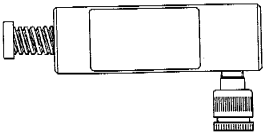


Snap-on**MODEL YA706
HYDRAULIC RAM
(4 TON - SERIES "D")****OWNER/OPERATOR MANUAL**

SPECIFICATIONS	
	
RATED LOAD CAPACITY	4 TON
HEIGHT CLOSED	5-1/2"
MAXIMUM HEIGHT (EXTENDED SCREW)	9-3/4"
RAM STROKE	2-3/4"
RAM CAP DIAMETER	1"
EFFECTIVE RAM AREA (SQ. IN.)	1.227"
OUTSIDE DIAMETER	1-3/4"

DESCRIPTION

Model YA706 is a hydraulic ram designed for use with a hydraulic pump and hose. The ram provides the following features:

- Positive ram travel stop.
- Hardened and plated ram plunger.
- Long life polyurethane ram cup.
- Roller burnished bore for optimum sealing and ram cup life.
- Quick detachable coupler and dust cap.

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 owners/operators 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.

OPERATION**BEFORE USING RAM**

Prior to operation or maintenance a visual inspection shall be made. Check ram for hydraulic leaks, worn or missing parts.

See Figure (1). Check ram operation by connecting a hydraulic pump and hose to the ram, 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.

USING RAM

Ram operation is controlled by pumping the pump handle and opening and closing the release valve on the pump. To extend the ram, firmly close the release valve by turning clockwise and pumping the handle. To retract the ram, open the release valve by turning counterclockwise. To fully retract, push end of ram in by hand.

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WARNING

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

DO NOT EXCEED RAM 4 TON CAPACITY.



LIMIT LOAD TO 4 TON.



DO NOT REACH UNDER UNSUPPORTED LOAD.



FOR YOUR SAFETY

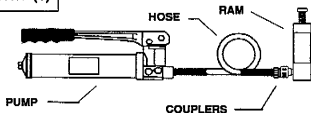
USE VEHICLE STANDS TO SUPPORT THE VEHICLE BEFORE GETTING UNDER IT.



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.

FIGURE (1)

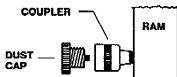


In order to operate the pump, the oil reservoir must be horizontal or the pump hose end down. The pump will not operate with the hose end up.

It is not necessary to vent the pump 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 plug/vent 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.

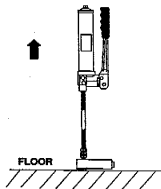
DUST/DIRT PROTECTION

The dust cap must be used on the coupler when disconnected from the hydraulic hose to keep out dirt and prevent damage.



MAINTENANCE

CHECKING PUMP OIL LEVEL



- Stand pump on end with oil plug/vent on top.
- Open release valve by turning counterclockwise and allow ram to fully retract.
- Remove oil plug/vent.
- If required, add clean hydraulic jack oil until full. Do not over-fill.

CAUTION

BRAKE OR TRANSMISSION FLUIDS WILL DAMAGE EQUIPMENT SEALS.

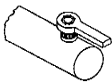
- Reinstall oil plug/vent.
- Close release valve by turning clockwise.

LUBRICATION

To lubricate ram, apply a light film of grease to extended ram and Acme screw.

COUPLER REMOVAL AND INSTALLATION

Use a box end wrench to remove or install a ram 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.



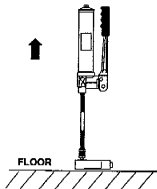
TROUBLESHOOTING

If the following procedures do not correct the problem, contact a factory authorized service center. When substituting 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 plug/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 plug/vent.

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 oil reservoir. Open oil plug/vent to allow air to vent.

REPAIR

Repair is limited to replacement of listed service parts. Special procedures and tools are required. If the ram requires repair, contact Lincoln Customer Service, One Lincoln Way, St. Louis, MO 63120-1578, (314) 679-4300 for your nearest factory authorized service center.

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

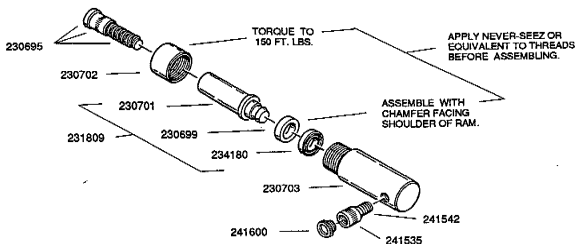
LIMITED WARRANTY

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.

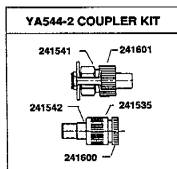
In no event shall Lincoln be liable for incidental or consequential damages. The liability of Lincoln on any claim or damage arising out of the sale, resale, or use of a jack or related service equipment shall in no event exceed the purchase price. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION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

PARTS	QTY	DESCRIPTION
YA544-2	1	Coupler kit
230695	1	Extension Screw Assembly
230699	1	Heel Plate
230701	1	Ram
230702	1	Housing Nut
230703	1	Ram Housing
231809	1	Ram Assembly
234180	1	U-Cup Packing
240498	1	Repair Kit
241535	1●	Coupling Nut
241541	1●	Hose End Coupling
241542	1●	Ram End Coupling
241600	1●	Ram Dust Cap
241601	1●	Hoe Dust Cap
242189	1	Label Kit

● (1) each included in YA544-2 Coupler Kit.



242189 LABEL KIT
240498 REPAIR KIT