Operating Instructions & Parts Manual



Hydraulic Long Jacks

Model 44915 44930 44940 44980 44981C (Air opt	Capaci 1-1/2 To 3 Ton 4 Ton 8 Ton 8 Ton	on	
	4915, 44930,) & 44980		Model 44981C
	U.S. Patent No. 5,946,912		



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

WARNING



To avoid crushing and related injuries: NEVER work on, under or around a load supported only by a hydraulic jack. ALWAYS use a pair of adequately rated jack stands.

SFA Companies

Read this manual and follow all the Safety Rules and Operating Instructions before using this product.

SAFETY AND GENERAL INFORMATION

Save these instructions. For your safety, read, understand, and follow the information provided with and on this device before using. The owner and/or operator shall have an understanding of the device, its operating characteristics and safety operating instructions before operating the equipment. The owner and/or operator shall be aware that use and repair of this product may require special skills and knowledge. Instructions and safety information shall be read to and discussed with the operator in the operator's native language, making sure that the operator comprehends their contents, before use of this equipment is authorized. If any doubt exists as to the safe and proper use of this device, remove from service immediately.

Inspect before each use. Do not use if abnormal conditions such as cracked welds, damaged, loose or missing parts are noted. Any equipment that appears damaged in any way, is found to be worn, or operates abnormally shall be removed from service until repaired. If the equipment has been or is suspected to have been subjected to an abnormal load or shock, immediately discontinue use until inspected by a factory authorized repair facility (contact distributor or manufacturer for list of authorized repair facilities). It is recommended that an annual inspection be made by an authorized repair facility. Labels and Operator's Manuals are available from the manufacturer.

PRODUCT DESCRIPTION

This jack is specifically intended to be used with corresponding Omega Engine Cranes to lift, not support, rated capacity loads. Immediately after lifting, the load must be supported by appropriate mechanical means. For air option model, ensure that air source can dedicate 7.8 CFM @ 110-175 psi to each jack operated.

WARNING

- Study, understand, and follow all instructions before operating this device.
- Do not exceed rated capacity.
- Use only on hard, level surfaces.
- Lifting device only. Immediately after lifting, support the vehicle with appropriate means.
- Use only in conjunction with corresponding Omega Engine Crane.
- No alterations shall be made to this product.
- Failure to heed these markings may result in personal injury and/or property damage.

SPECIFICATIONS

Model	Capacity	Min. Height	Max. Height	Base Size (L x W)
44915	1-1/2 Ton			
44930	3 Ton	19-7/8"	35-1/4"	5-1/8" x 4-1/2"
44940	4 Ton			
44980	8 Ton	24.1/0"	43-1/4"	5" x 4-3/4"
44981C	8 Ton	24-1/8"		7-1/8" x 5"

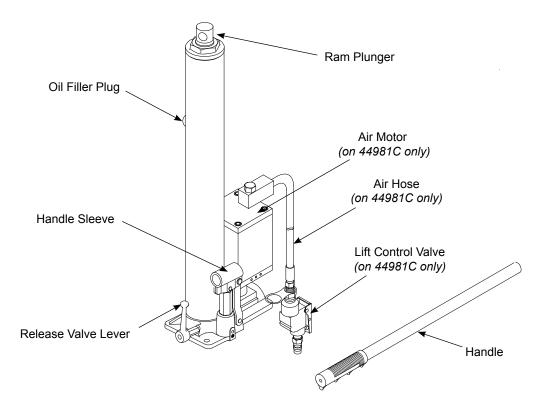


Figure 1 - Typical Hydraulic Long Jack Nomenclature (44981C shown)

PREPARATION

Before Use

- 1. Verify that the product and application are compatible.
- 2. Before using this product, read the operator's manual completely and familiarize yourself thoroughly with the product, its components and recognize the hazards associated with its use.
- 3. To familiarize yourself with basic operation, locate and turn the release valve lever:
 - a. Clockwise until firm resistance is felt to further turning. This is the '**CLOSED**' release valve position used to raise the ram plunger.
 - b. Counter-clockwise, but no more than 1/2 turn from the closed position. This is the '**OPEN**' release valve position used to lower the ram plunger.
- 4. With Ram Plunger fully retracted and release valve closed, pump the operating handle. If Ram Plunger responds immediately, jack is ready for use. If jack does not respond, follow Bleeding/Venting Trapped Air instruction below.
- 5. For air option model 44981C:

Pour a teaspoon of good quality, air tool lubricant into the air supply inlet of the lift control valve. Connect to air supply and operate for 3 seconds to evenly distribute lubricant.

NOTICE: Air operated jacks are equipped with the popular 1/4" NPT air coupler. If installing a different air coupler of your choice, use thread tape or compound when servicing connections. To ensure dependable, trouble free operation an inline air dryer and oiler is recommended.

6. Check that pump operates smoothly before putting into service. Replace worn or damaged parts and assemblies with Omega authorized replacement parts only.

Bleeding/Venting Trapped Air

With the release valve in the OPEN position (3b above) and with ram plunger fully lowered, locate and remove the oil filler plug. Insert the handle into the handle sleeve; then pump 6 to 8 full strokes. This will help release any pressurized air which may be trapped within the reservoir. Oil level should be even with the bottom of the oil filler hole. Reinstall the oil filler plug.

OPERATION

Extending the Ram Plunger

WARNING: Never use this jack as a stand alone lifting device.

WARNING: After lifting, immediately support the lifted load with appropriately rated mechanical means.

1. Locate and close release valve by turning it clockwise until firm resistance is felt to further thread engagement. 2. To raise:

- a) Models 44915, 44930, 44940 & 44980: Insert handle into handle sleeve and pump.
- b) Model 44981C: Squeeze the lift control valve or insert handle into handle sleeve and pump.

WARNING: On air option model, never wire, clamp or otherwise disable the lift control value to function by other than operator's hand.

NOTICE: Do not operate jack by air and hand pump at the same time.

- 3. Continue pumping until load reaches desired height.
- 4. Immediately secure lifted load with appropriately rated mechanical means such as jack stands or engine stand.

NOTICE: Do not use extenders on the air hose or the operating handle.

Retracting the Ram Plunger

WARNING: Clear all tools and personnel before lowering load. Open release valve slowly. The further handle is turned counter-clockwise, the faster the load will descend. Maintain control of the load at all times.

- 1. Raise load high enough to clear the mechanical supports, then carefully remove the supports.
- 2. Slowly turn the release valve lever counter-clockwise, but no more than 2 turns. If the load fails to lower.
 - a. Use another lifting device or jack to raise the load high enough to reinstall mechanical supports.
 - b. Remove the affected jack and then the supports.
 - c. Lower the load by turning the release valve lever counter-clockwise.
- 3. After removing jack from under the load, push ram and handle sleeve down to reduce exposure to rust and contamination.

MAINTENANCE

NOTICE: Use only good quality hydraulic jack oil. Avoid mixing different types of fluid and NEVER use brake fluid, turbine oil, transmission fluid, motor oil or glycerin. Improper fluid can cause premature failure of the jack and the potential for sudden and immediate loss of load. Premium hydraulic jack oil is recommended.

Adding oil

- 1. With ram plunger fully lowered and pump piston fully depressed, set jack in its upright, level position. Remove oil filler plug.
- 2. Fill with oil until just below the rim of the oil filler hole. Reinstall the oil filler plug.

Changing oil

NOTICE: For best performance and longest life, replace the complete fluid supply at least once per year.

- 1. With ram plunger fully lowered and pump piston fully depressed, remove the oil filler plug.
- 2. Lay the jack on its side and drain the fluid into a suitable container.

NOTICE: Dispose of hydraulic oil in accordance with local environmental regulations.

- 3. Fill with oil until just below the rim of the oil filler hole. Reinstall the oil filler plug.
- 4. Perform **Bleeding/Venting Trapped Air** procedure (page 3).

Lubrication

- 1. A periodic coating of light lubricating oil to pivot points, axles and hinges will help to prevent rust and assure that pump assemblies move freely.
- 2. For air option model 44981C: When used on a daily basis, air pump should be internally lubricated before each use. Use a good quality air tool lubricant. If no in-line oiler is used, pour a teaspoon of air tool oil into the inlet of the air control valve. Simply operate the jack using the air feature in order to fully distribute the oil.

Cleaning

Periodically check the pump piston and ram plunger for signs of rust or corrosion. Clean as needed and wipe with an oily cloth.

NOTICE: Never use sandpaper or abrasive material on ram or pump piston surfaces.

Storage

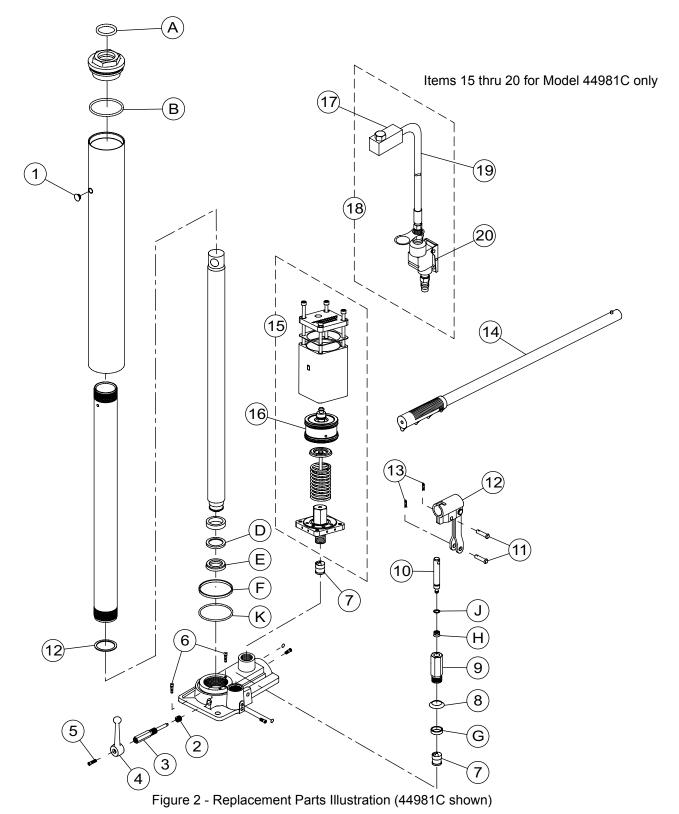
When not in use, store the jack with pump piston and ram plunger fully retracted and air supply disconnected.

TROUBLESHOOTING

Symptom	Possible Causes	Corrective Action
Jack will not lift load	 Release valve not tightly closed Load is too heavy Air pressure inadequate 	 Ensure release valve tightly closed Consider higher capacity jack Ensure adequate air pressure
Jack will lift, but not maintain pressure	 Release valve not tightly closed Hydraulic unit malfunction 	 Ensure release valve tightly closed Contact Omega Tech. Service
Jack will not lower after unloading	Reservoir overfilled	 Ensure load is removed, then drain fluid to proper level
Poor lift performance	Fluid level lowAir trapped in system	 Ensure proper fluid level Perform Bleeding/Venting Trapped Air procedure (page 3)
Will not lift to full extension	Fluid level low	Ensure proper fluid level

REPLACEMENT PARTS

Not all components of the jack are replacement items, but are illustrated as a convenient reference of location and position in the assembly sequence. When ordering parts, give model number, serial number and description.



Models 44915, 44930, 44940, 44980 & 44981C

Item		Parts Number for Model			Description	Ot i	
llem	44915	44930	44940	44980	44981C	Description	Qty
1	5905-00100-100			Filler Plug	1		
2			5905-00	056-000		Seal	1
3			BL80-16	6001-000		Release Valve	1
4			BL80-16	6002-000		Release Lever	1
5			5107-05	6016-000		Screw	1
6	G931-07015-000			Filter	2		
7	BL80-15000-000 (2 pc. for model 44981C)			Hydraulic Cartridge	1		
8	BL80-14002-000			Washer	1		
9	BL80-14001-000			Pump Cylinder	1		
10	BL80-14101-000			Pump Piston	1		
11	5403-08028-000			Pin	2		
12	BL80-13000-000			Handle Sleeve	1		
13	5405-02018-000			Snap Pin	2		
14	BL80-20000-000		BL80-42000-000	Handle	1		
15	N/A		A27010-0001	Air Motor	1		
16	N/A		A270-01100-0000	Piston, Air Motor	1		
17	N/A		A27010-0002	Air Inlet Swivel	1		
18	N/A		A20060-0005	Hose Assembly	1		
19	N/A		A20060-0006	Air Hose	1		
20	N/A		A20060-0007	Air Control Valve	1		
21	BL400S-034 BL		_800S-034	Seal Kit (#1, 2 & A~J)	1		
22	N/A N/A		A27010-0000	Seal Kit for Air Motor# 15	1		

Seal Kit (Item 21) Contents:

Item	Description	Qty
1	Filler Plug	1
2	Seal	1
A	O-ring	1
В	O-ring	1
С	Gasket	1
D	Back-up Ring	1
E	U-cup	1
F	Back-up Ring	1
G	Seal	1
Н	Seal	1
J	O-ring	1
К	Seal	1

ONE YEAR LIMITED WARRANTY

For a period of one (1) year from date of purchase, **SFA Companies** will repair or replace, at its option, without charge, any of its products which fails due to a defect in material or workmanship under normal usage. This limited warranty is a consumer's exclusive remedy.

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