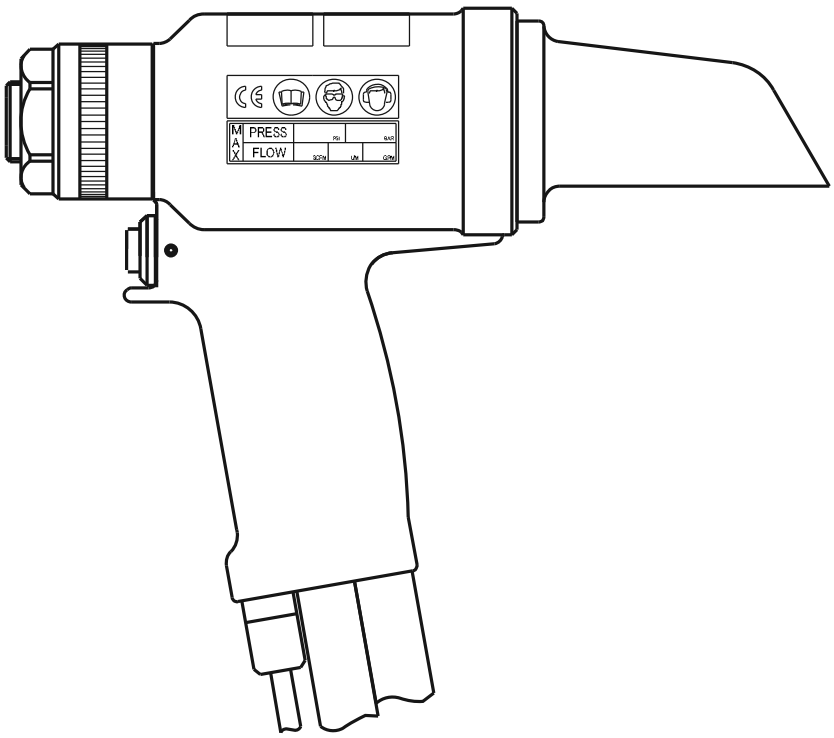
Alcoa Fastening Systems

ALCOA

INSTRUCTION MANUAL

HYDRAULIC INSTALLATION TOOLS

2600
2600-12
2600-16
2600-16-12



Makers of Huck®, Marson®, Recoil®
Brand Fasteners, Tools & Accessories

01-12-2006
HK914

HUCK®

EU Declaration of Conformity

Manufacturer:
Alcoa Fastening Systems, Commercial Products Division, 1 Corporate Drive, Kingston, NY, 12401, USA

Description of Machinery:
Model numbers **2600, 2600-12, 2600-16, and 2600-16-12** fastener installation tools

Relevant provisions complied with:
Council Directive related to Machinery, (89/392/EEC), (91/368/EEC), (93/44/EEC), (93/68/EEC)
Council Directive related to EMC/EMI, (89/336/EEC)

European Representative:
Rob Pattenden, Huck International, Ltd. Unit C Stafford Park 7, Telford Shropshire TF3 3BQ, England, United Kingdom

Authorized Signature/date:
I, the undersigned, do hereby declare that the equipment specified above conforms to the above Directive(s) and Standard(s).

Signature: _____

Full Name: Henk Rosier

Position: Engineering Manager
Installation Systems Division

Place: Kingston, New York, USA

Date: October, 2004

Sound Levels

Models: 2600, 2600-12, 2600-16, and 2600-16-12

SEL = 90.8 dB (A)
peak value = 108.2 dB (C)

For an eight hour work day, installing 400 typical Huck fasteners will result in an equivalent noise level (Leq) of 72.3 dB (A).

To calculate equivalent noise level for other quantities of fasteners in an eight hour period, use the formula:

Leq = SEL + 10 log (n/28,800)

where n = number of fasteners in eight hours.

Vibration Levels

Models: 2600, 2600-12, 2600-16, and 2600-16-12

For an eight hour work day, installing 400 typical Huck fasteners will result in an equivalent weighted RMS vibration level (Aeq) of 4.4m/s^2.

To calculate equivalent vibration level for other quantities of fasteners in an eight hour period, use the formula:

Equivalent Vibration Level, Aeq (m/s^2) = (n/480) x 2.00

where n = number of fasteners in eight hours, and 2.00(m/s^2) = Aeq for 60 seconds.

Test data to support the above information is on file at Alcoa Fastening Systems, Commercial Products Division, Kingston Operations, Kingston, NY, USA. Vibration measurements are frequency weighted in accordance with ISO 8041 (1990).

Contents

SAFETY

This instruction manual must be read with particular attention to the following safety guidelines, by any person servicing or operating this tool.

1. Safety Glossary

 — Product complies with requirements set forth by the relevant European directives.

 — Read manual prior to using equipment.

 — Eye protection required while using this equipment.

 — Hearing protection required while using this equipment.

WARNINGS - Must be understood to avoid severe personal injury.

CAUTIONS - *show conditions that will damage equipment and or structure.*
Notes - are reminders of required procedures.
Bold, Italic type and underlining - emphasizes a specific instruction.

2. Huck equipment must be maintained in a safe working condition at all times and inspected on a regular basis for damage or wear. Any repair should be done by a qualified repairman trained on Huck procedures.

3. Repairman and Operator must read manual prior to using equipment and understand any Warning and Caution stickers/labels supplied with equipment before connecting equipment to any primary power supply. As applicable, each of the sections in this manual have specific safety and other information.

4. See MSDS Specifications before servicing the tool. MSDS Specifications are available from your Huck representative or online at www.huck.com. Click on Installation Systems Division.

5. When repairing or operating Huck installation equipment, always wear approved eye protection. Where applicable, refer to ANSI Z87.1 - 1989

6. Disconnect primary power source before performing maintenance on Huck equipment.

7. If any equipment shows signs of damage, wear, or leakage, do not connect it to the primary power supply.

8. Make sure proper power source is used at all times.

9. Never remove any safety guards or pintail deflectors.

10. Never install a fastener in free air. Personal injury from fastener ejection may occur.

11. When using an offset nose, always clear spent pintail out of nose assembly before installing the next fastener.

12. If there is a pinch point between trigger and work piece, use remote trigger. (Remote triggers are available for all tooling).

13. Do not abuse tool by dropping or using it as a hammer. Never use hydraulic or air lines as a handle. Reasonable care of installation tools by operators is an important factor in maintaining tool efficiency, eliminating downtime, and in preventing an accident which may cause severe personal injury.

14. Never place hands between nose assembly and work piece.

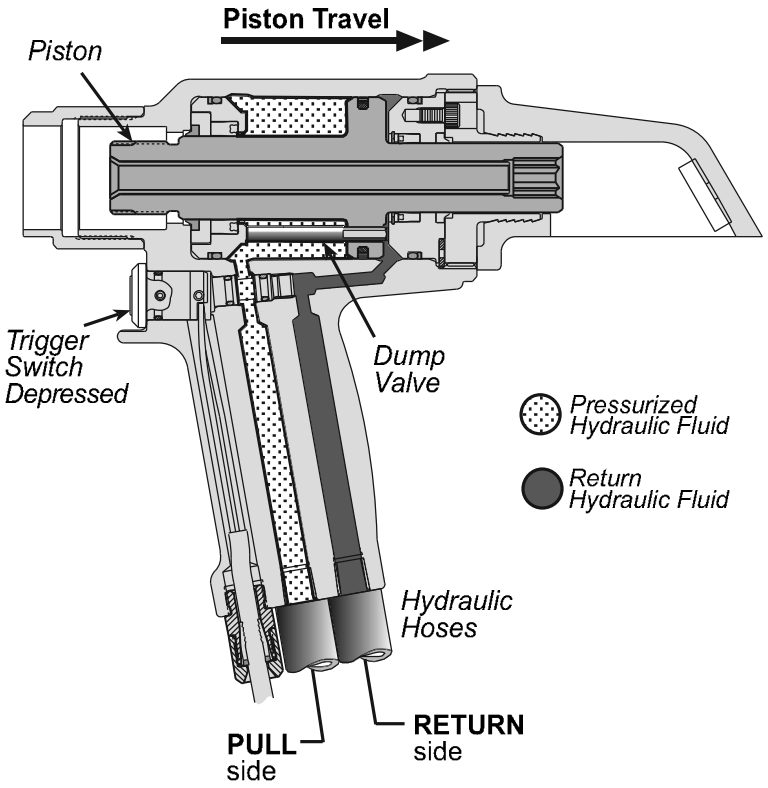
15. Tools with ejector rods should never be cycled with out nose assembly installed.

16. When two-piece lock bolts are being used, always make sure the collar orientation is correct. See fastener data sheet of correct positioning.

Principle of Operation

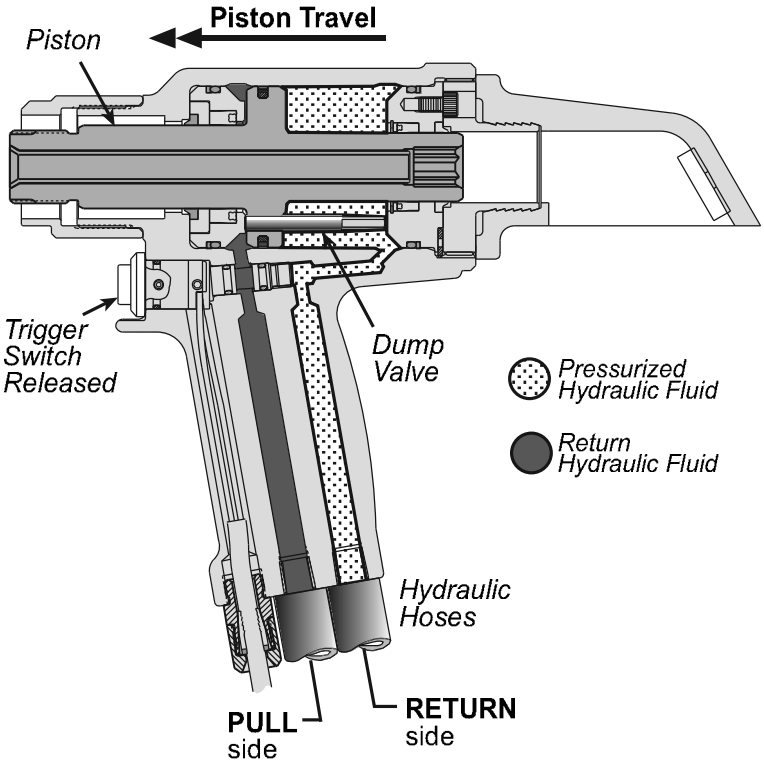
Pull Pressure (Pull Cycle)

When the Trigger Switch is depressed, pressurized hydraulic fluid moves through the PULL hose to the front side of the Piston. The piston and nose assembly collet move rearward, installing the fastener. When the Piston reaches the end of the PULL stroke, it uncovers flats on the back of the Dump Valve. These flats are designed to provide a passage for hydraulic fluid from the PULL side to the RETURN side of the Piston, unloading or "dumping" the pressurized fluid back to the Powerig tank.

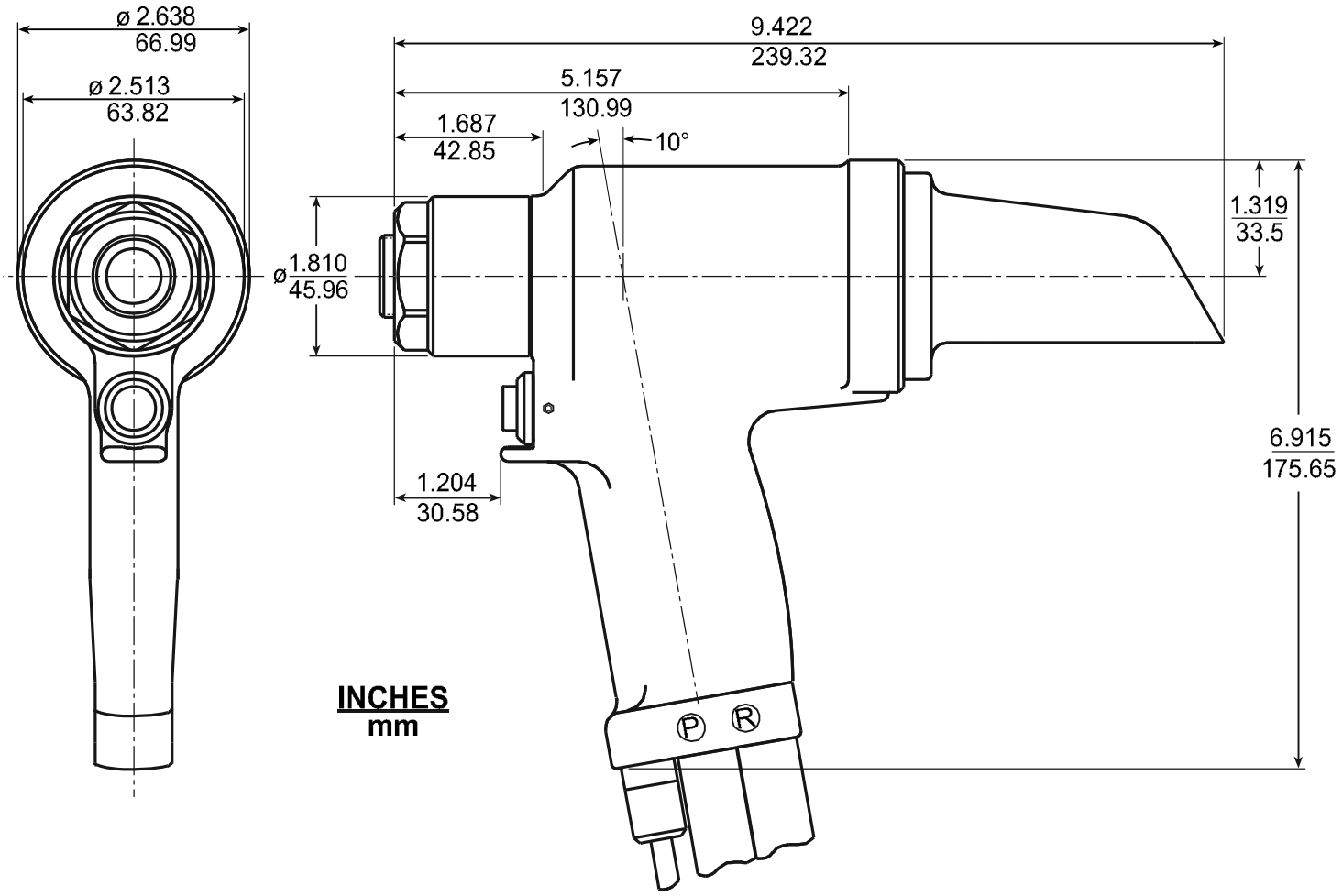


Return Pressure (Return Cycle)

When the trigger is released, pressurized hydraulic fluid is directed to the rear side of the Piston, causing the Piston and collet to move forward, allowing fluid on the PULL side to flow back through the PULL side hose to the Powerig tank, and pushing the nose assembly and tool off of the swaged (installed) fastener. When the Piston reaches the end of the RETURN stroke, pressure is built up, causing the Powerig to shut off, completing the cycle.



SPECIFICATIONS



- **Stroke:** 1.25 in
- **Weight:** 7.3 lbs
- **Pull Pressure**: 5,700 psi
- **Return Pressure**: 2,800 psi
- **Capacity:** 13,840 lbs @ 5,700 psi

PREPARATION FOR USE

1. Use Huck POWERIG® Hydraulic Unit, or equivalent, which has been prepared for operation per applicable ***instruction manual***. Check both PULL and RETURN pressures and, if required, adjust to pressures given in **SPECIFICATIONS** ***section of this manual.***

WARNING - Proper PULL and RETURN pressures are important for proper function of Installation Tools. Severe personal injury or damage to equipment may occur without correct pressures. Huck Pressure Gauge P/N T-10280 (old style) or the new T124833 is now available for checking these pressures using instructions furnished with the gauge and in applicable POWERIG® Hydraulic Unit instruction manuals. See Specifications.

2. First, turn hydraulic unit to OFF, and then disconnect power supply from unit. Connect tool's hoses to unit.

WARNING - Be sure to connect tool hoses to hydraulic unit BEFORE connecting tool electrical switch cord to unit. Hoses and switch must be connected in this order and disconnected in the reverse order to prevent possible severe personal injury.

3. Connect tool's control switch electrical cord to hydraulic unit.

4. Connect hydraulic unit to power supply. Turn unit to ON. Hold tool trigger depressed for 30 seconds; depress trigger a few times to cycle tool and to circulate hydraulic fluid. Observe action of tool and check for leaks. Turn unit to OFF.

5. Select nose assembly for fastener to be installed. Disconnect tool's control switch electrical cord from hydraulic unit; disconnect unit from power supply. Attach nose assembly to tool.

6. Reconnect hydraulic unit to power supply. Reconnect tool's switch control cord to unit. Check operation of nose assembly; install fasteners in test plate of correct thickness with proper size holes. Inspect installed fasteners. If fasteners do not pass inspection, see **TROUBLESHOOTING** section of this manual to locate and correct tool malfunction.

SERVICING THE TOOL

GOOD SERVICE PRACTICES

CAUTION: *Keep dirt and other harmful material out of hydraulic system, which includes tool, hoses, couplers and POWERIG Hydraulic Unit. Parts must be kept away from unclean work surfaces. Dirt in hydraulic system causes valve failure in hydraulic unit.*

Individual parts must be handled carefully and examined for damage or wear. Replace parts where required. Always replace O-rings and Back-up Rings when tool is disassembled for any reason. See applicable Service Kit.

WARNING: Inspect tool for damage or wear before each use. Do not operate if damaged or worn, as severe personal injury may occur

- The efficiency and life of your tool depends on proper maintenance. Using the manual will help give a clear understanding of the tool and basic maintenance procedures. Please read this section completely before proceeding with maintenance and repair. Use proper hand tools in a clean and well-lighted area. Only standard hand tools are required in most cases. Where a special tool is required, the description and part number are given.

- While clamping tool or parts in a vise, and when parts require force, use suitable soft materials to cushion impact. For example, using a half-inch brass drift, wood block and vise with soft jaws greatly reduces possibility of damaging tool. Remove components in a straight line without bending, cocking or undue force. Reassemble tool with the same care.

- Consult **TROUBLESHOOTING** section of this manual if a malfunction occurs and then see appropriate **DISASSEMBLY**; **ASSEMBLY** and/or component illustration sections.

(continued)

SERVICING THE TOOL *(cont.)*

GOOD SERVICE PRACTICES *(continued)*

Sealants, Lubricants, Hydraulic Fluid & Service Kits

- Rub SLIC-TITE TEFLON thread compound, or equivalent, on pipe threads to prevent leaks and for ease of assembly. **CAUTION:** *Do not use TEFLON tape on pipe threads.* Particles of shredded tape cause hydraulic unit valve failure. (SLIC-TITE in stick form, 503237).

- Smear LUBRIPLATE 130AA, or equivalent, on O-rings and mating surfaces to prevent damaging O-rings on rough or sharp surfaces. Also, increases ease of assembly. (LUBRIPLATE in a tube, 502723).

- Each Service Kit contains perishable parts for your specific tool. As foreseeable use may indicate, keep extra kits (O-rings, Back-up Rings, other standard items) and tool parts in stock. When stock is depleted, you can get kit items from any regular retailer of these items. See kit parts list for: O-ring size (AS568- number); material; durometer. For kit parts lists and related information, see General Notes.

PREVENTIVE MAINTENANCE

System Inspection

Operating efficiency of the tool is directly related to the performance of the complete system, including the tool with nose assembly, hydraulic hoses, trigger switch and control cord, and POWERIG Hydraulic Unit. Therefore, an effective preventive maintenance program includes scheduled inspections of the system to detect and correct minor troubles.

- Inspect tool and nose assembly for external damage.

- Verify that hydraulic hose fittings, couplings, and electrical connections are secure.

- Inspect hydraulic hoses for damage and deterioration. Do not use hoses to carry tool. Replace hoses if damaged.

- Observe tool, hoses, and hydraulic unit during operation to detect abnormal heating, leaks, or vibration.

POWERIG Hydraulic Unit Maintenance

Refer to the applicable POWERIG instruction manual.

Tool Maintenance

Whenever disassembled and also at regular intervals (depending on severity and length of use), replace all seals, wipers, and back-up rings in tool. Service Kits, hoses, and extra parts should be kept in stock. Inspect cylinder bore, pistons, and piston rods for scored surfaces and excessive wear or damage. Replace as necessary. **Always replace seals, wipers, and back-up rings whenever the tool is disassembled for any reason.**

Nose Assembly Maintenance

Clean nose assembly often. Dip in mineral spirits or similar solvent to clean jaws and wash away metal chips and debris. At regular intervals, as experience shows, disassemble nose and use a sharp "pick" to remove imbedded particles from grooves of jaws.

DISASSEMBLY

For component identification, refer to full ASSEMBLY DRAWING and PARTS LIST on pages 12 and 13 of this manual.

NOTE:

The following procedure is for complete disassembly of tool. Disassemble **only** components necessary to replace damaged O-rings, Quad-Rings, Back-up Rings, and worn or damaged components. Always use soft jaw vice to avoid damage to tool.

WARNING: Be sure to disconnect tool's electric control trigger system from Hydraulic Unit before disconnecting tool's hoses from unit. Before any maintenance is done, DISCONNECT IN THIS ORDER (RECONNECT IN THE OPPOSITE ORDER) to avoid possible severe personal injury.

1. Disconnect electrical or air connector from Powerig. Uncouple tool hydraulic hoses.

2. Remove nose assembly.

3. Unscrew coupling nipple and coupling body. Drain hydraulic hoses into container. Discard fluid.

4. Push rearward on Piston (1) until remaining hydraulic fluid is drained into container. Discard fluid.

(continued)

SERVICING THE TOOL *(cont.)*

5. ***NOTE:*** *Do not remove hydraulic hoses from tool unless replacing hoses. If necessary to remove hoses, uncover hose fittings by sliding plastic shrouds back.*

6. ***NOTE:*** *Use this step* ***only*** *if the Switch, Wire or Connector needs repair.*
   Remove Retaining Nut and Locking Ferrule from Strain Relief (28). Loosen Set Screw (29) and remove Switch (30). Loosen and remove the two wires from the switch. Remove cord from tool. Disassemble electrical connector (26).

7. Remove Pintail Deflector Assembly (14) by twisting and pulling in the same motion.

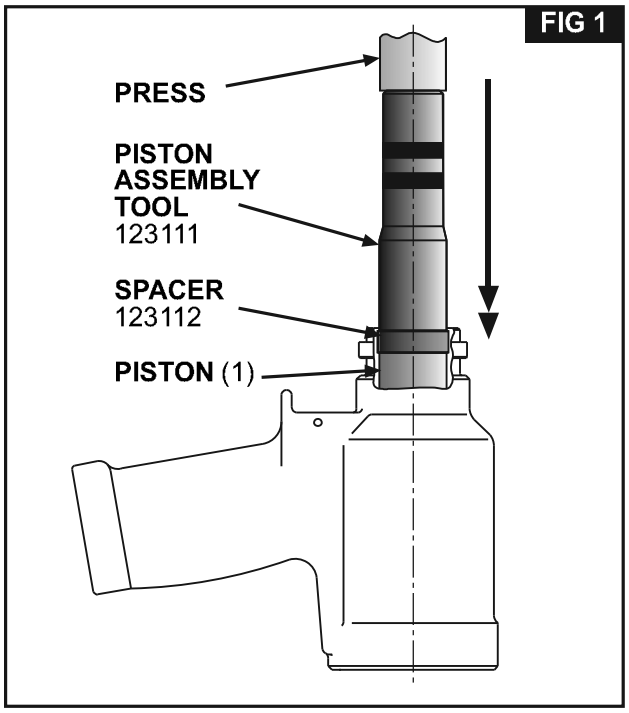
8. Remove Socket Head Screw (12) and Barbed Retainer (13) from Rear Gland (11).

9. Insert two 5/16 pins in opposite holes in rear of Barbed Retainer and unscrew retainer.

10. Slide Spacer 123112 over threaded end of Piston (1). Screw Piston Assembly Tool onto Piston. Press or drive Piston, Front Gland (8) and Rear Gland out of Cylinder. *(Figure 1)* Place hose ends in container to catch oil that is forced out by piston.

11. Use a small diameter dull pointed rod to remove all O-rings and Seals. Clean parts and examine for wear and other defects.

FIG 1

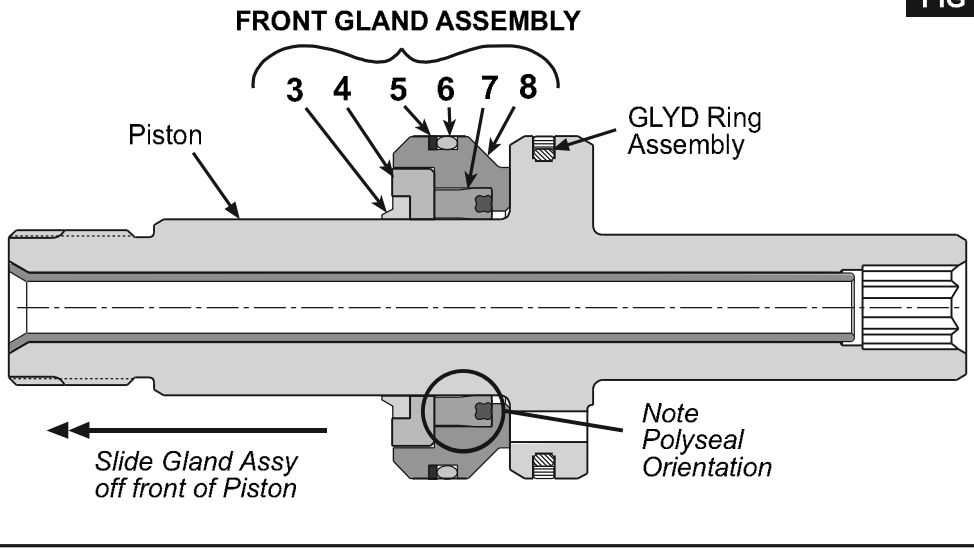


12. Remove Piston Assembly Tool and Spacer *(Figure 1)*.

13. Slide Front Gland (8) off of Piston (1) and remove Front Wiper (3), Front Wiper Housing (4), Back-up Ring (5), O-Ring (6) and Polyseal (7) *(Figure 2)*.

14. Remove GLYD Ring (13) from Piston (4)*(Figure 2)*.

FIG 2



SERVICING THE TOOL *(cont.)*

ASSEMBLY

For component identification, refer to full ASSEMBLY DRAWING and PARTS LIST on pages 12 and 13 of this manual.

NOTE: Clean components with mineral spirits or similar solvent. Inspect for wear/damage and replace as necessary. Replace all seals of disassembled components. Use O-rings, Quad-Rings, and Back-up Rings in **Service Parts Kit 2600KIT.** Smear LUBRIPLATE 130AA or PARKER-O-LUBE on O-rings, Back-up Rings, and mating parts to ease assembly. Assemble tool taking care not to damage O-rings or Back-up Rings.

1. Install GLYD Ring Assembly (9) on Piston (1). [Place the special O-ring in groove; place GLYD Ring on top of it. Roll GLYD Ring's diameter to a diameter smaller than Piston before installing ring. This is to insure that ring stays in place during Piston installation.] *(Figure 3)*

2. Thread Piston Assembly Tool 123111 onto Piston (1). ***Note: Do not install Spacer.*** *(Figure 3)*

3. Push Front Wiper Housing (4) into Front Gland (8). Taking care not to pinch inner ring of Polyseal (7), press it into Front Gland. Lubricate inside diameter of Polyseal and outside diameter of Piston (1). While holding Wiper Housing in place, guide Front Gland/Polyseal onto Piston. **CAUTION: Be sure that seal does not hang up on edge of Piston chamfer.**

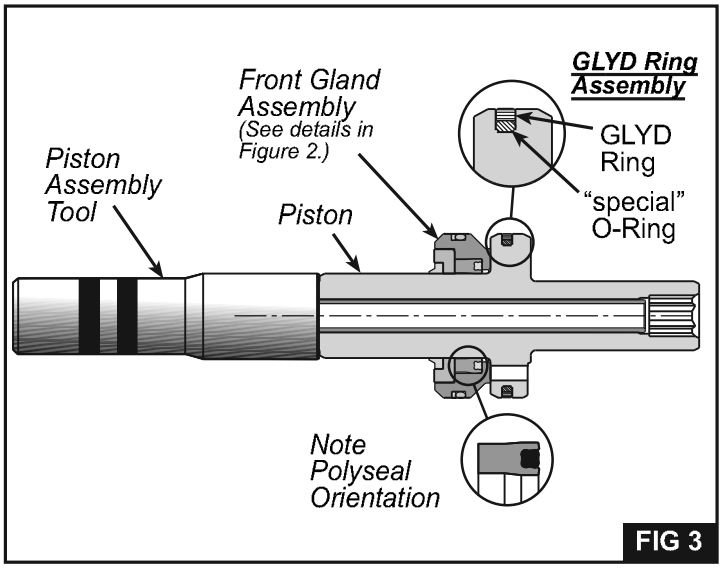


FIG 3

4. Press Front Wiper(3) into groove on Wiper Housing. *(Figure 2)*

5. Install O-Ring (6) and Back-up Ring (5) on Front Gland. *(For Front Gland Assembly detail, see Figure 2.)*

6. Thread 121694-2600 into the back of the Cylinder to prevent damage to GLYD RING Assembly. *(Figure 4)*

7. Using a press, carefully push Piston and Front Gland Assemblies into the back of Cylinder (10). *(Figure 4)*

8. Remove Piston Assembly Tool and GLYD Ring Insertion Tool and .

9. From the rear of Cylinder, install Dump Valve (20) with the ***four flats facing the rear of the tool*** *(Figure 6)*.

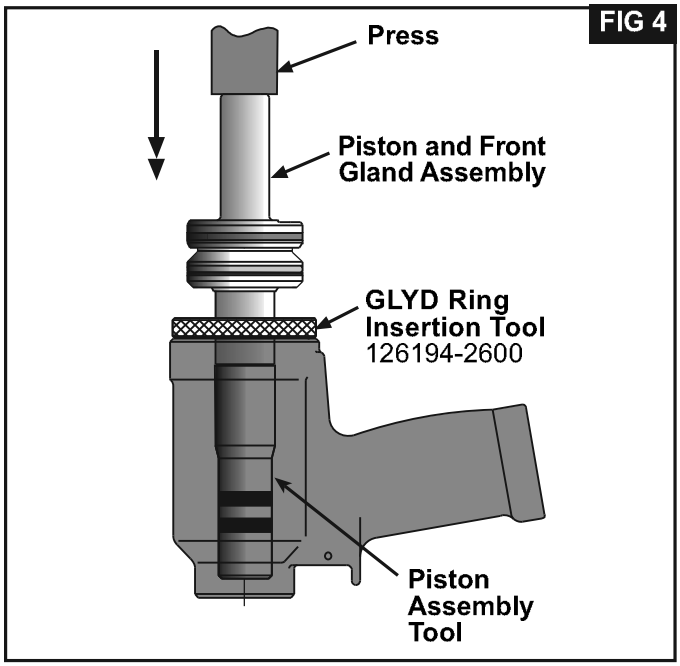


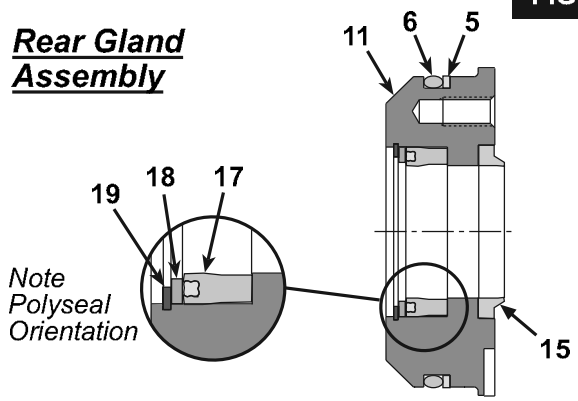
FIG 4

(continued)

SERVICING THE TOOL *(cont.)*

10. Install the following in Rear Gland (11): O-ring (6) and Back-up Ring (5), Polyseal (17), Spacer (18) and Retaining Ring (19). *(Figure 5)*

FIG 5



11. Lubricate inside of Rear Gland Assembly, and press assembled gland into Cylinder.

12. Press Rear Wiper (15) into groove in Rear Gland. *(Figure 5)*

13. Align recess in Rear Gland with groove in Cylinder, and install Locking Disc (16). *(Figure 6)*

14. Screw Barbed Retainer (13) into Cylinder until it bottoms out. Back Retainer out to first visible threaded hole in Rear Gland. Install and tighten Socket Head Screw (12) to 40 +/- 3in/ lbs. *(Figure 6)*

15. **CAUTION: Do not use Teflon tape on pipe threads. See GOOD SERVICE PRACTICES section of this manual.** If hydraulic hoses have been removed, thread hydraulic hoses into handle. Slide shrouds over fittings.

16. If removed, reinstall Electrical Connector: Assemble Control Cord (27) to Male Connector (26). Screw Strain Relief (28) grommet into handle. Push Cord through grommet. Attach Cord to Trigger Switch (30). Press Switch into handle and tighten Set Screw (29) against Switch. Pull excess Cord down through handle and Strain Relief grommet. Tighten grommet. *(Figure 6)*

17. Screw Connector (25) onto PULL pressure hose (from "P" port of tool). Screw Female Connector (24) onto RETURN pressure hose. *(Figure 6)*

18. Before attaching nose assembly and using tool, read entire **PREPARATION FOR USE** section of this manual. Hold 7/16" hex wrench in back of tool when tightening collet. After collet bottoms, loosen collet 1/4 turn or less until ball lock can be felt dropping into groove in Piston rod. ***2600 & 2600-12 ONLY:*** *Use Pintail Tube (31) if pintail will fall through.*

Assembly Drawing

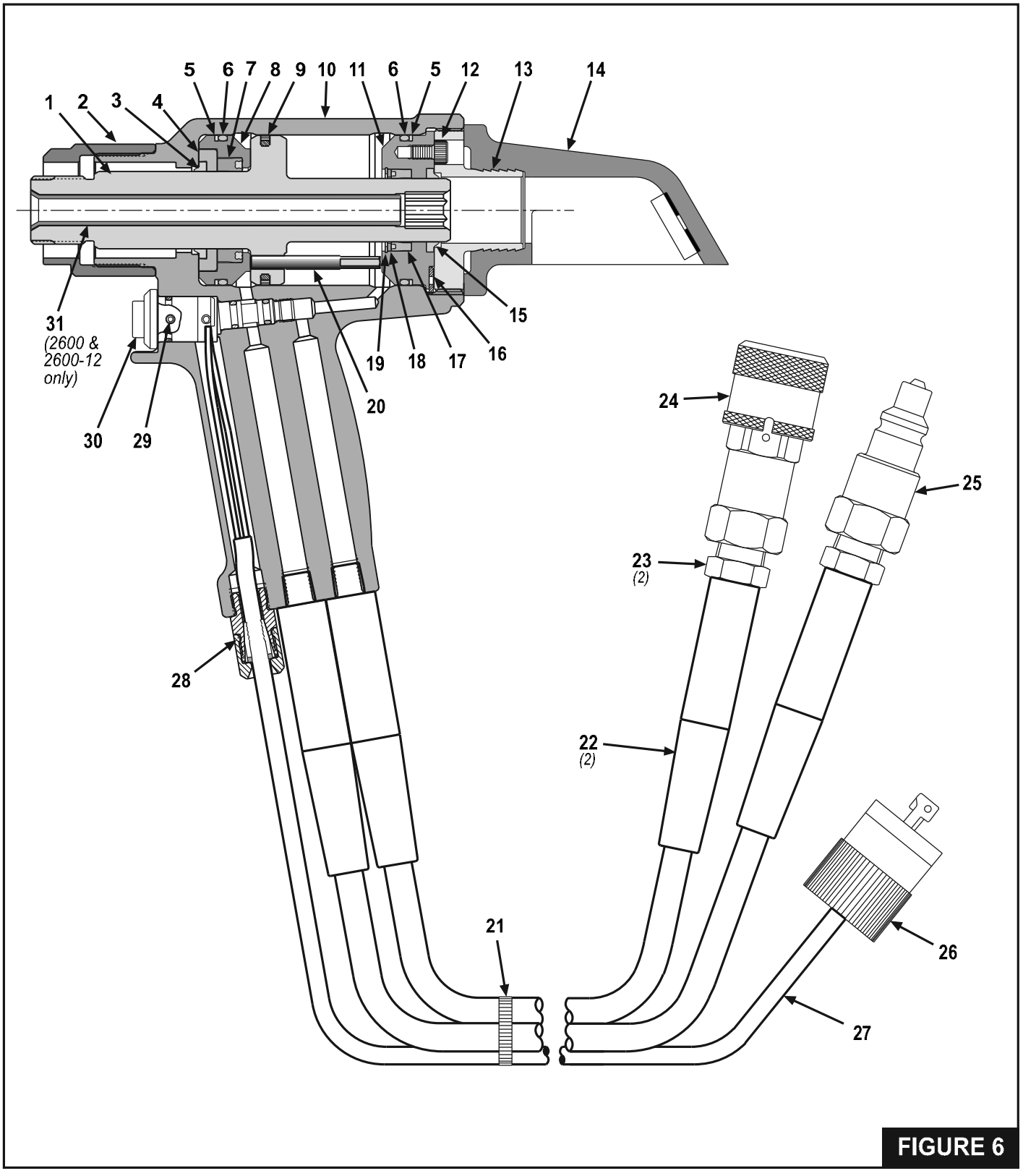


FIGURE 6

PARTS LIST

ITEM	DESCRIPTION	QTY	2600	2600-12	2600-16	2600-16-12
1	Piston	1	122759[1]	122759[1]	125467[2]	125467[2]
2	Retaining Nut	1	122756	122756	122756	122756
3	Front Wiper Seal	1	506064	506064	506064	506064
4	Front Wiper Housing	1	122758	122758	122758	122758
5	Back-up Ring	2	501125	501125	501125	501125
6	O-Ring	2	500831	500831	500831	500831
7	Polyseal	1	506158	506158	506158	506158
8	Front Gland[4]	1	122757	122757	122757	122757
9	GLYD Ring Assembly	1	122769	122769	122769	122769
10	Cylinder Assembly	1	122755	122755	122755	122755
11	Rear Gland[5]	1	122761	122761	122761	122761
12	Socket Head Screw	1	505189	505189	505189	505189
13	Barbed Retainer	1	122765	122765	122765	122765
14	Pintail Deflector Assembly	1	122766	122766	122766	122766
15	Rear Wiper Seal	1	505894	505894	505894	505894
16	Locking Disc	1	122764	122764	122764	122764
17	Polyseal	1	506160	506160	506160	506160
18	Spacer	1	122762	122762	122762	122762
19	Retaining Ring	1	506159	506159	506159	506159
20	Dump Valve	1	122763	122763	122763	122763
21	Cable Tie	[3]	505839	505839	505839	505839
22	Hose Assembly	2	118944-2	118944-1	118944-2	118944-1
23	Reducing Bushing	2	503431	503431	503431	503431
24	Female Connector	1	110439	110439	110439	110439
25	Connector	1	110438	110438	110438	110438
26	Male Connector [6]	1	110686	110686	110686	110686
27	Control Cord [6]	1	123337-1	120341	123337	120341
28	Strain Relief [6]	1	505344	505344	505344	505344
29	Set Screw	1	501731	501731	501731	501731
30	Trigger Switch Assy [6]	1	120361	120361	120361	120361
31	Pintail Tube	1	122771	122771	----------	----------

[1] *Piston **122759** is not sold separately. It may be purchased as **Piston Assembly 122760**, which contains Piston **122759** and GLYD Ring Assembly **122769**.*

[2] *Piston **125467** is not sold separately. It may be purchased as **Piston Assembly 125468**, which contains Piston **125467** and GLYD Ring Assembly **122769**.*

[3] *Cable Tie quantity depends upon length of hoses.*

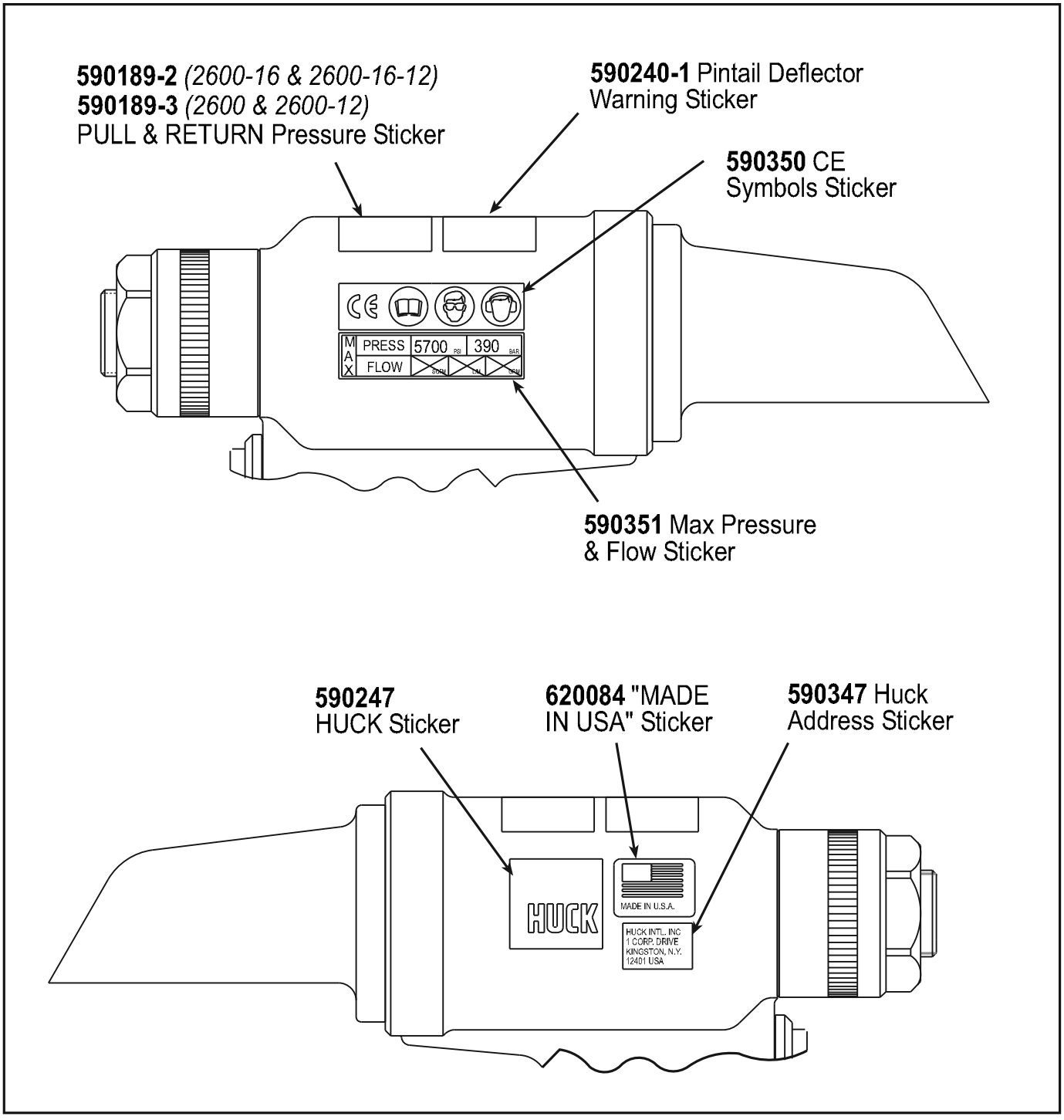
[4] *Front Gland may be purchased as **Front Gland Assembly 122767**, which includes Front Gland (8), O-Ring (6), Back-up Ring (5), Front Wiper Housing (4), and Front Wiper Seal (3).*

[5] *Rear Gland may be purchased as **Rear Gland Assembly 122768**, which includes Rear Gland (11), O-Ring (6), Back-up Ring (5), Polyseal (17), Spacer (18), Retaining Ring (19), and Rear Wiper Seal (15).*

[6] *Trigger Switch Assembly (30), Control Cord (27), Strain Relief (28), and Male Connector (26) are available as:*
Trigger Cord Assembly:
123338: *2600 & 2600-16*
123338-2: *2600-12 & 2600-16-12*

Sticker Locations

The 2600 series tools come labeled with important stickers, which contain safety and pressure settings information. It is necessary that these stickers remain on the tools and are easily read. If stickers become damaged or worn, or if they have been removed from the tool, they must be replaced. The part numbers are shown in the drawing below.



Service Notes

Use this section to record any notes you need regarding your tool(s).

TROUBLESHOOTING

Always check the simplest possible cause of a malfunction first (example: a loose or disconnected trigger line). Then proceed logically and eliminate each possible cause until the defect is found. Where possible, substitute known good parts for suspected defective parts. Use the following steps as an aid in troubleshooting.

1. *Tool fails to operate when trigger is pressed.*
   a. Inoperative POWERIG® Hydraulic Unit. See applicable instruction manual.
   b. Loose electrical connections.
   c. Damaged trigger assembly.
   d. Loose or faulty hose coupling.

2. *Tool operates in reverse.*
   a. Reversed hose connections between hydraulic unit and tool.

3. *Tool leaks hydraulic fluid.*
   a. Defective tool O-rings or loose connections at tool.

4. *Hydraulic couplers leak fluid.*
   a. Damaged or worn O-rings in Coupler Body Coupler

5. *Hydraulic fluid overheats.*
   a. Unit not operating properly. See units manual.
   b. Unit running in reverse (918; 918-5 only). See unit's manual.

6. *Tool operates erratically and fails to install fastener properly.*
   a. Low or erratic hydraulic pressure. Air in system.
   b. Damaged or worn Piston O-ring in tool.
   c. Excessive wear on sliding surfaces of tool parts.

7. *Pull grooves on fastener pintail stripped during PULL stroke.*
   a. Operator not sliding anvil completely onto fastener pintail.
   b. Incorrect fastener grip.
   c. Worn or damaged jaw segments.
   d. Metal particles in jaw grooves.
   e. Excessive sheet gap.

8. *Collar of fastener not completely swaged.*
   a. Improper tool operation. See No. 6.
   b. Scored anvil.

9. *Tool "hangs up" on swaged collar of fastener.*
   a. Improper tool operation. See No. 6.
   b. RETURN pressure too low.
   c. Not enough collar lubricant.
   d. Nose assembly not installed correctly.

10. *Pintail of fastener fails to break.*
    a. Improper tool operation - - see No. 6.
    b. Pull grooves on fastener stripped - - see No. 7.
    c. PULL pressure too low.

11. *Nose will not release broken pintail.*
    a. Nose assembly not installed correctly.

KITS AND ACCESSORIES

Service Kit:

All Models	-	2600KIT

Assembly Tool Kit:

Assembly Tool Kit: All Models	-	123110
Includes: (Figs. 3 & 6))		
Spacer	-	123112
Piston Assembly Tool	-	123111
GLYD Ring Insertion Tool	-	121694-2600

LIMITED WARRANTIES

Tooling Warranty: Huck warrants that tooling and other items (excluding fasteners, and hereinafter referred as "other items") manufactured by Huck shall be free from defects in workmanship and materials for a period of ninety (90) days from the date of original purchase.

Warranty on "non standard or custom manufactured products": With regard to non-standard products or custom manufactured products to customer's specifications, Huck warrants for a period of ninety (90) days from the date of purchase that such products shall meet Buyer's specifications, be free of defects in workmanship and materials. Such warranty shall not be effective with respect to non-standard or custom products manufactured using buyer-supplied molds, material, tooling and fixtures that are not in good condition or repair and suitable for their intended purpose.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. HUCK MAKES NO OTHER WARRANTIES AND EXPRESSLY DISCLAIMS ANY OTHER WARRANTIES, INCLUDING IMPLIED WARRANTIES AS TO MERCHANTABILITY OR AS TO THE FITNESS OF THE TOOLING, OTHER ITEMS, NONSTANDARD OR CUSTOM MANUFACTURED PRODUCTS FOR ANY PARTICULAR PURPOSE AND HUCK SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECTLY OR INDIRECTLY, ARISING FROM THE USE OF SUCH TOOLING, OTHER ITEMS, NONSTANDARD OR CUSTOM MANUFACTURED PRODUCTS OR BREACH OF WARRANTY OR FOR ANY CLAIM FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Huck's sole liability and Buyer's exclusive remedy for any breach of warranty shall be limited, at Huck's option, to replacement or repair, at FOB Huck's plant, of Huck manufactured tooling, other items, nonstandard or custom products found to be defective in specifications, workmanship and materials not otherwise the direct or indirect cause of Buyer supplied molds, material, tooling or fixtures. Buyer shall give Huck written notice of claims for defects within the ninety (90) day warranty period for tooling, other items, nonstandard or custom products described above and Huck shall inspect products for which such claim is made.

Tooling, Part(s) and Other Items not manufactured by Huck.

HUCK MAKES NO WARRANTY WITH RESPECT TO THE TOOLING, PART(S) OR OTHER ITEMS MANUFACTURED BY THIRD PARTIES. HUCK EXPRESSLY DISCLAIMS ANY WARRANTY EXPRESSED OR IMPLIED, AS TO THE CONDITION, DESIGN, OPERATION, MERCHANTABILITY OR FITNESS FOR USE OF ANY TOOL, PART(S), OR OTHER ITEMS THEREOF NOT MANUFACTURED BY HUCK. HUCK SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECTLY OR INDIRECTLY, ARISING FROM THE USE OF SUCH TOOLING, PART(S) OR OTHER ITEMS OR BREACH OF WARRANTY OR FOR ANY CLAIM FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

The only warranties made with respect to such tool, part(s) or other items thereof are those made by the manufacturer thereof and Huck agrees to cooperate with Buyer in enforcing such warranties when such action is necessary.

Huck shall not be liable for any loss or damage resulting from delays or nonfulfillment of orders owing to strikes, fires, accidents, transportation companies or for any reason or reasons beyond the control of the Huck or its suppliers.

Huck Installation Equipment

Huck International, Inc. reserves the right to make changes in specifications and design and to discontinue models without notice.

Huck Installation Equipment should be serviced by trained service technicians only.

Always give the Serial Number of the equipment when corresponding or ordering service parts.

Complete repair facilities are maintained by Huck International, Inc. Please contact one of the offices listed below.

Eastern
One Corporate Drive Kingston, New York 12401-0250
Telephone (845) 331-7300 FAX (845) 334-7333

Canada
6150 Kennedy Road Unit 10, Mississauga, Ontario, L5T2J4, Canada.
Telephone (905) 564-4825 FAX (905) 564-1963

Outside USA and Canada
Contact your nearest Huck International Office, see back cover.

In addition to the above repair facilities, there are Authorized Tool Service Centers (ATSC's) located throughout the United States. These service centers offer repair services, spare parts, Service Parts Kits, Service Tools Kits and Nose Assemblies. Please contact your Huck Representative or the nearest Huck office listed on the back cover for the ATSC in your area.