MST13006

22 TON AIR/HYDRAULIC TRUCK JACK

OWNERS MANUAL

SPECIFICATIONS

Low Height	9.06"	Handle Length	48"
Ram Travel	4.75"	Overall Length	22.38"
Screw Adjustment	4.13"	Overall Width	11"
Max. Height	17.94"	Weight	77 lb

Complies with ASME PALD/2009 Safety Standard

WARNING INFORMATION

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.

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

IMPORTANT: READ THESE INSTRUCTIONS BEFORE OPERATING

BEFORE USING THIS DEVICE, READ THIS MANUAL COMPLETELY AND THOROUGHLY, UNDERSTAND ITS OPERATING PROCEDURES, SAFETY WARNINGS AND MAINTENANCE REQUIREMENTS.

It is the responsibility of the owner to make sure all personnel read this manual prior to using the device. It is also the responsibility of the device owner to keep this manual intact and in a convenient location for all to see and read. If the manual or product labels are lost or not legible, contact Monster for replacements. If the operator is not fluent in English, the product and safety instructions shall be read to and discussed with the operator in the operator's native language by the purchaser/owner or his designee, making sure that the operator comprehends its contents.

THE NATURE OF HAZARDOUS SITUATIONS

⚠WARNING

The use of portable automotive lifting devices is subject to certain hazards that cannot be prevented by mechanical means, but only by the exercise of intelligence, care, and common sense. It is therefore essential to have owners and personnel involved in the use and operation of the equipment who are careful, competent, trained, and qualified in the safe operation of the equipment and its proper use. Examples of hazards are dropping, tipping or slipping of loads caused primarily by improperly securing loads, overloading, off-centered loads, use on other than hard level surfaces, and using equipment for a purpose for which it was not designed.

METHODS TO AVOID HAZARDOUS SITUATIONS

⚠WARNING

- Read, study, understand and follow all instructions before operating this device.
- Inspect the jack before each use. Do not use jack if damaged, altered, modified, in poor condition, leaking hydraulic fluid, or unstable due to loose or missing hardware or parts. Make corrections before using.
- Lift only on areas of the vehicle as specified by the vehicle manufacturer.
- Wear eye protection that meets ANSI Z87.1 and OSHA standards (users and bystanders).
- Do not use jack beyond its rated capacity.
- **This is a lifting device only. Immediately after lifting, support the vehicle with appropriate means.**
- No alterations shall be made to this product.
- Use only on a hard level surface.
- Do not use saddle adaptors or saddle extenders between the stock lifting saddle and the load.
- Always lower the jack slowly and carefully.
- This product may contain one or more chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. *Wash hands thoroughly after handling.*
- Failure to heed these warnings may result in serious or fatal personal injury and/or property damage.

CONSEQUENCES OF NOT AVOIDING HAZARDOUS SITUATIONS

⚠WARNING

Failure to read this manual completely and thoroughly, failure to understand its OPERATING INSTRUCTIONS, SAFETY WARNINGS, MAINTENANCE INSTRUCTIONS and comply with them, and failure to comply with the METHODS TO AVOID HAZARDOUS SITUATIONS could cause accidents resulting in serious or fatal personal injury and/or property damage.

SETUP

PLEASE REFER TO THE EXPLODED VIEW DRAWING IN THIS MANUAL IN ORDER TO IDENTIFY PARTS.

1. Feed the black hose (#64) and orange hose (#63) coming out of the bottom of the handle assembly (#76) through the handle-1 (#52) while at the same time lining up the hole in the handle-1 (#52) with the hole in the handle connector (#55). Secure them together with the screw (#54).
2. Thread two nuts (#53) all the way on the bottom of the tie rod (#50). Thread the bottom of the tie rod all the way inside the slotted pin (#49). Now tighten one nut (#53) down on top of the slotted pin (#49) and tighten. Slip the spring (#51) down on the tie rod (#50). Insert the tie rod (#50) through the bottom of the bracket that is welded to the handle-1 (#52) so that the spring is trapped between the bracket and the nuts (#53) that are tightened against the slotted pin (#49). Compress the spring until the cross hole in the tie rod (#50) is visible on the other side of the welded bracket and install the r-pin (#71) through the hole.
3. Thread another nut (#53) all the way on the tie rod (#56). Hold the handle lock (#58) down and away from the t-handle-2 (#60) while simultaneously threading the tie rod (#56) nut onto the tie rod (#50).
4. Raise the handle lock (#58) up so the slotted pin (#49) does not come in contact with any of the three holes in the handle position seat assembly (#7). Remove the screw (#73) from the handle socket (#11). Insert the handle-1 (#52) in the handle socket (#11) while simultaneously inserting the slotted pin (#49) in the handle socket (#11) guide holes. Make sure the hole in the lower portion of the handle-1 (#52) aligns with the threaded hole in the handle socket (#11) and secure them together with the screw (#73). Move the handle up and down while simultaneously pulling the handle lock down so the slotted pin (#49) will engage with any of the three locking holes in the handle position seat assembly (#7). Make sure the slotted pin will engage all three holes. It might be necessary to adjust the threaded connection between tie rods (#50 and #56) in order to get proper engagement. After final adjustment, tighten the nut (#53) to secure the connection.
5. There are two air hoses that must be firmly inserted into the couplers (#48). The orange hose (#63) fits in the higher located coupler while the black hose (#64) fits in the lower located coupler.
6. Install the air quick disconnect of your choice in the cross valve (#65). Put at least two wraps of pipe dope tape around the disconnect threads before installation to prevent air leaks.
7. Install the bracket assembly (#72) on the handle-1 tube in the position as shown on the cover of the Owner's Manual and secure the adaptors in the bracket holes using the r-pins (#69).
8. Due to the vacuum release system design of this jack, the jack's hydraulic system very rarely becomes air bound. Indication of an air bound system is a ram that does not rise smoothly. In some extreme case of an air bound system, air can be purged by following this procedure:

PURGING AIR FROM THE HYDRAULIC SYSTEM

a. Raise the ram (#32) to maximum height and then lower it all the way down following the activation directions on top of the handle.
b. Repeat step "a" several times until all air is purged from the system.

OPERATING INSTRUCTIONS

This is the safety alert symbol used for the **OPERATING INSTRUCTIONS** section of this manual to alert you to potential personal injury hazards. Obey all instructions to avoid possible injury or death.

IMPORTANT: Before attempting to raise any vehicle, check vehicle service manual for recommended lifting surfaces.

1. Become familiar with the identification and function of the operating jack components.
   a. The ram (#32) is the shaft that comes out of the jack when you rotate the air lever to the right.
   b. The ram (#32) is equipped with an extension screw which can be unscrewed to extend from the ram if there is not enough hydraulic stroke to raise the load to the desired height. If additional height is required, extension adapters can be inserted in the hole on top of the extension screw.
   c. Larger diameter saddles can be inserted in the extension screw when requiring a larger diameter saddle surface.
2. Chock the vehicle's tires that will not be lifted off the ground prior to lifting the vehicle and if available, apply the emergency brake or any other method of braking.
3. Position the jack at the designated lift point. Estimate the required ram travel to raise the vehicle to the desired height. If the desired vehicle height exceeds the entire ram travel, unscrew the extension screw to make up the difference and add an extension adapter if necessary.
4. Lock the handle in a position that will not interfere with the vehicle when raised or lowered. Keep the handle in that locked position until the work is completed and you are ready to remove the jack from use.
5. With the jack in the lowered position, push the jack under the vehicle. **IMPORTANT:** Use the vehicle manufacturer's recommended lifting procedures and lifting points before lifting loads.
6. In most cases 100 psig input air pressure (do not exceed 200 psig) will lift the maximum capacity load not to exceed 22 tons. Rotate the air lever to the right until the top of the ram comes close to the designated lift point. Make sure the designated lift point is flat, parallel to the ground and free from grease, any kind of lubricant, and debris. Proceed with pumping the jack in order to lift the vehicle to the desired height. During lifting, inspect the position of the jack in relation to the ground and the ram in relationship to the load to prevent any unstable conditions from developing. If conditions look like they are becoming unstable, slowly lower the load and make appropriate setup corrections after the load is fully lowered.
7. When the vehicle or load is lifted to its desired height, immediately place safety support stands (jack stands) in their designated locations and adjust the stands' support columns up as close to the designated vehicle support points as possible. Although jack stands are individually rated, they are to be used in a matched pair to support one end of the vehicle only. Stands are not to be used to simultaneously support both ends or one side of a vehicle. Rotate the air lever to the left to lower the vehicle onto the safety support stands (jack stands). Make sure the vehicle is safely supported by the safety support stands' (jack stands) saddles and not the locating lugs of the saddles. Inspect the relationship of the safety support stands (jack stands) with the ground and the safety support stand (jack stand) columns and saddles with the vehicle to prevent any unstable conditions. If conditions look unstable, rotate the air lever to the right to raise the vehicle off the safety support stands (jack stands). Make the appropriate setup changes and slowly and carefully lower the vehicle onto the safety support stand saddles.
8. After the work is done, rotate the air lever to the right until the jack is high enough to remove the vehicle or load from the safety support stand saddles. Be sure load is stable. If it is not, lower load back onto safety support stands. Make appropriate setup corrections and repeat the step again. Remove the safety support stands from under the vehicle, being very careful not to move the vehicle.
9. Rotate the air lever to the left to lower the vehicle or load down to the ground.

PREVENTATIVE MAINTENANCE

This is the safety alert symbol used for the **PREVENTATIVE MAINTENANCE** section of this manual to alert you to potential personal injury hazards. Obey all instructions to avoid possible injury or death.

IMPORTANT: The number one cause of jack failure in air/hydraulic jacks is dirt and moisture in the air motor and/or hydraulic system. The shop air supply should be equipped with water and dirt filter traps that should be emptied or cleaned according to a monthly maintenance schedule. An in line oil lubricator will extend the life of air/hydraulic jacks. Inoperable jacks caused by poorly equipped or maintained shop air systems are not eligible for warranty consideration. Contaminants can also enter the air/hydraulic system when the shop air line is disconnected from the jack air line and the line is dropped on the floor. Contaminants in the air couplers, once reconnected, will be driven into the system.

1. Always store the jack in a well protected area where it will not be exposed to inclement weather, corrosive vapors, abrasive dust, or any other harmful elements. The jack must be cleaned of water, snow, sand, grit, oil, grease or other foreign matter before using.
2. The jack must be lubricated periodically in order to prevent premature wearing of parts. A general purpose grease must be applied to the threads on the extension screw. Do not lubricate any portion of the lift saddle and make sure the saddle is free from grease, any kind of lubricant, or debris before using the jack. Jacks found to be defective due to worn parts resulting from inadequate or no lubrication are not eligible for warranty consideration.
3. It should not be necessary to refill or top off the reservoir with hydraulic fluid unless there is an external leak. An external leak requires immediate repair which must be performed in a dirt-free environment by qualified hydraulic repair personnel who are familiar with this equipment. Authorized Service Centers are recommended. **IMPORTANT:** In order to prevent seal damage and jack failure, never use alcohol, hydraulic brake fluid, or transmission oil in the jack. Use hydraulic jack oil, Chevron Hydraulic Oil AW ISO 32 or its equivalent Unocal Unax AW 150.
4. Every jack owner is responsible for keeping the jack label clean and readable. Use a mild soap solution to wash external surfaces of the jack but not any moving hydraulic components.
5. Inspect the jack before each use. Do not use the jack if any component is cracked, broken, bent, shows sign of damage or leaks hydraulic fluid. Do not use the jack if it has loose or missing hardware or components, or is modified in any way. Take corrective action before using the jack again.
6. Do not attempt to make any hydraulic repairs unless you are a qualified hydraulic repair person that is familiar with this equipment.

TROUBLESHOOTING

PROBLEM: UNIT WILL NOT LIFT RATED LOAD.
ACTION: Purge air from hydraulic system by following procedure under SETUP.

PROBLEM: UNIT WILL NOT SUSTAIN RATED LOAD OR FEELS “SPONGY” UNDER RATED LOAD.
ACTION: Purge air from hydraulic system as above.

PROBLEM: UNIT WILL NOT LIFT TO FULL HEIGHT.
ACTION: Purge air from hydraulic system as above or check oil level in reservoir.

PROBLEM: UNIT STILL DOES NOT OPERATE.
ACTION: Contact your place of purchase for details on handling warranty.

WARRANTY HANDLING PROCEDURES & GUIDELINES MONSTER LIFTING

Monster warrants that all and jacks and service related equipment will be free from defects in material and workmanship for a period of 2 years following the original date of purchase. This warranty is extended to the original retail purchaser only. If any jack or service-related item proves to be defective during this period, it will be replaced or repaired, at Monster's option, without charge. This warranty does not apply to damage from accident, overload, misuse or abuse, nor does it apply to any equipment which has been altered or used with special attachments other than those recommended. This warranty does not cover repairs made by anyone who is not a Monster Professional Lifting Equipment Authorized Repair Center.

All other jacks or service-related equipment will be replaced or repaired at Monster's option during the 2 year warranty period.

During the 2 year warranty period, all alleged defective products must be shipped, freight prepaid, along with proof of date-of-purchase, to your nearest Monster Professional Lifting Equipment Authorized Warranty Center. Be certain to include your name, address and phone number along with proof-of-purchase information, and a brief description of the alleged defect. The product will be returned to the customer, freight prepaid.

Many alleged defectives may simply be handled by calling your nearest Service Center for parts. See pages 18-20 for a listing of authorized warranty service centers.

In no event shall Monster be liable for incidental or consequential damages. The liability on any claim for loss or damage arising out of the sale, resale or use of a jack or related service equipment, shall in no event exceed the purchase price. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

THIS WARRANTY IS THE SOLE AND EXCLUSIVE WARRANTY PROVIDED IN CONNECTION WITH THE SALE OF MONSTER PROFESSIONAL LIFTING EQUIPMENT. ALL OTHER WARRANTIES, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE EXCLUDED.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

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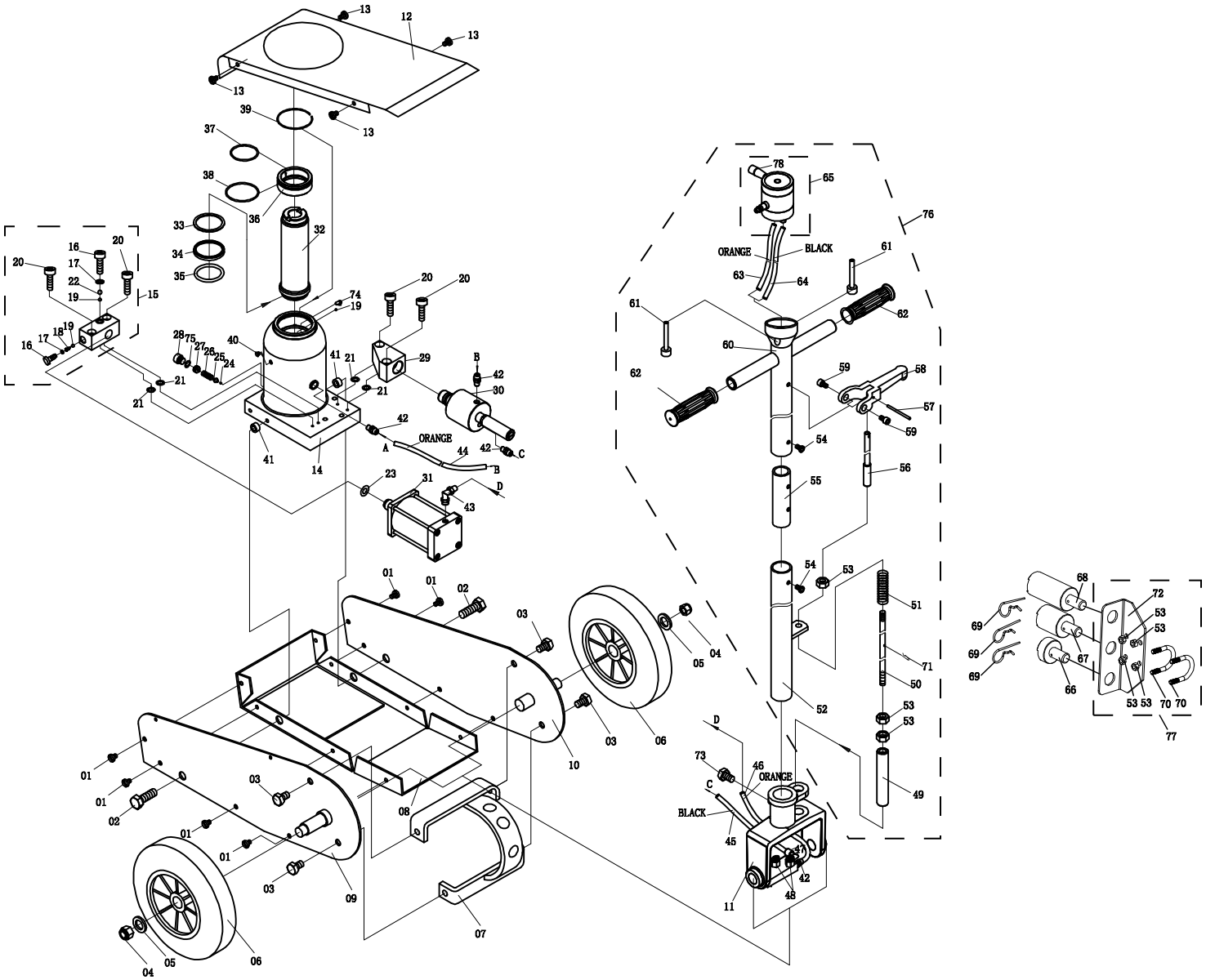
EXPLODED DRAWING



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PARTS LIST

REF. #	PART #	DESCRIPTION	QTY.	REF. #	PART #	DESCRIPTION	QTY.
1		Bolt	8	41		Block	2
2		Bolt	2	42	MS1300642	Coupler	4
3		Bolt	4	43	MS1300643	Coupler	1
4	MS1300604	Nut	2	44		Short Orange Hose	1
5	MS1300605	Washer	2	45	MS1300645	Short Black Hose	1
6	MS1300606	Wheel	2	46	MS1300646	Orange Hose	1
7		Handle Position Seat Assy	1	47		Coupler	1
8		Base Plate	1	48		Coupler	2
9		Left Side Plate	1	49		Slotted Pin	1
10		Right Side Plate	1	50		Tie Rod	1
11	MS1300611	Handle Socket	1	51	*	Spring	1
12	MS1300612	Cover Plate	1	52		Handle-1	1
13		Bolt	4	53		Nut	7
14		Pump Body Welded Components	1	54		Screw	2
15	MS1300615	Connecting Block Assembly	1	55		Handle Connector	1
16		Screw	2	56		Tie Rod	1
17		Copper Washer	2	57		Pin	1
18	*	Spring	1	58		Handle Lock	1
19	*	Steel Ball	3	59		Screw	2
20		Screw	4	60		Handle-2	1
21	*	O-Ring	4	61		Screw	2
22	*	Steel Ball	1	62		Handle Sleeve	2
23	*	Copper Ring	1	63	MS1300663	Orange Hose	1
24	*	Steel Ball	1	64	MS1300664	Black Hose	1
25		Regulating Ball Seat	1	65	MS1300665	Cross Valve & Air Lever	1
26	*	Spring	1	66	MS1300666	Adaptor	1
27		Screw	1	67	MS1300667	Adaptor	1
28		Screw	1	68	MS1300668	Adaptor	1
29	MS1300629	Release Plate	1	69	MS1300669	R-Pin	3
30	MS1300630	Release Valve	1	70		U Bolt	2
31	MS1300631	Air Motor	1	71		R-Pin	1
32	MS1300632	Ram	1	72		Bracket Assembly	1
33		Nylon Washer	1	73		Screw	1
34		Washer	1	74	MS1300674	Steel Ball Block Slice	1
35	*	O-Ring	1	75		O-Ring	1
36	MS1300636	Ring For Ram	1	76	MS1300676	Handle Assembly Complete	1
37	*	O-Ring	1	77	MS1300677	Bracket Assembly and Hardware	1
38	*	O-Ring	1	78	MS1300678	Air Lever	1
39		Circlip	1	Not Shown	MS13006LK	Product Label Kit	1
40		Oil Plug	1				

* Available in MS13006HRK - Hydraulic Repair Kit

Only numbers identified by Part No. are available separately.