Instruction Manual
T-124833CE
Pressure Gauge

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

Description of Machinery:
Models T-124833CE pressure setting gauge.

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)

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<table>
<thead>
<tr>
<th>Declared dual number noise emission values in accordance with ISO 4871</th>
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<tr>
<td>A weighted sound power level, LWA: ( &lt;80 ) dB (reference 1 µW)</td>
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<tr>
<td>A weighted emission sound pressure level at the work station, LpA: ( &lt;80 ) dB (reference 20 µPa)</td>
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<tr>
<td>C-weighted peak emission sound pressure level, LpC, peak: ( &lt;80 ) dB (reference 20 µPa)</td>
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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.

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<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:</td>
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<td>Uncertainty, K:</td>
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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. Read MSDS Specifications before servicing the tool. MSDS specifications are available from the product manufacturer or your Huck representative.
11. Only genuine Huck parts shall be used for replacements or spares. Use of any other parts can result in tooling damage or personal injury.
12. Never remove any safety guards or pintail deflectors.
13. Never install a fastener in free air. Personal injury from fastener ejecting may occur.
14. Where applicable, always clear spent pintail out of nose assembly before installing the next fastener.
15. Check clearance between trigger and work piece to ensure there is no pinch point when tool is activated. Remote triggers are available for hydraulic tooling if pinch point is unavoidable.
16. Do not abuse tool by dropping or using it as a hammer. Never use hydraulic or air lines as a handle or to bend or pry the tool. Reasonable care of installation tools by operators is an important factor in maintaining tool efficiency, eliminating downtime, and preventing an accident which may cause severe personal injury.
17. Never place hands between nose assembly and work piece. Keep hands clear from front of tool.
18. Tools with ejector rods should never be cycled with out nose assembly installed.
19. When two piece lock bolts are being used always make sure the collar orientation is correct. See fastener data sheet for correct positioning.

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

III. OPERATING HAZARDS:
1. Use of tool can expose the operator’s hands to hazards including: crushing, impacts, cuts, abrasions and heat. Wear suitable gloves to protect hands.
2. Operators and maintenance personnel shall be physically able to handle the bulk, weight and power of the tool.
3. Hold the tool correctly and be ready to counteract normal or sudden movements with both hands available.
4. Maintain a balanced body position and secure footing.
5. Release trigger or stop start device in case of interruption of energy supply.
6. Use only fluids and lubricants recommended by the manufacturer.
7. Avoid unsuitable postures, as it is likely for these 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.

Continued on next page...
IV. REPETITIVE MOTION HAZARDS:
1. When using assembly power tool, the operator can experience discomfort in the hands, arms, shoulders, neck or other parts of the body.
2. When using tool, the operator should adopt a comfortable posture while maintaining a secure footing and avoid awkward or off balanced postures.
3. The operator should change posture during extended tasks to help avoid discomfort and fatigue.
4. If the operator experiences symptoms such as persistent or recurring discomfort, pain, throbbing, aching, tingling, numbness, burning sensations or stiffness, these warnings should not be ignored. The operator should tell the employer and consult a qualified health professional.

V. ACCESSORIES HAZARDS:
1. Disconnect tool from energy supply before changing inserted tool or accessory.
2. Use only sizes and types of accessories and consumables that are recommended. Do not use other types or sizes of accessories or consumables.

VI. WORKPLACE HAZARDS:
1. Be aware of slippery surfaces caused by use of the tool and of trip hazards caused by the air line or hydraulic hose.
2. Proceed with caution while in unfamiliar surroundings; there could be hidden hazards such as electricity or other utility lines.
3. The assembly power tool is not intended for use in potentially explosive environments.
4. Tool is not insulated against contact with electrical power.
5. Ensure there are no electrical cables, gas pipes, etc., which can cause a hazard if damaged by use of the tool.

VII. NOISE HAZARDS:
1. Exposure to high noise levels can cause permanent, disabling hearing loss and other problems such as tinnitus, therefore risk assessment and the implementation of proper controls is essential.
2. Appropriate controls to reduce the risk may include actions such as damping materials to prevent workpiece from ‘ringing’.
3. Use hearing protection in accordance with employer’s instructions and as required by occupational health and safety regulations.
4. Operate and maintain tool as recommended in the instruction handbook to prevent an unnecessary increase in the noise level.
5. Select, maintain and replace the consumable / inserted tool as recommended to prevent an unnecessary increase in noise.
6. If the power tool has a silencer, always ensure that it is in place and in good working order when the tool is being operated.

VIII. VIBRATION HAZARDS:
1. Exposure to vibration can cause disabling damage to the nerves and blood supply to the hands and arms.
2. Wear warm clothing when working in cold conditions and keep hands warm and dry.
3. If numbness, tingling, pain or whitening of the skin in the fingers or hands, stop using the tool, tell your employer and consult a physician.
4. Support the weight of the tool in a stand, tensioner or balancer in order to have a lighter grip on the tool.

IX. HYDRAULIC TOOL SAFETY INSTRUCTIONS:
1. Carry out a daily check for damaged or worn hoses or hydraulic connections and replace if necessary.
2. Wipe all couplers clean before connecting. Failure to do so can result in damage to the quick couplers and cause overheating.
3. Ensure that couplings are clean and correctly engaged before operation.
4. Use only clean oil and filling equipment.
5. Power units require a free flow of air for cooling purposes and should therefore be positioned in a well ventilated area free from hazardous fumes.
6. Do not inspect or clean the tool while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury.
7. Be sure all hose connections are tight.
8. Wipe all couplers clean before connecting. Failure to do so can result in damage to the quick couplers and cause overheating.
Description

The T-124833CE pressure gauge is a device for measuring pressure settings of Huck Powerig® Hydraulic power sources. It consists of a needle valve, two pressure gauges (0–10,000 psi), a hose, and hydraulic couplers that connect to the hydraulic unit. The gauges have scales that show pressure in bar and psi.

Specifications

**Maximum Pressure:**
10,000 PSI (690 bar)

**Maximum Flow Rate:**
5 GPM (320 ml/s)

**Maximum Fluid Temperature:**
140° F (60° C)

**Hydraulic Fluid:**
Hydraulic fluid shall meet DEXRON® III, DEXRON VI, MERCON®, Allison C-4 or equivalent Automatic Transmission Fluid (ATF) specifications. Fire-resistant fluid may be used if it is an ester-based fluid such as Quintolubric® HFD or equivalent. Water-based fluid shall NOT be used as serious damage to equipment will occur.

Principle of Operation

Hydraulic fluid flows through the T-124833CE gauge when it is connected to the hydraulic unit. If the valve is shut, fluid cannot flow. During the PULL cycle, fluid flows from the port on the hydraulic unit marked “PULL”, through the gauge, and into the port marked “RETURN”.

During the RETURN cycle, the flow is in the opposite direction. When the valve is shut, flow is blocked and pressure builds up on one side of the valve. One pressure gauge will read the PULL pressure and the other will read the RETURN pressure.

Where the following trade names are used in this manual, note:
- **DEXRON** is a registered trademark of General Motors Corporation.
- **GLYD Ring** is a registered trademark of Trelleborg Sealing Solutions Germany GmbH
- **Loctite** is a registered trademark of Henkel Corporation, U.S.A.
- **LUBRIPLATE** is a registered trademark of Fiske Brothers Refining Co.
- **MERCON** is a registered trademark of Ford Motor Corp.
- **MOLYKOTE** is a registered trademark of Dow Corning Corporation
- **Never-Seez** is a registered trademark of Bostik, Inc.
- **Quintolubric** is a registered trademark of Quaker Chemical Corp.
- **Stic-tite** is a registered trademark of LA-CO Industries, Inc.
- **Spirolox** is a registered trademark of Smalley Steel Ring Company
- **Teflon** is a registered trademark of Chemours Company FC.
- **Threadmate** is a registered trademark of Parker Intangibles LLC.
- **TRUARC** is a trademark of TRUARC Co. LLC.
- **Vibra-Tite** is a registered trademark of ND Industries, Inc. USA.
WARNINGS:
A worn or damaged hose may rupture violently. Do not use any high-pressure equipment with hoses that are cut, badly worn, kinked, or damaged in any way.
Damaged hoses must be replaced. Severe personal injury is possible from flying parts and hydraulic fluid when hose rupture occurs.

GAUGES AND HOSES
1. Keep the pressure gauges filled with glycerine.
2. Replace the hose if the outer covering is worn through.

GLAND PACKING REPLACEMENT USING REPAIR KIT 507206
1. The valve must be in the open position during disassembly and assembly. Turn the handle counterclockwise at least 3 turns.
2. Disassemble all components of valve 507205. Check the valve stem for nicks, scratches, and irregularities that could damage the packing and cause a leak. Smooth the stem with whetstone if necessary.
3. Install the packing washer on the valve stem.
   NOTE: The washer is slightly concave on one side. Place the concave side toward the gland packing.
4. Install the new gland packing and replace the bushing.
5. Thread the assembled valve stem/packing/bushing completely into the valve body and then back out three full turns to ensure the valve is in open position.
6. Place the gland nut over the bushing and packing. Thread the nut onto the body and tighten with a wrench until a slight drag is felt when the valve handle is turned.
7. Install the valve into the gauge; pressurize the gauge and check for leakage. If necessary, adjust the gland as above.
8. Attach the handle and nut. Tighten the self-locking nut with a wrench.

Figure 1

Hydraulic Couplings

504438 O-ring  501102 Back-up Ring

110439 Female Connector

110438 Male Connector

Use a fine India stone to remove any nicks or burrs from these areas to prevent damage to O-ring of Female Connector.
Checking Powerig Output Pressures

WARNINGS:

When hydraulic unit is running, connect tool’s hoses to unit before connecting tool’s control cord to unit. If a malfunctioning cord switch is connected first, tool may begin to cycle unexpectedly. An accidentally cycling tool could severely injure a hand.

Disconnect the hydraulic unit from the power source. Accidental cycling of the hydraulic unit may cause severe injury when disconnecting the couplings, and fluid may unexpectedly spray.

When disconnecting hoses, switch control cord must be disconnected first, before disconnecting hoses.

To prevent malfunctions, check and adjust the PULL and RETURN pressures of Powerig® hydraulic power sources when:

Unit is being used for the first time or has not been used for a month or longer.
Any part of the combination valve has been repaired.
The combination valve has been replaced.
Troubleshooting is performed.
Before any tool is connected.

PREPARATIONS FOR CHECKING PRESSURES

Prime and bleed the Powerig unit per the instruction manual of the Powerig being used. NOTE: When checking pressures of units that operate more than one tool, the pressures for each tool must be checked separately.

1. Disconnect the hydraulic unit from the primary power source, then connect both quick connects to the hydraulic unit.
2. Open the valve (turn handle counterclockwise).
3. Connect the hydraulic unit to its primary power supply, either electrical or compressed air.

CHECKING POWERIG PRESSURE SETTINGS

1. Install the Auxiliary Trigger Switch and Control Cord Assembly (P/N 113056) in the control socket or use the tool trigger.
2. Turn on the hydraulic unit. Fluid will be directed out the PULL pressure port when the trigger is pressed. The 940 series hydraulic units automatically turn on and off.
3. Close the valve (turn handle clockwise). Press and hold the auxiliary trigger switch. Read the PULL pressure on right gauge. Release the switch.
4. Open the valve (turn handle counterclockwise) a few turns.
5. Press and release the auxiliary trigger switch to set the unit’s internal valve in the RETURN mode. Hydraulic fluid is directed out the RETURN pressure port.
6. Slowly close the valve. The pressure will rise and then sharply drop. Read the RETURN pressure on left gauge. Read the RETURN pressure of the 940 series just before the motor turns off.
7. Open the valve.
8. Disconnect the auxiliary trigger.
9. Disconnect the T-124833CE gauge.
10. See the Powerig’s instruction manual for PULL and RETURN pressure adjusting procedure. See the installation tool’s instruction manual for recommended PULL and RETURN pressures.
11. Connect the installation tool’s hoses and control cord to the hydraulic unit.

CAUTION: The following check must be completed quickly because sustained high pressure will cause premature wear on equipment.
Figure 2

Components Drawing

NOTES

1. USE THREAD COMPOUND #503237 ON ALL MALE PIPE THREADS

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<th>PART NO.</th>
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<th>DESCRIPTION</th>
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<tr>
<td>507220</td>
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<td>HOSE ASSY 36X38 MNPT .390D 200</td>
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VIEW A-A
Limited Warranties

Limited Lifetime Warranty on BobTail® Tools:

Huck International, Inc. warrants to the original purchaser that its BobTail® installation tools manufactured after 12/1/2016 shall be free from defects in materials and workmanship for its useful lifetime. This warranty does not cover special order / non-standard products, or part failure due to normal wear, tool abuse or misapplication, or user non-compliance with the service requirements and conditions detailed in the product literature.

Two Year Limited Warranty on Installation Tools:

Huck International, Inc. warrants that its installation tools and Powerig® hydraulic power sources manufactured after December 1, 2016 shall be free from defects in materials and workmanship for a period of two years from date of purchase by the end user. This warranty does not cover special order / non-standard products, or part failure due to normal wear, tool abuse or misapplication, or user non-compliance with the service requirements and conditions detailed in the product literature.

90 Day Limited Warranty on Nose Assemblies and Accessories:

Huck International, Inc. warrants that its nose assemblies and accessories shall be free from defects in materials and workmanship for a period of 90 days from date of purchase by the end user. This warranty does not cover special clearance noses, or special order / non-standard product, or part failure due to normal wear, abuse or misapplication, or user non-compliance with the service requirements and conditions detailed in the product literature.

Useful lifetime is defined as the period over which the product is expected to last physically, up to the point when replacement is required due to either normal in-service wear, or as part of a complete overhaul. Determination is made on a case-by-case basis upon return of parts to Huck International, Inc. for evaluation.

Tooling, Part(s) and Other Items not manufactured by Huck:

HUCK makes no warranty with respect to the tooling, part(s), or other items manufactured by third parties. HUCK expressly disclaims any warranty expressed or implied, as to the condition, design, operation, merchantability, or fitness for use of any tool, part(s), or other items thereof not manufactured by HUCK. HUCK shall not be liable for any loss or damage, directly or indirectly, arising from the use of such tooling, part(s), or other items or breach of warranty or for any claim for incidental or consequential damages.

Huck 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 Tooling Support Locations**

**INDUSTRIAL NORTH AMERICA**

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<tr>
<th>Location</th>
<th>Address</th>
<th>Tel</th>
<th>Fax</th>
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<tr>
<td>Kingston Operations</td>
<td>1 Corporate Drive</td>
<td>+1-800-278-4825</td>
<td>+1-845-334-7333</td>
</tr>
<tr>
<td>Tracy Operations</td>
<td>1925 North MacArthur Drive</td>
<td>+1-800-826-2884</td>
<td>+1-800-573-2645</td>
</tr>
<tr>
<td>Waco Operations</td>
<td>PO Box 8117</td>
<td>+1-800-388-4825</td>
<td>+1-800-798-4825</td>
</tr>
<tr>
<td>Kolkata Operations</td>
<td>Unit No. 28, 2nd Floor,</td>
<td>+91-33-40699170</td>
<td>+91-33-40699180</td>
</tr>
<tr>
<td>Melbourne Operations</td>
<td>1508 Centre Road</td>
<td>+613-8545-3333</td>
<td>+613-8545-3390</td>
</tr>
<tr>
<td>São Paulo Operations</td>
<td>Rodovia Anhanguera, s/n KM 17</td>
<td>+55-11-3583-7061</td>
<td>+55-11-3583-6594</td>
</tr>
<tr>
<td>Suzhou Operations</td>
<td>58 Yinsheng Road, SIP Suzhou</td>
<td>+86-512-62863800</td>
<td>+86-512-62863800</td>
</tr>
<tr>
<td>Telford Operations</td>
<td>Unit C, Stafford Park 7</td>
<td>+44-(0)-1952-290011</td>
<td>+44-(0)-1952-207701</td>
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<tr>
<td>Tokyo Operations (Japan and Korea)</td>
<td>1013 Hibiya U-1 Bldg.</td>
<td>+81-3-3539-6594</td>
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**AEROSPACE NORTH AMERICA**

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<td>+1-845-334-7333</td>
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<tr>
<td>Simi Valley Operations</td>
<td>3990A Heritage Oak Court</td>
<td>+1-805-527-3600</td>
<td>+1-805-527-0900</td>
</tr>
<tr>
<td>Hong Kong Operations</td>
<td>27th Floor, 88 Hing Fat Street</td>
<td>+852-2864-2012</td>
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**AEROSPACE GLOBAL**

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<td>Robert-Bosch Str. 4</td>
<td>+49-8251-8757-0</td>
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<tr>
<td>Cergy Operations</td>
<td>15 Rue du Petit Albi</td>
<td>+33-1-34-33-98-00</td>
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<td>27th Floor, 88 Hing Fat Street</td>
<td>+852-2864-2012</td>
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**CERTIFIED MANAGEMENT SYSTEM**

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Arconic Fastening Systems
Kingston Operations
1 Corporate Drive, Kingston, NY 12401
Tel: 800-431-3091 • Fax: 845-334-7333
www.afshuck.net/us

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