OPERATION & SERVICE MANUAL

Model: 8950-010
5 Ton Hydraulic Leveling Jack

08/2025 – Rev. 01

For Spare Parts, Operations & Service Manuals or Service Needs
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This product can not be modified without the written approval of Tronair, Inc. Any modifications done without written approval voids all warranties and releases Tronair, Inc., its suppliers, distributors, employees, or financial institutions from any liability from consequences that may occur. Only Tronair OEM replacement parts shall be used.

1.0 PRODUCT INFORMATION

1.1 DESCRIPTION

The 5 Ton Hydraulic Leveling Jack Is a two stage hydraulic jack designed to lift a load of up to five tons. Both stages are spring loaded. The cylinder inside diameter and the second stage ram outside diameter are hard chrome plated for wear resistance and the outside diameter of first stage ram is cad plated as a protection against the weather. The Jack is provided with a 9” diameter footpad which can swivel a minimum of 10° In any direction. The jack requires the application of hydraulic pressure to extend it but will retract automatically when the pressure Is relieved.

1.2 MODEL & SERIAL NUMBER

Reference nameplate on unit

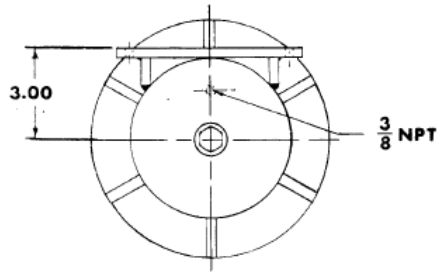
1.3 MANUFACTURER

***TRONAIR*, Inc./ColumbusJack/Regent**
1 Air Cargo Pkwy East
Swanton, Ohio 43558 USA

Telephone: (419) 866-6301 or 800-426-6301
Fax: (419) 867-0634
E-mail: sales@tronair.com

1.4 SPECIFICATIONS

Capacity ..... 5 Ton (4.5 Metric Ton)
Minimum Height ..... 30 in (76.2 cm)
Maximum Height ..... 67 in (170.18 cm)
Operating Pressure ..... 1700 psi (117.2 bar)



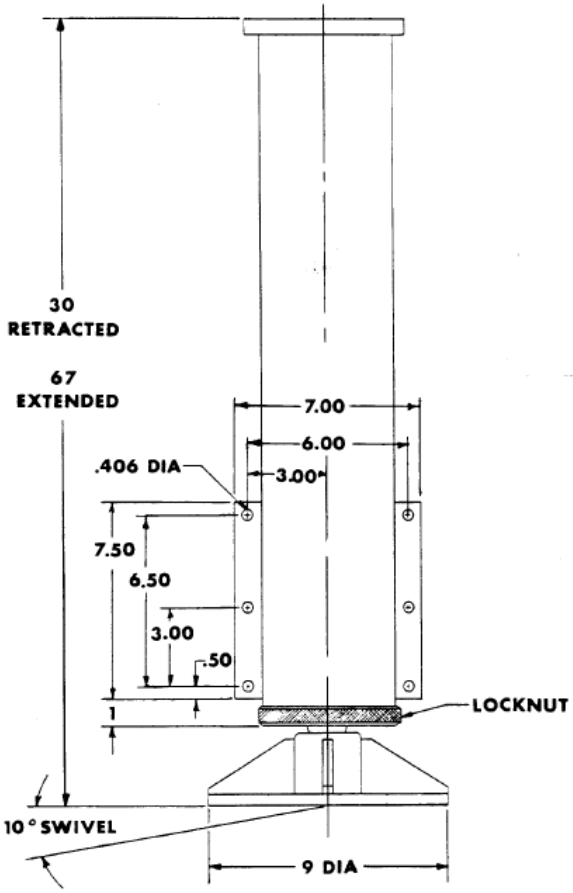
2.0 SAFETY INFORMATION

2.1 USAGE AND SAFETY INFORMATION

To ensure safe operations please read the following statements and understand their meaning. Also refer to your equipment manufacturer’s manual for other important safety information. This manual contains safety precautions which are explained below. Please read carefully.

WARNING!
Warning is used to indicate the presence of a hazard that can cause ***severe personal injury, death, and/or substantial property damage*** if the Warning Notice is ignored.

CAUTION!
Caution is used to indicate the presence of a hazard, which will or can cause ***minor personal injury or property damage*** if the Caution Notice is ignored.



3.0 TRAINING

3.1 TRAINING REQUIREMENTS

The employer of the operator is responsible for providing a training program sufficient for the safe operation of the unit.

3.2 TRAINING PROGRAM

The employer provided operator training program should cover safety procedures concerning use of the unit in and around the intended aircraft at the intended aircraft servicing location.

3.3 OPERATOR TRAINING

The operator training should provide the required training for safe operation of the unit.

NOTE: Maintenance and Trouble Shooting are to be performed by a skilled and trained technician.

4.0 PREPARATION PRIOR TO FIRST USE

To prevent air from being trapped in the fluid supply line remove the plastic cap from the 3/8 NPT port on the end of the jack and fill with fluid of the same type being used In the hydraulic supply system. This will also prevent a drop In the fluid level of the system reservoir.

The following hydraulic oils are recommended for use in Columbus Jack/Regent Jacks:

- Tellus 15-Shell Oil Company
- MIL-H-6083a (General Petroleum Corp., MILVAC-6083).
- MIL-PRF-5606 (Shell 011 Co., Aero Shell No. 4).
- Caiol Engine 011-5, Standard 011 Co.
- Red line Cp Ott, Union Oil Co.
- Texaco Regal 011 AA, Texas Co. R & o.
- Opaline 10W Motor Oil, Sinclair Oil Co.

5.0 OPERATION

5.1 TO EXTEND

Connect the Jack to a suitable source of hydraulic pressure and energize. When the rams have extended to the required length turn the locknut on the first stage ram up tight against the end of cylinder.

5.2 TO RETRACT

Pressurize jack to remove toad from locknut. Run the locknut down to the end of the first stage ram and relieve the hydraulic pressure. Rams will retract automatically.

6.0 CLEANING

WARNING!

Use dry cleaning solvent only in a well ventilated area, removed from vicinity of open flame or elevated temperature. Avoid prolonged or repeated contact with skin and inhalation of toxic solvent vapors; and do not smoke in presence of vapors. Toxic solvents present a danger to human life and health.

Wipe away accumulations of dirt or grease from exterior of Jack rams with a clean cloth. All removed metallic parts (removed during disassembly) shall be cleaned with dry cleaning solvent. Thoroughly dry all cleaned parts.

7.0 MAINTENANCE

7.1 TO REPLACE O-RING (23) AND BACKUP RING (17)

1. Remove footpad (5) by unscrewing capscrew (25)
2. Remove capscrew (24) and seal (27)
3. Remove snap ring (28)
4. Ram (2) and bushing (9) can now be removed from the cylinder (1). O-Ring (23) and backup Ring (17) can be replaced
5. Re-assemble in reverse order

7.2 TO REPLACE O-RING (22)

A special tool Is required, P/N 8950-12.

1. Remove footpad (5) by unscrewing capscrew (25)
2. Remove capscrew (24) and seal (27)
3. Remove snap ring (15)
4. Screw the special tool into the tapped hole in the end of the second stage ram (4) and pull the complete spring assembly out of the first stage ram (2) until the O-ring Is exposed and can be replaced.
5. Re-assemble in reverse order.

7.3 TO REPLACE O-RING (21) AND BACKUP RING (16)

A special toot Is required, P/N 8950-12.

1. Remove footpad (5) by unscrewing capscrew (25).
2. Screw the special toot into the tapped hole in the end of the second stage ram (4) and put I the ram out of the spring nut (7) far enough to al low an assistant to remove the snap ring (14).
3. With snap ring (14) removed, at low the ram to slide gently Inside the spring nut (7) and guide tube (3) until the spring (19) tension Is relieved. Unscrew the special tool and replace o-ring (21) and backup (16).
4. Re-assemble in reverse order

7.4 IF SPRINGS (19)(20) NEED TO BE REPLACED

The complete Jack must be returned to Tronair/Columbus Jack.

WARNING

Springs (19)(20) are under high stress and may cause damage or injury if an attempt is made to replace them without using the proper tools.

8.0 PROVISION OF SPARES

8.1 SOURCE OF SPARE PARTS

Spare parts may be obtained from the manufacturer:

TRONAIR, Inc./Columbus Jack
1 Air Cargo Pkwy East
Swanton, Ohio 43558 USA

Telephone: (419) 866-6301 or 800-426-6301
Fax: (419) 867-0634
E-mail: sales@tronair.com
Website: www.tronair.com

For Spare Parts, Operations & Service Manuals or Service Needs:
Scan the QR code or visit tronair.com/pages/tronair-information-center

8.2 RECOMMENDED SPARE PARTS LISTS

Reference the following page(s) for Replacement Parts and Kits available.

9.0 IN SERVICE SUPPORT

Contact Tronair, Inc. for technical services and information.

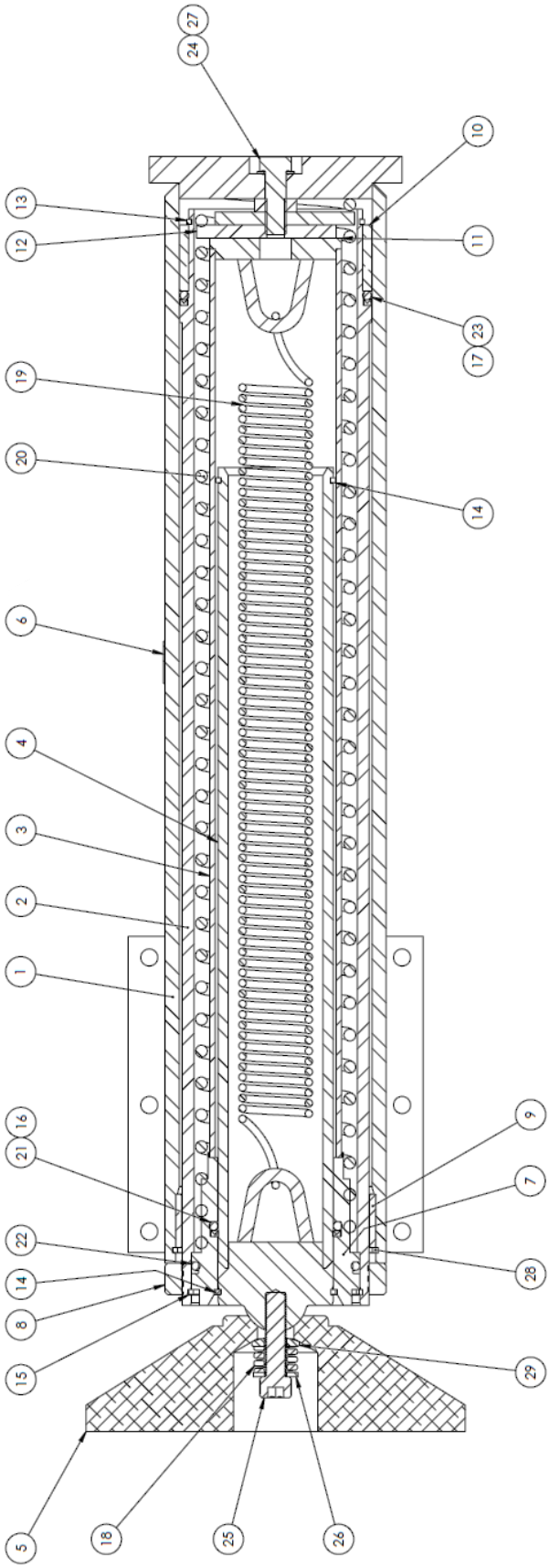
10.0 GUARANTEES/LIMITATION OF LIABILITY

1. ColumbusJACK Corporation, (Seller) warrants each new product of its manufacture to be free from defects in material or workmanship, under proper, reasonable and normal use and service, and for a period of twelve (12) months after date of shipment from Seller's Swanton, OH. USA facility.
2. Where Buyer claims an alleged defect in material or workmanship and so advises Seller in writing within ten (10) days after discovery thereof, then and in such event, Buyer shall return said equipment, transportation prepaid, to the Seller, provided such return is timely and within twelve (12) months form date of original shipment. This warranty and liability of the Seller is expressly limited solely to replacement of repair of defective parts or goods, and return at Buyer's expense to Seller after find by Seller the product was defective prior to original shipment or, at the option of Seller, to making refund to Buyer of the purchase price for said product.
3. It is further expressly understood and agreed that:
   a. THERE IS NO WARRANTY, representation of condition OF ANY KIND, express or implied, (INCLUDING NO WARRANTY OF MERCHANT-ABILITY OR OF FITNESS) EXCEPT THAT THE MATERIAL SHALL BE OF THE QUALITY SPECIFIED HEREIN, and none shall be implied by law. Except as otherwise provided herein, quality shall be in accordance with seller's specifications. Final determination of the material for the use contemplated by Buyer is the sole responsibility of Buyer and Seller shall have no responsibility in connection with such suitability, and
   b. The Buyer's sole and exclusive remedy shall be repair or replacement of defective parts by the Seller. Should the goods, in the judgment of Seller, preclude the remedying of the warranted defects by repair or replacement, the buyer's sole and exclusive remedy shall the be the refund of the purchase price, and
   c. Seller shall not be liable for prospective profits or special, indirect or consequential damages, nor shall any recovery of any kind against Seller be greater in amount than the purchase price of the specific material sold and causing the alleged loss, damage or injury. Buyer assumes all risk and liability for loss, damage or injury to persons or property of Buyer or others arising out of use or possession of any product or part sold hereunder, and
   d. The Seller shall in no way be deemed or held to be obligated, liable or accountable upon or for any guarantees or warranties, express or implied, or created by statute or by operation of law or otherwise, in any manner of form beyond its express agreement above set forth, and
   e. No warranty herein shall apply to any product which shall have been repaired or altered, unless such alteration or repair has been made by Seller or where, after return to and inspection by Seller, the product is found by Seller to have been subject to misuse, negligence or accident, and
   f. No warranty of any nature is made by Seller as to any component forming a part of the product sold and Buyer shall receive only such warranties offered by such other manufacturer pertinent to such component, and
   g. Seller does not assume nor does Seller authorize any other person to assume for it any other liability or make any warranty in connection with the sale of its products.

The obligations of ColumbusJACK expressly stated herein are in lieu of all other warranties or conditions expressed or implied. **Any unauthorized modification of the ColumbusJACK products or use of the ColumbusJACK products in violations of cautions and warnings in any manual (including updates) or safety bulletins published or delivered by ColumbusJACK will immediately *void any warranty, express or implied* and ColumbusJACK *disclaims any and all liability for injury (WITHOUT LIMITATION and including DEATH), loss or damage arising from or relating to such misuse*.**

Parts List

When ordering replacement parts/kits, please specify model, serial number and color of your unit.



Parts List

When ordering replacement parts/kits, please specify model, serial number and color of your unit.

Item	Part Number	Description	Qty
1	8950-1	CYLINDER	1
2	8950-2	RAM, FIRST STAGE	1
3	8950-3	GUIDE TUBE	1
4	8950-4	RAM, SECOND STAGE	1
5	8950-5	FOOT PAD	1
6	915-176-1	NAME PLATE	1
7	8950-10	SPRING NUT	1
8	8950-8	LOCKNUT	1
9	8950-7	BUSHING	1
10	3989-8	PISTON	1
11	8950-9	SPRING HOOK	1
12	3989-10	SPRING BAR	1
13	915-140.12-3.97	SNAP RING	1
14	915-140.12-2.59	SNAP RING	2
15	916-150.12-4.160	SNAP RING	1
16	916-45-2.710	BACKUP RING	1
17	916-45-4.165	BACKUP RING	1
18	916-184-12	DIE SPRING	1
19	916-186-60	SPRING, TENSION	1
20	916-186-61	SPRING, TENSION	1
21	MS28775-335	O-RING	1
22	MS28775-342	O-RING	1
23	MS28775-345	O-RING	1
24	G-1100-109014	BOLT, 1/2-13 X .1-1/2" HEX HD GR 5	1
25	378-20160	SHCS, 1/2-20 NF X 2"	1
26	G-1250-1090N	FLATWASHER, 1/2 NARROW	1
27	450A5685	LOCK-O-SEAL	1
28	915-150.12-4.900	SNAP RING, INTERNAL	1
29	G-1286-03-SS	SET, SPHERICAL WASHER	1