

**Parts List &  
Operating Instructions**  
for:

1540

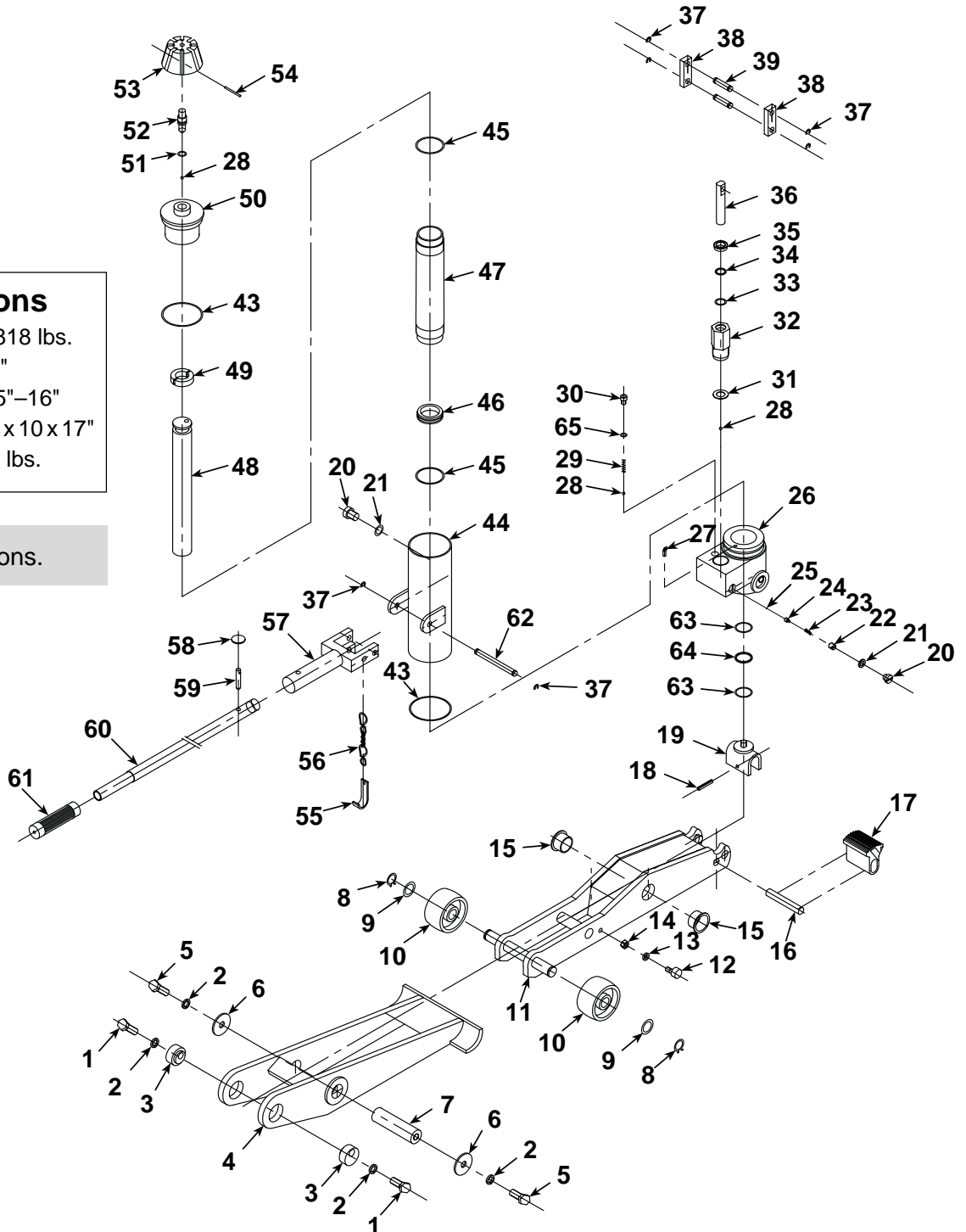
**4-Ton Fork Lift Jack**

*Application: Servicing Fork Lift Machinery*

**Specifications**

Lifting Capacity: 8,818 lbs.  
Lifting Range 13"  
Min-Max Height 2.5"-16"  
Package Size: 28 x 10 x 17"  
Net Weight: 73 lbs.

Added translations.



# Parts List & Operating Instructions

---

## Parts Description

Item			Item		
No.	Qty.	Description	No.	Qty.	Description
1	2	Screw	32	1	Pump
2	4	Lock Washer	33	1	O-ring
3	2	Trunnion	34	1	Back-up Ring
4	1	Frame 1	35	1	Wiper
5	2	Screw	36	1	Plunger
6	2	Washer	37	6	Retaining Ring
7	1	Axle	38	2	Link Rod
8	2	Snap Ring	39	2	Pin
9	2	Washer	43	2	O-ring
10	2	Wheel	44	1	Oil Tank
11	1	Frame 2	45	2	O-ring
12	2	Screw	46	1	Port Ring
13	2	Lock Washer	47	1	Cylinder
14	2	Nut	48	1	Piston Rod
15	2	Spacer	49	1	Piston
16	1	Pin	50	1	Valve Seat
17	1	Saddle	51	1	O-ring
18	1	Pin	52	1	Release Rod
19	1	Piston Rod Pad	53	1	Release Knob
20	2	Screw	54	1	Pin
21	2	Seal Ring	55	1	Chain Hook
22	1	Screw	56	1	Chain
23	1	Spring	57	1	Handle Base
24	1	Ball Seat	58	1	Ring
25	1	Ball	59	1	Pin
26	1	Valve Block	60	1	Handle
27	1	Filter	61	1	Grip
28	3	Ball	62	1	Pin
29	1	Spring	63	2	O-ring
30	1	Screw	64	1	Back-up Ring
31	1	Seal Ring	65	1	Seal Ring

Replacement Kits

Item No.	Qty.	Description
----------	------	-------------

**Handle Kit  
No. 525820**

37	2	Retaining Ring
55	1	Chain Hook
56	1	Chain
57	1	Handle Base
58	1	Ring
59	1	Pin
60	1	Handle
61	1	Grip
62	1	Pin

**Hydraulic Unit  
No. 525821**

18	1	Pin
19	1	Piston Rod Pad
20	2	Screw
21	2	Seal Ring
22	1	Screw
23	1	Spring
24	1	Ball Seat
25	1	Ball
26	1	Valve Block
27	1	Filter
28	3	Ball
29	1	Spring
30	1	Screw
31	1	Seal Ring
32	1	Pump
33	1	O-ring
34	1	Back-up Ring
35	1	Wiper
36	1	Plunger
43	2	O-ring
44	1	Oil Tank
45	2	O-ring
46	1	Port Ring
47	1	Cylinder
48	1	Piston Rod
49	1	Piston
50	1	Valve Seat
51	1	O-ring
52	1	Release Rod
53	1	Release Knob
54	1	Pin
63	2	O-ring
64	1	Back-up Ring
65	1	Seal Ring

Item No.	Qty.	Description
----------	------	-------------

**Hydraulic Unit Rebuild Kit  
No. 525826**

18	1	Pin
19	1	Piston Rod Pad
20	2	Screw
21	2	Seal Ring
22	1	Screw
23	1	Spring
24	1	Ball Seat
25	1	Ball
27	1	Filter
28	1	Ball
29	1	Spring
30	1	Screw
43	2	O-ring
45	2	O-ring
46	1	Port Ring
47	1	Cylinder
48	1	Piston Rod
49	1	Piston
50	1	Valve Seat
63	2	O-ring
64	1	Back-up Ring
65	1	Seal Ring

**Jack Stop Kit  
No. 525824**

12	1	Screw
13	1	Lock Washer
14	1	Nut

**Pivot Pins Kit  
No. 525823**

1	2	Screw
2	4	Lock Washer
3	2	Trunnion
5	2	Screw
6	2	Washer
7	1	Axle
15	2	Spacer

**Pump Station Kit  
No. 525825**

28	1	Ball
31	1	Seal Ring
32	1	Pump
33	1	O-ring
34	1	Back-up Ring
35	1	Wiper
36	1	Plunger
37	4	Retaining Ring
38	2	Link Rod
39	2	Pin

Item No.	Qty.	Description
----------	------	-------------

**Release Knob Kit  
No. 525818**

28	1	Ball
51	1	O-ring
52	1	Release Rod
53	1	Release Knob
54	1	Pin

**Saddle Kit  
No. 525822**

16	1	Pin
17	1	Saddle

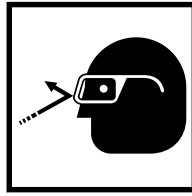
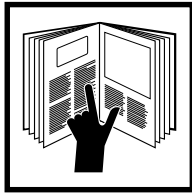
**Seal Kit  
No. 525817**

21	2	Seal Ring
23	1	Spring
24	1	Ball Seat
25	1	Ball
27	1	Filter
28	3	Ball
29	1	Spring
31	1	Seal Ring
33	1	O-ring
34	1	Back-up Ring
35	1	Wiper
43	2	O-ring
45	2	O-ring
46	1	Port Ring
51	1	O-ring
63	2	O-ring
64	1	Back-up Ring
65	1	Seal Ring

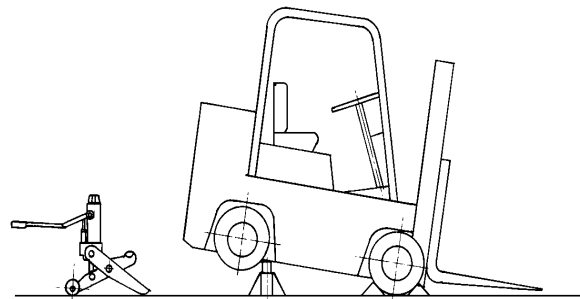
**Wheel Kit  
No. 525819**

8	1	Snap Ring
9	1	Washer
10	1	Wheel

### Safety Precautions



- ⚠ CAUTION:** To prevent personal injury and damage to equipment,
- Read, understand, and follow all instructions, including the ANSI B30.1 safety code for jacks. Before using the fork lift jack to lift a vehicle, refer to the vehicle service manual for recommended lifting surfaces on the vehicle chassis.
  - Wear protective eyewear that meets the requirements of ANSI Z87.1 and OSHA.
  - Inspect the jack before each use; do not use the jack if it's damaged, altered, or in poor condition.
  - Use the jack for lifting purposes only.
  - A load must never exceed the rated lifting capacity (4 ton) of the jack.
  - Only use the jack on a hard, level surface.
  - Do not tilt the vehicle more than 15° when using the serrated pad. Tilting the vehicle too far may result in the jack kicking out suddenly and dropping the load.
  - Stay clear of lifted loads and the scissor mechanism of the jack.
  - Place support stands under the axles before working on the vehicle. See Figure 1.
  - Do not modify the jack or use adapters unless approved or supplied by OTC.
  - Lower the jack slowly and carefully while watching the position of the jack saddle. Do not drive the fork lift truck off the jack, or move the fork lift when it is supported by the jack.
  - Use only approved hydraulic fluid (Mobile DTE #13 or equivalent). The use of alcohol, hydraulic brake fluid, or automatic transmission fluid (ATF) could damage seals and result in jack failure.



**Figure 1**

This guide cannot cover every situation, so always do the job with safety first.

### Bleeding Air from the Fork Lift Jack

Air can accumulate within a hydraulic system during shipment or after prolonged use. This entrapped air causes the jack to respond slowly or feel “spongy.” To remove the air:

1. Open the release valve (large knob on top) by turning the knob two full turns counterclockwise (CCW).
2. Pump handle slowly 5–10 times.
3. Close release valve.

If jack does not lift correctly, repeat steps 1 through 3.

## Operating Instructions

### To raise the jack,

1. Insert handle into handle base.
2. Turn release valve (turn the knob clockwise until resistance is felt); do not over tighten.

### To lower the jack,

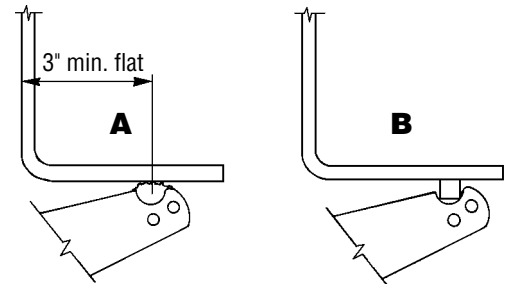
1. SLOWLY turn the release valve counterclockwise. **IMPORTANT: When lowering a fork lift truck, keep the rate of lowering under your control. Do not lower the fork lift until the area is free of personnel, tools, and equipment. Stay clear of the rear wheels on the jack; the wheels will move backward when the jack is lowered.**

### Recommended Method to Raise a Vehicle

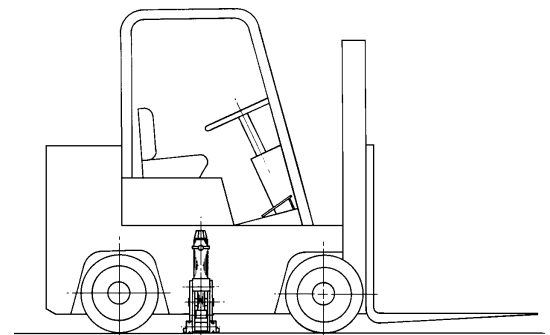
1. Lower the forks on the fork lift. Remove any load. Clear personnel from the area.
2. Carefully select a lifting point on the fork lift. It must be strong enough to resist the lifting force without damage to the fork lift.
3. Cradle a support point in the notch at the end of the lift arm. See Figure 2-B. Use the serrated pad to raise a vehicle with a flat underside. See Figure 2-A.

**⚠ CAUTION: To prevent injury or equipment damage,**

- Use only the serrated lifting pad or the notch in the end of the lifting arm as the means of lifting. Do not use any other part of the jack as a lifting contact point.
  - Do not tilt the vehicle more than 15° when using the serrated pad. Tilting the vehicle too far may result in the jack kicking out suddenly and dropping the load.
  - Do not use cribbing under the jack or on top of the lift pad. The jack must remain in direct contact with the floor; the lift pad or notch must be in direct contact with the fork lift.
4. Position the lift pad at least 3" inward toward the center of the vehicle from the beginning of the flat surface. See Figure 2-A.



**Figure 2**



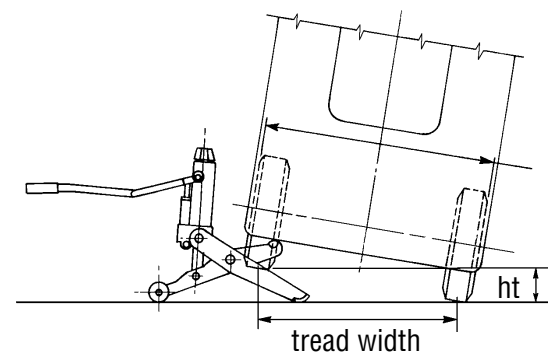
**Figure 3**

### Lifting from the Side

1. Position the jack closer to the rear wheels than the front wheels to maintain balance. See Figure 3. If the fork lift seems heavier at one end, lower the jack and move it closer to the heavy end.

**⚠ CAUTION: When lifting narrow fork lift trucks (less than 40" wide) from the sides, the height between the floor and the bottom of the raised tire cannot be more than one fourth (1/4) the tire tread width. (Tread width is measured from centerline to centerline of the tire treads.) If this height is exceeded, the fork lift truck could tip over or the jack could drop the load. See Figure 4.**

**Example: If tread width is 36", the bottom of the vehicle tire may never be more than 9" off the floor.**



**Figure 4**

# Parts List & Operating Instructions

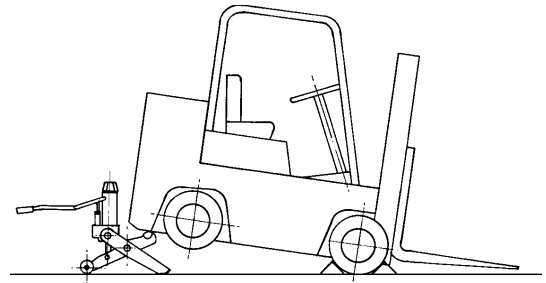
---

## Lifting from the End

1. Position the jack at the center of the fork lift truck. See Figure 5.
2. Chock the wheels at the opposite end of the fork lift.

**⚠ CAUTION:** To prevent injury or equipment damage,

- Do not lift from the end of the fork lift if the contact surface is sloped or rounded, such as in the counter weight areas.
- When lifting 3-wheeled trucks, never lift the 2-wheeled end.



**Figure 5**

## Preventive Maintenance

**IMPORTANT:** The greatest single cause of failure in hydraulic units is dirt. Keep the fork lift jack clean and well lubricated to prevent foreign matter from entering the system. If the jack has been exposed to rain, snow, sand, or grit, it must be cleaned before it is used.

1. Store the jack in a well-protected area where it will not be exposed to corrosive vapors, abrasive dust, or any other harmful elements.
2. Regularly lubricate the stem of the pump plunger with heavy grade machine oil.
3. To check the oil level, place the fork lift jack on level ground, and completely retract the ram. Remove the plug from the oil filler hole. The oil level should be within 1/4" of the filler plug hole. If necessary, add approved anti-wear hydraulic jack oil (Mobile DTE #13 or equivalent), and install the filler plug again. **IMPORTANT: The use of alcohol, hydraulic brake fluid, detergent motor oil, or automatic transmission fluid (ATF) could damage the seals and result in jack failure.**
4. Inspect the jack before each use. Take corrective action if any of the following problems are found:
  - a. Cracked or damaged housing
  - b. Excessive wear, bending, or other damage
  - c. Leaking hydraulic fluid
  - d. Scored or damaged piston rod
  - e. Loose hardware
  - f. Modified or altered equipment

## Troubleshooting Guide

Repair procedures must be performed in a dirt-free environment by qualified personnel who are familiar with this equipment.

Trouble	Cause	Solution
<b>Erratic action</b>	<ol style="list-style-type: none"> <li>1. Air in system</li> <li>2. Oil viscosity too high</li> <li>3. Internal leakage in cylinder</li> <li>4. Cylinder sticking or binding</li> </ol>	<ol style="list-style-type: none"> <li>1. Refer to section titled "Bleeding Air from the Fork Lift Jack."</li> <li>2. Change to a lower viscosity oil.</li> <li>3. Replace worn packings. Look for excessive contamination or wear.</li> <li>4. Look for dirt, gummy deposits, leaks, misalignment, worn parts, defective packings.</li> </ol>
<b>Jack does not lift</b>	<ol style="list-style-type: none"> <li>1. Release valve is open</li> <li>2. Low/no oil in reservoir</li> <li>3. Air-locked system</li> <li>4. Load is above capacity of jack</li> <li>5. Delivery valve and/or bypass valve not working correctly</li> <li>6. Packing worn out or defective</li> </ol>	<ol style="list-style-type: none"> <li>1. Close release valve.</li> <li>2. Fill with oil and bleed system.</li> <li>3. Bleed system.</li> <li>4. Use correct equipment.</li> <li>5. Clean to remove dirt or foreign matter. Replace oil.</li> <li>6. Repair power unit.</li> </ol>
<b>Jack lifts only partially</b>	<ol style="list-style-type: none"> <li>1. Too much or not enough oil</li> </ol>	<ol style="list-style-type: none"> <li>1. Check oil level.</li> </ol>
<b>Jack advances slowly</b>	<ol style="list-style-type: none"> <li>1. Air in system</li> <li>2. Pump not working correctly</li> <li>3. Leaking seals</li> </ol>	<ol style="list-style-type: none"> <li>1. Refer to section titled "Bleeding Air from the Fork Lift Jack."</li> <li>2. Repair power unit.</li> <li>3. Repair power unit or seals.</li> </ol>
<b>Jack lifts load, but doesn't hold</b>	<ol style="list-style-type: none"> <li>1. Cylinder packing is leaking</li> <li>2. Valve not working correctly (suction, delivery, release, or bypass)</li> <li>3. Air-locked system</li> </ol>	<ol style="list-style-type: none"> <li>1. Repair power unit or seals.</li> <li>2. Inspect valves. Clean and repair seat surfaces.</li> <li>3. Bleed system.</li> </ol>
<b>Jack leaks oil</b>	<ol style="list-style-type: none"> <li>1. Worn or damaged seals</li> </ol>	<ol style="list-style-type: none"> <li>1. Repair power unit or seals.</li> </ol>
<b>Jack will not retract</b>	<ol style="list-style-type: none"> <li>1. Release valve is closed</li> </ol>	<ol style="list-style-type: none"> <li>1. Open or clean release valve.</li> </ol>
<b>Jack retracts slowly</b>	<ol style="list-style-type: none"> <li>1. Cylinder damaged internally</li> <li>2. Link section is binding</li> </ol>	<ol style="list-style-type: none"> <li>1. Send jack to OTC authorized service center for repair.</li> <li>2. Lubricate link section.</li> </ol>