Instruction Manual
DT4600
Pneudraulic Installation Tool
HUCK DREAM TOOL™

Patent Pending
**EC Declaration of Conformity**

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

**Description of Machinery:**
Models DT4600 family of pneumatic 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 11448-1:2011)

**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: Nick Gogoutris
Position: Engineering Manager
Location: Huck International, LLC d/b/a Arconic Fastening Systems and Rings
Kingston, New York, USA
Date: 24/10/2017 (October 24, 2017)

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### Declared dual number noise emission values in accordance with ISO 4871

- A weighted sound power level, LWA: **92 dB** (reference 1 pW)  Uncertainty, KWA: 3 dB
- A weighted emission sound pressure level at the work station, LpA: **81 dB** (reference 20 μPa)  Uncertainty, KpA: 3 dB
- C-weighted peak emission sound pressure level, LpC, peak: **112 dB** (reference 20 μPa)  Uncertainty, KpC: 3 dB

Values determined according to noise test code ISO 3744. 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.

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### Declared vibration emission values in accordance with EN 12096

- Measured Vibrations emission value, a: **0.56 m/s²**
- Uncertainty, K: **0.13 m/s²**

Values measured and determined according to ISO 28662-1, ISO 5349-2, and EN 1033

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Test data to support the above information is on file at:
Arconic Fastening Systems and Rings, Kingston Operations, Kingston, NY, USA.
Safety Instructions

GLOSSARY OF TERMS AND SYMBOLS:
- **CE**: Product complies with requirements set forth by the relevant European directives.
- **Read manual prior to using this equipment.**
- **Eye protection is required while using this equipment.**
- **Hearing protection is required while using this equipment.**

Notes: are reminders of required procedures. **Bold, Italic type, and underline:** emphasize a specific instruction.

**WARNINGS: Must be understood to avoid severe personal injury.**

**CAUTIONS: Show conditions that will damage equipment or structure.**

I. GENERAL SAFETY RULES:
1. A half hour long hands-on training session with qualified personnel is recommended before using Huck equipment.
2. Huck 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 Huck 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 them to the operator.
7. Do not use assembly power tool if it has been 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 Huck representative.
11. Only genuine Huck 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, minimizing 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.

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 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. REPEATED 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. When using tool, the operator should adopt a comfortable posture while maintaining 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.

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 there are no electrical cables, gas pipes, etc., which 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 workshop ‘ringing’.
3. Use hearing protection in accordance with employer’s instructions and as required by occupational health and safety regulations.
4. Operate and maintain of new tool or unexpected tool movement. The operator should tell the employer and consult a qualified health professional.

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. PNEUMATIC / PNEUDRAULIC 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. When using universal twist couplings (claw couplings) are used, lock pins shall be installed and 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.
### Specifications

**POWER SOURCE:** 90 psi shop air

**STROKE:** 1.125 in (2.86 cm) at full load with losses

**WEIGHT:** 4 lbs 8 oz (2.04 kg)

**MAXIMUM AIR PRESSURE:** 90 psi (6.2 BAR)

**MAXIMUM FLOW RATE:** 6.3 scfm (178 L/m)

**MINIMUM CAPACITY:** 4600 lbs (20.46 kN) @ 80 psi (5.5 bar)

**SPEED/CYCLES:** 30 per minute

**MAXIMUM OPERATING TEMPERATURE:** 125°F (52°C)

**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 is an ester based fluid such as Quintolubric HFD or equivalent. Water based fluid shall NOT be used as serious damage to equipment will occur.

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**NOTE:** WARNING Sticker and HUCK Trademark Sticker must be in place and readable at all times.

Where the following trade names are used in this manual, 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 Corporation, U.S.A.
- **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.
- **Spiraxol** 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.
Principle of Operation

When the trigger is pressed, the throttle valve moves to the PULL position, and pressurized air is directed through a tube to the bottom of the air piston, causing the air piston to move upward. The air above the air piston is exhausted and directed through the ports in the front of the tool.

As this happens, a column of hydraulic fluid is forced through a passage in the tool head, causing the hydraulic piston in the head to move rearward. The attached nose assembly moves with the hydraulic piston to start fastener installation.

When fastener installation is completed, the trigger is released. Air pressure sends the throttle valve to the RETURN position. Pressurized air is re-directed to the top of the air piston, causing the air piston to move downward. The air from below the piston is exhausted through the tube and outside the tool.

Preparation for Use

The HUCK DREAM TOOL DT4600 ships with a plug in the air inlet connector. The connector has 1/4-18 female pipe threads to accept the air hose fitting. Huck recommends quick-disconnect fittings and a 1/4” inside-diameter air hose. The air supply should be equipped with a filter-regulator-lubricator unit, and access to a 90 psi (6.2 bar) air supply capable of 20 ft³/s (0.57 m³/s). NOTE: Air quick-disconnect fittings and air hoses are not available from Huck.

1. Remove the shipping 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 to 90 psi (6.2 bar), and connect the air hose to the tool.
4. Press and release the trigger a few times to cycle the tool.
5. Disconnect the air hose from the tool, and remove the retaining nut.
6. Select the correct nose assembly for the fastener to be installed.
7. Screw the collet assembly (including the lock collar and shim if applicable) onto the spindle and tighten with a wrench.
8. Slide the anvil over the collet assembly and into the counterbore. Slide the retaining nut over the anvil, and screw the nut onto the head.
9. Connect the air hose to the tool and install fasteners in a test plate of proper thickness with correctly sized holes. Inspect the fasteners to ensure a complete installation was accomplished.

Vacuum Feature

This tool is equipped with a vacuum feature for pintail evacuation and collection. (See Figures 6 and 7 for components identification.)

To activate the vacuum feature:
1. Disconnect the air supply.
2. Remove Pintail Deflector or Pintail Bottle Assembly.
3. Loosen Vacuum Shut-off one full turn.
4. Attach Pintail Bottle Assembly, and tighten clamp onto Hydraulic End Cap Assembly barb.
5. Attach to air supply. NOTE: Air flow into the Pintail Bottle Assembly should be audible.
6. Install a fastener in a test plate to ensure pintail is drawn into the Pintail Bottle Assembly after the Hydraulic Piston returns to the fully-forward position.
7. Repeat steps to adjust vacuum air flow, if necessary.

To deactivate the vacuum feature:
1. Disconnect the air supply.
2. Remove the Pintail Bottle Assembly.
3. Tighten Vacuum Shut-off.
4. Re-attach Pintail Bottle Assembly or Deflector.
5. Attach to air supply. Air flow should not be audible.
CAUTIONS: Attach only those nose assemblies which are specifically recommended for use with this tool.
Install only those fasteners specifically recommended for use with this tool.
The use of nose assemblies and/or fasteners not recommended for this tool can result in equipment damage.

Use the table on the right to determine the nose assembly and fastener combinations recommended for your tool.

<table>
<thead>
<tr>
<th>Fastener Size</th>
<th>Fastener Type</th>
<th>Nose Assembly Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>-06</td>
<td>MGL Standard, self-releasing</td>
<td>99-3303</td>
</tr>
<tr>
<td>-08</td>
<td>MGL self-releasing</td>
<td>99-3305</td>
</tr>
<tr>
<td>-06</td>
<td>MG</td>
<td>99-1456</td>
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<tr>
<td>-08</td>
<td>MG</td>
<td>99-1458</td>
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<td>-06</td>
<td>C6L</td>
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<td>-08</td>
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<td>BR</td>
<td>99-2743</td>
</tr>
<tr>
<td>-04, -05, -06</td>
<td>Huck-Clinch®, HuckMAX®, NAS1919/1921U</td>
<td>99-3459-202</td>
</tr>
<tr>
<td>-05, -06, -08</td>
<td>BB (Rivet Pintail)</td>
<td>99-3482</td>
</tr>
</tbody>
</table>

Attaching and Removing a Nose Assembly

INSTALLING A NOSE ASSEMBLY
1. Using a 1 inch wrench, remove Retaining Nut and Anvil Adapter.
2. Screw Collet onto Spindle Extension and, using an 9/16 inch wrench to hold Spindle Extension in place, tighten Collet using an adjustable wrench.
3. Slide Anvil Adapter over Collet and tighten.
4. Slide Anvil into Anvil Holder, and tighten Retaining Nut using a 1 inch wrench.

Figure 2
Operating Instructions

FOR SAFE OPERATION, THIS SECTION MUST BE READ AND UNDERSTOOD.

WARNINGs:
To avoid severe personal injury, wear approved eye and ear protection.
Be sure of adequate clearance for operator’s hands before proceeding with fastener installation.
Do NOT attempt to install a pin without placing the fastener and collar in the work piece (structure to be fastened).
Do NOT attempt to install a pin without a properly oriented collar in place.
The collar flange must be against work piece.
If these safety measures are not followed, the fastener could eject with great velocity and cause severe personal injury.
This condition can cause pin to eject with great velocity and force if the pintail breaks off or teeth/grooves strip. This may cause severe personal injury.
To avoid pinch point, never place hand between nose assembly and work piece.
Only use compatible equipment with this tool.

CAUTIONS: Remove excess gap from between the sheets. This permits enough pintail to emerge from collar for ALL jaw teeth to engage with pintail. If ALL teeth do not engage properly, jaws will be damaged.

LOCKBOLT® FASTENER INSTALLATION:
Place pin in work hole and place collar over pin. Hold pin and push nose assembly onto pin protruding through collar until nose anvil touches collar. Press trigger and hold until collar is swaged and pintail breaks. Release trigger and tool will go into return stroke. The tool and nose assembly are ready for the next fastener installation cycle.

BLIND FASTENER INSTALLATION:
Fastener may be placed in work hole or in end of nose assembly. In either case, tool and nose assembly must be held against work and at right angles to it. Press trigger and hold until fastener is installed and pintail breaks. Release trigger and tool will go into return stroke. Tool and nose assembly are ready for next fastener installation cycle.

Maintenance

GENERAL
1. Tool life and efficiency depends on proper maintenance. Regular inspection and correction of minor problems keeps tool operating efficiently and prevent downtime. The tool should be serviced by personnel who are thoroughly familiar with how it operates.
2. Service tool in a clean, well-lit area to prevent contamination of pneumatic and hydraulic systems.
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.
5. Service Parts Kit DT4600K1T includes consumable parts and should be available at all times. Other components, as experience dictates, should also be available.

DAILY
1. If a Filter-Regulator-Lubricator unit is not being used, uncouple air disconnects and put a few drops of ATF 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/hydraulic leaks, tighten or replace if necessary.
5. Check the nose assembly for tightness or damage, tighten or replace if necessary.
6. Check oil level in tool reservoir, replenish 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**

1. Remove the Ring Bumper (Figure 7) from the tool.
2. Flip tool upside down and hold handle in a soft-jaw vice.
3. Using a ¾” wrench, remove the Bottom End Cap (Figure 7).
4. Remove the Bleed Screw and Washer from the tool head (Figure 6), and drain the fluid into a container. Grip the air piston flats with pliers and remove from tool.
5. Hold the piston rod and use snap-ring pliers to remove the retaining ring. Push the Piston Gland Assembly (Figure 8) out of the Air Piston.
6. Repeat step 2. Remove the Retaining Nut (Figure 7) with a 1 ¼” socket. Pull the Air Cylinder Assembly off.
7. Using a dull pick, remove the Retaining Rings (Figure 8) and push out the Return Gland Assembly and the Pull Gland Assembly.
8. Remove the remainder of the tool from the vice and pull the Handle Assembly off.
9. Using a punch and hammer, push the Slotted Pin (Figure 7) out and remove the Trigger.
10. Remove the Trigger Valve Assembly with a ½” socket. If the Seals need to be replaced, remove the Trigger Button, replace the Seals with a dull pick, and replace the Trigger Button.
11. (Figure 8) To remove Valve Assembly, hold one side with a ¾” wrench and remove the Valve Cap with ¾” T-handle wrench. Use a small, dull drift from the side with the ¾” hex to push out the Spool with O-rings.
12. Hold the remainder of the tool in a soft-jaw-vice. Remove the Nose Adapter (Figure 7) with 13/16” wrench.
13. Remove the Vacuum Shut-off with a ½” wrench.
14. Remove the Hydraulic End Cap Assembly with a 11/16” wrench.
15. Remove the Connecting Tube with a 13/16” wrench.
16. Using a dull drift and a hammer, tap the Hydraulic Piston Assembly out of the tool.

**Assembly Procedure**

1. While holding Hydraulic Cylinder in a soft jaw vice, apply Loctite® 243™ per manufacturers’ instructions to threads of Connecting Tube and screw into Cylinder.
2. Make sure Front Gland Assembly is in place, and apply Loctite 243 to threads of Nose Adapter per manufacturers’ instructions, screw into tool and torque to 50 ft-lbs.
3. Thread 121694-DT4600 Seal Insertion tool into the back of the Hydraulic Cylinder. Thread 123111-2 Piston Assembly tool onto Hydraulic Piston. Apply Lubriplate® or equivalent to Piston seals, front rod, and rear rod and insert into tool sure taking care not to shear seals or back-up rings. Push the pull piston all the way forward.
4. Apply Loctite 243 to threads of Hydraulic End Cap per manufacturers’ instructions, thread into tool, and torque to 50-60 ft-lbs.
5. Slide Handle Assembly over Connecting Tube while making sure the O-ring is in place.
6. Apply Lubriplate to seals of Return Gland Assembly and Pull Gland Assembly. Minding orientation, push gland assemblies into Air Cylinder Assembly and install.
7. Apply Lubriplate to Tube (part of Handle Assembly) and adjacent bore. Slide the Air Cylinder Assembly into place.
8. Apply Never-seez® to threads of Connecting Tube, thread into Retaining Nut, and torque to 15 ft-lbs.
9. Apply Lubriplate to the Piston Gland Assembly and, noting correct orientation, push into the Piston; then install the Retaining Ring.
10. Apply Lubriplate to the Piston Rod and O-ring; then push all of the way up into the Air Cylinder Assembly.
11. Thread Bottom End Cap into place and torque to 10-15 ft-lbs. Install Ring Bumper.
12. Install Trigger Valve Assembly with a ½” socket.
13. Place Trigger into position and tap Slotted Pin in with a drift and hammer until it is flush with one side of the Trigger.
14. Apply Lubriplate to Spool and O-rings and push into Valve Cage, small-end-first. Apply Lubriplate to the seals of the Throttle Valve Assembly and push into Handle from the back. Apply Loctite 243 to Valve Cap and torque to 195 in-lb MAX.
Fill and Bleed

This section documents the “bleed-&-fill” procedure. For component identification, see Figures 9, 10, & 11.

REQUIRED EQUIPMENT:
Automatic Transmission Fluid (ATF) DEXRON III or equivalent (Refer to Specifications for more information.)

Shop air-line with 90 psi (6.2 bar) max.
Air regulator
Fill Bottle Assembly (P/N 120337, supplied with tool)
Large flat-blade screwdriver
Stall Nut (P/N 124090)
Nose assembly
Fasteners (optional)
Torque wrench (60 in/lbs required)

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.

TO FILL AND BLEED THE TOOL:

1. Lay the tool on its side with the fill port facing up, and remove the bleed plug from the fill port.
2. 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 10)

3. Screw the fill bottle into the fill port.
4. Stand the tool upright on a bench. Trigger the tool slowly (20–30 cycles), and bend the fill bottle at a right-angle to the tool. (Figure 11)
5. When air bubbles stop accumulating at top of the bottle, stop cycling the tool. When the trigger is released, the pull piston returns to the idle position (full-forward).
6. Disconnect the tool from the air-line.
7. Lay the tool on its side and remove the fill bottle. Top off the fluid in the fill port; then install and tighten the bleed plug. Torque the bleed plug to 60 in/lbs.
8. Connect the air-line to the tool and measure the stroke. If the stroke is less than specified, remove the bleed plug and add fluid. Re-insert the bleed plug and recheck the stroke.
9. 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.

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.

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.

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.
505005 Bleed Screw
508544 Washer
Torque screw to 60 inch/lbs.

500772 O-ring

131502 Pintail Bottle Assembly

590351 Pressure and Flow Sticker

Note: Sticker must remain on the tool and readable at all times. If the sticker becomes worn, unreadable, or is missing, a new one must be ordered and placed as shown.
**Components Drawing 2 of 3 - Section A-A from Figure X**

Figure 7

- **130418** Hydraulic Piston Assembly
  - 2-part Piston Rod not sold separately
- **130424** Nose Adapter
  - Apply Loctite® 243™ Threadlocker to threads and torque to 50 ft/lbs.
- **130417** Air Cylinder Assembly
- **130415** Handle Assembly
- **130420** Trigger
  - 502571 O-ring
  - 500774 O-ring
- **130426** Trigger Button
- **130443** Trigger Valve Spool
  - Apply Loctite® 243™ Threadlocker to threads.
- **130411** Hydraulic Cylinder
  - 500786 O-ring
- **130440** Vacuum Shut-off
  - Apply Loctite® 243™ Threadlocker to threads and torque to 50-60 ft/lbs.
- **130451** Hydraulic End Cap Assembly
  - (End Cap not sold separately)
  - Apply Loctite® 243™ Threadlocker to threads.
- **124211** Pintail Deflector
- **130439** Retaining Nut
  - Apply Never-Seez® to threads and torque to 15 ft/lbs.
- **130444** Piston Rod
  - Apply Loctite® 243™ Threadlocker to threads.
- **130430** Retaining Nut
  - Apply Never-Seez® to threads and torque to 15 ft/lbs.
- **130422** Bottom End Cap
  - Torque to 10-15 ft/lbs.
- **130427** Connecting Assembly
  - 500786 O-ring
- **130419** GLYD Ring
- **130425** Nose Adapter
  - Apply Loctite® 243™ Threadlocker to threads.
- **130408** GLYD Ring
- **130450** Front Gland Assembly
  - Apply Loctite® 243™ Threadlocker to threads.
- **130418** Hydraulic Piston Assembly
  - 2-part Piston Rod not sold separately
- **130432** Air Piston
  - 500908 O-ring
  - 508953 O-ring
- **130446** Trigger Valve Assy
- **130421** Ring Bumper
  - Torque to 10-15 ft/lbs.
- **500817** O-ring
- **500789** O-ring
- **500780** O-ring
- **500778** O-ring
- **500792** O-ring
- **505817** O-ring
- **505841** Polyseal
- **505827** Polyseal
- **504034** O-ring
- **508538** O-ring
- **508542** O-ring
- **505817** Wiper
- **505827** Polyseal
- **502571** O-ring
- **500619** Slotted Pin
- **500780** O-ring
- **500778** O-ring
- **500817** O-ring
- **500789** O-ring
- **505817** Wiper
- **505827** Polyseal
- **502571** O-ring
- **500619** Slotted Pin
- **130420** Trigger
  - 502571 O-ring
  - 500774 O-ring
- **130426** Trigger Button
- **130443** Trigger Valve Spool
  - Apply Loctite® 243™ Threadlocker to threads.
- **130411** Hydraulic Cylinder
  - 500786 O-ring
Apply Loctite® 243™ Threadlocker to threads and torque to 195 in/lbs max.

Sold as an assembly

500777 O-rings (2)
500776 O-ring
500778 O-ring
508563 Retaining Ring
500966 Retaining Ring
500779 O-ring
500779 O-ring
508563 Retaining Ring
500779 O-ring
130448 Pull Gland Assembly (Pull Gland not available separately).

13048 Valve Spool
131171 Valve Cap
130435 Valve Spool
131172 Valve Cage
500776 O-ring
130449 Piston Gland Assembly (Piston Gland not available separately).
500779 O-ring
500779 O-ring
130447 Return Gland Assembly (Return Gland not available separately).
500966 Retaining Ring

Sold as an assembly
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 Powerig® hydraulic power sources manufactured after December 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.
Arconic Inc. (NYSE: ARNC) creates breakthrough products that shape industries. Working in close partnership with our customers, we solve complex engineering challenges to transform the way we fly, drive, build and power. Through the ingenuity of our people and cutting-edge advanced manufacturing, we deliver these products at a quality and efficiency that ensures customer success and shareholder value.

Arconic Fastening Systems Tooling Support Locations

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Fax: +1-845-334-7333
afs.sales.kingston@arconic.com

Tracy Operations
1925 North MacArthur Drive
Tracy, CA 95376
Tel: +1-800-826-2884
Fax: +1-800-573-2645
afs.sales.idg@arconic.com

Waco Operations
PO Box 8117
8001 Imperial Drive
Waco, TX 76714-8117
Tel: +1-800-388-4825
Fax: +1-800-798-4825
afs.sales.waco@arconic.com

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Parque São Domingos - Complexo Anhanguera - Galpão 1 Seção III
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Tel: +44-(0)-1952-290011
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Huck provides technical assistance regarding the use and application of Huck fasteners and tooling. NOTICE: The information contained in this publication is only for general guidance with regard to properties of the products shown and/or the means for selecting such products, and is not intended to create any warranty, express, implied, or statutory; all warranties are contained only in Huck’s written quotations, acknowledgments, and/or purchase orders. It is recommended that the user secure specific, up-to-date data and information regarding each application and/or use of such products.