Instruction Manual
Tool-Mounted series
Collar Cutters

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EC Declaration of Conformity

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

Description of Machinery:
Models TM4, TM5, TM6, TM7, TM8 family of 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)

<table>
<thead>
<tr>
<th>Declared dual number noise emission values in accordance with ISO 4871</th>
</tr>
</thead>
<tbody>
<tr>
<td>A weighted sound power level, LWA: <strong>73</strong> dB (reference 1 pW) Uncertainty, KWA: 3 dB</td>
</tr>
<tr>
<td>A weighted emission sound pressure level at the work station, LpA: <strong>62</strong> dB (reference 20 μPa) Uncertainty, KpA: 3 dB</td>
</tr>
<tr>
<td>C-weighted peak emission sound pressure level, LpC, peak: <strong>105</strong> dB (reference 20 μPa) Uncertainty, KpC: 3 dB</td>
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</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.

<table>
<thead>
<tr>
<th>Declared vibration emission values in accordance with EN 12096</th>
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<tr>
<td>Measured Vibrations emission value, a: <strong>0.57 m/s²</strong></td>
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<tr>
<td>Uncertainty, K: <strong>0.19 m/s²</strong></td>
</tr>
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</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.
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.

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.

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 remove any safety guards or pintail deflectors.
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, impactions, 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 offset 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. 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 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.

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.
DESCRIPTION

All Tool Mounted Series CC Collar Cutters are designed to remove LGP® HuckBolt® fasteners with flanged titanium collars. Models TM6CCMG and TM8CCMG collar cutters are designed to remove Magna-Grip® HuckBolt® and flanged Magna-Grip collars. The CCX models cut XPL collars. These mini collar cutters are lightweight and compact. They are well adapted to remove fasteners in limited-clearance conditions.

**Tool mounted** collar cutters are designed to be used with model 244 and the 2400 series Huck Installation Tools. With adapter 102463, they can be used with models 245, 246, 255, 256, and the 2502 and 4800 series of installation tools.

**PRINCIPLE OF OPERATION**

A wedge is drawn between the housing and lever. The gap in the tool pocket closes. The collar is pressed against the stationary blade set which shears the collar apart.

**SPECIFICATIONS**

**CUTTER WEIGHT:** 1.23 lb (.56 kg)

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**FIGURE 1**

Dimensions are expressed in inches.

**FIGURE 2**

Cap Screw, Setscrew, Housing, Retaining Nut, Retainer, Draw Bar, Stop, Piston Adapter, Truarc Ring, Guard, Wedge, Torsion Spring, Split Pin, Pin, Pocket, Gage, Blades.
OPERATING INSTRUCTIONS

WARNING: The tool moves forcibly while cutting collars. Be sure there is adequate clearance for the tool and the operator's hands before proceeding. Otherwise, severe personal injury may result.

CAUTIONS: The tool must be held perpendicular to the sheet AND it must be centered on the collar to prevent blade damage. (Figure 3)

To prevent structural and tool damage, be sure there is enough clearance for the tool to move while cutting collars. Most tool malfunctions are due to unequal loading of the blades caused by misalignment.

Experience indicates the most efficient procedure. Each collar to be removed requires the operator's judgment before proceeding. Collars must be cut on the first attempt. Repeated cycling of the tool could damage the blades. The cutter must be properly positioned, otherwise the collar will not be cut and in further attempts the blades will follow the previous blade path without cutting.

1. Place tool over fastener to be removed as shown in Figure 3. (See the CAUTION above.) Check the position of the blades before triggering the tool.

2. Press the actuating trigger of the tool; release the trigger when the cutting action stops. Remove the tool.

CAUTION: Check the Collar Cutter for segments after each stroke. Segments that are not removed will cause damage to the Cutter and the fastened structure.

3. If the tool is adjusted correctly for swaged condition of the collar, one stroke will remove the collar. See ADJUSTMENTS for detailed instructions. When the collar is cut but still attached to the fastener, use the appropriate hand tools to complete collar removal.

4. Tap the end of the fastener with a soft-faced mallet to remove it from the hole.

REMOVING PARTIALLY CUT COLLARS (See Figure 4)

1. Place the G57F over the fastener to be removed, and squeeze the handles, closing the blades around the pin.

2. Move the G57F handles up and down as shown in direction of arrows until the collar separates from the pin.

FIGURE 4

FIGURE 3

COLLAR CUTTING POSITION

1. Place tool over fastener to be removed as shown in Figure 3. (See the CAUTION above.) Check the position of the blades before triggering the tool.
The efficiency and life of your tool depends on proper maintenance. Read this entire section before proceeding with maintenance and repair. Use proper hand tools in a clean, well-lighted area. Only standard hand tools are required in most cases. Where a special tool is required, the description and part number are given.

While clamping the tool or its parts in a vise, and when parts require force, use suitable soft materials to cushion impact. For example, using a half-inch brass drift, wood block, and vise with soft jaws greatly reduces possibility of damaging tool. Remove the components in a straight line without bending, cocking, or undue force. Reassemble tool with the same care.

**SYSTEM INSPECTION**

The operating efficiency of any installation or removal tool is directly related to the performance of the entire system. Therefore, an effective preventive maintenance program includes scheduled inspections of the system to detect and correct minor troubles.

- Inspect the tool for external damage.
- Verify that hoses and fittings, and trigger connections are secure.
- Inspect air and hydraulic hoses for signs of damage; replace if necessary.

**ATTACHING TO TOOL**

The tool mounted collar cutters are tested on a Model 244 Installation Tool at the factory.

Because of dimensional differences, it may be necessary to re-adjust the cutter to the tool it is intended to be used on. Follow the instructions in **ADJUSTMENTS**.

To install the cutter on the intended tool, pull the piston adapter out of the cutter as far as possible and thread the cutter onto the piston/spindle of the tool. Tighten the adapter onto the piston; wrench tighten. When installing on a Model HK150, **HAND TIGHTEN ONLY**.

**NOTE**: Over-tightening on a Model HK150 will cause the tool adapter to unscrew when removing the collar cutter from the tool. If this happens, unscrew the holder to remove the entire assembly from the HK150. Insert a 3/16" hex wrench into the rear of the HK150 adapter to hold THE piston adapter, and disassemble the two adapters. Reassemble the HK150 adapter and holder to the tool.

**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® hydraulic power source.

**WARNING**: Inspect the tool for damage and wear before each use. Do not operate if damaged or worn; severe personal injury may occur.

**NOTES**: Tools ship with a tool-specific Set Plug; the P/N is 130045-(tool size). So, for example, the TM6CCFT tool ships with Set Plug 130045-6. Never-Seez is a registered trademark of Bostik, Inc.

**Figure 5**

**Example Only**

- **Never-Seez**
- **NEVER-SEEZ**
- **NEVER-SEEZ**
- **HOUSING**
- **DRAWBAR**

**Table of Standard Tools Available from Huck**

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>USE ON</th>
</tr>
</thead>
<tbody>
<tr>
<td>502865</td>
<td>Truarc Pliers #0200</td>
<td>500989</td>
</tr>
<tr>
<td>502295</td>
<td>Hex Key 1/8 across flats</td>
<td>500054</td>
</tr>
<tr>
<td>502296</td>
<td>Hex Key 3/16 across flats</td>
<td>119929</td>
</tr>
<tr>
<td>502444</td>
<td>Hex Key 5/64 across flats</td>
<td>501613</td>
</tr>
</tbody>
</table>

**NOTE**: Tools ship with a tool-specific Set Plug; the P/N is 130045-(tool size). So, for example, the TM6CCFT tool ships with Set Plug 130045-6.
**Adjustments**

The Collar Cutter is designed to remove a fully swaged collar in one stroke when adjusted with the gauge that is supplied with the tool. The Collar Cutter can be adjusted to cut partially swaged collars by increasing the opening between the lever and the blades.

**Lever Adjustment: Fully Swaged Collar**

1. Place the Adjustment Gauge in the “pocket area” formed by the housing, lever, and blade set.

   - If the tool accepts the gauge with slight interference, no further adjustment is required.
   - If the tool accepts the gauge loosely or not at all, loosen the locking screw on the side of the wedge through the hole in the housing.

2. If the tool is mounted on a hydraulic or pneumatic installation tool, insert a long 3/16” hexagonal wrench and engage the drawbar through the rear of the tool piston/spindle.
   - If the gap opening is too large, turn the wrench clockwise to decrease the gap.
   - If the gap is too small, turn the wrench counterclockwise to increase the gap.

   These adjustments must be made with the gauge in the “pocket area” of the tool.

   **Note:** Fasteners that have not been completely swaged may require additional tool adjustments prior to cutting to increase the gap between the blades and the lever. This will be noticeable when a cutter is placed over the collar and it does not reach the sheet line.

**Lever Adjustment: Partially Swaged Collar**

Simulate the “partially swaged” condition by installing fasteners in a test plate using spacers (shim stock) equally spaced under the anvil of the nose assembly. Install the fasteners with various shims until the desired “partial swage” is obtained.

1. Follow *Fully Swaged Collar* steps 1 & 2; then remove the gauge.

2. Turn the key clockwise 1/4 of a turn. Check the tool adjustment with partially swaged collars in a test plate.

3. Repeat step 2 until the tool accepts partially swaged collars and cuts them in one stroke.

**Additional Procedures After Adjustment**

1. Do NOT secure the wedge and drawbar locking screw until the fasteners that are to be removed have been cut to the operator’s satisfaction. At this time, secure the locking screw in place. If the cutter is removed from a tool it may be necessary to re-adjust when re-installing on the same or any other tool.

2. If the Collar Cutter is installed on a Model HK150 tool, it must be adjusted through the front of the tool using a 1/8” hex wrench. Loosen the locking screw, then turn the wrench:
   - clockwise to increase the gap;
   - counterclockwise to decrease the gap.

   With each adjustment, remove the hex wrench and insert the gauge in the pocket to check the gap. When the correct gap is achieved, re-tighten the locking screw.

   **Note:** In the case of improperly swaged collars, the cutter may have to be adjusted to the collar itself prior to cutting. As in all other cutting operations, it is essential that the cutter be held flush with the sheet line.

3. When flanged collars have not been completely swaged or the gap has not been properly set, the fastener might not be cut completely through in the flange area; additional tools (such as the GS7F cutter) may be required to remove the fastener. See Figure 4.

   Fasteners that have been partially removed CANNOT be recut with this cutter; they must be removed with other tools, such as shavers and grinders.

**Caution:** Do NOT force the cutter if the pocket is too small to accept the gauge or a partially swaged collar; this could damage the location pins in the tool pocket.
**DISASSEMBLY**

For component identification, see Figure 2 and the Assembly Drawings in this manual.

**WARNING:** Disconnect the tool and cutter assembly from power supply before disassembling, cleaning, and when replacing worn or damaged components. If not disconnected, severe personal injury may occur.

The following procedure is for complete disassembly. Disassemble only those parts necessary to check and replace damaged seals and components.

1. Remove the blade retainer screw and blade set.
2. Remove the retaining ring and pin. The lever will drop out of the housing.
3. Insert a 5/64” hex wrench through the access hole in the housing and remove the wedge set screw.
4. Insert a 3/16” hex wrench through the rear of the piston adapter and into the draw bar. Unscrew the draw bar from the wedge. The wedge will slide out of the housing.
5. It is not necessary to remove the torsion spring and split pin from the housing unless the spring must be replaced. If replacement is required, drive the split pin out of the housing using the correct drift and the spring will come out.

The tool has been properly disassembled. Store all re-usable parts (screws and disassembled components) in a clean, dry area.

**ASSEMBLY**

For component identification, see Figure 2 and the Assembly Drawings in this manual.

**NOTE:** Prior to assembly, lubricate all components per the instructions in the **MAINTENANCE** section and on appropriate figures.

1. Place the wedge in the housing with the threaded end toward the installation tool end of the cutter.
2. Slide the draw bar through the piston adapter; slide the assembly into the housing and use a 3/16” hex wrench to thread it into the wedge.
3. Place the lever in the housing between the spring and the wedge. See the appropriate figures. Push the pin through the hole in the housing and the lever. Install the retaining ring.
4. Install the blade set and retaining screw.
5. Adjust the blade gap per the instructions in the **ADJUSTMENTS** section.

**STICKER PLACEMENT**

All Tool Mounted Collar Cutters are equipped with important information, safety, and WARNING stickers. If a sticker is becoming unreadable, damaged, worn, or is missing, a replacement sticker must be ordered and placed as shown in the photos below.

**NOTE:** Pinch Point Stickers (P/N 590513) must be on both sides of the cutter.
# Assembly Drawings

**Figure 5**

For visual identification and correct stickers placement, see **Sticker Placement**.

### Non-CCX Series

<table>
<thead>
<tr>
<th>TOOL</th>
<th>BLADES</th>
<th>GAUGE</th>
<th>HOUSING</th>
<th>WEDGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TM4CCMFT</td>
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**Figure 6**

For visual identification and correct stickers placement, see **Sticker Placement**.

### CCX Series

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<tr>
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<td>TM7CCX</td>
<td>129840</td>
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<tr>
<td>TM8CCX</td>
<td>128872</td>
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TROUBLESHOOTING

Always check the simplest possible cause (such as a loose or disconnected trigger line) of a malfunction first. Then proceed logically, eliminating other possible causes until the cause is discovered. Where possible, substitute known good parts for suspected defective parts. Use this troubleshooting information to aid in locating and correcting trouble.

1. **Cutter fails to operate when trigger is pressed.**
   a. Inoperative Powerig® hydraulic power source. See applicable instruction manual.
   b. Loose air or electric connections.
   c. Damaged trigger assembly.
   d. Loose or faulty hydraulic hose coupling.

2. **Cutter blades do not cut through collar.**
   a. Reversed hydraulic hose connections between Powerig and tool.
   b. Insufficient air supply.
   c. Incorrect adjustment of blades. See gauge specifications.
   d. Cutter NOT held flush to sheet line on first cut. When a second cut is attempted, the cutter may not fit over the already cut and distorted collar. Manual cutter P/N GS7F may be required for complete removal. See Figure 4.

3. **Cutter operates erratically and fails to quickly cut collar.**
   a. Low or erratic hydraulic or air pressure supply.
   b. Excessive wear on sliding surfaces of tool parts.
   c. Excessive wear of blades; dulled or damaged.
   d. Lack of lubricant on moving components.

Service Notes

Use this space to record any references you may need.
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.

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.

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 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 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.
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  
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845-331-7300  
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**Carson Operations**  
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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  
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**Waco Operations**  
PO Box 8117  
8001 Imperial Drive  
Waco, TX 76714-8117  
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**Acuña Operations**  
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