Instruction Manual

546 and 548 series
Offset Collar Cutters
EC Declaration of Conformity

Manufacturer:
Huck International, LLC, Industrial Products Group, 1 Corporate Drive, Kingston, NY, 12401, USA

Description of Machinery:
Models 546 and 548 families of tool-mounted collar cutters and specials based on their design (e.g. PR####).

Relevant provisions complied with:
British Standard related to hand held, non-electric power tools (ISO 11148-2:2011)

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: [Signature]

Full Name: Robert B. Wilcox
Position: Engineering Manager
Location: Huck International, LLC d/b/a Arconic Fastening Systems and Rings
          Kingston, New York, USA
Date: 01/11/2016 (November 1, 2016)

Declared dual number noise emission values in accordance with ISO 4871

<table>
<thead>
<tr>
<th>A weighted sound power level, LWA: 79 dB (reference 1 pW)</th>
<th>Uncertainty, KWA: 3 dB</th>
</tr>
</thead>
<tbody>
<tr>
<td>A weighted emission sound pressure level at the work station, LpA: 68 dB (reference 20 μPa)</td>
<td>Uncertainty, KpA: 3 dB</td>
</tr>
<tr>
<td>C-weighted peak emission sound pressure level, LpC, peak: 111 dB (reference 20 μPa)</td>
<td>Uncertainty, KpC: 3 dB</td>
</tr>
</tbody>
</table>

Values determined according to noise test code ISO 3744. The sum of a measured noise emission value and its associated uncertainty represents an upper boundary of the range of values which is likely to occur in measurements.

Declared vibration emission values in accordance with EN 12096

<table>
<thead>
<tr>
<th>Measured Vibrations emission value, a:</th>
<th>.42 m/s²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncertainty, K:</td>
<td>.07 m/s²</td>
</tr>
</tbody>
</table>

Values measured and determined according to ISO 28662-1, ISO 5349-2, and EN 1033

Test data to support the above information is on file at:
Arconic Fastening Systems and Rings, Kingston Operations, Kingston, NY, USA.
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 cutting-off / crimping power tool.
5. Do not modify this cutting-off / crimping 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 cutting-off / crimping 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. Only genuine Huck parts shall be used for replacements or spares. Use of any other parts can result in tooling damage or personal injury.
11. Never release any safety guards or pincer defectors.
12. 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.
13. 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.

II. PROJECTILE HAZARDS:
1. Disconnect the cutting-off / crimping power tool from energy source when changing inserted tools or accessories.
2. Be aware that failure of the workpiece, accessories, or the inserted tool itself can generate high velocity projectiles.
3. Always wear impact resistant eye protection during tool operation. The grade of protection required should be assessed for each use.
4. For overhead work, wear a safety helmet.
5. Ensure that the workpiece is securely fixed.
6. The risk to others should also be assessed at this time.
7. Be aware of the risk of being exposed to the ejection of cuttings or chips.
8. Be aware that working on brittle material can cause harmful splinters.

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 direct contact with the inserted tool as it can become hot.
8. Sharp tools shall always be used.
10. Be aware of risk of cutting with tools with large dimensions.

IV. REPEATED MOTION HAZARDS:
1. When using cutting-off / crimping 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 cutting-off / crimping 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. DUST AND FUME HAZARDS:
1. Dust and fumes generated when using cutting-off and crimping power tools can cause ill health; risk assessment and implementation of appropriate controls for these hazards are essential.
2. Risk assessment should include dust created by the use of the tool and the potential for disturbing existing dust.
3. Operate and maintain the cutting-off or crimping power tool as recommended in the instruction handbook, in order to minimize dust or fume emissions.
4. Direct the exhaust so as to minimize disturbance of dust in a dust-filled environment.
5. Where dust or fumes are created, the priority shall be to control them at the point of emission.
6. All integral features or accessories for the collection, extraction or suppression of airborne dust or fumes should be properly used and maintained.
7. Use respiratory protection in accordance with employer's instructions and as required by occupational health and safety regulations.

VIII. 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 unnecessary increase in the noise level.
5. Select, maintain and replace the consumable / inserted tool as recommended to avoid an unnecessary increase in noise.
6. If the power tool has a silenced, always ensure that it is in place and in good working order when the tool is being operated.

IX. 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.

GLOSSARY OF TERMS AND SYMBOLS:
- CE: Product complies with requirements set forth by the relevant European directives.
- Manual: Read manual prior to using this equipment.
- Eye protection: Eye protection is required while using this equipment.
- Hearing protection: 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.
Description

These Offset Collar Cutters with twin steel blades weigh only 3/4 lb.; operate with a simple, single fluid cam movement; and have been designed for production use in extreme situations when movement is curtailed and fastener access is severely limited. Model 546 removes aluminum HuckBolt® collars from installed fasteners with a 3/16” diameter. Model 548 removes aluminum HuckBolt® collars from installed fasteners with a 1/4” diameter. Both Collar Cutters are designed to be used in the streamlined procedure previously reserved for attaching nose assemblies. These cutters can be used with 2400 series Huck installation tool models. With Adapter part number 102463, they can be used with Huck tool models 245, 246, 255, 256, and the 2582 and 4800 series of tools.

Specifications

Figure 1

Dimensions are given in inches.

Operating Instructions

Refer to Figures 2, 3, and 4 for parts identification.

1. Slide the cam out from the rear of the cutter assembly, and attach the shim and the cam to the tool piston. Tighten with a wrench.
2. Slide the housing and shoulder pin assembly, with the retaining nut in place, over the cam. (Squeeze the blade set at the front of the cutter to get the assembly to slide completely over the cam.)
3. Tighten the retaining nut.
4. Slide the cutter assembly over the collar. (Figure 2)
5. Pull the tool trigger to cut the collar.

Maintenance

WARNING: Inspect tool for damage or wear before each use. Do not operate if damaged or worn, as severe personal injury may occur.

Read this section completely before proceeding with maintenance and repair.

The operating efficiency of any installation or removal tool depends upon proper maintenance and good service practices.

Use proper hand tools, and service the tool in a clean, well-lighted area. Take care to prevent contamination of hydraulic systems.

Perform regular preventive maintenance to ensure safe use. Check the tool at the beginning and end of each shift.

Blades must move freely; check for debris if there is any resistance.

Cam shall be lubricated regularly; apply as needed to keep tool moving freely.

Dispose of lubricants and tool parts in accordance with local environmental regulations.
Components Drawings

Figure 3

89140 Shim

120588 Stop

111795 Retaining Nut

115487 Blade Set

112687 Retainer

127403 Housing and Shoulder Pin Assembly contains: 127402 Housing 127401 Shoulder Pin (2) T1598RR-18 Retaining Ring (2)

114391 Cam

546

89140 Shim

120588 Stop

111795 Retaining Nut

116711 Blade Set

112687 Retainer

127403 Housing and Shoulder Pin Assembly contains: 127402 Housing 127401 Shoulder Pin (2) T1598RR-18 Retaining Ring (2)

114391 Cam

548-05
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.
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 and Rings world-wide locations:**

**AMERICAS**

**Kingston Operations**
1 Corporate Drive
Kingston, NY 12401
800-278-4825
845-331-7300
FAX: 845-334-7333

**Carson Operations**
900 Watson Center Rd.
Carson, CA 90745
800-421-1459
310-830-8200
FAX: 310-830-1436

**Tucson Operations**
3724 East Columbia
Tucson, AZ 85714
800-234-4825
520-747-9898
FAX: 520-748-2142

**Us Operations**
BP4
Clos D’Asseville
95450 Us par Vigny
France
33-1-30-27-9500
FAX: 33-1-34-66-0600

**Waco Operations**
PO Box 8117
8001 Imperial Drive
Waco, TX 76714-8117
800-388-4825
254-776-2000
FAX: 254-751-5259

**Melbourne Operations**
11508 Centre Road
Clayton, Victoria
Australia 3168
03-764-5500
Toll Free: 008-335-030
FAX: 03-764-5510

**EUROPE**

**Telford Operations**
Unit C, Stafford Park 7
Telford, Shropshire
England TF3 3BQ
01952-290011
FAX: 0952-290459

**Acuña Operations**
Hidalgo #120
Parque Industrial Amistad
26220 Acuña Coahuila
Mexico
FAX: 525-515-1776
TELEX: 1173530 LUKSME

**Us Operations**
BP4
Clos D’Asseville
95450 Us par Vigny
France
33-1-30-27-9500
FAX: 33-1-34-66-0600

**FAR EAST**

**Melbourne Operations**
11508 Centre Road
Clayton, Victoria
Australia 3168
03-764-5500
Toll Free: 008-335-030
FAX: 03-764-5510


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.

© 2017 Huck International, Inc.
1 Corporate Drive, Kingston, NY 12401 • Tel: 800-431-3091 • Fax: 845-334-7333