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Form No. 554043

**Parts List &
Operating Instructions
for:**

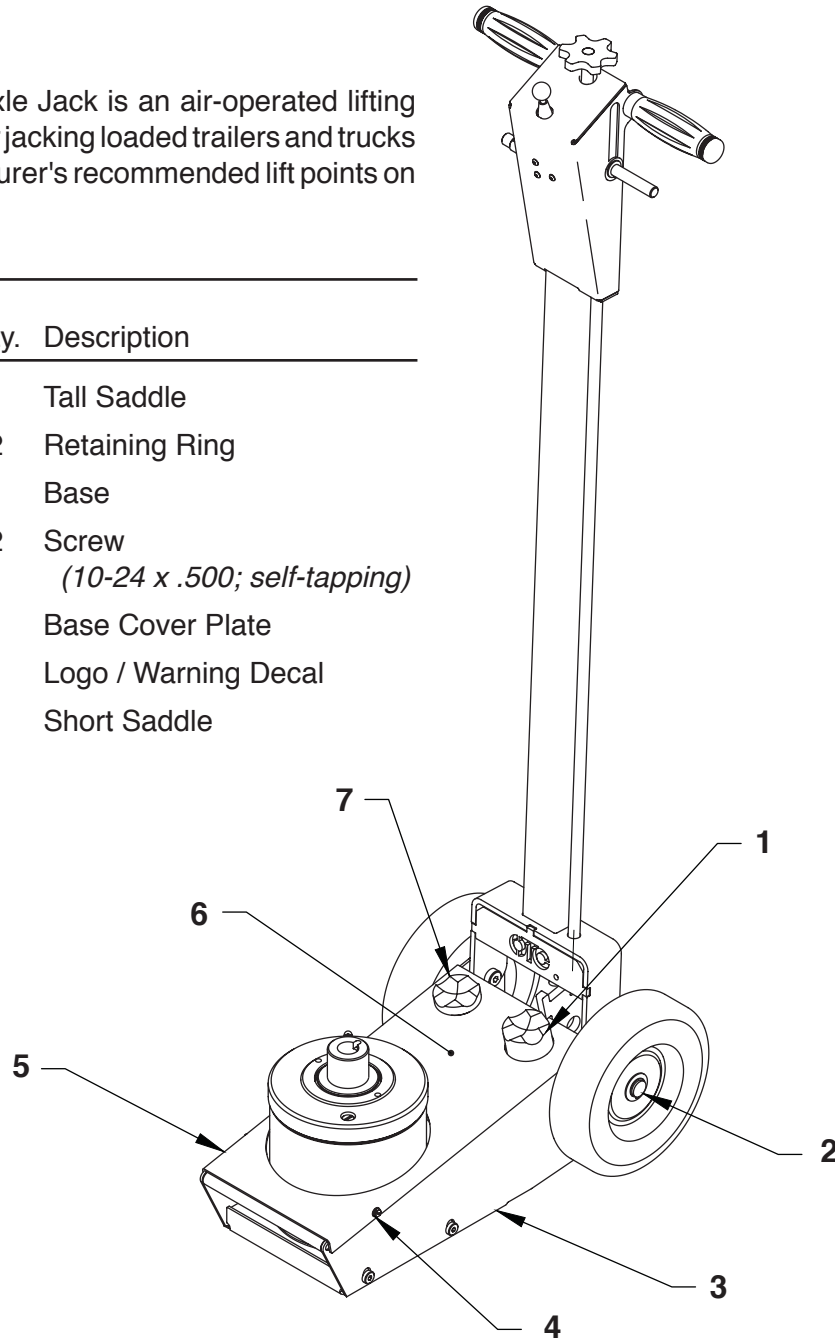
5092

Under Axle Jack

Max. Capacity: 27.5 Tons

No. 5092 Under Axle Jack is an air-operated lifting device designed for jacking loaded trailers and trucks using the manufacturer's recommended lift points on the chassis.

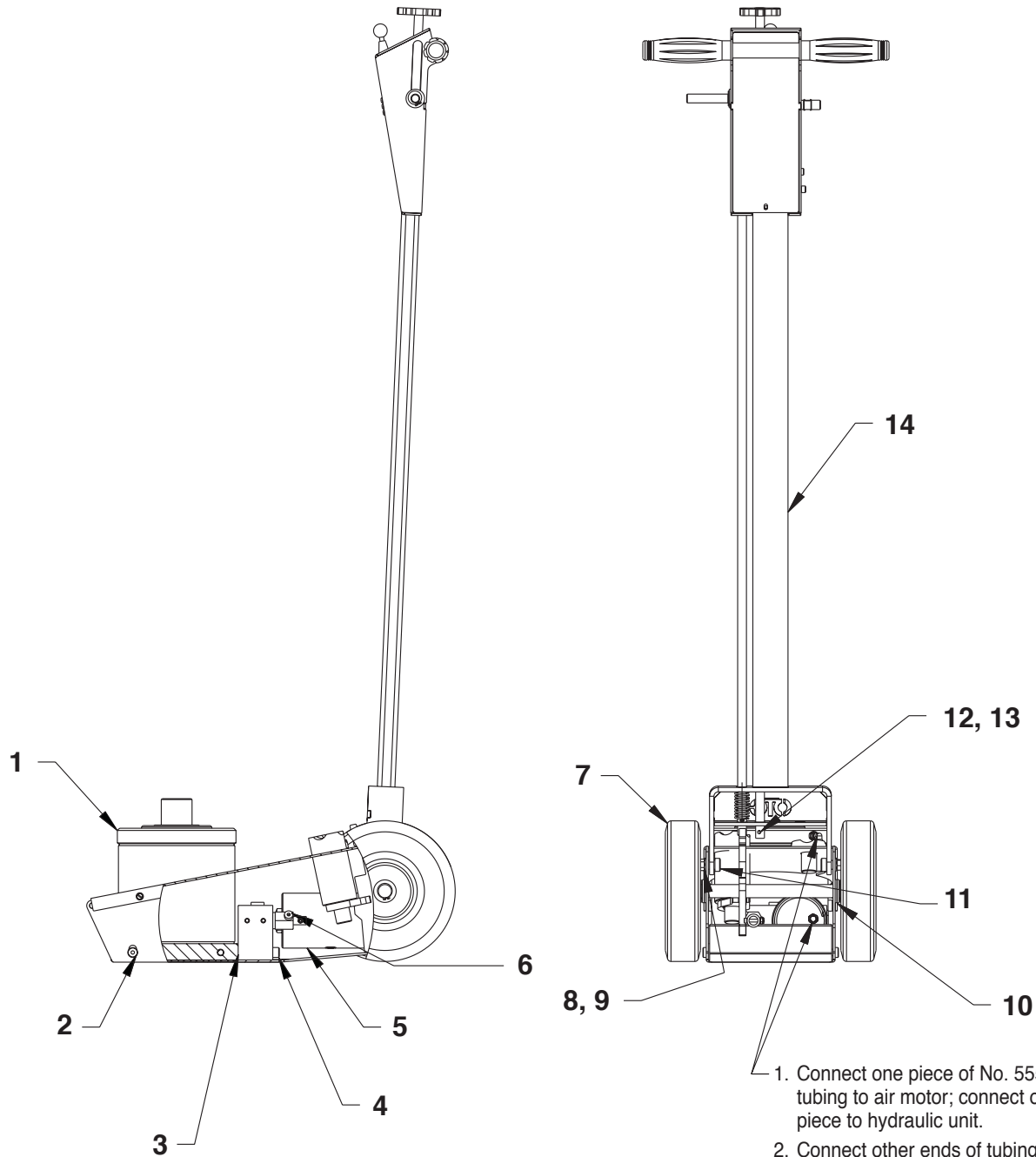
Item No.	Part No.	Qty.	Description
1	542077	1	Tall Saddle
2	14855	2	Retaining Ring
3	542068	1	Base
4	14456	2	Screw (10-24 x .500; self-tapping)
5	542073	1	Base Cover Plate
6	554042	1	Logo / Warning Decal
7	542076	1	Short Saddle



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Sheet No. 1 of 4

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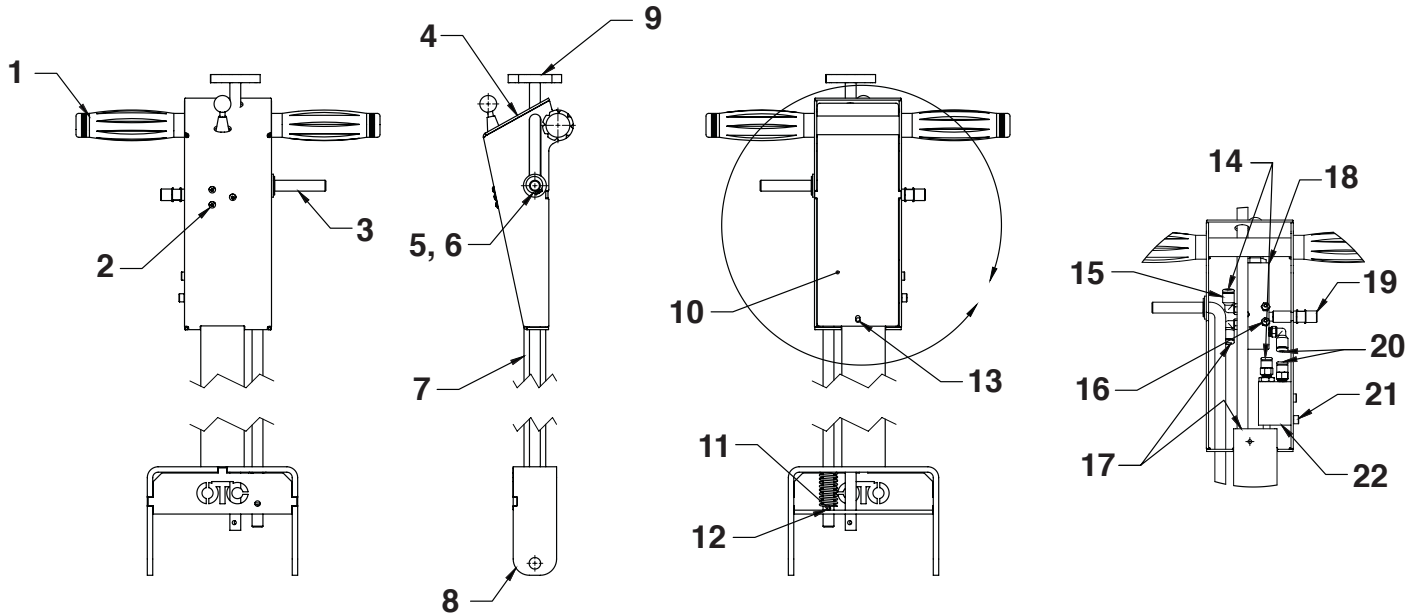


1. Connect one piece of No. 555032 tubing to air motor; connect other piece to hydraulic unit.
2. Connect other ends of tubing to split end of No. 554212 "Y" fitting; connect single end of "Y" fitting to No. 555032 tubing from handle.

Item No.	Part No.	Qty.	Description
1	542069	1	Hydraulic Assembly
2	553976	4	Socket Hd. Cap Screw (.375-16)
3	18996	2	O-ring
4	10435	2	Socket Hd. Cap Screw (apply Loctite®; torque to 30 ft-lbs)
5	542061	1	Air Pump & Motor Assembly (parts list on sheet 3)
6	552895	1	Release Shaft
7	542072	2	Wheel

Item No.	Part No.	Qty.	Description
8	10204	2	Hex Nut (3/8-16)
9	10247	2	Lockwasher (3/8)
10	15953	6	Washer
11	542079	2	Shoulder Bolt
12	220221	2	Metric Hex Hd. Cap Screw
13	554210	2	Locknut (M4 x .70)
14	542062	1	Handle Assembly (parts list on sheet 2)

No. 542062 Handle Assembly

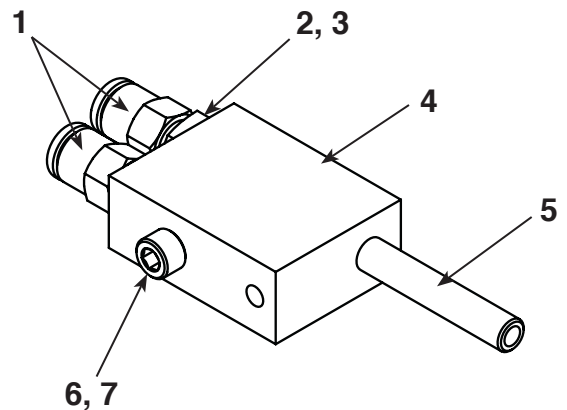


Item No.	Part No.	Qty.	Description
1	18267	2	Handle Grip
2	553975	3	Button Hd. Cap Screw (8-32)
3	542070	1	Handle Lock Rod
4	554333	1	Control Decal
5	RS-22200-600	1	Retaining Ring
6	12004	1	Washer (1/2")
7	554332	1	Warning Decal
8	542063	1	Handle
9	542067	1	Release Knob
10	542064	1	Cover Plate
11	553974	1	Compression Spring
12	11418	1	Roll Pin

Item No.	Part No.	Qty.	Description
13	14456	1	Screw (10-24 x .500)
14	555032	9.25"	Tubing
15	553973	3	Push-to-Connect Fitting
16	554210	3	Locknut (M4 x .70)
17	555032	44"	Tubing
18	554112	1	Valve
19	554110	1	Nipple (.250 NPT x .125 NPT)
20	555032	2.5"	Tubing
21	554114	1	Socket Hd. Cap Screw
22	553772	1	Vacuum Generator Assembly (see parts list below)

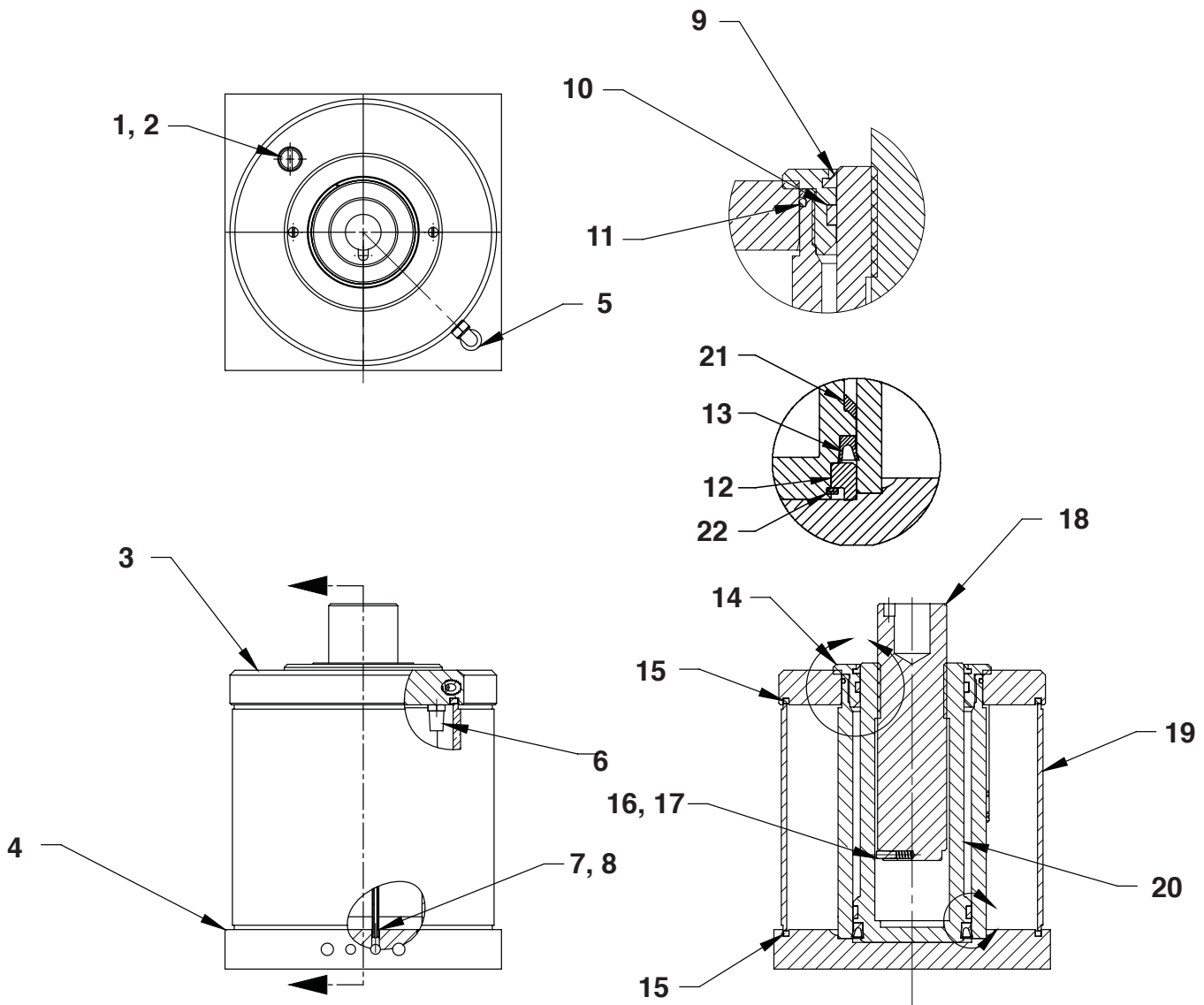
No. 553772 Vacuum Generator Assembly

Item No.	Part No.	Qty.	Description
1	554113	2	Push-to-Connect Fitting (8 mm)
2	553770	1	Venturi Nozzle
3	10301	1	O-ring (nitrile)
4	553769	1	Venturi Valve Block
5	553771	1	Nozzle Tube
6	554114	1	Socket Head Cap Screw
7	11437	1	O-ring (fluoroelastomer)



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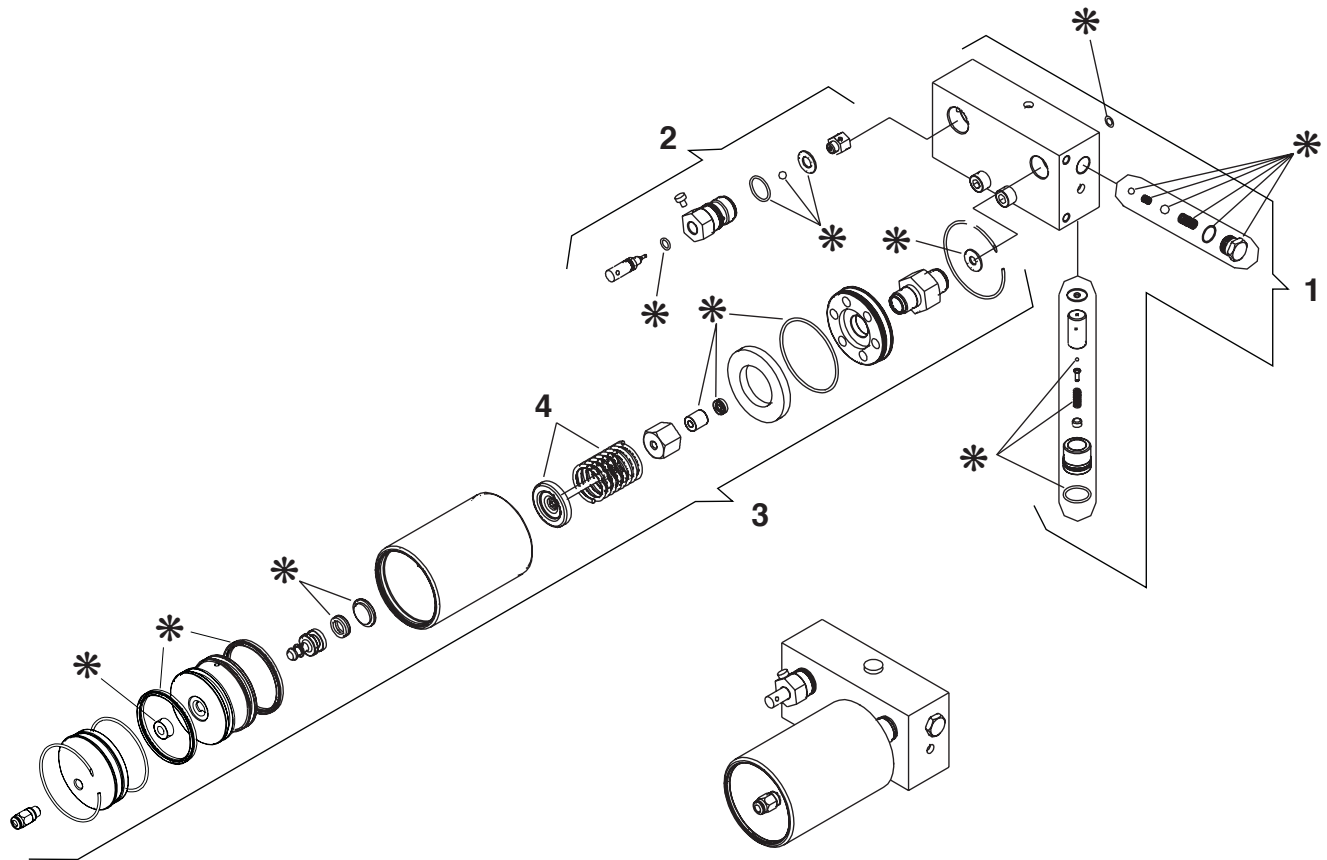
No. 542069 Hydraulic Assembly



Item No.	Part No.	Qty.	Description
1	548125	1	Fill Plug
2	270051	1	O-ring
3	548124	1	Reservoir Cap
4	542080	1	Base
5	553973	1	Push-to-Connect Fitting
6	553066	1	Exhaust Muffler
7	221280	1	Screen Filter
8	501236	1	Filter Retainer
9	548128	1	Seal
10	548126	1	Wear Ring
11	553093	1	O-ring
12	558437	1	Piston Wear Ring





Item No.	Part No.	Qty.	Description
13	554207	1	U-cup
14	548127	1	Gland Nut <i>(torque to 100 ft-lbs)</i>
15	548129	2	Seal
16	15141	1	Spring
17	510274	1	Dowel Pin
18	542085	1	Extension Screw
19	548123	1	Reservoir Tube
20	542084	1	Piston
21	558435	1	Stop Ring
22	558438	1	External Retaining Ring

Air Motor Assembly



Item No.	Part No.	Description
1	555014	Block Assembly
2	555015	Release Valve
3	555016	Air Motor
4	555017	Air Motor Plunger Assembly
	555018	Seal Kit (<i>contains all balls, springs, and guides</i>)

Safety Precautions

-  **CAUTION:** To prevent personal injury and damage to equipment,
- Study, understand, and follow all instructions before operating this device.
 - Wear protective eyewear that meets the requirements of ANSI Z87.1 and OSHA.
 - Do not exceed the rated capacity of the jack.
 - Use the jack only on a hard, level surface.
 - This jack is a lifting device only. Immediately after lifting, support the vehicle with appropriate means.
 - Do not move or dolly the vehicle while it is on the jack.
 - Lift only on areas of the vehicle as specified by the vehicle manufacturer.
 - No alterations shall be made to this product.
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Operating Instructions

1. Lubricate the air inlet on the jack with 1/2 oz. clean lubricating oil; lack of oil can cause pump malfunction.
2. Connect the air supply. (90 – 175 psi of clean, dry air is required for the capacity of this jack.)
3. Set the vehicle's parking brakes and / or block the wheels.
4. Position the jack under the vehicle. **Important: Use the vehicle manufacturer's recommended lifting points on the chassis.**
5. Close the release valve by turning the release knob clockwise (CW) until snug.
6. Press the air valve lever to raise the jack saddle until it touches the vehicle. Check the placement of the saddle lugs. Finish lifting the vehicle.
7. Place approved safety stands under the vehicle at points that will provide stable support. Before making repairs, lower the vehicle onto the safety stands by SLOWLY and carefully turning the release knob counterclockwise (CCW).

Bleeding Air from the Under Axle 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 release knob all the way counterclockwise (CCW).
2. Connect the air supply to the jack.
3. Press the air valve lever, and cycle the jack five or more times.
4. Close the release valve by turning the release knob all the way clockwise (CW) until snug.
5. Press the air valve lever until the ram is fully extended.
6. Lower the ram by turning the release knob all the way CCW. Move the air valve lever to the retract position (to the left).

Preventive Maintenance

Important: The greatest single cause of failure in hydraulic units is dirt. Keep the under axle 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 moving parts.
3. Replace the oil in the reservoir at least once per year. To check the oil level, disconnect the air supply, place the under axle jack on level ground, and completely retract the ram. Remove the filler plug / dipstick, wipe it clean, and reinstall it, threading it in all the way. Remove the dipstick again and note the oil level. The oil level should be between the two marks on the dipstick. Add or remove approved anti-wear hydraulic jack oil as needed, and install the dipstick. **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. 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
Erratic action	<ol style="list-style-type: none"> 1. Air in system. 2. Oil viscosity too high. 3. Internal leakage in cylinder. 4. Cylinder sticking or binding. 	<ol style="list-style-type: none"> 1. To bleed air, place jack on base with ram retracted, open release valve knob, and cycle ram five times. 2. Change to a lower viscosity oil. 3. Replace worn packings. Look for excessive contamination or wear. 4. Look for dirt, gummy deposits, or leaks. Check for misalignment, worn parts, or defective packings.
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 power unit.
Jack lifts only partially	<ol style="list-style-type: none"> 1. Not enough oil. 	<ol style="list-style-type: none"> 1. Check oil level.
Jack advances slowly	<ol style="list-style-type: none"> 1. Low air pressure. 2. Seals are leaking. 3. Pump not working correctly. 	<ol style="list-style-type: none"> 1. Adjust air pressure to 90–175 psi. 2. Send jack to OTC authorized service center for repair. 3. Send jack to OTC authorized service center for repair.
Jack lifts load, but does not hold	<ol style="list-style-type: none"> 1. Cylinder packing is leaking. 2. Valve not working correctly (delivery, release, or bypass). 3. Air-locked system. 	<ol style="list-style-type: none"> 1. Replace seals. 2. Send jack to OTC authorized service center for repair. 3. Bleed system.
Jack leaks oil	<ol style="list-style-type: none"> 1. Worn or damaged seals. 	<ol style="list-style-type: none"> 1. Send jack to OTC authorized service center for repair.
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. 	<ol style="list-style-type: none"> 1. Send jack to OTC authorized service center for repair.
Sound of air leaking when lever is in retract position.	<ol style="list-style-type: none"> 1. This is normal. 	