Operating Instructions & Parts Manual



Hydraulic Truck Jack



Capacity 22/35 Ton 50 Ton 100 Ton

U.S. Patent No's. 5,341,723 • 5,946,912

Models 23227, 23501 & 23991



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.



To avoid **crushing and related injuries**:



NEVER work on, under or around a load supported only by a hydraulic jack. **ALWAYS** use adequately rated jack stands.

SAFETY and GENERAL INFORMATION

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

Inspect before each use. Do not use if broken, bent, cracked or damaged parts are noted. Any jack that appears damaged in any way, or operates abnormally shall be removed from service immediately. If the jack has been or suspected to have been subjected to a shock load (a load dropped suddenly, unexpectedly upon it), immediately discontinue use until jack has been checked by a factory authorized service center (contact distributor or manufacturer for list of authorized service centers). It is recommended that an annual inspection be done by qualified personnel. Labels and Operator's Manuals are available from manufacturer.

PRODUCT DESCRIPTION

These Hydraulic Truck Jacks are designed to lift, but not support, rated capacity partial vehicle loads consisting of one end of a vehicle. **Immediately** after lifting, loads must be supported by a pair of appropriately rated jack stands.



WARNING: Never use a hydraulic truck jack as a stand-alone device. After lifting, **immediately** support the lifted vehicle with a pair of appropriately rated jack stands.

PREPARATION

Assembly (see Replacement Parts pages 6-10 for reference to parts location & assembly sequence)
Assemble, align and insert the handle assembly & handle position bar into the handle sleeve, then tighten the bolt on handle sleeve to prevent accidental removal of handle while in use.

Before Use

- 1. 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.
- 2. To familiarize yourself with basic operation, locate and turn the release valve (handle knob):
 - a. Clockwise until firm resistance is felt to further turning. This is the 'CLOSED' release valve position used to raise the load
 - b. *Counter-clockwise*, but no more than 1 full turn from the closed position. This is the '**OPEN**' release valve position used to **lower** the load. The more you turn the release valve counter-clockwise, the faster the load descends.
- 3. With ram fully lowered and release valve closed, pump the operating handle. If ram responds immediately, jack is ready for use. If jack does not respond, open release valve and pump 6 to 8 full strokes to purge air. Close release valve and recheck operation.
- 4. Pour a teaspoon of good quality air tool lubricant into the air supply inlet of the lift control valve. Connect to air supply, then squeeze the lift control valve for 3 seconds to evenly distribute lubricant.
 - **Note:** These models are equipped with the popular 1/4" NPT air coupler. When installing a different air coupler of your choice, ensure that thread tape or compound is used when servicing connections. To ensure dependable, trouble free operation an inline air dryer and oiler is recommended.
- 5. Ensure that jack rolls freely. Raise and lower the unloaded ram throughout the lifting range before putting into service to ensure the jack operates smoothly. 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.) and with ram fully lowered, locate and remove the oil filler screw. Pump 6 to 8 full strokes. This will help release any pressurized air which may be trapped within the reservoir. Reinstall the oil filler screw.

SPECIFICATIONS

Model	Capacity	Jack Size (L x W)	Min. Height	Max. Height	Hyd. Range	Extension Screw	Volume of Hyd. Oil
23227	22/35 Ton	21-5/8" x 13-7/8"	8-1/4"	19-5/8"	11-3/8"	3-1/8"	490 mL
23501	50 Ton	22-7/8" x 13-3/4"	12"	19"	7"	NI/A	1650 mL
23991	100 Ton	26" x 15-3/4"	12"	18-1/8"	6-1/8"	- N/A	2550 mL

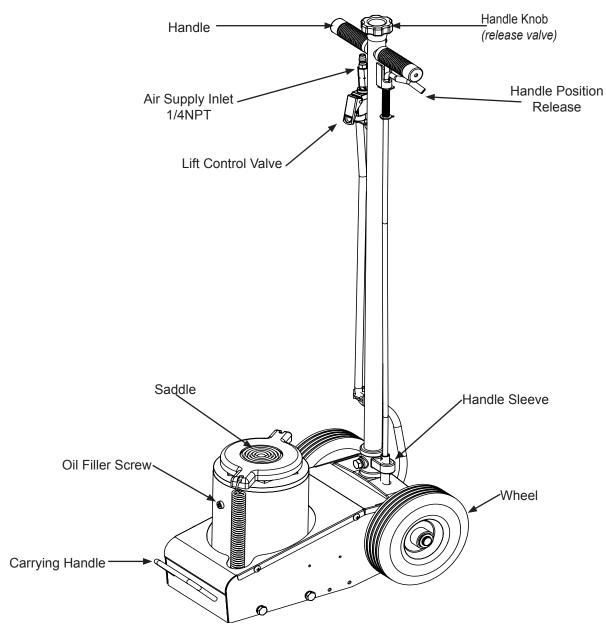


Figure 1 - Typical Truck Jack Nomenclature (23227 shown)

WARNING

- Study, understand, and follow all printed materials provided with/on this product before use.
- Do not exceed rated capacity.
- This is a lifting device only! Immediately after lifting, support the load with a pair of appropriately rated jack stands.
- **Only** attachments and/or adapters supplied by the manufacturer shall be used.
- Use only on hard, level surface.
- **Lift only** on areas of the vehicle as specified by the vehicle manufacturer.
- Never wire, clamp or otherwise disable the lift control valve to function by other than operator's hand.
- · No alterations shall be made to this product.
- Failure to heed these markings may result in personal injury and/or property damage.



To avoid **crushing and related injuries**:

- Never work on, under or around a load supported only by hydraulic jack.
- Always use adequately rated jack stands.
- · Chock each unlifted tire in both directions.
- Do not use this device to lift, level, lower, support nor move a house, mobile home, travel trailer, camper or any building structure.
- Be alert and sober when using this product. Do not operate under the influence of drugs or alcohol.



WARNING: The wheels provided with this jack are for positioning the jack under a load **ONLY!** The wheels are **not** load wheels. Do not try to dolly or move the vehicle with the jack!

OPERATION (see Fig 1)

Lifting

Note: The jack is equipped with handle position lock. To adjust the handle, release lock device by pulling the lever up, lever is spring loaded and will lock into desired position. Ensure lever locking mechanism is fully engaged before leaving

- 1. Connect adequate air source to the air supply inlet.
- 2. Follow the vehicle manufacturer's recommended guidelines for lifting. Engage the emergency brake and chock each unlifted wheel in both directions to prevent inadvertent vehicle movement.
- 3. Close the release valve by turning the handle knob clockwise until firm resistance is felt.
- 4. Center jack saddle under lift point, then squeeze the lift control valve until saddle contacts the lift point. To lift, continue squeezing the lift control valve until load reaches desired height. Simply release your grip on the lift control valve to end lift event.
- 5. Transfer the load **immediately** to appropriately rated jack stands.



WARNING: Only attachments and/or adapters supplied by the manufacturer shall be used. Lift only on area of the vehicle as specified by the vehicle manufacturer.



WARNING: NEVER use hydraulic jack as a stand alone device! ALWAYS transfer the lifted load IMMEDIATELY to a pair of appropriately rated jack stands. Use one pair of jack stands per vehicle. Rated capacity is per pair only! Do not exceed rated capacity.

Lowering



WARNING: Be sure all tools and personnel are clear before lowering load. Slowly open the release valve! The more you turn the handle knob counter-clockwise, the faster the load will come down. Maintain control of the rate of speed at which the load lowers at all times!

- 1. Raise load high enough to clear the jack stands.
- 2. Remove jack stands carefully (always used in pairs).
- 3. Slowly turn handle knob counter-clockwise, but no more than 1 full turn. If the load fails to lower:
 - a. Use another jack to raise the vehicle high enough to reinstall jack stands.
 - b. Remove the malfunctioning jack and then the jack stands.
 - c. Use the functioning jack to lower the vehicle.
- 4. After removing jack from under the vehicle, fully retract the jack to reduce ram exposure to rust and contamination.

MAINTENANCE

<u>Important:</u> Use only good grade 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. We recommend premium hydraulic jack oil.

Adding/ Changing Oil

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

- 1. With saddle fully lowered remove cover plate, then oil filler plug.
- 2. Lay jack on its side and drain fluid into a suitable container.

Note: Dispose of hydraulic fluid in accordance with local regulations.

- 3. Set jack in its upright, level position.
- 4. Fill with oil. Proper oil level is just below the rim of the opening. Reinstall the oil filler screw.
- 5. Perform Bleeding/ Venting Trapped Air instructions

Lubrication

A periodic coating of light lubricating oil to pivot points, axles and hinges will help to prevent rust and assure that wheels move freely and the pump functions smoothly. To help ensure trouble free operation, an inline air dryer and oiler is recommended.

Cleaning

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

Note: Never use sandpaper or abrasive material on ram surfaces!

Storage

When not in use, store the jack with saddle fully lowered.

TROUBLESHOOTING

Symptom	Possible Causes	Corrective Action
Jack will not lift load	Release valve not tightly closedLoad is too heavyAir supply inadequate	Ensure release valve tightly closed Consider higher capacity jack Ensure adequate air supply
Jack will lift, but not maintain pressure	Release valve not tightly closed Hydraulic unit malfunction	Ensure release valve tightly closed Discontinue use, contact Omega technical service
Jack will not lower after unloading	Reservoir overfilled Linkages binding	Drain fluid to proper level Clean and lubricate moving parts
Poor lift performance	Fluid level low Air trapped in system	Ensure proper fluid level With ram fully retracted, remove oil filler screw to let pressurized air escape. Reinstall oil filler screw
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, please give the Model number, part number and parts description.

Replacement Parts for model 23227:

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Item	Part No.	Description	Qty	
1	A07-4-2100-108	Handle Assy.	1	
2	A22-3-1100-209	Extension Screw	1	
3	A22-6-1218-109	Collar	1	
4	A22-6-1213-109	Retaining Ring	2	
5	A22-6-1211-105	Retaining Ring	1	
6	A22-6-1219-101	Collor	1	
7	A22-6-1217-208	Fixing Ring	1	
8	A22-3-1220-209	Piston Rod Assy.	1	
9	A22-6-1802-108	Cover	1	
10	522-2-0260-030	Extension Spring	2	
11	324-4-1900-208	Filler Screw	1	
12	A22-6-1808-100	Retaining Ring	1	
13	A20-4-1500-106	Hyd. Cartridge Assy.	1	
14	A22-1-1001-113	Hyraulic Unit Assy.	1	
15	A22-4-2040-107	Air Hose Assy.	1	
16	A27-3-2000-104	Air Motor Assy.	1	
17	649-1-0050-019	Hex. Socket Bolt	1	
18	A20-6-1707-108	Release Valve	1	
19	A07-3-3300-307	Flexible Joint Assy.	1	
20	A22-6-3220-106	Cover Plate	1	

Item	Part No.	Description	Qty
21	A22-6-1607-100	Base Plate	1
22	605-3-0100-203	Spring Washer	5
23	653-1-0100-014	Bolt	5
24	A232-6-3230-200	Wheel Axle	2
25	A22-4-3400-106	Rubber Wheel Assy.	2
26	511-3-0202-046	Washer	2
27	667-5-0180-009	Retaining Ring "C"	4
28	644-1-0060-053	Hex. Socket Bolt	2
29	A07-6-1301-105	Handle Fork	1
30	421-6-2202-209	Knob	1
**	A22-3-9901-102	Repair Kit	-

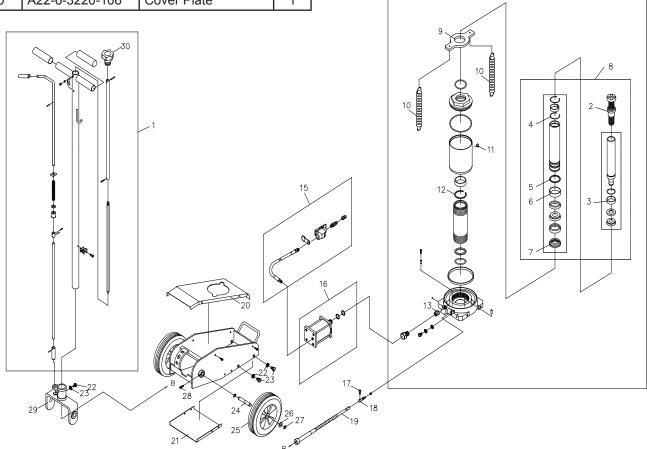


Figure 2 - Replacement Parts Illustration for Model 23227

Replacement Parts for model 23501:

Item	Part No.	Description	Qty
1	A07-4-2100-108	Handle Assembly	1
2	506-9-0264-106	Handle Grip	2
3	421-6-2202-209	Knob	1
4	601-4-0040-034	Spring Pin	1
5	653-1-0100-014	Bolt	5
6	605-3-0100-203	Washer, Lock	5
7	A07-6-1301-105	Handle Sleeve	1
8	A30-6-3220-106	Cover Plate	1
9	609-1-0050-109	Screw	5
10	A22-4-3400-106	Wheel	2
11	511-3-0202-046	Washer	2
12	667-5-0180-009	C-clip	4
13	A27010-0001	Air Motor	1
14	A270-01004-0420	Washer	1
15	A270-01014-0000	Gasket	1
16	A20060-0015	Air Hose Assembly	1
17	A20060-0006	Air Hose	1

Item	Part No.	Description	Qty
18	A20060-0007	Lift Control Valve	1
19	A20060-0016	Air Coupler, Male, 1/4 NPT	1
20	A07-3-3300-307	Release Valve Cable	1
21	A20-6-1701-108	Release Valve	1
22	554-7-0062-007	Oil Seal	1
23	614-1-0050-019	Screw	1
24	A20-4-1500-106	Hyd. Cartridge	1
25	532-8-0050-024	Filter	1
26	324-4-1900-208	Filler Screw Assy.	1
27	522-2-0260-003	Spring	2
28	A50-6-1802-108	Spring Plate	1
29	A50-1-1001-113	Hydraulic Unit	1
30	A07-4-2900-100	Air Filter	1
31	A22-6-3230-200	Wheel Axle	2
32	A27010-0008	Piston, Air Motor #13	1
33	A50-3-9905-100	Repair Kit (includes #22, 26 & A~E)	-

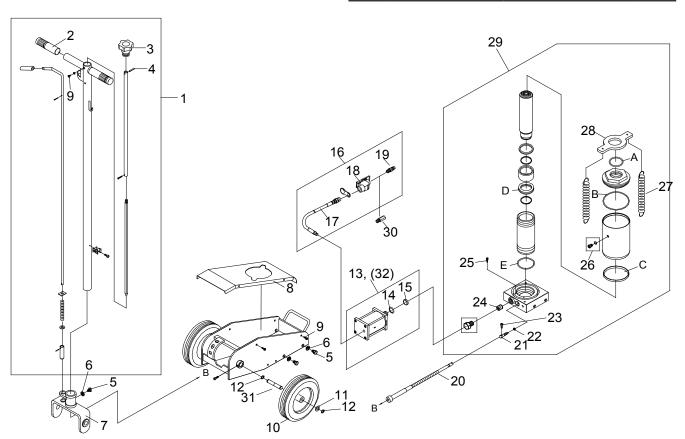


Figure 3 - Replacement Parts Illustration for Model 23501

Replacement Parts for model 23991:

Item	Part No.	Description	Qty
1	A07-4-2100-108	Handle Assembly	1
2	506-9-0264-106	Handle Grip	2
3	421-6-2202-209	Knob	1
4	601-4-0040-034	Spring Pin	1
5	653-1-0100-014	Bolt	5
6	605-3-0100-203	Washer, Lock	5
7	A07-6-1301-105	Handle Sleeve	1
8	A99-6-3220-101	Cover Plate	1
9	609-1-0050-109	Screw	5
10	A99-4-3400-202	Wheel	2
11	511-3-0202-046	Washer	4
12	667-5-0180-009	C-clip	2
13	A27010-0001	Air Motor	1
14	A270-01004-0420	Washer	1
15	A270-01014-0000	Gasket	1
16	A20060-0015	Air Hose Assembly	1
17	A20060-0006	Air Hose	1
18	A20060-0007	Lift Control Valve	1

Item	Part No.	Description	Qty
19	A20060-0016	Air Coupler, Male, 1/4 NPT	1
20	A07-3-3300-307	Release Valve Cable	1
21	A20-6-1701-108	Release Valve	1
22	554-7-0062-007	Oil Seal	1
23	614-1-0050-019	Screw	1
24	A20-4-1500-106	Hyd. Cartridge	1
25	532-8-0050-024	Filter	1
26	324-4-1900-208	Filler Screw Assy.	1
27	522-2-0260-003	Spring	2
28	250-6-1103-201	Saddle	1
29	A99-6-1802-103	Spring Plate	1
30	A99-1-1001-118	Hydraulic Unit	1
31	A07-4-2900-100	Air Filter	1
32	A27010-0008	Piston, Air Motor #13	1
33	A99-3-9905-105	Repair Kit (includes #22, 26 & A~F)	-
34	A99-6-1302-103	Axle, Handle Sleeve	2

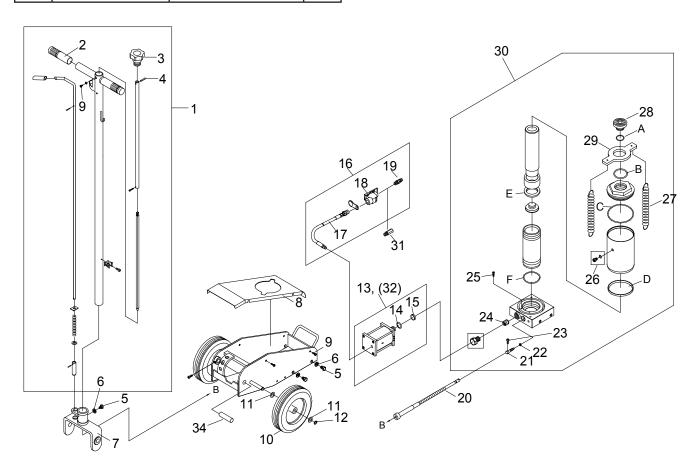


Figure 4 - Replacement Parts Illustration for Model 23991