



10-TON LONG FRAME JACK

Model 66593

SET UP AND OPERATING INSTRUCTIONS



Diagrams within this manual may not be drawn proportionally.

Due to continuing improvements, actual product may differ slightly from the product described herein.

Distributed exclusively by Harbor Freight Tools®.

3491 Mission Oaks Blvd., Camarillo, CA 93011

Visit our website at: <http://www.harborfreight.com>



**Read this material before using this product.
Failure to do so can result in serious injury.
SAVE THIS MANUAL.**

Copyright© 2009 by Harbor Freight Tools®. All rights reserved. No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools.

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

SAVE THIS MANUAL

Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

IMPORTANT SAFETY INFORMATION

In this manual, on the labeling, and all other information provided with this product:



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to personal injury.

CAUTION

CAUTION, without the safety alert symbol, is used to address practices not related to personal injury.

General Safety Rules



WARNING! Read all instructions. Failure to follow all instructions listed below may result in serious injury. The term “tool” in all of the warnings listed below refers to your Jack.

SAVE THESE INSTRUCTIONS

1. **Work area safety**
 - a. Keep work area clean and well lit. *Cluttered or dark areas invite accidents.*
 - b. Do not operate tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. *Air and hydraulic tools create sparks which may ignite the dust or fumes.*
 - c. Keep children and bystanders away while operating this tool. *Distractions can cause you to lose control.*
3. **Personal safety**
 - a. Stay alert, watch what you are doing and use common sense when operating this tool. Do not use this tool while you are tired or under the influence of drugs, alcohol or medication. *A moment of inattention while operating this tool may result in serious personal injury.*

- b. Use safety equipment. Always wear ANSI-approved safety impact goggles and heavy-duty work gloves. *Safety equipment such as non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.*
- c. Avoid accidental lowering when under load. Ensure that the Handle Lever (1.4) is secured at Position A. (See Fig. 2.)
- d. Stay out from under loads being lifted, even loads held by jack stands if possible.
- e. Do not overreach. Keep proper footing and balance at all times. *This reduces the chance of falling or tripping.*
- f. Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.
- d. Use the tool and its accessories in accordance with these instructions and in the manner intended for this particular type of tool, taking into account the working conditions, location and the work to be performed. *Use of this tool for operations different from those intended could result in a hazardous situation.*
- e. The wheels will need periodic lubrication by greasing the Zerk Fittings provided at each wheel using a grease gun. (Not supplied.)
 - Grease guns can be obtained from Harbor Freight Tools.

Service

- f. Have the tool serviced by a qualified repair person at a qualified shop using only identical replacement parts. *This will ensure the safety of the tool is maintained.*

Tool use and care

- a. 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 was designed.*
- b. Store idle tools out of the reach of children and do not allow people unfamiliar with the tool or these instructions to operate this tool. *Tools are dangerous in the hands of untrained users.*
- c. Maintain this tool. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the tool's operation. If damaged, have the tool repaired at a qualified shop before use. *Many accidents are caused by poorly maintained tools.*

Specific Safety Rules

- 1. Maintain labels and nameplates on this Jack. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- 2. Do not exceed the **10 ton** (20,000 lbs.) capacity of the Long Frame Jack.
- 3. Bleed the hydraulic system of the Long Frame Jack before its initial use. (See Bleed Instructions.)
- 4. Always place the Jack on a dry, oil/grease free, solid, level floor surface capable of supporting the weight of the Jack, the load to be lifted and all other additional tools and accessories.

5. Apply the vehicle's parking brake and chock the non-lifted tires before raising the vehicle.
6. Lift the vehicle only by the manufacturer-recommended lifting points.
7. Stay out from under the load while it is being lifted or supported only by this Jack.
8. Avoid rapid load descent. Turn the Release Screw slowly.
9. Do not use for aircraft purposes.
10. Do not leave the tool unattended when it is connected to a compressed air supply. Release the tool's load before leaving.
11. This product is not a toy. Keep it out of reach of children.
12. 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 frame or recommended lifting point.
13. 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 frame or recommended lifting points. Also, make sure the jack stands are adjusted at the same height.
14. Use the Long Frame Jack only on vehicles whose frames have lifting points (on its seam or frame) capable of aligning with the Bottle Jack.
15. Do not use the Jack with the vehicle's engine running. When running, the vehicle's engine produces carbon monoxide, a colorless, odorless, toxic fume that, when inhaled, can cause serious personal injury or death.
16. Always keep hands, fingers, and feet away from all moving parts of the 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.
17. Do not allow anyone in the vehicle when using the Jack. Keep all bystanders a safe distance away from the vehicle.
18. Never use this Jack to lift both ends of a vehicle at the same time.
19. Before lowering the Jack, make sure tool trays, jack stands, and all other tools and equipment are removed from under the vehicle.
20. The warnings, precautions, 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.



**SAVE THESE
INSTRUCTIONS.**

SPECIFICATIONS

Maximum Lifting Capacity	10 Tons (20,000 lb.)
Minimum Lift Height	6-1/4"
Maximum Lift Height	22-1/8"
Net Weight	326.30 lbs
Jack Handle	36-1/4"L
Wheels and Casters	All steel

UNPACKING

When unpacking, check to make sure that the item is intact and undamaged. 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.

Note: For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

ASSEMBLY

1. Slip the bottom end of the Handle (1.5) into the opening of the Fork Member (2.4) .
2. Put the Washer (1.6) onto Fastening Screw (1.7) and insert into threaded hole in back of Fork Member.
3. Tighten Fastening Screw securely with an adjustable wrench (not included).

OPERATING INSTRUCTIONS



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Tool Set Up

IMPORTANT: The Jack comes filled with oil. But the hydraulic system must be bled prior to initial use. (See Bleeding Instructions Pg. 8.)

1. Make sure the vehicle is parked on a flat, level, solid, ground surface.
2. Turn off the vehicle's engine. Place the vehicle's transmission in "PARK" (if automatic) or in it lowest gear (if manual). Set the emergency brake. Then chock the wheels that *are not* being lifted.
3. Check to make sure the Saddle (7.1) is fully lowered. If not, move the Handle Lever (1.4) to Position D. (See Fig. 2.)
 - a. Once the Jack's Lift Arm (7.6) is fully lowered, move the Handle Lever (1.4) to Position A. (See Fig. 2.)

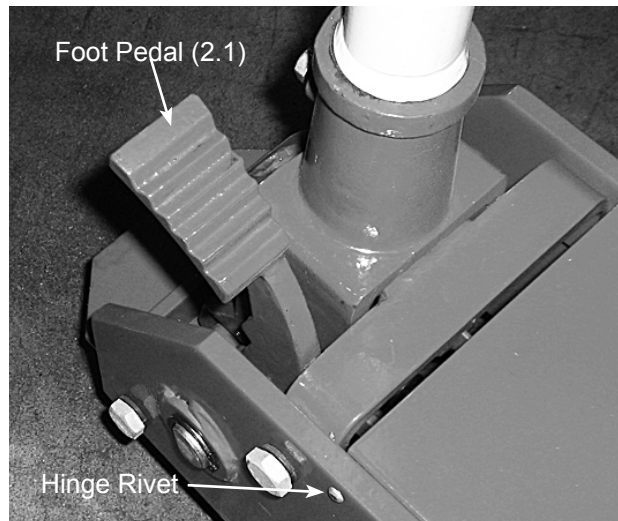


Fig. 1

4. Pump the Foot Pedal (2.1) after carefully positioning the Saddle (7.1) under the vehicle manufacturer's recommended lifting point. (See vehicle manufacturer's manual for location of lift points when lifting only

one wheel and *frame* lifting points when lifting the entire front or rear end of the vehicle.)

Handle Lever Positioning:

1. Moving the Valve Release Lever (1.4) to the desired position. (See Fig. 2.)

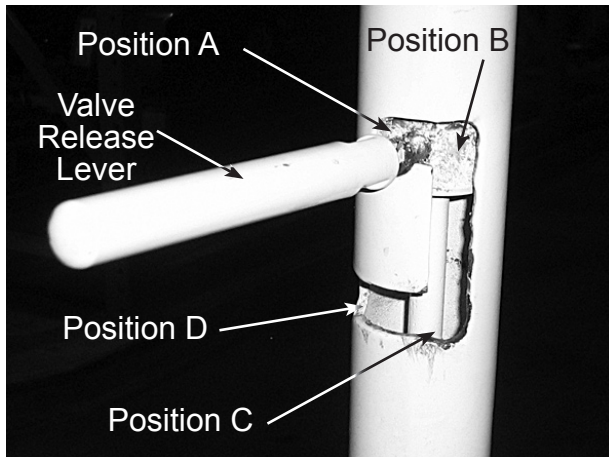


Fig 2

- a. **Position A:** Shuts the Release Valve allowing lifting of the Saddle (7.1) by pumping the Handle (1.5) up and down or pumping the Foot Pedal (2.1).

Note: The Handle is not locked in this position.

- b. **Position B:** The Deflector Rod (1.3) is not engaged in the Base (2.6) when at this position.

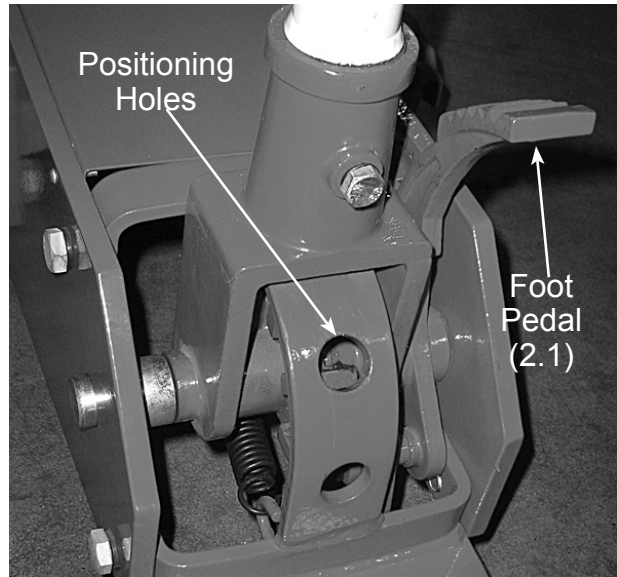


Fig 3

- c. **Position C:** Allows the Deflector Rod to drop into one of three holes (See Fig. 3.) locking the Handle (1.5) in one of three angles, vertical, horizontal and 45°.
- d. **Position D:** Opens release valve to lower the Saddle.

Note: With the release valve in its shut position, the Foot Pedal (2.1) can be pumped to raise the Saddle regardless of the Handle's angle.

To raise the vehicle:

1. It is recommended to move the Valve Release Lever to Position B, then move the Handle to the desired angle.
 - The Valve Release Lever and Deflector Rod will drop down into one of three holes (at Position C) locking the Handle in either a vertical, 45° or horizontal angle.
 - Although the Foot Pedal (2.1) will raise the Lift Arm (7.6), it is recommended to lock the handle vertically with the Valve Release Lever at Po-

sition C. The Handle is less likely to be in the way, be a tripping hazard, and the upright Handle (2.5) can be used to maintain balance while pumping the Foot Pedal (2.1).

2. Pump the Foot Pedal (2.1) until the Saddle of the Jack has nearly reached the vehicle lifting point.
 - The Saddle's center should be positioned directly under the vehicle's lifting point. If not, reposition the Jack before lifting.
3. If the Jack and Saddle are in proper position, continue to pump Foot Pedal, raising the vehicle.
4. Once the vehicle is raised, place a jack stand (not included) at the proper support location(s) according to the vehicle manufacturer's manual.
 - If using two jack stands, make sure they are at the same point on each side of the vehicle and at the same height. Always raise the vehicle the least amount possible.
5. Slightly lower the Jack to ease the vehicle onto the jack stands. Do this by slowly sliding the Valve Release Lever (1.4) to the right (Position D) until the Saddle (7.1) lowers slightly and the vehicle rests on the jack stand(s).
6. While standing safely aside, gently rock the vehicle to determine if it is stable on the jack stand(s). If it is not, raise the vehicle, and reposition the jack stand(s).

WARNING! When performing this procedure, be prepared to stand clear of the vehicle as the vehicle can fall off the jack stand(s) causing personal injury and/or property damage.

To lower the vehicle:

1. When the work to the vehicle is completed, and prior to lowering the vehicle, make sure to remove all tools, old vehicle parts, etc. from under the vehicle.
2. Pump Foot Pedal (2.1) to raise the vehicle slightly above the saddle(s) of the jack stand(s). Then remove the jack stand(s) from under the vehicle.
3. *Slowly* move the Handle Lever to Position D to lower the vehicle to the ground. (**See Fig. 2.**)

MAINTENANCE AND SERVICING



Procedures not specifically explained in this manual must be performed only by a qualified technician.

Move the Handle Lever (1.4) to Position D to release all hydraulic pressure before performing any inspection, maintenance, or cleaning procedures.

1. **BEFORE EACH USE**, inspect the general condition of the Jack. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, and any other condition that may affect its safe operation.
2. The moving parts can be greased through built-in Zerk fittings (4.3, 5.5, 7.10)
3. **AFTER USE**, clean external surfaces of the Jack with a clean cloth. Do not use solvents.

BLEEDING INSTRUCTIONS:

4. Thoroughly test the Jack for proper operation prior to its actual use. If the Jack appears not to be working properly, it may be necessary to purge air from the hydraulic system. To do so:
 - a. Move Valve Release Lever to lower the Saddle to Position D. The Lever must remain here to keep the pressure Release Valve open. **(See Fig. 2.)**
 - b. Remove the two Screws (8.5), located just behind the Lift Arm (7.6), holding on the Cover Plate (8.1) in place.
 - c. The Cover Plate can then swing up on the Hinge Rivets (9.2) (the Hinge Rivet is the Cover Plate's pivot point just in front of the Handle), like the hood of a car.

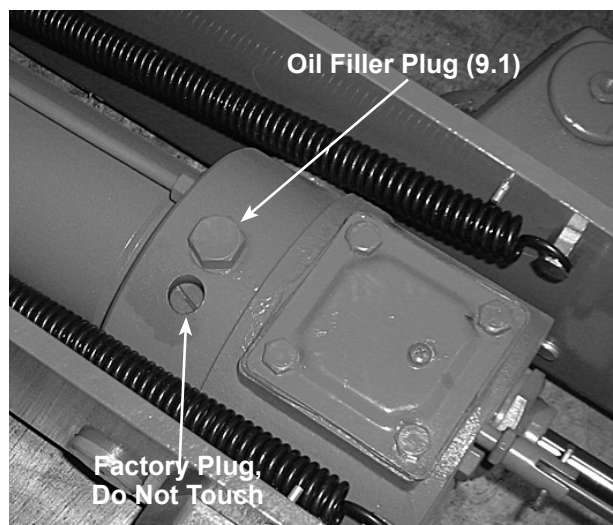


Fig.4

- d. Carefully remove the Oil Filler Plug (9.1) with a 22 socket wrench, making sure not to lose the flat copper washer with it. (See Fig. 4.)
 - e. Top off the hydraulic reservoir with fresh hydraulic jack fluid to a point

just below the oil Filler Plug (9.1) orifice.

- f. Pump the Foot Pedal (2.1) ten to fifteen times in rapid succession.
 - g. Top off the hydraulic oil if required.
 - h. Clean off the Oil Filler Plug (9.1) with a clean cloth and thread back into the oil fill orifice.
 - i. Wipe area surrounding the Oil Filler Plug with a clean cloth.
 - j. Let the Handle Lever (1.4) return to Position C, allowing the pressure valve to close. **(See Fig. 2.)**
 - k. Lower the Cover Plate back down and re-install the two Screws securing it.

IMPORTANT: After bleeding the Jack, test for proper operation prior to its actual use.

NOTE: To prevent damage to the Jack, check for the presence of air and/or low hydraulic oil regularly.

5. **WHEN STORING**, move the Handle to an appropriate angle, such as vertical, and move the Valve Release Lever (1.4) to Position C, locking the Handle, preventing it from accidentally falling and causing possible injury or property damage.
6. Always store the Jack with its Handle locked, and its accessories in a clean, dry, safe location out of reach of children and other unauthorized people.

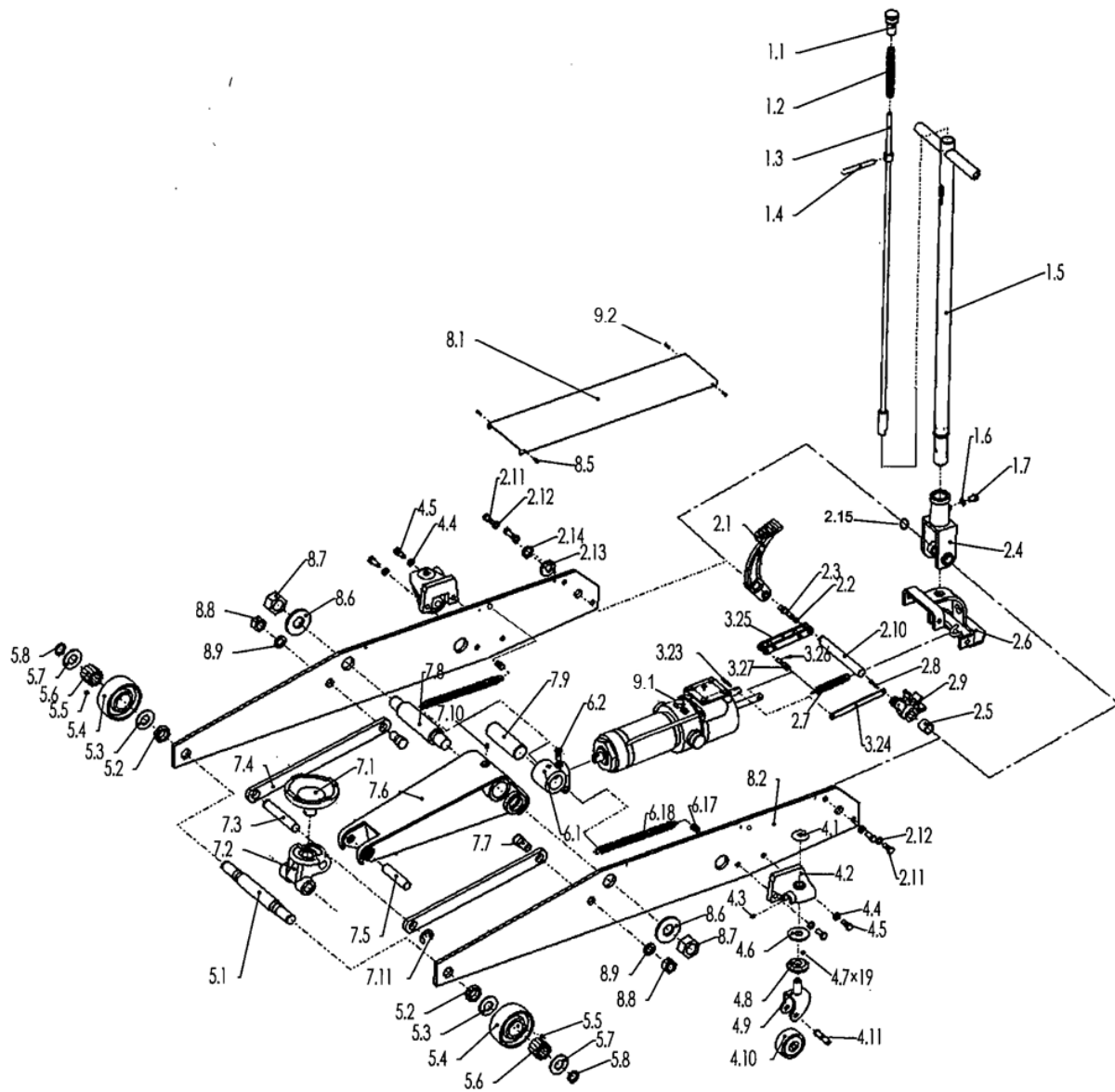
PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR 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.

TROUBLESHOOTING

Problem	Solution
Jack will not raise the Lift Arm when pumping the Foot Pedal.	<ol style="list-style-type: none">1. Bleed the Hydraulic Jack of excess air.2. Valve Release Lever is in Position D. Move the Lever to any other position making sure it isn't stuck in the open position.3. Purge air from the hydraulic system.4. Make sure there is adequate hydraulic fluid in the oil reservoir.5. Take the Hydraulic Jack to a qualified shop for inspection and repair.
Wheels make noise when rolling the Jack or raising the Lift Arm.	<ol style="list-style-type: none">1. Use grease gun to grease all Zerk Fittings (4.3, 5.5, 7.10).

ASSEMBLY DIAGRAM



PARTS LIST

Part	Description
1.1	Cap
1.2	Compression Spring
1.3	Deflector Rod
1.4	Valve Release Lever
1.5	Handle (Control Rod)
1.6	Washer
1.7	Fastening Screw
2.1	Foot Pedal
2.2	Wire
2.3	Pin
2.4	Fork Member
2.5	Bushing
2.6	Base
2.7	Spring
2.8	Pin
2.9	Cap
2.10	Shaft
2.11	Screw
2.12	Washer
2.13	Washer
2.14	Clamp Ring
2.15	Bushing
3.22	Connecting Brush
3.23	Cotter Pin
3.24	Connecting Rod
3.25	Driving Rod
3.26	Cotter Pin
3.27	Pin
4.1	Cover
4.2	Wheel Cover
4.3	Zerk Fitting
4.4	Washer
4.5	Screw
4.6	Bearing Cover
4.7	Steel Ball
4.8	Bearing Holder
4.9	Wheel Fork
4.10	Wheel

Part	Description
4.11	Rivet
5.1	Axle
5.2	Nut
5.3	Stop Ring
5.4	Wheel
5.5	Zerk Fitting
5.6	Roller
5.7	Stop Ring
5.8	Split Ring
6.1	Joint
6.2	Screw
6.17	Screw
6.18	Spring
7.1	Saddle
7.2	Saddle Carrier
7.3	Axle
7.4	Level Supporting Rod
7.5	Axle
7.6	Lift Arm
7.7	Bolt
7.8	Axle
7.9	Axle
7.10	Zerk Fitting
7.11	Split Ring
8.1	Cover Plate
8.2	Side Plate
8.5	Screw
8.6	Washer
8.7	Nut
8.8	Nut
8.9	Washer
9.1	Oil Filler Plug
9.2	Hinge Rivet

LIMITED 90 DAY WARRANTY

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

3491 Mission Oaks Blvd. • PO Box 6009 • Camarillo, CA 93011 • (800) 444-3353

Record Product's Serial Number Here: _____

Note: If product has no serial number, record month and year of purchase instead.

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