U.S.GENERAL 3,000 LBS. CAPACITY LIGHTWEIGHT ALUMINUM RACING JACK

Model 91039

ASSEMBLY AND OPERATING INSTRUCTIONS



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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.

Specifications

Lift Capacity	3000 Lbs.
Lifting Height	14-3/4 (maximum) inches; 3-1/8 inches (min.)
Pump Action	13; ½ turn handle release
Jack Dimensions	20-1/2 (L) x 9-3/8 (W) x 8 (H) inches
Saddle Dimensions	4-1/8 (OD) inches; 3/8 inch thick with rubber
	pad
Weight	24.2 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.

General 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. Do not use electrically powered tools in the presence of flammable gases or liquids.
- 3. **Keep children away**. Children must never be allowed in the work area. Do not let them handle machines, tools, or extension cords.
- 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 and ear protection**. Always wear ANSI approved impact safety goggles. Wear a full face shield if you are producing metal filings or wood chips. Wear an ANSI approved dust mask or respirator when working around metal, wood, and chemical dusts and mists.
- 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 sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and, if damaged, have them repaired by an authorized technician. The handles 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.
- 12. **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.
- 13. **Do not operate tool if under the influence of alcohol or drugs**. Read warning labels if taking prescription medicine to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.
- 14. **Maintenance**. For your safety, service and maintenance should be performed regularly by a qualified technician.

Warning: 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.

Specific Jack Safety Precautions

- 1. **Do not overload this equipment**. Know the weight of the load being lifted.
- 2. **Use Jack for lifting only**. Do not use this equipment for any other purpose. Immediately after lifting, support the load with appropriate supporting equipment.
- 3. **Place Jack correctly**. Only use this equipment on a surface that is stable, level, clean and dry, and capable of sustaining the load.
- 4. **Stabilize load**. Ensure that the load remains stable at all times. Do not move load while on the Jack. Lift deadweight loads only.
- 5. **Vehicle lifting**. When lifting a vehicle, apply the emergency brake and block all wheels.
- 6. **Center Load**. Center the load on the Jack Saddle. Off center loads can damage the seals, causing Jack failure.
- 7. **Vehicle Lift Points**. Read the vehicle manual to find the proper lifting points for the vehicle.
- 8. **Never attempt to use the Jack** unless it is properly filled with hydraulic fluid. (see Maintenance Section, page 5)

Unpacking

When unpacking, check to make sure the following parts are included. Refer to the Parts Lists and Assembly Drawings at the end of this manual for more detail.



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.

Handle Assembly

- 1. Insert the Lower Handle (33) into the Handle Base (29) until it locks in place with Locking Bolt (X). See photo above and on the next page.
- 2. Insert the Upper Handle (31) into the Lower Handle (33) so that its locking pin goes into the hole in the Lower Handle.

Operation

- 1. Test the Jack by placing the Saddle (40) under a stable, dead load. Turn the Handle completely clockwise, and pump the Handle up and down.
 - The Jack Saddle should rise and stay at that level. If it slowly goes down, tighten the Breathing Screw (A37). If it still goes down, the Power Unit may need to have the air purged from its system. Refer to the Maintenance section.
- 2. Turn the Handle counterclockwise. The Saddle should lower completely.
- 3. Position the Jack under the equipment or vehicle to be lifted.

Warning: The Jack, and equipment being lifted, must be stable so when lifted, they do not fall and cause personal injury. Keep spectators away from the work area. Read the vehicle manual to find the proper lifting points for the vehicle.

- 4. Turn the Handle clockwise to close the release valve.
- 5. Pump the Handle up and down until the Saddle (40) just touches the item being lifted. Readjust the Saddle position so that the equipment is centered on the Saddle.
- 6. Continue pumping until the Jack is fully extended, or the equipment is lifted to the desired height.

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7. Place vehicle stands, or other support devices under the equipment before attempting to do any work in or around it.

Caution: Avoid rapid descent to avoid spilling of load. Turn the Handle slowly.

- 8. Slowly and carefully lower the load by turning the Handle counterclockwise in extremely small increments.
- 9. When finished using the Jack, perform maintenance on it, and store the Jack in a dry location.

Maintenance

General

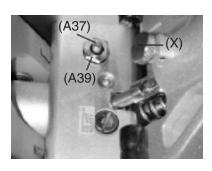
Periodically lubricate the Jack as described below.

- 1. Lubricate the joints and Ram (A5) with a light oil as needed.
- 2. Remove Handle and grease the lower end of the Handle where it rotates in the Handle Base (29).
- 3. Oil all lift arm linkages, front wheels, and rear casters.
- 4. Clean the outside of the Jack with a dry, clean cloth.
- 5. If the Jack is exposed to moisture, wipe dry with a clean cloth and lubricate.
- 6. Store Jack with piston Ram (A5) withdrawn (Saddle down), and in a clean and dry location.

Purging Air from the Hydraulic System

Air bubbles can become trapped inside the hydraulic system thereby reducing the efficiency of the Jack. Purge the air from the system if lift efficiency drops.

- 1. Turn the Handle 1-1/2 turns counterclockwise.
- 2. Remove the Breathing Screw (A37) by turning it counterclockwise.
- 3. Rapidly pump the Handle assembly several times to purge the air from the hydraulic system.
- 4. Close the release valve by turning the Handle completely clockwise.
- 5. Replace and tighten the Breathing Screw.
- 6. If efficiency is still low, remove Oil Plug (A39), and top off fluid reservoir in the Aluminum Base (A13) with hydraulic oil.
- 7. Replace the Oil Plug (A39) and repeat steps 1 ~ 5, above.
- 8. Wipe up any hydraulic oil overflow with a cloth.
- 9. Test the Jack as described under Operation, step 1 on page 4.



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Oil Replacement

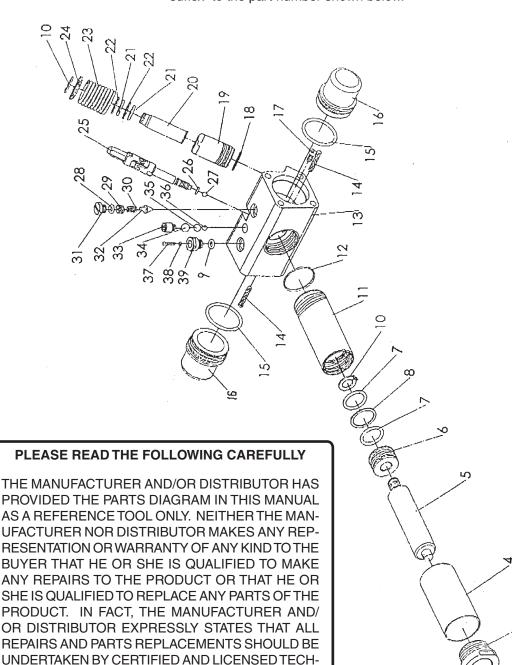
- 1. Completely lower the Saddle (40).
- 2. Place the Jack on its side.
- 3. Remove the Oil Plug (A39) and drain old oil into a container. See photo on page 5.
- 4. Place Jack upright and fill with high-quality hydraulic jack oil to the lower rim of the fill hole.
- 5. Replace the Oil Plug.
- 6. Purge air from the hydraulic system as previously described.
- 7. Wipe up any hydraulic oil overflow with a cloth.
- 8. Contact the local Hazardous Waste Disposal authority for proper oil disposal instructions.

Power Unit Parts List

Item	Description	Qty
A1	Spring Pin	1
A2	Block Linkage	1
A3	Tank Nut	1
A4	Cylinder Outer Case	1
A5	Ram	1
A6	Bushing	1
A7	O-ring	2
A8	Back Seal	1
A9	O-ring	1
A10	Snap Ring	2
A11	Hydraulic Cylinder	1
A12	O-ring	1
A13	Aluminum Base	1
A14	Oil Strainer	2
A15	O-ring	2
A16	Oil Cover	2
A17	Bolt	1
A18	Washer	1
A19	Pump Case	1
A20	Pump Core	1
A21	O-ring	2
A22	Back Seal	2
A23	Press Spring	1
A24	Piston Cover	1
A25	Discharge Valve Rod	1
A26	O-ring	1
A27	Steel Ball	1
A28	O-ring	1
A29	Bolt, Regulating	1
A30	Spring, Relief Valve	1
A31	Bolt, Seal	1
A32	Valve, Safety	1
A33	Bolt, High Pressure	1
A34	Ball, Steel	1
A35	Ball, Steel	1
A36	Ball, Steel	1
A37	Screw, Breathing	1
A38	O-ring	1
A39	Oil Plug	1

Power Unit Assembly Drawing

When ordering parts for the Power Unit, add an "A" suffex to the part number shown below.



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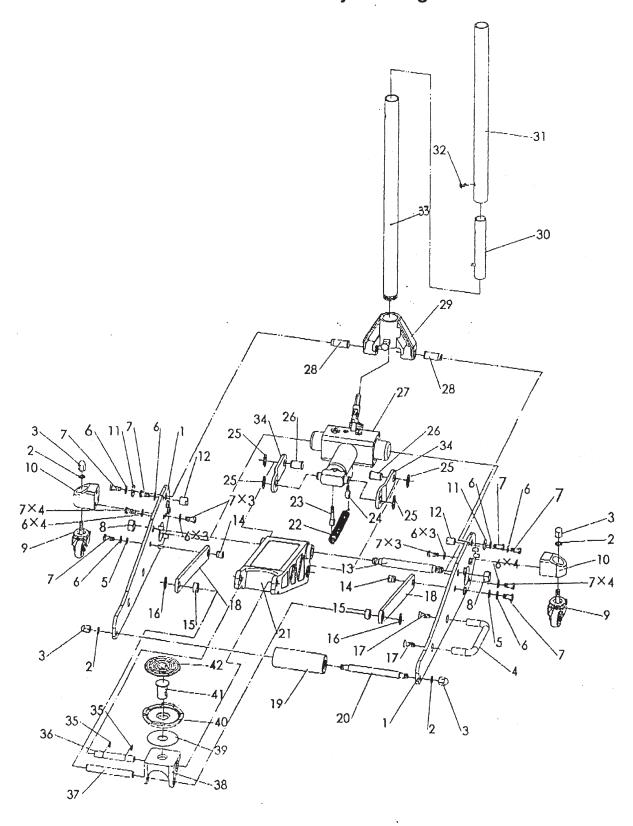
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Jack Parts List

Item	Description	Qty
1	Frame	2
2	Washer	2
3	Cover Nut	2
4	Handle Bar	1
5	Washer	2
6	Washer, Inner Tighten	20
7	Screw	20
8	Screw Bushing	2
9	Rear Wheel Set	2
10	Rear Wheel Saddle	2
11	Linkage Washer	2
12	Case	2
13	Axis, Arm Raise	1
14	Axis, Link Rod	2
15	Washer, Link Rod	2
16	C-ring	2
17	Screw, Inner Set Angular	2
18	Link Rod	2
19	Caster, Front Wheel	
20	Axis	1
21	Lift Arm	1
22	Spring	1
23	Eye Bolt	1
24	Eye Bolt	1
25	C-ring	4
26	Axis, Pull Rod	2
27	Power Unit Assy.	1
28	Axis, Handle Base	2
29	Handle Base	1
30	Joint Connector	1
31	Handle, Upper	1
32	Bolt, Hex	1
33	Handle, Lower	1
34	Pull Rod	2
35	Snap Rings, Round Wire	2
36	Saddle Base Axis, Short	1
37	Saddle Base Axis, Long	1
38	Saddle Base	1
39	Nylon Washer	1
40	Saddle	1
41	Holder Axis	1
42	Rubber Saddle Pad	1

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

Jack Assembly Drawing



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.

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