



Toll Free: 1-800-579-8088 Web: www.zinko.com

MODEL

ZML-500

Telescopic Transmission Jack

## Operation & Maintenance Manual

### Important Receiving Instructions

Visually inspect all components for shipping damage. Shipping damage is NOT covered by warranty. If shipping damage is found, notify carrier at once. The carrier is responsible for all repairs and replacement costs during product shipping.

### For Your Safety and To Prevent Injury

Read, study and understand all warning labels and operating instructions furnished with this equipment prior to use. If any portion of this material is unclear, contact your representative for clarification. Never allow unskilled or improperly trained personnel to operate this equipment. Use of the transmission jack is limited to the removal and installation of transmissions, transaxles and vehicle components for which appropriate adapters are supplied. DO NOT lift or support vehicles with transmission jack.

### Caution Remarks Used In This Manual

**WARNING** indicates a potential danger that requires correct procedures or practices to avoid personal injury.

### Operator Responsibility

It is the operator's responsibility to read and understand all of the following safety statements:

**WARNING**

1. Be sure vehicle is appropriately supported before starting repairs. **This jack IS NOT a load supporting device.**
2. **DO NOT OVERLOAD.** Overloading can cause damage, failure of the jack, and/or personal or fatal injury.
3. **Use only on hard level surfaces capable of sustaining the load.**
4. Always use the load restraint belt, corner support bracket, and attachments to stabilize and firmly secure the load to the saddle. Insure that the load restraint belt is tight and properly positioned to effectively harness the load. **NEVER USE THIS JACK WITHOUT A LOAD RESTRAINT BELT THAT IS STRONG ENOUGH TO SUPPORT THE TRANSMISSION.**
5. Prior to transporting the load, insure that the jack is adjusted so the saddle is in the lowest horizontal position possible, and the load is centrally located on the saddle.
6. **DO NOT modify this equipment or remove load restraint belt.**
7. It is your responsibility to keep all warning labels and instruction literature legible and intact. Replacement labels and literature are available from the factory.
8. Failure to heed these warnings may result in equipment and/or property damage and/or personal or fatal injury.

### Operating Instructions

#### Preparing the Vehicle for Transmission Removal or Installation

**WARNING** The entire vehicle must be lifted and supported (use under-hoist stands) high enough above the floor so there is space for the jack with transmission to clear the vehicle.

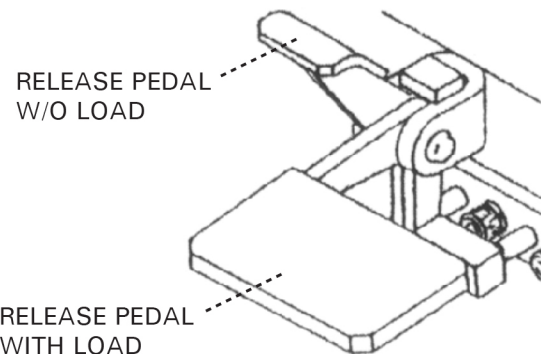
**IMPORTANT:** It is important to know the center weight balance of the transmission. The transmission saddle should support the center balance of transmission weight. Consult the vehicle manufacturer for information on the transmission.

#### Lowering the Load

There are two release pedals located beneath the pump pedal. The smaller pedal at the left is for rapid release when the jack is not loaded. The bigger pedal, at the lower right and painted yellow, is for slow release when the jack is loaded. To lower the jack, simply depress the desired pedal slowly. The saddle stops lowering when the operator removes foot from the release pedal.

1. DO NOT use the jack beyond its rated capacity or for purposes other than what were intended.
2. The jack and load may be lowered by depressing the release pedal with your foot. Be careful not to fully depress the release pedal when the jack is under load.

**WARNING** Always use the proper release pedal for lowering the jack. Using the small pedal incorrectly when the jack is loaded may result in equipment and/or property damage and/or personal or fatal injury.



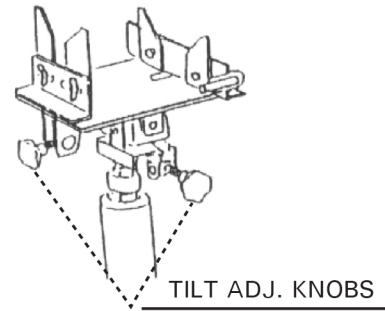
# Zinko Hydraulic Jack

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### Raising the Load

1. Make sure the load to be raised is positioned properly and securely attached to the saddle assembly with the restraint system provided.
2. Pump pedal to raise saddle to contact load. Position jack so weight of load will be equally distributed on saddle, and adjust pitch and tilt controls as necessary. Position corner support brackets and secure load with load restraint belt. Make sure the load to be raised is positioned properly and securely attached to the saddle with the restraint system provided.

**WARNING** Always use the load restraint belt, corner support brackets, and attachments to stabilize and firmly secure the load to the saddle. **The belt should be used as follows:** Hang the open end of the belt through the two "U" shaped slots beneath the saddle plate. Place the belt over the load, pull tight and engage into the buckle at the other end of the belt. Tighten the strapping and lock the buckle.



### Removing the Transmission

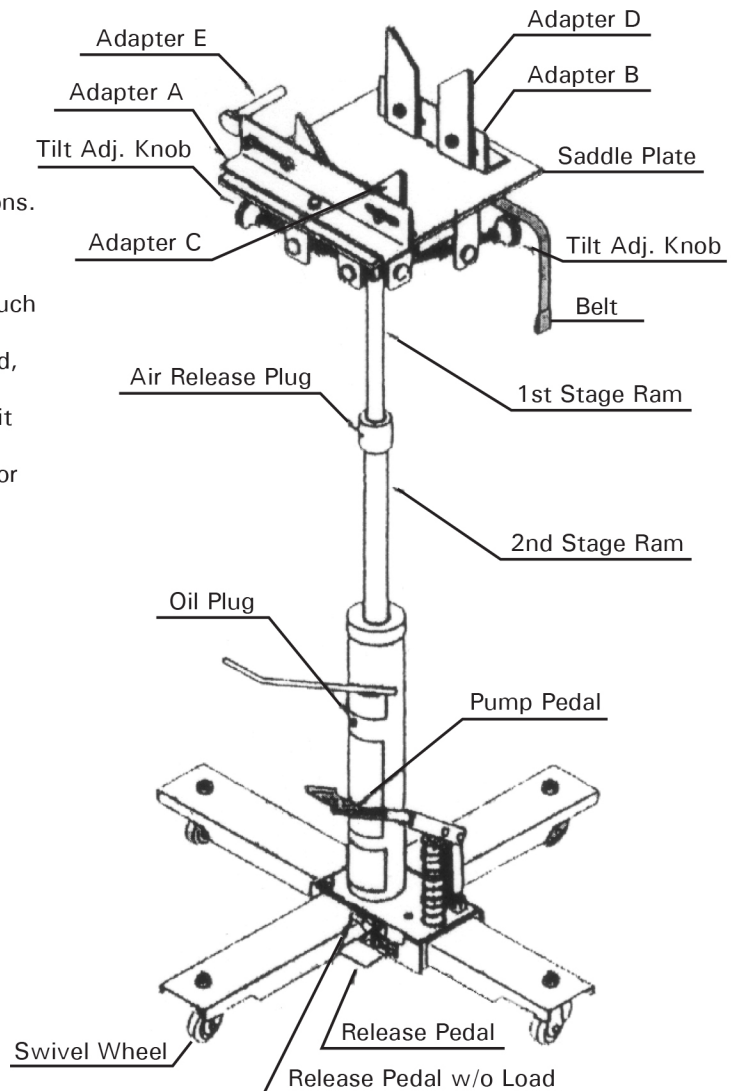
1. Consult the vehicle manufacturer's instructions regarding transmission removal.
2. Place the jack so the saddle assembly will lift the center balance of the transmission weight. Pump the jack up until the saddle is close to the transmission oil pan.
3. Once the saddle is centered and positioned near the transmission oil pan, adjust the saddle base and corner support brackets (adapters) so the flange of the transmission pan will rest on the top edge of the adapters. The adapters must then be secured to the saddle by tightening the hex bolts. Now gently raise the saddle so the adapters are supporting the transmission pan flanges.
4. Use the load restraint belt, corner support brackets, and attachments to stabilize and firmly secure the load to the saddle.
5. Use the saddle plate tilt knobs, forward/backward or side-to-side tilting, to adjust the load to a proper position for transmission removal or for alignment with the engine.

### Installing the Transmission

1. After removal of the transmission it is recommended to keep the transmission jack saddle adjustment the same. This will help in installing the transmission into its proper position.
2. Proceed with the installation of the transmission in accordance with the vehicle manufacturer's instructions.

### Maintenance Instructions

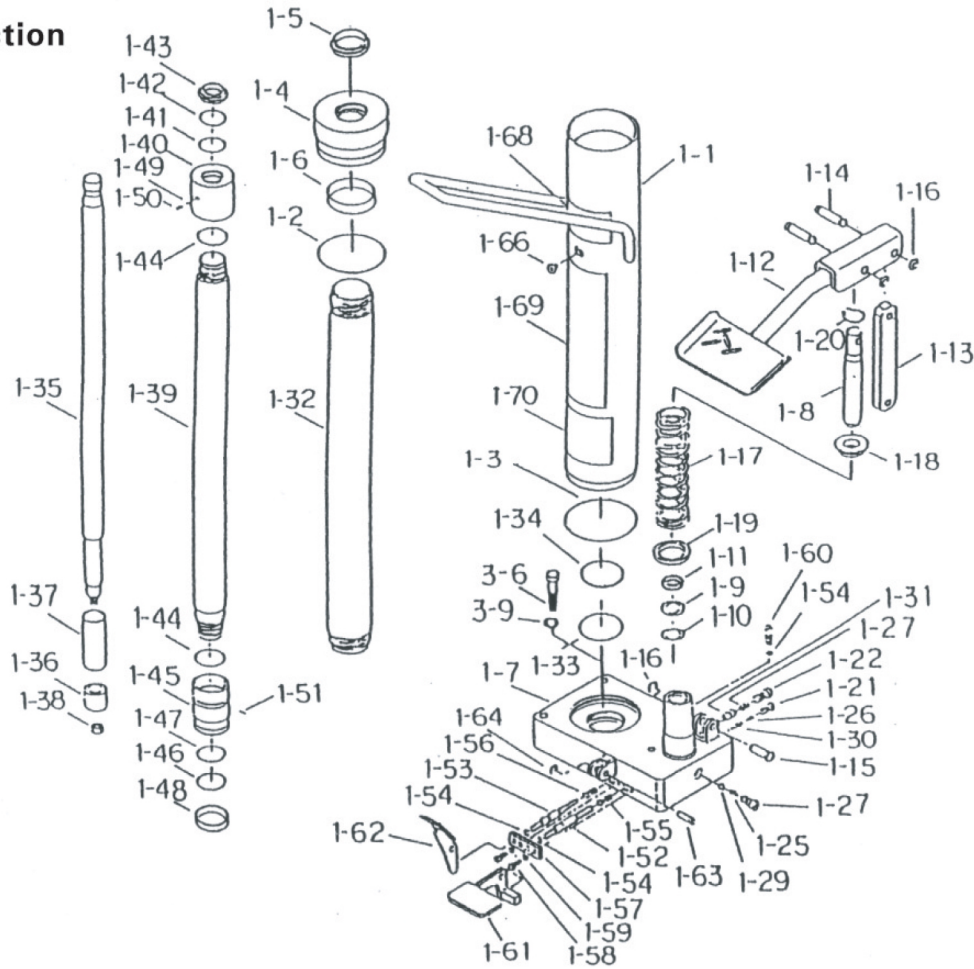
1. Lube the jack regularly. A medium weight lubricating grease should be used on all external moving parts, such as bearing surface, pivot points, tilt screws, etc.
2. Regularly check oil level. With the saddle fully lowered, remove oil plug and check oil level. Fill if necessary.
3. If jack fails to operate, check oil level and/or bleed unit before seeking service.
4. DO NOT use this jack as a wash rack when washing or steam cleaning transmissions.



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## 1 - Jack Section



### 1. Jack Section

Prod. #	Kit #	Description
9140005-100		Jack Assy
9140005-101		Casing
9140005-102	0,1	Casing A
9140005-103	0,1	Casing B
9140005-104		Head
9140005-105	0,1	Dust Seal
9140005-106		Bush
9140005-107		Bed
9140005-108		Pump Plunger
9140005-109	0,2	Pump Backup Ring
9140005-110	0,2	Pump O-Ring
9140005-111	0,2	Pump Dust Seal
9140005-112		Pump Pedal
9140005-113		Pump Stay
9140005-114		Plunger Pin
9140005-115		Stay Pin
9140005-116		E-Ring
9140005-117		Pump Return Spring
9140005-118		Stopper Ring A
9140005-119		Stopper Ring B
9140005-120		C-Ring
9140005-121		Plug
9140005-122		Plug
9140005-123		Bolt
9140005-124		Valve Spring
9140005-125		Valve Spring
9140005-126		Valve Spring

Prod. #	Kit #	Description
9140005-127		Valve Spring
9140005-128		Valve Ball
9140005-129		Valve Ball
9140005-130		Check Valve
9140005-131		Check Valve
9140005-132		Cylinder
9140005-133	0,1	Cylinder O-Ring
9140005-134	1,1	Backup Ring
9140005-135	4	1st Ram
9140005-136	4	1st Ram Guide Ring
9140005-137	4	1st Ram Guide Valve
9140005-138	4	Nut
9140005-139	5	2nd Ram
9140005-140	5	2nd Ram Head
9140005-141	0,1,5	O-Ring
9140005-142	0,1,5	Backup Ring
9140005-143	0,1,5	Dust Seal
9140005-144	0,1,5	O-Ring
9140005-145	5	2nd Ram Guide Ring
9140005-146	0,1,5	O-Ring
9140005-147	0,1,5	Backup Ring
9140005-148	5	Ring
9140005-149	5	Ball
9140005-150	5	Screw
9140005-151	5	Screw
9140005-152		Release Push Pin A
9140005-153		Release Push Pin B

Prod. #	Kit #	Description
9140005-154	0,3	Release O-Ring
9140005-155		Push Pin Spring A
9140005-156		Push Pin Spring B
9140005-157		Push Pin Stopper
9140005-158		Bolt
9140005-159		Spring Washer
9140005-160		Plug
9140005-161		Release Pedal A
9140005-162		Release Pedal B
9140005-163		Pedal Pin
9140005-164		E-Ring
9140005-165		Mesh
9140005-166	0,1	Oil Plug
9140005-167		Jack Oil
9140005-168		Decal
9140005-169		Warning Label
9140005-170		Caution Plate

### Repair Parts Kits for Jack Section

Prod. #	Kit #	Description
9140005-RK	0	Repair Kit
9140005-SJ	1	Seal Kit for Jack
9140005-SP	2	Seal Kit for Pump
9140005-SV	3	Seal Kit for Valve
9140005-R1	4	1st Ram Assy
9140005-R2	5	2nd Ram Assy

(Including all items of the same Kit #)

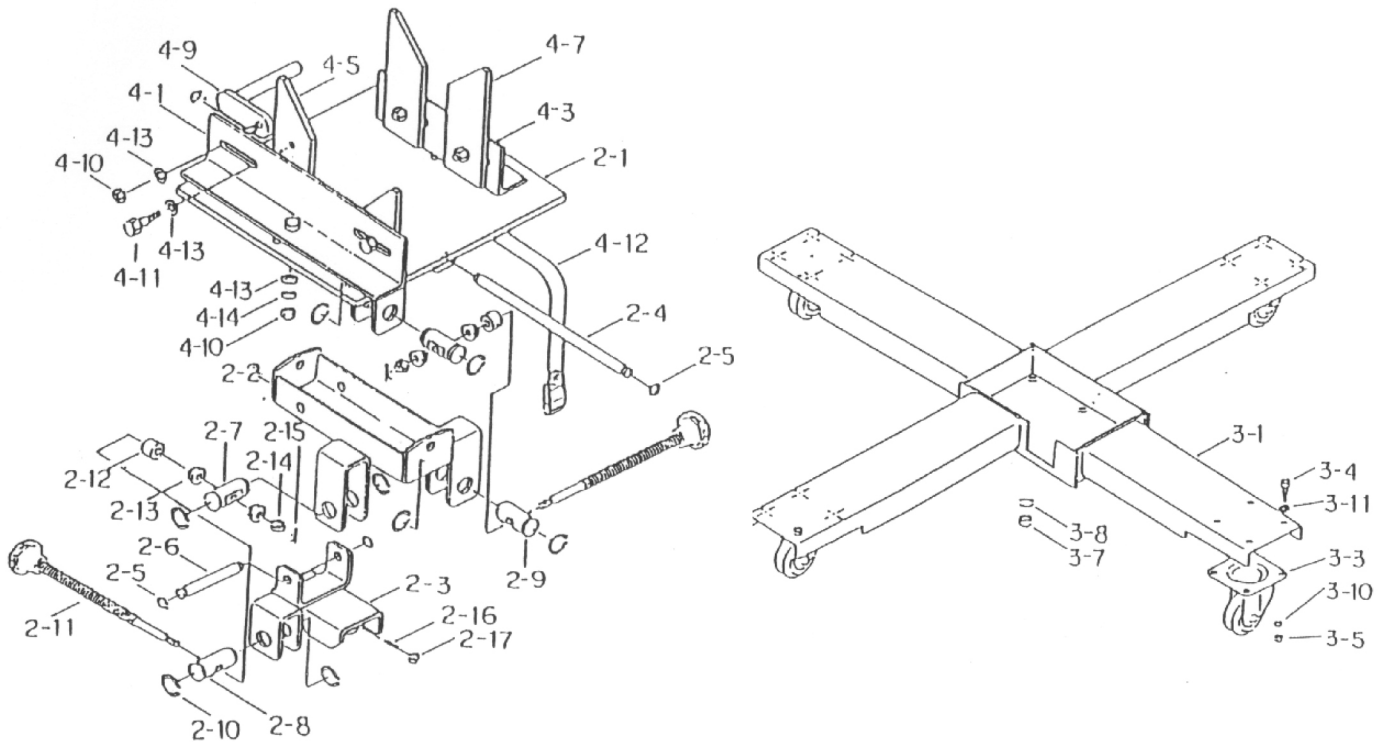
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**2 - Table Section**

**3 - Frame Section**

**4 - Attachment Section**



## 2. Table Section

Prod. #	Description
9140005-200	Table Assy
9140005-201	Table
9140005-202	Table Plate A
9140005-203	Table Plate B
9140005-204	Shaft A
9140005-205	C-Ring
9140005-206	Shaft B
9140005-207	Shaft C
9140005-208	Shaft D
9140005-209	Shaft E
9140005-210	C-Ring
9140005-211	Angle Adj. Handle
9140005-212	Collar
9140005-213	Trust Bearing
9140005-214	Nut
9140005-215	Pin
9140005-216	Screw
9140005-217	Nut

## 3. Frame Section

Prod. #	Description
9140005-300	Frame Assy
9140005-301	Frame
9140005-303	Caster
9140005-304	Bolt
9140005-305	Nut
9140005-306	Bolt
9140005-307	Nut
9140005-308	Spring Washer
9140005-309	Washer
9140005-310	Spring Washer
9140005-311	Washer

## 4. Attachment Section

Prod. #	Description
9140005-400	Attachment Assy
9140005-401	Bracket A
9140005-403	Bracket B
9140005-405	Attachment A
9140005-407	Attachment B
9140005-409	Attachment C
9140005-410	Nut
9140005-411	Bolt
9140005-412	Belt
9140005-413	Washer
9140005-414	Spring Washer



**ZINKO HYDRAULIC JACK**

PO Box 4903, Ontario, CA 91761

Toll Free: 1-800-579-8088

[www.zinkojack.com](http://www.zinkojack.com)

Phone: (909) 230-4100

Fax: (909) 230-4137