Instruction Manual

A1100

Pneumatic Installation Tool
EC Declaration of Conformity

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

Description of Machinery:
Model A1100 pneumatic installation tool and specials based on its design (e.g. PR####).

Relevant provisions complied with:
British Standard related to hand held, non-electric power tools (ISO 11148-1:2011)

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:

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: 80 dB (reference 1 pW)</td>
</tr>
<tr>
<td>Uncertainty, KWA: 3 dB</td>
</tr>
<tr>
<td>A weighted emission sound pressure level at the work station, LpA: 69 dB (reference 20 µPa)</td>
</tr>
<tr>
<td>Uncertainty, KpA: 3 dB</td>
</tr>
<tr>
<td>C-weighted peak emission sound pressure level, LpC, peak: 97 dB (reference 20 µPa)</td>
</tr>
<tr>
<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.

<table>
<thead>
<tr>
<th>Declared vibration emission values in accordance with EN 12096</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measured Vibrations emission value, a:</td>
</tr>
<tr>
<td>.00 m/s²</td>
</tr>
<tr>
<td>Uncertainty, K:</td>
</tr>
<tr>
<td>.00 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 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. Reprint 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 tool 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 can occur.
14. Where applicable, always clean 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 equipment or structure.
17. Use only fluids and lubricants recommended by the manufacturer.
18. Maintain a balanced body position and secure footing.
19. Release trigger or stop start device in case of interruption of energy supply.
20. Use only fluids and lubricants recommended by the manufacturer.
21. Avoid unsuitable postures, as it is likely for these not to allow counteracting of normal or unexpected tool movement.
22. If the assembly power tool is fixed to a suspension device, make sure that fixation is secure.
23. Beware of the risk of crushing or pinching if nose equipment is not fitted.

Notes: are reminders of required procedures.
Bold, Italic type and underlining: emphasizes a specific instruction.

WARNINGS: Must be understood to avoid severe personal injury.

CAUTIONS: Show conditions that will damage equipment or structure.

II. PROJECTILE HAZARDS:
1. Risk of whipping compressed air hose if tool is pneumatic or pneumatic.
2. Connect 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. REPEATED 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, ache, 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 recommend. 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 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 installing the next fastener.

IX. PNEUMATIC / PNEUARDILIC TOOL SAFETY INSTRUCTIONS:
1. Air under pressure can cause severe injury.
2. Always shut off air supply, drain hose of air pressure and disconnect tool from air supply when not in use, before changing accessories or when making repairs.
3. Never direct air at yourself or anyone else.
4. Whipping hoses can cause severe injury, always check for damaged or loose hoses and fittings.
5. Cold air should be directed away from hands.
6. Whenever universal twist couplings (claw couplings) are used, lock pins shall be installed and whipcheck safety cables shall be used to safeguard against possible hose to hose or hose to tool connection failure.
7. Do not exceed maximum air pressure stated on tool.
8. Never carry an air tool by the hose.
**A1100 Pneumatic Installation Tool (HK1196)**

### DESCRIPTION

The A1100 pneumatic installation tool, designed specifically for pulling -08 BT (1/4”) 6061 Aluminum BobTail® fasteners, has the advantages of being lightweight and appropriate for limited-clearance applications. The tool is powered by standard 90 psi shop air.

### SPECIFICATIONS

**POWER SOURCE:** 90 psi (6.2 bar) shop air  
**MAX OPERATING TEMP:** 125°F (51.7°C)  
**MAX FLOW RATE:** 9 scfm (255 l/m)  
**MAX AIR PRESSURE:** 100 psi (6.9 bar)  
**MIN PULL CAPACITY:** 1,100 lbs (4.9 kN) @ 90 psi  
**MIN STROKE:** 1.0 inches (2.54 cm)  
**SPEED/CYCLES:** 30 per minute  
**WEIGHT:** 4 lbs (1.81 kg)

### PRINCIPLE OF OPERATION

**PULL:** When the trigger is depressed pressurized air is directed to the front of the air piston, causing it to move rearward. The attached nose assembly moves with the piston to begin fastener installation.  
**RETURN:** When fastener installation is completed, the trigger is released. Pressurized air is redirected to the rear of the piston, causing it to move forward. The tool is ready for another cycle.

### PREPARATION FOR USE

**WARNINGS:** Read full manual before using tool.  
Inspect tool for damage or wear before each use. Do not operate if damaged or worn, as severe personal injury may occur.  
A half-hour training session with qualified personnel is recommended before using Huck equipment.  
When operating Huck installation equipment, always wear approved eye protection.  
Be sure there is adequate clearance for the operator’s hands before proceeding.

**CAUTIONS:**  
Do not let disconnected hoses and couplers contact a dirty floor.  
Do not use TEFLON® tape on pipe threads. Pipe threads may cause tape to shred resulting in tool malfunction. (Threadmate™ is available from Huck in a 4oz. tube as part number 508517.)

**NOTE:** Air hoses are not available from Huck. Threadmate is a registered trademark of Parker Intangibles LLC. TEFLON is a registered trademark of DuPont Corp.

This tool is shipped with a plastic plug in the air inlet connector. An air supply of 90-100 psi capable of 6.3 CFM must be available. Air supply should be equipped with a filter-regulator-lubricator unit.  
1. Remove plastic shipping plug from Air Inlet Connector and put in a few drops of Automatic Transmission Fluid, DEXRON III, or equivalent.  
2. Set air pressure on regulator to 90-100 psi.  
3. Connect air hose to tool.  
4. Cycle tool a few times by depressing and releasing trigger.  
5. Disconnect air hose from tool.  
6. Select proper Nose Assembly for fastener to be installed.  
7. Attach Nose Assembly.  
8. Connect air hose to tool and install fastener in test plate of proper thickness with proper size holes. Inspect fastener(s).
**OPERATING INSTRUCTIONS**

FOR SAFE OPERATION, THIS SECTION MUST BE READ AND UNDERSTOOD.

**WARNINGS:**
To avoid severe personal injury: Wear approved eye and ear protection.

Be sure of adequate clearance for Operator’s hands before proceeding with fastener installation.

Do not pull on a pin without placing fastener/collar in a workpiece, and also, collar chamfer MUST be out toward tool. These conditions cause pin to eject with great velocity and force when the pintail breaks off or teeth/grooves strip. This may cause severe personal injury.

**CAUTIONS:** Remove excess gap from between the sheets. This permits enough pintail to emerge from collar for ALL jaw teeth to engage with pintail. If ALL teeth do not engage properly, jaws will be damaged.

**GENERAL**
Operators should receive training from qualified personnel. Do not bend tool to free if stuck. Tool should only be used to install fasteners. Never use as a jack/spreader or hammer.

**BobTail® FASTENER INSTALLATION:**
Place fastener in workpiece and place collar over fastener. See WARNING. (If Collar has only one tapered end, that end MUST face the tool; not the workpiece.) Hold fastener and push nose assembly onto fastener pintail protruding through collar until puller bottoms on fastener. Depress trigger and hold until collar is swaged. Release trigger. Tool will go into its return stroke. Tool/nose are ready for next installation cycle.

- Check fastener for correct grip. Place fastener in workpiece hole.
- Place collar over fastener. See WARNINGS. If collar has only one tapered end, that end should face the tool.
- Hold fastener in hole. Push tool onto fastener protruding from collar until puller bottoms on fastener.
- Move hands away from fastener and structure. Keep hands away from front of tool during operation. Tool anvil advances forward.
- Hold tool at right angle (90 degrees) to work piece. Press and hold trigger down until collar is swaged.
- Release trigger. Tool returns to starting position.

- Tool is ready for next installation cycle.

**ATTACHING A NOSE ASSEMBLY**

1. Unscrew tool retaining nut.
2. Slide puller cap of nose assembly onto puller; then, while holding piston rod flats with a wrench, screw puller and cap onto tool piston until wrench tight.
3. Slide anvil assembly over puller and into tool nose adapter.
4. Thread retaining nut onto nose adapter and wrench tight.

**FOR SAFE OPERATION, THIS SECTION MUST BE READ AND UNDERSTOOD.**

operating instructionS

1. Unscrew tool retaining nut.
2. Slide puller cap of nose assembly onto puller; then, while holding piston rod flats with a wrench, screw puller and cap onto tool piston until wrench tight.
3. Slide anvil assembly over puller and into tool nose adapter.
4. Thread retaining nut onto nose adapter and wrench tight.
MAINTENANCE

CAUTIONS:
Separated parts must be kept away from dirty work surfaces.

Always replace seals, wipers, and back-up rings when tool is disassembled for any reason.

Do not use TEFFLON® tape on pipe threads. Pipe threads may cause tape to shred resulting in tool malfunction. (Threadmate™ is available from Huck in a 4oz. tube as part number 508517.)

NOTES: Recycle steel, aluminum, and plastic parts in accordance with local lawful and safe practices.

GENERAL
1. The efficiency and life of any tool depends upon proper maintenance. Regular inspection and correction of minor problems will keep tool operating efficiently and prevent downtime. The tool should be serviced by personnel who are thoroughly familiar with how it operates.
2. A clean, well lit area should be available for servicing the tool. Special care must be taken to prevent contamination of pneumatic system.
3. Proper hand tools, both standard and special, must be available.
4. All parts must be handled carefully and examined for damage or wear. Always replace Seals, when tool is disassembled for any reason. Components should be disassembled and assembled in a straight line without bending, cocking, or undue force. Disassembly and assembly procedures outlined in this manual should be followed.
5. Service Parts Kit A1100KIT includes consumable parts and should be available at all times. Other components, as experience dictates, should also be available.

DAILY
1. If a Filter-Regulator-Lubricator unit is not being used, uncouple air disconnects and put a few drops of Automatic Transmission Fluid or light oil into the air inlet of the tool. If the tool is in continuous use, put a few drops of oil in every two to three hours.
2. Bleed the air line to clear it of accumulated dirt or water before connecting air hose to the tool.
3. Check all hoses and couplings for damage or air leaks, tighten or replace if necessary.
4. Check the tool for damage or air leaks, tighten or replace if necessary.
5. Check the nose assembly for tightness or damage, tighten or replace if necessary.

WEEKLY
1. Disassemble and clean nose assemblies and reassemble.
2. Check the tool and all connecting parts for damage or oil/air leaks, tighten or replace if necessary.
**DISASSEMBLY**

**WARNING:** Be sure air hose is disconnected from tool before cleaning, or performing maintenance. Severe personal injury may occur if air hose is not disconnected.

---

**CYLINDER DISASSEMBLY**

**CAUTION:** Do not remove crossport plugs from cylinder, as system damage may result.

NOTE: It is not necessary to remove the Back Cap from the Cylinder Assembly unless the Cylinder is being replaced.

1. Unscrew 4 Cap Screws that attach Handle to Cylinder.
2. Separate Cylinder from Handle, and remove 4 O-rings from top of Handle and 2 O-rings from bottom of Cylinder.
3. Place Cylinder Assembly face-up in a soft-jaw vise, and using a 1-3/8 inch wrench, unscrew and remove Front Cap Assembly. Remove O-ring and U-Cup Seal from Front Cap.
4. Using the 1-3/8 inch wrench on the Font Cap, and an adjustable wrench on the Nose Adapter, remove Nose Adapter; then remove Wiper and O-ring.
5. Carefully pull out Piston Rod without cocking it, which will bring Air Piston Assembly with it; then remove O-ring from Air Piston. **NOTE: If it is necessary to disassemble Piston Rod from Air Piston, do so with 1/2 inch wrench on Piston Rod flats and 5/8 inch wrench on the flats of the Air Piston to unscrew them.**

---

**HANDLE DISASSEMBLY**

**CAUTION:** Do not remove crossport plug from handle, as system damage may result.

1. Press out Slotted Pin, and remove Dowel Pin and Trigger Lever.
2. Using snap ring pliers or a pick with a blunt edge, remove Retaining Ring.
3. With a pair of needle-nosed pliers, grip pin of Cartridge Valve and pull Valve out of Handle.
4. Only if Filter requires changing, use 11/16 inch wrench to remove Quick Disconnect; then 9/16 inch wrench to remove Filter.

---

**WARNING:** Be sure air hose is disconnected from tool before cleaning, or performing maintenance. Severe personal injury may occur if air hose is not disconnected.

**CAUTION:** Do not remove crossport plugs from cylinder, as system damage may result.

**CAUTION:** Do not remove crossport plugs from cylinder, as system damage may result.
WARNINGs: Do not omit any seals during servicing, leaks will result and personal injury may occur.

Tool must be fully assembled with all components included.

CAUTION: Do not scratch inside of Cylinder.

HANDLE ASSEMBLY
1. If Filter has been removed or changed, apply Parker Threadmate® (Huck part no. 508517) to threads, and ensure that the flow arrow on the Filter points toward the Air Swivel inlet.

2. Apply LUBRIPLATE® (Huck part no. 502723) to Cartridge Valve, press Valve into Handle, and secure with Retaining Ring.

3. Align Trigger Lever to Trigger and secure with Dowel Pin.

4. Align hole of Trigger Lever with holes in Trigger and Handle, and install Roll Pin.

CYLINDER ASSEMBLY
1. Apply Loctite 243® (Huck part no. 508567) to threads of Piston Rod, and screw it into to Air Piston using 1/2 inch wrench on Piston Rod flats and 5/8 inch wrench on the flats of the Air Piston.

2. Apply LUBRIPLATE® (Huck part no. 502723) to Air Piston O-Ring and carefully, without cocking or force, press Piston assembly into Cylinder until it bottoms.

3. Apply LUBRIPLATE® (Huck part no. 502723) to Wiper, U-Cup Seal, and O-Ring, and install them on Front Cap. Note orientation of U-Cup Seal.

4. Apply LUBRIPLATE® (Huck part no. 502723) to Nose Adapter O-ring, install it onto Nose Adapter; then unsing an adjustable wrench, install Nose Adapter onto Front Cap.

5. Place Cylinder Assembly facing front-up in a soft jaw vise; then apply anti-seize compound (Huck part no. 508183) to threads of Front Cap Assembly and tighten Front Cap into Cylinder Assembly.

6. Remove Cylinder Assembly from vise, and apply LUBRIPLATE® (Huck part no. 502723) to 4 O-rings at top of Handle and 2 O-rings at bottom of Cylinder. Put 6 O-rings into place.

7. Apply Loctite 243® (Huck part no. 508567) to threads of 4 Cap Screws. Assemble Cylinder to Handle by securing with the treated Cap Screws.

8. Attach Quick Disconnect to air source, and cycle tool a few times to ensure there are no leaks.
NOTE:
Front Cap, Cylinder, Piston, and Back Cap are not sold separately.
Front Cap Assembly includes components labeled with 1.
Cylinder Assembly includes components labeled with 2.
Piston Assembly includes components labeled with 3.
Back Cap Assembly includes components labeled with 4.
Handle Assembly includes components labeled with 5.

* These stickers must remain on cylinder and readable at all times. Any time one of these stickers becomes damaged, torn, worn, or unreadable - or if a new cylinder is ordered - these stickers must be ordered and placed in the location shown.

SECTION A-A
TRROUBLESHOOTING

Always check out the simplest possible cause of a malfunction first. For example, an air hose not connected; then proceed logically, eliminating each possible cause until the cause is located. Where possible, substitute known good parts for suspected bad parts. Use these steps as an aid in locating and correcting malfunction.

1  Tool fails to operate when trigger is depressed:
   a) Air line not connected

2  Fastener installation incomplete:
   a) Air pressure is too low.
   b) Piston seals are worn or damaged.

3  Pintail stripped and/or swaged tool not ejected:
   a) Check for broken or worn puller.

7. Air leaks at air cylinder head:
   a) Worn or damaged O-ring. Replace if necessary.
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, or to the repair of 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
800-278-4825
845-331-7300
FAX: 845-334-7333

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

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

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

### EUROPE

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

### FAR EAST

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


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.


NOTICE: The information contained in this publication is only for general guidance.

© 2016 Huck International, Inc.
1 Corporate Drive, Kingston, NY 12401 • Tel: 800-431-3091 • Fax: 845-334-7333