MODEL 94-657
HYDRAULIC SERVICE JACK
(4 TON - SERIES "B")

OWNER/OPERATOR MANUAL

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>RATED LOAD CAPACITY</td>
<td>8,000 lbs</td>
</tr>
<tr>
<td>LOW PICK UP HEIGHT</td>
<td>5-3/8&quot;</td>
</tr>
<tr>
<td>HIGH LIFTING POINT</td>
<td>20-15/16&quot;</td>
</tr>
<tr>
<td>HYDRAULIC LIFT</td>
<td>15-9/16&quot;</td>
</tr>
<tr>
<td>CHASSIS LENGTH</td>
<td>40-3/8&quot;</td>
</tr>
<tr>
<td>CHASSIS WIDTH</td>
<td>12-3/16&quot;</td>
</tr>
<tr>
<td>CHASSIS HEIGHT</td>
<td>7-3/4&quot;</td>
</tr>
</tbody>
</table>

DESCRIPTION

Model 94-657 is a manual hydraulic service jack designed for automotive, agriculture and light truck repair facilities. The jack provides the following features:

- Extra long chassis reaches under low overhangs and obstructions.
- Full swivel rear casters and lifting cap for easy positioning.
- Long handle and low height is ideal for lifting loaded light trucks by the axles.
- Handle adjusts to three pumping positions for operator convenience and low clearance vehicles.
- Automatic overload protection prevents overloading and exceeding the jack rated lifting capacity.
- "T" handle for easier positioning.

OWNER/OPERATOR RESPONSIBILITY

It is the owner/operator responsibility to properly use and maintain this equipment.

The instructions and warnings contained in this manual shall be read and understood by the owner/operator prior to operating this equipment.

If an owner/operator does not understand English, the contents of this manual shall be explained in the owner/operator native language to assure the owner/operator comprehension.

It is the owners/operators responsibility to maintain the legibility of all warning and instruction labels.

The owner/operator shall retain this manual for future reference to important warnings, operating and maintenance instructions.

WARNING

FAILURE TO HEED THE FOLLOWING INSTRUCTIONS MAY RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE.

- Do not exceed rated capacity.
- Use only as a lifting device. Do not use to support a load or vehicle.
- Use jack on hard level surfaces.
- Center load on lift cap.
- Use vehicle stands or appropriate support after lifting a vehicle/load.
- Lift only at locations specified by the manufacturer.
- Do not crawl under a vehicle/load when placing stands or support.
- Lower a vehicle/load slowly.

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NAPA LIFTING EQUIPMENT
One Lincoln Way - St. Louis, MO 63120-1578

J1N94-657000B1
ASSEMBLY

Assemble jack handle to jack frame as follows:

A. Remove nuts (1), washers (2) and handle set bolt (3).

B. Remove pedal connecting pin (4).

C. Position handle assembly (5) in jack frame and reinstall handle set bolt (3), washers (2) and nuts (1).

D. Reinstall pedal connecting pin (4).

E. Align pedal spring (6) with pivoting step bolt (7).

F. Attach connector (8) to connector (9) using release bolt (10).

Check jack operation by closing release valve and pumping jack handle. If jack responds immediately to pump action, it is ready to use. If not, refer to TROUBLESHOOTING and perform PURGING AIR FROM JACK procedure.

If jack is damaged, badly worn, or operates abnormally it shall be removed from service. Contact a factory authorized service center for repair.

If the jack has been subjected to an abnormal load or shock, the jack shall be inspected by a factory authorized service center.

An annual jack inspection is recommended to be performed by a factory authorized service center.

G. Pump jack handle and raise vehicle to desired height. DO NOT lift vehicle any higher than is needed to make repairs.

H. DO NOT crawl under vehicle while positioning vehicle stands.

I. Slowly and carefully lower vehicle on to vehicle stands or other appropriate supports.

REMOVING JACK

A. Make sure release valve is closed by firmly turning release knob clockwise.

B. Pump jack handle and raise vehicle just enough to clear vehicle stands or support means.

C. Remove vehicle stands or other support means from under vehicle. DO NOT crawl under vehicle when removing vehicle stands.

D. Slowly turn release knob counterclockwise to open release valve and lower vehicle.

E. When vehicle is fully lowered, remove jack from under vehicle.

OPERATION

BEFORE USING JACK

Prior to operation, a visual jack inspection shall be made. Check for bent or worn parts, hydraulic leaks, damaged, loose or missing parts.

POOLING

USING JACK

A. Set vehicle parking brakes and/or block vehicle wheels.

B. Open release valve by turning release knob counterclockwise and allow jack to fully retract.

C. Position jack under desired vehicle lifting point suggested by manufacturer.

D. Select the best handle position to operate the jack by pulling up on the handle lock lever.

E. Firmly close release valve by turning release knob clockwise.

F. The jack lift cap must contact the vehicle lift surface squarely and as close to center of lift cap as possible.

CAUTION

A. Open release valve and allow jack to retract to its lowest position.

B. Raise cover over hydraulic unit assembly to gain access to filler screw/plug.

C. Fill reservoir with clean hydraulic jack oil. Do not overfill.

D. Reinstall filler screw/plug and lower cover.
LUBRICATION

Lubricate jack as follows:

A. Open release valve by turning release knob counterclockwise and allow jack to fully retract.
B. Raise cover over hydraulic unit assembly.
C. Apply oil to release mechanism universal joint, pump linkages and all moving joints at the lower end of the handle.
D. Apply chassis grease to lifting arm spindles and pins.
E. Close release valve by turning release knob clockwise.
F. Pump jack handle until jack is fully extended.
G. Apply oil to all pin joints under lifting cap.
H. Open release valve by turning release knob counterclockwise and allow jack to fully retract.
I. Apply oil or chassis grease to wheels, caster swivel bearings, and the hydraulic unit bushings until fully lubricated.
J. If required, repeat steps C through H until jack operates and moves freely.
K. Lower cover over hydraulic unit assembly.

TROUBLESHOOTING

If the following procedures do not correct the problem, contact a factory authorized service center. When submitting a jack or equipment to be repaired, be sure to state the nature of the problem.

PURGING AIR FROM JACK

As with any hydraulic unit, the jack may occasionally become air bound due to being tipped over during shipment or handling. To purge air from jack hydraulic circuit, perform the following procedure:

A. Open release valve one full turn counterclockwise.
B. Pump jack handle at least 6 full strokes to purge air from the hydraulic circuit.
C. Close the release valve.
D. Pump jack handle until jack is fully extended.
E. Continue to pump slowly several times to purge air from the hydraulic circuit.
F. Open release valve and allow jack to retract quickly.
G. Close the release valve.
H. Check the pump action. If jack does not respond, repeat the above procedure several times until air is purged from the jack.

COMMON PROBLEMS

JACK WILL NOT LIFT TO FULL HEIGHT.

- Oil level low. Perform CHECKING HYDRAULIC OIL LEVEL procedure.

JACK WILL NOT HOLD LOAD.

- Release valve not closed or not sealing. Repair may be required.
- Dirt in hydraulic oil or pump ball valves not seating. Flush hydraulic circuit by closing release valve and pumping jack to maximum height. Open release valve and quickly lower jack by manually pushing on lift cap. Repeat if necessary. If this procedure does not correct the problem, internal repairs are required.

LIFTING ARM WILL NOT LOWER PROPERLY

- Broken return spring. Replacement required.
- Lift arm bearings binding. Perform LUBRICATION procedure and lubricate lift arms.
- Hydraulic cylinder ram binding. Repair required.
- Lifting arms, spindles, pins bent or worn. Repair required.

JACK FEELS SPONGY WHEN LIFTING LOAD.

- Air in hydraulic system. Perform PURGING AIR FROM JACK procedure.

LIMITED WARRANTY

Lincoln, A Pentair Company, warrants that jacks and related service equipment manufactured by it will be free from defects in material and workmanship during the ninety (90) days following the date of purchase. This warranty is extended to the original retailer purchaser only. If a jack or related service equipment proves to be defective during this warranty period, it will be repaired or replaced without charge. To obtain repair or replacement, it must be shipped, transportation charges prepaid, with proof of date of purchase, to a Lincoln authorized Warranty and Service Center, within the ninety (90) days following the date of purchase. This warranty does not apply to parts damaged from accident, overload, or abuse, nor does it apply to any equipment which has been altered or used with special attachments other than those recommended by Lincoln. No other express warranty applies to jacks and related service equipment manufactured by Lincoln.

ANY IMPLIED WARRANTIES applicable to jacks and related service equipment manufactured by Lincoln, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WILL LAST ONLY FOR NINETY (90) DAYS FROM THE DATE OF PURCHASE. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

In no event shall Lincoln be liable for incidental or consequential damages. The liability of Lincoln on any claim or damage arising out of the sale, resale, or use of a jack or related service equipment shall in no event exceed the purchase price. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.
REPAIR

No service parts are available for this jack, other than those listed. Should repair become necessary to parts other than those listed, this jack can only be serviced by complete replacement. In order to claim a replacement at no charge for a defective jack under warranty, receipts or other proof of purchase should be kept for the length of the warranty period.

SERVICE PARTS

<table>
<thead>
<tr>
<th>PART</th>
<th>QTY</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>242108</td>
<td>1</td>
<td>HANDLE ASSEMBLY</td>
</tr>
<tr>
<td>242109</td>
<td>1</td>
<td>CASTER ASSEMBLY</td>
</tr>
<tr>
<td>242110</td>
<td>1</td>
<td>WHEEL ASSEMBLY</td>
</tr>
<tr>
<td>242111</td>
<td>1</td>
<td>HYDRAULIC UNIT ASSEMBLY</td>
</tr>
<tr>
<td>242112</td>
<td>1</td>
<td>SEAL KIT</td>
</tr>
</tbody>
</table>

* PART OF 242112 SEAL KIT.

* RELEASE VALVE O-RING

* PISTON CUP-STYLE PACKING

PUMP GLAND * CUP SEAL

HYDRAULIC POWER UNIT