CENTRAL HYDRAULICS

3 TON HYDRAULIC FLOOR JACK

Model 54877

ASSEMBLY and OPERATING INSTRUCTIONS





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

TO PREVENT SERIOUS INJURY, READ AND UNDERSTAND ALL WARNINGS AND INSTRUCTIONS BEFORE USE.

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

SPECIFICATIONS

Capacity	6000 lbs
Height Range	4-1/2"H to 19-3/8" H
Saddle Size	4-1/4" Square
Saddle Swivel	360 degrees
Overall Dimensions	24"L x 14-3/8"W x 4-1/2"H
Front Wheel Diameter	2"W X 3-1/2" DIA.
Rear Wheel Diameter	1"W X 2-5/16" DIA.
Weight	81.9 lbs.
Material	Plate Steel

UNPACKING

When unpacking, check to make sure all the parts shown on the Parts Lists on page 10 and 11 are included. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

SAVE THIS MANUAL

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

GENERAL SAFETY PRECAUTIONS

WARNING!

READ AND UNDERSTAND ALL INSTRUCTIONS
Failure to follow all instructions listed in the following
pages may result in electric shock, fire, and/or serious injury.
SAVE THESE INSTRUCTIONS

GENERAL SAFETY RULES

- 1. **Keep your work area clean and well lit.** Cluttered work areas invite accidents.
- 2. **Do not operate tools and equipment in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools and equipment create sparks which may ignite flammables.
- 3. **Keep bystanders, children, and visitors away while operating tools and equipment.** Distractions can cause you to lose control. Protect others in the work area. Provide barriers or shields as needed.
- 4. Stay alert. Watch what you are doing, and use common sense when operating a power tool. Do not use tools and equipment while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
- 5. Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
- 6. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.
- 7. Use safety equipment. Always wear ANSI approved safety impact goggles, safety shoes/boots, and heavy duty work gloves when using this product.
- 8. **Do not force the tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
- 9. Store idle tools and equipment out of reach of children and other untrained persons. Tools and equipment are dangerous in the hands of untrained users.
- 10. **Maintain tools with care.** Do not use a damaged tool. Tag damaged tools "Do not use" until repaired.
- 11. **If damaged, have the tool serviced before using.** Check for loose screws, misalignment or binding of moving parts, loose mounting, cracked or broken parts, low hydraulic oil level, and any other condition that may affect its safe operation. Many accidents are caused by poorly maintained tools.
- 12. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.

13. When servicing a tool, use only identical replacement parts. Follow instructions in the "Inspection, Maintenance, And Cleaning" section of this manual. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of injury.

SPECIFIC SAFETY RULES

- 1. WARNING! Do not exceed the maximum lift capacity (3 Tons / 6,000 pounds) for this Floor Jack. Overloading the Jack could cause serious personal injury and/or property damage.
- 2. **The Floor Jack is designed for intermittent use only.** Do not use the Jack to support a vehicle over extended periods of time. The duration of the lifting job should be kept as short as possible.
- 3. **Maintain labels and nameplates on the Floor Jack.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- 4. Prior to using the Bottle Jack, make sure to read and understand all warnings, safety precautions, and instructions as outlined in the manufacturer's instruction manual for the vehicle (or object) you will lift.
- 5. When lifting only one wheel, make sure to support the load immediately with one jack stand (not included) placed under the side of the vehicle being lifted. Align the saddle of the jack stand directly under the vehicle's <u>seam</u> or a recommended lifting point.
- 6. When lifting the entire front end or rear end of a vehicle, make sure to support the load immediately with two jack stands. Align the saddles of the jack stands directly under the vehicle's <u>frame</u> or recommended lifting points. Also make sure the jack stands are adjusted at the same height.
- 7. Make sure the Floor Jack is used only on a dry, oil/grease free, flat, level, ground surface capable of supporting the weight of the vehicle being lifted and any additional tools and equipment.
- 8. **Do not work under the vehicle without properly supporting the vehicle with jack stands.** Make sure the load and jack stands are stable before getting under a vehicle.

- 9. Use the Floor Jack only on vehicles whose frames have lifting points (on its seam or frame) capable of aligning with the Elevating Screw of the Jack.
- 10. **Avoid dangerous oncoming traffic.** Always use the Floor Jack as far away from the roadside as possible.
- 11. **Do not use the Floor Jack with the vehicle's engine running.** Make sure to place the vehicle's transmission in "Park" (if automatic) or "1st Gear" (if manual). Then set the emergency brake, and block the tires opposite the tire being lifted.
- 12. Industrial applications must follow OSHA requirements.
- 13. Always keep hands, fingers, and feet away from all moving parts of the Floor Jack when applying or releasing a load. Remain clear of the vehicle being raised or lowered. People and animals should be kept at a safe distance when using the Jack.
- 14. **Use extreme caution when applying or releasing a load.** Never allow the load to suddenly release. Slowly and carefully apply and release the load.
- 15. **Do not allow anyone in the vehicle while using the Bottle Jack.** Keep all bystanders a safe distance away from the vehicle.
- 16. Never leave the Floor Jack unattended when the Jack is under a load.
- 17. Never support both ends of the vehicle at the same time.
- 18. Before lowering the Floor Jack, make sure tool trays, jack stands, and all other tools and equipment are removed from under the vehicle.
- 19. Do not stand on the Floor Jack as it may tip, causing personal injury.
- 20. If changing a damaged tire, make it easier to remove the lug nuts by slightly loosening the lug nuts *before* raising the tire off the ground.
- 21. **This Floor Jack is not to be used for aircraft purposes.** Never modify the Floor Jack in an attempt to use it for a purpose it was not designed for.
- 22. WARNING! The warnings, precautions, and instructions discussed in this manual cannot cover all possible conditions and situations that may occur. The operator must understand that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

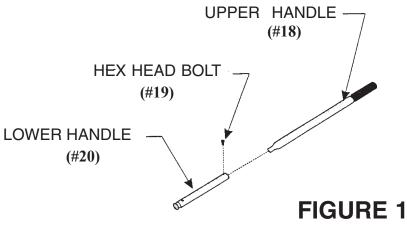
ASSEMBLY

You will need a 3/8" and an 11/16" wrench to complete assembly.

Step 1. Take LOWER HANDLE (#20) and remove the HEX HEAD BOLT (#19).

Step 2: Insert the fitted end of the UPPER HANDLE (#18) into LOWER HANDLE. Rotate HANDLES until the bolt holes line up in the center of the Handle Assembly.

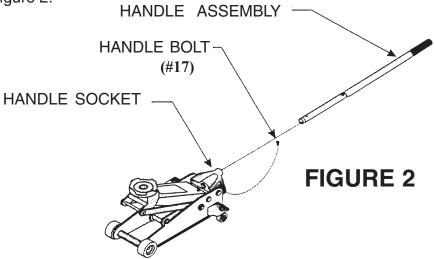
Step 3: Insert HEX HEAD BOLT (#19) and tighten with a 3/8" wrench as shown in Figure 1.



Step 4: Remove HANDLE BOLT (#17) from the HANDLE SOCKET.

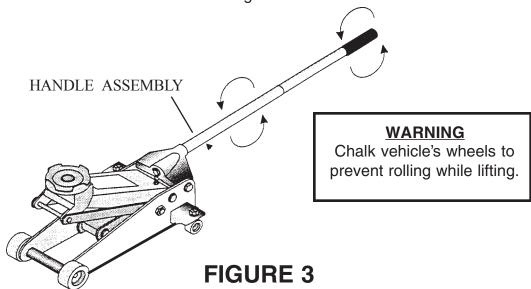
Step 5: Insert Handle Assembly into HANDLE SOCKET and turn Handle Assembly clockwise until it engages the pressure release gear located underneath the HANDLE SOCKET.

Step 6: Thread HANDLE BOLT into HANDLE SOCKET and tighten with 11/16" wrench as shown in Figure 2.

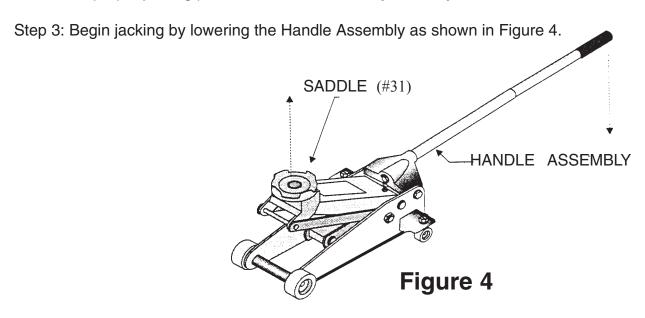


OPERATION

Step 1: Twist the Handle Assembly clockwise to close the pressure release valve as shown in Figure 3.



Step 2: Maneuver the Floor Jack underneath the vehicle. Check the vehicle's Owners Manual for proper jacking points. Do not lift vehicle by the body.



Step 4: Lift Handle Assembly as high as clearance allows.

Step 5: Repeat Steps 3-4 until vehicle is at desired height. Do not overextend the jack.

Step 6: Place jack stands underneath vehicle at specified points. Refer to the vehicle's Owners Manual for proper jack stand placement locations.

Step 7: Slowly twist Handle Assembly counterclockwise. This will lower the vehicle onto the jack stands.

WARNING:

Watch for movement of vehicle or jack stands as vehicle is lowered. If any movement occurs, jack vehicle up and adjust jack stands properly.

Step 8: Completely lower the Floor Jack and remove from underneath the vehicle.

CAUTION:

When not in use, make sure pressure is released by turning Handle Assembly fully counterclockwise.

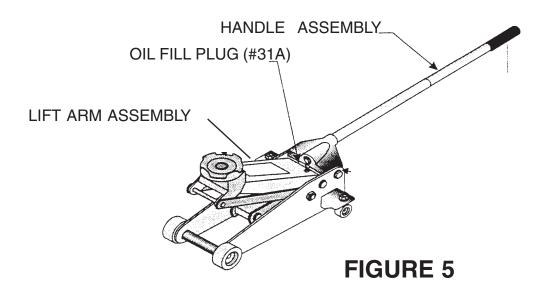
This will prolong the life of the jack.

Step 9: To make sure vehicle is stable, stand away and attempt to rock the vehicle. If movement is detected, jack up the vehicle and adjust jack stands properly. Test again.

Purging the air from the hydraulic system and filling the floor jack with oil

NOTE: If the Floor Jack stops working it may be low on oil or there may be air trapped in the hydraulic system.

- Step 1: Turn the Handle 1-1/2 turns counterclockwise to lower the Floor Jack.
- Step 2: Remove the FILL PLUG (#31A), shown on page 9 Figure # 5, It is located in the gap between the Lift Arm Assembly (#30) and the Handle Socket. You can remove it using a flat head screw driver.
- Step 3: Rapidly pump the Handle Assembly several times to purge air from the hydraulic system.
- Step 4: Close the release valve by turning the Handle Assembly completely clockwise.
- Step 5: Top off the pump with hydraulic oil if needed and replace the Oil Fill Plug.



Maintenance

NOTE: Other than the maintenance steps mentioned in this manual, all tool service must be performed only by qualified service technicians. Service or maintenance performed by unqualified personnel could result in a risk of injury. Lubricate the Handle Assembly, Handle Socket, Lift Arm, Wheels, and Lift Arm Linkage before first use and at least twice per month (more often during heavy use) as shown in Figure 6.

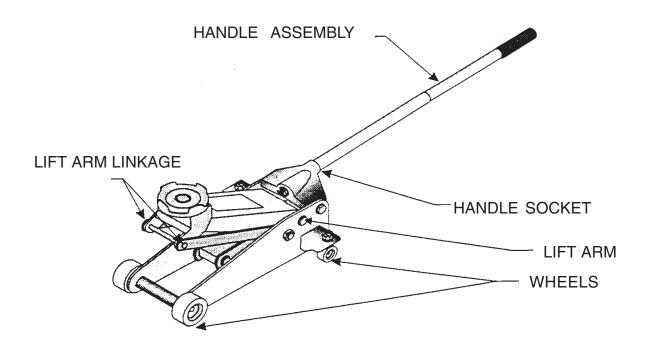
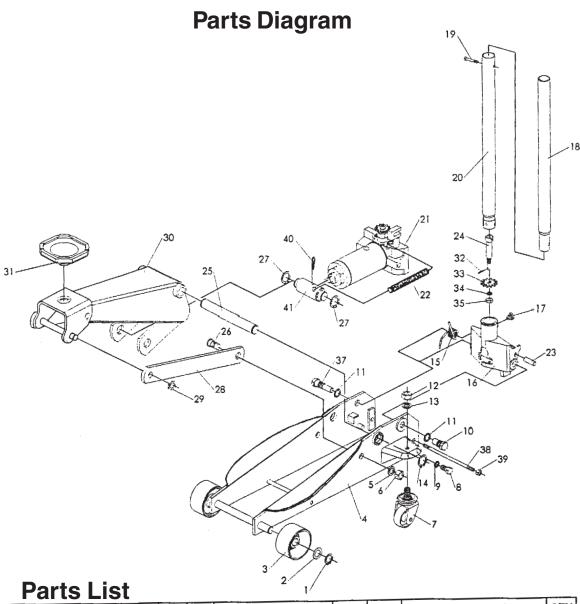


FIGURE 6

LUBRICATION POINTS



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NO.	DESCRIPTION	QTY	NO.	DESCRIPTION	QTY	NO.	DESCRIPTION	QTY
1	RETAINING RING	2	15	TORSION SPRING	1	29	RETAINING RING	2
2	WASHER	2	16	HANDLE SOCKET	1	30	LIFT ARM ASSEMBLY	1
3	WHEEL	2	17	BOLT	1	31	SADDLE	1
4	SIDE PLATE ASSY	1	18	HANDLE UPPER	1 .	32	SPLIT PIN	1
5	WASHER 16	2	19	HEX BOLT M6×35	1	33	GEAR HANDLE SOCKET	1_
6	HEX NUT M16	2	20	HANDLE LOWER	1	34	SPRING WASHER 10	1
7	CASTER ASSEMBLY	2	21	POWER UNIT ASSY	1	35	NUT M10	1
8	HEX BOLT M12×25	2	22	SPRING	1			
9	SPRING WASHER 12	2	23	PLUNGER PIN	1	37	BOLT	1
10	BOLT	1	24	GEAR SHAFT	1	38	PULL ROD	1
11	SPRING WASHER 18	2	25	SHAFT ARM	1	39	NUT M8	2
12	NUT M12	2	26	BOLT	2	40	SPLIT PIN	1
13	SPRING WASHER	2	27	RETAINING RING	2	41	BLOCK LINKAGE	1
14	RETAINING RING	2	28.	LONG LINKAGE	2			

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

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: When ordering parts on this page, use an "A" suffix to specify the specific part.

Note: The only parts of the POWER UNIT that are offered as separate parts are listed in the parts list below. The complete POWER UNIT ASSEMBLY is available as part # 21.

