

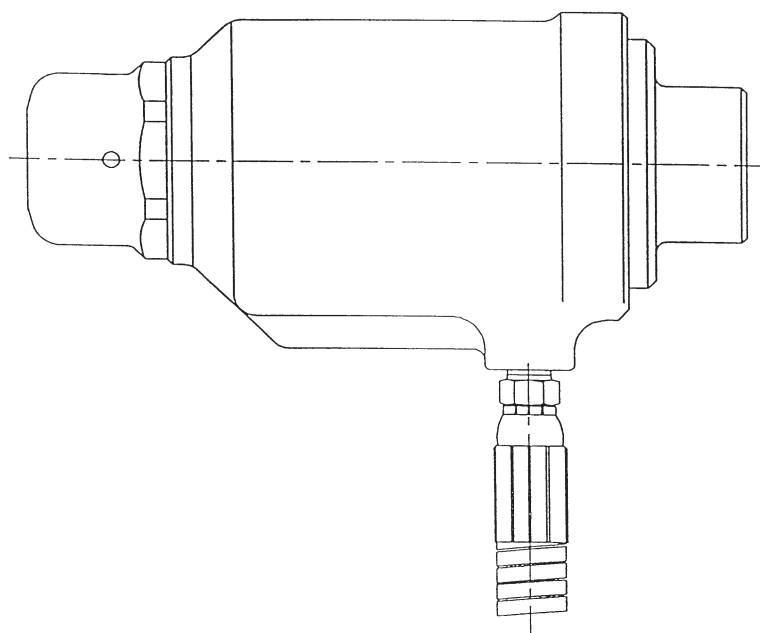


ARCONIC

Instruction Manual

582 and 682

Hydraulic Installation Tools



HUCK IS FOREVER.™

February 17, 2017
HK916

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Makers of Huck®, Marson®, Recoil®
Brand Fasteners, Tools & Accessories





Safety Instructions

GLOSSARY OF TERMS AND SYMBOLS:



- Product complies with requirements set forth by the relevant European directives.



- Read manual prior to using this equipment.



- Eye protection is required while using this equipment.



- Hearing protection is required while using this equipment.

Notes: are reminders of required procedures.

Bold, italic type, and underline: emphasize a specific instruction.



WARNINGS: Must be understood to avoid severe personal injury.



CAUTIONS: Show conditions that will damage equipment or structure.

I. GENERAL SAFETY RULES:

1. A half hour long hands-on training session with qualified personnel is recommended before using Huck equipment.
2. Huck equipment must be maintained in a safe working condition at all times. Tools and hoses should be inspected at the beginning of each shift/day for damage or wear. Any repair should be done by a qualified repairman trained on Huck procedures.
3. For multiple hazards, read and understand the safety instructions before installing, operating, repairing, maintaining, changing accessories on, or working near the assembly power tool. Failure to do so can result in serious bodily injury.
4. Only qualified and trained operators should install, adjust or use the assembly power tool.
5. Do not modify this assembly power tool. This can reduce effectiveness of safety measures and increase operator risk.
6. Do not discard safety instructions; give them to the operator.
7. Do not use assembly power tool if it has been damaged.
8. Tools shall be inspected periodically to verify all ratings and markings required, and listed in the manual, are legibly marked on the tool. The employer/operator shall contact the manufacturer to obtain replacement marking labels when necessary. Refer to assembly drawing and parts list for replacement.
9. Tool is only to be used as stated in this manual. Any other use is prohibited.
10. Read MSDS Specifications before servicing the tool. MSDS specifications are available from the product manufacturer or your Huck representative.
11. Only genuine Huck parts shall be used for replacements or spares. Use of any other parts can result in tooling damage or personal injury.
12. Never remove any safety guards or pintail deflectors.
13. Never install a fastener in free air. Personal injury from fastener ejecting may occur.
14. Where applicable, always clear spent pintail out of nose

assembly before installing the next fastener.

15. Check clearance between trigger and work piece to ensure there is no pinch point when tool is activated. Remote triggers are available for hydraulic tooling if pinch point is unavoidable.
16. Do not abuse tool by dropping or using it as a hammer. Never use hydraulic or air lines as a handle or to bend or pry the tool. Reasonable care of installation tools by operators is an important factor in maintaining tool efficiency, 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...



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:



WARNINGS:

Do not exceed maximum pull or return settings on tool.

Be sure all hose connections are tight. All tool hoses must be connected.

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.



Description

The **582** (5/8-16mm) and **682** (3/4) Hydraulic Installation Tools install **C50L** and **M50L** (582) HUCKBOLT® and Huck Blind Fasteners. Tool models vary in size and pull capacity. Each model has a built-in nose assembly that is designed to install a specific size fastener.

The tools are powered by Huck POWERIG® Hydraulic Units (models 913, 918, 918-5, and 940) and equivalent hydraulic units.

Hydraulic Units are preset at the factory to provide 5700 psi (393 bar) PULL pressure and 2400 psi (165 bar) RETURN pressure. Hydraulic units must be reset per applicable instructions to provide 8000 psi (551.6 bar) PULL pressure and 2800 psi (193 bar) RETURN pressure.

Tool seals and hoses are compatible with phosphate ester hydraulic fluid.

Specifications

PULL PRESSURE: 8000 psi (551.6 bar)

RETURN PRESSURE: 2800 psi (193 bar)

PULL CAPACITY:

582: 32235 lbs @ 8000 psi (143.1 kN @ 551.6 bar)

682: 40720 lbs @ 8000 psi (181.1 kN @ 551.6 bar)

POWER SOURCE: Huck POWERIG® Hydraulic Unit (models 913, 918, 918-5, and 940) and equivalent hydraulic units

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.

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.

TOOL	MIN. EFFECTIVE STROKE	LENGTH	WIDTH	HEIGHT (excluding hoses)	CENTER-TO-EDGE	WEIGHT
582	1.413 in. (35.9 cm)	8.2 in. (20.1 cm)	3.6 in. (9.2 cm)	4.3 in. (11.0 cm)	1.7 in. (4.3 cm)	16.0 lbs. (7.3 kg)
682		8.6 in. (21.2 cm)	4.0 in. (101..2 cm)	4.7 in. (11.9 cm)	2.0 in. (5.0 cm)	19.0 lbs. (8.6 kg)

Assembly of NPTF Threaded Components

AIR FITTINGS

- 1) Apply TEFLON® 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)

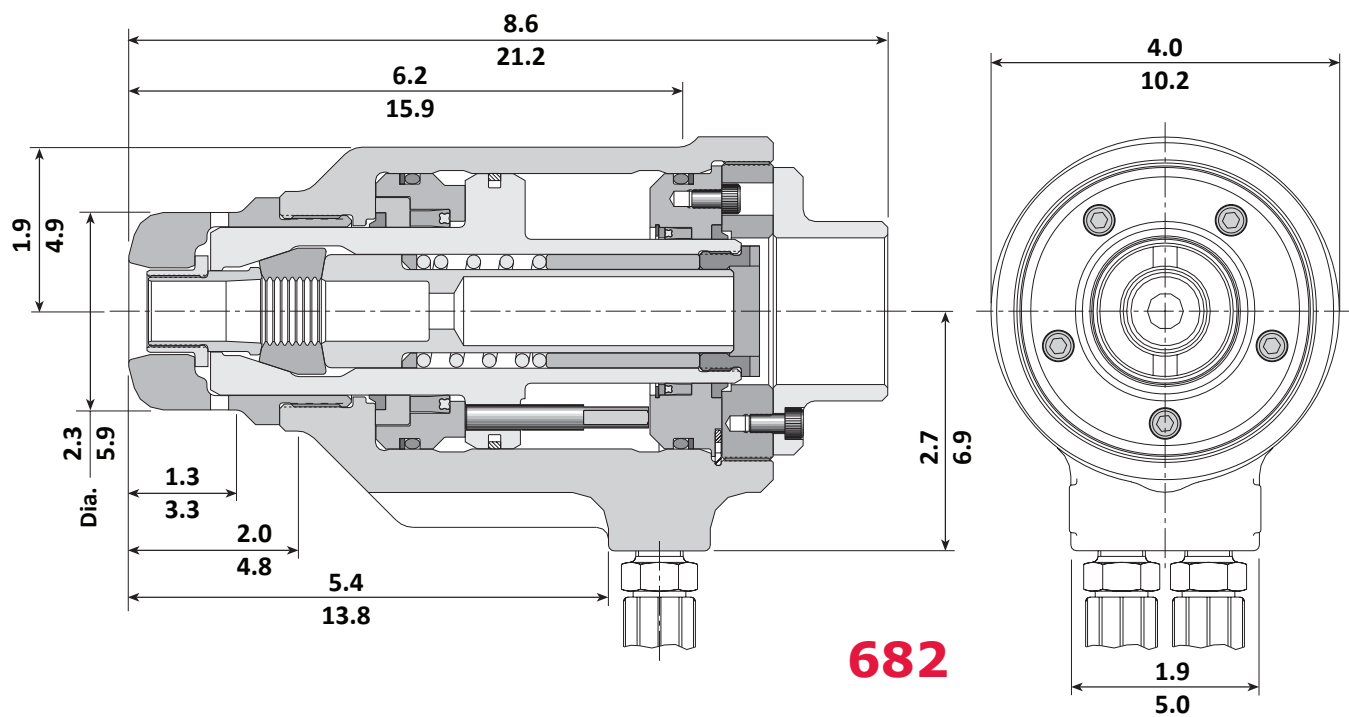
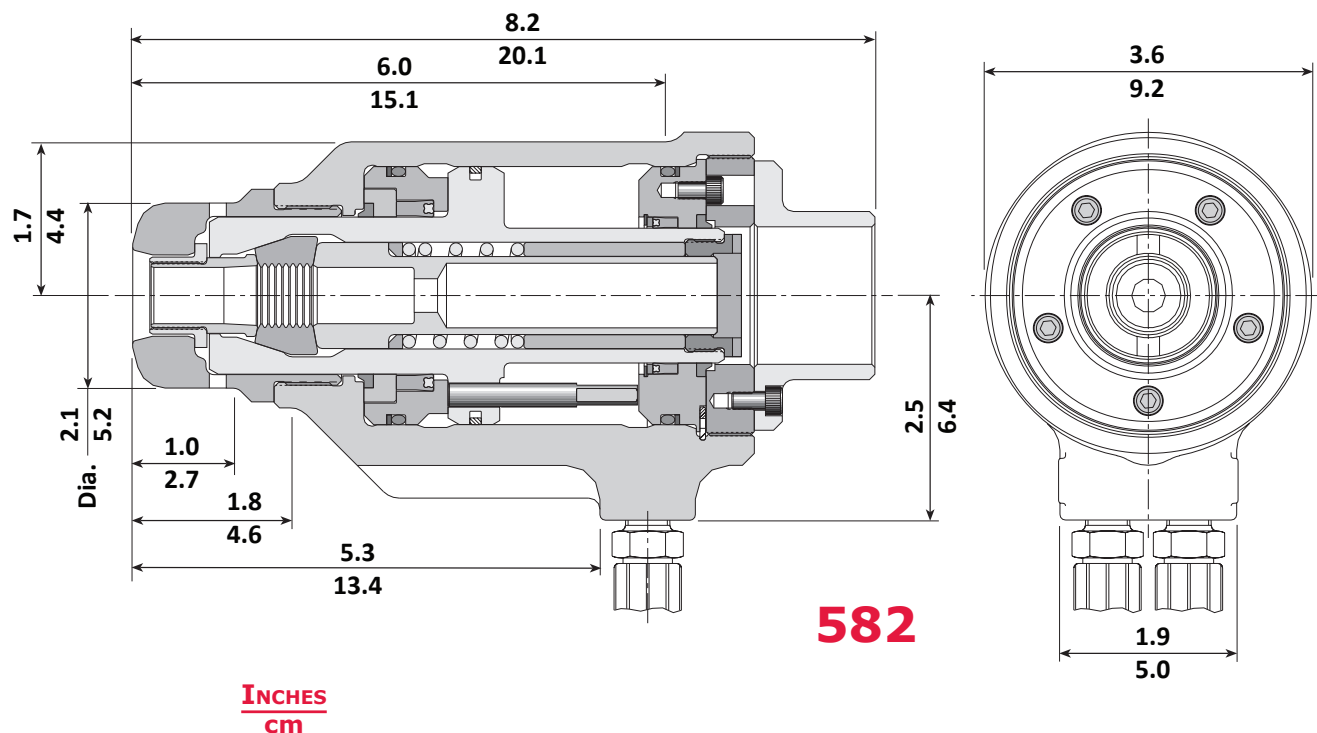
ALL FITTINGS:

- 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.

THREAD SIZE	FINAL THREAD ENGAGEMENT AT FULL MAKE-UP
1/8-27 NPTF	.235 inch (.59 cm)
1/4-18 NPTF	.339 inch (.86 cm)
3/8-18 NPTF	.351 inch (.89 cm)



Specifications (continued)



Principle of Operation



WARNING: 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. Serious personal injury and/or equipment damage could result from using unqualified units.

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

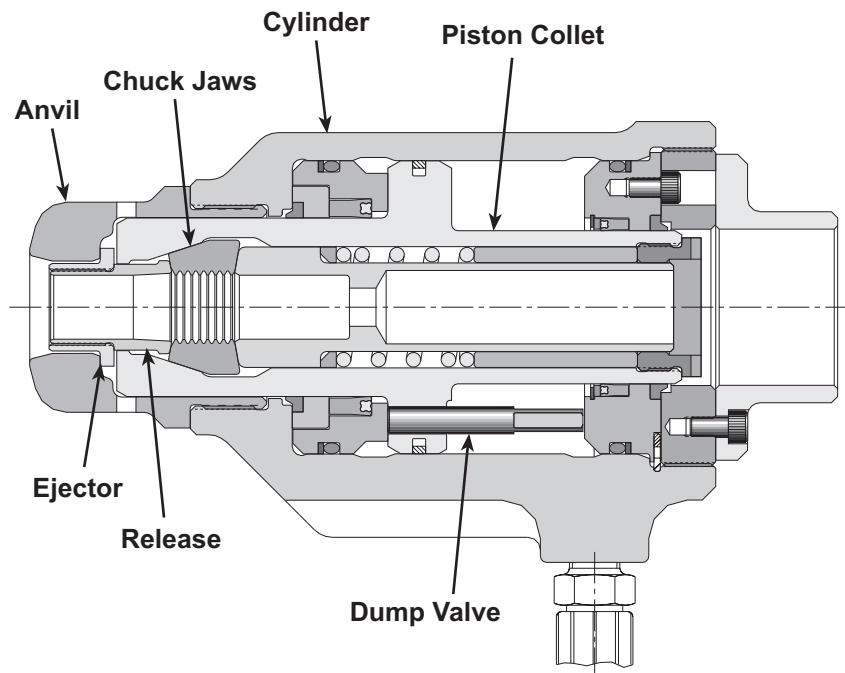
Huck Pressure Gauge (P/N T-124883CE) is available, and should be used as indicated in its instruction manual.

Operators of any Huck equipment must always wear approved eye protection.

These tools are **cylinder** and piston assembly with an integral nose assembly. The piston assembly includes a collet assembly. The **anvil**, attached separately, completes the integral nose assembly. A **dump** (“unloading”) **valve** has flats that are controlled by the piston collet’s position at both ends of the stroke. Flats on the dump valve allow a measured flow of pressurized fluid to flow back to the hydraulic unit. This relieves pressure and strain on tool.

When the trigger is released at the end of the PULL stroke, after fastener is installed, pressure is directed to the RETURN side of the **piston collet** and moves the piston collet forward. The **ejector** pushes against swaged collar and the anvil is pulled from the collar. The **release** opens the **chuck jaws**. When the broken pintail is free of the tool, the next installation cycle can begin.

FIGURE 1





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.
- 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.

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) to prevent leaks and ease assembly.



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

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. Connect the tool's hoses to hydraulic unit.
3. Connect the tool's control switch electrical cord to the hydraulic unit.



WARNING: Connect the tool's *hydraulic hoses* to the POWERIG before connecting the tool's control trigger system to the POWERIG.

If not connected in this order, severe personal injury may occur.

4. Connect the hydraulic unit to the power supply and turn it ON. Press and hold the tool trigger for 30 seconds; then press the trigger a few times to cycle the tool and to circulate the hydraulic fluid. Observe the action of the tool and check for leaks. Turn OFF the hydraulic unit.
5. Disconnect the tool's control switch electrical cord from the hydraulic unit; then disconnect the hydraulic unit from the power supply. Select the appropriate nose assembly for the fastener to be installed. Attach nose assembly to tool.
6. Reconnect the hydraulic unit to the power supply. Reconnect the tool's switch control cord to the unit. Check the operation of nose assembly. Install fasteners in test plate of correct thickness with proper size holes. Inspect the installed fasteners.

If the fasteners do not pass inspection, see TROUBLESHOOTING to investigate possible causes.

*Loctite is a registered trademark of Henkel Corporation, U.S.A.
Threadmate is a registered trademark of Parker Intangibles LLC.
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.*



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.



CAUTIONS:

- To avoid structural and tool damage, be sure there is 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.
- Reasonable care of tools by operators is an important factor in maintaining tool efficiency and reducing downtime.



CAUTION: Remove the excess gap from between the sheets to ensure that enough of the pintail emerges from the collar for **ALL** chuck jaw teeth to engage with the pintail. If **ALL** teeth do not engage properly, chuck jaws will be stripped and/or damaged.

TO INSTALL 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 in the hole and push the nose assembly onto the pin protruding through the collar until the nose anvil touches the collar. Hold the tool at a right-angle (90 degrees) to the work.
3. Move hands away from pin and structure. (Keep hands away from the front of the tool during operation because the tool anvil advances forward.)
4. Press and hold the trigger until the collar is swaged and the pintail breaks.
5. 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.

NOTE: *If the pintail does not break off, operate the switch to re-cycle the tool until the pintail breaks and the nose assembly is ejected from the installed fastener.*

TO INSTALL A HUCK BLIND FASTENER:



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

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°) 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.

For additional safety information, see page 4.



Maintenance



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.

SYSTEM INSPECTION / PREVENTIVE MAINTENANCE

The operating efficiency of your tool is directly related to performance of the entire system, including the tool and nose assembly, hydraulic hoses, control trigger assembly, and the POWERIG® Hydraulic Unit. Therefore, 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.



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

- 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.
- Observe tool, hoses, and POWERIG during operation to detect abnormal heating, leaks, and vibrations. Never carry the tool by the hose.
- 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 Kits:
 - **582**: (kit P/N **123382**) with Loctite® 271
 - **682**: (kit P/N **123546**) with Loctite® 242
- Follow the disassembly and assembly procedures in this manual. If Huck recommended procedures are not followed, the tool could be damaged.

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).



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

- Smear LUBRIPLATE® 130-AA or SUPER-O-LUBE® on seals and mating surfaces to ease assembly to prevent damage to seals.

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, (**582KIT** or **682KIT**) on hand.

Inspect cylinder bore, piston, collet exterior, and unloading valve for scored surfaces, excessive wear, and damage; replace as necessary.

Huck recommends cleaning the piston/collet internal parts daily by dipping the anvil in mineral spirits or other suitable solvent to clear jaws and rinse metal chips and debris. Use a spanner wrench to remove the retainer for a more thorough cleaning. If spanner wrench is not available, use a proper fitting tool in the slots of the retainer. Jaws, follower, etc. are removed by turning tool. Use a pointed "pick" to remove embedded particles from the pull grooves of the jaws.



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

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Threadmate is a registered trademark of Parker Intangibles LLC.
Slic-tite is a registered trademark of LA-CO Industries, Inc.
LUBRIPLATE is a registered trademark of Fiske Brothers Refining Co.
SUPER-O-LUBE is a registered trademark of Parker Hannifin Corp.
Teflon is a registered trademark of E. I. du Pont de Nemours and Company.*

Disassembly

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 Figure 3 and **PARTS LIST**.

TO DISASSEMBLE THE TOOL:

1. Disconnect the tool's electric trigger control cord (33), then uncouple the hydraulic hoses.

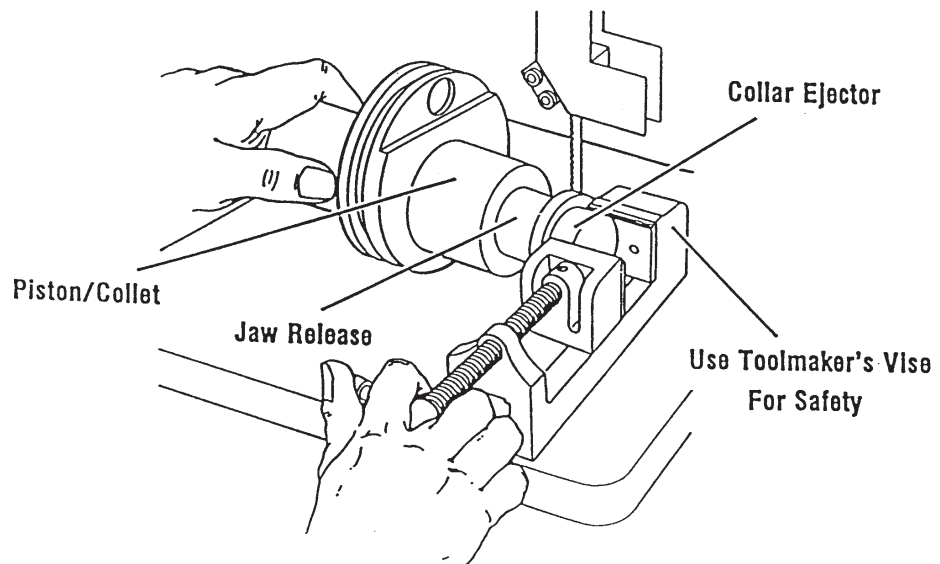


WARNING: Disconnect the tool's control trigger system from the POWERIG® before disconnecting the hydraulic hoses from it. If not disconnected in this order, serious personal injury may occur.

2. **582:** Unscrew anvil (1) with a 2-3/16" open-end wrench.
682: Unscrew anvil (1) with a 2-1/2" open-end wrench.
3. Unscrew the coupling nipple and coupling body, and drain the hydraulic hoses into a container.
4. Push rearward on piston until remaining hydraulic fluid is drained into a container. Discard the fluid.
5. Remove the square nuts, screws, and washers. Separate the clamp from the trigger/cord assembly and hydraulic hoses.
6. Remove the hoses from the cylinder. PULL hose with male coupler.
7. Remove screws (22) that secure guard (21); remove the guard.
8. Remove the retainer screw. Unscrew the retainer. Use the adjustable spanner wrench or insert two 5/16 rods in holes and turn the retainer with the bar held between the rods.
9. Push rearward on piston collet (4) until rear gland (14), with locking disc (23), slides out of the cylinder. Remove the dump valve (26) and front gland (9).
10. Hold the front of piston collet (4) in a soft-jaw vise. Unscrew the retainer and O-ring assembly with the spanner wrench.
11. Pull the rear gland from the piston extension. Remove retaining ring (13), spacer (15), and Polyseal (16).
12. Slide the jaws (5), follower (7), and O-rings from the piston collet.
13. **582:** Typically, Release and Ejector cannot be disassembled by unscrewing. Hold in toolmaker's vise to keep assembly from rolling while cutting at a point between flange of ejector and end of collet. Use a hack saw, band saw, or abrasive cutting wheel for this operation. (Figure 2)
682: Release and Ejector can be disassembled by unscrewing. Use hex wrench (P/N **124065**), vise, and an open-end wrench. Release and Ejector can also be cut apart as is 582.
14. Loosen the two screws on the cord grip. Loosen the cup point setscrew. Pull the switch from housing.
15. Loosen the two screws at the rear of the switch to remove the switch from the electrical cord. Remove the two electrical #6-32 socket set screws to dismantle the switch for cleaning. Remove the cord grip from the housing.
16. Disconnect 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.

FIGURE 2

REMOVING THE RELEASE AND EJECTOR





Assembly

This section details the re-assembly of the tool. For component identification, see Figure 3 and [PARTS LIST](#).

BEFORE RE-ASSEMBLING THE TOOL:



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

- Clean components in mineral spirits or other solvent compatible with O-ring seals. Clean O-ring grooves. Air dry all parts.
- Inspect components for scoring, excessive wear, and damage; replace as necessary.
- Replace all O-rings, Quad-rings, and Back-up rings. See Figure 3 for guidance on positioning these rings. Take care not to damage rings. Use the rings that are in the Spare Parts Service Kit (**582KIT** or **682KIT**). Smear LUBRIPLATE® 130-AA or SUPER-O-LUBE® on rings and mating parts to prevent damage and to ease assembly.



CAUTION: When re-assembling the tool, always replace damaged and defective parts, and all seals, wipers, and rings of disassembled components.

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

TO RE-ASSEMBLE THE TOOL:



CAUTION: Do not use TEFLON® tape on threads. Tape can shred, resulting in malfunctions.

1. Apply Loctite (in accordance with manufacturer's instructions for cleaning application) to the release. Assemble it to piston collet (4) and ejector.
NOTE: See [DISASSEMBLY, step 13, to remove Release and Ejector](#).
2. Install GLYD ring assembly (10) on piston/collet (4).
 - Place the special O-ring in the groove.
 - Roll the GLYD ring's diameter to a diameter smaller than the piston, then place GLYD ring on top of piston. (*This ensures that the GLYD ring stays in place during piston installation.*)
3. Taking care not to pinch the inner ring, press Polyseal (27) into front gland housing (9). Install O-ring (25) and Back-up ring (24).
4. Lubricate the Polyseal's inside diameter.



CAUTION: Be sure that the seal does not get caught on the edge of the piston chamfer. Press against the back of the piston with a suitable pressing drift. While holding the wiper housing in place, guide the Polyseal onto the piston.

NOTE: To keep the Polyseal in the front gland, push the front wiper housing into the front gland. Hold the housing against the Polyseal while pressing the front gland / Polyseal onto the piston.

5. Press wiper into the groove on the wiper housing.
6. Lubricate the front gland's and piston's seals.
7. Install the GLYD ring Insertion Tool (P/N **121694-582**) into the cylinder to protect the GLYD ring. Carefully drive or press the piston into the cylinder.
8. Remove the insertion tool. Install dump valve (26) into piston with four flats toward the rear of the tool.
9. Install O-ring, Back-up ring, Polyseal (16), spacer (15), and retaining ring (13) in rear gland (14). Press assembled gland into cylinder. Press wiper into groove in the gland.
10. Align the recess in the rear gland (14) with the groove in the cylinder. Install the locking disc.
11. Tighten the retainer into the cylinder. Then back out the retainer to the first visible threaded hole in the rear gland. Insert the locking screw and tighten to 40 (+/- 3) in.-lbs.
12. If the hydraulic hoses have been removed, thread hydraulic hoses into the cylinder.



CAUTION: Do not use TEFLON® tape on threads.

13. Screw the coupling nipple into the PULL pressure hose from "P" port. Screw the coupling body into the RETURN pressure hose.
14. If necessary, rewire and re-assemble the electrical connector. Screw the cord grip into the housing.
15. Assemble the switch and install two #6-32 socket setscrews. Insert two screws at the rear of the switch to attach the cord.
16. Push the switch into the housing and tighten the cup point setscrew to hold the switch. Tighten the two screws on the cord grip.

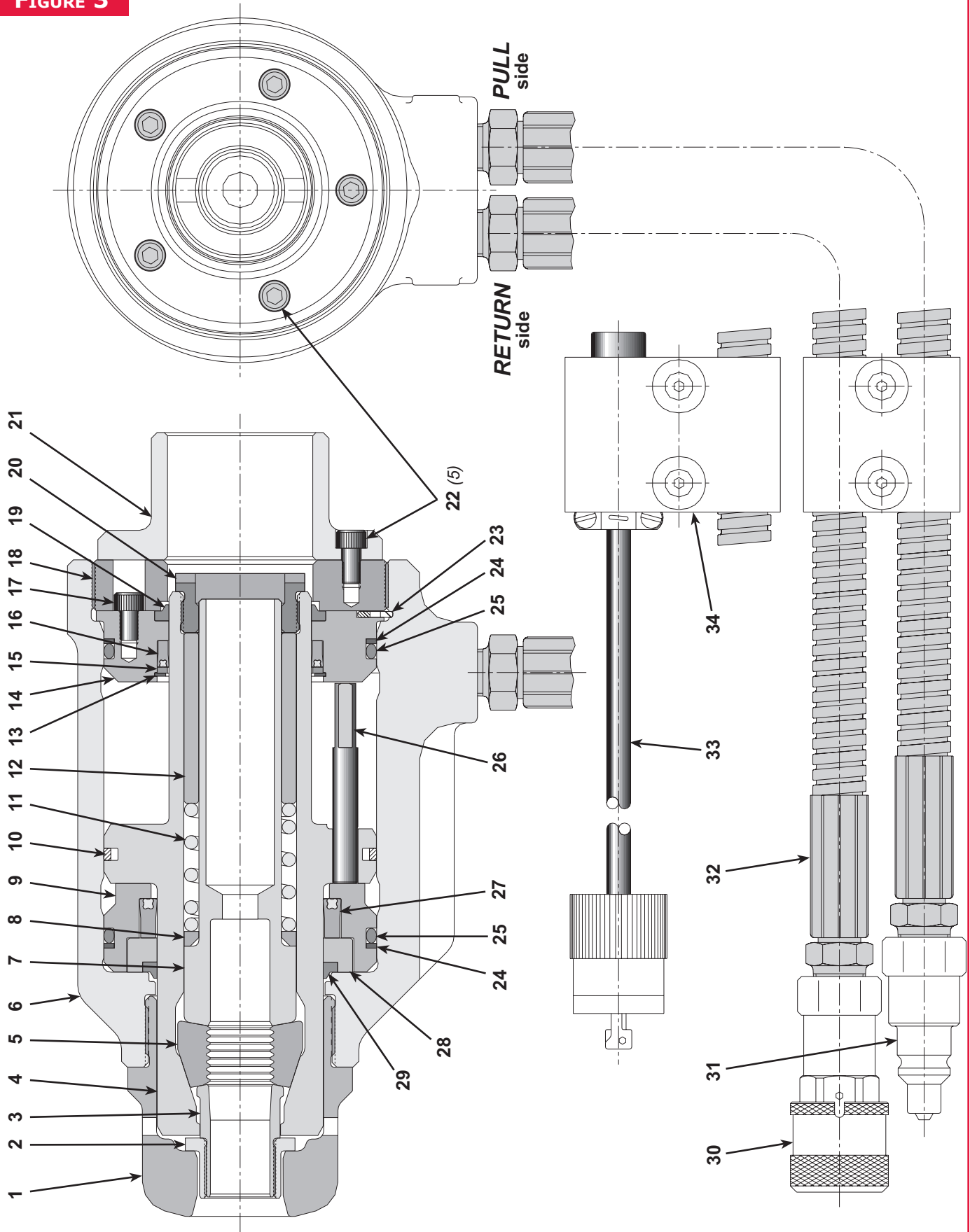


WARNING: Connect the tool's *hydraulic hoses* to the POWERIG before connecting the tool's control trigger system to the POWERIG. If not connected in this order, severe personal injury may occur.



WARNING: Make sure that the tool is completely and properly assembled (with all components included) before using.

Components Drawing

FIGURE 3




Parts List

ITEM	DESCRIPTION	PART NO.		QTY.
		582	682	
1	Anvil	123365	123574	1
2	Ejector Collar	123455 ⁽¹⁾	123542 ⁽²⁾	1
3	Chuck Jaw Release	124762 ⁽¹⁾	124752 ⁽²⁾	1
4	Piston Collet	123363 ⁽¹⁾	123562 ⁽²⁾	1
5	Chuck Jaws	104706	104926	1
6	Cylinder Assembly	123362	123575	1
7	Follower	123374	123571	1
8	Spring Seat	127891	127891-1	1
9	Front Gland	123369 ⁽³⁾	123564 ⁽⁴⁾	1
10	Glyd Ring	506354 ⁽¹⁾	506454 ⁽²⁾	1
11	Spring	508206	508206-1	1
12	Sleeve	127892	127892-1	1
13	Retaining Ring	506351 ⁽⁵⁾	506453 ⁽⁶⁾	1
14	Rear Gland	123366 ⁽⁵⁾	123567 ⁽⁶⁾	1
15	Spacer	123367 ⁽⁵⁾	123568 ⁽⁶⁾	1
16*	Polyseal, Rear Gland	506353 ⁽⁵⁾	506070 ⁽⁶⁾	1
17**	Screw	505189	505189	1
18	Retainer, Rear Gland	123372	123572	1
19	Rear Wiper Seal	506066 ⁽⁵⁾	506451 ⁽⁶⁾	1
20	Retainer, Spring/Sleeve	122318	122298	1
21	Guard	123383	123573	1
22**	Screw	501266	501266	5
23	Locking Disc	122764	122764	1
24	Back-up Ring	501158 ⁽³⁾⁽⁵⁾	501161 ⁽⁴⁾⁽⁶⁾	2
25	O-ring	500863 ⁽³⁾⁽⁵⁾	500866 ⁽⁴⁾⁽⁶⁾	2
26	Dump Valve	123376	123376	1
27*	Polyseal, Front Gland	506352 ⁽³⁾	506452 ⁽⁴⁾	1
28	Front Wiper Housing	123370 ⁽³⁾	123565 ⁽⁴⁾	1
29	Front Wiper Seal	506067 ⁽³⁾	506068 ⁽⁴⁾	1
30	Female Connector	110439	110439	1
31	Male Connector	110438	110438	1
32	Hose	123749-2	123749-2	2
33	Trigger/Cord Assembly	123381 ⁽⁷⁾	123381 ⁽⁷⁾	1
34	Trigger/Hose Clamp Assembly	123380 ⁽⁸⁾	123380 ⁽⁸⁾	1

(1) These parts are available together as **Piston Assembly 123364**

(2) These parts are available together as **Piston Assembly 123563**

(3) These parts are available together as **Front Gland Assembly 123371**

(4) These parts are available together as **Front Gland Assembly 123566**

(5) These parts are available together as **Rear Gland Assembly 123368**

(6) These parts are available together as **Rear Gland Assembly 123569**

(7) **Trigger/Cord Assembly 123381** contains:

- 110948-12 Cord (12 inches)
- 110686 Male Connector
- 108597 Trigger Housing Assy
- 103944 Switch

(8) **Trigger/Hose Clamp Assembly 123380** contains:

- 123378 Trigger/Hose Clamp Base
- 123379 Trigger/Hose Clamp Cap
- 506361 Flat Washer (Qty. 4)
- 506357 Screw (Qty. 2)
- 502481 Screw (Qty. 2)

* Note orientation of Polyseal in Figure 3.

** Torque these screws to 37–43 in.-lbs. using a 5/32" hex key (P/N 502295)



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 or disconnected control cord.
 - 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 hydraulic unit and tool.
- 3. Tool leaks hydraulic fluid.**
 - a. Depending on where leak occurs, defective or worn O-rings, or loose hydraulic hose connection at tool.
- 4. Hydraulic couplers leak fluid.**
 - a. Damaged or worn O-rings in coupler body.
- 5. Hydraulic fluid overheats.**
 - a. Hydraulic unit not operating properly. See applicable POWERIG Hydraulic Unit Instruction Manual.
 - b. Unloading valve installed backwards.
 - c. Hydraulic couplers not completely tightened.
 - d. Restriction in hydraulic line.
- 6. Tool operates erratically and fails to properly install fastener.**
 - a. Low or erratic hydraulic pressure; air in system. See applicable POWERIG Instruction Manual.
 - b. Damaged or excessively worn piston O-ring in tool.
 - c. Unloading valve installed backwards.
 - d. Excessive wear on or scoring of sliding surfaces of tool parts.
 - e. Excessive wear of unloading valve.
- 7. Operator cannot slide anvil completely onto fastener pintail.**
 - a. Inoperative POWERIG Hydraulic Unit. See applicable instruction manual.
- 8. Pull grooves on fastener pintail stripped during pull stroke.**
 - a. Broken-off pintail not removed from tool.
 - b. Operator not sliding jaws completely onto fastener pintail.
 - c. Incorrect fastener length.
 - d. Worn or damaged jaw segments.
 - e. Metal particles accumulated in pull grooves of jaw segments.
 - f. Jaw release binding.
 - g. Excessive sheet gap.
- 9. Collar of HUCKBOLT® Fastener not completely swaged.**
 - a. Improper tool operation. See 6.
 - b. Scored tool anvil.
- 10. Tool “hangs-up” on swaged collar of HUCKBOLT Fastener.**
 - a. Improper tool operation. See 6.
 - b. RETURN pressure too low.
- 11. Pintail of fastener fails to break.**
 - a. Improper tool operation. See 6.
 - b. Pull grooves on fastener stripped. See 7.
 - c. Worn piston and/or unloading valve.
 - d. Hydraulic pressure too low.
 - e. Damaged O-ring on piston.
- 12. Jaw segments do not maintain proper position in piston/collet.**
 - a. Incorrect number of follower O-rings.



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.

KITS

Huck service kits **582KIT** and **682KIT** include all perishable seals, O-rings and Back-up rings (see the table below). Spare kits should be kept on hand.

ACCESSORIES

Parker Threadmate® (4 oz. tube)

Slic-Tite® (stick)

Loctite

Loctite 271 (5 ml tube)

Loctite 242 (50 ml bottle)

- **508517**

- **503237**

- **503657**

- **50365**

- **505016**

SUPER-O-LUBE®

LUBRIPLATE® 130-AA

- **505476**

- **502723**

Loctite is a registered trademark of Henkel Corporation, U.S.A.

Threadmate is a registered trademark of Parker Intangibles LLC.

Slic-tite is a registered trademark of LA-CO Industries, Inc.

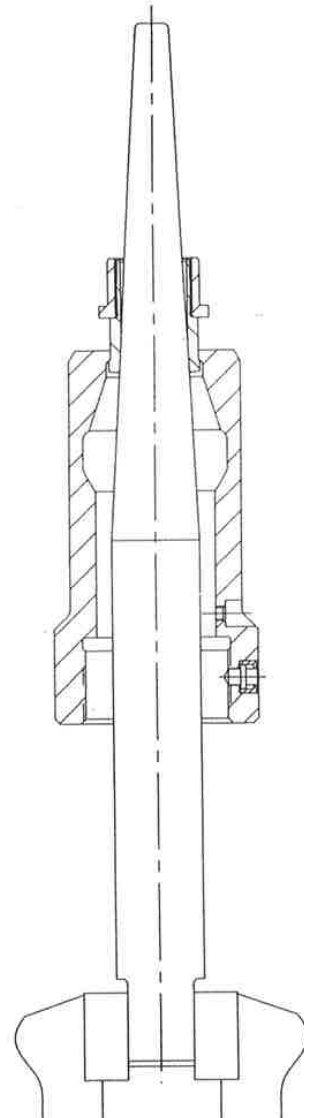
LUBRIPLATE is a registered trademark of Fiske Brothers Refining Co.

SUPER-O-LUBE is a registered trademark of Parker Hannifin Corp..

Release and Ejector Tool, 124751, for -20 and -24 Nose Assemblies and Tools

An assembly tool is available for disassembling and assembling -20 (5/8) and -24 (3/4) release and ejector assemblies in the 99-5000 series. The tool is also used with 582/682, 6304 through 8304, and 7142/8142 tools. The assembly tool's locking taper locks into the release's taper. This prevents the release from turning while the ejector is unscrewed - - use an open end wrench.

1. Lock assembly tool in vise as shown.
2. Place collet assembly over taper. Using a soft mallet (or hammer), tap assembly firmly onto taper to ensure that tapers are locked together.
3. Using an open end wrench on ejector flats, unscrew ejector from release.
4. Lift collet off release. With soft mallet, tap release from assembly tool.
5. Assemble in reverse order.



PART NO.	DESCRIPTION	QTY.
582KIT		
500863	O-ring	2
501158	Back-up ring	2
500790	O-ring	1
506067	Wiper	1
506352	Polyseal	1
506066	Wiper	1
506353	Polyseal	1
506351	Retaining Ring	1
506354	Glyd Ring Assembly	1
504438	O-ring	1
501102	Back-up ring	1
682KIT		
500866	O-ring	2
501161	Back-up ring	2
500792	O-ring	1
506068	Wiper	1
506452	Polyseal	1
506451	Wiper	1
506070	Polyseal	1
506453	Retaining Ring	1
506454	Glyd Ring Assembly	1
504438	O-ring	1
501102	Back-up ring	1



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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Arconic Fastening Systems and Rings world-wide locations:

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FAX: 845-334-7333

Tucson Operations

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Tucson, AZ 85714
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520-747-9898
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