Instruction Manual

568 and 574

Hydraulic Installation Tools

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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, 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 pneumatic 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, release trigger or stop start device in case of interruption of energy supply.

Continued on next page...
Safety Instructions (continued)

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. 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 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 that 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.

X. HYDRAULIC TOOL SAFETY INSTRUCTIONS:
1. Carry out a daily check for damaged or worn hoses or hydraulic connections and replace if necessary.
2. Wipe all couplers clean before connecting. Failure to do so can result in damage to the quick couplers and cause overheating.
3. Ensure that couplings are clean and correctly engaged before operation.
4. Use only clean oil and filling equipment.
5. Power units require a free flow of air for cooling purposes and should therefore be positioned in a well ventilated area free from hazardous fumes.
6. Do not inspect or clean the tool while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury.
7. Be sure all hose connections are tight.
8. Wipe all couplers clean before connecting. Failure to do so can result in damage to the quick couplers and cause overheating.

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

**MAX OPERATING TEMP:** 125° F (51.7° C)

**MAX FLOW RATE:** 2 gpm (7.5 l/m)

**MAX PULL PRESSURE:** 6000 psi (414 bar)

**PULL CAPACITY:**
- Model 568: 5940 lbs @ 8400 psi (26.4 kN @ 579 bar)
- Model 574: 12428 lbs @ 8400 psi (55.3 kN @ 579 bar)

**STROKE:**
- Model 568: 0.225 inches (0.57 cm)
- Model 574: 0.295 inches (0.75 cm)

**WEIGHT:**
- Model 568: 2.5 lbs (1.13 kg)
- Model 574: 3.0 lbs (1.36 kg)

**POWER SOURCE:** Huck Powerig® Hydraulic Unit

**HOSE KITS:** Use only genuine HUCK Hose Kits rated @ 10,000 psi (689.5 bar) working pressure.

**HYDRAULIC FLUID:** Hydraulic fluid shall meet DEXRON® III, DEXRON VI, MERCON®, Allison C-4 or equivalent Automatic Transmission Fluid (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.

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

- **DEXRON** is a registered trademark of General Motors Corporation.
- **Quintolubric** is a registered trademark of Quaker Chemical Corp.
- **Threadmate** is a registered trademark of Parker Intangibles LLC.
- **Loctite** is a registered trademark of Henkel Corporation, U.S.A.
- **Slic-tite** is a registered trademark of LA-CO Industries, Inc.
- **Teflon** is a registered trademark of E. I. du Pont de Nemours and Company.
- **LUBRIPLATE** is a registered trademark of Fiske Brothers Refining Co.
Description

Huck models 568 & 574 Hydraulic Installation Tools install HUCKRIMP® (Krimpnut®) with a crimping action that deforms the nut to provide accurate installation loads. The tools operate at 6000 psi (414 bar) pull pressure, as supplied by a Huck Powerig® Hydraulic Unit. This electric triggered tool is compatible with Huck Powerig models 913, 918, and 940, and equivalent hydraulic units.

Principle of Operation

Hydraulic hoses and trigger control cord are connected to the Huck Powerig Hydraulic Unit, or an equivalent power source. The trigger controls the PULL stroke of the tool. When the trigger is pressed, hydraulic pressure is directed to the PULL side of the anvil/piston and it moves forward; fastener installation begins.
Preparation for Use

**WARNINGS:**
Huck recommends that a Huck Powerig® be used to power Huck tools. Hydraulic power units that deliver high PULL and RETURN pressures—but which are NOT equipped with relief valves—are specifically NOT RECOMMENDED and may be dangerous.

Set the PULL and RETURN pressures as specified in **Specifications**. Failure to properly set these pressures may result in serious personal injury.

Huck Pressure Gauge (P/N T-124883CE) is available, and should be used as indicated in its instruction manual.

Read entire manual before using tool.

A 30-minute training session with qualified personnel is recommended before using Huck equipment.

When operating Huck equipment, always wear approved eye and hearing protection.

Be sure there is adequate clearance for the operator’s hands before proceeding.

Connect the tool’s hydraulic hoses to the Powerig® Hydraulic Unit before connecting the tool’s trigger control system (control cord assembly) to it. If not connected in this order, severe personal injury may occur.

Correct PULL and RETURN pressures (see **Specifications**) are required for operator’s safety and proper tool function. Huck Pressure Gauge (P/N T-124883CE) is available, and should be used as indicated in its instruction manual. Improper pressure settings may result in severe personal injury.

**CAUTIONS:**
Keep disconnected hoses and couplers, and hydraulic fluid away from dirty surfaces and free of foreign matter. Contaminated fluid can cause valve failures in tool and Powerig.

Apply Parker Threadmate®, Loctite® 567, or Slic-Tite® to male pipe threads per manufacturer’s instructions.

Hose couplers must be securely attached to ensure that the ball checks in the nipple and the body are completely open. Improperly assembled couplers will cause overheating and malfunctions in the tool and Powerig. Hand tighten couplers; do NOT use a pipe wrench.

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

**NOTE:** Where a part number (P/N) is given, Huck sells that part. Apply Parker Threadmate®, Loctite® 567, or Slic-Tite® to male pipe threads per manufacturer’s instructions.

1. Use a Huck Powerig (or equivalent hydraulic unit) that has been prepared for operation per applicable instruction manual. Check the PULL and RETURN pressures, and adjust as necessary. Use Huck Gauge (P/N T-124833CE) to check Powerig pressures (see **Specifications**).

2. Turn OFF the Powerig and disconnect its power supply. Disconnect the trigger control system from the Powerig.

3. Connect the PULL pressure hose (with coupler nipple) into tool port “P”. **NOTE:** Use only with Huck-supplied hoses that are rated at a minimum of 10,000 psi (689.5 bar).

4. Check the trigger control system (control cord assembly) for damage and wear. If necessary, adjust the position of it on the RETURN pressure hose. Connect it to the Powerig.

5. Connect the Powerig to power supply (air or electric), and turn it ON. Press the trigger a few times to cycle the tool and circulate the hydraulic fluid. Observe action of tool. Check for fluid leaks.

6. Disconnect the tool from the power supply.
Operating Instructions

WARNINGS:
Wear approved eye and hearing protection.

Ensure adequate clearance for operator’s hands before installing fasteners.

Operators should receive training from qualified personnel.

Be sure that pintail deflector is attached to the tool and directed away from all personnel.

Do NOT pull on a pin without placing a fastener/collar in a workpiece. Make sure that the collar chamfer is out, toward the tool. Pins eject with great velocity when pintails break off or teeth/grooves strip, which could cause serious injury.

Do NOT bend tool to free if stuck.

Use tool to install fasteners ONLY; never use tool as a jack/spreader or hammer.

Length of tool increases during fastener installation. Allow adequate tool and anvil clearance before installing fasteners.

Move hands away from pin and structure. Keep hands away from front of tool during operation; tool anvil advances forward.

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

TO INSTALL A HUCKRIMP® FASTENER:

1. Check pin for correct grip. Place pin in workpiece and place collar over pin.

   **NOTE:** If the collar has only one tapered end, that end MUST be out toward tool; not next to sheet.

2. Hold the pin and push the nose assembly onto the pin protruding through the collar until the nose anvil touches the collar.

   **NOTE:** Hold tool at right angle (90 degrees) to work.

3. Press and hold the trigger until the collar is swaged and the pintail breaks.

4. Release the trigger.

5. When the forward motion of the nose assembly anvil stops and pintail breaks off, release the trigger.

The tool will go into its return stroke. The tool and nose assembly are ready for the next installation cycle.
CAUTIONS: Consult the Material Safety Data Sheet (MSDS) before servicing tool.

Keep foreign matter out of the hydraulic system. Keep separated parts away from dirty work surfaces. Dirt and debris in hydraulic fluid causes valve failures in tool and Powerig.

ALWAYS replace all seals, wipers, and rings when the tool is disassembled for any reason.

Check the Assembly Drawings in this manual for the proper direction of the flats on the dump valve.

Do NOT use Teflon® tape on pipe threads. Tape can shred, resulting in malfunctions.

Do not let jaws come in contact with other solvents under any circumstances. Do not let jaws soak; dry them immediately after cleaning.

SYSTEM INSPECTION / PREVENTIVE MAINTENANCE
The operating efficiency of your tool is directly related to performance of the entire system, including the tool, nose assembly, hydraulic hoses, control trigger assembly, and Powerig® Hydraulic Unit. An effective preventive maintenance program includes scheduled inspections of the system to detect and correct minor troubles.

- Service the tool in a clean, well-lighted area. Take special care to prevent contamination of pneumatic and hydraulic systems.
- Inspect tool and nose assembly daily for damage and wear. Inspect tool before each use for leaks.
- Check hoses, fittings, and disconnects for leaks and damage. Verify that hydraulic hoses, fittings, couplings, and electrical connections are secure, and free of leaks and damage. (Replace hoses as needed, or at six-month to one-year intervals, depending on use.) Clear air-lines of dirt and water.
- Inspect tool, hoses, and Powerig during operation to detect abnormal heating, leaks, and vibrations.
- Carefully handle all parts and components to prevent contamination of pneumatic and hydraulic systems. Before reassembly, examine for damage and wear;

   replace when necessary.
- Have available all necessary hand tools (standard and special); a half-inch brass drift and wood block; arbor press; and soft-jaw vise. Unsuitable hand tools could cause tool damage.
- Apply continuous steady pressure to components. An arbor press provides steady pressure to press a component into or out of an assembly.
- Disassemble and assemble tool components in a straight line. Do NOT bend, twist, or apply undue force. Never force a misaligned component; reverse the procedure; correct the misalignment; start again.
- Assemble the Release and Ejector Kit with Loctite adhesive sealant.
- Follow the disassembly and assembly procedures in this manual. If Huck recommended procedures are not followed, the tool could be damaged.

See SPECIFICATIONS for fluid type. Dispose of fluid in accordance with local environmental regulations. Recycle steel, aluminum, and plastic parts in accordance with local lawful and safe practices.

STANDARD SEALANTS, LUBRICANTS
To ease assembly and prevent leaks, apply Parker Threadmate®, Loctite® 567, or Slic-Tite® to male pipe threads and quick-connect fittings (per manufacturer's instructions). Smear LUBRIPLATE® 130-AA or SUPER-O-LUBE® on rings and mating surfaces to ease assembly to prevent nicking/pinching rings on rough/tight spots.

POWERIG MAINTENANCE
Maintenance instructions and repair procedures are in the appropriate Powerig Instruction Manual.

TOOL MAINTENANCE
Whenever disassembled, and at regular intervals depending on use, replace all O-rings and Back-up rings. Keep the appropriate Spare Parts Service Kit, (568KIT or 574KIT) on hand. Inspect cylinder bore, piston, piston rod, and unloading valve for scored surfaces, excessive wear, and damage; replace as necessary.

NOSE ASSEMBLY MAINTENANCE
Clean nose assemblies daily in mineral spirits or isopropyl alcohol only to clear jaws and rinse metal chips and debris. Disassemble the nose assembly for more thorough cleaning. Use a pointed “pick” to remove embedded particles from the pull grooves of the jaws.

Hydraulic Couplings

O-ring (P/N 504438) Back-up ring (P/N 501102)

TIP: Use a fine India stone to remove nicks and burrs from diameter A and leading edge to prevent damage to O-ring.
Disassembly

WARNINGS:
Disconnect the tool’s control trigger system from the Powerig® Hydraulic Unit before disconnecting the hydraulic hoses from it.
If not disconnected in this order, serious personal injury may occur.

This procedure is for complete disassembly of the tool. Disassemble only those components necessary to replace damaged rings, and worn or damaged components. Always replace O-rings, Back-up rings, and wipers of disassembled sub-assemblies. Always use a soft-jaw vise to avoid damaging the tool. For component identification, see the Assembly Drawings in this manual.

TO DISASSEMBLE THE TOOL:

1. Disconnect the tool’s electric trigger control cord, then uncouple the hydraulic hose.
2. Unscrew the coupling nipple and coupling body. Drain the hydraulic hoses into a container, and discard the fluid.
3. Remove the retaining ring from the swivel adapter, push the pin through from the other side and separate the swivel.
4. Unscrew the socket head screw from the rear of the tool and remove the threaded retainer.
5. Remove the locater and press the piston and remaining half of swivel out through the back of the housing.
6. Loosen the two screws on the cord grip. Loosen the cup-point setscrew. Pull the switch from the housing.
7. Loosen the two screws at the rear of the switch to remove the switch from the electrical cord. Remove the two #6-32 socket setscrews to dismantle the switch for cleaning. Remove the cord grip from the housing.
8. Disconnect the electrical connector to rewire or replace.

The tool has been properly disassembled. Store all re-usable parts (screws and disassembled components) in a clean, dry area.
Assembly

BEFORE RE-ASSEMBLING THE TOOL:
Always replace damaged and defective parts, and all seals, wipers, and rings of sub-assemblies.
- Clean components in mineral spirits or other solvent compatible with O-ring seals. Clean O-ring grooves.
- Inspect components for scoring, excessive wear, and damage; replace as necessary.
- Replace all O-rings, Quad-rings, and Back-up rings. See Assembly Drawings for guidance on positioning these rings. Take care not to damage rings. Use the rings that are in the Spare Parts Service Kit (568KIT or 574KIT).
- Smear LUBRIPLATE® 130-AA or SUPER-O-LUBE® on rings and mating parts to prevent damage and to ease assembly.
- Apply Parker Threadmate®, Loctite® 567, or Slic-Tite® to male pipe threads per manufacturer’s instructions.

TO RE-ASSEMBLE THE TOOL:
1. Press the anvil and the swivel into the rear of the cylinder.
2. Position the locater between the bottom of the swivel and the cut in bottom of the cylinder.
3. Thread the retainer into the rear of the anvil and lock it into place with the socket-head cap screw.
4. Align the holes in the two halves of the swivel and press the pin to secure them. Lock the pin with the retaining ring.
5. If the hydraulic hoses were removed, tighten them into the cylinder.
6. Screw the coupler nipple into the PULL pressure hose from “P” port.
7. If necessary, rewire and re-assemble the electrical connector. Screw the cord grip into the housing.
8. Assemble the switch and install two #6-32 socket setscrews. Insert two screws at the rear of the switch to attach the cord.
9. Push the switch into the housing and tighten the cup point setscrew to hold the switch. Tighten the two screws on the cord grip.
10. Actuate the tool a few times to check its operation; inspect for leaks.

Assembly of NPTF Threaded Components

AIR FITTINGS
1) Apply TEFLOP® stick to male threads which do not have pre-applied sealant per manufacturer’s recommendations. (Proceed to All Fittings step 2)

HYDRAULIC FITTINGS
1) Apply Threadmate™ to male and female threads which do not have pre-applied sealant per manufacturer’s recommendations. (Proceed to All Fittings step 2)

ALL FITTINGS:
2) Tighten to finger-tight condition.
3) Wrench tighten to 2-3 turns past finger-tight condition.
4) Final thread engagement can be checked (optional) by measuring the dimension from the flange of male fitting to the end of the thread before assembly and subtracting the distance under the flange after assembly.

<table>
<thead>
<tr>
<th>Thread Size</th>
<th>Final thread engagement at full make-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8-27 NPTF</td>
<td>.235 inch (.59 cm)</td>
</tr>
<tr>
<td>1/4-18 NPTF</td>
<td>.339 inch (.86 cm)</td>
</tr>
<tr>
<td>3/8-18 NPTF</td>
<td>.351 inch (.89 cm)</td>
</tr>
</tbody>
</table>
568 Components Drawing

Figure 2
Figure 3

574 Components Drawing
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.

1. **Tool fails to operate when trigger is pressed.**
   - b. Loose air or electric connections.
   - c. Damaged trigger assembly.
   - d. Loose or faulty hydraulic hose couplings.
   - e. Unloading valve not installed in tool.

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

3. **Hydraulic couplers leak fluid.**
   - a. Damaged or worn O-rings in coupler body. See Coupler 110440.

4. **Hydraulic fluid overheats.**
   - a. Hydraulic unit not operating properly.
   - b. Unloading valve incorrectly installed.
   - c. Powerig running in reverse (918, 918-5). See unit’s manual.

5. **Tool operates erratically and fails to install fastener properly.**
   - a. Low or erratic hydraulic pressure; air in system.
   - b. Damaged or worn piston/anvil O-ring in tool.
   - c. Unloading valve incorrectly installed.
   - d. Excessive wear on sliding surfaces of tool parts.
   - e. Excessive wear of unloading valve in tool.

6. **Collar of HUCKRIMP® Fastener not completely swaged.**
   - b. Scored anvil.

7. **Tool “hangs-up” on swaged collar of HUCKRIMP Fastener.**
   - b. RETURN pressure too low.

8. **Pintail of fastener fails to break.**
   - c. PULL pressure too low.
   - d. Worn unloading valve.

Kits & Accessories

Huck has created product-specific **Spare Parts Service Kits** that contain various perishable parts. The types and quantities of spare parts that should be available vary with the application and tools in use. Have the appropriate kit accessible when using this tool and when performing maintenance on it. Huck also recommends having the following **Accessories** available when preparing, using, and performing maintenance on this tool.

**SERVICE KITS**

Use **568KIT** and **574KIT** when using these tools and when performing maintenance on them. They include all perishable seals, O-rings and Back-up rings. A spare kit should be kept on hand.

**ACCESSORIES**

- Parker Threadmate® (4 oz. tube) - 508517
- Slic-Tite® (stick) - 503237
- Loctite - 503657
- SUPER-O-LUBE® - 505476
- LUBRIPLATE® 130-AA - 502723
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.
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 and Rings world-wide locations:**

**AMERICAS**

**Kingston Operations**
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