

Alcoa
Fastening
Systems



INSTRUCTION MANUAL

620

HYDRAULIC COLLAR CUTTERS



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

Form HK 1018
04-22-2004



EU Declaration of Conformity

Manufacturer:

Huck International, Inc., Installation Systems Division, 1 Corporate Drive, Kingston, NY, 12401, USA

Description of Machinery:

Model number 620 fastener collar cutter

Relevant provisions complied with:

Council Directive related to Machinery, (89/392/EEC), (91/368/EEC), (93/44/EEC), (93/68/EEC)

European Representative:

Rob Pattenden, Huck International, Ltd. Unit C Stafford Park 7, Telford Shropshire TF3 3BQ, England, United Kingdom

Authorized Signature/date:

I, the undersigned, do hereby declare that the equipment specified above conforms to the above Directive(s) and Standard(s).

Signature:



Full Name:

Henk Rosier

Position:

Engineering Manager
Installation Systems Division

Place:

Kingston, New York, USA


Date:


June, 2000


SAFETY


This instruction manual must be read with particular attention to the following safety guide lines, by any person servicing or operating this tool.

1. Safety Glossary

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

 — Read manual prior to using equipment.

 — Eye protection required while using this equipment.

 — Hearing protection required while using this equipment.



WARNINGS - Must be understood to avoid severe personal injury.

CAUTIONS - show conditions that will damage equipment and or structure.

Notes - are reminders of required procedures.

Bold, Italic type and underlining - emphasizes a specific instruction.

2. Huck equipment must be maintained in a safe working condition at all times and inspected on a regular basis for damage or wear. Any repair should be done by a qualified repairman trained on Huck procedures.
3. Repairman and Operator must read manual prior to using equipment and understand any Warning and Caution stickers/labels supplied with equipment before connecting equipment to any primary power supply. As applicable, each of the sections in this manual have specific safety and other information.
4. See MSDS Specifications before servicing the tool. MSDS Specifications are available from you Huck representative or on-line at www.huck.com. Click on Installation Systems Division.
5. When repairing or operating Huck installation equipment, always wear approved eye protection. Where applicable, refer to ANSI Z87.1 - 1989
6. Disconnect primary power source before doing maintenance on Huck equipment.
7. If any equipment shows signs of damage, wear, or leakage, do not connect it to the primary power supply.
8. Make sure proper power source is used at all times.
9. Never remove any safety guards or pintail deflector.
10. Never install a fastener in free air. Personal injury from fastener ejecting may occur.
11. When using an offset nose always clear spent pintail out of nose assembly before installing the next fastener.
12. If there is a pinch point between trigger and work piece use remote trigger. (Remote triggers are available for all tooling).
13. Do not abuse tool by dropping or using it as a hammer. Never use hydraulic or air lines as a handle. Reasonable care of installation tools by operators is an important factor in maintaining tool efficiency, eliminating downtime, and in preventing an accident which may cause severe personal injury.
14. Never place hands between nose assembly and work piece.
15. Tools with ejector rods should never be cycled with out nose assembly installed.
16. When two piece lock bolts are being used always make sure the collar orientation is correct. See fastener data sheet of correct positioning.

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SPECIFICATIONS

- **Application range:**For cutting 1/2 HP8, 5/8HP8 & 1/2 3LC, 5/8 3LC collars
- **Developed force:**11.2 tons
- **Max. operating pressure:**10,000 psi
- **Dimensions:** length7.48 in
width2.17 in
- **Weight:**4.19 lbs

INSTRUCTIONS FOR USE



General:

- This collar cutter is supplied with an automatic, quick fit male coupler suitable for connection to a hydraulic power supply developing 10,000 psi.
- Position the cutter on the collar to be split so that it is centered between the Fix Blade (06) 5/8 or (06a) 1/2 and the M6x15 bolt plunger screws (04). (refer to fig.1)



WARNING : Incorrect positioning can cause blade damage and user injury.

Cutting the Collar: (refer to fig.1)

- Energize the Powerig to advance the blade (17) and split the collar.
- When the collar splits, de-energize the Powerig and release hydraulic pressure from the cutter. The blade will then retract and re-open. The collar is now completely split, and can be removed.
NOTE: *If model 960 Powerig is being used, the handle must be manually moved to fully retract piston and blade. All other models retract when rig is de-energized.*

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 so that minimal daily maintenance is needed. Compliance with the following points should help to maintain the optimum performance of the tool.

MAINTENANCE (CONT.)



Preventive Maintenance:

- Dust, sand and dirt are a danger for any hydraulic device. Avoid putting the cutter on muddy or dusty ground. Any dirt particles may score the piston and create oil leaks.
- Every day, after use, the cutter must be cleaned with a clean cloth, taking care to remove any residual particles, especially around the moving parts.
- When not in use, the cutter should be stored and transported in the plastic case, to prevent damage.

Blade Changing: (Refer to fig. 2)

NOTE: • Only perform this operation with the cutter disconnected from the pump.

- The 620 cutter comes standard with the 5/8 ram blade (17) and fix blade (06) installed. If 1/2 fasteners are going to be cut make sure that both the 1/2 ram blade (17a) and 1/2 fix blade (06a) is also used. Also make sure that the 04 M6x15 bolt plunger screws (04) are readjusted. (refer to fig.1)

The blade may become worn or damaged through prolonged or improper use. Replace the damaged blade as follows:

Ram blade

- Make sure that the blade (17 or 17a) is completely retracted.
- Using a 6 mm Allen key, remove Allen screw (08).
- Using a 4 mm Allen key, slacken Allen screw (07) until the blade (17 or 17a) is free.
- Remove the old blade from the cutter.
- Insert the new blade. **Note:** Make sure that the short side of the blade, is positioned at

the front of the cutter as illustrated. (refer to fig. 2)

- Fully tighten Allen screw (07) and fit the security Allen screw (08).

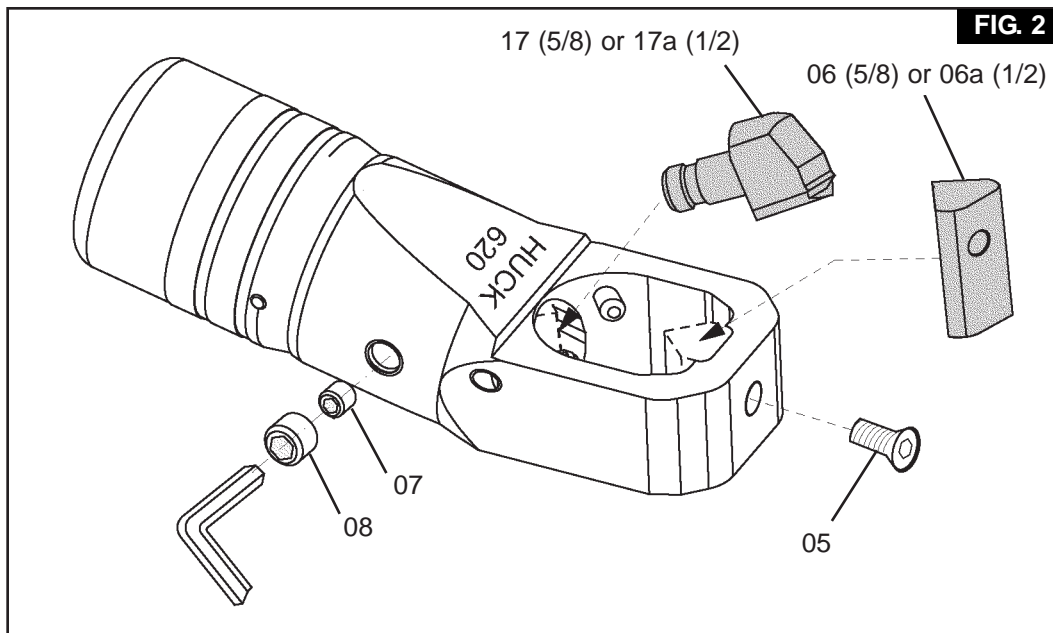
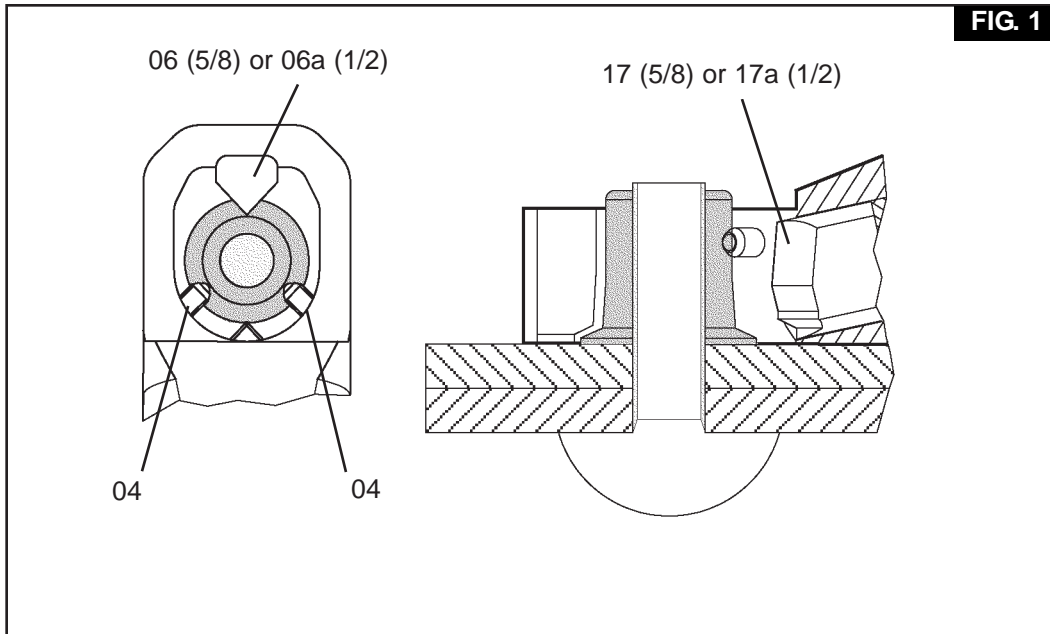
Fix blade

- Using a 5 mm Allen key, remove screw (05), until the blade (06 or 06a) is free to be removed.
- Fully insert the new blade and secure with the fixing screw (05).

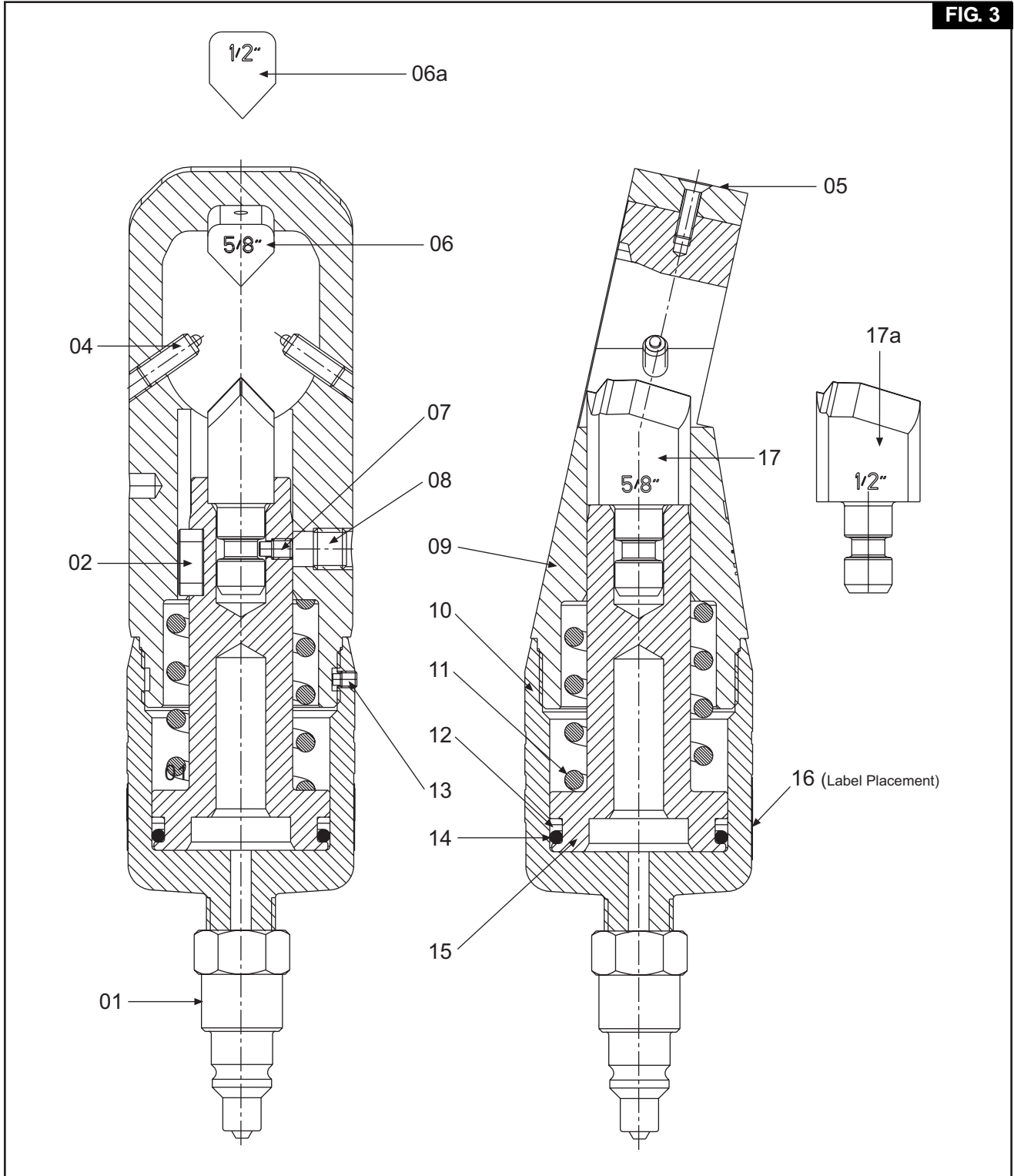
Changing Piston Seals: (Refer to fig. 3)

- Remove (01) quick disconnect from the cylinder (10). Empty the hydraulic fluid from the cylinder.
- Remove the Allen screw (13).
- Unscrew the cylinder (10) from the head (09). Pull the cylinder with the piston (15), spring (11) and key (02) out of the head.
- Clamp the end of the piston in a soft jaw vise and pull the cylinder away from the piston.
- Replace the O-ring (14) and Back-up Ring (12) on the piston. **NOTE:** See figure 3. for correct position. Smear lubriplate 130AA on the O-ring and Backup-ring, also on the inside bore of the cylinder.
- Push the piston gently into the cylinder until it bottoms out.
- Line up the key (02) with the slot in the head and thread the cylinder (10) onto the head (09) as far as it will go.
- Unthread the cylinder until the threaded hole in the side of the cylinder lines up with the slot in the head.
- Replace the Allen screw (13) and tighten.
- Add hydraulic fluid to the rear of the cylinder, quick disconnect and bushing until all air has been removed. Apply teflon tape to the cylinder and thread the quick disconnect to the cylinder and tighten firmly.

REFERENCE DRAWINGS



ASSEMBLY DRAWING



PARTS LIST

ITEM	PART NUMBER	DESCRIPTION	QTY
01	110438	Hydraulic Male Disconnect	1
02	126174	6x6x16 Key	1
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04	126176	M6x15 Bolt Plunger Screw	2
05	126177	M4x14 Screw	1
06	126178	Fix Blade (5/8)	1
06a	126593	Fix Blade (1/2)	1
07	126179	M 5x8 Allen Screw	1
08	126180	M 10x8 Allen Screw	1
09	126181	Head	1
10	126182	Cylinder	1
11	126183	Spring, Return Piston	1
12	126184**	Back-up Ring	1
13	126185	M 4x6 Allen Screw	1
14	126186**	O-ring	1
15	126187	Piston	1
16	126188	Label (TG 0352)	1
17	126189	Ram Blade (5/8)	1
17a	126594	Ram Blade (1/2)	1

NOTE: (**) --- Replace if the tool is disassembled.

SERVICE NOTES

LIMITED WARRANTIES

Tooling Warranty: Huck warrants that tooling and other items (excluding fasteners, and hereinafter referred as "other items") manufactured by Huck shall be free from defects in workmanship and materials for a period of ninety (90) days from the date of original purchase.

Warranty on "non standard or custom manufactured products": With regard to non-standard products or custom manufactured products to customer's specifications, Huck warrants for a period of ninety (90) days from the date of purchase that such products shall meet Buyer's specifications, be free of defects in workmanship and materials. Such warranty shall not be effective with respect to non-standard or custom products manufactured using buyer-supplied molds, material, tooling and fixtures that are not in good condition or repair and suitable for their intended purpose.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. HUCK MAKES NO OTHER WARRANTIES AND EXPRESSLY DISCLAIMS ANY OTHER WARRANTIES, INCLUDING IMPLIED WARRANTIES AS TO MERCHANTABILITY OR AS TO THE FITNESS OF THE TOOLING, OTHER ITEMS, NONSTANDARD OR CUSTOM MANUFACTURED PRODUCTS FOR ANY PARTICULAR PURPOSE AND HUCK SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECTLY OR INDIRECTLY, ARISING FROM THE USE OF SUCH TOOLING, OTHER ITEMS, NONSTANDARD OR CUSTOM MANUFACTURED PRODUCTS OR BREACH OF WARRANTY OR FOR ANY CLAIM FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Huck's sole liability and Buyer's exclusive remedy for any breach of warranty shall be limited, at Huck's option, to replacement or repair, at FOB Huck's plant, of Huck manufactured tooling, other items, nonstandard or custom products found to be defective in specifications, workmanship and materials not otherwise the direct or indirect cause of Buyer supplied molds, material, tooling or fixtures. Buyer shall give Huck written notice of claims for defects within the ninety (90) day warranty period for tooling, other items, nonstandard or custom products described above and Huck shall inspect products for which such claim is made.

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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,

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The only warranties made with respect to such tool, part(s) or other items thereof are those made by the manufacturer thereof and Huck agrees to cooperate with Buyer in enforcing such warranties when such action is necessary.

Huck shall not be liable for any loss or damage resulting from delays or nonfulfillment 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

Canada

6150 Kennedy Road Unit 10, Mississauga, Ontario, L5T2J4, Canada.
Telephone (905) 564-4825 FAX (905) 564-1963

Outside USA and Canada

Contact your nearest Huck International Office, see back cover.

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 Tools Kits and Nose Assemblies. Please contact your Huck Representative or the nearest Huck office listed on the back cover for the ATSC in your area.



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