



655 Eisenhower Drive
Owatonna, MN 55060 USA
Phone: (507) 455-7000
Tech. Serv.: (800) 533-6127
Fax: (800) 955-8329
Order Entry: (800) 533-6127
Fax: (800) 283-8665
International Sales: (507) 455-7223
Fax: (507) 455-7063

Form No. 577597

Parts List & Operating Instructions for: 1546

Racing Jack

Max. Capacity: 6,000 lbs. (2,722 kg)

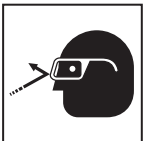
Safety Precautions



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



- Read, understand, and follow instructions and safety precautions, including ASME PASE, 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.

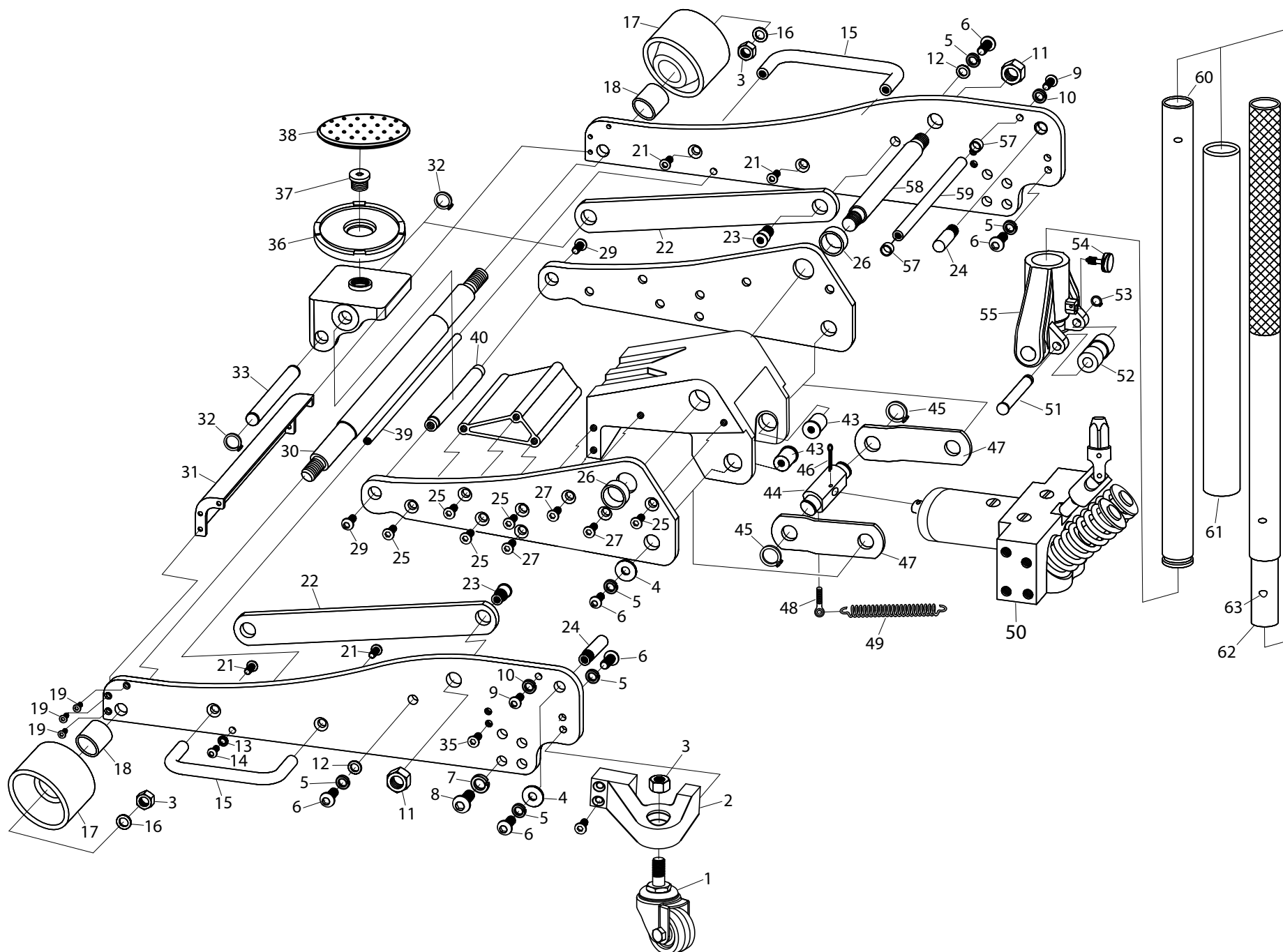


- Lift only dead weight. Do not move the jack while it is supporting a vehicle.
- Stay clear of lifted loads. Use approved safety stands to support the axles before making repairs. Do not use blocks or other extenders between the saddle and the load being lifted.
- Do not adjust the safety valve.

- 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.

Jack Parts List



Replacement Kits

No. 577805 Handle Kit

Item No.	Qty.	Description
60	1	Lower Handle
61	1	Handle Sleeve
62	1	Upper Handle
63	1	Handle Lock Clip

No. 577806 Wheels Kit

Item No.	Qty.	Description
3	2	Lock Nut M12
16	2	Washer
17	2	Front Wheel
18	2	Spacer
30	1	Axle

No. 577807 Casters Kit

Item No.	Qty.	Description
1	2	Rear Caster
3	2	Lock Nut M12

No. 577808 Saddle Kit

Item No.	Qty.	Description
36	1	Saddle
37	1	Saddle Screw
38	1	Rubber Pad

No. 577809 Hydraulic Unit

Item No.	Qty.	Description
7	8	Lock Washer
8	8	Bolt
46	1	Cotter Pin
50	1	Hydraulic Unit

No. 577810 Handle Pivot

Item No.	Qty.	Description
4	2	Washer
5	2	Lock Washer
6	2	Bolt
24	2	Handle Yoke Stud
51	1	Roller Pin
52	1	Roller
53	1	Retaining Ring
54	1	Handle Retaining Bolt
55	1	Handle Yoke

No. 577811 Side Handle

Item No.	Qty.	Description
15	1	Side Carrying Grip
21	2	Bolt

No. 577813 Handle Retaining Bolt

Item No.	Qty.	Description
54	1	Handle Retaining Bolt

No. 577814 Return Spring

Item No.	Qty.	Description
48	2	Return Spring Bolt
49	2	Return Spring

No. 577812 Hardware Kit

Item No.	Qty.	Description
2	2	Caster Mount
4	2	Washer
5	6	Lock Washer
6	6	Button Head Cap Screw
9	2	Button Head Cap Screw
10	2	Lock Washer
11	2	Nut
12	2	Washer
13	2	Lock Washer
14	2	Button Head Cap Screw
19	6	Button Head Cap Screw
22	2	Load Leveling Arm
23	2	Load Level Arm Bolt
25	10	Flat Socket Cap Screw
26	2	Spacer
27	6	Flat Socket Cap Screw
29	2	Button Head Cap Screw
31	1	Axle Cover
32	2	Retaining Ring
33	1	Pin
35	4	Button Head Cap Screw
39	1	Spacer Tube
40	1	Spacer
43	2	Lift Arm Nut
44	1	Load Block
45	2	Retaining Ring
46	1	Cotter Pin
47	2	Load Arm
57	2	Spacer
58	1	Main Lift Pin
59	1	Spacer Tube

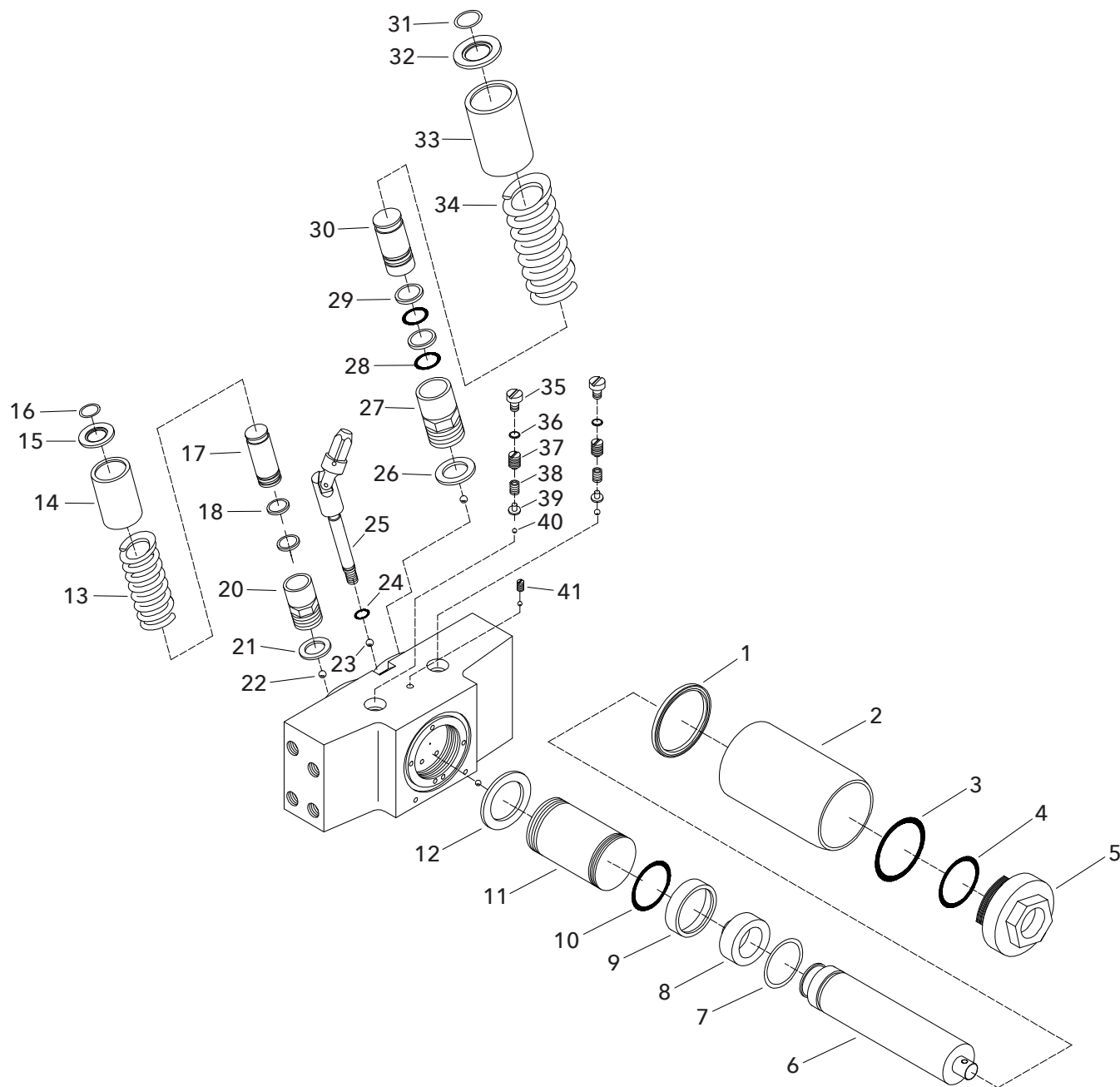


Get parts at OTCparts.com

This document contains product parts lists and information regarding operation and maintenance. Items listed in the parts list have been carefully tested and selected by OTC. Therefore, use only OTC replacement parts.

Product questions may be directed to the OTC Technical Service Department at (800) 533-6127.

Hydraulic Unit Parts List



Hydraulic Unit Replacement Kits

No. 577815 Seal Kit

Item No.	Qty.	Description
1	1	Reservoir Bottom Seal Ring
3	1	Reservoir Top Seal Ring
4	1	O-ring 29.5X3.55
10	1	O-ring 31X4.6
12	1	Cylinder Bottom Seal Ring
18	2	Circlip 15X10.6X1.25
21	1	Piston Housing Copper Seal Ring
24	1	O-ring 6.8X1.8
26	1	Piston Housing Copper Seal Ring
28	2	O-ring 17X2.65
29	2	Circlip 22X17.6X1.25
36	2	Seal Member 15X9.5X2

No. 577816 Release Screw Kit

Item No.	Qty.	Description
23	1	Steel Ball 6
24	1	O-ring 6.8X1.8
25	1	U-Joint

No. 577817 Pump Piston Kit

Item No.	Qty.	Description
13	1	Piston Return Spring
14	1	Dust Cover
15	1	Return Spring Holder
16	1	Circlip 15
17	1	Piston
18	2	Circlip 15X10.6X1.25
19	2	O-ring 10X2.65
20	1	Piston Housing
21	1	Piston Housing Copper Seal Ring
22	5	Steel Ball 5
26	1	Piston Housing Copper Seal Ring
27	1	Piston Housing
28	2	O-ring 17X2.65
29	2	Circlip 22X17.6X1.25
30	1	Piston
31	1	Circlip 22
32	1	Return Spring Holder
33	1	Dust Cover
34	1	Piston Return Spring

No. 577818 Reservoir Kit

Item No.	Qty.	Description
1	1	Reservoir Bottom Seal Ring
2	1	Reservoir
3	1	Reservoir Top Seal Ring
4	1	O-ring 29.5X3.55
5	1	Top Nut

No. 577819 Cylinder Kit

Item No.	Qty.	Description
1	1	Reservoir Bottom Seal Ring
3	1	Reservoir Top Seal Ring
4	1	O-ring 29.5X3.55
6	1	Piston Rod
7	1	Circlip 30
8	1	Piston Rod Base
9	1	Piston Rod Retainer
10	1	O-ring 31X4.6
11	1	Cylinder
12	1	Cylinder Bottom Seal Ring

No. 577820 Hardware Kit

Item No.	Qty.	Description
35	2	Relief Valve Cover Screw
36	2	Circlip 15X9.5X2
37	1	Relief Valve Set Screw
38	1	Relief Valve Spring
39	1	Spring Retainer
40	2	Steel Ball 4
41	1	Screw M6X8



Get parts at OTCparts.com

This document contains product parts lists and information regarding operation and maintenance. Items listed in the parts list have been carefully tested and selected by OTC. Therefore, use only OTC replacement parts.

Product questions may be directed to the OTC Technical Service Department at (800) 533-6127.

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.



CAUTION: To prevent personal injury, 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

CAUTION: 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. **CAUTION: 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:
Cracked or damaged housing; excessive wear, bending, or other damage; leaking hydraulic fluid; scored or damaged piston rod; malfunctioning swivel heads or adjusting screws; loose hardware; or 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	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.	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 seals (Kit No. 577815) or hydraulic unit (Kit No. 577809).
Jack lifts only partially	1. Too much or not enough oil.	1. Check oil level.
Jack advances slowly	1. Pump not working correctly. 2. Leaking seals.	1. Replace seals (Kit No. 577815) or hydraulic unit (Kit No. 577809). 2. Replace seals (Kit No. 577815) or hydraulic unit (Kit No. 577809).
Jack lifts load, but doesn't hold	1. Cylinder packing is leaking 2. Valve not working correct (suction, delivery, release, or bypass). 3. Air-locked system.	1. Replace seals (Kit No. 577815) or hydraulic unit (Kit No. 577809). 2. Inspect valves. Clean and repair seat surfaces. 3. Bleed system.
Jack leaks oil	1. Worn or damaged seals.	1. Replace seals (Kit No. 577815) or hydraulic unit (Kit No. 577809).
Jack will not retract	1. Release valve is closed.	1. Open or clean release valve.
Jack retracts slowly	1. Cylinder damaged internally. 2. Link section is binding.	1. Send jack to OTC authorized service center for repair; refer to OTC Form No. 104060. 2. Lubricate or replace link section.