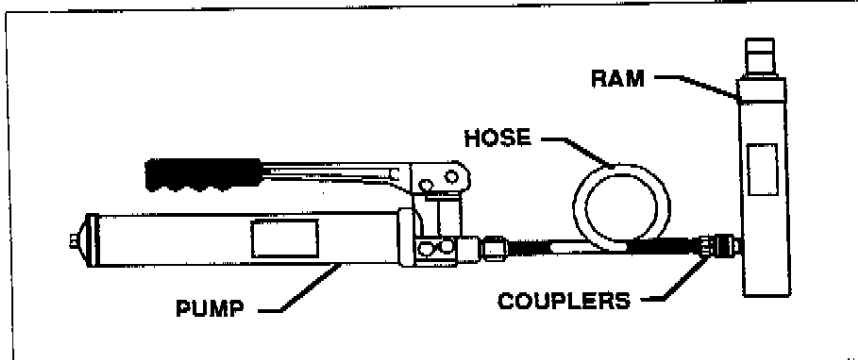




# MODELS 93102E, 93552C BODY-JAK® EQUIPMENT ( 10 TON )

## OWNER/OPERATOR MANUAL



### SPECIFICATIONS

<b><u>PUMP PRESSURE</u></b>	<b><u>10,000 PSI</u></b>
<b><u>PUMP OIL CAPACITY</u></b>	<b><u>23 OZ</u></b>
<b><u>RAM CAPACITY</u></b>	<b><u>10 TON</u></b>
<b><u>RAM EFFECTIVE AREA (SQUARE)</u></b>	<b><u>2.241"</u></b>
<b><u>RAM STROKE</u></b>	<b><u>6"</u></b>
<b><u>RAM HEIGHT EXTENDED</u></b>	<b><u>21.250"</u></b>
<b><u>RAM HEIGHT CLOSED</u></b>	<b><u>15.250"</u></b>
<b><u>TUBE EXTENSIONS CAPACITY</u></b>	<b><u>5 TON</u></b>
<b><u>OFFSET ATTACHMENTS CAPACITY</u></b>	<b><u>2.5 TON</u></b>
<b><u>HOSE MINIMUM BEND RADIUS</u></b>	<b><u>4.0"</u></b>
<b><u>HOSE CONSTRUCTION</u></b>	<b><u>SAE 100R8</u></b> <b><u>MINIMUM</u></b>
<b><u>HOSE LENGTH</u></b>	<b><u>6 FT</u></b>

### DESCRIPTION

The Body-Jak® Equipment is comprised of a pump, ram, hose, couplers, extensions and attachments. A release valve is conveniently located on the pump. The pump also contains an automatic safety valve which protects the ram and hose

from excessive hydraulic pressure. Couplers provide a quick means to connect the ram and hose together. Ram travel is limited by a positive ram stop. The attachments and extensions provide set-ups to push, pull, spread, straighten, bend, clamp and hold.

### OWNER/OPERATOR RESPONSIBILITY

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

The instructions and warning 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 labels.

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

**⚠ WARNING**

**FOR YOUR SAFETY**



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

### ASSEMBLY

Remove pipe plug from pump assembly and connect hose. Remove and save the dust caps from the hose coupler and ram coupler. Connect the pump, hose and ram together by connecting the hose coupler to the ram coupler. Hand tighten only. Pliers or wrenches may damage the coupler nuts.

One Lincoln Way  
St. Louis, Missouri 63120-1578  
Customer Service (314) 679-4300

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**WARNING**

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

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DO NOT EXCEED CAPACITIES

<b>RAM</b>	<b>10 TON</b>
<b>EXTENSIONS</b>	<b>5 TON</b>
<b>OFFSET ATTACH.</b>	<b>2.5 TON</b>

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**LIMIT LOAD TO 10 TON**

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**DO NOT REACH UNDER UNSUPPORTED LOAD.**

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**KEEP AWAY FROM HEAT**

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**LIMIT OFFSET LOADS TO 2.5 TON**

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**DO NOT CUT, KINK, OR DAMAGE HOSE. DO NOT USE IF HOSE OR FITTINGS ARE LEAKING.**

**NEVER RETIGHTEN THE HOSE COUPLER WHILE UNDER PRESSURE. OIL LEAKAGE CAN PENETRATE THE SKIN.**

### INSPECTION

Prior to operation or maintenance a visual inspection shall be made. Check for hydraulic leaks, bent extension tubes, cracked attachments, worn or missing parts. Check hose for kinks, blisters or leaks.

Check operation by closing pump release valve and pumping handle. Make sure pump and ram operate smoothly and are not binding. If pump or ram do not respond to pump action, refer to TROUBLESHOOTING and perform AIR PURGING procedure.

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

Any component that has been subjected to an abnormal load or shock, shall be inspected by a factory authorized service center.

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

### OPERATION

Operation is controlled by pumping the handle and opening and closing the release valve on the pump. To extend the ram, firmly close by hand the release valve by turning clockwise and pumping the handle. To retract

the ram, open the release valve by turning counterclockwise.

In order to operate the pump, the oil reservoir must be horizontal or the pump hose end down. The pump will not operate with the hose end up.

It is not necessary to vent the oil reservoir in normal operation. Venting the reservoir with the ram extended will cause the ram to remain partially extended when fully released. To fully retract the ram, open the oil gauge (d stick) and then retighten. Always vent with the pump vertical to the floor. In the horizontal position, oil will flow out of the oil gauge hole.

### USING ATTACHMENTS AND EXTENSIONS

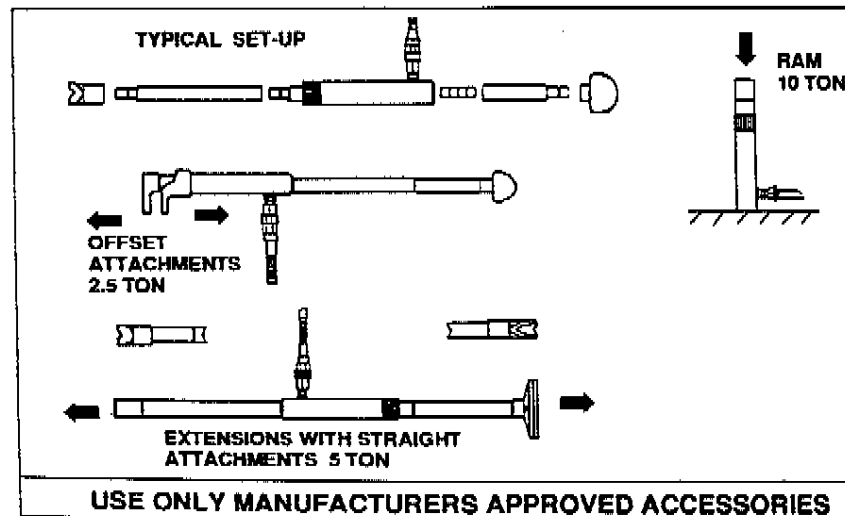
For a desired set-up, connect attachments and extensions together as required. Minimize the number of extensions by using the longest possible extensions. It is important to position the extensions perpendicular to the load to prevent bending.

**WARNING**

DO NOT EXCEED CAPACITIES

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<b>RAM</b>	<b>10 TON</b>
<b>EXTENSIONS</b>	<b>5 TON</b>
<b>OFFSET ATTACH.</b>	<b>2.5 TON</b>



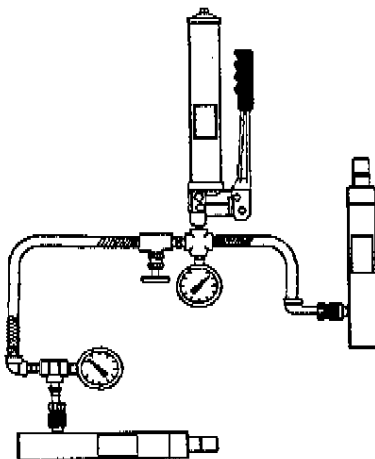
### SPECIAL APPLICATIONS

The Body-Jak® Equipment may be used in special applications with other equipment.

Use of ram without an adapter may damage or enlarge end of ram and cause adapters to bind.

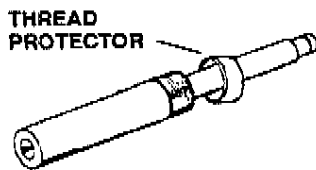
**⚠ WARNING**

**USE ONLY HIGH PRESSURE FORGED FITTINGS WHEN CONNECTING SPECIAL APPLICATIONS**



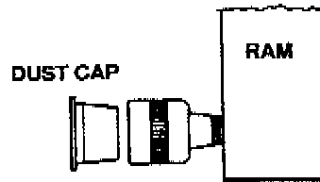
### THREAD PROTECTION

When not being used, protect the rams external threads with the thread protector.



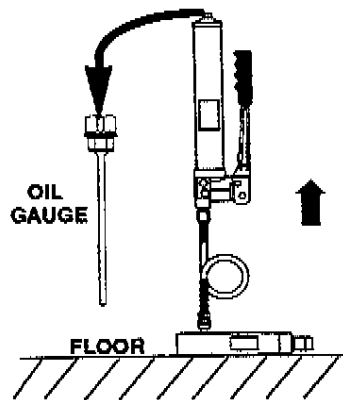
### DUST/DIRT PROTECTION

Dust caps must be used on each half of the quick connect fittings when disconnected to keep out dirt and prevent damage to the coupler.



### MAINTENANCE

#### CHECKING PUMP OIL LEVEL



- A. Stand pump on end with oil gauge on top.
- B. Open release valve by turning counterclockwise and allow ram to fully retract.
- C. Remove oil gauge. Oil level will be indicated on gauge.
- D. If required, add clean hydraulic jack oil until level indicates full on oil gauge. Do not overfill.

**⚠ CAUTION**

**BRAKE OR TRANSMISSION FLUIDS WILL DAMAGE EQUIPMENT SEALS.**

- E. Reinstall oil gauge. Hand tighten only.
- E. Close release valve by turning clockwise.

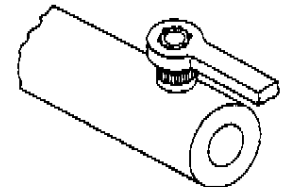
#### LUBRICATION

Lubricate as follows:

- A. Apply a light film of grease to extended ram.
- B. Apply oil to pump handle pins.

### COUPLER REMOVAL AND INSTALLATION

Use a box end wrench to remove or install a coupler. To prevent damage, do not use an open end wrench. Apply high pressure pipe sealant to pipe threads. Install dust cap if hose is not reconnected to coupler.



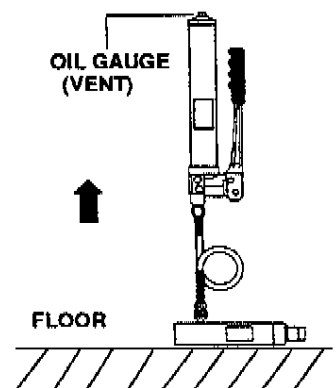
### TROUBLESHOOTING

If the following procedures do not correct the problem, contact a factory authorized service center. When submitting equipment to be repaired, be sure to state the nature of the problem and indicate if a repair cost estimate is required.

#### AIR PURGING

To purge air from the hydraulic circuit, perform the following procedure:

- A. Position the pump vertically with the ram lower than the pump.



- B. Crack open oil gauge (vent) to release air.
- C. Open release valve and pump handle several times.
- D. Close release valve.
- E. Pump handle to fully extend ram. Open release valve to retract ram.
- F. If unit does not respond, repeat the above procedure until air is purged from hydraulic circuit.
- G. Retighten oil gauge.

**COMMON PROBLEMS**

**PUMP FEELS SPONGY**

- Air in hydraulic pump or ram. Perform AIR PURGING procedure.

**RAM DOES NOT FULLY EXTEND.**

- Pump oil level low or reservoir overfilled. Refer to CHECKING PUMP OIL LEVEL procedure.

**WILL NOT HOLD LOAD**

- Release valve not closed or not sealing. Internal repairs may be required.

- Dirt in hydraulic oil or pump ball valves not sealing. Flush hydraulic circuit by fully extending the ram. Open release valve and at the same time push ram in by hand as quickly as possible. Repeat as necessary. If this procedure does not correct the problem, internal repairs are required.

**RAM RETRACTS SLOWLY**

- Ram hydraulic cylinder binding. Repair required.
- Air pressure build up in pump or reservoir. Open oil gauge (vent) to allow air to vent.

**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.

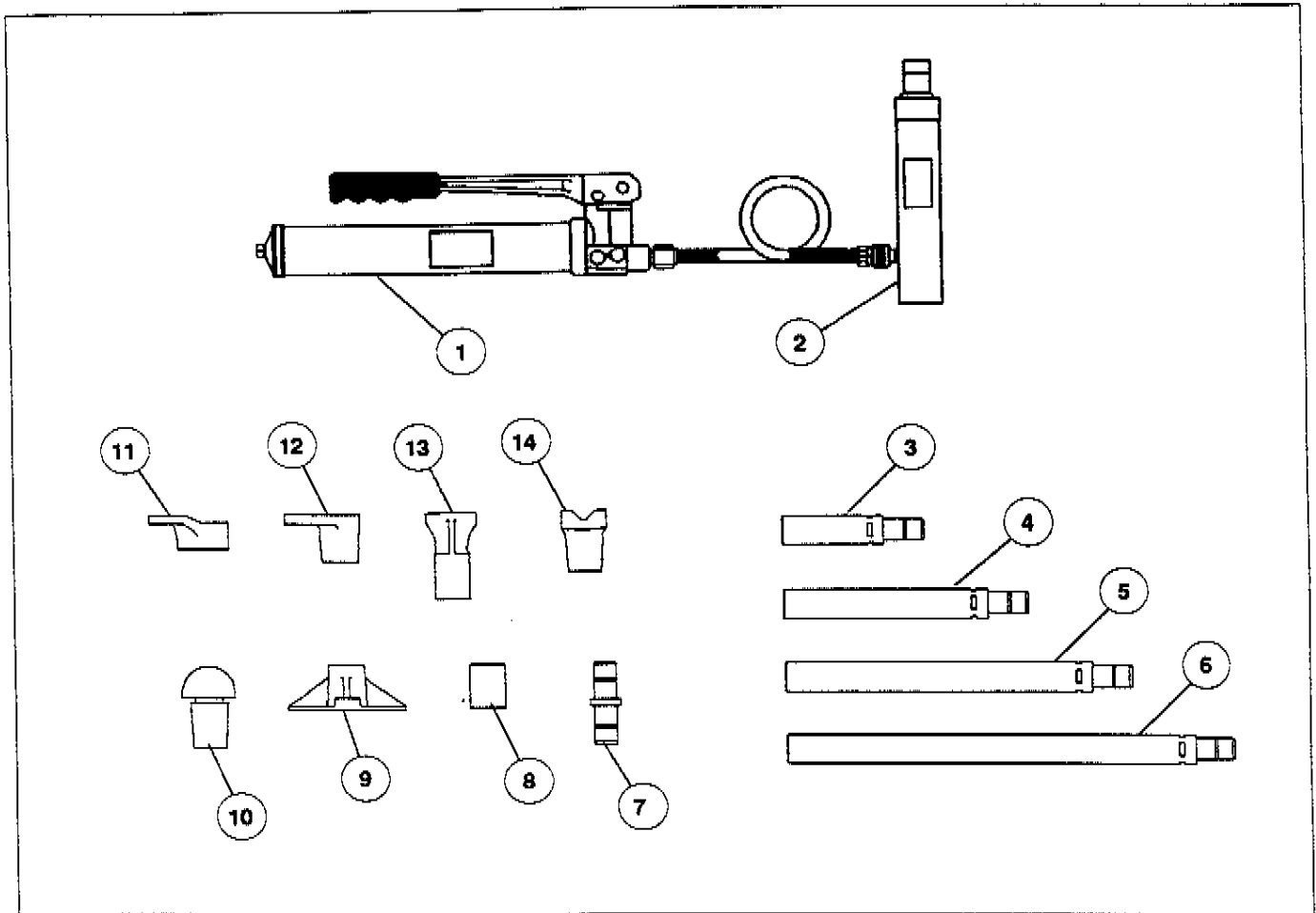
In no event shall Lincoln be liable for incidental or consequential damages. The liability of Lincoln on any claim or damage arising out of the sale, resale, or use of a jack or related service equipment shall in no event exceed the purchase price. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION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

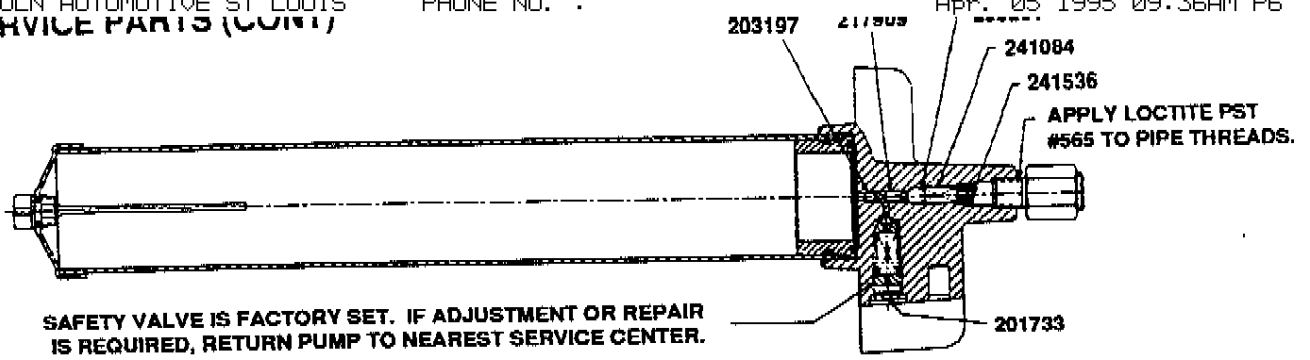
### SERVICE PARTS

Lincoln provides Factory Authorized Service Centers that stock equipment and replacement parts. Contact Lincoln Customer Service, One Lincoln Way, St. Louis, MO 63120-1578, (314) 679-4300 for your nearest Service Center.

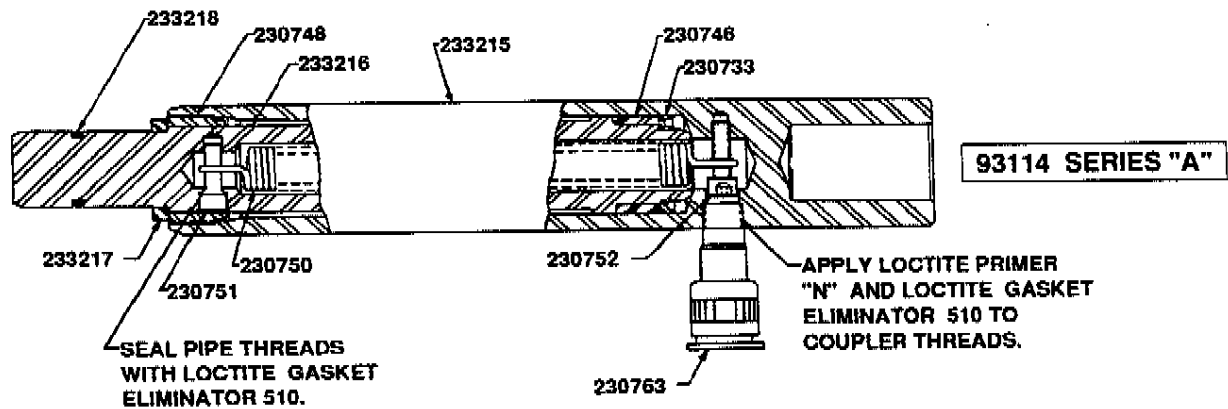
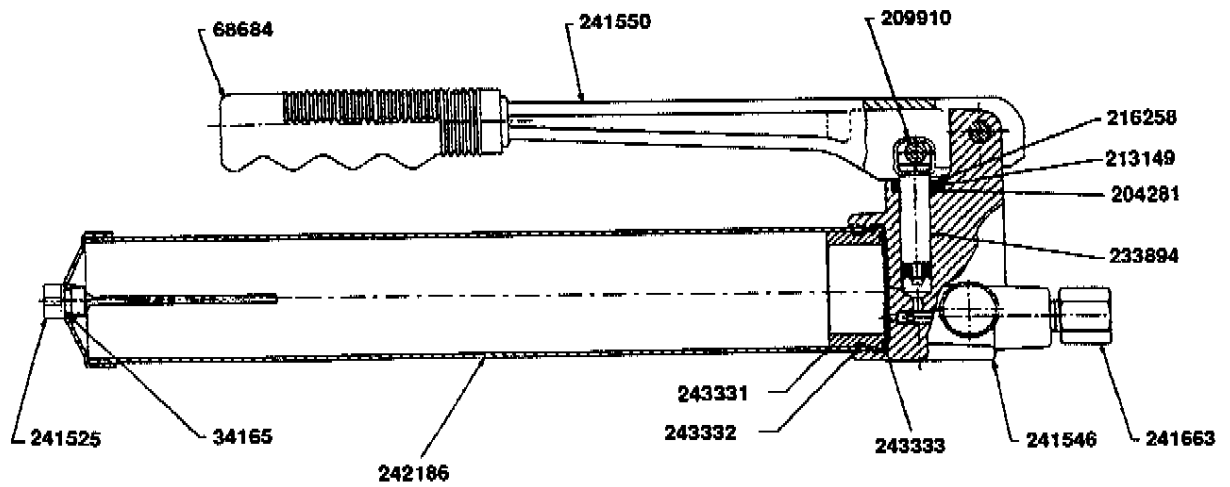
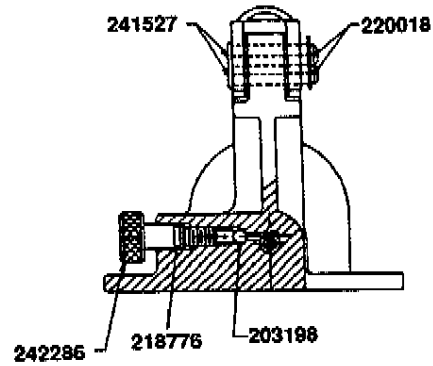
When ordering replacement parts, list: part number, description, model number, and series letter.



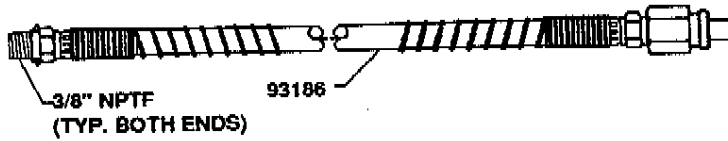
KEY NO.	MODEL/PART NO.	DESCRIPTION	QUANTITY
1	93102	Pump	1
2	93114	Ram	1
3	93589	6" Extension	1
4	93590	12" Extension	1
5	93591	18" Extension	1
6	93592	24" Extension	1
7	93586	Connector	1
8	93585	Ram Cap	1
9	93588	Flat Head	1
10	93587	Rubber Head	1
11	93168	Body Toe	1
12	93582	Ram Toe	1
13	93583	Spring Spreader	1
14	93584	Concave Head	1



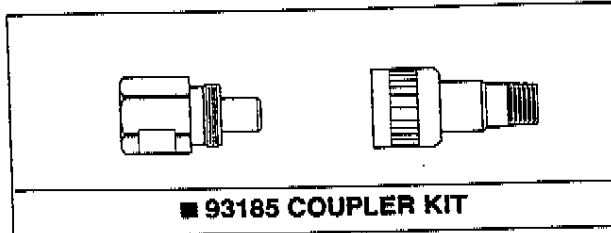
93102 SERIES "E"



**SERVICE PARTS (CONT)**



**93204 6' HOSE ASSEMBLY**



**234552 RAM NAMEPLATE**  
**243268 PUMP NAMEPLATE**

PARTS	QTY	DESCRIPTION
34165	1 ●	O-ring
68684	1	Handle grip
93185	1	Coupler kit (mated pair)
93186	1	6' Hose w/o coupler
201733	1	Plug
203197	1 ●	Ball 3/16" Diameter
203198	1 ●	Ball 7/32" Diameter
203201	1 ●	Ball 5/16" Diameter
204281	1 ●	Washer
209910	1	Pump clip
213149	1 ●	Packing ring
216258	1 ●	Pump cover
217909	1 ●	Suction spring
218776	1 ●	O-ring
220018	2	Pump pin retainer ring
230674	1	Pipe plug
230733	1 ▲	U-cup
230737	1	Thread protector
230746	1 ▲	Heel plate
230748	1	Ram nut
230750	1	Return spring
230751	1	Return spring retainer
230752	1	Screw
230763	1	Dust cap
233215	1	Ram housing
233216	1	Ram

PARTS	QTY	DESCRIPTION
233217	1	Spacer
233218	1	Retaining ring
233894	1 ●	Pump assembly
234230	1 ★	Logo label
234552	1 ★	Ram nameplate
241084	1 ●	Discharge spring
241525	1	Oil gauge
241527	2	Pump pin
241536	1	Vented plug
241546	1	Pump housing
241550	1	Handle
241663	1	Adapter
242186	1	Oil pump reservoir assembly
242286	1	Release stem
243268	1	Pump nameplate
243331	1	O-ring insert
243332	1	O-ring
243333	1	O-ring

- Included in Repair Kit 241656 for 93102 Pump.
- ▲ Included in Repair Kit 240557 for 93114 Ram
- (1) each Included in 93185 Coupler Kit.
- ★ Included in Label Kit 240143 for 93114 Ram.