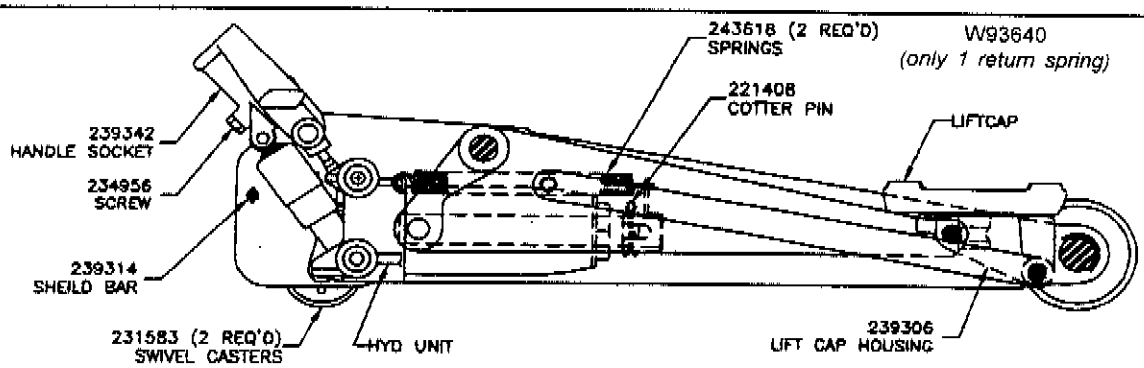
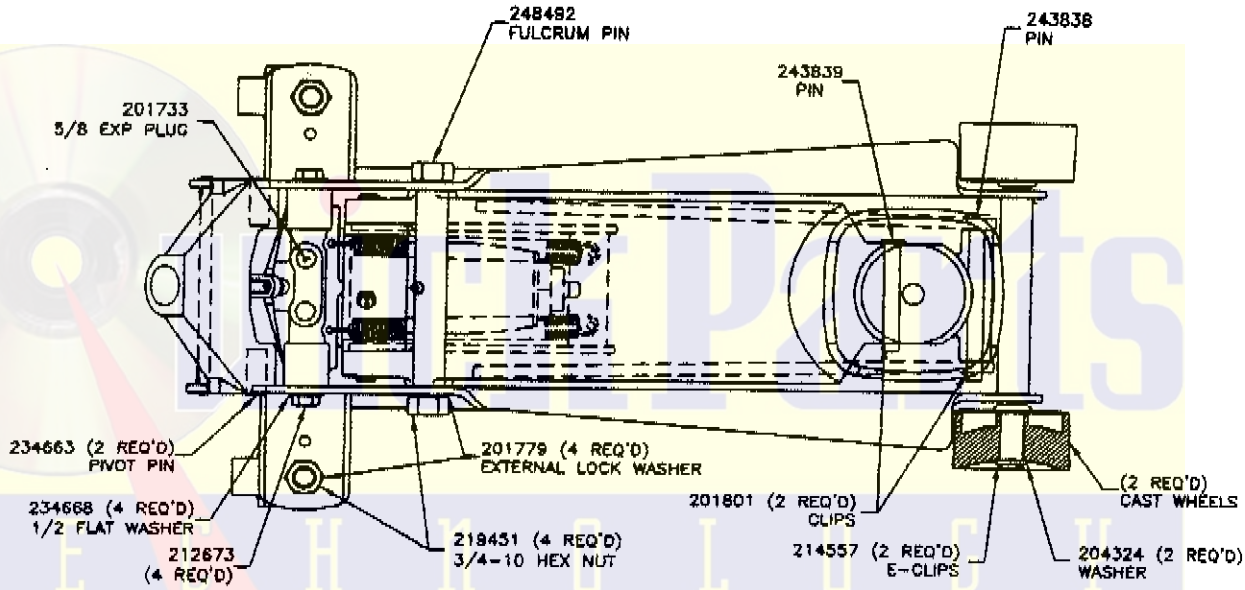
2 Ton Service Jack

Series "D" Models - W93642, 91-642,YA642, JS642USA

B67399, C93642C, DT642, MFJ2, ULT72256

Series "A" Models - W93640, USA2000





Part	Qt.	Description	Part	Qt.	Description
201733	2	5/8 Expansion Plug	234668	4	1/2 Flat Washer
201779	4	3/4 Lock Washer	234956	1	Screw
201801	2	Retainer Clips	239306	1	Lift Cap Housing
204324	2	Flat Washer	239314	1	Shield Bar
212673	4	1/2-13 Screw	239342	1	Handle Socket
214557	2	"E" Clips	243618	2	Return Springs
219451	4	3/4-10 Nut	243838	1	Pin
221408	1	Cotter Pin	243839	1	Pin
231583	2	Swivel Casters	248492	1	Fulcrum Pin
234663	2	Pivot Pin			

Description	"642"	"640"
Lift Cap	239304	248745
Front Wheels	234678	248743

MODEL	LABEL KIT
91-642	248956
B67399	418750
C93642	418956
DT642	242987
JS642USA	418951
MFJ2	248953
ULT72252	248954
USA2000	248951
W93640	248952
W93642	239403
YA642	248955

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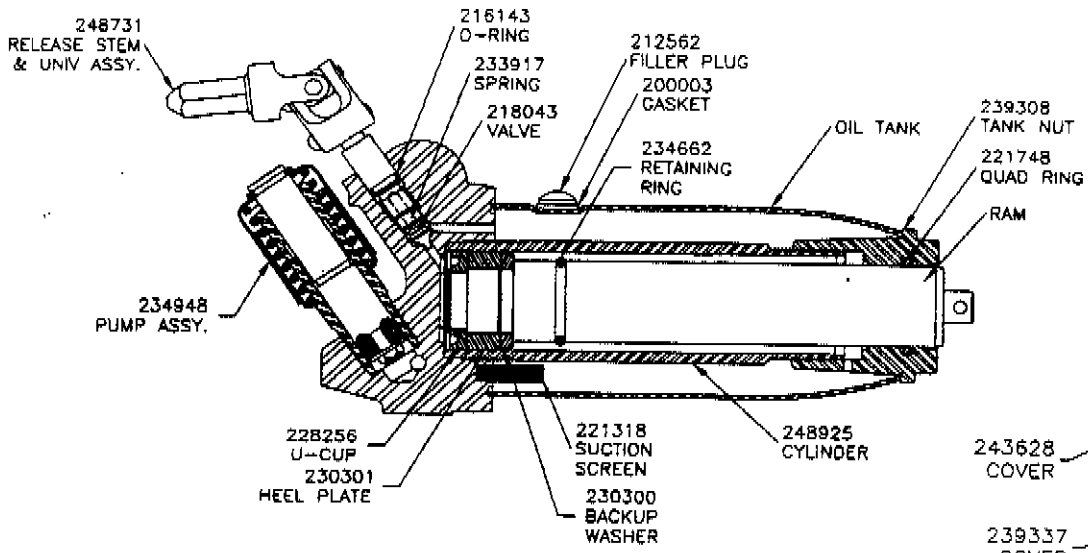
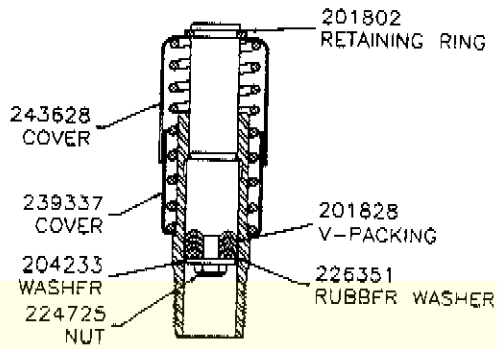
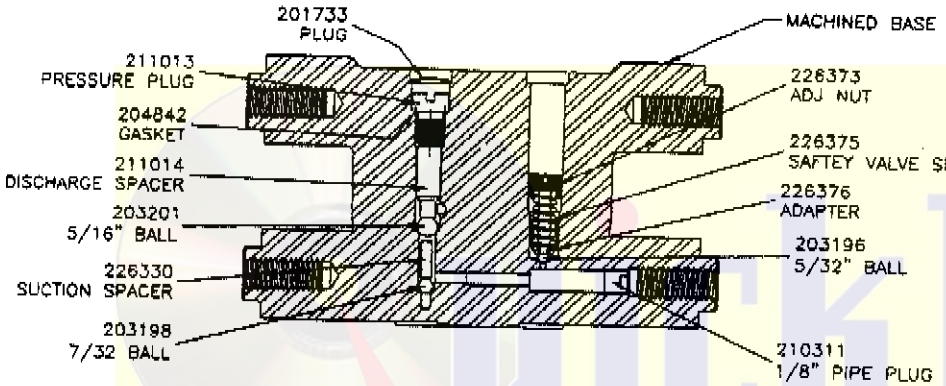
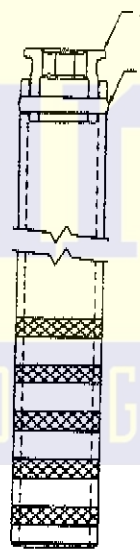
Section 2
Service Jacks



HYDRAULIC UNIT #248720







	Part	Qt.	Description		Part	Qt.	Description
*	200003	1	Gasket	*	226361	1	Rubber Washer
*	201733	2	5/8 Expansion Plug		226373	1	Adjusting Nut
*	201802	1	Retaining Ring		226375	1	Safety Valve Spring
*	201828	3	V-Packing		226376	1	Adapter
*	203196	1	5/32 Ball	*	228256	1	U-Cup
*	203198	1	7/32 Ball		230300	1	Back-up Washer
*	203201	1	5/16 Ball	*	230301	1	Heel Plate
	204233	1	Washer	*	233917	1	Spring
*	204842	1	Gasket		234662	1	Retaining Ring
	210311	1	Pipe Plug		234948	1	Pump Assy
	211014	1	Discharge Spacer		239308	1	Tank Nut
	212562	1	Filler Plug		239337	1	Cover
*	216143	1	O-Ring		243628	1	Cover
*	218043	1	Valve		248723	1	Ram
*	221318	1	Suction Screen		248726	1	Machined Base
*	221748	1	Quad Ring		248731	1	Universal Assy
	224725	1	Nut		248925	1	Cylinder
	226330	1	Suction Spacer		248926	1	Oil Tank

*-Included in repair kit 248949(640A/642D/700A/B67399) 642C KIT = 240530

Handle Color	1 pc	2 pc
Yellow	234957	248918 Upper 248917 Lower
Red	234968	n/a
Gray	246657	n/a
White	246662	n/a
Blue	n/a	248916 Upper 248915 Lower

248751 - 2 pc Handle Insert
248958 - 2 pc Handle Pin(2 req'd)

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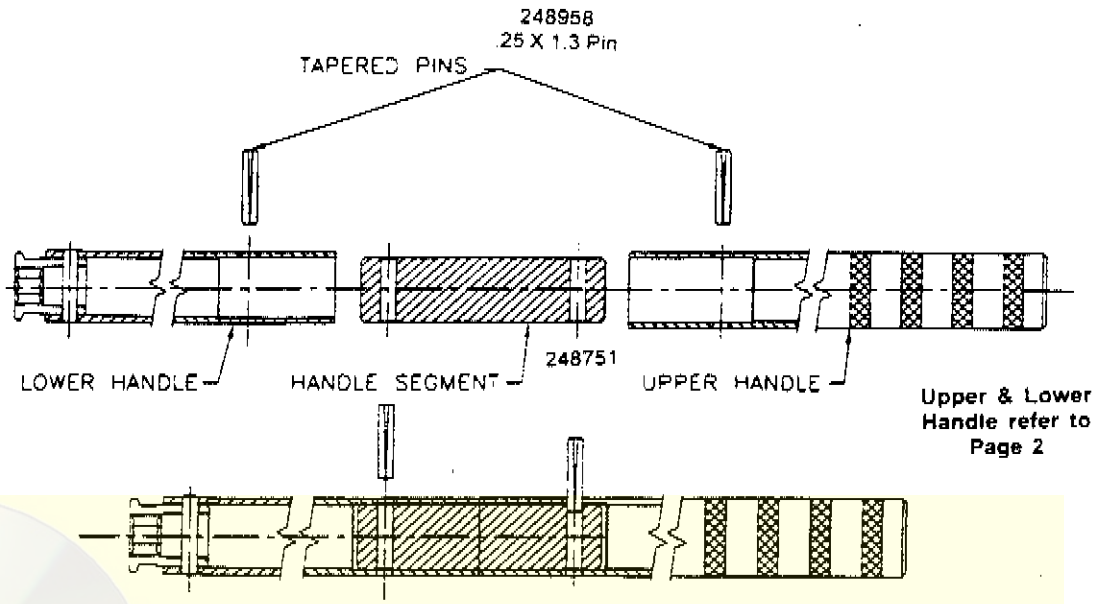
Section 2
Service Jacks

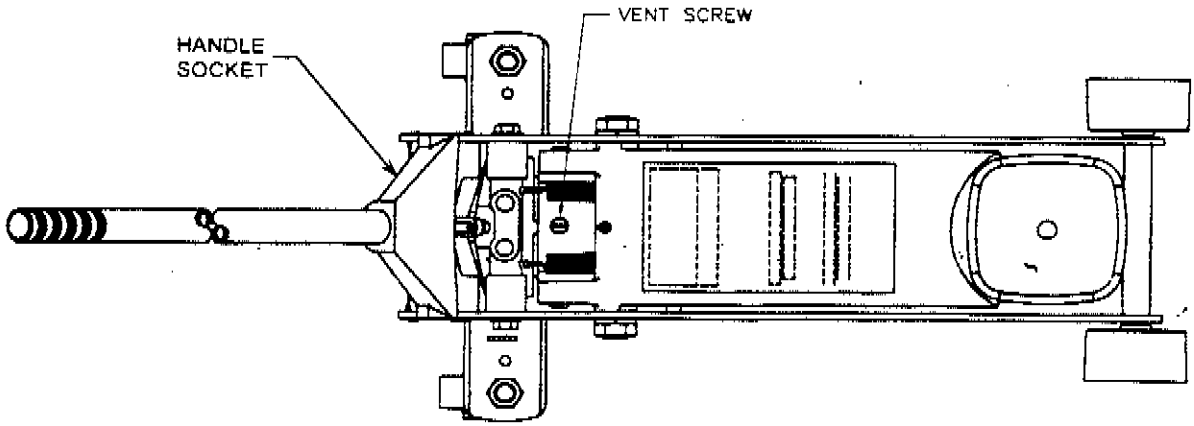
HANDLE ASSEMBLY



Upper & Lower Handle refer to Page 2

1. PLACE LOWER HANDLE END ON SOLID SMOOTH SURFACE.
2. INSERT HANDLE SEGMENT INTO LOWER HANDLE.
3. ALIGN HOLES AND INSERT **SMALL END** OF TAPERED PIN.
4. TAP PIN LIGHTLY TO ALIGN HOLES. CHECK ALIGNMENT ON OPPOSIT SIDE.
5. HAMMER PIN UNTIL END OF PIN IS FLUSH WITH HANDLE.
6. REPEAT PROCEDURE WITH UPPER HANDLE.
7. INSERT LOWER HANDLE END INTO HANDLE SOCKET.
8. TIGHTEN SCREW TO SECURE HANDLE.

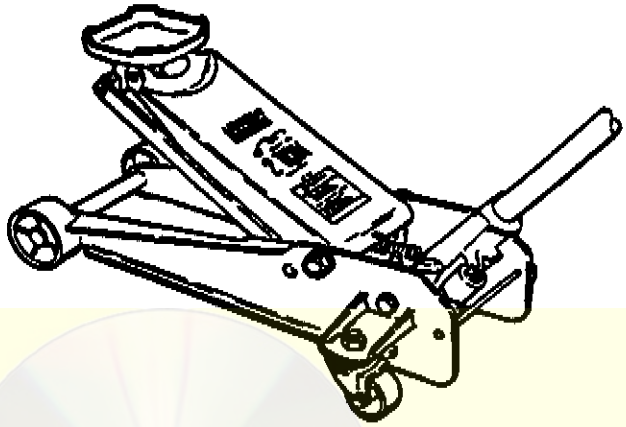
ATTENTION - VENT SCREW IS CLOSED FOR SHIPPING. OPEN ONE TURN BEFORE USE. CONSULT OWNERS MANUAL FOR FURTHER INSTRUCTIONS.



LINCOLN

Model No. 93642
HYDRAULIC SERVICE JACK
Series "C"

OWNER/OPERATOR MANUAL



SPECIFICATIONS

Rated Load Capacity	4000 lbs.
Low Pick-up Height	3 3/4 inches
High Lifting Point	20 inches
Lift Cap (Square)	5 3/4 inches
Handle Length	50 inches
Front Wheel Diameter	3 3/4 inches
Caster Wheel Diameter	2 1/2 inches
Weight	90 lbs.

DESCRIPTION

Model 93642 is a manually operated jack designed for automotive, construction, industrial, and agricultural lifting jobs. If used to lift a vehicle/load, the vehicle/load must be supported by vehicle stands or other appropriate support.

OWNER/OPERATOR RESPONSIBILITY

It is the owner's/operator's 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's/operator's 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.

ASSEMBLY

The jack is completely assembled except for the handle assembly.

Assemble jack handle to jack frame as follows:

A. Apply a light coat of chassis grease to jack handle socket (239310).

B. Loosen hex head screw (234956).

C. Insert jack handle (234968) into jack handle socket (239310).

D. Tighten hex head screw (234956).

⚠ 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.
- Do not use to dolly a vehicle.

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Customer Service (314) 679-4300

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⚠ 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 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.

USING JACK

A. If raising a vehicle, set the parking brakes and block the vehicle wheels.

B. Using jack handle, firmly close release valve by turning clockwise.

C. Position jack under desired vehicle/load lifting point specified by the manufacturer.

D. Pump jack handle and raise the vehicle/load to desired height. Make sure lift cap lugs and cup grip vehicle/load points and jack wheels are free to roll while lifting. Reposition jack if vehicle/load pulls lift arm sideways.

E. Install vehicle stands or other appropriate support under the vehicle/load. DO NOT CRAWL UNDER VEHICLE/LOAD.

F. Carefully lower vehicle/load on to vehicle stands or support.

REMOVING JACK

A. Using jack handle, make sure release valve is closed by turning clockwise.

B. Pump jack handle and raise vehicle/load just enough to clear vehicle stands or support. Jack wheels must be free to roll while lifting.

C. Remove vehicle stands or support from under vehicle/load. DO NOT CRAWL UNDER VEHICLE/LOAD.

D. Using jack handle, slowly open release valve by turning counterclockwise and slowly lower vehicle/load.

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

MAINTENANCE

⚠ CAUTION

BRAKE OR TRANSMISSION FLUIDS WILL DAMAGE EQUIPMENT SEALS.

CHECKING HYDRAULIC OIL LEVEL

A. Open release valve and allow jack to fully retract.

B. Remove filler plug.

C. Fill reservoir to bottom of filler plug hole with clean hydraulic jack oil. Do not overfill.

D. Reinstall filler plug. Hand tighten only.

LUBRICATION

All jack linkages and moving joints require frequent lubrication. Any chassis grease and motor oil can be used. Lubricate jack as follows:

A. Clean jack as required before applying lubricant.

B. Remove handle and apply grease to jack handle socket opening.

C. Use a grease gun to grease the lift arm fulcrum pin through the grease fitting.

D. Apply oil to the pump roller and handle socket side plate pivot pins.

E. Apply oil to all lift arm linkages, universal joint, front wheels and rear casters bearings.

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 pump.

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 ram.

F. Open release valve and allow jack to retract fully.

G. Close the release valve.

H. Check the pump action. If jack does not respond, repeat the above procedures several times until air is purged from the jack.

COMMON PROBLEMS

JACK WILL NOT LIFT TO FULL HEIGHT

- Oil level low. Perform CHECKING HYDRUALIC 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 bindir Perform LUBRICATION p cedure and lubricate lift arm
- Hydraulic cylinder ram bir ing. Repair required.
- Lifting arms, spindles, pi bent or worn. Repair quired.

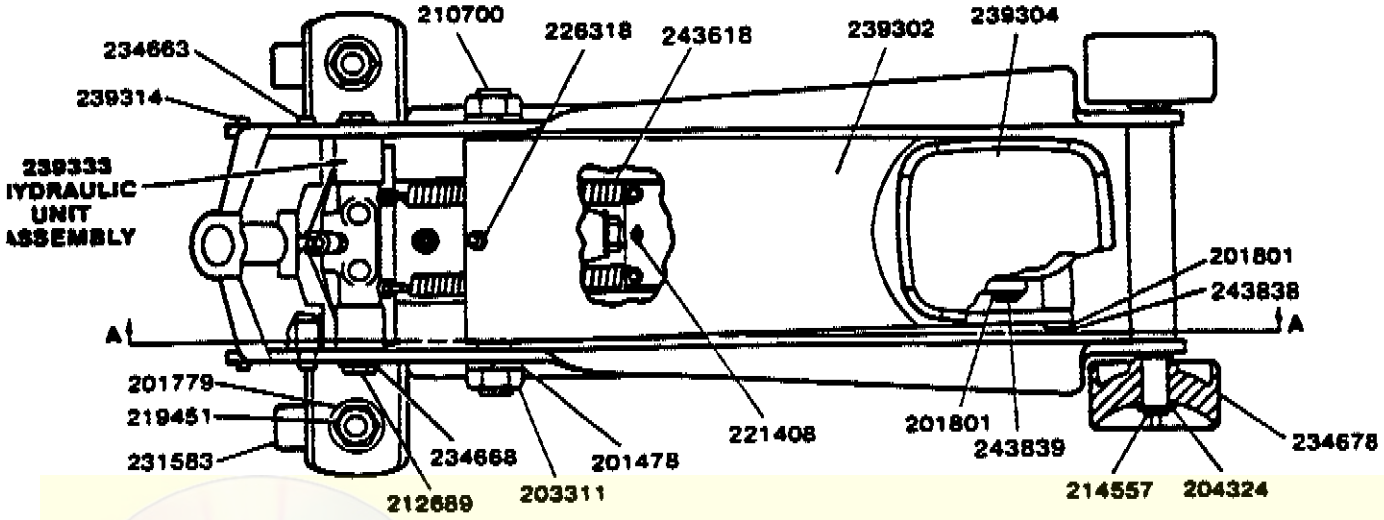
JACK FEELS SPONGY WHEI LIFTING LOAD

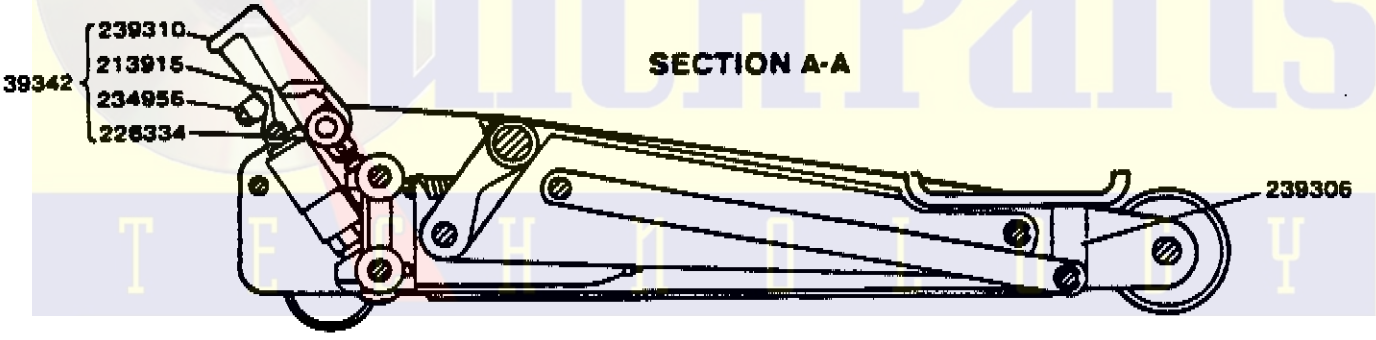
- Air in hydraulic system. P form PURGING AIR FRC JACK procedure.

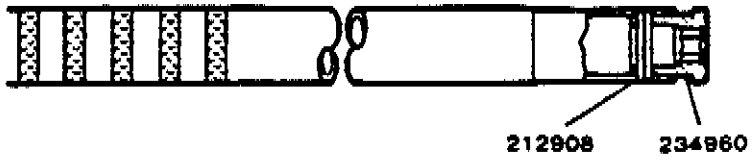
REPAIR

Repair is limited to replacement of lis service parts. Special procedures a tools are required. If the jack requi repair, contact a factory authorized s vice center.

LiftParts TECHNOLOGY





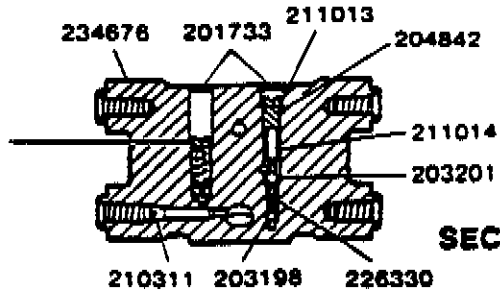


234957
HANDLE ASSEMBLY

Label Kit	Seal Repair Kit
239403	240530

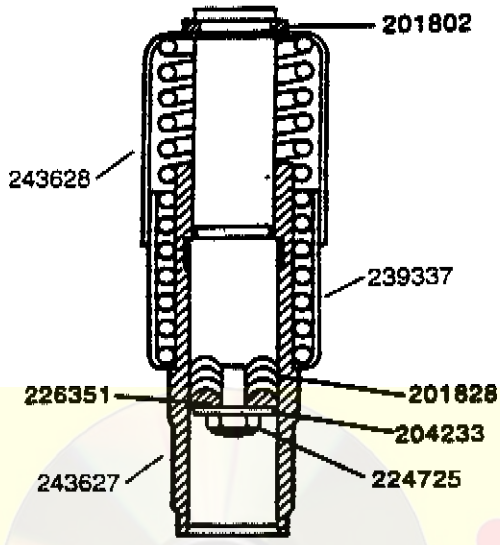
DO NOT ADJUST

Safety valve is factory set. If adjustment or repair is required, return jack to nearest Authorized Warranty and Service Center.

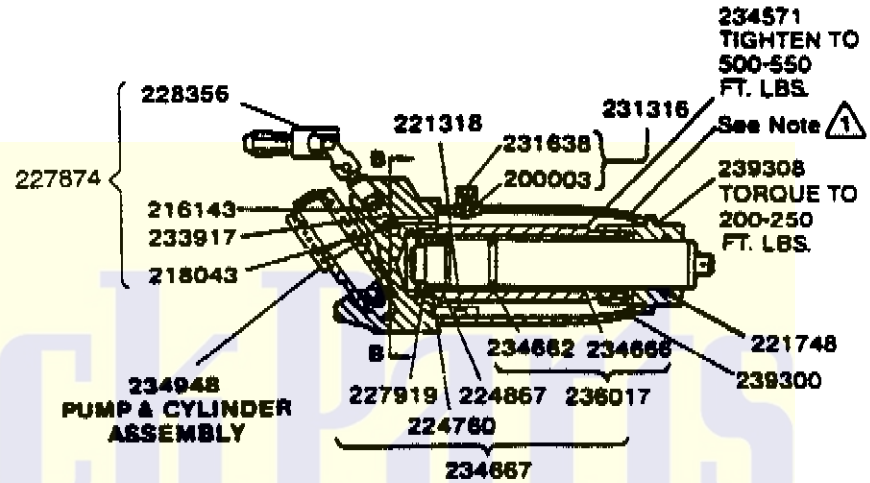


SECTION B-B

239333
HYDRAULIC UNIT ASSEMBLY



234948
PUMP & CYLINDER ASSEMBLY AND SERVICEABLE COMPONENTS



NOTE 1 Apply light coating of Locktite Gasket Eliminator* 515 or equivalent to ends of tank before assembling tank nut.

Part	Qty.	Description	Part	Qty.	Description	Part	Qty.	Description
200003	1	Gasket	219451	2	Nut	234668	4	Washer
201478	2	Lockwasher	221318	1	Suction screen	234676	1	Unit block
201733	2	Expansion plug	221408	1	Cotter pin	234678	2	Front wheel
201779	2	Washer	*221748	1	Quad ring	234948	1	Pump & cylinder ass'y.
201801	2	Retaining ring	224725	1	Nut	234956	1	Hex head screw
201802	1	Retaining ring	224760	1	Heel plate	234960	1	Lower end
*201828	3	V-packing	224867	1	Back-up washer	236017	1	Ram & ring ass'y.
*203198	1	Ball	226318	1	Grease fitting	239300	1	Oil tank
*203201	1	Ball	226330	1	Suction spacer	239302	1	Bell crank assembly
203311	2	Nut	226334	1	Pump roller	239304	1	Lift cap
204233	1	Washer	*226351	1	Rubber washer	239306	1	Lift cap housing
204324	2	Washer	227874	1	Release valve & plug	239308	1	Tank nut
*204842	1	Gasket	*227919	1	U-cup packing	239310	1	Handle socket
210311	1	Pipe plug	228356	1	Release valve ass'y.	239314	2	Shield bar
210700	1	Fulcrum pin	231316	1	Plug & gasket ass'y.	239333	1	Hydraulic unit ass'y.
211013	1	Pressure plug	231583	2	Rear caster	239337	1	Sleeve, lower
211014	1	Discharge spacer	231638	1	Filler plug & vent ass'y.	239342	1	Handle socket ass'y.
212689	4	Bolt	233917	1	Spring	243618	2	Spring
212908	1	Groove pin	234571	1	Cylinder	243627	1	Cylinder
213915	1	Pin	234662	1	Snap ring	243628	1	Sleeve, upper
214557	2	Retaining ring	234663	2	Pin	243838	1	Pin
216143	1	O-ring	234666	1	Ram	243839	1	Pin
218043	1	Valve	234667	1	Ram assembly			

* Included in 240530 Seal Repair Kit.

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 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 damages 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.

SmartParts TECHNOLOGY