Instruction Manual

620
Hydraulic Collar Cutters
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 without spent mandrels from front of tool.

II. PROJECTILE HAZARDS:

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

III. OPERATING HAZARDS:

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

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.

WARNING: Do not exceed maximum pull or return settings on tool.
Specifications

**APPLICATION RANGE:**
For cutting...

- **HP8 collars:** 1/2” & 5/8”
- **3LC collars:** 1/2” & 5/8”

**DEVELOPED FORCE:** 11.2 tons (10160 kgs)

**MAX. OPERATING PRESSURE:** 10,000 PSI (689.5 BAR)

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<th>Length</th>
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<td></td>
<td>7.48 in.</td>
<td>2.17 in.</td>
<td>4.19 lbs.</td>
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<tr>
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<td>(189.99 mm)</td>
<td>(55.11 mm)</td>
<td>(1.90 kg)</td>
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Where the following trade names are used in this manual, please note:

- **DEXRON** is a registered trademark of General Motors Corporation.
- **GLYD Ring** is a registered trademark of Trelleborg Sealing Solutions Germany GmbH.
- **Loctite** is a registered trademark of Henkel Corporation, U.S.A.
- **LUBRIPLATE** is a registered trademark of Fiske Brothers Refining Co.
- **MERCON** is a registered trademark of Ford Motor Corp.
- **MOLYKOTE** is a registered trademark of Dow Corning Corporation.
- **Never-Seez** is a registered trademark of Bostik, Inc.
- **Quintolubric** is a registered trademark of Quaker Chemical Corp.
- **Slic-tite** is a registered trademark of LA-CO Industries, Inc.
- **Spirolox** is a registered trademark of Smalley Steel Ring Company.
- **Teflon** is a registered trademark of Chemours Company FC.
- **Threadmate** is a registered trademark of Parker Intangibles LLC.
- **TRUARC** is a trademark of TRUARC Co. LLC.
- **Vibra-Tite** is a registered trademark of ND Industries, Inc. USA.

Operating Instructions

**GENERAL**
See Figure 1

- This collar cutter is supplied with an automatic, quick-fit male coupler that is suitable for connecting to a hydraulic power supply developing 10,000 PSI (689.5 BAR).
- Position the cutter on the collar to be split so that it is centered between the Fix Blade 5/8” or 1/2” and the M6x15 bolt plunger screws.

**CUTTING THE COLLAR**
See Figure 1

- Energize the Powerig* hydraulic power source to advance the blade and split the collar.
- When the collar splits, de-energize the Powerig and release the hydraulic pressure from the cutter. The blade will retract and re-open. The collar is now completely split, and can be removed.

**NOTE:** If Powerig model 960 is being used, the handle must be manually moved to fully retract the piston and blade. All other models retract when the Powerig is de-energized.

**WARNING:** Incorrect positioning can cause blade damage and operator injury.
Maintenance

WARNING: Disconnect the cutter from the pump before performing maintenance.

GENERAL

NOTE: The oil pressure in the cutter must always be completely released before disconnecting the cutter from the hose. All maintenance operations must be performed with the cutter disconnected from the hydraulic pump hose.

The tool is designed such that it requires minimal daily maintenance. Adhere to the following recommendations in order to ensure optimum performance of the tool.

PREVENTIVE MAINTENANCE

- Dust, sand, and dirt are a danger for any hydraulic device. Avoid putting the cutter on muddy or dusty ground. Dirt particles may score the piston and create fluid leaks.
- Every day, after use, clean the cutter with a clean cloth, taking care to remove any residual particles, especially around the moving parts.
- When not in use, store (and transport) the cutter in the plastic case to prevent damage.

BLADE CHANGING

See Figure 2

NOTE: The 620 cutter ships with the 5/8" ram blade and fix blade installed. If 1/2" collars are going to be cut, make sure that the 5/8" blades are removed and the 1/2" ram and fix blades are installed on the tool.

Also make sure that the M6x15 bolt plunger screws are readjusted. (Figure 1)

The blades may become worn or damaged through prolonged or improper use. Replace the damaged blades as described below.

Ram Blade
1. Make sure that the blade is completely retracted.
2. Use a 6mm Allen key to remove the Allen screw.
3. Use a 4mm Allen key to slacken the Allen screw until the blade is free.

4. Remove the old blade from the cutter.
5. Insert the new blade.

NOTE: Make sure that the short side of the blade is positioned at the front of the cutter (as shown in Figure 2).

6. Fully tighten the Allen screw and fit the security Allen screw.

Fix Blade
1. Use a 5mm Allen key to back out the screw just enough to remove the blade.
2. Fully insert the new blade and secure with the fixing screw.

CHANGING PISTON SEALS

See Figure 3

1. Remove quick disconnect from the cylinder. Empty the hydraulic fluid from the cylinder.
2. Remove the Allen screw.
3. Unscrew the cylinder from the head. Pull the cylinder with the piston, spring, and key out of the head.
4. Clamp the end of the piston in a soft-jaw vise and pull the cylinder away from the piston.
5. Replace the O-ring and Back-up ring on the piston.

NOTE: See Figure 3 for correct positioning of rings. Smear LUBRIPLATE 130-AA® on the O-ring and Back-up ring, and on the inside bore of the cylinder.

6. Push the piston gently into the cylinder until it bottoms out.
7. Line up the key with the slot in the head and thread the cylinder onto the head as far as it will go.
8. Unthread the cylinder until the threaded hole in the side of the cylinder lines up with the slot in the head.
9. Replace the Allen screw and tighten.
10. Add hydraulic fluid to the rear of the cylinder, quick disconnect, and bushing until all the air has been removed. Apply teflon compound to the cylinder, and thread the quick disconnect to the cylinder and tighten firmly.
Components Drawings

Figure 1

Head Positioning

Figure 2

Changing the Blade
## Components Drawings

### Figure 3

![Diagram of Large Diameter Hydraulic Collar Cutters](image)

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<thead>
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<tr>
<td>02</td>
<td>126174</td>
<td>6x6x16 Key</td>
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<tr>
<td>04</td>
<td>126176</td>
<td>M6x15 Bolt Plunger Screw</td>
<td>2</td>
</tr>
<tr>
<td>05</td>
<td>126177</td>
<td>M4x14 Screw</td>
<td>1</td>
</tr>
<tr>
<td>06</td>
<td>126178</td>
<td>Fix Blade (5/8&quot;)</td>
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</tr>
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<td>06a</td>
<td>126593</td>
<td>Fix Blade (1/2&quot;)</td>
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<td>126179</td>
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<td>126180</td>
<td>M10x8 Allen Screw</td>
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<td>126181</td>
<td>Head</td>
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<tr>
<td>10</td>
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<td>Cylinder</td>
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<td>Back-up Ring</td>
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<td>M4x6 Allen Screw</td>
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<td>O-ring</td>
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<td>17a</td>
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<td>Ram Blade (1/2&quot;)</td>
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** Replace if the tool is disassembled.
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.
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