

Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

Westward® Hydraulic High Lift Transmission Jacks

Description

Westward hydraulic high lift transmission jacks provide quick, effortless lifts of rated capacity loads for lifting transmissions and differentials of automotive vehicles. Model 5M466A features a powerful air motor and stamped steel frame construction with steel base. Jack pumping can be done either by air operation or manual operation by foot pedal. The saddle has both side and tilting angle adjustment to best fit the different shapes of various transmissions and differentials. Hydraulic cartridges provide overload protection, while bypass mechanism offers stroke limitation of ram piston. Metered release valve assures precise adjustment of saddle height and smooth lowering of load.

Specifications

Model	Capacity	Saddle Low	Saddle Height
5ML72	1,000 lb	36 3/4"	76 5/8"
5M466A (air Model)	1,000	36 3/4"	76 5/8"

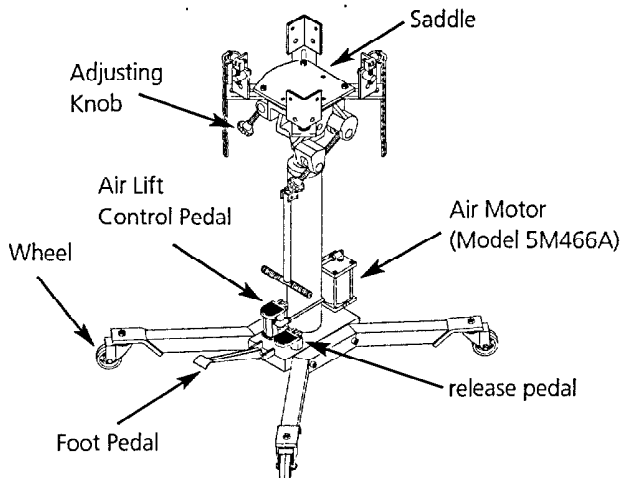


Figure 1 — Hydraulic High Lift Transmission Jack

General Safety Information

▲ WARNING Be sure all people and tools are clear before lowering. Inspect jack before each use. Do not use if bent, broken, leaking or damaged components are noted. No alteration of this product is allowed. Do not use this device for any purpose other than that for which it is intended. Ensure that load is stable and fully lowered before attempting to move jack.

1. Transmission jacks are for removing, transporting, and installing transmissions or specified components only.
2. Do not lift or support a vehicle with a transmission jack.
3. Do not overload this jack beyond its rated capacity.
4. This is a lifting device only. Transfer load to a suitable support device.

5. When using the foot pump, take care not to accidentally actuate the metered release pedal, located to the right of the foot pedal.
6. Before working on/under vehicle, always ensure the vehicle is properly raised and secured by means of a proper lift.
7. Use jack on a hard level surface.
8. Failure to follow these warnings may result in loss of load, property damage, and/or serious injury.

Assembly

Refer to Figures 1 and 2.

1. Three major parts are included in package: a) hydraulic unit with pumping mechanism and air motor, b) saddle unit with a bag of chains and miscellaneous items, and c) two base frame pieces with two bags of wheels and hardware.
2. Attach either one of the two base frames to the steel base of hydraulic unit, and secure with hex socket bolts and washers provided. Then apply the same procedure for the other base frame.
3. Install the wheels onto the base frame.
4. Move the saddle unit above the ram piston, then place the saddle socket onto the ram piston. Align the hole and then screw in the hex socket bolt all the way through.

Operation

▲ WARNING Off-center loads and loads lifted while jack is not level may damage the jack or cause personal injury.

▲ CAUTION Occasionally hydraulic jacks become air bound and will not function properly. To correct this condition, remove oil filler plug. This

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Operation (Continued)

will allow any pressurized air to escape.

Ensure oil level is even with or just below oil plug hole. Reinstall the oil filler plug. Pour a teaspoon of air tool lubricant into air supply inlet of lift actuator pedal. Connect to air supply and operate for 3 seconds to evenly distribute lubricant.

TAKING TRANSMISSION/DIFFERENTIAL FROM VEHICLE

1. Operate the jack by pressing the lift actuator pedal (for Model 5M466A) or, when pressured air is not available, operating the foot pedal to desired height.
2. Adjust the saddle in side position and tilting angle that best fits the shape of transmission/differential using chain and tighten properly.
3. Secure the transmission/differential using chain and tighten properly.
4. After removing all securing bolts of the transmission/differential, carefully lower load to jack's minimum height. Then move to desired workplace.
5. THIS IS A LIFTING DEVICE ONLY. THE LOAD MUST BE SUPPORTED IMMEDIATELY BY OTHER APPROPRIATE MEANS.

PUTTING TRANSMISSION/DIFFERENTIAL INTO VEHICLE

1. Place transmission/differential on jack saddle and properly secure by chain.
2. Carefully press the lift actuator pedal (model 5M466A) or operate the pumping pedal if pressured air is not available to lift the transmission / differential to desired height.
3. After all fasteners bolts are properly secured, press the release pedal to lower the jack to minimum height.

▲ WARNING *Avoid shock loads created by quickly opening and closing the release valve as the load is being lowered. Shock loads can create dangerously high operating pressures within the hydraulic system, causing system failure and resulting in personal injury and/or property damage.*

Maintenance

▲ CAUTION *Use only a good grade hydraulic jack oil. Avoid mixing types of oil. Do not use brake fluid, alcohol, glycerin, detergent motor oil, or dirty oil. Improper fluid can cause serious internal damage to the jack rendering it inoperative.*

CHANGING OIL

1. For best performance and longest unit life, replace the complete oil supply at least once a year.
2. To drain the oil, remove the oil filler plug.
3. Lay the jack on its side and allow the oil to run out into suitable drain pan. The oil will run slowly because air must enter as oil drains out.
4. BE CAREFUL to prevent dirt or foreign matter from entering the system.
5. Replace with proper oil as described above.
6. Reinstall oil filler plug.

LUBRICATION

1. (For Model 5M466A) When used on a daily basis, lubricate air motor before use. Use Dayton lubricating oil 4ZF22. If no air line oiler is used, run a 1/2 teaspoon of oil thru the air motor. Oil can be squirted or poured into the hose connection nearest the air supply connection, then simply run the jack.

2. Add lubricating oil to all pivoting sections every 3 months.

PREVENTING RUST

1. Check ram and piston periodically for signs of corrosion. Clean as needed with an oily cloth.
2. When not in use, store jack with saddle and piston fully retracted.

For Replacement Parts, call 1-800-323-0620

24 hours a day - 365 days a year

Please provide following information:

- Model number
- Serial number (if any)
- Part description and number as shown in parts list

Address parts correspondence to:

Grainger Parts
 P.O. Box 3074
 1657 Shermer Road
 Northbrook, IL 60065-3074 U.S.A.

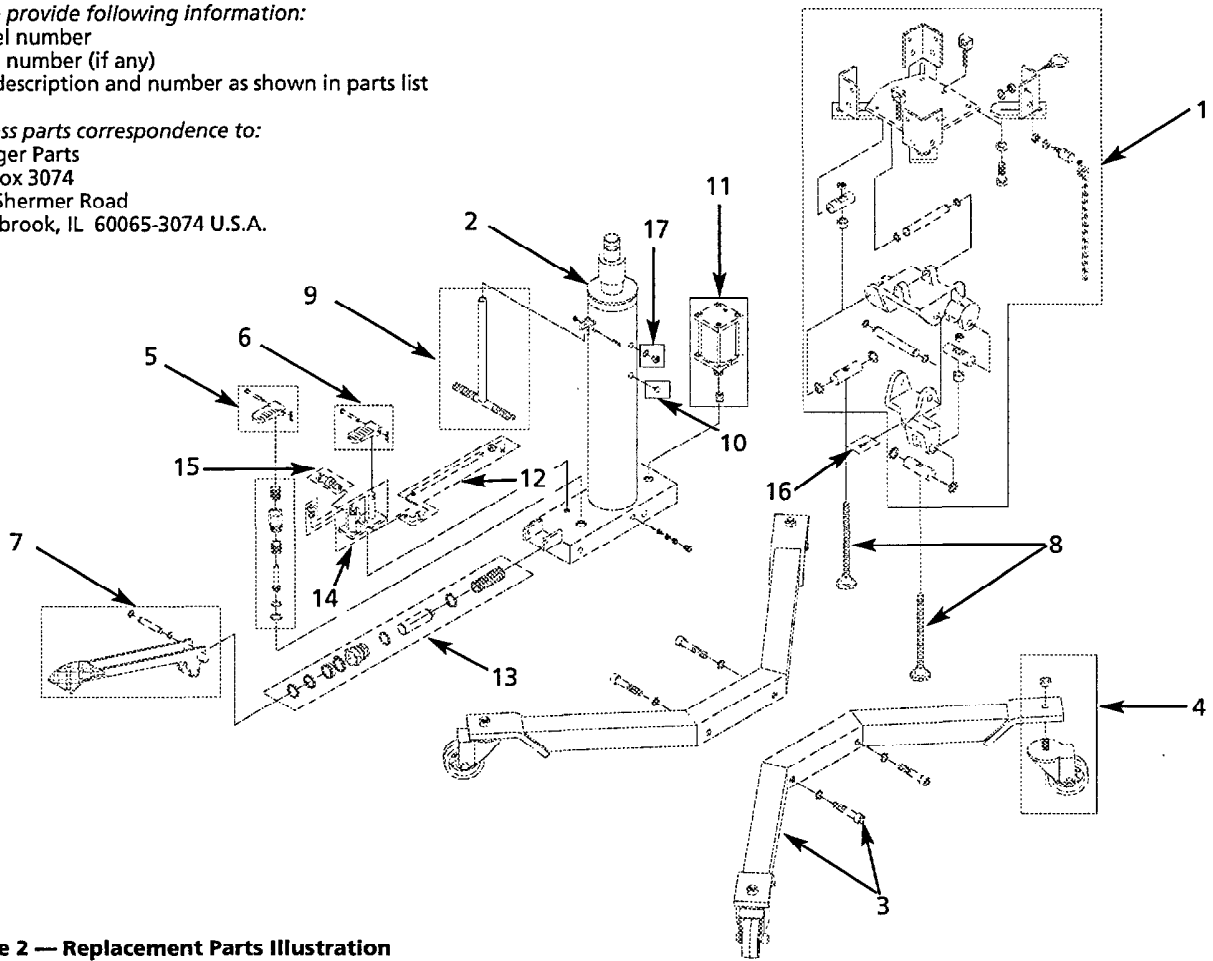


Figure 2 — Replacement Parts Illustration

Replacement Parts List

Reference Number	Description	Part Number For Model:		Quantity
		5M466A	5ML72	
1	Saddle Assembly	G360001	G360101	1
2	* Hydraulic Unit (includes #10, 11, 13, 17)	G360002	G360102 (#11 exclude)	1
3	Base Frame	G360003	G360103	2
4	Wheel (Includes hardware)	G360004	G360104	4
5	Release Pedal	G360005	G360105	1
6	Lift Actuator (air) Pedal	G360006	N/A	1
7	Foot Pumping Pedal	G360007	G360107	1
8	Saddle Adjusting Knob	G360008	G360108	2
9	Handle Assembly (Includes hardware)	G360009	G360109	1
10	Oil Filler Screw	G360010	G360110	1
11	* Air Motor	24101-G36	N/A	1
12	Air Hose Assembly	G360012	N/A	1
13	Pump Piston Assembly	G360013	G360113	1
14	Air Inlet Valve Assembly	G360014	N/A	1
15	Male Connector	G360015	N/A	1
16	Hex. Socket Head Bolt	G360016	G360116	1
17	Air Vent Screw Assembly	G360017	G360117	1

(*) No replacement parts available for hydraulic unit or air motor.

Westward® Hydraulic High Lift Transmission Jacks

Troubleshooting Chart

Symptom	Possible Cause(s)	Corrective Action
Jack will not lift load	<ol style="list-style-type: none"> 1. Release valve not tightly closed 2. Overload condition 3. Pressure of air supply is too low 	<ol style="list-style-type: none"> 1. Ensure release valve tightly closed 2. Remedy overload condition 3. Change to a suitable air source
Jack bleeds off after lift	<ol style="list-style-type: none"> 1. Same as above 2. Hydraulic unit malfunctioning 	<ol style="list-style-type: none"> 1. Same as above 2. Replace
Jack will not lower after unloading	<ol style="list-style-type: none"> 1. Reservoir overfilled 2. Linkages binding 	<ol style="list-style-type: none"> 1. Drain fluid to proper level 2. Clean and lubricate moving parts
Poor lift performance	<ol style="list-style-type: none"> 1. Fluid level low 2. Air trapped in system 	<ol style="list-style-type: none"> 1. Ensure proper fluid level 2. With ram fully retracted, remove oil filler plug to let pressurized air escape, reinstall oil filler plug
Will not lift to full height	Fluid level low	Ensure proper fluid level

LIMITED WARRANTY

WESTWARD ONE-YEAR LIMITED WARRANTY. Hydraulic High Lift Transmission Jacks, Models covered in this manual, are warranted by Westward to the original user against defects in workmanship or materials under normal use for one year after date of purchase. Any part which is determined to be defective in material or workmanship and returned to an authorized service location, as Westward designates, shipping costs prepaid, will be, as the exclusive remedy, repaired or replaced at Westward's option. For limited warranty claim procedures, see PROMPT DISPOSITION below. This limited warranty gives purchasers specific legal rights which vary from jurisdiction to jurisdiction.

LIMITATION OF LIABILITY. To the extent allowable under applicable law, Westward's liability for consequential and incidental damages is expressly disclaimed. Westward's liability in all events is limited to and shall not exceed the purchase price paid.

WARRANTY DISCLAIMER. Westward has made a diligent effort to provide product information and illustrate the products in this literature accurately; however, such information and illustrations are for the sole purpose of identification, and do not express or imply a warranty that the products are MERCHANTABLE, or FIT FOR A PARTICULAR PURPOSE, or that the products will necessarily conform to the illustrations or descriptions.

Except as provided below, no warranty or affirmation of fact, expressed or implied, other than as stated in the "LIMITED WARRANTY" above is made or authorized by Westward.

PRODUCT SUITABILITY. Many jurisdictions have codes and regulations governing sales, construction, installation, and/or use of products for certain purposes, which may vary from those in neighboring areas. While Westward attempts to assure that its products comply with such codes, it cannot guarantee compliance, and cannot be responsible for how the product is installed or used. Before purchase and use of a product, review the product applications, and all applicable national and local codes and regulations, and be sure that the product, installation, and use will comply with them.

Certain aspects of disclaimers are not applicable to consumer products; e.g., (a) some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you; (b) also, some jurisdictions do not allow a limitation on how long an implied warranty lasts, consequentially the above limitation may not apply to you; and (c) by law, during the period of this Limited Warranty, any implied warranties of implied merchantability or fitness for a particular purpose applicable to consumer products purchased by consumers, may not be excluded or otherwise disclaimed.

PROMPT DISPOSITION. Westward will make a good faith effort for prompt correction or other adjustment with respect to any product which proves to be defective within limited warranty. For any product believed to be defective within limited warranty, first write or call dealer from whom the product was purchased. Dealer will give additional directions. If unable to resolve satisfactorily, write to Westward at address below, giving dealer's name, address, date, and number of dealer's invoice, and describing the nature of the defect. Title and risk of loss pass to buyer on delivery to common carrier. If product was damaged in transit to you, file claim with carrier.

Manufactured for Grainger International, 100 Grainger Pkwy., Lake Forest, Illinois 60045 U.S.A.