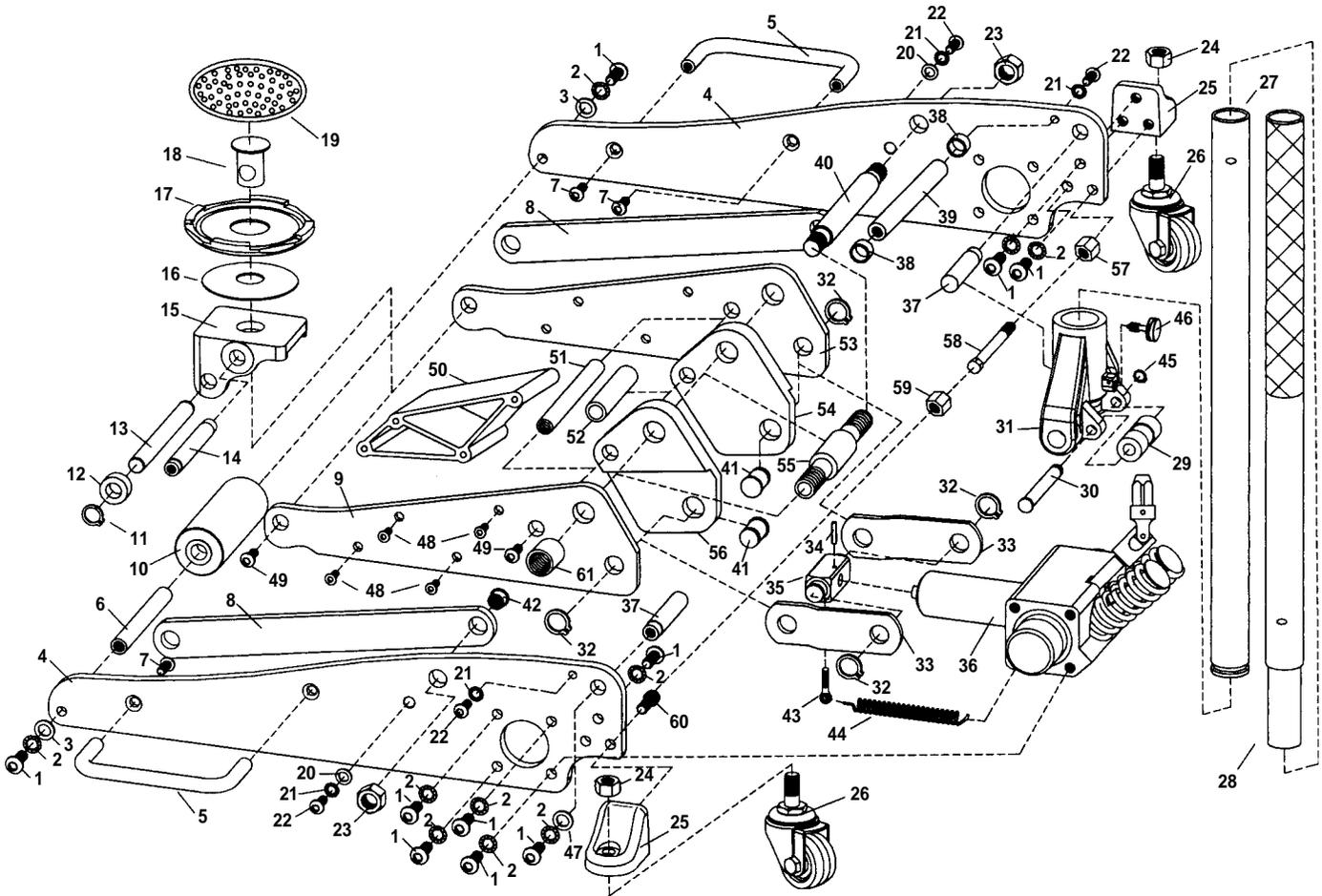


Racing Jack

Max. Capacity: 4,000 lbs. (1,814 kg)



Parts List

Item No.	Qty.	Description	Item No.	Qty.	Description	Item No.	Qty.	Description
1	18	Screw (M10 x 25 mm)	12	4	Spacer	22	4	Screw (M8 x 20 mm)
2	18	Star Washer (10)	13	1	Saddle Base Pin (Long)	23	2	Nut (M18)
3	2	Washer	14	1	Saddle Base Pin (Short)	24	2	Nut (M12)
4	2	Side Plate	15	1	Saddle Base	25	2	Caster Mount
5	2	Handle Bar	16	1	Washer	26	2	Caster
6	1	Front Wheel Axle	17	1	Saddle	27	1	Handle (Lower)
7	4	Screw (M8 x 25 mm)	18	1	Saddle Pin	28	1	Handle (Upper)
8	2	Leveling Arm	19	1	Rubber Saddle Pad	29	1	Pump Roller
9	1	Lift Arm Left Side Plate	20	2	Washer (8)			
10	1	Roller Wheel	21	4	Lock Washer			
11	2	Retaining Ring						

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Parts List contd.

Item No.	Qty.	Description
30	1	Pump Roller Pin
31	1	Handle Base
32	4	Retaining Ring
33	2	Load Block Arm
34	1	Pin
35	1	Link Block
36	1	Power Unit Assembly
37	2	Handle Base Pin
38	2	Spacer
39	1	Rod
40	1	Main Pivot Rod
41	2	Pin
42	2	Bushing

Item No.	Qty.	Description
43	2	Bolt Post (M6 x 30 mm)
44	2	Return Spring
45	1	Retaining Ring
46	1	Handle Retaining Screw
47	2	Washer (10)
48	8	Lift Arm Core Bolt
49	1	Bolt (M8 x 20 mm)
50	1	Lift Arm Core
51	1	Lift Arm Mounting Plate Front Axle
52	1	Lift Arm Mounting Plate Front Axle Spacer
53	1	Lift Arm Right Side Plate

Item No.	Qty.	Description
54	1	Lift Arm Left Mounting Plate
55	1	Lift Arm Left Mounting Plate Upper Axle
56	1	Lift Arm Right Mounting Plate
57	1	Side Plate Spacing Rod Nut
58	1	Side Plate Spacing Rod
59	1	Side Plate Spacing Rod Nut
60	1	Side Plate Spacing Rod Bolt

Replacement Kits

Handle Kit No. 535480

Item No.	Qty.	Description
27	1	Handle (Lower)
28	1	Handle (Upper)
46	1	Handle Retaining Screw

Hardware Kit No. 535482

Item No.	Qty.	Description
1	18	Screw (M10 x 25 mm)
2	18	Star Washer (10)
3	2	Washer
6	1	Front Wheel Axle
7	4	Screw (M8 x 25 mm)
8	2	Leveling Arm
11	2	Retaining Ring
12	4	Spacer
13	1	Saddle Base Pin (Long)
14	1	Saddle Base Pin (Short)
15	1	Saddle Base
20	2	Washer (8)
21	4	Lock Washer
22	4	Screw (M8 x 20 mm)
23	2	Nut (M18)
24	2	Nut (M12)
29	1	Pump Roller
30	1	Pump Roller Pin
31	1	Handle Base
32	4	Retaining Ring
33	2	Load Block Arm
34	1	Pin
35	1	Link Block
37	2	Handle Base Pin
38	2	Spacer
39	1	Rod

Hardware Kit No. 535482 contd.

Item No.	Qty.	Description
40	1	Main Pivot Rod
41	2	Pin
42	2	Bushing
43	2	Bolt Post (M6 x 30 mm)
44	2	Return Spring
45	1	Retaining Ring
47	2	Washer (10)
48	8	Lift Arm Core Bolt
49	1	Bolt (M8 x 20 mm)
51	1	Lift Arm Mounting Plate Front Axle
52	1	Lift Arm Mounting Plate Front Axle Spacer
55	1	Lift Arm Left Mounting Plate Upper Axle
57	1	Side Plate Spacing Rod Nut
58	1	Side Plate Spacing Rod
59	1	Side Plate Spacing Rod Nut
60	1	Side Plate Spacing Rod Bolt

Power Unit Kit No. 535479

Item No.	Qty.	Description
1	8	Screw (M10 x 25 mm)
2	8	Star Washer (10)
34	1	Pin
36	1	Power Unit Assembly

Saddle Kit No. 535481

Item No.	Qty.	Description
16	1	Nylon Washer
17	1	Saddle
18	1	Saddle Pin
19	1	Rubber Saddle Pad

Side Handle Kit No. 541572

Item No.	Qty.	Description
5	1	Side Handle
7	2	Screw (M8 x 25 mm)

Wheel Kit No. 535478

Item No.	Qty.	Description
1	6	Screw (M10 x 25 mm)
2	6	Star Washer (10)
3	2	Washer
6	1	Front Wheel Axle
10	1	Roller Wheel
24	2	Nut (M12)
25	2	Caster Mount
26	2	Caster
57	1	Side Plate Spacing Rod Nut
58	1	Side Plate Spacing Rod
59	1	Side Plate Spacing Rod Nut
60	1	Side Plate Spacing Rod Bolt

Safety Precautions



WARNING: To prevent personal injury and/or damage to equipment,



- Read, understand, and follow instructions and safety precautions, including ASME PALD Part 10 for service jacks. If the operator cannot read these instructions, operating instructions and safety precautions must be read and discussed in the operator's native language.



- Before using the service jack to lift a vehicle, refer to the vehicle service manual for recommended lifting surfaces on the vehicle chassis.

- Wear eye protection that meets ANSI Z87.1 and OSHA standards.
- 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; use approved safety stands to support the axles before working on the vehicle.



- Never exceed the rated lifting capacity of the jack.
- Use the jack on a hard, level surface. The jack must be free to roll without obstruction while lifting or lowering the vehicle. The wheels of the vehicle must be in the straight-ahead position, with the hand brake released.

- Center the load on the jack saddle. Off-center loads can damage seals and cause jack failure.
- Lift only dead weight. Do not move the jack while it is supporting a vehicle.

- Stay clear of lifted loads. Use approved safety stands to support the axles before making repairs. Do not use blocks or other extenders between the saddle and the load being lifted.
- Do not adjust the safety valve.
- Lower the jack slowly and carefully while watching the position of the jack saddle.
- Use only approved hydraulic fluid (Chevron AW Hydraulic Oil MV or equivalent). The use of alcohol, hydraulic brake fluid, or transmission oil could damage seals and result in jack failure.
- Do not modify the jack, or use adapters, unless approved or supplied by OTC.

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

Setup

Assemble the Handle

1. Loosen the thumb screw on the back of the handle socket.
2. Grease the socket opening. Insert the handle.
3. Hand tighten the thumb screw.

Bleed Air from the Service 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 by turning the handle all the way counterclockwise.
2. Pump the jack handle six full strokes.
3. Close the release valve by turning the handle all the way clockwise.
4. Pump the jack handle until the lift arm is fully extended.
5. Lower the lift arm by turning the handle counterclockwise. If the jack does not immediately respond, repeat Steps 2–4.

Operating Instructions

1. Close the release valve by turning the handle completely clockwise.
2. Position the jack under the vehicle **using the manufacturer's recommended lifting points on the chassis**. The jack must be free to roll without obstruction while lifting or lowering the vehicle. The wheels of the vehicle must be in the straight-ahead position, with the emergency brake released.
3. Pump the jack handle until the saddle touches the vehicle. Check the placement of the jack; the load must be centered on the jack saddle. **IMPORTANT: Avoid wheel obstructions such as gravel, tools, or uneven expansion joints.**
4. Finish lifting the vehicle by pumping the handle. Do not attempt to raise the jack beyond its travel stops.
5. Place approved support stands under the vehicle at points that will provide stable support. Before working on the vehicle, **SLOWLY** lower the vehicle onto the support stands by turning the handle counterclockwise.

Preventive Maintenance

IMPORTANT: Dirt is the greatest single cause of failure in hydraulic units. Keep the 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 (at least once per month) lubricate the moving parts in the wheels, arm, and handle.
3. Replace the oil in the reservoir at least once per year. To check the oil level, place the jack on level ground and lower the lift arm completely. Remove the oil screw. The oil level should be at the bottom of the filler plug hole. If necessary, add approved anti-wear hydraulic jack oil, and install the filler plug again. **IMPORTANT: The use of alcohol, hydraulic brake fluid, detergent motor oil, or transmission oil 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. malfunctioning swivel heads or adjusting screws
 - f. loose hardware
 - g. 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.

 **CAUTION: To prevent personal injury, inspection, maintenance, and repair procedures must be performed when the jack is free of a load (not in use).**

Trouble	Cause	Solution
Jack does not lift	<ol style="list-style-type: none"> 1. Release valve is open. 2. Low/no oil in reservoir. 3. Air-locked system. 4. Load is above capacity of jack. 5. Delivery valve and/or bypass valve not working correctly. 6. Packing worn out or defective. 	<ol style="list-style-type: none"> 1. Close release valve. 2. Fill with oil and bleed system. 3. Bleed system. 4. Use correct equipment. 5. Clean to remove dirt or foreign matter. Replace oil. 6. Replace hydraulic unit with kit No. 535479.
Jack lifts only partially	<ol style="list-style-type: none"> 1. Too much or not enough oil. 	<ol style="list-style-type: none"> 1. Check oil level.
Jack advances slowly	<ol style="list-style-type: none"> 1. Pump not working correctly. 2. Leaking seals. 	<ol style="list-style-type: none"> 1. Replace hydraulic unit with kit No. 535479. 2. Replace hydraulic unit with kit No. 535479.
Jack lifts load, but doesn't hold	<ol style="list-style-type: none"> 1. Cylinder packing is leaking. 2. Valve not working correctly (suction, delivery, release, or bypass). 3. Air-locked system. 	<ol style="list-style-type: none"> 1. Replace hydraulic unit with kit No. 535479. 2. Inspect valves. Clean and repair seat surfaces. 3. Bleed system.
Jack leaks oil	<ol style="list-style-type: none"> 1. Worn or damaged seals. 	<ol style="list-style-type: none"> 1. Replace hydraulic unit with kit No. 535479.
Jack will not retract	<ol style="list-style-type: none"> 1. Release valve is closed. 	<ol style="list-style-type: none"> 1. Open or clean release valve.
Jack retracts slowly	<ol style="list-style-type: none"> 1. Cylinder damaged internally. 2. Link section is binding. 	<ol style="list-style-type: none"> 1. Send jack to OTC authorized service center for repair; refer to OTC Form No. 104060. 2. Lubricate or replace link section.