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

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For technical questions or replacement parts, please call 1-800-444-3353. Revised Manual 09j

# Specifications

|                       | ľ                            |  |  |
|-----------------------|------------------------------|--|--|
| Lifting Capacity      | 1-1/2 Tons (3000 Lbs.)       |  |  |
| Minimum Saddle Height | 3.54"                        |  |  |
| Maximum Saddle Height | 17.59"                       |  |  |
| Hydraulic Lift        | 14.06"                       |  |  |
| Overall Dimensions    | 23.62" L x 11.81" W x 6.1" H |  |  |
| Weight                | 35.4 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 and understand 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 3000 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. Do not move the vehicle while it is on the Jack.
- 20. Do not make any alterations or modifications to this Jack.

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 pages 7 and 8 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.

#### Assembly

1. Slide the **Upper Handle (#23)** into **Lower Handle (#20)**. As you slide it on, depress the **Lock Button (#22)** and allow the hole in the bottom of the **Upper Handle (#23)** to line up with the **Lock Button (#22)**. The **Lock Button (#22)** should snap out securely holding the **Upper Handle (#23)**.

2. Unscrew the holding screw on the **Handle Base (#17)** and slide the entire handle assembly into the **Handle Base (#17)**. Tighten the screw to hold the handle in place.

3. Bleed Air. See page 5 for bleeding instructions.

### 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, put a block below each Jack wheel to stop it from moving.

Warning!! Never exceed the Jack's maximum capacity of 3000 Lbs.

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

#### Raising the vehicle.

1. Position the Jack so that the **Saddle Pad (#43)** is at one of the recommended lifting points. Turn the **Upper Handle (#23)** clockwise to lock the release valve. Pump the **Upper Handle (#23)** until the **Saddle Pad (#43)** fully engages the lifting point, then continue to pump the Jack to the needed height. If the Jack does not reach its full height or more than eight pumps are needed, the Jack will require bleeding or refilling.

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 Upper

Handle (#23) 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 reposition 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 Pad (#43)** is at one of the recommended lifting points. Turn the **Upper Handle (#23)** clockwise to lock the release valve. Pump the **Upper Handle (#23)** until the **Saddle Pad (#43)** fully engages the lifting point, then continue to pump the Jack above the jack stands.

3. Remove the jack stands.

4. Slowly turn the **Upper Handle (#23)** 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.

### **Bleeding And Refilling**

#### To Bleed/Purge excessive air from system:

1. Place Jack on flat, level and solid surface.

2. Turn the Breathing Screw (14A) fully counterclockwise. (See Figure 1, below)

3. Turn the Handle (20) to a position where the Discharge Valve is closed enough for the Saddle (41) to rise when you pump with no pressure on the Saddle, but open enough so that the Saddle does not rise when you pump with one hand while applying pressure to the Saddle with your other hand. (If the Saddle is up, turn the Handle slowly counterclockwise until the Saddle begins to go down slowly. If the Saddle is down, while pumping quickly, turn the Handle slowly clockwise until the Saddle begins to rise.)

4. While holding down the Saddle with one hand, rapidly pump the Handle with the other hand, so that air comes out from between the Breathing Screw and the Oil Plug (13A). Continue pumping until air stops coming out and you see oil appearing between the Breathing Screw and the Oil Plug.

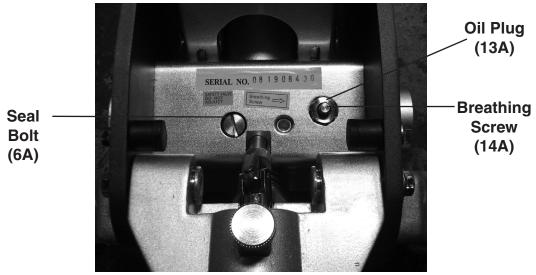
5. Tighten the Breathing Screw by turning it clockwise as far as it will go. Then turn it 360° counterclockwise.

### To Refill Hydraulic fluid (if unable to bleed/purge or Saddle stops part way):

1. Use wrench (not included) to unscrew Oil Plug.

2. Pour high-quality hydraulic oil into hole and replace Oil Plug. Tighten with wrench.

3. Follow the Bleed/Purge Instructions above.



#### **General Maintenance**

#### If Saddle does not lower and the valve is open, there is too much Hydraulic fluid:

1. Unscrew Oil Plug.

- 2. Push Saddle and Handle down at the same time.
- 3. Wipe off any oil that spills.

4. Replace Oil Plug and tighten with Wrench.

If more than eight strokes of Handle is needed to raise Saddle, there may be air in the system. In that case, follow the Bleed/Purge Instructions, making sure to use full strokes. If the Saddle does not go up at all during full strokes and valve is closed, there may be excessive air or insufficient hydraulic fluid in the system:

1. Place Jack on a flat, level surface and turn Handle clockwise as far as it goes.

- 2. Turn Breathing Screw clockwise fully.
- 3. Turn Handle clockwise fully.

4. Repeatedly pump Handle. Continue as long as air comes out or until Saddle begins to rise. Once Saddle begins to rise, stop pumping and follow Bleed/Purge Instructions. If Saddle does not begin to rise and air does not seem to be purging or bleeding, follow Refilling Instructions.

#### If Handle will not go down:

1. Make sure load is not exceeding 3,000 lb. capacity.

2. Make sure Saddle is not already at maximum height. If it is, lower and reposition under different part of vehicle.

3. If Jack functions properly and you are unable to push down and apply the required 150 lbs. of force needed to operate Jack, seek the help of another person for assistance.

#### **Other Maintenance Tips**

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.

#### PLEASE READ THE FOLLOWING CAREFULLY

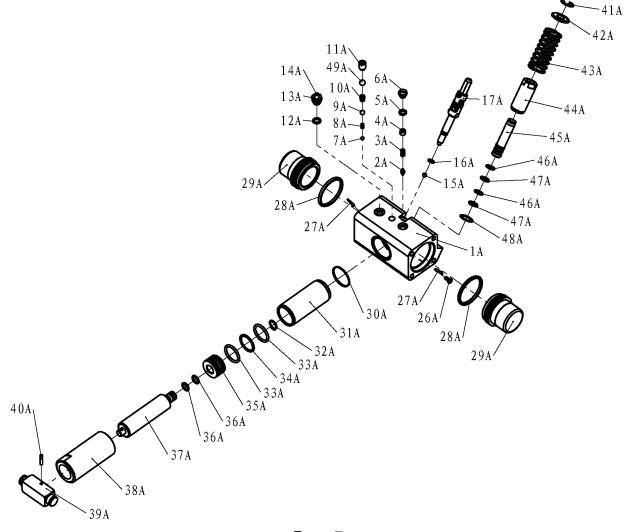
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**NOTE**: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.

| Part | Description          | Q'ty |
|------|----------------------|------|
| 1A   | Aluminum Base        | 1    |
| 2A   | Safety Valve         | 1    |
| 3A   | Relief Valve Spring  | 1    |
| 4A   | Regulator Bolt       | 1    |
| 5A   | Seal Washer          | 1    |
| 6A   | Seal Bolt            | 1    |
| 7A   | Steel Ball           | 1    |
| 8A   | Separator            | 1    |
| 9A   | Steel Ball           | 1    |
| 10A  | High Pressure Spring | 1    |
| 11A  | High Pressure Bolt   | 1    |
| 12A  | O-Ring               | 1    |
| 13A  | Oil Plug             | 1    |
| 14A  | Breathing Screw      | 1    |
| 15A  | 15A Steel Ball       |      |
| 16A  | O-Ring               | 1    |
| 17A  | Discharge Valve Rod  | 1    |
| 26A  | Bolt                 | 1    |
| 27A  | Oil Strainer         | 2    |
| 28A  | O-Ring               | 2    |
| 29A  | Oil Cover            | 2    |

# Parts List and Assembly Diagram

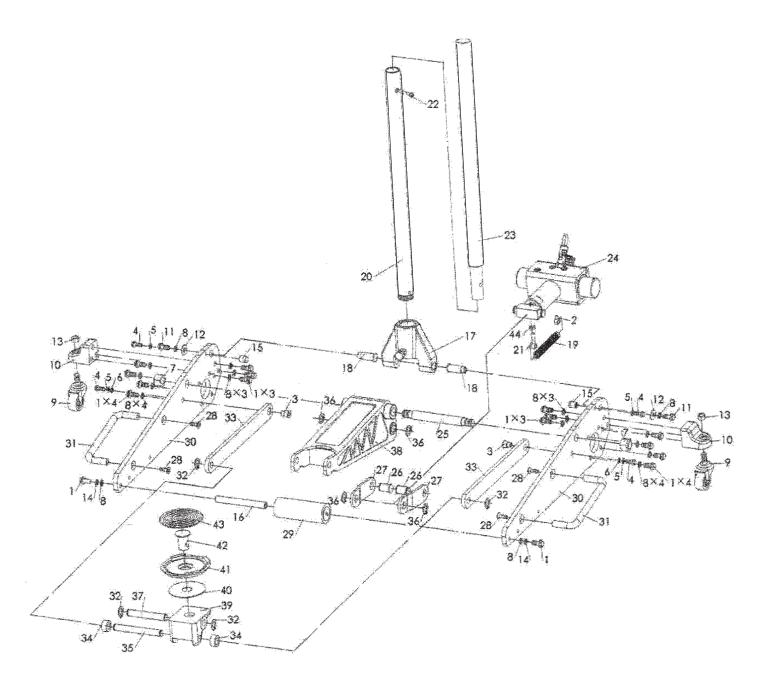
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|------|--------------------|-------|
| Part | Description        | Q'ty  |
| 30A  | O-Ring             | 1     |
| 31A  | Hydraulic Cylinder | 1     |
| 32A  | Snap Ring          | 1     |
| 33A  | O-Ring             | 2     |
| 34A  | Rear Seal          | 1     |
| 35A  | Bushing            | 1     |
| 36A  | O-Ring             | 2     |
| 37A  | Ram                | 1     |
| 38A  | Aluminum Bar       | 1     |
| 39A  | Block Linkage      | 1     |
| 40A  | Spring Pin         | 1     |
| 41A  | Snap Ring 12       | 1     |
| 42A  | Piston Cover       | 1     |
| 43A  | Press Spring       | 1     |
| 44A  | Pump Case          | 1     |
| 45A  | Pump Core          | 1     |
| 46A  | Back-Seal          | 2     |
| 47A  | O-Ring             | 2     |
| 48A  | Washer             | 1     |
| 49A  | Steel Ball         | 1     |



# **Parts List**

| ITEM | DESCRIPTION                | QTY | ITEM | DESCRIPTION              | QTY |
|------|----------------------------|-----|------|--------------------------|-----|
| NO.  |                            |     | NO.  |                          |     |
| 1    | Screw M10x25               | 2   | 23   | Handle Upper             | 1   |
| 2    | Eye Bolt M8x14             | 2   | 24   | Power Unit Assy          | 1   |
| 3    | Link Rod Axis              | 2   | 25   | Raise Arms Axis          | 1   |
| 4    | Screw M8x25                | 2   | 26   | Pull Rod Axis            | 2   |
| 5    | Inner Tighten Washer 8     | 4   | 27   | Pull Rod                 | 2   |
| 6    | Washer 8                   | 2   | 28   | Inner Angular Set Screw  | 4   |
| 7    | Screw Bushing              | 2   | 29   | Front Caster Wheel       | 1   |
| 8    | Inner Tighten Washer 10    | 8   | 30   | Frame                    | 2   |
| 9    | Rear Wheel Set             | 2   | 31   | Handle Bar               | 2   |
| 10   | Rear Wheel Saddle          | 2   | 32   | "C"-Ring S16             | 2   |
| 11   | Screw M10x25               | 2   | 33   | Link Rod                 | 2   |
| 12   | Linkage Washer             | 2   | 34   | Link Rod Washer          | 2   |
| 13   | Nut M12                    | 2   | 35   | Saddle Base Axis (Long)  | 1   |
| 14   | Washer 10                  | 2   | 36   | "C"-Ring S20             | 4   |
| 15   | Case                       | 6   | 37   | Saddle Base Axis (Short) | 1   |
| 16   | Axis                       | 2   | 38   | Lift Arm                 | 1   |
| 17   | Handle Base                | 1   | 39   | Saddle Base              | 1   |
| 18   | Handle Base Axis           | 2   | 40   | Nylon Washer             | 1   |
| 19   | Spring                     | 1   | 41   | Saddle                   | 1   |
| 20   | Handle Lower               | 1   | 42   | Holder Axis              | 1   |
| 21   | Eye Bolt M8x35             | 1   | 43   | Rubber Saddle Pad        | 1   |
| 22   | Hex Bolt M6x18 Lock Button | 1   | 44   | Nut M8                   | 1   |

# Assembly Diagram



# 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 OTH-ER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MER-CHANTABILITY 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.

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