Pressure Gauge Instruction Manual

T-124833 and T124833CE

To setup POWERIG® Hydraulic Unit/H I T
EU Declaration of Conformity

Manufacturer:
Huck International, Inc., Installation Systems Division, 85 Grand Street, Kingston, NY, 12401, USA

Description of Machinery:
Model number T-124833CE pressure setting gauge

Relevant provisions complied with:

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: Renno Budziak
Position: Vice President of Engineering, Installation Systems Division
Place: Kingston, New York, USA
Date: December, 1996
SAFETY

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

1. Safety Glossary

- Product complies with requirements set forth by the relevant European directives.
- Read manual prior to using equipment.
- Eye protection required while using this equipment.
- Hearing protection required while using this equipment.

⚠️ WARNINGS - Must be understood to avoid severe personal injury.

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

Notes - Are reminders of required procedures. Bold, italic type and underlining - Emphasizes a specific instruction.

2. Huck equipment must be maintained in a safe working condition at all times and inspected on a regular basis for damage or wear. Any repair should be done by a qualified repairman trained on Huck procedures.

3. Repairman and Operator must read manual prior to using equipment and understand any Warning and Caution stickers/labels supplied with equipment before connecting equipment to any primary power supply. As applicable, each of the sections in this manual have specific safety and other information.

4. See MSDS Specifications before servicing the tool. MSDS Specifications are available from you Huck representative or on-line at www.huck.com. Click on Installation Systems Division.

5. When repairing or operating Huck installation equipment, always wear approved eye protection. Where applicable, refer to ANSI Z87.1 - 1989.

6. Disconnect primary power source before doing maintenance on Huck equipment.

7. If any equipment shows signs of damage, wear, or leakage, do not connect it to the primary power supply.

8. Make sure proper power source is used at all times.

9. Never remove any safety guards or pintail deflector.

10. Never install a fastener in free air. Personal injury from fastener ejecting may occur.

11. When using an offset nose always clear spent pintail out of nose assembly before installing the next fastener.

12. If there is a pinch point between trigger and work piece use remote trigger. (Remote triggers are available for all tooling).

13. Do not abuse tool by dropping or using it as a hammer. Never use hydraulic or air lines as a handle. Reasonable care of installation tools by operators is an important factor in maintaining tool efficiency, eliminating downtime, and in preventing an accident which may cause severe personal injury.

14. Never place hands between nose assembly and work piece.

15. Tools with ejector rods should never be cycled with out nose assembly installed.

16. When two piece lock bolts are being used always make sure the collar orientation is correct. See fastener data sheet of correct positioning.
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DESCRIPTION

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

SPECIFICATIONS

- Maximum pressure: 10,000 psi, 690 Bar
- Maximum flow rate: 5 GPM, 320 ml/s
- Maximum fluid temperature: 140° C, 60° C
- Minimum fluid temperature: 40° C, 4° C

PRINCIPLE OF OPERATION

Hydraulic fluid flows through the T-124833 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 which is marked “PULL”, through the T-124833 gauge, and into the port marked “RETURN”. During the RETURN cycle, 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 PULL pressure and the other will read RETURN pressure.

⚠️ Warning:
A worn or damaged hose may rupture violently. Do not use any high-pressure equipment with hoses that are cut, or 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.
Checking POWERIG® Output Pressures

To prevent malfunctions, check and adjust PULL and RETURN pressures of POWERIG® Hydraulic Unit when:

1) Unit is being used for the first time or has not been used for a month.

2) Any part of combination valve is repaired.

3) Combination valve is replaced.

4) Troubleshooting is performed.

5) Before any tool is connected.

Preparations for checking Pressures:

Prime and bleed POWERIG® unit per the instruction manual of the POWERIG® you are using.

Warning:
When hydraulic unit is running, be sure to 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.

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

1) Disconnect hydraulic unit from primary power source, then connect both quick-connects to hydraulic unit.

Note: When checking pressures of units that operate more than one tool, the pressures for each tool must be checked separately.

2) Open valve (turn handle counterclockwise).

3) Connect hydraulic unit to its primary power supply, either electrical or compressed air.
CHECKING POWERIG® OUTPUT PRESSURES (CONT.)

Checking POWERIG® Pressure Settings:

1) Install Auxiliary Trigger Switch and Control Cord Assembly, 113056, in control socket or use tool trigger.

2) Turn hydraulic unit on. Fluid will be directed out the PULL pressure port when trigger is depressed. 940 series hydraulic units turn on and off automatically.

Caution: the following check must be completed quickly, as sustained high pressure will cause premature wear on equipment.

3) Close the valve (turn handle clockwise). Depress auxiliary trigger switch and hold. Read PULL pressure on right hand gauge. Release switch.

4) Open the valve (turn handle counter-clockwise) a few turns.

5) Depress and release auxiliary trigger switch to set unit’s internal valve in RETURN mode. Hydraulic fluid is directed out RETURN pressure port.

6) Slowly close the valve. The pressure will rise, and then, drop sharply. Read RETURN pressure on left-hand gauge. Read RETURN pressure pressure of 940 series just before motor turns off.

7) Open the valve.

⚠️ Warning: Disconnect hydraulic unit from power source. Accidental cycling of the hydraulic unit may cause severe injury when disconnecting couplings. Also fluid may spray unexpectedly.

8) Disconnect auxiliary trigger.

9) Disconnect pressure setting gauge.

10) Refer to POWERIG Hydraulic Unit’s instruction manual for PULL and RETURN pressure adjusting procedure. Refer to installation tool’s instruction manual for specific PULL and RETURN pressures.

11) Connect installation tool’s hoses and control cord to hydraulic unit.
MAINTENANCE

Gauges and Hoses:

⚠️ Warning: Replace hose if damaged as indicated in Warnings on page 6.

1) Keep the pressure gauges filled with glycerine.

2) Replace hose if outer covering is worn through. See warning on page 6.

Gland Nut Adjustment for Leakage:

1) Release system pressure from both ports of the 507205 valve.

2) Adjust valve to open position by turning handle counter-clockwise 3 turns.

3) Hold valve in vise. With wrench, turn gland nut clockwise for 1/8 turn to increase pressure on valve stem packing and stop leak.

Note: Do not turn counter-clockwise as leakage will increase!!

4) When handle is turned, there must be a slight drag on valve stem. Check for drag by rotating handle in both directions. Tighten gland nut in 1/8 turn increments until drag is felt.

5) Pressurize the T-124833 gauge and check for leakage.

6) If leakage continues, tighten the gland nut, as above, until leak is stopped.

7) If leakage cannot be stopped by tightening gland nut, order a repair kit, 507206. Follow the instructions for gland replacement.
Gland Packing Replacement using Repair Kit 507206:

1) Valve must be in open position during disassembly and assembly. Turn handle counter-clockwise at least 3 turns.

2) Disassemble all components of valve, 507205. Check valve stem for nicks, scratches and irregularities that could damage packing and cause a leak. Smooth stem with whetstone if necessary.

3) Install packing washer on valve stem. Note: Washer is slightly concave on one side. Place concave side toward gland packing.

4) Install new gland packing and replace bushing.

5) Thread assembled valve stem/packing/bushing into valve body completely and then backout three full turns to assure valve is in open position.

6) Place gland nut over bushing and packing. Thread nut onto body and tighten with wrench until slight drag is felt when valve handle is turned.

7) Install valve into T-124833 gauge. Pressurize gauge and check for leakage. If necessary, adjust gland as in Gland Nut Adjustment above.

8) Attach handle and nut. Tighten self-locking nut with wrench.
Notes:
1) Use thread compound on all male pipe threads.
2) Test per Huck spec 42-534.
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.

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

Huck shall not be liable for any loss or damage resulting from delays or nonfulfillment of orders owing to strikes, fires, accidents, transportation companies or for any reason or reasons beyond the control of the Huck or its suppliers.

Huck Installation Equipment

Huck International, Inc. reserves the right to make changes in specifications and design and to discontinue models without notice.

Huck Installation Equipment should be serviced by trained service technicians only.

Always give the Serial Number of the equipment when corresponding or ordering service parts.

Complete repair facilities are maintained by Huck International, Inc. Please contact one of the offices listed below.

Eastern
One Corporate Drive Kingston, New York 12401-0250
Telephone (845) 331-7300 FAX (845) 334-7333

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

Outside USA and Canada
Contact your nearest Huck International Office, see back cover.

In addition to the above repair facilities, there are Authorized Tool Service Centers (ATSC's) located throughout the United States. These service centers offer repair services, spare parts, Service Parts Kits, Service Tools Kits and Nose Assemblies. Please contact your Huck Representative or the nearest Huck office listed on the back cover for the ATSC in your area.
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