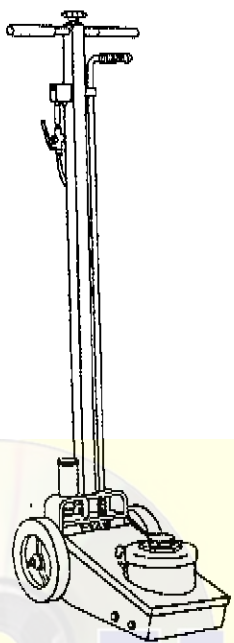




MODEL 93732 AIR-HYDRAULIC SERVICE JACK (22 TON - SERIES " A ")

OWNER/OPERATOR MANUAL



SPECIFICATIONS

RATED LOAD CAPACITY	44,000 lbs.
LOW PICK UP HEIGHT (W/O LIFT PAD)	8"
LOW PICK UP HEIGHT (WITH LIFT PAD)	11"
HIGH LIFTING POINT (WITH SCREW EXTENDED)	18"
HIGH LIFTING POINT (WITH LIFT PAD)	21"
SCREW EXTENSION	4-7/8"
REQUIRED AIR PRESSURE SUPPLY	90-200 p.s.i.
FULL RISE TIME @ 160 p.s.i.	NO LOAD - 6 sec. RATED LOAD - 78 sec. (22 TONS)

DESCRIPTION

Model 93732 is an air operated low pickup jack designed for truck and trailer emergency road service calls. The jack provides the following features:

- Operates with air.
- Compact, portable, easy to transport and store.
- Long handle and low height for lifting loaded trailers and trucks by the axles.
- Automatic overload protection prevents overloading and exceeding the jack rated lifting capacity.
- Two speed lifting action to quickly contact a load then power raise it.
- Screw extension provides low pickup height adjustments.

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 comprehends.

It is the owner/operator 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.

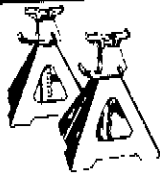
! WARNING

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 with a lift cap at locations specified by the manufacturer.
- Do not crawl under a vehicle/load when placing stands or support.
- Lower a vehicle/load slowly.
- Do not use to dolly a vehicle.

⚠ WARNING

FOR YOUR
SAFETY



USE VEHICLE STANDS OR OTHER
APPROPRIATE SUPPORTS
TO SUPPORT THE VEHICLE/LOAD
BEFORE GETTING UNDER IT.

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.

Check jack operation by closing release valve, connecting air hose to jack and pressing air control valve. If jack responds immediately to air pressure, it is ready to use. If not, refer to TROUBLESHOOTING and perform AIR PURGING 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.

USING JACK

- Set vehicle parking brakes and/or block vehicle wheels.
- Open release valve by turning release knob counterclockwise and allow jack to fully retract.
- Connect air hose to jack. 90-200 p.s.i. is required for rated lifting capacity (44,000 lbs.).
- Position jack under desired vehicle lifting point suggested by manufacturer. Make sure lift cap is installed on extension screw.

- Firmly close release valve by turning release knob clockwise.
- The jack lift cap must contact the vehicle lift surface squarely and as close to center of lift cap as possible.
- Press air control valve and raise vehicle to desired height. DO NOT lift vehicle any higher than is needed to make repairs.
- DO NOT crawl under vehicle while positioning vehicle stands.
- Slowly turn release knob counterclockwise to open release valve and carefully lower vehicle on to vehicle stands or other appropriate supports.

REMOVING JACK

- Make sure release valve is closed by firmly turning release knob clockwise.
- Press air control valve and raise vehicle just enough to clear vehicle stands or support means.
- Remove vehicle stands or other support means from under vehicle. DO NOT crawl under vehicle when removing vehicle stands.
- Slowly turn release knob counterclockwise to open release valve and lower vehicle.
- When vehicle is fully lowered, remove jack from under vehicle.

MAINTENANCE

CHECKING HYDRAULIC OIL LEVEL

⚠ CAUTION

BRAKE OR TRANSMISSION
FLUIDS WILL DAMAGE
EQUIPMENT SEALS.

- Make sure air line is disconnected.

- Open release valve and allow jack to retract to its lowest position.
- Carefully remove plastic plug from oil fill hole on top of jack body.
- Make sure oil fill hole is clean and dry before removing oil plug.
- Remove oil plug with a 3/16" Allen wrench.
- Check fluid level. Oil should be 1/4" from bottom of oil fill hole. If fluid is low, add clean hydraulic jack oil.
- Reinstall oil plug and secure. Replace plastic plug in oil fill hole.

LUBRICATION

Lubricate jack as follows:

- Clean jack as required before applying lubricant.
- Apply motor oil to wheel bearings.
- Apply motor oil to release mechanism universal joints and all moving parts at lower end of handle assembly monthly.
- Put several drops of motor oil in jack air inlet once a month to lubricate air motor.

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.

AIR PURGING

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:

- Open release valve by turning release knob counterclockwise.

- B. Connect external air hose to jack.
- C. Press air valve control lever and allow jack to operate slowly twenty or more cycles.
- D. Close release valve.
- E. Disconnect external air hose.

COMMON PROBLEMS

JACK WILL NOT LIFT TO FULL HEIGHT.

- Oil level low. Perform CHECKING HYDRAULIC OIL LEVEL procedure.
- Oil level to high. Remove oil plug. Open release valve and slowly push ram down until fully lowered. Replace oil plug when oil stops flowing.
- Air in hydraulic system. Perform AIR PURGING procedure.

JACK WILL NOT LIFT LOAD.

- Oil level low. Perform CHECKING HYDRAULIC OIL LEVEL procedure.
- Air in hydraulic system. Perform AIR PURGING procedure.
- Valves not closing. Make sure release valve is closed and try jack again. If jack will still not lift, open release valve and allow jack to cycle 20 times to flush the valves.

JACK FEELS SPONGY UNDER LOAD.

- Oil level low. Perform CHECKING HYDRAULIC OIL LEVEL procedure.
- Air in hydraulic system. Perform AIR PURGING procedure.

JACK STALLS UNDER HEAVYLOAD.

- Air pressure to low. Check air pressure supply. 90-200 p.s.i.

required for rated lifting capacity (44,000 lbs.).

- Air hose restricted or leaking. Check air hose for restrictions or leaks.

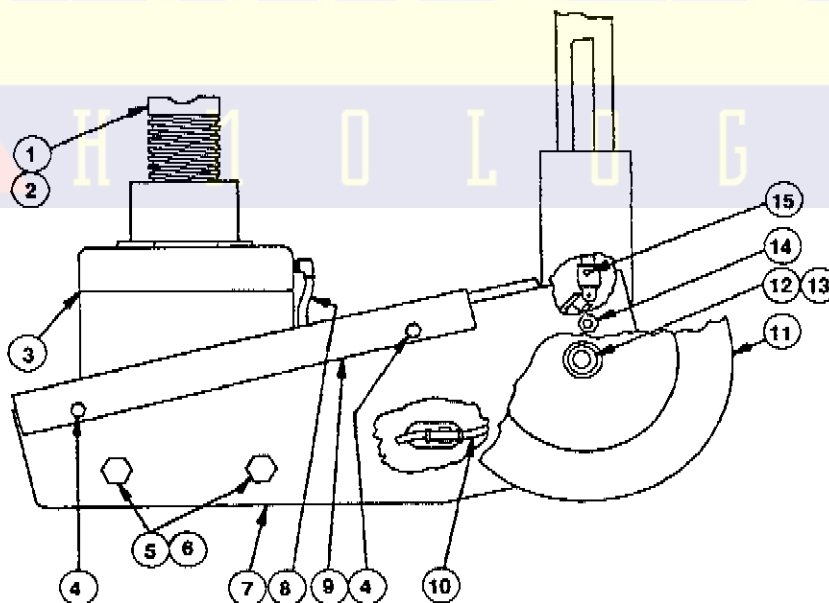
JACK LIFTS LOAD TO SLOW.

- Air-hydraulic pump requires lubrication. To lubricate, open air valve on handle and squirt 1/2 ounce SAE 30 oil into air inlet. Connect air hose and operate jack to distribute oil internally.
- Air lines restricted or too small.
- Inadequate air supply.

REPAIR

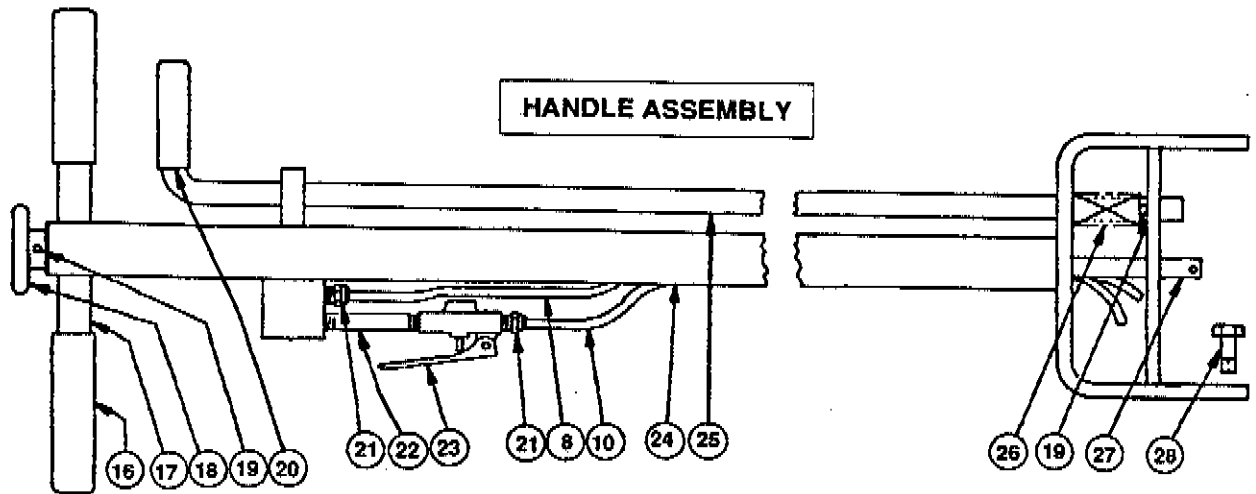
Repair is limited to replacement of listed service parts. Special procedures are required. If the jack requires repair, contact a factory authorized service center.

SERVICE PARTS



JACK ASSEMBLY

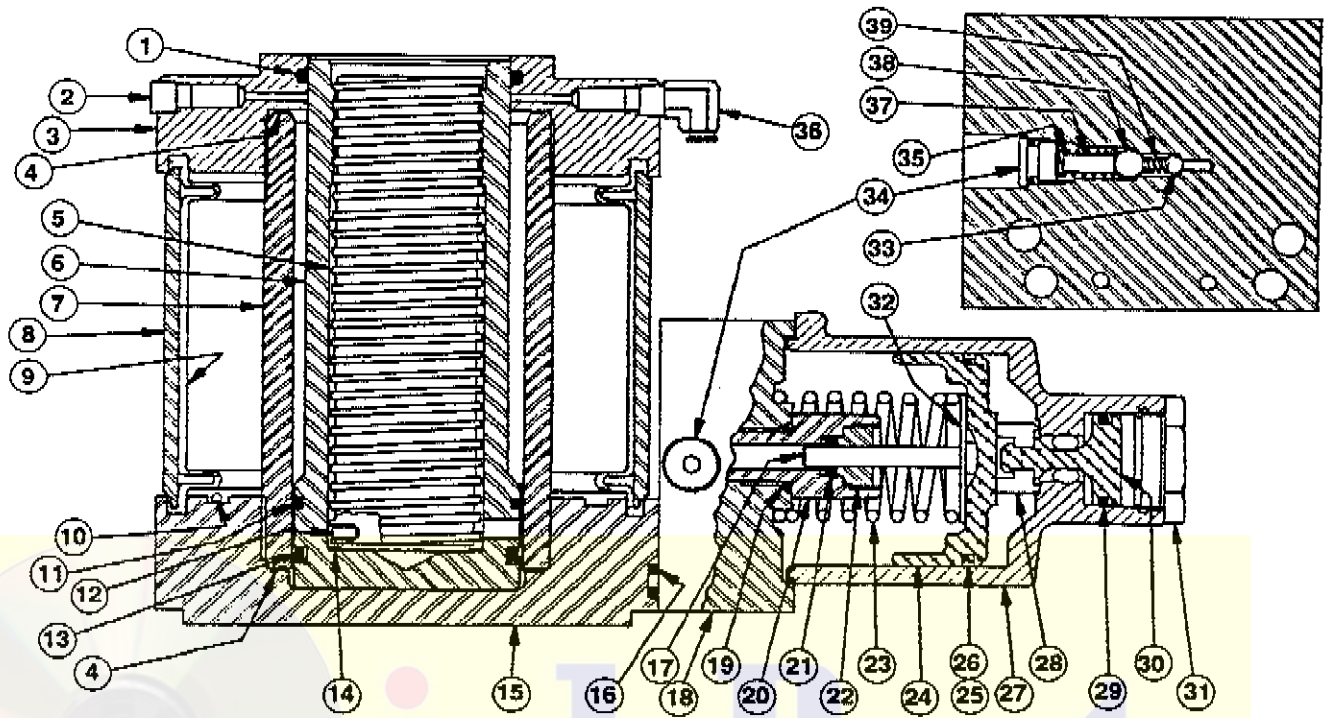
SERVICE PARTS (CONT)



JACK ASSEMBLY PARTS LIST

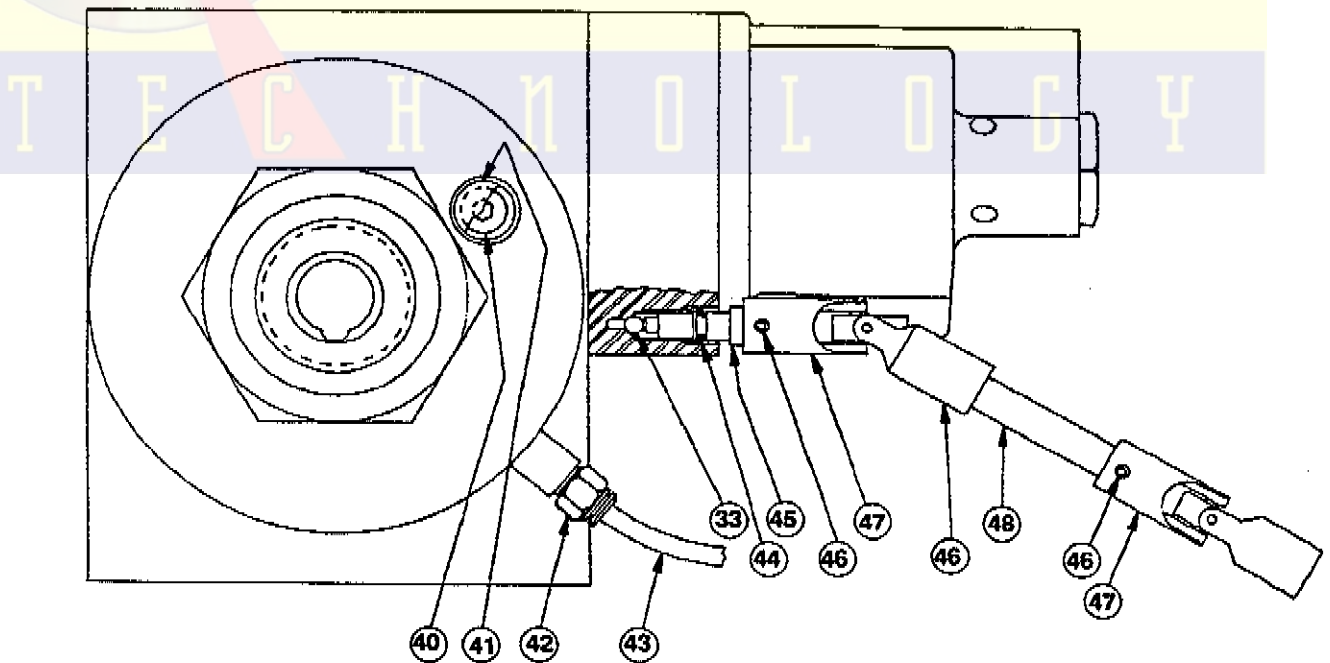
ITEM	PART	QTY	DESCRIPTION
1	242508	1	Lift Pad Casting
2	242535	1	O-Ring, 1-1/16" x 1-1/4" x 3/32"
3	242509	1	Power Unit
4	242510	4	Screw, 5/16"-18, Self-Tapping
5	242511	4	Capscrew, 1/2"-13 x 1" Long, Plated, Grade 5
6	242512	4	Lockwasher, 1/2"
7	242513	1	Base Frame
8	242514	1	Tubing, 1/4" O.D. x .035 x 45-1/2" Long
9	242515	1	Top Cover
10	242516	1	Tubing, 1/4" O.D. x .035" x 60" Long
11	242531	2	Wheel
12	242530	1	Bar, 5/8" Dia. x 12-3/16" Long
13	242529	2	Palnut, 5/8" Dia., Washer Cap
14	242528	2	Jam Nut, 7/16"-14
15	242527	1	Roll Pin, 3/16" Dia. x 3/4" Long
16	242517	2	Handle Grip, 7/8" I.D.
17	242518	1	Handle Bar
18	242519	1	Hand Wheel
19	242520	2	Roll Pin, 3/16" Dia. x 7/8" Long
20	242521	1	Handle Grip, 5/8" I.D.
21	242522	2	Male Connector
22	242523	1	Nipple
23	242524	1	Air Valve
24	242525	1	Handle
25	242526	1	Handle Release Rod
26	242532	1	Compression Spring
27	242533	1	Release Control Rod
28	242534	1	Capscrew, Special
-	242536	1	Label Kit

SERVICE PARTS (CONT)

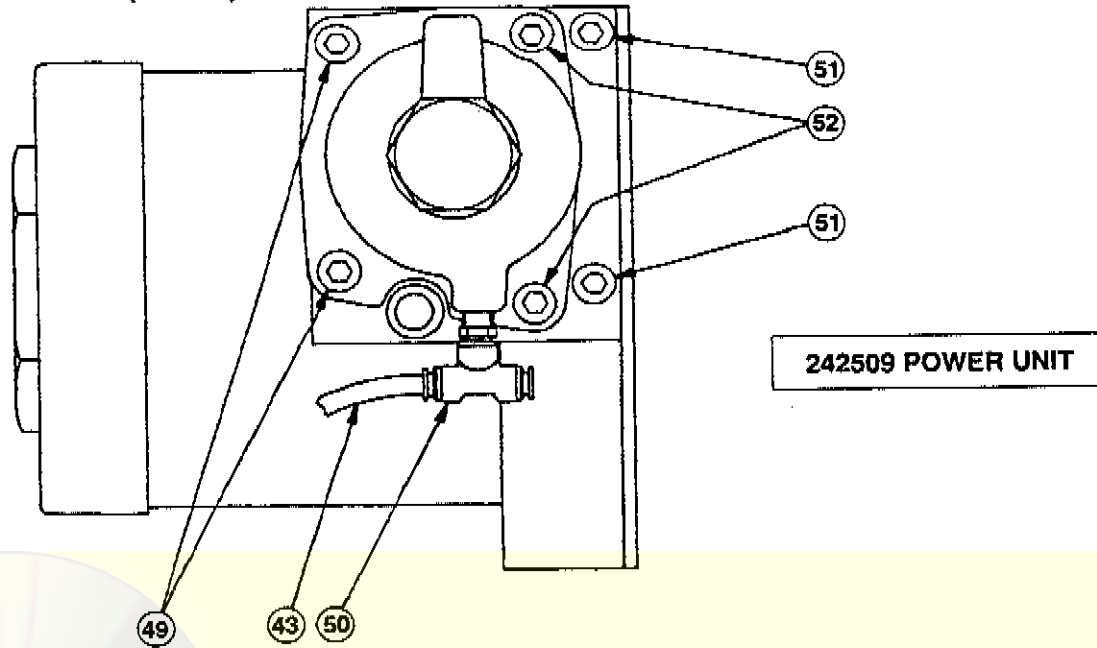


242509 POWER UNIT

label kit 242536



SERVICE PARTS (CONT)



242509 POWER UNIT PARTS LIST

ITEM	PART	QTY	DESCRIPTION
1	242577	1	Quad Ring, 2-5/8" x 1/8" x 2-7/8"
2	242578	2	Plug, 1/8" NPT
3	242579	1	Jack Cap
4	242580	2	Backup Ring, 3-1/8" x 3/16" x 3-1/2"
5	242581	1	Extension Screw
6	242582	1	Hydraulic Ram
7	242583	1	Hydraulic Cylinder
8	242584	1	Outer Barrel
9	242585	1	Bladder
10	242586	1	Magnet
11	242587	1	Quad Ring 2-3/4" x 1/8" x 3"
12	242588	1	Capscrew, Socket Head, 8-32 UNC, 1/4" Long
13	242589	1	Seal, 2-5/8" x 3/16" x 3"
14	242626	1	Backup Ring, 1-5/8" x 1/16" x 2"
15	242590	1	Base Plate
16	242591	2	Quad Ring, 7/16" x 3/32" x 1/4"
17	242592	1	Pump Plunger
18	242593	1	Hydraulic Block
19	242594	1	O-ring, 5/8" x 3/16" x 13/16"
20	242595	1	Pump Housing
21	242596	1	Seal, 9/16" x 1/8" x 5/8"
22	242597	1	Seal, Backup Nut
23	242598	1	Compression Spring, 1-3/4" O.D.
24	242599	1	Motor Piston
25	242600	1	O-ring, 2-3/4" x 3/32" x 2-9/16"
26	242601	1	Piston Ring
27	242602	1	Motor Housing
28	242603	1	Shuttle Valve Seal

SERVICE PARTS (CONT)

242509 POWER UNIT PARTS LIST (CONT)

ITEM	PART	QTY	DESCRIPTION
29	242604	1	O-ring, 1-1/4" x 1/8" x 1", TFE Coated
30	242605	1	Air Shuttle Piston
31	242606	1	Shuttle Valve End Cap
32	242625	1	Washer, 1.750" x .320" x .064"
33	242612	2	Ball, 1/4" Diameter
34	242611	1	Plug
35	242627	1	Compression Spring, .406" O.D.
36	242610	1	Elbow
37	242609	1	Check Valve Spacer
38	242608	1	Ball, 3/8" Diameter
39	242607	1	Compression Spring, 1/6" O.D.
40	242613	1	Plastic Plug
41	242614	1	Plug, SAE #4
42	242615	1	Male Connector
43	242616	1	Tubing, Nylon, 1/4" O.D. x .035" x 4-5/8" Long
44	242617	1	O-ring, 3/8" x 1/16" x 1/4"
45	242618	1	Release Stem
46	242527	3	Roll Pin, 3/16" Diameter x 3/4" Long
47	242619	2	Universal Joint, Special
48	242620	1	Shaft, 1/2" Diameter
49	242621	2	Capscrew, Socket Head, 3/8"-24 UNF, 1" Long
50	242622	1	Branch Tee
51	242623	2	Capscrew, Socket Head, 3/8"-24 UNF, 2-1/4" Long
52	242624	2	Capscrew, Socket Head, 3/8"-24 UNF, 2-5/8" Long

Repair Kit 242981 Label Kit 242536

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 one (1) year 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 one (1) year 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 ONE (1) YEAR 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.