Safety Instructions

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

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

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. 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.

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

The HUCK 12142 Hydraulic Installation Tool installs 1-38" HUCKBOLT® Fasteners. This compact, inline tool is designed to install fasteners in limited-clearance areas. The tool operates on 8400 psi (579 BAR) PULL and 3200 psi (220 BAR) RETURN pressures as supplied by Huck POWERIG® Hydraulic Units, models 913, 918, and 940—or an equivalent hydraulic unit. The nose assembly is part of the tool.

Specifications

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

**MAX FLOW RATE:** 2 gpm (7.6 l/m)

**WEIGHT:** 60 lbs (27.2 kg)

**STROKE:** 2.25 in. (5.7 cm)

**MAX INLET (PULL) PRESSURE:** 8400 psi (579.18 bar)

**MAX RETURN PRESSURE:** 3200 psi (220.6 bar)

**PULL CAPACITY:**
114,300 lbs @ 8400 psi (508.4 kN @ 579.18 bar)

**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.
Principle of Operation

**WARNING:** HUCK recommends that only a HUCK Powerig® be used to power Huck tools. (Only use the Powerig as indicated in its instruction manual.) Hydraulic power units that deliver high PULL and RETURN pressures, but that are NOT equipped with RELIEF VALVES, are specifically NOT RECOMMENDED and may be dangerous.

**PULL PRESSURE**
Hydraulic hoses and trigger control cord are connected to the HUCK Powerig® Hydraulic Unit. The trigger controls the PULL and RETURN strokes 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.

**RETURN PRESSURE**
When the fastener installation is completed, the trigger is released. The hydraulic pressure is directed to the RETURN side of the anvil/piston, moving the piston rearward. The tool and nose assembly are pushed off the installed fastener. At the end of the PULL stroke, the piston uncovers a flat on the unloading valve causing the PULL pressure to flow back to the Powerig tank.

**Sticker Locations**
The 12142 tool is labeled with important stickers that contain safety and pressure-settings information. These stickers must remain on the tool and be legible. If the stickers become damaged or worn, or if they are removed from the tool, they must be replaced. The part numbers are shown in the figure below.
Preparation for Use

**WARNINGS:**
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.
Ensure 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 switch control cord to it. If not connected in this order, serious personal injury may occur.
Huck recommends that a Huck POWERIG® be used to power Huck tools. (Only use the POWERIG as indicated in its instruction manual.) 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 could result in serious personal injury.
Use Pressure Gauge T-124883CE as indicated in its instruction manual. Improper pressure settings may result in severe personal injury.

**CONNECTION THE TOOL**

**NOTE: Where a part number (P/N) is given, HUCK sells that part.** Remove shipping caps from pipe plug fitting ends. Coat pipe plug threads, hose fitting threads, and quick connect fittings with Parker Threadmate®, Loctite® 567, or Slic-Tite® per manufacturer’s instructions. Use a HUCK Powerig® Hydraulic Unit, or equivalent, that has been prepared for operation per its instruction manual. Check both the PULL and RETURN pressures and, if required, adjust to pressures given in Specifications section of this manual.

1. First, turn OFF the Powerig, and then disconnect its power supply. Disconnect trigger control system from hydraulic unit.

2. Connect PULL pressure hose, with coupler nipple, into port “P” of tool. Connect RETURN pressure hose, with coupler body, into port “R” of tool. Check trigger assembly for apparent damage or wear. If required, adjust position of trigger assembly on RETURN pressure hose. Connect the trigger control system to the Powerig.

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

4. Disconnect tool from Powerig.

**Assembly of NPTF Threaded Components**

**AIR FITTINGS**
1) Apply TEFOLON® 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>
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<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>
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<tr>
<td>3/8-18 NPTF</td>
<td>.351 inch (.89 cm)</td>
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**Hydraulic Couplings**

**CAUTIONS:**
Keep disconnected hoses, couplers, and hydraulic fluid away from dirty surfaces and free of foreign matter. Contaminated fluid can cause tool and POWERIG valve failures.
Apply Parker Threadmate®, Loctite® 567, or Slic-Tite® to male pipe threads (per manufacturer’s instructions) to prevent leaks and to ease assembly.

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**Hydraulic Couplings**
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.
To avoid structural and tool damage, ensure sufficient clearance for the nose assembly at full stroke.
Do not abuse tool by dropping it, using it as a hammer, or otherwise causing unnecessary wear and tear.
Do not connect tool’s hoses to each other or use hoses as a handle for carrying.

GENERAL
► Operators should receive training from qualified personnel.
► Do not bend tool to free if stuck.
► Tool should only be used to install fasteners. Never use as a jack/spreader or hammer.
► Reasonable care of tools by operators is an important factor in maintaining efficiency and reducing downtime.
► The length of the tool increases during fastener installation. Allow adequate tool and anvil clearance before installing fasteners.
► Before starting, hold trigger down for approximately one minute to be sure tool is filled with air-free hydraulic fluid.

HUCKBOLT® FASTENER INSTALLATION:
Check pin for correct grip. Place a fastener in the workpiece and place the collar over the fastener.

NOTE: If the collar has one tapered end, that end must be facing toward tool; not next to workpiece.
1. Hold the fastener in the hole and push the nose assembly onto the fastener protruding through the collar until the nose assembly anvil touches the collar.
2. Hold the tool at a right-angle (90 degrees) to the workpiece, and move hands away from fastener and structure. Keep hands away from the front of the tool during operation; the tool anvil advances forward.
3. Press and hold the trigger until the collar is swaged and the pintail breaks. NOTE: If the pintail does not break off, operate the trigger to recycle the tool until the pintail breaks and the tool is released from the fastener.
4. Release the trigger; the tool performs its RETURN stroke; the pressure is redirected; the piston moves forward; and the tool is pushed off the fastener and ready for the next installation cycle.

CAUTION: Tilt tool downward so that the broken-off pintail can drop out.
**Maintenance**

**FLUID MAINTENANCE**

See **Specifications** for fluid type. For fluid maintenance, refer to NAS 1638 class 9, ISO CODE 18/15, or SAE level 6. 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**

- Apply Parker Threadmate®, Loctite® 567, or Slic-Tite® to male pipe threads per manufacturer’s instructions (to ease assembly and to prevent leaks).
- Smear LUBRIPLATE® 130-AA or SUPER-O-LUBE® on rings and mating parts to ease assembly and to prevent nicking/pinching rings on rough/tight spots.

**PREVENTIVE MAINTENANCE**

Huck recommends that you:

- Inspect the tool and nose daily for damage and wear. Inspect the tool before each use for leaks.
- Verify that hoses, fittings, and trigger connections are secure and free of leaks.
- Inspect hydraulic hoses for signs of damage. Replace if necessary.
- Inspect the tool, hoses, and POWERIG during operation to detect abnormal heating, leaks, or vibration.

For supplementary information, see **Troubleshooting**, the **Disassembly and Assembly procedures**, and the **Assembly Drawing** in this manual.

**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. Tool-specific Spare Parts Service Kits should be kept 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 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 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.

For additional information, see the appropriate Nose Assembly Data Sheet.

**SPARE PARTS SERVICE KITS**

Spare Parts Service Kits contain perishable parts (O-rings, Back-up rings, and other standard items) for your tool (see **Kits & Accessories**). For convenience, and as experience indicates, keep extra kits and tool parts on hand. As an alternative, you can obtain O-rings and Back-up rings from any regular retailer of these items.

---

**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®.

Check the Assembly Drawings in this manual for the proper direction of the flats on the dump valve. Always replace all seals, wipers, O-rings, and Back-up rings when the tool is disassembled for any reason.

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

Damaged jaw teeth, or debris packed between teeth, will result in fastener not being installed or being improperly installed.
Disassembly Procedure

The following procedure is for disassembly of Tool. Remove only those parts necessary. The retainer is removed for jaw maintenance; the collet and release assembly are removed to service release/ejector assembly. Check and replace damaged/worn components. **Always replace O-rings, wipers, and back-up rings when disassembling tool.**

1. Disconnect electric trigger control cord, then uncouple Hydraulic Hoses.
2. Unscrew coupling nipple and coupling body. Drain hydraulic hoses into a container, and discard fluid.
3. To remove retainer, thread out of collet. Pull out follower with O-rings; remove jaws.
4. Use either a sliding pin spanner or a 1/4 inch thick flat steel bar, 4 1/2 inches long with an adjustable wrench to unscrew collet. Collet will come out with retainer, follower, seals, jaws, release and ejector still assembled.
6. Remove dump valve from piston anvil.
7. Normally, ejector and release cannot be disassembled by unscrewing. Hold collet in a toolmaker’s vise, and using a hack saw, band saw, or abrasive cutting wheel, cut at a point between flange of ejector and end of collet.
8. Loosen two screws on cord grip. Loosen cup-point setscrew. Pull switch from housing.
9. Loosen two screws at rear of switch to remove switch from electrical cord. Remove two #6-32 socket setscrews to dismantle switch for cleaning. Remove cord grip from housing.
10. Disconnect electrical connector to rewire or replace.

Clean all tool components with mineral spirits, or equivalent, and inspect for wear or damage. Replace as required. **Always replace all seals on/in disassembled components.** Use O-rings and back-up rings supplied in SERVICE PARTS KIT, 12142KIT. Smear LUBRIPLATE 130AA, or equivalent, on O-rings, back-up rings and mating components for ease of assembly. Assemble Tool taking care not to damage either O-rings or back-up rings.

2. Press Piston Anvil into Cylinder.
3. With flats oriented in the direction shown on the 12142 Component Drawing, slide Dump Valve into Anvil.
4. Thread Collet into Cylinder. Use flat bar and wrench or pin spanner.
6. If hydraulic hoses have been removed, tighten hoses into Cylinder.
7. Screw Coupler Nipple into PULL pressure hose from “P” port. Screw Coupler Body onto RETURN pressure hose.
8. If necessary, rewire and assemble electrical connector. Screw cord grip into housing.
9. Assemble switch and install two #6-32 socket setscrews. Attach cord using two screws at rear of switch.
10. Push switch into housing and tighten cup point setscrew to hold switch. Tighten two screws on cord grip.
11. See WARNING in Disassembly and reverse the given procedure; i.e. CONNECT HOSES FIRST, and then connect electrical control cord before testing tool on hydraulic unit.

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

**WARNINGS:**
Do not omit any seals during servicing or re-assembly; leaks will result and serious personal injury can occur

Tool must be fully assembled with all components included prior to testing and/or operation.

**CAUTIONS:**
When re-assembling the tool, always replace damaged and defective parts, and all seals, wipers, and rings of sub-assemblies.

Always use proper unloading (dump) valve, and always make sure the flats of the valve are oriented in the tool as shown in 12142 COMPONENTS DRAWING on the next page of this manual.

Do NOT use Teflon® tape on pipe threads. Tape can shred and break free into fluid lines, resulting in malfunctions.
Components Drawing

1. 126668 Sleeve Use with 502035 Setscrews (2) Not Shown
2. 504683 O-Ring
3. 503412 Back-up Ring
4. 505086 Wiper
5. 112719 Piston Anvil
6. 111924 Ejector
7. 112721 Release
8. 120361 Trigger Switch Assembly
   - 508455 Setscrew
   - 120344 Switch Housing
   - 505344 Strain Relief
9. 120341 Trimmed Cord
10. 120345 Switch & Electric Cord Assembly
   - Parts shown may be ordered individually or as an assembly.
11. 126667 Chuck Jaws
12. 502496 Screw
13. 505053 Back-up Ring (2)
14. 505050 O-Ring
15. 111925 Unloading (Dump) Valve
16. 500804 O-Ring
17. 111931 Retainer
18. 111936 Follower
19. 500880 O-Ring (21) Arrange as shown.
20. 111927 Spacer (2)
21. 110686 Male Connector
22. 110686 Male Connector
23. 120361 Trigger Switch Assembly
24. 123749-5 Hose (2)
25. 110438 Coupler Nipple
26. 110439 Coupler Body

1. See Subassembly Part Numbers on next page.
Subassembly Part Numbers

Refer to 12142 COMPONENTS DRAWING on previous page

Cylinder Assembly 112339 includes:

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>590501-8400</td>
<td>Cylinder (not available separately)</td>
</tr>
<tr>
<td>503412</td>
<td>Back-up Ring</td>
</tr>
<tr>
<td>504683</td>
<td>O-Ring</td>
</tr>
<tr>
<td>505086</td>
<td>Wiper</td>
</tr>
<tr>
<td>590517</td>
<td>HUCK Trademark &amp; Year Sticker</td>
</tr>
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Piston Anvil Assembly 112336 includes:

<table>
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<tr>
<th>Part Number</th>
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<tbody>
<tr>
<td>504677</td>
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<tr>
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<td>O-Ring</td>
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<tr>
<td>505053</td>
<td>Back-up Ring</td>
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<td>505094</td>
<td>Back-up Ring</td>
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Collet & Release Assembly 112340 includes:

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<tbody>
<tr>
<td>111924</td>
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<td>112721</td>
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<td>O-Ring</td>
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<tr>
<td>505052</td>
<td>Back-up Ring</td>
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Retainer Assembly 112341 includes:

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<th>Part Number</th>
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<tbody>
<tr>
<td>500804</td>
<td>Retainer (not available separately)</td>
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Service Kits

Service Kit 12142KIT is a product specific spare parts kit that contains perishable seals, O-rings, and Back-up rings. Keep this kit on hand.

Kits & Accessories

Service Kits

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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<tr>
<td>111924</td>
<td>Ejector</td>
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<tr>
<td>112721</td>
<td>Release</td>
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<tr>
<td>505051</td>
<td>O-Ring</td>
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<tr>
<td>505052</td>
<td>Back-up Ring</td>
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Accessories

<table>
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<tr>
<th>Product</th>
<th>Part Number</th>
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<tr>
<td>Pintail Deflector</td>
<td>118951</td>
</tr>
<tr>
<td>Loctite 271 (5 ml tube)</td>
<td>503657</td>
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<tr>
<td>Loctite 242 (50 ml bottle)</td>
<td>505016</td>
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<tr>
<td>LUBRIPLATE® 130-AA</td>
<td>502723</td>
</tr>
<tr>
<td>Parker Threadmate® (4 oz. tube)</td>
<td>508517</td>
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<tr>
<td>Slic-Tite® (stick)</td>
<td>503237</td>
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<tr>
<td>SUPER-O-LUBE®</td>
<td>505476</td>
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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.
   a. Inoperative POWERIG® Hydraulic Unit. See applicable instruction manual.
   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 operates in reverse.
   a. Reversed hydraulic hose connections between POWERIG and tool.
3. Tool leaks hydraulic fluid.
   a. Defective or worn O-rings or loose hose connections at tool.
4. Hydraulic couplers leak fluid.
   a. Damaged or worn O-rings in coupler body. See Coupler (P/N 110440).
5. Hydraulic fluid overheats.
   a. Hydraulic unit not operating properly; see unit's manual.
   b. Unloading valve incorrectly installed.
   c. POWERIG running in reverse (918 & 918-5 only). See unit's manual.
6. Tool operates erratically and fails to properly install fastener.
   a. Low or erratic hydraulic pressure supply; air in system.
   b. Damaged or excessively worn piston/anvil O-ring.
   c. Unloading valve incorrectly installed.
6. Tool operates erratically and fails to properly install fastener.
   a. Low or erratic hydraulic pressure supply; air in system.
   b. Damaged or excessively worn piston/anvil O-ring.
   c. Unloading valve incorrectly installed.
   d. Excessive wear on or scoring of sliding surfaces of tool parts.
   e. Excessive wear of unloading valve.
7. Pull grooves on fastener pintail stripped during PULL stroke.
   a. Operator not sliding anvil completely onto fastener pintail.
   b. Incorrect fastener grip.
   c. Worn or damaged jaw segments.
   d. Metal particles accumulated in pull grooves of jaw segments.
   e. Excessive sheet gap.
8. Collar of HUCKBOLT® fastener not completely swaged.
   b. Scored anvil in nose assembly.
   a. Improper operation of jaw follower. Check number of follower O-rings.
10. Tool “hangs-up” on swaged collar of HUCKBOLT fastener.
    b. RETURN pressure too low.
11. Pintail of fastener fails to break.
    b. Pull grooves on fastener stripped. See Trouble 7.
    c. PULL pressure too low.
    d. Worn unloading valve.
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

**INDUSTRIAL NORTH AMERICA**

<table>
<thead>
<tr>
<th>Location</th>
<th>Address</th>
<th>Phone</th>
<th>Fax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kingston Operations</td>
<td>1 Corporate Drive, Kingston, NY 12401</td>
<td>+1-800-278-4825</td>
<td>+1 845-334-7333</td>
</tr>
<tr>
<td>Tracy Operations</td>
<td>1925 North MacArthur Drive, Tracy, CA 95376</td>
<td>+1-800-826-2884</td>
<td>+1-800-573-2645</td>
</tr>
<tr>
<td>Waco Operations</td>
<td>PO Box 8117, Waco, TX 76714-8117</td>
<td>+1-800-388-4825</td>
<td>+1-800-798-4825</td>
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**INDUSTRIAL GLOBAL**

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<tbody>
<tr>
<td>Kolkata Operations</td>
<td>Unit No. 28, 2nd Floor, 55/1, Chowringhee Road, Kolkata 700071, West Bengal, India</td>
<td>+91-33-40699170</td>
<td>+91-33-40699180</td>
</tr>
<tr>
<td>Melbourne Operations</td>
<td>1508 Centre Road, Clayton, Victoria, Australia 3168</td>
<td>+613-8545-3333</td>
<td>+613-8545-3390</td>
</tr>
<tr>
<td>São Paulo Operations</td>
<td>Rodovia Anhanguera, s/n, KM 17, Parque São Domingos - Complexo Anhanguera - Galpão 1 Seção III (Módulo III) Box 11 CEP 05112-000 São Paulo – SP Brazil</td>
<td>+55-11-3583-7061</td>
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<tr>
<td>Suzhou Operations</td>
<td>58 Yinsheng Road, SIP Suzhou, Jiangsu 215126 China</td>
<td>+86-512-62863800-8888</td>
<td></td>
</tr>
<tr>
<td>Tokyo Operations (Japan and Korea)</td>
<td>1013 Hibiya U-1 Bldg. Uchisaiwai-cho 1-1-7 Chiyoda-ku, Tokyo 100-0011 Japan</td>
<td>+81-3-3539-6594</td>
<td>+81-3-3539-6585</td>
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**AEROSPACE NORTH AMERICA**

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<td>Kingston Operations</td>
<td>1 Corporate Drive, Kingston, NY 12401</td>
<td>+1-800-278-4825</td>
<td>+1 845-334-7333</td>
</tr>
<tr>
<td>Simi Valley Operations</td>
<td>3990A Heritage Oak Court, Simi Valley, CA 93063</td>
<td>805 527 3600</td>
<td>805 527 0900</td>
</tr>
<tr>
<td><a href="http://www.afs-simivalley.com">www.afs-simivalley.com</a></td>
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<tbody>
<tr>
<td>Aichach Operations</td>
<td>Robert-Bosch Str. 4, Aichach 86551, Germany</td>
<td>+49-8251-8757-0</td>
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<tr>
<td></td>
<td><a href="mailto:aicafswelcomedl@arconic.com">aicafswelcomedl@arconic.com</a></td>
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<tr>
<td>Cergy Operations</td>
<td>15 Rue du Petit Albi, F-95611 Cergy Pontoise, France</td>
<td>+33-1-34-33-98-00</td>
<td>+33-1-34-33-97-77</td>
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<tr>
<td>Hong Kong Operations</td>
<td>27th Floor, 88 Hing Fat Street, Causeway Bay, Hong Kong, China</td>
<td>+852-2864-2012</td>
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</table>

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.