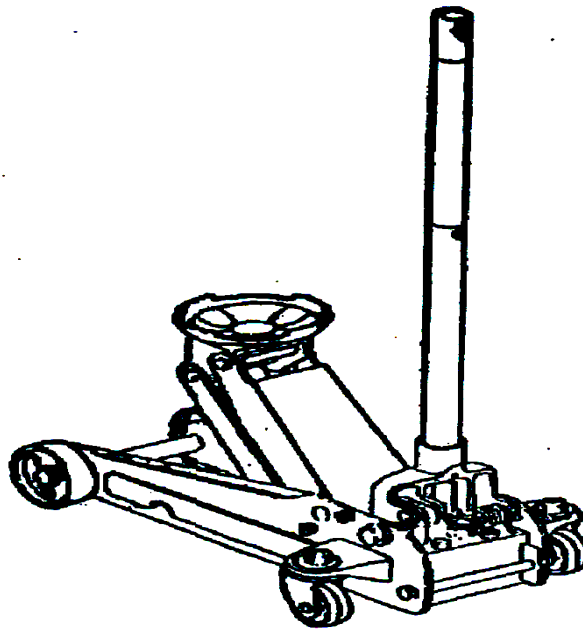




2-1/4 TON FLOOR JACK

Model 4172

ASSEMBLY and OPERATING INSTRUCTIONS



3491 Mission Oaks Blvd., Camarillo, CA 93011
Visit our Web site at <http://www.harborfreight.com>

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For technical questions and replacement parts, please call 1-800-444-3353

Specifications

Lifting Capacity	2-1/4 Tons (4500 Lbs.)
Minimum Saddle Height	5"
Maximum Saddle Height	19-1/4"
Handle Length	39-1/2"
Chassis Dimensions	25-1/2" L x 13-3/4" W
Weight	69 Lbs.

Save This Manual

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

Safety Warnings and Precautions

WARNING: When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

Read all instructions before using this tool!

1. **Keep work area clean.** Cluttered areas invite injuries.
2. **Observe work area conditions.** Do not use machines or power tools in damp or wet locations. Don't expose to rain. Keep work area well lighted.
3. **Keep children away.** Children must never be allowed in the work area. Do not let them handle the Jack.
4. **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
5. **Use the right tool for the job.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. There are certain applications for which this tool was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
6. **Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
7. **Use eye protection.** Always wear ANSI approved impact safety goggles.
8. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machines.
9. **Maintain tools with care.** Keep tools clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool periodically, and if damaged, have it repaired by an authorized technician. The handle must be kept clean, dry, and free from oil and grease at all times.

10. **Stay alert.** Watch what you are doing, use common sense. Do not operate any tool when you are tired.
11. **Check for damaged parts.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if the handle and pedal do not operate properly.
12. **Guard against electric shock.** Prevent body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerator enclosures.
13. **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Harbor Freight Tools.
14. **Do not operate tool if under the influence of alcohol or drugs.** Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.
15. **Maintenance.** For your safety, maintenance should be performed regularly by a qualified technician.
16. **Jack Capacity.** Never exceed the Jack's capacity of 4500 Lbs. Check the vehicle's owner's manual to determine the actual gross weight of your vehicle before attempting to lift it.
17. **Never ride on the Jack.** Never ride on the Jack, and never have people or pets in the vehicle you are raising.
18. **Only use Jack to raise vehicle.** After raising the vehicle, use jack stands to keep the vehicle suspended for periods of time. Do not work on the vehicle while it is up on the Jack. The Jack is designed for lifting the vehicle only
19. **Not to be used for any aircraft purposes.**

Warning!! Stand clear of the Jack when raising or lowering a vehicle.

The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Unpacking

When unpacking, check to make sure the parts listed on page 6 are included. If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual as soon as possible.

Refer to the Assembly Drawing on page 7.

Assembly

1. Insert the **Lower Handle (#11-7)** into the **Upper Handle (#11-6)** and secure it with a **Screw (#11-9)**.
2. Insert the bottom of the **Upper Handle (#11-6)** into the **Handle Socket (#10-3)** and secure it with the **Screw (#11-1)**.
3. Set the **Saddle Assy. (#2-1)** into the hole on the **Arm Assy. (#2-2)**.

Operation

Warning!! Only operate this Jack on a level, flat, hard surface capable of supporting the weight of the Jack, the vehicle, and the tools. Use of an uneven or weak surface can cause damage to the floor, or cause the vehicle to become unstable and potentially fall, causing serious damage or injury.

Warning!! Consult the vehicle's manual for the advised lift points. Only use the advised lift points when using this Jack. Lifting in other areas can cause damage to the vehicle and cause an unplanned, sudden lowering of the vehicle.

Warning!! Whenever the vehicle is to remain elevated more than momentarily, install appropriate Jack Stands (not included) under the vehicle. Never work under the vehicle unless jack stands have been positioned.

Warning!! Before lifting or lowering a vehicle with the Jack, block each Jack wheel to stop it from moving. Block the vehicle's tires that remain on the ground.

Warning!! When raising or lowering the vehicle make sure no people are in the immediate area.

Warning!! Never exceed the Jack's maximum capacity of 4500 Lbs.

Warning!! Put the vehicle in gear or park and engage the emergency brake before jacking the vehicle.

Raising the vehicle.

1. Position the Jack so that the **Saddle (#2-1)** is at one of the recommended lifting points. Put shims under each wheel of the Jack. Turn the **Lower Handle (#11-7)** clockwise to lock the release valve. Pump the **Lower Handle (#11-7)** until the **Saddle (#2-1)** fully engages the lifting point, then continue to pump the Jack to the needed height.
2. Use jack stands (not included) to secure the vehicle. Use your vehicle's owner's manual to determine the specified points to safely position jack stands.
3. Once the vehicle is safely positioned over the jack stands, slowly turn the **Lower Handle (#11-7)** counterclockwise to open the release valve to lower the vehicle onto the jack stands.
4. To determine if the vehicle is safely up on jack stands, stand away and attempt to gently rock the vehicle. If it sways and seems unstable, repeat the procedure and re-position the jack stands. Test again.
5. Completely lower the Jack and remove it from under the vehicle.

Operation (continued)

Lowering Vehicles.

1. First, clear any tools or equipment from under the vehicle. Make sure there are no obstructions.
2. Position the Jack so that the **Saddle (#2-1)** is at one of the recommended lifting points. Turn the **Lower Handle (#11-7)** clockwise to lock the release valve. Pump the **Lower Handle (#11-7)** until the **Saddle (#2-1)** fully engages the lifting point, then continue to pump the Jack above the jack stands.
3. Remove the jack stands.
4. Slowly turn the **Lower Handle (#11-7)** counterclockwise to open the release valve, and gently to lower the vehicle.
5. Pull the Jack clear of the vehicle and store in a safe place.

If the Jack is not performing properly, it may have air in the hydraulic system and need to be bled.

Bleeding and filling the Jack with hydraulic oil.

1. Place the Jack on a flat, level, solid surface.
2. If just filling the Jack, open the **Oil Plug (#6-2)** and check the oil. Fill to the top with a high quality hydraulic oil if necessary.
3. If bleeding, with the **Oil Plug (#6-2)** removed, fully open the release valve by turning the **Lower Handle (#11-7)** counter-clockwise.
4. Apply pressure on the **Saddle (#2-1)**, holding it down. Quickly crank the **Lower Handle (#11-7)** ten times. This will bring all the air out of the system. Continue cranking until no more air bubbles appear. Fill to the top with a high quality hydraulic oil if necessary. Repeat if necessary.
5. Replace the **Oil Plug (#6-2)**.
6. Test the Floor Jack. Make sure it is functioning properly before attempting to lift another vehicle. Crank the **Saddle (#2-1)** up and down several times to make sure it is working properly. If not, repeat the above process.

General Maintenance

1. Keep the Jack clean and dry.
2. Periodically lubricate the caster wheels with high quality grease.
3. Periodically dismantle and lubricate the handle assembly and all lift arm linkages.
4. Watch for hydraulic oil leaks. Fill oil if necessary. If leaks persist, contact an authorized service technician.
5. If the Jack does not lift to satisfaction, take it to an authorized service technician.

Parts List 1

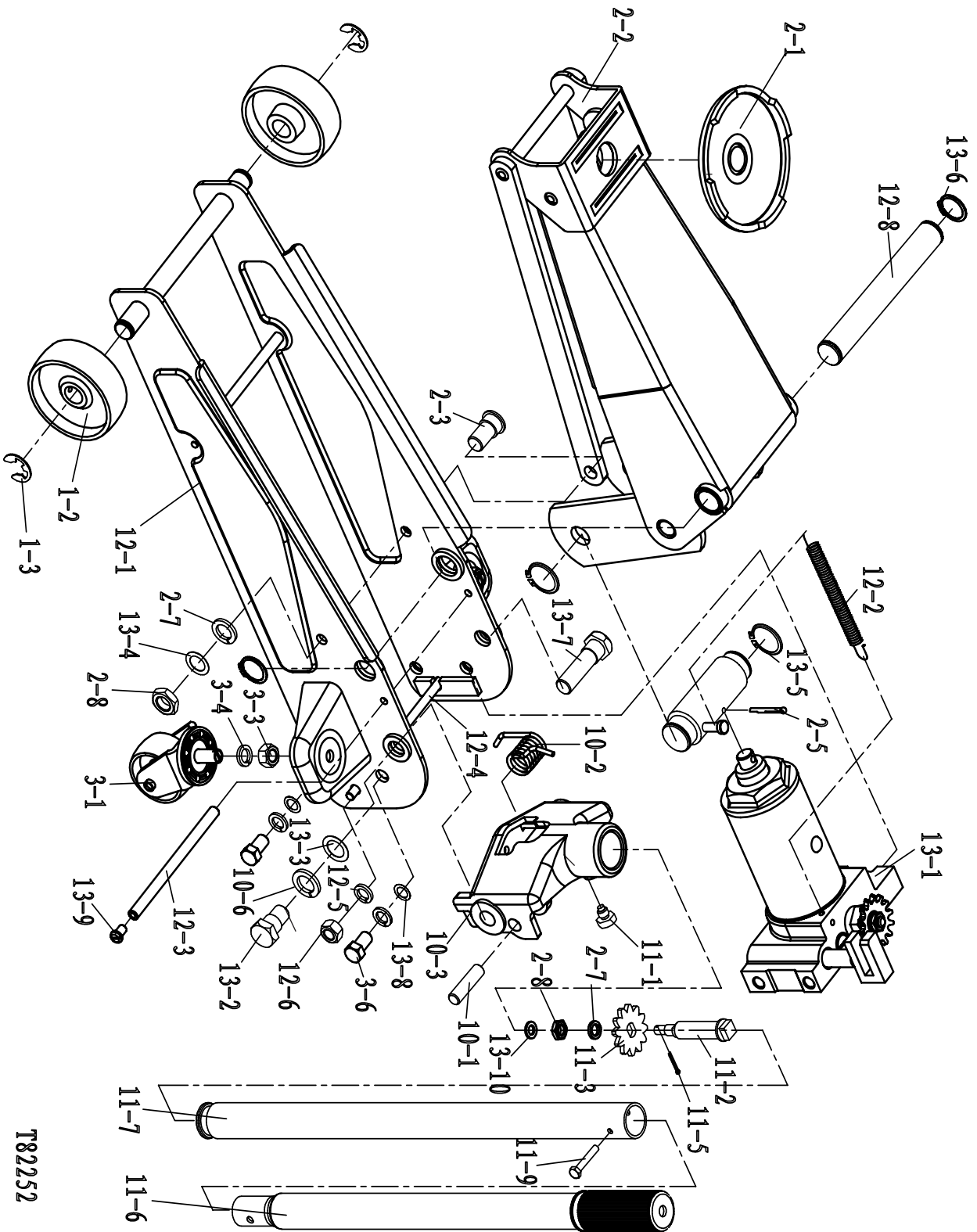
Part	Description	Qty.	Part	Description	Qty.
1--2	FRONT WHEEL	2	11--6	UPPER HANDLE	1
1--3	SPRING WASHER 15	2	11--7	LOWER HANDLE	1
2--1	SADDLE ASSEMBLY	1	11--9	SCREW M6X35	1
2--2	ARM ASSEMBLY	1	12--1	WALL PLATE ASSEMBLY	1
2--3	LINK BOLT	2	12--2	RETURN SPRING	1
2--5	COTTER PIN 4X40	1	12--3	STAY SHAFT	1
2--7	SPRING WASHER 10	3	12--4	SHAFT	1
2--8	NUT M10	3	12--5	SPRING WASHER 8	2
3--1	REAR WHEEL ASSEMBLY	2	12--6	NUT 8	2
3--3	NUT M12	4	12--8	SHAFT	1
3--4	SPRING WASHER 12	6	13--1	CYLINDER ASSEMBLY	1
3--6	SCREW M12X20	2	13--2	LEFT BOLT	1
10--1	PIN	1	13--3	WASHER	2
10--2	TORSION SPRING	1	13--4	WASHER	2
10--3	HANDLE SOCKET	1	13--5	RETAINING RING 20	2
10--6	SPRING WASHER 18	2	13--6	RETAINING RING 22	2
11--1	SCREW	1	13--7	RIGHT BOLT	1
11--2	GEAR SHAFT	1	13--8	WASHER	4
11--3	GEAR	1	13--9	SCREW M6X10	2
11--5	COTTER PIN	1	13--10	SPRING WASHER6	1

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

NOTE: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.

Assembly Drawing 1



T82252

Parts List 2

Part	Description	Qty.	Part	Description	Qty.
4--1	O-RING	1	6--4	SCREW	1
4--2	TOP CUP	1	7--1	PLUNGER	1
4--3	PISTON ROD	1	7--2	BACK-UP RING	1
4--4	RETAINER PISTON	1	7--3	O-RING	1
4--5	BOWL WASHER	1	8--1	PLUG SCREW	1
4--6	O-RING	1	8--2	O-RING	1
4--7	CYLINDER	1	8--3	SPRING	1
4--8	BASE PLATE WASHER	1	8--4	SPRING BASE	1
4--9	U-WASHER	1	8--5	BALL 3.0000	1
4--10	O-RING	1	8--6	WALVE CAP	1
5--1	BASE PLATE	1	9--1	WINDING GEAR WHEEL	1
5--2	PLUG SCREW	1	9--2	O-RING	1
5--3	WASHER	1	9--3	RELEASE VALVE NUT	1
5--4	SPRING	1	9--4	RELEASE VALVE SHAFT	1
5--5a	BALL 9.0000	1	9--5	RELEASE VALVE WICK	1
5--5b	BALL 6.0000	2	9--7	ALUMINUM WASHER	1
5--6	FILTER OIL TUBE	1	9--8	SQUARE WASHER	1
6--1	OIL TANK	1	9--9	STEEL WASHER	1
6--2	OIL PLUG	1	9--10	WASHER 10	1
6--3	WASHER	1	9--11	TANK NUT M10	1

Assembly Drawing 2

