hold Handle assembly horizontal with Trigger port downward and insert assembly Trigger first (flat face pointing down) through Ram Sleeve hole in bottom of Handle casting. Tilt Handle downward allowing Trigger and Toggle to exit through Trigger port.
d. Holding Trigger, turn Handle upright and insert Exhaust tube into Valve Sleeve. A small rod inserted up through Valve Sleeve and into Exhaust Tube will aid to guide Tube into place.
e. Position Trigger PRG 540-101 in place and drive Trigger Pin PRG 540-107 through.
f. Replace Ram Sleeve PRG 540-5 into Handle, squared end first, making certain Restrictor Housing Seal PRG 540-4 has not been disturbed.
g. Replace Air Valve Assembly per Section IV, par. E2, a-c.
h. Recharge tool with Hydraulic Fluid and complete assembly per Section III, par. B2.

G. JAWS, JAW PUSHER, MANDREL GUIDE AND JAW PUSHER SPRING
1. Disassembly
a. Unscrew Nose Housing PRG 540-22 along with Nosepiece.

2. Assembly
c. Lightly oil outside of Jaw Pusher PRG 14 and drop in place in Jaw Guide. Attach assembly to Pulling Head Adaptor PRG 540-21 with 20 ft. lbs. torque.
d. Screw Nose Housing PRG 540-22 and Nosepiece onto Handle PRG 540-31. Tighten to 60 ft. lbs. torque.

NOTE
When changing to \(\frac{1}{4}"\) "POP" Rivets, Mandrel Guide PRG 540-43 must be removed and Jaw Pusher PRG 740-7A must be used with Jaws PRG 540-44. Be sure the correct Nosepiece PRN is also interchanged.
H. PULLING HEAD ADAPTOR, RETURN SPRING AND HYDRAULIC PISTON ROD WIPER

1. Disassembly
   a. Remove Nose Housing PRG 540-22 along with Nosepiece.
   c. Place Pulling Head Adaptor PRG 540-21 in vise and using a 5/8” (16mm) socket wrench on the rear of Hydraulic Piston Rod PRG 540-14, unscrew assembly.

CAUTION
Pulling Head Adaptor PRG 540-12 is under spring tension and may fly out when connection is broken in step “c” above.

d. Remove Return Spring PRG 540-104 and Return Spring Washer PRG 540-110.

2. Assembly
   b. Insert Return Spring Washer PRG 540-110 and Return Spring PRG 540-104 over Pulling Head Adaptor PRG 540-21.
   c. Reassemble Pulling Head Adaptor PRG 540-21 and Hydraulic Piston Rod PRG-14 by placing Pulling Head Adaptor in vise and tighten with a 5/8” (16mm) socket wrench on Hydraulic Piston Rod PRG 540-14. Push assembly together to compress Return Spring by firm pressure exerted on Handle assembly. Tighten to 20 ft. lbs. torque.
   d. Reassemble Jaw Pulling mechanism per section IV, par. G2, observing torque requirement.
   e. Screw Nose Housing PRG 540-22 and Nosepiece onto Handle PRG 540-31. Tighten to 60 ft. lbs. torque.
   f. Add Hydraulic Fluid as needed per Section III, par. B1.

J. SEAL SLEEVE AND SEALS

1. Disassembly
   a. Remove Hydraulic Piston and Seal Sleeve assemblies per Section IV, par. I, a-c.
   b. Remove Sleeve “O” Ring PRG 540-114 from Seal Sleeve PRG 540-10.
   c. Remove Seal Retaining Ring PRG 540-121, Seal Retaining Washer PRG 540-111, and Rod Seal PRG 520-63 from Seal Sleeve PRG 540-10.

NOTE
To facilitate removal of Rod Seal PRG 520-63, insert threaded portion of Hydraulic Piston Rod PRG 540-14 into front of Seal and pry out. Be careful not to scratch inner portion of Seal Sleeve.

2. Assembly
   a. Assemble Rod Seal PRG 520-63 flat side first, Seal Retaining Washer PRG 540-111, and Seal Retaining Ring PRG 540-121 into Seal Sleeve PRG 540-10.
   b. Place Sleeve “O” Ring PRG 540-114 in groove provided in Seal Sleeve PRG 540-10. Lubricate O-Ring and groove with Lubriplate 130AA before assembly.
   c. To complete assembly see Section IV, par. 1, 2, f-i, observing cautionary note.
SECTION V—TROUBLE SHOOTING

<table>
<thead>
<tr>
<th>TROUBLE</th>
<th>PROBABLE CAUSE</th>
<th>REMEDY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Worn Jaw Teeth</td>
<td>Replace Jaws. See Section IV, par. G.</td>
</tr>
<tr>
<td></td>
<td>Fatigued Jaw Pusher Spring</td>
<td>Replace Jaw Pusher Spring. See Section IV, par. G.</td>
</tr>
<tr>
<td></td>
<td>Loose Jaw Guide or Pulling Head Adaptor</td>
<td>Tighten. See Section IV, par. H2.</td>
</tr>
<tr>
<td>Jaws fail to open</td>
<td>Nosepiece loose</td>
<td>Tighten</td>
</tr>
<tr>
<td></td>
<td>Jaws sticking</td>
<td>Clean and lubricate</td>
</tr>
<tr>
<td></td>
<td>Excess oil</td>
<td>Drain oil. See Section III, par. B.</td>
</tr>
<tr>
<td>Slow pulling action</td>
<td>Air Line or air passage plugged</td>
<td>Clean. Check Air Line. See Section III, par. C.</td>
</tr>
<tr>
<td></td>
<td>Insufficient air pressure</td>
<td>Check air supply.</td>
</tr>
<tr>
<td></td>
<td>Damaged Air Valve</td>
<td>Replace. See Section IV, par. E.</td>
</tr>
<tr>
<td></td>
<td>Dirt in Restrictor Orifice</td>
<td>Clean. See Section IV, par. D.</td>
</tr>
<tr>
<td>Excessive oil leakage:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Noted on rear</td>
<td>Damaged or worn</td>
<td>Replace. See Section IV, par. I.</td>
</tr>
<tr>
<td></td>
<td>Hydraulic Piston Seal</td>
<td></td>
</tr>
<tr>
<td>2. Noted on Return Spring</td>
<td>Damaged or worn Sleeve Seals</td>
<td>Replace. See Section IV, par. J.</td>
</tr>
<tr>
<td>3. Noted around Chamber joint</td>
<td>Damaged or worn Ram Seal</td>
<td>Replace. See Section IV, par. C.</td>
</tr>
<tr>
<td>4. Noted around Trigger</td>
<td>Damaged or worn Ram Seal</td>
<td>Replace. See Section IV, par. C.</td>
</tr>
<tr>
<td></td>
<td>a. Ram Seal</td>
<td>Replace. See Section IV, par. C.</td>
</tr>
<tr>
<td></td>
<td>b. Seal Sleeve “O” Ring</td>
<td>Replace. See Section IV, par. J.</td>
</tr>
<tr>
<td></td>
<td>c. Restrictor Housing Seal</td>
<td>Replace. See Section IV, par. D.</td>
</tr>
</tbody>
</table>

Table I

<table>
<thead>
<tr>
<th>RIVET DIA.</th>
<th>OPEN END</th>
<th>CLOSED END STEEL MANDREL</th>
<th>CLOSED END ALUM. MANDREL</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/32</td>
<td>PRN-314</td>
<td>PRN-424</td>
<td>PRN-434</td>
</tr>
<tr>
<td>1/8 or 7/64</td>
<td>PRN-414</td>
<td>PRN-524</td>
<td>PRN-534</td>
</tr>
<tr>
<td>5/32</td>
<td>PRN-514</td>
<td>PRN-624</td>
<td>PRN-634</td>
</tr>
<tr>
<td>3/16</td>
<td>PRN-614</td>
<td>PRN-811</td>
<td>PRN-822</td>
</tr>
<tr>
<td>* 1/4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*When changing to 1/4" Rivets, PRG 540-43 Mandrel Guide must be removed and PRG 740-7A Jaw Pusher must be used together with PRG 540-44 Jaws.

Table II

COMMERCIAL EQUIVALENTS FOR PRG 540-130 HYDRAULIC FLUID

- MOBIL—DTE26
- EXXON—NUTO H-68
- SHELL—TELLUS 68
- TEXACO—RANDO HD-68
## SECTION VI—LIST OF PARTS

<table>
<thead>
<tr>
<th>PRG 540 NO.</th>
<th>MISC. PARTS</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRG 540-31</td>
<td>HANDLE PARTS</td>
<td></td>
</tr>
<tr>
<td>PRG 540-106</td>
<td>Exhaust tube pin</td>
<td>1</td>
</tr>
<tr>
<td>PRG 540-29</td>
<td>Intensifier chamber</td>
<td>1</td>
</tr>
<tr>
<td>PRG 540-120</td>
<td>Lock washer</td>
<td>7</td>
</tr>
<tr>
<td>PRG 540-123</td>
<td>Intensifier chamber screw</td>
<td>8</td>
</tr>
<tr>
<td>PRG 540-38</td>
<td>Air line fitting</td>
<td>1</td>
</tr>
<tr>
<td>PRG 540-39</td>
<td>Air line</td>
<td>1</td>
</tr>
<tr>
<td>PRG 540-40</td>
<td>Hose female fitting</td>
<td>1</td>
</tr>
<tr>
<td>PRG 540-45</td>
<td>Air line o-clamp</td>
<td>4</td>
</tr>
<tr>
<td>PRG 540-37</td>
<td>Air line strap, split</td>
<td>1</td>
</tr>
<tr>
<td>PRG 540-29</td>
<td>Deflector</td>
<td>1</td>
</tr>
<tr>
<td>PRG 540-102</td>
<td>Fill washer</td>
<td>1</td>
</tr>
<tr>
<td>PRG 540-122</td>
<td>Fill screw</td>
<td>1</td>
</tr>
<tr>
<td>PRG 540-7A</td>
<td>Sleeve retainer plate</td>
<td>1</td>
</tr>
<tr>
<td>PRG 540-120</td>
<td>Retainer plate screw</td>
<td>3</td>
</tr>
<tr>
<td>PRG 540-118</td>
<td>Intensifier chamber seal</td>
<td>1</td>
</tr>
<tr>
<td>PRG 540-47</td>
<td>Mandrel catcher</td>
<td>1</td>
</tr>
</tbody>
</table>

### PRG 520-100

- **AIR PISTON AND SEAL PARTS**
  - Air piston | 1 |
  - Air piston block | 1 |
  - Air piston retainer | 1 |
  - Ram | 1 |
  - Ram screw | 1 |
  - Ram seal retaining washer | 1 |
  - Ram seal backup ring | 1 |
  - Ram seal | 1 |

### PRG 540-5

- Ram sleeve and restrictor parts
  - Ram sleeve | 1 |
  - Restrictor | 1 |
  - Restrictor seat | 1 |
  - Restrictor housing | 1 |
  - Restrictor housing seal | 1 |

### PRG 540-36

- Air valve parts
  - Valve | 1 |
  - Valve plug | 1 |
  - Valve plug seal | 1 |

### PRG 540-101

- Trigger and exhaust tube parts
  - Trigger | 1 |
  - Trigger return spring | 1 |
  - Trigger pin | 1 |
  - Toggle | 1 |
  - Exhaust tube | 1 |
  - Exhaust tube plug | 1 |

### PRG 540-22

- Jaw, jaw pusher and jaw pusher spring parts
  - Nose housing | 1 |
  - Jaws 3/32 thru 3/16" | 1 |
  - Rivet | 1set |
  - Jaw pusher | 1 |
  - Mandrel guide | 1 |
  - Jaw pusher spring | 1 |
  - Jaw guide | 1 |
  - Nosopiece 3/32" open end | 1 |
  - Nosopiece 7/64" and 1/8" open end | 1 |
  - Nosopiece 3/32" open end | 1 |
  - Nosopiece 3/16" open end | 1 |

### PRG 540-44

- Pulling head adaptor, return spring and piston rod wiper
  - Pulling head adaptor | 1 |
  - Return spring | 1 |
  - Return spring washer (front) | 1 |
  - Piston rod wiper | 1 |
  - Retainer washer | 1 |

### PRG 540-14

- Hydraulic piston and seals
  - Hydraulic piston rod | 1 |
  - Piston rod snap ring | 1 |
  - Seal retaining washer | 1 |
  - Seal retaining ring | 1 |
  - Rod seal (rear) | 1 |
  - Piston "O" ring | 1 |

### PRG 540-10

- Seal sleeve and seal parts
  - Seal sleeve | 1 |
  - Snap ring | 1 |
  - Sevew "O" ring | 1 |
  - Rod seal (front) | 1 |
  - Seal retaining washer | 1 |
  - Seal retaining ring | 1 |
  - Oil replacement | 1 |
  - Screw 3/8"-24 | 1 |

### LUBRICATION

- Hydraulic oil USM 300B | 1 |
- Lubriplate 130A | 1 |
- PRG 510-130 jaw lube | 1 |

### PRG 540-44

- For 1/4" dia rivets
  - Jaw 1/4" rivets | 1pr |
  - Jaw pusher | 1 |
  - Nosopiece 1/4" rivets | 1 |
  - Nosopiece 1/4" rivets | 1 |

When using above parts PRG 540-43 Mandrel guide must be removed. See Section IV, G.

*Not furnished with tool. Must be ordered separately.*
See nosepiece chart page 8.
** Must be removed for use with ¼" Dia. Rivets.
† Not furnished with tool.
Must be ordered separately.

PRG 540 AIR-HYDRAULIC "POP" RIVET TOOL