Instruction Manual

OS5500 and OS9300 series
Installation Tools

Safety Instructions 3-4
Description 5
Principle of Operation 5
Specifications 6
Preparation for Use 7
Attaching a Nose Assembly 8
Operating Instructions 9
Maintenance 10
Components Drawings 11-13
Disassembly Procedure 14
Assembly Procedure 14
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 pneumdraulic 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 unexpected tool movement.
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.

Continued on next page...
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.
OS5500 and OS9300 series Hydraulic Installation Tools (HK1205)

Description

Huck models OS5500 and OS9300 series Hydraulic Installation Tools install various fasteners. Compatible with standard HUCK® offset nose assemblies, these lightweight and compact tools which feature 360° rotatability and are great for use in limited-clearance areas. With improved seals, improved bearing area, as well as inline pistons, these new models also include rod wipers on front and back of the piston to keep debris out.

There are both air-and electric-trigger versions of these tools. The air triggered tool is intended for use with Huck models 956 and 970 Powerig Hydraulic Units, or equivalent; while the electric triggered tool is designed for use with Models 913F, 918, and 940 Powerig Hydraulic Units, or equivalent. Each tool is complete with hydraulic hoses, couplings and its respective control trigger assembly (air or electric).

Principle of Operation

First, hydraulic hoses, and then trigger control cord/hose, are connected to Powerig® Hydraulic Unit. Trigger controls PULL and RETURN strokes of Tool. Trigger is depressed; hydraulic pressure is directed to PULL side of piston and piston moves rearward. Fastener installation begins.

When installation is completed, trigger is released. Hydraulic pressure is directed to RETURN side of piston. It moves forward, and the nose assembly, with tool, is pushed off the installed fastener. At the end of the Piston’s PULL stroke, pressurized fluid circulates back to reservoir of the hydraulic unit.
### Specifications

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

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

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

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

**MAX PULL PRESSURE:** 8400 psi (579 bar)

**MAX RETURN PRESSURE:** 3200 psi (221 bar)

**PULL CAPACITY:**
- OS5500 series: 5515 lbf @ 8400 psi (24.5 kN @ 579 bar)
- OS9300 series: 9330 lbf @ 8400 psi (41.5 kN @ 579 bar)

**RETURN CAPACITY:**
- OS5500 series: 2100 lbf @ 3200 psi (9.34 kN @ 221 bar)
- OS9300 series: 3550 lbf @ 3200 psi (15.8 kN @ 221 bar)

**STROKE:**
- OS5500-56-12: .562 in. (1.43 cm)
- OS5500-56AT-12: .562 in. (1.43 cm)
- OS9300-63-12*: .625 in. (1.59 cm)
- OS9300-75-12: .750 in. (1.90 cm)
- OS9300-75AT-12: .750 in. (1.90 cm)

*NOTE: The OS9300-75 series tool can be used with an optional stroke limiter, HUCK part no. 131168, which will limit stroke to .625 inches (1.59 cm).

**WEIGHT:**
- OS5500-56-12: 4.5 lbs (2.0 kg)
- OS5500-56AT-12: 4.5 lbs (2.0 kg)
- OS9300-63-12: 5.43 lbs (2.5 kg)
- OS9300-75-12: 5.4 lbs (2.4 kg)
- OS9300-75AT-12: 5.4 lbs (2.4 kg)

**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; serious damage to equipment will occur.

DEXRON is a registered trademark of General Motors Corp.
MERCON is a registered trademark of Ford Motor Corp.
Quintolubric is a registered trademark of Quaker Chemical Corp.
Preparation for Use

POWER SOURCE CONNECTIONS
Use a Huck Powerig® Hydraulic Unit that has been suitably prepared for operation.

1. Use Huck Powerig Hydraulic Unit that has been prepared for operation per unit’s instruction manual. Check both PULL and RETURN pressures and, if required, adjust to pressures given in Specifications section of this manual. See both hydraulic unit and T-124883CE Instruction manuals before/during checking procedure. Visually inspect for leaks and to verify that End Cap is installed correctly.

2. First, turn hydraulic unit to OFF (918 Powerigs only). Then disconnect power supply from hydraulic unit. Disconnect trigger control system from hydraulic unit.

3. Connect tool hoses to hydraulic unit. If required, adjust position of trigger assembly on return pressure hose. Connect trigger control system to hydraulic unit.

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

5. Select nose assembly for fastener to be installed. Disconnect hydraulic unit from power supply; disconnect Tool’s trigger control system from hydraulic unit. Attach nose assembly to Tool.

6. Reconnect Tool’s trigger control system to hydraulic unit; reconnect unit to power supply. Check operation of nose assembly. Install fasteners in test plate of correct thickness with proper size holes. Inspect installed fasteners. If fasteners do not pass inspection, see Troubleshooting section to locate and correct Tool’s malfunction.

7. Operator should receive training on proper use from qualified personnel.

SPECIAL NOTES
Use the correct nose assembly for your fastener. Hoses may be installed in bottom of cylinder or out the back of cylinder, as application requires. After removing hoses, move pipe plugs to hose ports, then reinstall hoses. Rub Loctite®* with PTFE thread compound, or equivalent, on pipe plug threads and quick connect fitting.

Teflon is a registered trademark of E. I. du Pont de Nemours and Company.
Loctite is a registered trademark of Henkel Corporation, U.S.A.
Attaching a Nose Assembly

**Simple Offset**

1. While making sure the collet is in the full-forward position, thread assembly onto the tool until it bottoms.

2. Back off the assembly to desired position, tighten tool locknut against the assembly.

**Front Bearing Offset**

1. Install one (1) shim; two (2) if necessary, onto drawbar, and thread assembly onto the tool until it bottoms.

2. Back off the assembly to desired position, tighten tool locknut against the assembly.

3. Tighten drawbar down with T-Handle.

**Left Hand Thread Drawbar Offset**

1. With collet nested in anvil, thread drawbar into collet until it bottoms; then back it out one full turn.

2. While ensuring the collet is in the full-forward position, thread assembly onto tool until it bottoms.

3. Back off the assembly to desired position, tighten tool locknut against the assembly.

4. Using a T-Handle, turn the drawbar to left until the collet is touching the anvil.
OPERATING INSTRUCTIONS

Review and understand this entire section prior to using your tool.

WARNINGS:
Wear approved eye and hearing protection.

Ensure there is adequate clearance for operator’s hands before proceeding with fastener installation.

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 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 severe injury.

CAUTIONS:
BOM blind fasteners will jam in the nose assembly if they are pulled when not in workpiece.

To avoid structural and tool damage, be sure there is sufficient clearance for the nose assembly at full stroke.

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.

Ensure the tool has been properly reassembled prior to use.

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.

INSTALLING A HUCKBOLT FASTENER:

1. Place a pin in the workpiece and place the collar over the pin. **NOTE:** If the collar has one tapered end, that end **must** be out toward tool; not next to the sheet.
2. Hold the pin and push the nose assembly onto the pin that is protruding through the collar until the nose anvil touches the collar.
3. Press and hold the trigger until the collar is swaged and the pintail breaks.
4. Release the trigger.

The pressure is re-directed; the piston moves forward; and the tool is pushed off the fastener and ready for the next installation cycle.

INSTALLING A HUCK BLIND FASTENER:

1. Place a fastener in the workpiece or in the end of the nose assembly. **NOTE:** The tool or nose assembly **must** be held against, and at a right angle (90-degrees) to, the workpiece.
2. Press and hold the trigger until the fastener is installed and the pintail breaks.
3. Release the trigger; the tool will perform its RETURN stroke.

The pressure is re-directed; the piston moves forward; and the tool is pushed off the fastener and ready for the next installation cycle.
GENERAL

The operating efficiency of your tool is directly related to the performance of the entire system. Regular inspection and the immediate correction of minor problems will keep the tool operating efficiently, and prevent downtime. A schedule of “preventive” maintenance of the tool, nose assembly, hoses, trigger and control cord, and POWERIG will ensure your tool’s proper operation, extend its life, and reduce the risk of personal injury to those who operate it.

NOTE: Huck tools should be serviced only by personnel who are thoroughly familiar with its operation.

Consult MSDS before servicing tool.

Service the tool in a clean, well-lighted area. Take special care to prevent contamination of pneumatic and hydraulic systems. Keep separated parts away from dirty work surfaces.

Have available all necessary hand tools—standard and special.

Carefully handle all parts. Before reassembly, examine them for damage and wear.

Disassemble and assemble tool components in a straight line. Do NOT bend, cock, twist, or apply undue force.

Have any relevant Huck Spare Parts Service Kits available when servicing the tool; they include important consumable parts. Other components, as experience dictates, should also be available.

DAILY

If a Filter-Regulator-Lubricator unit is not being used, uncouple the air disconnects and add a few drops of hydraulic fluid to the air inlet of the tool. **NOTE: If the tool is in continuous use, add a few drops of oil every 2–3 hours.**

Before connecting an air hose to the tool, bleed the air lines to clear dirt or water.

Verify that hoses, fittings, couplings, and electrical connections are secure and free of leaks; tighten or replace if necessary.

Check tools and nose assemblies for damage and air or hydraulic leaks; tighten, repair, or replace if necessary.

Inspect the tool, hoses, and Powerig during operation to detect abnormal heating, leaks, or vibration.

Clean nose assemblies in mineral spirits to clear jaws and rinse metal chips and dirt. For a more thorough cleaning, disassemble the nose assembly. Use a pointed “pick” to remove embedded particles from the pull grooves of the jaws.

Clean all parts of any assembly with UNITIZED™ Jaws in mineral spirits or isopropyl alcohol only; do not let the jaws come in contact with other solvents. Do not let jaws soak; dry them immediately after cleaning. Huck recommends drying other parts before re-assembling.

WEEKLY

Disassemble, clean, and reassemble nose assemblies in accordance with applicable instructions.

Check the tool and all connecting parts for damage and fluid/air leaks; tighten or replace if necessary.

Inspect the cylinder bore, piston, and rod/extension for scored surfaces, excessive wear, and damage; replace as necessary.

STICKERS

Stickers on the tool display safety and pressure-settings information, and must always be legible. For more information on sticker locations and part numbers, see the **Components Drawings.**

SPARE PARTS SERVICE KITS

Huck Spare Parts Service Kits contain perishable replacement parts for your tool. Huck recommends having the appropriate kit accessible. For more information, see **Kits & Accessories.**

FLUID MAINTENANCE

See **Specifications** on page 10 for information about approved fluid types. Dispose of fluid in accordance with local environmental regulations. Recycle steel, aluminum, and plastic parts in accordance with local lawful and safe practices.

Teflon is a registered trademark of E. I. du Pont de Nemours and Company.

Threadmate is a registered trademark of Parker Intangibles LLC.
Components Drawing - Head/Handle

Electric trigger assembly is shown here. For details of electric and air trigger assemblies, see figure VV.

Front Gland Assembly Detail - OS5500: 131123
OS9300: 131158

Gland Assembly
See detail below.

Lock Nut
OS5500: 131136
OS9300: 131167

Nose Adapter
OS5500: 131135
OS9300: 131166

Piston GLYD Ring Assy
OS5500: 131122
OS9300: 131157
(Piston not sold separately)

Socket Head Screw 508593

Button Head Screw (Qty. 3)
OS5500: 502473
OS9300: 502471

Button Head Screw 502489 (Qty. 4)

Setscrew 501731

O-ring - OS5500: 500816
OS9300: 500822

Back-up Ring - OS5500: 501110
OS9300: 501116

Polyseal - OS5500: 505827
OS9300: 505865

Washer
OS5500: 131130
OS9300: 131164

Wiper
OS5500: 505817
OS9300: 505894

Retaining Ring
OS5500: 508784
OS9300: 508792

Front Gland
(not sold separately)

Sticker
OS5500: 590548
OS9300: 590549

GLYD Ring
OS5500: 131128
OS9300: 131162

Cylinder Assembly
OS5500: 131121
OS9300: 131156
(Cylinder not sold separately)

Retaining Ring, Washer, Polyseal, and Wiper
See Gland Assembly detail below for part numbers.

Spacer
OS5500: 131132
Handle Cap
OS9300: 131165

Front Gland Detail - OS5500: 131123
OS9300: 131158

OS5500 and OS9300 series Hydraulic Installation Tools (HK1205)
Figure 6

OS5000 SERIES

Cylinder Assembly 131121

Plug 508782

Steel Ball 502505

Setscrew 508783

Apply Loctite® 243 (HUCK p/n 508567) to screw threads per mfr. instructions

Note: These Cylinder Head Assemblies also include the internal seals in the back: Retaining Ring, Washer, Polyseal, and Wiper.

Figure 7

OS9000 SERIES

Cylinder Assembly 131156

Plugs 508782

Steel Ball 502505

held in with

Setscrew 508783

Apply Loctite® 243 (HUCK p/n 508567) to screw threads per mfr. instructions
Components Drawing - Electric and Air Triggers with Hoses

**Figure 8**

**AIR TRIGGER ASSEMBLY**

- Male Air Quick Disconnect 113021
- Male Quick Disconnect 110438
- Air Hose 112143-6
- Air Adapter Assembly 131305
- Air Hose 112143-4
- Male Quick Disconnect 110438
- Hoses HPHX12-AA10
- Male Connector 110686
- Female Quick Disconnect 110439
- Male Quick Disconnect 110438
- Reducing Bushings 503431
- Male Air Quick Disconnect 113021
- Air Trigger Close-up
  - O-ring 500782
  - Trigger Assembly 131300

Apply Loctite® 430 per mfr. instructions to ensure glue adheres to tubing and housing completely. No leaks can be present.

**Figure 9**

**ELECTRIC TRIGGER ASSEMBLY**

- Trigger Switch 508735
- Trigger Bushing 131134
- Strain Relief 505344
- Hoses HPHX12-AA10
- Male Connector 110686
- Female Quick Disconnect 110439
- Male Quick Disconnect 110438
- Reducing Bushings 503431
**Disassembly Procedure**

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 subassemblies. Always use a soft-jaw vise to avoid damaging the tool. For component identification, see Figures 5-9.

**WARNING: Disconnect the tool control trigger from the Powerig® before disconnecting the hydraulic hoses. If not disconnected in this order, serious personal injury may occur.**

To disassemble the tool:

1. See WARNING above. Disconnect the electric trigger control cord or air trigger control hose from the Powerig; then uncouple the hydraulic hoses.
2. Remove the nose assembly from the tool.
3. Unscrew 4 button head screws at the bottom of the handle to disengage the 2-piece clamp guide. This will aid in loosening the hoses and cord, and in lifting the cylinder assembly from the handle.
4. Remove 3 button head screws that hold the handle to the cylinder; then pull the cylinder assembly up from the handle.
5. Using a 1-3/8 inch open-end wrench, unscrew the nose adapter.
6. With a blunt drift against the back of the piston rod, press the piston out through the front of the tool. This action will also press the front gland assembly out.
7. Slide the gland assembly off the piston.
8. Use a small, dull pointed rod or pick, remove all seals, O-rings, and back-up rings from the piston, gland, and inside the cylinder.

**NOTE: Disassemble control trigger systems only when it is necessary to rewire or replace trigger switch.**

**Assembly Procedure**

To assemble the tool:

1. Set the cylinder assembly in a soft jaw vice. The piston can then slide through front opening of cylinder.
2. Assemble the front gland assembly, and slide it onto the front of the piston until it stops; then position the piston in the cylinder, and press down on piston until it stops.
3. Screw the nose adapter all the way onto the front of cylinder head assembly; then back it out until the flat is aligned with the flat on the handle.
4. Reduce the pressure on a Powerig to the lowest possible setting and actuate 5 to 10 times. If incomplete stroke or erratic piston actuation is observed, crack open cylinder assembly bleed ports (Figures 6 and 7) to vent air. Apply Loctite 243 to 508783 setscrew, tighten down against 502505 Ball so no leaks are present, and re-actuate the tool. Repeat these steps as necessary.
5. Seat the assembled cylinder back onto the handle assembly, ensuring the (OS5500) spacer - or (OS9300) handle cap - is in place; then affix the assemblies with 3 button head screws treated with Loctite 243® Threadlocker. If the handle assembly has been disassembled, with trigger assembly removed apply Loctite 243 Threadlocker to 508593 socket head screw and tighten against the nose adapter.

**WARNING: Make sure the tool has been properly re-assembled prior to use. Failure to do so could result in serious personal injury. Do not omit any seals during servicing; leaks will result and personal injury may occur.**

**CAUTION: Do not use Teflon tape on any threads. Tape can shred, resulting in malfunctions. Threadmate™ is available in a 4oz. tube from Huck (P/N 508517).**

When re-assembling the tool, always replace seals, wipers, and rings of subassemblies, as well as damaged and defective parts. Take care not to damage rings. Cleaning components with mineral spirits or a similar solvent. Inspect them for wear/damage and replace as necessary. Use the O-rings, Polyseals, and Back-up rings from Huck Spare Parts Service Kit OS5500KIT or OS9300KIT. Having an extra Service Kit available at all times is advised.

For component identification, see Figures 5-9.

Smear LUBRIPLATE® 130-AA (Huck P/N 502723) or SUPER-O-LUBE® (Huck P/N 505476) on all rings, and mating parts to ease 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 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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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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845-331-7300
FAX: 845-334-7333

**Tucson Operations**
3724 East Columbia
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520-747-9898
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**Carson Operations**
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