

2057 Series

Pneudraulic Installation Tool Instruction Manual



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EC Declaration of Conformity

Manufacturer:

Huck International, LLC, Industrial Products Group,
1 Corporate Drive, Kingston, NY, 12401, USA

Description of Machinery:

Models 24#, 25#, 2047, and 2057 pneudraulic installation tools and specials based on their design (e.g. PR####).

Relevant provisions complied with:

- Council Directive related to Machinery (2006/42/EC)
- British Standard related to hand held, non-electric power tools (ISO 11148-1:2011)

Representatives:

EU: Lutz Baumann
Hildesheim Operations
Fairchild Fasteners Europe - VSD GmbH
Steven 3
31135 Hildesheim
Germany

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: Nicholas Gougoutris

Position: Engineering Manager

Location: Huck International, LLC d/b/a
Howmet Fastening Systems
Kingston, New York, USA

Date: 2/9/23 February 9, 2023



UKCA Declaration of Conformity

Manufacturer:

Huck International, LLC, Industrial Products Group,
1 Corporate Drive, Kingston, NY, 12401, USA

Description of Machinery:

Models 24#, 25#, 2047, and 2057 pneudraulic installation tools and specials based on their design (e.g. PR####).

Relevant provisions complied with:

- British Standard related to hand held, non-electric power tools (ISO 11148-1:2011)
- Supply of Machinery (Safety) Regulations 2008

Representatives:

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Stafford Park 7
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England TF3 3BQ, 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).

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Kingston, New York, USA

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Declared dual number noise emission values in accordance with ISO 4871

A weighted sound power level, LWA: **91** dB (reference 1 pW) Uncertainty, KWA: 3 dB

A weighted emission sound pressure level at the work station, LpA: **80** dB (reference 20 µPa) Uncertainty, KpA: 3 dB

C-weighted peak emission sound pressure level, LpC, peak: **115** dB (reference 20 µPa) Uncertainty, KpC: 3 dB

Values determined according to noise test code ISO 15744, using as basic standards ISO 3744 and ISO 11203. The sum of a measured noise emission value and its associated uncertainty represents an upper boundary of the range of values which is likely to occur in measurements.

Declared vibration emission values in accordance with EN 12096

Measured Vibrations emission value, a:	.63 m/s ²	Uncertainty, K:	.72 m/s ²
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Values measured and determined according to ISO 28662-1, ISO 5349-2, and EN 1033

Test data to support the above information is on file at: Howmet Fastening Systems, Kingston Operations, Kingston, NY, USA.



Safety Instructions

I. GENERAL SAFETY RULES:

1. A half hour long hands-on training session with qualified personnel is recommended before using Howmet equipment.
2. Howmet equipment must be maintained in a safe working condition at all times. Tools and hoses should be inspected at the beginning of each shift/day for damage or wear. Any repair should be done by a qualified repairman trained on Howmet procedures.
3. For multiple hazards, read and understand the safety instructions before installing, operating, repairing, maintaining, changing accessories on, or working near the assembly power tool. Failure to do so can result in serious bodily injury.
4. Only qualified and trained operators should install, adjust or use the assembly power tool.
5. Do not modify this assembly power tool. This can reduce effectiveness of safety measures and increase operator risk.
6. Do not discard safety instructions; give to operator.
7. Do not use assembly power tool if it is damaged.
8. Tools shall be inspected periodically to verify all ratings and markings required, and listed in the manual, are legibly marked on the tool. The employer/operator shall contact the manufacturer to obtain replacement marking labels when necessary. Refer to assembly drawing and parts list for replacement.
9. Tool is only to be used as stated in this manual. Any other use is prohibited.
10. Read MSDS Specifications before servicing the tool. MSDS specifications are available from the product manufacturer or your Howmet representative.
11. Only genuine Howmet parts shall be used for replacements or spares. Use of any other parts can result in tooling damage or personal injury.
12. Never remove any safety guards or pintail deflectors.
13. Never install a fastener in free air. Personal injury from fastener ejecting may occur.
14. Where applicable, always clear spent pintail out of nose assembly before installing the next fastener.
15. Check clearance between trigger and work piece to ensure there is no pinch point when tool is activated. Remote triggers are available for hydraulic tooling if pinch point is unavoidable.
16. Do not abuse tool by dropping or using it as a hammer. Never use hydraulic or air lines as a handle or to bend or pry the tool. Reasonable care of installation tools by operators is an important factor in maintaining tool efficiency, eliminating downtime, and preventing an accident which may cause severe personal injury.
17. Never place hands between nose assembly and work piece. Keep hands clear from front of tool.
18. Tools with ejector rods should never be cycled with out nose assembly installed.
19. When two piece lock bolts are being used always make sure the collar orientation is correct. See fastener data sheet for correct positioning.

II. PROJECTILE HAZARDS:

1. Risk of whipping compressed air hose if tool is pneudraulic or pneumatic.
2. Disconnect the assembly power tool from energy source when changing inserted tools or accessories.
3. Be aware that failure of the workpiece, accessories, or the inserted tool itself can generate high velocity projectiles.
4. Always wear impact resistant eye protection during tool operation. The grade of protection required should be assessed for each use.
5. The risk of others should also be assessed at this time.
6. Ensure that the workpiece is securely fixed.
7. Check that the means of protection from ejection of fastener or pintail is in place and operative.
8. There is possibility of forcible ejection of pintails or spent mandrels from front of tool.

III. OPERATING HAZARDS:

1. Use of tool can expose the operator's hands to hazards including: crushing, impacts, cuts, abrasions and heat. Wear suitable gloves to protect hands.
2. Operators and maintenance personnel shall be physically able to handle the bulk, weight and power of the tool.
3. Hold the tool correctly and be ready to counteract normal or sudden movements with both hands available.
4. Maintain a balanced body position and secure footing.
5. Release trigger or stop start device in case of interruption of energy supply.
6. Use only fluids and lubricants recommended by the manufacturer.
7. Avoid unsuitable postures, as it is likely for these not to allow counteracting of normal or unexpected tool movement.
8. If the assembly power tool is fixed to a suspension device, make sure that fixation is secure.
9. Beware of the risk of crushing or pinching if nose equipment is not fitted.

IV. REPETITIVE MOTION HAZARDS:

1. When using assembly power tool, the operator can experience discomfort in the hands, arms, shoulders, neck or other parts of the body.
2. The operator should adopt a comfortable posture, maintain a secure footing and avoid awkward or off balanced postures.
3. The operator should change posture during extended tasks to help avoid discomfort and fatigue.
4. If the operator experiences symptoms such as persistent or recurring discomfort, pain, throbbing, aching, tingling, numbness, burning sensations or stiffness, these warnings should not be ignored. The operator should tell the employer and consult a qualified health professional.



Safety Instructions

V. ACCESSORIES HAZARDS:

1. Disconnect tool from energy supply before changing inserted tool or accessory.
2. Use only sizes and types of accessories and consumables that are recommended. Do not use other types or sizes of accessories or consumables.

VI. WORKPLACE HAZARDS:

1. Be aware of slippery surfaces caused by use of the tool and of trip hazards caused by the air line or hydraulic hose.
2. Proceed with caution while in unfamiliar surroundings; there could be hidden hazards such as electricity or other utility lines.
3. The assembly power tool is not intended for use in potentially explosive environments.
4. Tool is not insulated against contact with electrical power.
5. Ensure no electrical cables, gas pipes, etc., can cause a hazard if damaged by use of the tool.

VII. NOISE HAZARDS:

1. Exposure to high noise levels can cause permanent, disabling hearing loss and other problems such as tinnitus, therefore risk assessment and the implementation of proper controls is essential.
2. Appropriate controls to reduce the risk may include actions such as damping materials to prevent workpiece from 'ringing'.
3. Use hearing protection in accordance with employer's instructions and as required by occupational health and safety regulations.
4. Operate and maintain tool as recommended in the instruction handbook to prevent an unnecessary increase in the noise level.

5. Select, maintain and replace the consumable / inserted tool as recommended to prevent an unnecessary increase in noise.
6. If the power tool has a silencer, always ensure it is in place and in good working order when the tool is being operated.

VIII. VIBRATION HAZARDS:

1. Exposure to vibration can cause disabling damage to the nerves and blood supply to the hands and arms.
2. Wear warm clothing when working in cold conditions and keep hands warm and dry.
3. If numbness, tingling, pain or whitening of the skin in the fingers or hands, stop using the tool, tell your employer and consult a physician.
4. Support the weight of the tool in a stand, tensioner or balancer in order to have a lighter grip on the tool.

IX. HYDRAULIC TOOL SAFETY INSTRUCTIONS:

1. Air under pressure can cause severe injury.
2. Always shut off air supply, drain hose of air pressure and disconnect tool from air supply when not in use, before changing accessories or when making repairs.
3. Never direct air at yourself or anyone else.
4. Whipping hoses can cause severe injury, always check for damaged or loose hoses and fittings.
5. Cold air should be directed away from hands.
6. Whenever universal twist couplings (claw couplings) are used, lock pins shall be installed and whip-check safety cables shall be used to safeguard against possible hose to hose or hose to tool connection failure.
7. Do not exceed maximum air pressure stated on tool.
8. Never carry an air tool by the hose.



WARNINGS: Do not exceed maximum pull or return settings on tool.
Be sure all hose connections are tight. All tool hoses must be connected.

Where the following trade names are used in this manual, please note:

DEXRON is a registered trademark of General Motors Corporation.
GLYD Ring is a registered trademark of Trelleborg Sealing Solutions Germany GmbH
Loctite is a registered trademark of Henkel IP & Holding GmbH
LUBRIPLATE is a registered trademark of Fiske Brothers Refining Co.
MERCON is a registered trademark of Ford Motor Corp.
MOLYKOTE is a registered trademark of Dow Corning Corporation
Never-Seez is a registered trademark of Bostik, Inc.

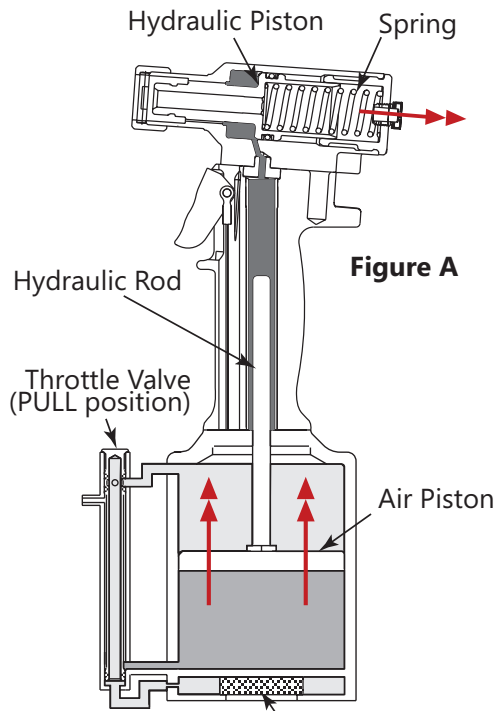
Quintolubric is a registered trademark of Quaker Chemical Corp.
Slic-tite is a registered trademark of LA-CO Industries, Inc.
Spirolax is a registered trademark of Smalley Steel Ring Company
Teflon is a registered trademark of Chemours Company FC.
Threadmate is a registered trademark of Parker Intangibles LLC.
TRUARC is a trademark of TRUARC Co. LLC.
Vibra-Tite is a registered trademark of ND Industries, Inc. USA.

Description

The 2057 pneudraulic installation tool is a lightweight, high speed pull-in tool designed for use with LGP-style Pull-In nose assemblies. The air inlet is equipped with 1/4-18 female pipe threads to accept user air hose or quick connect fitting. A nose assembly is required for each fastener type and size. Nose assemblies must be ordered separately.



Principle of Operation

**Figure A**

When the trigger is pressed, the throttle valve moves downward to the PULL position, and pressurized air is directed to the bottom of the air piston, causing it to move upward (Figure A). The air above the air piston is exhausted and directed through the center of the throttle valve and out the bottom of the tool.

As the hydraulic rod moves upward, a column of fluid is forced into head, which moves the pull piston backward. The attached nose assembly moves with the pull piston to start fastener installation.

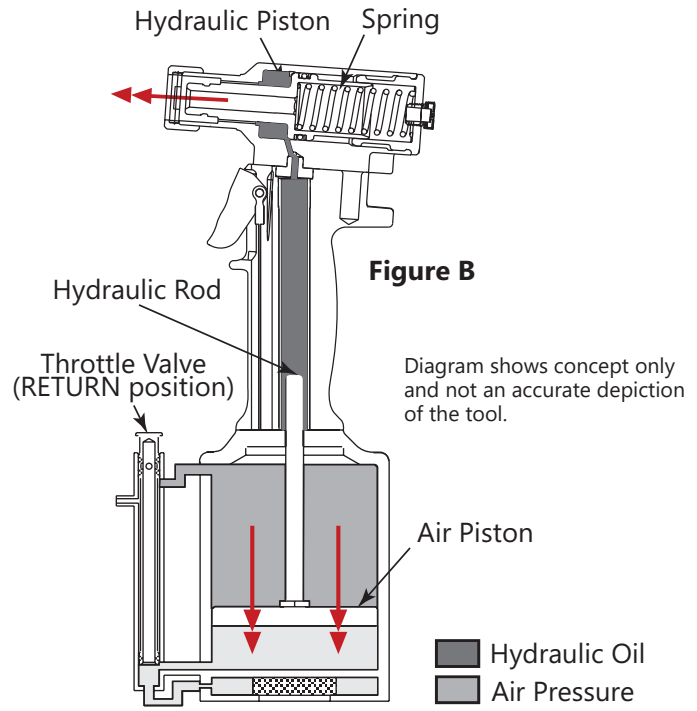
**Figure B**

Diagram shows concept only and not an accurate depiction of the tool.

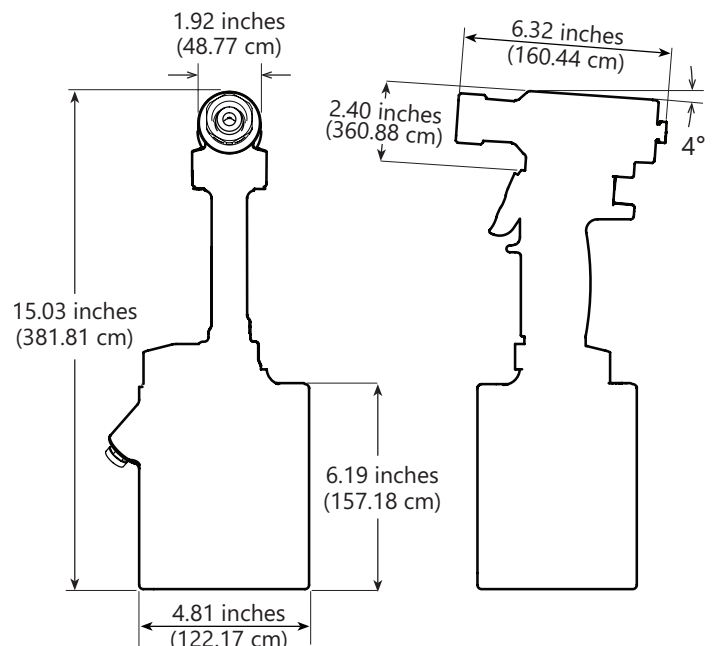
When fastener installation is completed, the trigger is released. Air pressure, with the assistance of a spring, sends the throttle valve to the up (RETURN) position. Pressurized air is re-directed to the top of the air piston (Figure B), causing the air piston and hydraulic rod to move downward.

The air from below the piston is exhausted through the bottom of the tool, and springs force the pull piston to return to its home position. The damper valve (Figure A) impedes oil flow at pinbreak to prevent "tool kick."

Specifications

Hydraulic fluid: Hydraulic fluid shall meet DEXRON III, DEXRON VI, MERCON, Allison C-4 or equivalent ATF specifications. Fire resistant fluid may be used if it's an ester based fluid such as Quintolubric HFD or equivalent. Water based fluid shall NOT be used as serious damage to equipment will occur.

DESCRIPTION	DETAIL	
STROKE	.875 inches	2.22cm
MAX INLET PRESSURE	100 psi	6.9 bar
PULL CAPACITY	4839 kbs 21.8 kN	@ 90 PSI @ 6.2 bar
WEIGHT (WITHOUT NOSE ASSEMBLY)	9.3 LBS	4.22 kg
CENTERLINE (TO TOP OF HEAD)	.960"	2.44 cm
MAX OPERATING TEMP	125 ° F	51.7 ° C





Preparation for Use



WARNINGS: Only use recommended pin/collar combinations with recommended pressure settings. Otherwise pulling a pin without a collar or workpiece in place (and collar/chamfer toward the tool where applicable), unintentional forcible ejection may occur, possibly resulting in severe personal injury.

If deflectors are removed or damaged, broken pintails may eject forcibly from rear of tool, and severe personal injury may result. Be sure there is adequate clearance for tool and operator's hands before proceeding. Severe personal injury may result if not enough clearance is provided.



CAUTION: Do not use TEFLON® tape on pipe threads. Tape can shred and break free into fluid lines, resulting in malfunctions.

Threadmate® is available in a 4oz. tube from Huck (P/N 508517).

The tool is shipped with a plug in the air inlet connector. The connector has 1/4"-18 female pipe threads to accept an air hose or quick-connect fitting. Huck recommends quick-disconnect fittings and a 1/4" inside diameter air hose. The air supply should have a filter-regulator-lubricator unit and access to a 100-psi (6.9 bar) air supply capable of a flow rate of 11.5 scfm (500 l/m).

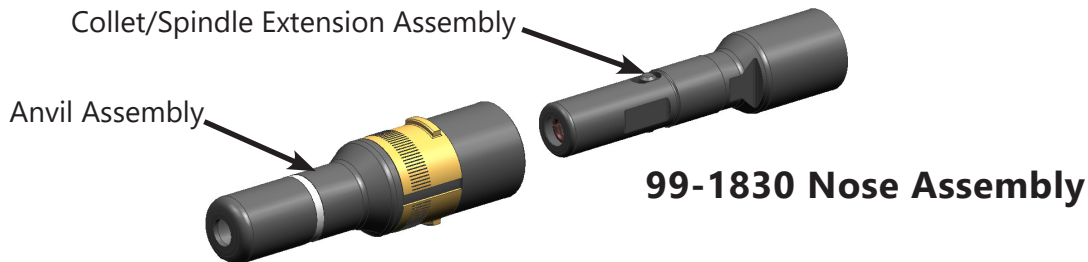
NOTE: Air quick-disconnect fittings and air hoses are not available from Huck International, Inc. Huck includes an air hose (P/N 115436) to facilitate immediate tool use.

1. Remove the plastic plug from air inlet connector and add a few drops of an approved hydraulic fluid.
2. Screw the quick-disconnect fitting into the air inlet connector.
3. Set the air pressure on the regulator and connect the air hose to the tool. Do NOT exceed 100 psi (6.9 bar). Set the Required Pressure per the formula below:

$$\left(\frac{\text{Minimum Pneudraulic} \times .85}{\text{Tool Capacity}} \right) \times 90 \text{ psi}$$

4. Press and release the trigger a few times to cycle the tool.
5. Disconnect the air hose from the tool.
6. The stake hole in the head must be aligned with the stake hole in the piston rod. If holes are not aligned, a malfunction could occur. See **FILL AND BLEED** for instructions on how to align stake holes.
7. Remove the retaining nut and stop.
8. Screw the Collet/Spindle Extension onto the spindle and tighten with a wrench.
9. Slide the anvil over the collet assembly and into the counterbore.
10. Slide the stop and retaining nut over the anvil, and screw the nut onto the head.
11. Connect the air hose to the tool and ensure the pintail moves freely in the jaws.

Nose Assembly Installation and Removal



ATTACHING INSTALLATION NOSE ASSEMBLY:

1. Unscrew tool retaining nut.
2. Screw collet/spindle extension assembly of nose assembly onto tool piston, until wrench tight.
3. Slide anvil assembly over collet/spindle extension and into tool nose adapter.
4. Slide rotatable stop over anvil assembly and align anvil tabs with rotatable stop slot.
5. Thread retaining nut onto tool nose adapter and wrench tight.

REMOVING INSTALLATION NOSE ASSEMBLY:

1. Loosen retaining nut with a wrench. Unthread retaining nut and slide it off the anvil.
2. Remove the anvil from collet/spindle.
3. Unthread collet/spindle extension.



Operating Instructions

Read all of these instructions in order to ensure the safe operation of this equipment.



WARNINGS: Wear approved eye and hearing protection. Ensure adequate clearance for operator's hands before installing fasteners. Be sure that the pintail deflector is properly attached to the tool and directed away from all personnel.



CAUTION: Remove excess gap from between the sheets to permit proper fastener installation and prevent jaw damage. ALL jaw teeth must engage the pintail to avoid damaging the teeth.

1. Place a pin in the workpiece and place the collar over the pin.
2. Hold the pin in the hole and push the nose assembly onto the pin protruding through the structure until the nose anvil touches the sheet.
3. Press and hold the trigger until the end of the stroke is met.
4. Release the trigger; the tool will perform its RETURN stroke. The tool will be released from the fastener and ready for the next installation cycle.

Maintenance



CAUTIONS: Separated parts must be kept away from dirty work surfaces.

Always replace seals, wipers, and back-up rings when tool is disassembled for any reason.

Do not use TEFLON® tape on pipe threads. Pipe threads may cause tape to shred resulting in tool malfunction. (Threadmate™ is available from Huck in a 4oz. tube as part number 508517.)

NOTES: Recycle steel, aluminum, and plastic parts in accordance with local lawful and safe practices.

5. Service Parts Kit 2047KIT or 2057KIT includes consumable parts and should be available at all times. Other components, as experience dictates, should also be available.

GENERAL

1. The efficiency and life of any tool depends upon proper maintenance. Regular inspection and correction of minor problems will keep tool operating efficiently and prevent downtime. The tool should be serviced by personnel who are thoroughly familiar with how it operates.
2. A clean, well lit area should be available for servicing the tool. Special care must be taken to prevent contamination of pneumatic system.
3. Proper hand tools, both standard and special, must be available.
4. All parts must be handled carefully and examined for damage or wear. Always replace Seals, when tool is disassembled for any reason. Components should be disassembled and assembled in a straight line without bending, cocking, or undue force. Disassembly and assembly procedures outlined in this manual should be followed.

DAILY

1. If a Filter-Regulator-Lubricator unit is not being used, uncouple air disconnects and put a few drops of Automatic Transmission Fluid or light oil into the air inlet of the tool. If the tool is in continuous use, put a few drops of oil in every two to three hours.
2. Bleed the air line to clear it of accumulated dirt or water before connecting air hose to the tool.
3. Check all hoses and couplings for damage or air leaks, tighten or replace if necessary.
4. Check the tool for damage or air leaks, tighten or replace if necessary.
5. Check the nose assembly for tightness or damage, tighten or replace if necessary.

WEEKLY

1. Disassemble and clean nose assemblies and reassemble.
2. Check the tool and all connecting parts for damage or oil/air leaks, tighten or replace if necessary.



Disassembly Procedure

This procedure is for complete disassembly of the tool. Disassemble only those components necessary to replace damaged O-rings, Back-up rings, and worn or damaged components. For components identification, see Components Drawings on the following pages.



WARNING: Disconnect the air hose from the tool before performing any maintenance. Serious personal injury could result if the air hose is connected.



CAUTIONS: Always use a soft-jaw vise to avoid damaging the tool. DO NOT scratch the piston rod or cylinder when removing. Do NOT re-use seals, wipers, or rings; irreparable tool damage could occur. Discard these parts and use replacements.

1. Disconnect the air hose from the tool.
2. Unscrew the 4 cap screws with a $\frac{5}{32}$ " hex key; carefully separate the head from the handle. Remove the pull gland from the separated assemblies.
3. Use a 1- $\frac{3}{4}$ " open-end wrench to unscrew the cylinder end cap.
4. Thread the Polyseal Assembly Tool onto the spindle end of piston. Push the piston out the back of the head.
5. Unscrew the cap screws with $\frac{5}{32}$ " hex key. Pull the throttle arm cover away from the handle.
6. Unscrew $\frac{5}{32}$ " cap screw holding throttle arm in place.
7. Remove the trigger roll pin. Pull dowel pin from ears of the trigger.
8. Pull the ball end of cable assembly from the trigger.
9. Remove the screw from the throttle arm, and then remove the throttle arm.
10. Remove the ball cable end from the throttle arm.
11. Pull the cable from the handle.
12. Secure the tool upside-down in a soft-jaw vise and drain fluid from handle. Unscrew three button-head screws from the muffler end cap with a $\frac{1}{8}$ " hex key.
13. Remove the muffler end cap, return spring, bottom exhaust gasket, muffler, and O-ring.
14. Remove the retaining ring from the cylinder.
15. Screw the button-head screws into the cylinder head, and carefully pry on them to remove the cylinder head.
16. Use $\frac{5}{8}$ " socket to hold nut on air piston. Using $\frac{3}{16}$ " T-Handle Hex Key, loosen intensifier piston through top of handle.
17. Screw $\frac{1}{4}$ -20 UNC screws into the piston.
18. Pull evenly on $\frac{1}{4}$ " screws in piston to remove piston assembly from cylinder. Remove $\frac{1}{4}$ " screws.
19. Hold hex of piston rod with a wrench. Unscrew locknut and pull the rod from the piston.
20. Unscrew the gland with a 1- $\frac{3}{8}$ " socket wrench. Disassemble the gland and remove the seals.
21. Push the intensifier piston out of the handle, from the top, with a soft rod.
22. The lower and upper bushings may be pressed out of cylinder if damaged. Use flat end brass rods at least 6 inches long. Press out the lower bushing first with rod having diameter between .38" and .43" (0.96 and 1.10 cm). Press out upper bushing with rod having diameter between .48" and .55" (1.22 and 1.39 cm).

Discard the hydraulic fluid that was drained from the head and the handle. The tool has been properly disassembled. Store all re-usable parts (screws and disassembled components) in a clean, dry area.



Assembly Procedure

For components identification, see Components Drawings on the following pages.



CAUTIONS: DO NOT scratch the piston rod or cylinder when removing.

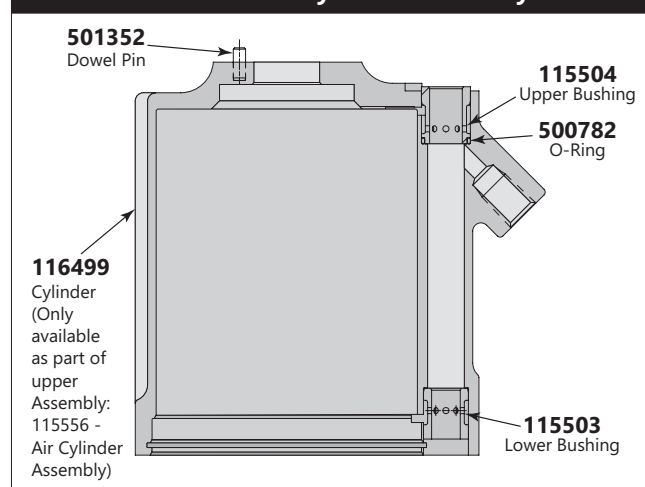
Install the seat assembly through the FRONT of the tool head to avoid damaging the O-ring. When pressing in seats, use extreme care to avoid damaging the sealing surfaces.

Do NOT re-use seals, wipers, or rings; irreparable tool damage could occur. Discard these parts and use replacements.

Before re-assembling tool:

- Clean components with mineral spirits or a similar solvent. Inspect for wear and damage; replace as necessary. Replace all seals of disassembled components.
 - Use the O-rings and Back-up rings from Huck Spare Parts Service Kit (P/N 247KIT; see Table 5). Take care not to damage the rings. Smear LUBRIPLATE® 130-AA or SUPER-O-LUBE® on rings and mating parts to ease assembly.
1. Apply Loctite® Grade 609 to bushings prior to pressing into cylinder. Use an arbor press when replacing the upper and lower bushings. Place the chamfered end of the upper bushing into the top of the cylinder. Carefully press bushing squarely into cylinder. Repeat procedure for lower bushing.
 2. Install intensifier piston into handle through bottom only.
 3. Push Air piston and Rod assembly into Air cylinder. Hold nut with $\frac{5}{8}$ " socket while tightening intensifier with $\frac{3}{16}$ " Hex key. Torque intensifier piston to 175-195 lbs.
 4. Apply Loctite® 243 Threadlocker (P/N 508567) to gland threads and cylinder cap threads. Place the cylinder on handle with pin positioned in matching hole. Assemble the gland and seals. Screw in the lower gland and torque to 75-85 ft.-lbs. using a 1- $\frac{3}{8}$ " socket wrench.
 5. Push piston rod through the piston from flat side, and screw the self-locking nut onto rod. Hold hex of rod with wrench, and torque nut to 28-32 ft.-lbs.
 6. To ease installation of hydraulic piston, use optional Piston Assembly Tool 120792 to compress the O-ring and Back-up rings. Push the piston into the back of the cylinder until it bottoms. Drop in spring; Apply Loctite® 243 Threadlocker to cylinder end cap threads; then screw in and torque to 50-60 foot pounds.
 7. Screw in the vent plug.
 8. Turn tool upright; push throttle valve into cylinder.
 9. Slide throttle arm onto ball end of throttle cable (small end). Push screw through throttle arm; tighten with screwdriver.
 10. Assemble the trigger cable and trigger pin, and slide cable into handle. Align hole in trigger with the hole in handle and install roll pin with a hammer and punch.
 11. Secure handle upside-down in a soft-jaw vise. Position O-ring and muffler on center of cylinder head, gasket on cylinder, and spring in lower bushing.
 12. Carefully position muffler end cap on cylinder. Be certain that muffler is properly positioned in recess of muffler end cap.
 13. Hold down the end cap and insert three button-head cap screws; tighten with a $\frac{1}{8}$ " hex key.
 14. Use a $\frac{5}{32}$ " hex key to fasten throttle arm cover to cylinder and handle with cap screws.
 15. Push button plug into cover.
 16. Filling tool manually and at assembly: Also see FILL AND BLEED. With handle and head separated, push hydraulic piston down. Fill pull hole in handle. Allow air to circulate out of fluid in handle before assembling. Push pull gland into head; align glands with handle and press head into place. Push cap screws through handle and screw into head. Tighten to 40 in.-lbs. torque.

115556 - Air Cylinder Assembly



Sticker Location

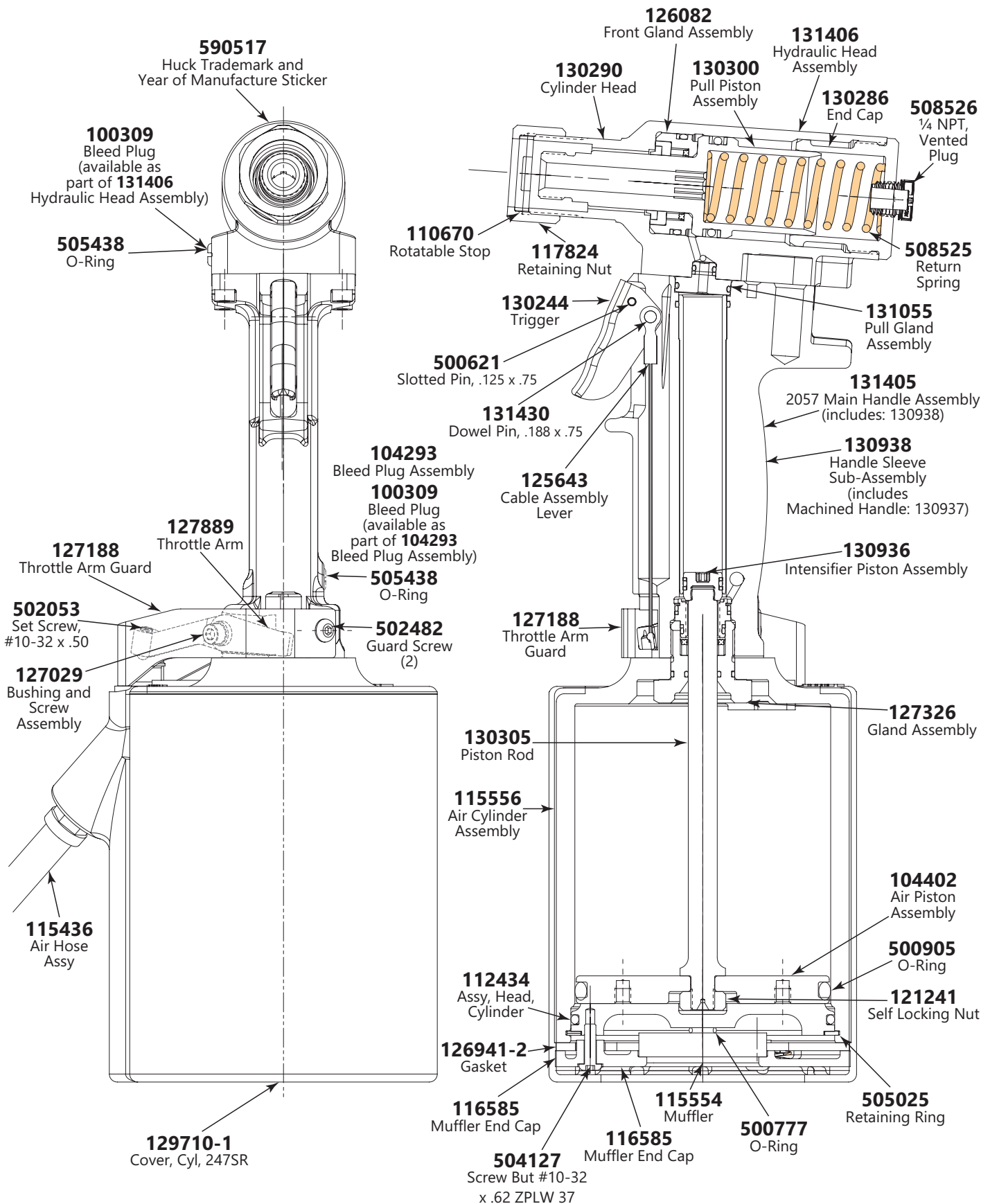
NOTE: HUCK Trademark Sticker must be in place and readable at all times. If the sticker becomes damaged or worn, or if it has been removed from the tool, it must be ordered and placed in the location shown on Tool Component Drawings, page 10.



590517
HUCK/Year of Manufacture
Sticker

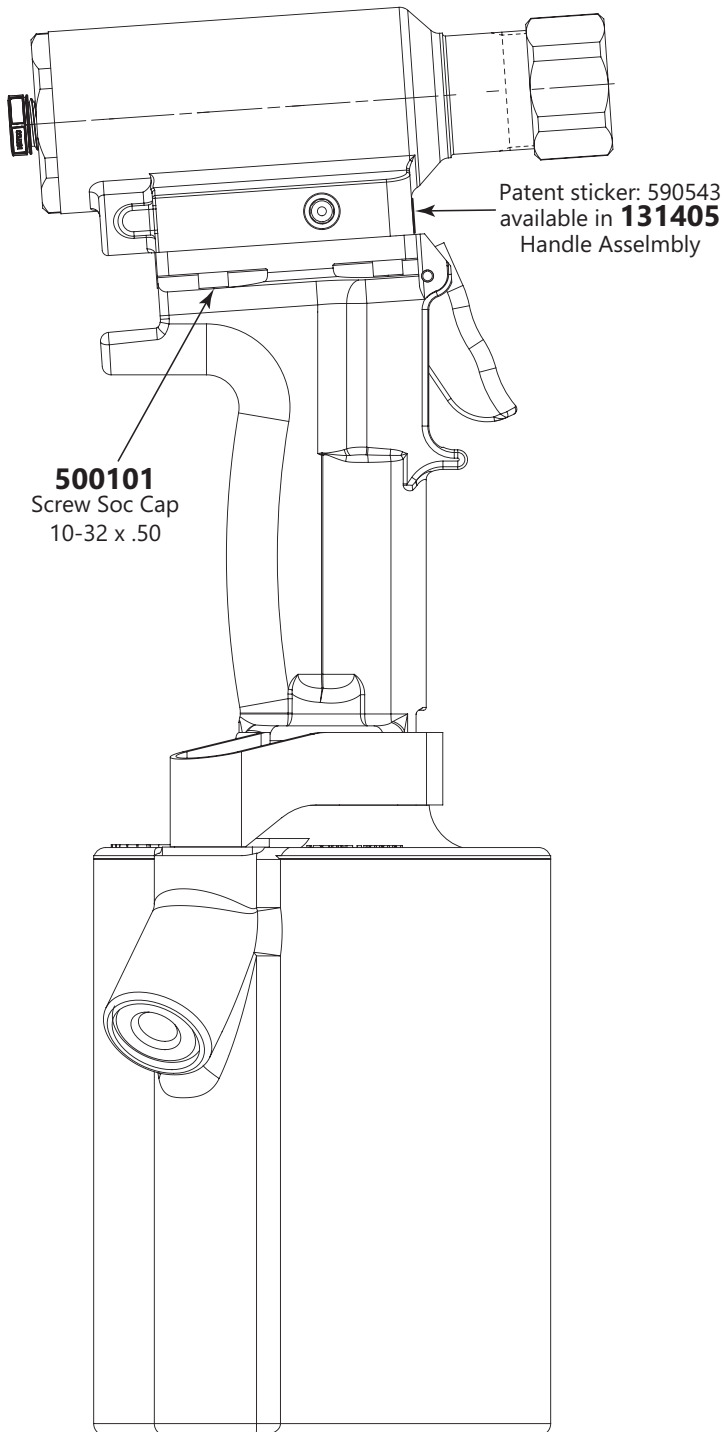


Component Drawings

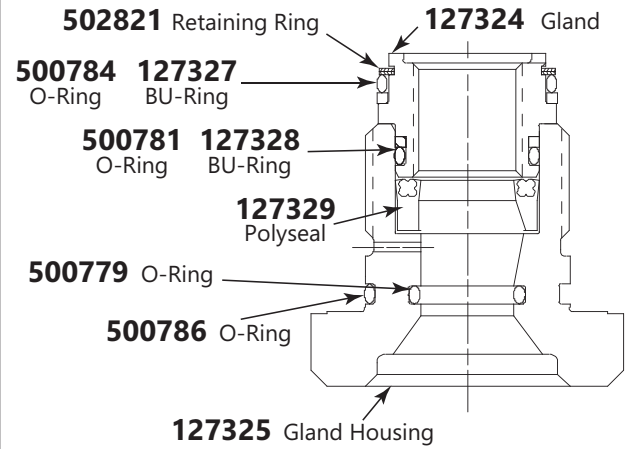




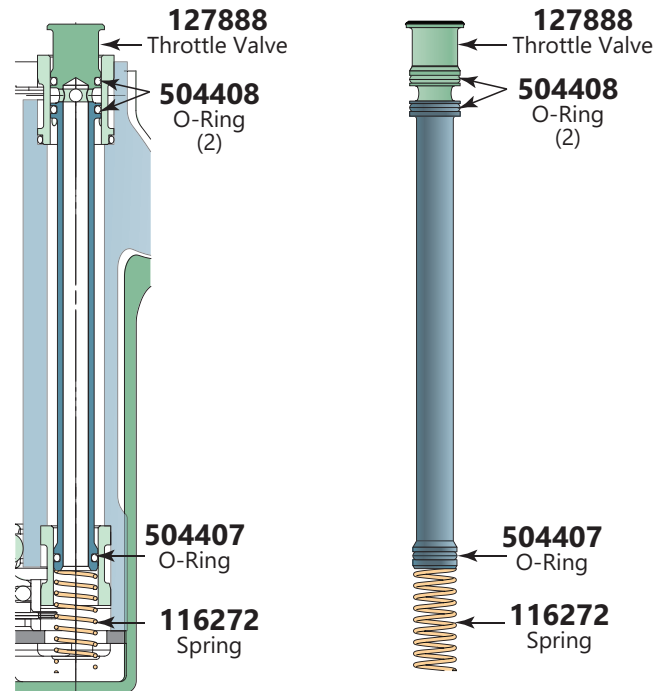
Component Drawings



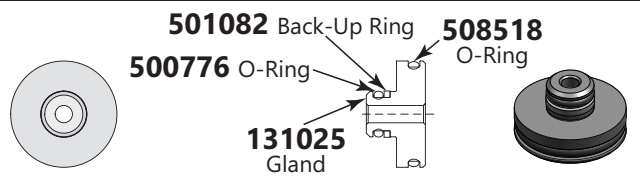
127326 - Gland Assembly



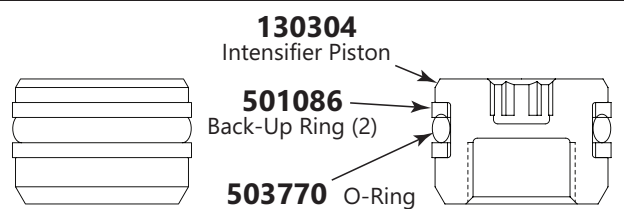
115558 Throttle Valve Assembly



131055 - Pull Gland Assembly



130936 - Intensifier Piston Assembly





Fill and Bleed

This section documents the “bleed-&-fill” procedure. For component identification, see Figures 1, 2, & 3.

REQUIRED EQUIPMENT

- Automatic Transmission Fluid (ATF) DEXRON III, or equivalent (Refer to **SPECIFICATIONS** for more information.)



WARNING: Avoid contact with hydraulic fluid. Hydraulic fluid must be disposed of in accordance with local regulations. See MSDS for hydraulic fluid shipped with tool.

- Shop air-line with 90–100 psi (6.2–6.9 bar) max.
- Air regulator
- Fill Bottle Assembly (P/N **120337**, supplied with tool)
- Large flat-blade screwdriver
- Stall Nut (P/N **124090** or **125340**, optional)
- Nose assembly
- Fasteners (optional)

PREPARATION

- Install air regulator in the air-line and set the pressure to **20–40 psi** (1.4–2.8 bar).
- Add an approved hydraulic fluid to the fill point of the Fill Bottle.

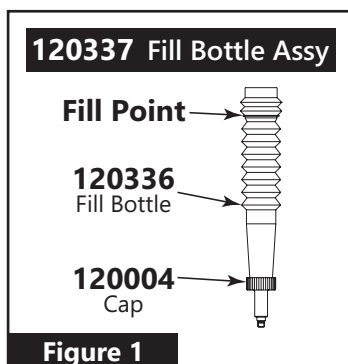


Figure 1

TO BLEED AND FILL THE TOOL:

- Lay the tool on its side with the fill port facing up, and



CAUTION: All fluid must be purged from the tool before refilling. The tool stroke will be diminished if the fluid is aerated.

For optimal performance, refill with a fluid that is recommended in Specifications.

remove the bleed plug from the fill port.

- Connect the tool to shop air-line. If fluid is present, hold the tool over a suitable container with fill port facing into container. Cycle the tool several times to drain old fluid, air, and foam. (Figure 2)
- Screw the fill bottle into the fill port.



WARNING: Air pressure must be set at 20–40 psi (1.4–2.8 bar) to prevent possible injury from high-pressure spray.

If the bleed plug is removed, the Fill Bottle must be in place before cycling the tool.

returns to the idle position (full-forward).

- Disconnect the tool from the air-line.
- Lay the tool on its side and remove the fill bottle. Top off the fluid in the fill port, and install and tighten the bleed plug.
- Connect the air-line to the tool and measure the stroke. If the stroke is less than .900 inches, remove the bleed plug and add fluid. Re-insert the bleed plug and recheck the stroke.

To measure stroke:

- Cycle the piston all the way forward and measure distance between front of cylinder head and front of hydraulic piston (X).
- Cycle and hold the trigger until hydraulic piston is in the back position. Measure distance between front of cylinder head and front of hydraulic piston (Y).

8 Stroke = Y-X

- Increase the air pressure to specifications. Install two fasteners to check the function and installation in a single stroke, or cycle the tool with a stall nut fully threaded onto the piston to load up the tool. Measure the stroke again. Remove the plug and add fluid. Re-insert the plug and cycle and measure again. Repeat this process until the stroke meets the minimum requirements.

Figure 2

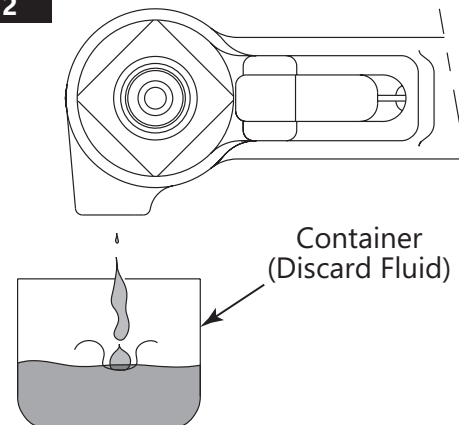
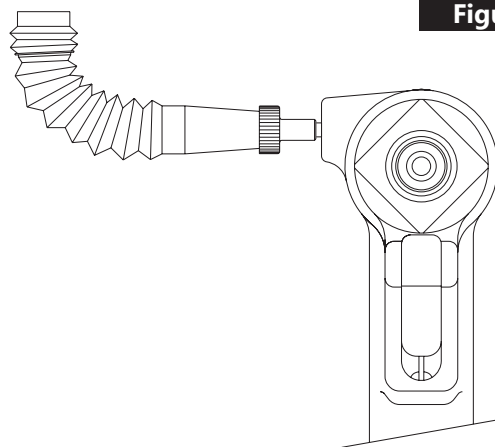


Figure 3





Troubleshooting

Always check the simplest possible cause (such as a loose or disconnected trigger line) of a malfunction first. Then proceed logically, eliminating other possible causes until the cause is discovered. Where possible, substitute known good parts for suspected defective parts. Use this Troubleshooting information to aid in locating and correcting trouble. NOTE: "Piston drift" is when the air piston is in the down position, but the hydraulic pull piston is not in the full-forward position. This causes an out-of-sequence condition.

1. Tool fails to operate when trigger is pressed.
 - a. Air-line not connected.
 - b. Worn or damaged throttle valve O-rings.
 - c. Broken throttle valve cable.
2. Tool does not complete fastener installation.
 - a. Air pressure too low.
 - b. Worn or damaged air piston O-ring.
 - c. Air in hydraulic system. See the Fill and Bleed section.
3. Pintail stripped.
 - a. Check for broken or worn jaws in nose assembly. See Nose Assembly Data Sheet.
 - b. Check for loose retaining nut.
 - c. Tool pressure too high; check tool pressure.
4. Hydraulic fluid exhausts with air or leaks at base of handle.
 - a. Worn or damaged gland assembly. Inspect Polyseal and rings. Replace if necessary.
5. Hydraulic fluid leaks at front of pull piston.
 - a. Worn or damaged front gland. Inspect Polyseal. Replace if necessary.
6. Pull piston will not return.
 - a. Throttle valve stuck; lubricate O-rings.
 - b. Throttle arm, cable, or trigger binding.
7. Air leaks at air cylinder head.
 - a. Worn or damaged O-ring. Replace if necessary.



Limited Warranties

Limited Lifetime Warranty on BobTail® Tools:

Huck International, Inc. warrants to the original purchaser that its BobTail® installation tools manufactured after 12/1/2016 shall be free from defects in materials and workmanship for its **useful lifetime**. This warranty does not cover special order / non-standard products, or part failure due to normal wear, tool abuse or misapplication, or user non-compliance with the service requirements and conditions detailed in the product literature.

Two Year Limited Warranty on Installation Tools:

Huck International, Inc. warrants that its installation tools and Powerigs® manufactured after 12/1/2016 shall be free from defects in materials and workmanship for a period of two years from date of purchase by the end user. This warranty does not cover special order / non-standard products, or part failure due to normal wear, tool abuse or misapplication, or user non-compliance with the service requirements and conditions detailed in the product literature.

90 Day Limited Warranty on Nose Assemblies and Accessories:

Huck International, Inc. warrants that its nose assemblies and accessories shall be free from defects in materials and workmanship for a period of 90 days from date of purchase by the end user. This warranty does not cover special clearance noses, or special order / non-standard product, or part failure due to normal wear, abuse or misapplication, or user non-compliance with the service requirements and conditions detailed in the product literature.

Useful lifetime is defined as the period over which the product is expected to last physically, up to the point when replacement is required due to either normal in-service wear, or as part of a complete overhaul. Determination is made on a case-by case basis upon return of parts to Huck International, Inc. for evaluation.

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.

Huck shall not be liable for any loss or damage resulting from delays or non-fulfillment 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

Outside USA and Canada

Contact your nearest Huck International location (see reverse).

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 Tool Kits and Nose Assemblies. Please contact your Huck Representative or the nearest Huck International location (see reverse) for the ATSC in your area.



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