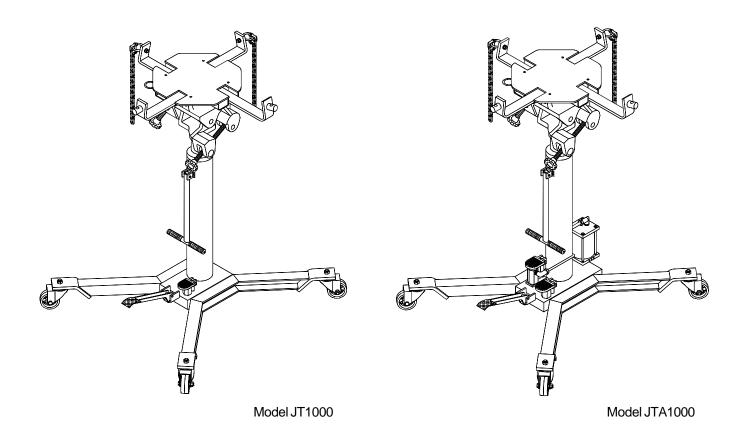


# Hydraulic Telescopic Transmission Jacks

# **Operating Instructions & Parts Manual**

Model Number JT1000 JTA1000 (Air/Manual) Capacity 1000-lb 1000-lb



## MAC TOOLS INC.

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

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Save these instructions. For your safety, read and understand the information contained within. The owner and operator shall have an understanding of this product and safe operating procedures before attempting to use this product. Instructions and Safety information shall be conveyed in the operators native language before use of this product is authorized. Make certain that the operator thoroughly understands the inherent dangers associated with the use and misuse of the product. If any doubt exists as to the safe and proper use of this product as outlined in this factory authorized manual, remove from service until which time it is clear. Inspect before each use. Do not use if broken, bent, cracked or otherwise damaged parts are noted. If the jack has been or suspected to have been subjected to a shock load, discontinue use until checked out by an authorized factory service center. Owners and operators of this equipment shall be aware that the use and subsequent repair of this equipment may require special training and knowledge. It is recommended that an annual inspection be done by qualified personnel and that any missing or damaged parts, decals, warning / safety labels or signs be replaced with authorized replacement parts only. Any jack that appears to be damaged in any way, operates abnormally or is missing parts, shall be removed from service immediately until such time as repairs can be made.

#### PRODUCT DESCRIPTION

Mac Tools Hydraulic Telescopic Transmission Jacks are designed to be used as an aid in the removal and installation of vehicle component parts and assemblies, specifically transmissions. They are for use under an overhead lift or in a garage pit. The air actuated function is an added feature on Model JTA1000. Ensure that your air source can dedicate 7.8 CFM @ 90 - 175PSI to each jack operated. To ensure dependable, troublefree operation an air dryer and oiler is recommended.

#### **SPECIFICATIONS**

Model	Capacity	Base Size ( L x W )	Min. Height	Max. Height
JT1000	1000 Lbs	34 1/8" x 35 1/2"	37 7/8"	77 5/8"
JTA1000*	1000 Lbs	34 1/8" x 36 1/8"	37 7/8"	77 5/8"

<sup>\*</sup> Air/ Lever Actuated Model

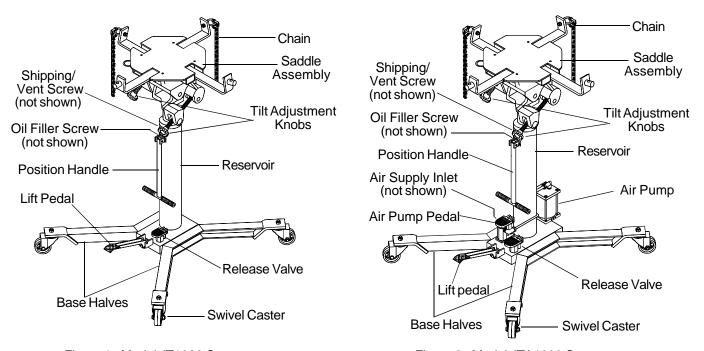


Figure 1 - Model JT1000 Components

Figure 2 - Model JTA1000 Components

**Note:** Vent Screw and Oil Filler Screw are located on the upper portion of the reservoir. See exploded drawing on page 6 & 7

#### **ASSEMBLY**

(Refer to figure 1 & 2)

- 1. Three major parts should be included in package:
  - (a) Hydraulic unit with pumping mechanism ( with air motor equipped for Model JTA1000),
  - (b) Saddle unit, and
  - (c) 2 pieces of base half with bolts and washers.
- Attach either one of the two base halves to the base of the hydraulic unit, then secure using allen head bolts and washers provided. Then apply the same procedure to the other base half. Use torque wrench to tighten to 30 lb.ft.. Do not overtighten.
- Position the saddle unit above the ram piston, place the saddle socket onto the ram piston. Secure using the set screw.

# **WARNING**

- Study, understand, and follow all printed materials provided with/on this product before use.
- · Do not exceed rated capacity.
- Use only on hard, level surfaces capable of supporting rated capacity loads.
- Use of this jack is limited to the removal, installation and transportation of transmissions, transfer cases and transaxles. Do not use a transmission jack to tilt or support a vehicle.
- Ensure that center gravity of load is centered on the saddle.
- Do not exceed 10° tilt angle of the saddle assembly in all directions.
- Adequately support the vehicle before starting repairs.
- Use only chains provided.
- If loaded jack must be moved, make sure that the load is secured, stable and in lowest position.
- This is a lifting and lowering device only.
- Transfer load immediately to appropriate support device for service or repair.
- No alterations shall be made to this product.
- Failure to heed these markings may result in personal injury and/or property damage.

# **AWARNING**



To avoid crushing and related injuries:

NEVER work on, under or around a load supported only by a jack. Immediately transfer the load to an appropriate work station.

#### **BEFORE USE**

- Inspect jack before each use. Do not use if bent, broken or cracked components are noted. Ensure that casters move freely. Check for and tighten any loose assemblies.
- 2. Verify that the product and the application are compatible.
- 3. Press the release valve, ensure that saddle is fully lowered. Remove shipping screw and replace with vent screw. (shipping screw is on top of the oil filler screw)
- Ensure oil level is just below the rim of the oil filler screw hole.

### Air Actuated Jacks only (JTA1000)

- 1. Pour a teaspoon of good quality air tool lubricant into the air supply inlet (See Figure 2). Connect to air supply and operate for 3 seconds to evenly distribute lubricant.
- 2. Air actuated product is fitted to accept the popular 1/4" NPT air nipple. When installing air nipple, ensure that thread tape or compound is used on connections. Do not allow compound to enter the air supply inlet orifice. Application of thread tape is acceptable, but ensure that it is not applied beyond the first machine thread.

### **OPERATION**

#### Raise saddle:

**Caution!** For model JTA1000, do not operate the jack by pumping the lift pedal and air pump pedal at the same time.

- 1. Pump foot pedal or press air pump pedal (Model JTA1000) until saddle reaches desired position.
- 2. Follow vehicle manufacturer's recommended procedures for removing the load as outlined in vehicle service manual or repair guide.
- Secure load with provided chains. Ensure load's center of gravity is centered on the saddle and load is stable before moving jack.

#### Lower saddle:

**Important!** Be sure all tools and personnel are clear before lowering load.

Slowly, gently apply downward pressure to the release valve pedal.

#### **MAINTENANCE**

Important: Use only good grade hydraulic jack oil. We recommend Mobil DTE 13M or equivalent. 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.

For Air Actuated model only: When used daily, pour a teaspoon of proper lubricant into the air inlet supply. Connect valve to air supply and press the air pump pedal to operate. This will evenly distribute lubricant and properly prepare the hydraulic power unit for use. Periodically check for leaks at air connections. Use thread compound to repair. Be caution when choose to use thread tape, ensure that thread tape is not applied beyond the first machine thread.

#### Adding oil

- 1. With the saddle fully lowered and level position. Remove oil filler screw.
- 2. Fill until oil is level with the oil filler screw hole, reinstall oil filler screw.

#### Changing oil

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

- 1. With ram fully lowered and pump piston fully depressed, remove the 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 upright position.
- 4. Fill with good quality jack oil.

#### Lubrication

A coating of light lubricating oil to pivot points, axles and hinges will help to prevent rust and assure that wheels, 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 retracted.

#### 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, serial number and description on page 6 & 7. Call or write for current pricing: Mac Tools Inc. 505 N. Cleveland Ave. Suite 200 Westerville, OH 43082. Tel: 1800-MAC-TOOL (622-8665)

#### TROUBLESHOOTING

Symptom	Possible Causes	Corrective Action	
Jack will not lift load	Air supply inadequate (Model JTA1000 only) Hydraulic unit malfunction	Ensure adequate air supply (Model JTA1000 only) Contact Mac Tools Tech. Service	
Jack bleeds off after lift	Overload condition Hydraulic unit malfunction	Remedy overload condition Contact Mac Tools Tech. Service	
Jack will not lower after unloading	Reservoir overfilled Linkage binding	Drain fluid to proper level Clean and lubricate moving parts	
Poor lift performance	Fluid level low	Ensure proper fluid level	
Will not lift to full extension	• Fluid level low	Ensure proper fluid level	

## **Replacement Parts for Model JTA1000**

<u>ltem</u>	Part#	<u>Description</u>	Qty
1	324-4-1900-208	Screw Assembly	2
2	G36-6-1804-102	Vent Screw Assembly	1
3	G36-3-1900-100	Lift Pedal	1
4	G36-6-1809-102	Release Valve/Air Pump Pedal	2
5a	G36-3-5000-104	Caster w/o Brake	2
5b	G36-3-5001-106	Caster w/ Brake	2
6	G36-3-2300-101	Tilt Screw Assembly	1
7	G36-3-2301-103	Tilt Screw Assembly	1
8	G36-3-0513-108	Accessory Kit	2
9	G36-4-4200-10308	Saddle Assembly (chain not included)	1
10	G36-3-0511-104	Bolt Set	1
11	G36-3-3301-108	Base Half	2
12	G36-3-2100-103	Handle Assembly	1
13	A24-6-8101-107	Male Coupler	1
14	G36-4-2000-105	Air Motor	1
15	G36-6-2302-103	Hose Connector	2
16	G36-6-2300-109	Air Hose	1
-	G36-3-9902-104	Repair Kit for Hydraulic Unit	-
-	JTA1000-L0	Product Label	-
-	JT1000-M0	Manual	-

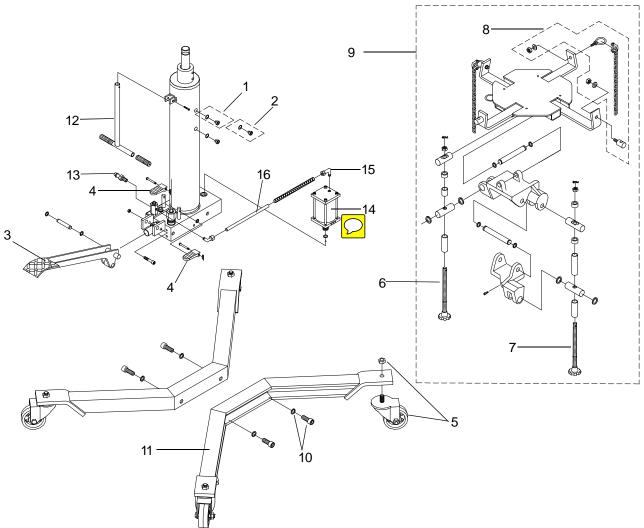


Figure 4 - Replacement Parts Illustration for Model JTA1000

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