

Low Profile Transmission Jack

Operating Instructions & Parts Manual

Model Number
JT2500
1-1/2 Ton



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.

A ADVERTENCIA

- Leer, comprender, y seguir las instrucciónes antes de utilizar el aparato.
- El manual de instrucciónes y la información de seguridad deben estar comunicado en lengua del operador antes del uso.
- No seguir estas indicaciónes puede causar daños personales o materiales.

WARNING

U.S. Patent No. 5,946,912

To avoid crushing and related injuries:



NEVER work on, under or around a load supported only by a hydraulic jack. **ALWAYS** use adequately rated jack stands.

MAC TOOLS

505 N. Cleveland Ave. Suite 200 Westerville, OH 43082

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SAFETY and GENERAL INFORMATION

Save these instructions. For your safety, read, understand, and follow the information provided with and on this jack before using. The owner and operator of this equipment shall have an understanding of this jack and safe operating procedures before attempting to use. The owner and operator shall be aware that use and repair of this product may require special skills and knowledge. Instructions and safety information shall be conveyed in the operator's native language before use of this jack is authorized. If any doubt exists as to the safe and proper use of this jack, remove from service immediately.

Inspect before each use. Do not use if broken, bent, cracked or damaged parts are noted. Any jack that appears damaged in any way, or operates abnormally shall be removed from service immediately. If the jack has been or suspected to have been subjected to a shock load (a load dropped suddenly, unexpectedly upon it), immediately discontinue use until jack has been checked by a factory authorized service center (contact distributor or manufacturer for list of authorized service centers). It is recommended that an annual inspection be done by qualified personnel. Labels and Operator's Manuals are available from manufacturer.

PRODUCT DESCRIPTION

This Transmission Jack is designed to be used as an aid in the removal and installation of automotive and light truck transmissions, transfer cases and transaxles. This jack is for use under portable lift equipment, where vehicle must be supported by a pair of appropriately rated jack stands.



NEVER use for any purpose other than those uses outlined above!

SPECIFICATIONS

Model	Capacity	Min. Height	Max. Height	Base Size	Saddle Base	Extended Saddle Area
JT2500	1-1/2 Ton	7-7/8"	37-1/4"	46-3/4" x 25-5/8"	15-1/2" x 13-1/4"	24-7/8" x 19"

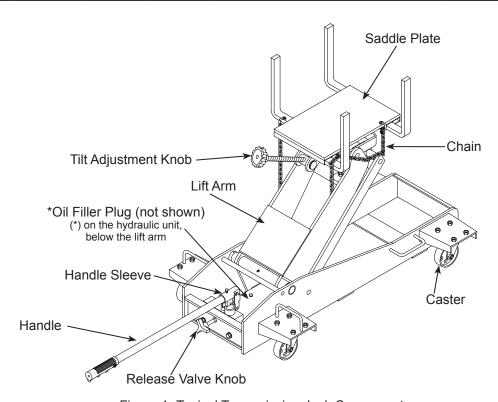


Figure 1- Typical Transmission Jack Components

PREPARATION

Assembly

Little or no assembly is required. Refer to Figures in the manual for details in understanding the assembly and the components of your product.

Before Use

- 1. Verify that the product and application are compatible.
- 2. Before using this product, read the operator's manual completely and familiarize yourself thoroughly with the product, its components and recognize the hazards associated with its use.
- 3. To familiarize yourself with basic operation, locate and turn the release valve knob (see Fig 1):
 - a. <u>Clockwise</u> until firm resistance is felt to further turning. This is the '**CLOSED**' release valve position used to **raise** the saddle plate.
 - b. <u>Counter-clockwise</u>, but no more than 1/2 turn from the closed position. This is the '**OPEN**' release valve position used to **lower** the saddle plate.
- 4. With saddle fully lowered, remove the oil filler screw. Pump 6 to 8 full strokes. This will help release any pressurized air which may be trapped within the reservoir. Check oil level. Proper oil level will vary from just covering the ram cylinder to 3/16" above it as seen from the oil filler hole. Reinstall the oil filler screw.
- 5. Ensure that jack rolls freely. Raise and lower the unloaded jack throughout the lifting range before putting into service to ensure the pump operates smoothly. Replace worn or damaged parts and assemblies with factory authorized replacement parts only.

Bleeding / Venting Trapped Air

With the release valve in the OPEN position (3b.) and with saddle fully lowered, locate and remove the oil filler screw. Pump 6 to 8 full strokes. This will help release any pressurized air which may be trapped within the reservoir. Reinstall the oil filler screw.

WARNING

- Read, understand, and follow all printed material provided with and on this product before use.
- Do not exceed rated capacity.
- Use only on hard, level surfaces.
- · Adequately support the vehicle before starting repairs.
- If loaded jack must be moved, make certain that load is secured by appropriate means, is stable, is in the **lowest possible position**, is moved over a smooth, hard level surface and that the **lifting platform** is level.
- Use of this product is **limited to removal**, **installation**, **and transportation** of **automotive and light truck transmissions**, **transfer cases and transaxles**.
- Use only adapters / accessories provided by the manufacturer of this transmission jack.
- Use only adapters / accessories whose rated capacity is greater than the rated capacity of this jack.
- Ensure the center of gravity is **center loaded** on the saddle.
- Never use this device as a work/repair station. Transfer the load immediately to a suitable work station.
- No alteration shall be made to this product.
- Failure to heed these markings may result in personal injury and/or property damage.

WARNING



To avoid crushing and related injuries:

- **Never** work on, under or around a load supported only by hydraulic jack.
- Be alert and sober when using this product. Do not operate under the influence of drugs or alcohol.

OPERATION

Follow the instruction for removal and installation of transmission, transfer case or transaxle according to the vehicle manufacturer's service manual.

Raise saddle:

- 1. Close release valve by turning release valve knob clockwise firmly.
- 2. Insert handle into handle sleeve, then pump handle until the load is contacted.
- 3. Secure load with provided chains.



Ensure center gravity of load is centered on the saddle and load is stable before moving jack. An off-center transmission could cause the jack to tip or flip over.

Lower saddle:



Be sure all tools and personnel are clear before lowering load. Slowly open the release valve! The more you turn the knob counter-clockwise, the faster the load will come down. Maintain control of the rate of speed at which the load lowers at all times!

- 1. Secure load to the jack with provided chain.
- 2. Slowly, gently turn the release valve knob counter-clockwise, never more than 1/2 full turn until the load is completely lowered.
- 3. Immediately transfer the load to an appropriate work station.
- 4. After removing load from the jack, ensure that saddle is fully lowered to reduce ram exposure to rust and contamination.



Never use this jack as a workstation!

MAINTENANCE

Important: Use only good grade hydraulic jack oil. Avoid mixing different types of fluid and NEVER use brake fluid, turbine oil, transmission fluid, motor oil or glycerin. Improper fluid can cause premature failure of the jack and the potential for sudden and immediate loss of load. Mobil DTE 13M or equivalent recommended.

Adding oil

- 1. With saddle fully lowered set jack in its upright, level position. Locate and remove oil filler screw.
- 2. Fill with oil until ~3/16" above the inner cylinder as seen from the oil filler hole. Reinstall oil filler screw.

Changing oil

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

- 1. With saddle fully lowered, remove oil filler screw.
- 2. Lay the jack on its side and drain the fluid into a suitable container.

Note. Dispose of hydraulic fluid in accordance with local regulations.

3. Set jack in its level position. Fill with oil until ~3/16" above the inner cylinder as seen from the oil filler hole. Reinstall oil filler screw.

Lubrication

A periodic coating of light lubricating oil to pivot points, axles and hinges will help to prevent rust and assure that casters and pump assemblies move freely.

Cleaning

Periodically check the pump piston and ram for signs of rust or corrosion. Clean as needed and wipe with an oily cloth.

Note: Never use sandpaper or abrasive material on these surfaces!

Storage

When not in use, store the jack with saddle fully lowered.

TROUBLESHOOTING

Symptom	Possible Causes	Corrective Action
Jack will not lift load	Release valve not tightly closed Load is too heavy	Ensure release valve tightly closed Consider higher capacity jack
Jack will lift, but not maintain pressure	Release valve not tightly closed Hydraulic unit malfunction	Ensure release valve tightly closed Discontinue use, contact Mac Tools technical service
Jack will not lower after unloading	Reservoir overfilled Linkage binding	Ensure load is removed, then drain fluid to proper level Clean and lubricate moving parts
Poor lift performance	Fluid level low Air trapped in system	Ensure proper fluid level With ram fully retracted, remove oil filler screw to let pressurized air escape, reinstall oil filler screw
Jack will not lift to full extension	• Fluid level low	Ensure proper fluid level

REPLACEMENT PARTS

Not all components of the jack are replacement items, but are illustrated as a convenient reference of location and position in the assembly sequence. When ordering parts, give Model number, part number and description below. Call or write for current pricing: Mac Tools a division of Stanley Black & Decker. 505 N. Cleveland Ave. Suite 200, Westerville, OH 43082. Tel: 1-800-MAC-TOOL (622-8665)

Replacement Parts **Illustration for Model** JT2500

Figure 2 - Model JT2500 Replacement Parts Illustration

Replacement Parts List for Model JT2500:

Item	Part No.	Description	Qty.
1	G62-1-1000-108	Hydraulic Unit	1
2	324-4-1900-208	Filler Screw Assembly	1
3	551-7-0060-066	Oil Seal	1
4	G46-3-9906-100	Release Valve Assembly	1
5	G62-6-1401-106	Pump Cylinder	1
6	G62-6-1306-102	Pump Piston	1
7	566-4-0080-508	Pin	3
8	G46-6-1301-205	Handle Sleeve	1
9	649-1-0095-103	Hex socket Set Screw	8
10	G38-3-9901-106	Handle Assembly	1
11	506-9-0264-106	Handle Grip	1
12	G38-4-5200-102	Caster Assembly	1
13	G62-3-4200-101	Saddle Assembly	1
14	G62-5-4302-103	Support Bar	4
15	G52-4-4102-101	Hook & Chain	4
16	G36-6-7000-102	Chain	2
17	G62-3-4502-109	Screw Assembly	4
18	G62-3-4203-109	Saddle Holder	1
19	G62-6-4207-103	Stationary Rod	1
20	G36-3-5100-108	Bearing	1
21	G62-6-4505-103	Washer	1
22	G62-6-4504-101	Tube II	1
23	G62-6-4503-109	Tube I	1
24	G62-3-4300-107	Saddle Base	1
25	G52-6-1709-106	Knob	1
26	601-4-0040-034	Spring Pin	1
27	G62-6-4501-105	Tilt Screw	1
28	653-1-0127-409	Hex. Bolt	4
*	G62-3-9901-108	Seal Kit, Hyd. Unit	-

(*) Seal Kit Contents:				
Item	Description	Qty.		
2	Filler Screw	1		
3	Oil Seal	1		
Α	Seal	1		
В	O-ring	1		
С	Back-up Ring	1		
D	U-cup	1		
E	O-ring	1		
F	Back-up Ring	1		
G	O-ring	1		
Н	Back-up Ring	1		
Ι	O-ring	1		
J	O-ring	1		
K	O-ring	1		

ONE YEAR LIMITED WARRANTY

For a period of one (1) year from date of purchase, **Mac Tools** a division of Stanley Black & Decker will repair or replace, at its option, without charge, any of its products which fails due to a defect in material or workmanship under normal usage. This limited warranty is a consumer's exclusive remedy.

Performance of any obligation under this warranty may be obtained by returning the warranted product, freight prepaid, to **Mac Tools** a division of Stanley Black & Decker Warranty Service Department, 505 N. Cleveland Ave. Suite 200 Westerville. OH 43082.

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