



Operating Instructions and Parts Manual

Air/Hydraulic 22 Ton Service Jack

Model JASJ-22S



WMH TOOL GROUP

2420 Vantage Drive
Elgin, Illinois 60123
Ph.: 800-274-6848
www.wmhtoolgroup.com

Part No. M-454222K

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This manual has been prepared for the owner and operators of a JET JASJ-22S Service Jack. Its purpose, aside from machine operation, is to promote safety using accepted operating and maintenance procedures. To obtain maximum life and efficiency from your service jack and to aid in using it safely, please read this manual thoroughly and follow the instructions carefully.

Warranty and Service

WMH Tool Group warrants every product it sells. If one of our tools needs service or repair, one of our Authorized Service Centers located throughout the United States can provide quick service or information.

In most cases, a WMH Tool Group Service Center can assist in authorizing repair work, obtaining parts, or perform routine or major maintenance repair on your JET product.

For the name of an Authorized Service Center in your area, please call 1-800-274-6848, or visit our web site at www.wmhtoolgroup.com

More Information

Remember, WMH Tool Group is consistently adding new products to the line. For complete, up-to-date product information, check with your local WMH Tool Group distributor, or visit our web site at www.wmhtoolgroup.com

WMH Tool Group Warranty

WMH Tool Group makes every effort to assure that its products meet high quality and durability standards and warrants to the original retail consumer/purchaser of our products that each product be free from defects in materials and workmanship as follows: 1 YEAR LIMITED WARRANTY ON ALL PRODUCTS UNLESS SPECIFIED OTHERWISE. This Warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, repair or alterations outside our facilities, or to a lack of maintenance.

WMH TOOL GROUP LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD SPECIFIED ABOVE, BEGINNING FROM THE DATE THE PRODUCT WAS PURCHASED AT RETAIL. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG THE IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. IN NO EVENT SHALL WMH TOOL GROUP BE LIABLE FOR DEATH, INJURIES TO PERSONS OR PROPERTY, OR FOR INCIDENTAL, CONTINGENT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

To take advantage of this warranty, the product or part must be returned for examination, postage prepaid, to an Authorized Service Center designated by our office. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection discloses a defect, we will either repair or replace the product at our discretion, or refund the purchase price if we cannot readily and quickly provide a repair or replacement. We will return the repaired product or replacement at WMH Tool Group's expense, but if it is determined there is no defect, or that the defect resulted from causes not within the scope of WMH Tool Group's warranty, then the user must bear the cost of storing and returning the product. This warranty gives you specific legal rights; you may also have other rights, which vary from state to state.

WMH Tool Group sells through distributors only. Members of the WMH Tool Group reserve the right to effect at any time, without prior notice, alterations to parts, fittings and accessory equipment, which they may deem necessary for any reason whatsoever.

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Warnings

1. Read and understand the entire owners manual before attempting assembly or operation.
2. Read and understand the warnings posted on the machine and in this manual. Failure to comply with all of these warnings may cause serious injury.
3. This air/hydraulic service jack is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper and safe operation of an air/hydraulic service jack, do not use until proper training and knowledge has been obtained.
4. This is a lifting device only. Do not move or dolly the vehicle while on the jack. The load must be supported immediately by other appropriate means.
5. Lift only on areas of the vehicle as specified by the vehicle manufacturer.
6. This jack is designed for use only on hard, level surfaces capable of sustaining the load. Use on other than hard, level surfaces can result in jack instability and possible loss of load.
7. Failure to heed these warnings may result in loss of load, damage to the jack, and/or failure resulting in personal injury and/or property damage.

- - SAVE THESE INSTRUCTIONS - -

Introduction

This manual is provided by WMH Tool Group covering the safe operation and maintenance procedures for a JET Model JASJ-22S Service Jack. This manual contains instructions on installation, safety precautions, general operating procedures, maintenance instructions and parts breakdown. This machine has been designed and constructed to provide years of trouble free operation if used in accordance with instructions set forth in this manual. If there are any questions or comments, please contact either your local supplier or WMH Tool Group. WMH Tool Group can also be reached at our web site: www.wmhtoolgroup.com.

Specifications

Model Number	JASJ-22S
Stock Number	454222K
Capacity (ton)	22
Minimum Height (in.)	9-7/8
Extension Screw Height (in.)	4-1/2
Maximum Height (in.)	20-1/4
Handle Length (in.)	48-3/4
Saddle Diameter (in.)	2-1/8"
Air Pressure (PSI)	90-150
Air Consumption for Full Lift (CFM)	7.8
Air Hose Size (NPT)	3/8
Hydraulic Oil Volume (cu. in.)	29.9
Lifting Time (rated load @ 120 psi)	105 sec.
Lifting Time (no load @ 120 psi)	32 sec.
Overall Dimensions (L x W)(in.)	22-7/8 x 13-3/4
Net Weight (lbs.)	91
Shipping Weight (lbs.)	96

The above specifications were current at the time this manual was published, but because of our policy of continuous improvement, WMH Tool Group reserves the right to change specifications at any time and without prior notice, without incurring obligations.

Assembly

NOTE: Part numbers in parentheses refer to numbers in the parts breakdown.

1. Remove bolt from the handle fork (#82).
2. Line up the positioning rod and the handle assembly. Insert into proper holes and tighten bolt in the handle fork.

Before Operation

1. Open the release valve by turning knob (#63) counterclockwise no more than two full turns.
2. With the ram full retracted, remove the oil filler plug (#17). This will help release any pressurized air that may be trapped within the reservoir. Make sure oil level is just below the oil filler plug hole.
3. If oil is low use a good quality hydraulic jack oil such as Mobil DTE 13. Re-install the oil filler plug.
4. Each day before operating the jack, add 1/2 ounce of JET Marvel Air Tool to the air inlet. Operate for at least three seconds to evenly distribute the oil. Lack of oil may cause damage to the pump.
5. Connect the jack to the compressor. Use only clean, dry air. Dirty or humid air may cause damage to the pump.
6. Close release valve by turning knob clockwise until it stops.
7. Press valve lever and check to see if the ram rises.
8. Open release valve by turning knob counterclockwise and check to see if the ram lowers.

Operation

⚠WARNING Do not use a saddle extender when using this product. Failure to comply may cause damage to property and/or serious injury!

1. Inspect before use. Do not use if broken, cracked or damaged in any way.
2. Position handle in most convenient operating position. Release handle lock by pulling positioning lever.
3. Move the jack and position the saddle under the point of contact.

4. Raise the saddle until the saddle contacts the load and then stop.
5. Check the point of contact to make sure the load is centered.
6. Raise the load to the desired height and transfer the load to jack stands.

Lowering

1. Raise load enough to remove jack stands.
2. Slowly turn release valve knob counterclockwise, no more than a 1/2 turn.

⚠WARNING Do not turn the release valve knob more than one half turn counterclockwise! This may cause sudden lowering which can lead to loss of control. Failure to comply may cause damage to property and/or serious injury!

If the jack is laid down before using or during transit, it may become "airbound" and the ram will not rise. To remove air from the hydraulic system:

1. Open the release valve knob.
2. With the air supply connected, activate the air pump for 10-15 seconds.
3. Close the release valve knob and check for normal operation.

If the ram still will not rise, follow this procedure to remove the air completely:

1. Remove the upper cover.
2. Remove the plug.
3. Slowly press and release air pump lever to allow air to escape. Do not press air pump lever fully. This will allow too much air into the system.
4. After air has bled out, replace and tighten plug.
5. Remove oil plug and check oil level. See "Maintenance" for oil instructions.
6. Check for proper operation before placing into service.

Maintenance

For best performance and long life, replace the complete fluid supply at least once per year.

Changing the Oil:

1. Lower the ram to the lowest position.
2. Remove filler plug (#17).
3. Tilt jack on its side and drain the fluid into a suitable container. Dispose of oil according to local regulations.
4. Fill reservoir with clean hydraulic jack oil until level is to the bottom of the fill hole. Only use quality **hydraulic jack oil** such as

Mobil DTE 13. Never use brake fluid, transmission fluid, motor oil or turbine oil.

5. Re-install filler plug.
 - Keep oil reservoir filled.
 - Clean the jack after use.
 - Check sliding and rotating parts. Oil as needed.
 - When storing the jack, keep the handle upright and the ram in the lowest position.
 - Periodically check the pump piston and ram for signs of rust or corrosion. Clean as needed and wipe with an oily cloth.

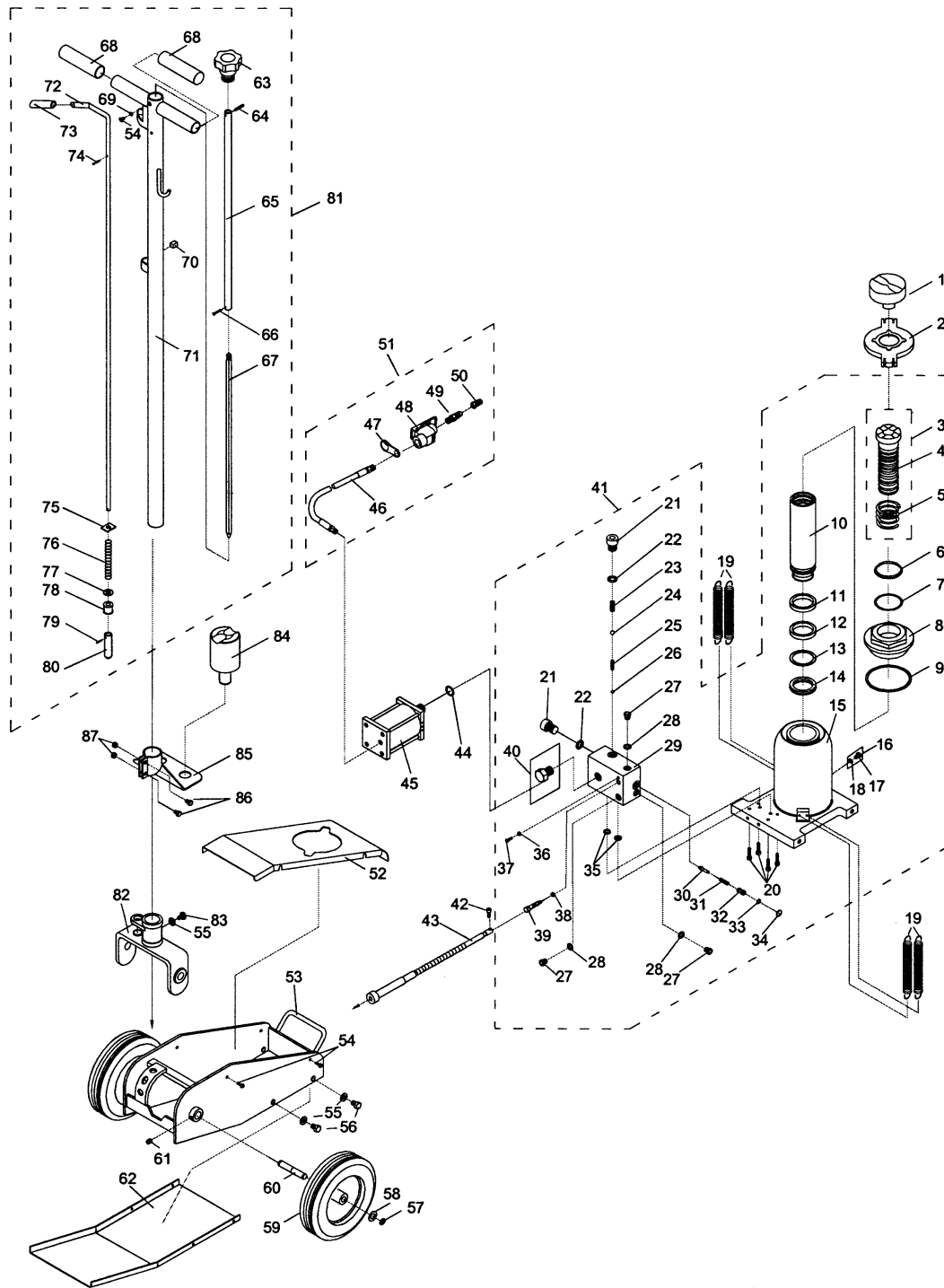
Troubleshooting

Trouble	Probable Cause	Remedy
Jack will not lift load.	Release valve not tightly closed.	Tighten release valve knob.
	Overload condition.	Remedy overload condition.
	Pressure of air supply is too low.	Change to a suitable pressured air source.
Jack bleeds off after lift.	Release valve not tightly closed.	Tighten release valve knob.
	Overload condition.	Remedy overload condition.
	Hydraulic unit malfunction.	Contact WMH Technical Service.
Jack will not lower after unloading.	Reservoir is overfilled.	Drain oil to proper level.
	Linkages binding.	Clean and lubricate moving parts.
Poor lift performance.	Oil level low.	Fill oil to proper level.
	Air is trapped in system.	With ram fully retracted remove oil filler plug to let air escape; reinstall oil filler plug.
Jack will not lift to full extension.	Oil level low.	Fill oil to proper level.

Replacement Parts

Replacement parts are listed on the following pages. To order parts or reach our service department, call 1-800-274-6848 between 7:30 a.m. and 6:00 p.m. (CST), Monday through Friday. Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

JASJ-22S Service Jack



Parts List: JASJ-22S Service Jack

Index No.	Part No.	Description	Size	Qty
1	A07-5-1108-105	Saddle		1
	A09-3-1101-103	Saddle Extension Set (includes index# 1, 84, 85)		1
2	A07-5-1802-101	Spring Plate		1
3	A07-3-1100-501	Extension Screw Assembly		1
4	A07-5-1101-101	Extension Screw		1
5	512-2-0447-102	Spring		1
6		Dust Seal*		1
7		O-Ring*		1
8	A07-5-1801-109	Top Nut		1
9		Gasket*		1
10	A07-5-1203-106	Piston Rod		1
11	A07-6-1209-208	Ram Bearing		1
12	A07-6-1209-107	Ram Bearing		1
13		Back-Up Ring*		1
14		U-Cup Ring*		1
15	A09-3-1601-103	Welded Base Assembly		1
16	324-4-1900-208	Filler Screw Assembly* (includes index #17 and 18)		1
17	324-6-1902-305	Filler Screw		1
18	511-7-0090-403	O-Ring		1
19	523-2-0196-016	Return Spring		4
20	649-1-0060-020	Hex Socket Head Bolt		4
21	A59-6-2405-106	Set Screw		2
22		Special Washer*		2
23	512-2-0110-107	Spring		1
24	601-7-0014-013	Steel Ball		1
25	521-2-0062-011	Spring		1
26	601-7-0009-001	Steel Ball		1
27	414-6-1215-509	Set Screw		3
28		Special Washer*		3
29	A09-6-1602-204	Valve Base		1
30	441-6-1216-107	Pin		1
31	512-2-0067-010	Spring		1
32	414-6-1215-307	Safety Valve Screw		1
33		O-Ring*		1
34	509-9-0145-109	Safety Valve Cap		1
35		O-Ring*		2
36	486-6-1302-100	Gasket		1
37	653-1-0060-072	Bolt		1
38		Oil Seal*		1
39	A09-6-1701-105	Release Valve		1
40	G10-4-1101-104	Screw Assembly		1
41	A09-1-1001-217	Hydraulic Unit (includes index# 3-18, 20-40)		1
42	649-1-0050-109	Hex Socket Head Bolt		1
43	A07-3-3300-307	Flexible Joint Assembly		1
44		Copper Gasket*		1
45	G53-3-2000-205	Air Cylinder		1
46	507-9-0064-013	Hose Assembly		1
47	G53-6-2203-106	Air Valve Hook		1
48	A27-3-2050-109	Air Valve Assembly		1
49	A07-4-2900-100	Filter		1
50	A24-6-8101-107	Male Coupler		1
51	A22-4-2040-107	Air Hose and Valve Assembly (includes index# 46 thru 50)		1
52	A09-6-3221-101	Upper Cover Plate		1
53	A09-3-3001-109	Frame Assembly		1
54	TS-1533031	Phillips Pan Head Machine Screw	M5 x 10	5
55	TS-1551071	Lock Washer	M10	5
56	TS-1491021	Hex Cap Screw	M10 x 20	4

57	667-5-0127-005	Retaining Ring "C"	2
58	611-3-0130-101	Washer	2
59	A07-4-3400-509	Rubber Wheel	2
60	A07-6-3230-300	Wheel Axle	2
61	644-1-0060-05311	Hex Socket Head Bolt	2
62	A09-6-3124-104	Base Plate	1
63	421-6-2202-209	Release Knob	1
64	601-4-0040-034	Spring Pin	1
65	A22-5-2304-101	Release Linkage (1)	1
66	TS-1521061	Socket Set Screw M4 x 16	1
67	A22-6-2304-107	Release Linkage (2)	1
68	506-9-0280-104	Handle Grip	2
69	605-3-0050-103	Spring Washer	1
70	110-6-1317-108	Washer	1
71	A22-3-2201-109	Handle	1
72	A35-6-7001-103	Positioning Bar	1
73	421-6-0100-100	Rubber Grip	1
74	602-4-0025-017	Cotter Pin	1
75	A07-6-2204-102	Washer	1
76	524-2-0138-019	Spring	1
77	511-3-0105-011	Washer	1
78	A07-6-2109-108	Positioning Bar Housing	1
79	601-4-0030-040	Spring Pin	1
80	A07-6-2106-203	Positioning Head	1
81	A09-4-2200-106	Handle Assembly (includes index# 63 thru 80)	1
82	A07-6-1301-105	Handle Fork	1
83	653-1-0100-014	Bolt	1
84	A07-6-1109-103	Adapter, 2-1/2"	1
85	A09-6-1104-107	Adapter Holder	1
86	653-1-0080-02511	Screw	2
87	661-2-0080-023	Nut	2
	JASJ22S-LB	Label (not shown)	1
	A09-3-9901-105	Repair Kit	1

NOTE: Items included in the Repair Kit are indicated by an asterisk (*).



TEST CERTIFICATE

COMMODITY	Air/Hydraulic Jack
MODEL	JASJ-22S
SERIAL NO.	
CAPACITY	22 ton
TEST LOAD	ton
DATE OF INSPECTION	
JUDGEMENT	PASSED
INSPECTOR	

WMH Tool Group
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