



**PRO-SERIES**

## Operating Instructions & Parts Manual

## Transmission Jacks

### Model Number

**KTI-63503**

**KTI-63504 (Air/ Manual)**

**KTI-63505**

**KTI-63511**

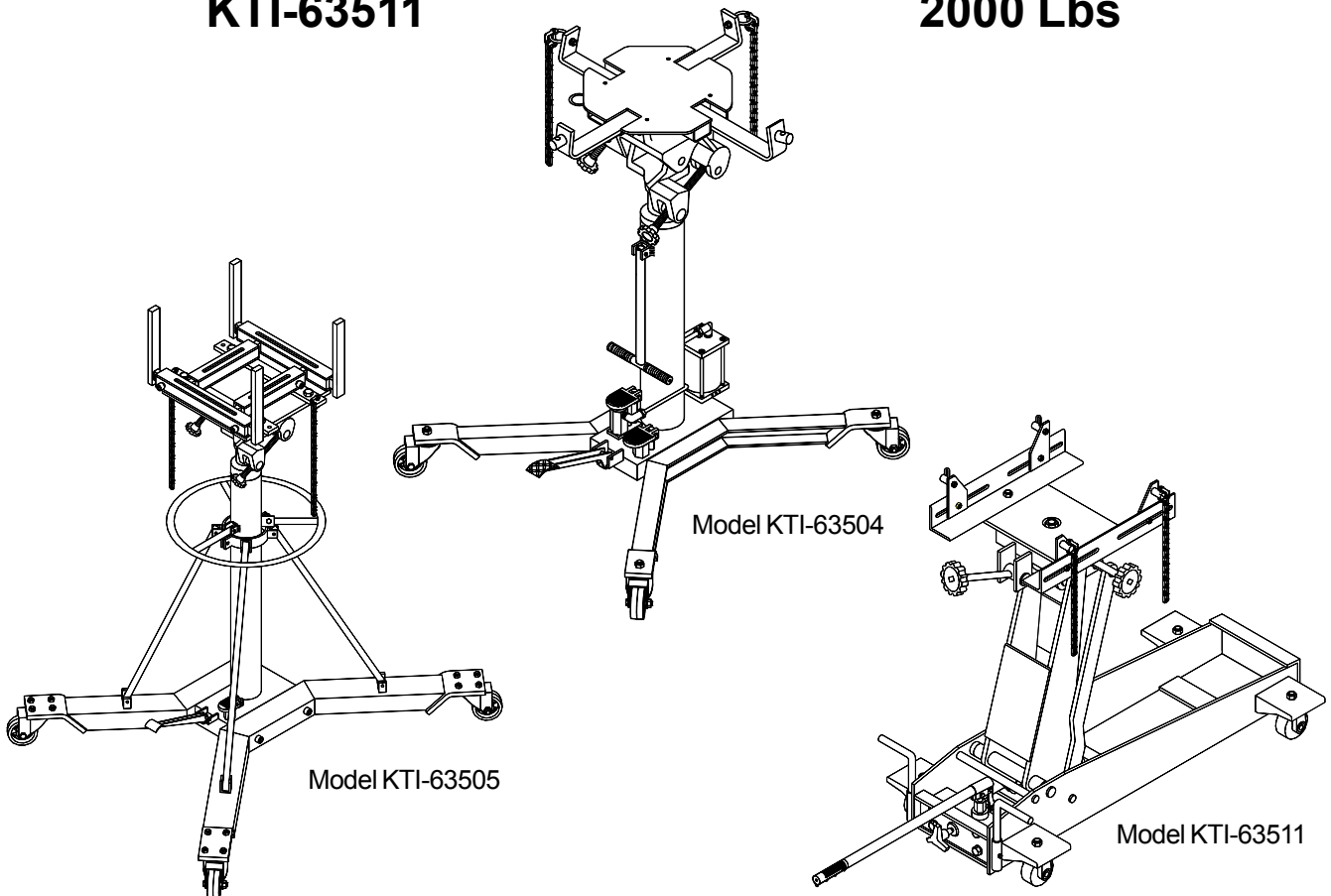
### Capacity

**1000 Lbs**

**1000 Lbs**

**2000 Lbs**

**2000 Lbs**



K-Tool International  
31111 Wixom Rd., Wixom, MI 48393  
E-mail: [sales@ktool.com](mailto:sales@ktool.com)  
(248) 669-5000

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KTI-63503-M0 rev 08/06

## ONE YEAR LIMITED WARRANTY

For a period of one (1) year from date of purchase, **KTI** 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 K-Tool International 31111 Wixom Rd. Wixom, MI 48393, phone (248)669-5000.

Except where such limitations and exclusions are specifically prohibited by applicable law, (1) THE CONSUMER'S SOLE AND EXCLUSIVE REMEDY SHALL BE THE REPAIR OR REPLACEMENT OF DEFECTIVE PRODUCTS AS DESCRIBED ABOVE. (2) **KTI** SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGE OR LOSS WHATSOEVER. (3) ANY IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED TO ONE YEAR, OTHERWISE THE REPAIR, REPLACEMENT OR REFUND AS PROVIDED UNDER THIS EXPRESS LIMITED WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER, AND IS PROVIDED IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. (4) ANY MODIFICATION, ALTERATION, ABUSE, UNAUTHORIZED SERVICE OR ORNAMENTAL DESIGN VOIDS THIS WARRANTY AND IS NOT COVERED BY THIS WARRANTY.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

**Save these instructions.** For your safety, read, understand, and follow the information provided with and on this jack. 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 an KTI authorized service center. It is recommended that an annual inspection be done by qualified personnel. Labels and Owner's Manuals are available from manufacturer (see Replacement Parts section).

## PRODUCT DESCRIPTION

KTI Transmission Jacks are designed to be used as an aid in the removal and installation of vehicle component parts and assemblies, specifically transmissions. Model Nos. KTI-63503, KTI-63504 and KTI-63505 are for use under an overhead lift or in a garage pit. The air actuated function is an added feature of Model No. KTI-63504. Model No. KTI-63511 is for use under portable lift equipment, where vehicle must be supported by appropriately rated jack stands. With Model KTI-63504, ensure that your air source can dedicate 7.8 CFM @ 90 - 175 PSI to each jack operated. To ensure dependable, trouble free operation an air dryer and oiler is recommended.

## SPECIFICATIONS

Model	Capacity	Base Size ( L x W )	Min. Height	Max. Height
KTI-63503	1000 Lbs	33-1/8" x 35-1/2"	37-7/8"	77-5/8"
KTI-63504	1000 Lbs	34-1/8" x 36-1/8"	37-7/8"	77-5/8"
KTI-63505	2000 Lbs	42-1/8" x 39-1/2"	48-5/8"	77-3/8"
KTI-63511	2000 Lbs	39-3/8" x 19-1/8"	7-7/8"	33-1/2"

Product appearance may differ slightly from this publication due to improvements in manufacturing, design and materials. However, performance characteristics will not be adversely affected.

## ASSEMBLY (KTI-63503, KTI-63504)

Refer to figure 1:

1. Three major parts should be included in package:
  - (a) Hydraulic unit with pumping mechanism ( air motor equipped for model 63504),
  - (b) saddle unit, and
  - (c) 2 pieces of base half with hex socket bolts and washers.
2. 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 frame. Use torque wrench to tighten to 30 lb.ft. Do not overtighten.
3. Position the saddle unit above the ram piston, place the saddle socket onto the ram piston. Secure using the set screw .

**Note:** Before initial use, turn vent screw counterclockwise carefully, but no more than 1 full turn.

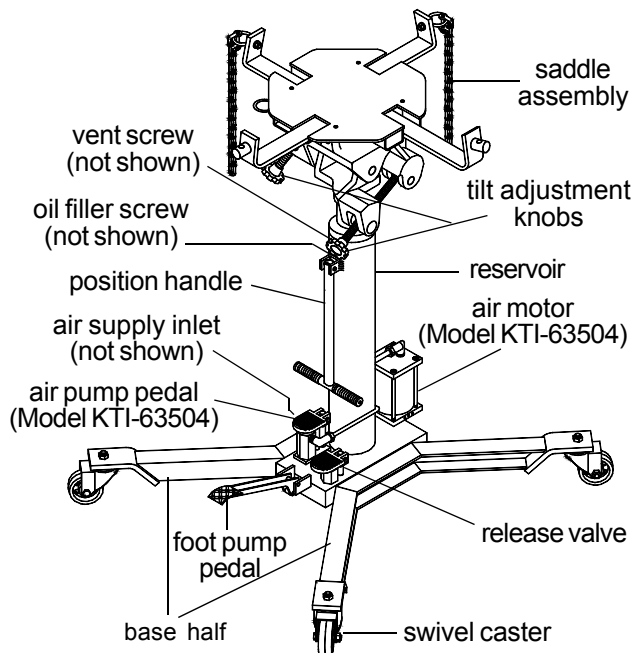


Figure 1 - Model KTI-63503 & KTI-63504 Components

**Note:** Vent Screw and Oil Filler Screw are located on the upper portion of the reservoir. See exploded drawing on pages 8 and 9.

## ASSEMBLY (KTI-63505)

Refer to figure 2:

1. Three major parts should be included in package:
  - (a) Hydraulic unit with pumping mechanism,
  - (b) saddle unit, and
  - (c) 2 pieces of base half with hex socket bolts and washers.
2. 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 frame. Use torque wrench to tighten to 30 lb.ft. Do not overtighten.
3. Attach the brackets to reservoir, then attach one end of the support bar to base half and the other end to the bracket. Secure with bolts and nuts provided. Repeat for all other three support bars.
4. Slice the position handle to reservoir from top, then secure with bolts and nuts provided.
5. Position the saddle unit above the ram piston, place the saddle socket onto the ram piston. Secure using the set screw.
6. Remove oil filler screw. This will allow any pressurized air to escape.
7. Ensure oil level is just below the rim of the oil filler screw hole. Reinstall the oil filler screw.

**Note:** Before initial use, turn vent screw counterclockwise carefully, but no more than 1 full turn.

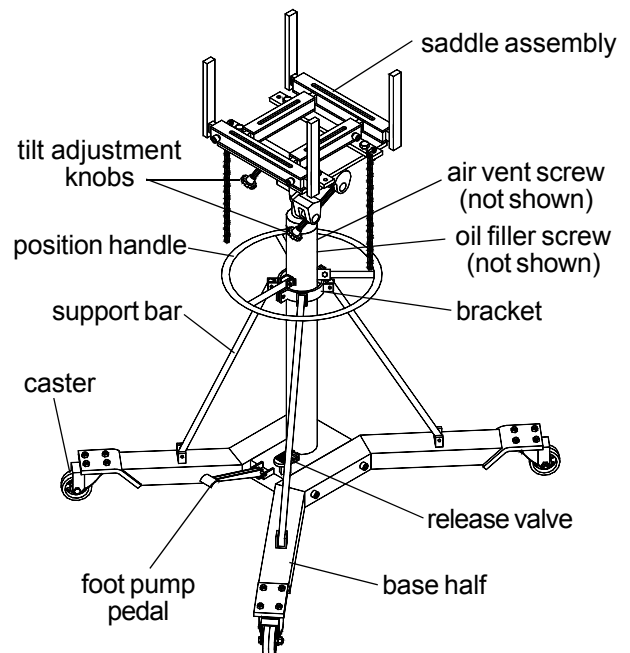


Figure 2 - Model KTI-63505 Components

**Note:** Vent Screw and Oil Filler Screw are located on the upper portion of the reservoir. See exploded drawing on page 10.

## ASSEMBLY (KTI-63511)

Refer to figure 3:

Little or no assembly is required. Refer to figure 3 and the exploded view on page 11 for details in understanding the assembly and the nomenclature of your product.

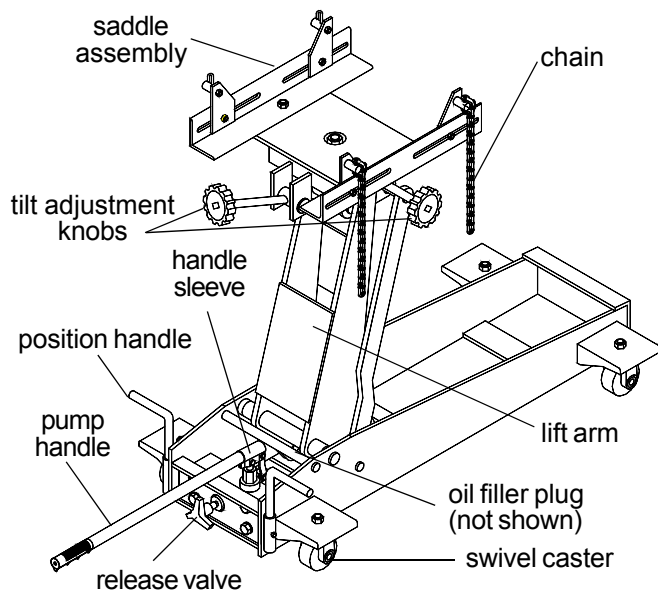


Figure 3 - Model KTI-63511

**Note:** Oil Filler Plug is rubber and located centrally on the upper portion of the reservoir. See exploded drawing on page 11.

## BEFORE USE

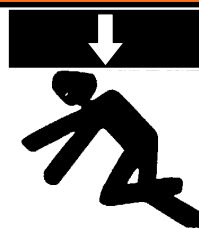
1. Inspect jack before each use. Do not use if bent, broken or cracked components are noted. Ensure that casters move freely. Check for and tighten any loose assemblies.
2. Verify that the product and the application are compatible.
3. With ram fully retracted, locate and remove the oil filler plug/screw. This will help release any pressurized air which may be trapped within the reservoir. Ensure the oil level is just below the oil filler plug/screw hole. Reinstall the oil filler plug/screw.  
**For KTI-63511 only:** Ensure the oil level is ~3/16" above the inner cylinder as seen from the oil filler plug hole.
4. Before initial use, turn vent screw counterclockwise carefully, but no more than 1 full turn.
5. **KTI-63504 only:** Pour a teaspoon of good quality, air tool lubricant into the air supply inlet of the lift control valve (See Fig 1). Connect to air supply and operate for 3 seconds to evenly distribute lubricant.

**Note:** Air actuated product is fitted to accept the popular 1/4"npt air nipple. When installing air nipple, ensure that thread sealing compound enter the air supply inlet orifice. Application of thread tape is acceptable, but ensure that it is not applied beyond the first machine thread.

## ! 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 the 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 and slings 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.
- Shock loads may cause the sudden loss of load and/ or cause the jack to tip or flip over violently, bend or break.
- No alterations 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 a jack. Immediately transfer the load to an appropriate work station.

## ! ADVERTENCIA

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

## OPERATION

### Raise saddle

For Models KTI-63503, KTI-63504 & KTI-63505:

**Caution!** For Model KTI-63504, **do not** operate the jack by pumping the lift pedal and pressing the air pump pedal at the same time.

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

For Model KTI-63511:

Locate and close release valve by turning knob clockwise firmly, then pump the pump handle until the load is contacted.

### Lower saddle

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

For Models KTI-63503, KTI-63504 & KTI-63505:

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

For Model KTI-63511:

Slowly, gently turn the release valve knob counterclockwise, **NEVER MORE THAN 1/2 FULL TURN** until the load is completely lowered.

**Note:** Dynamic shock loads are created by quickly opening and closing the release valve as the load is being lowered. The resulting overload may cause hydraulic system failure.

## MAINTENANCE

**Important:** Use only a 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 failure of the jack and the potential for sudden and immediate loss of load. Fill with good quality jack oil. We recommend Mobil DTE 13M or equivalent.

### Adding oil

For Models KTI-63503, KTI-63504 & KTI-63505:

- With saddle fully lowered, and jack in its upright, level position. Remove oil filler screw.
- Fill with oil until just below the rim of the oil filler screw hole. Reinstall the oil filler screw.

For Model KTI-63511:

- With saddle fully lowered, remove oil filler plug.
- Fill to ~3/16" above the inner cylinder as seen from the oil filler plug hole. Reinstall oil filler plug.

## MAINTENANCE (continued)

### Changing oil

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

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

For Models KTI-63503, KTI-63504 & KTI-63505:

- With saddle fully lowered, remove the oil filler screw.
- Lay the jack on its side and drain the fluid into a suitable container.
- Fill with oil until just below the rim of the oil filler screw hole. Reinstall the oil filler screw.

For Model KTI-63511:

- With saddle fully lowered, remove oil filler plug.
- Lay the jack on its side and drain the fluid into a suitable container.
- Fill to ~3/16" above the inner cylinder as seen from the oil filler plug hole. Reinstall oil filler plug.

### Lubrication

- A periodic 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.
- When used on a daily basis, air pump models should be internally lubricated before each use. Use **only** good quality air tool lubricant. If no inline oiler is used, pour a teaspoon of air tool oil into the inlet of the air control valve. Simply operate the jack using the air feature in order to fully distribute the oil.

### Cleaning

Periodically check the 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 ram fully retracted and air supply disconnected.

## REPLACEMENT PARTS

**Available Parts:** Please refer to the Parts drawings on page 8 thru 11 when ordering 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 No. and the description. To order parts contact KTI at (248) 669-5000 or E-mail: [sales@ktool.com](mailto:sales@ktool.com).

## TROUBLESHOOTING

Symptom	Possible Causes	Corrective Action
Jack will not lift load	<ul style="list-style-type: none"><li>• Air supply inadequate (Model KTI63504 only)</li><li>• Hydraulic unit malfunction</li></ul>	<ul style="list-style-type: none"><li>• Ensure adequate air supply (Model KTI63504 only)</li><li>• Contact KTI Tech. Service</li></ul>
Jack bleeds off after lift	<ul style="list-style-type: none"><li>• Overload condition</li><li>• Hydraulic unit malfunction</li></ul>	<ul style="list-style-type: none"><li>• Remedy overload condition</li><li>• Contact KTI Tech. Service</li></ul>
Jack will not lower after unloading	<ul style="list-style-type: none"><li>• Reservoir overfilled</li><li>• Linkage binding</li></ul>	<ul style="list-style-type: none"><li>• Drain fluid to proper level</li><li>• Clean and lubricate moving parts</li></ul>
Poor lift performance	<ul style="list-style-type: none"><li>• Fluid level low</li></ul>	<ul style="list-style-type: none"><li>• Ensure proper fluid level</li></ul>
Will not lift to full extension	<ul style="list-style-type: none"><li>• Fluid level low</li></ul>	<ul style="list-style-type: none"><li>• Ensure proper fluid level</li></ul>

## Replacement parts for Model KTI-63503

<u>Item</u>	<u>Part#</u>	<u>Description</u>	<u>Qty</u>
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 Pedal	1
5	G36-3-5000-104	Caster w/o Brake	2
6	G36-3-5001-106	Caster w/ Brake	2
7	G36-3-2300-101	Tilt Screw Assembly	1
8	G36-3-2301-103	Tilt Screw Assembly	1
9	G36-3-0513-108	Accessory Kit	2
10	G36-4-4200-10308	Saddle Assembly (chain not included)	1
11	G36-3-0511-104	Bolt Set	1
12	G36-3-3301-108	Base Half	2
13	G36-3-2100-103	Handle Assembly	1
-	G36-3-9902-104	Repair Kit for Hydraulic Unit	-

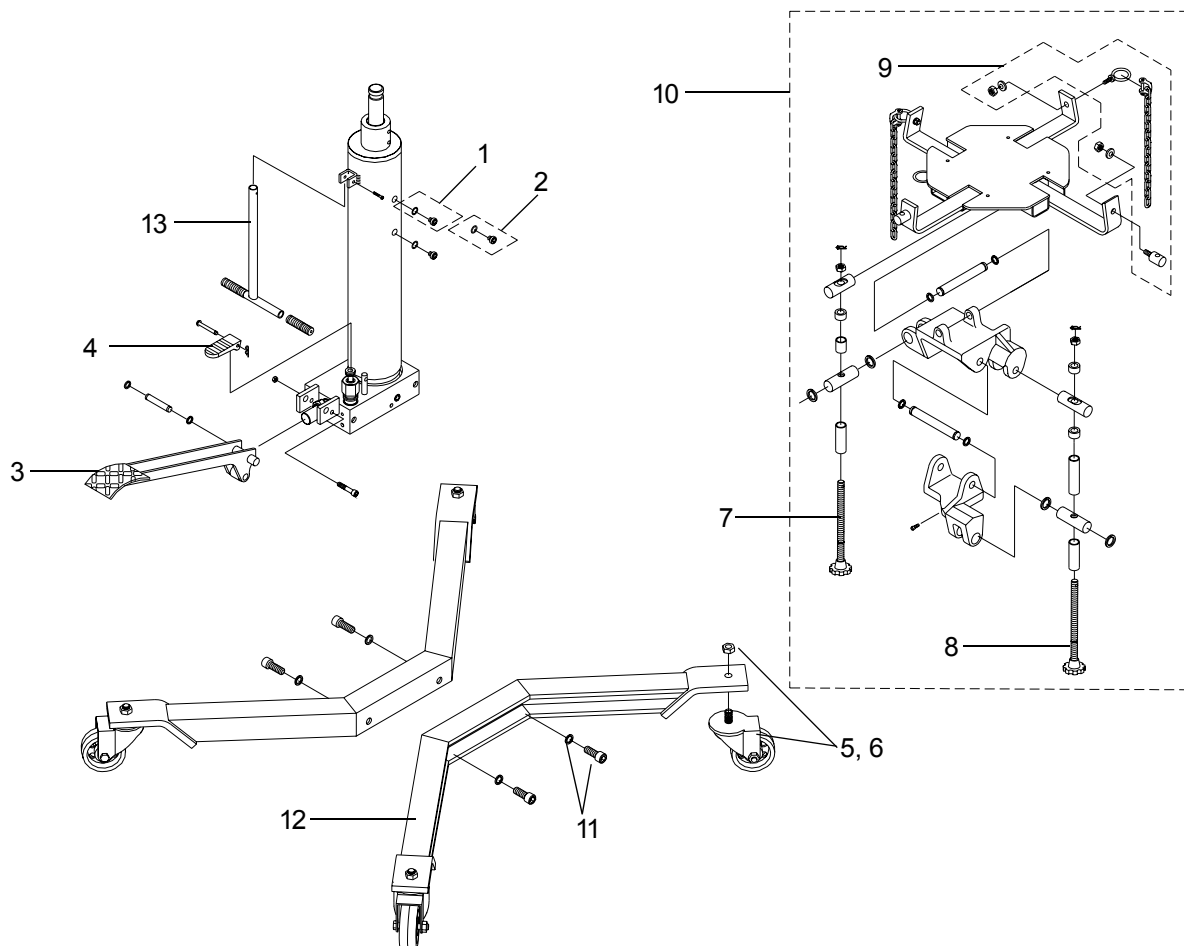


Figure 4 - Replacement Parts Illustration for Model KTI-63503



## Replacement parts for Model 63504

Item	Part#	Description	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
5	G36-3-5000-104	Caster w/o Brake	2
6	G36-3-5001-106	Caster w/ Brake	2
7	G36-3-2300-101	Tilt Screw Assembly	1
8	G36-3-2301-103	Tilt Screw Assembly	1
9	G36-3-0513-108	Accessory Kit	2
10	G36-4-4200-10308	Saddle Assembly (chain not included)	1
11	G36-3-0511-104	Bolt Set	1
12	G36-3-3301-108	Base Half	2
13	G36-3-2100-103	Handle Assembly.	1
14	A24-6-8101-107	Male Coupler	1
15	G36-4-2000-105	Air Motor	1
16	G36-6-2302-103	Hose Connector	2
17	G36-6-2300-109	Air Hose	1
-	G36-3-9902-104	Repair Kit for Hydraulic Unit	-

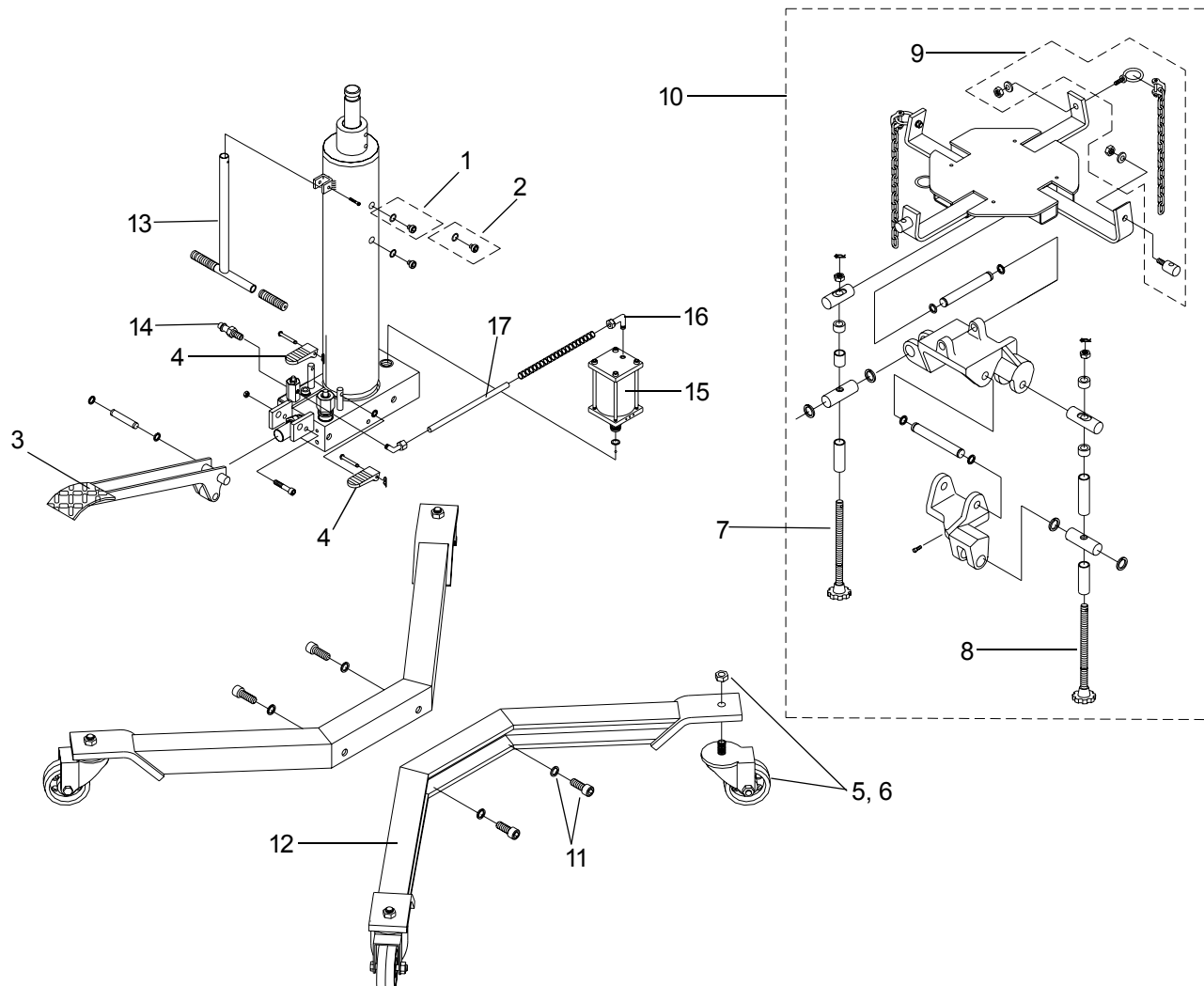


Figure 5 - Replacement Parts Illustration for Model KTI-63504

## Replacement parts for Model 63505

<u>Item</u>	<u>Part#</u>	<u>Description</u>	<u>Qty</u>
1	324-4-1900-208	Screw Assembly	2
2	G37-3-1320-109	Bracket	2
3	G37-3-1806-105	Handle	1
4	G36-3-1900-100	Lift Pedal	1
5	G36-6-1809-102	Release Valve Pedal	1
6	G37-6-1319-102	Support Bar	4
7	G37-3-3300-103	Base Half	2
8	651-1-0127-100	Bolt	4
9	G37-4-5200-105	Caster w/o Brake	2
10	G37-4-5201-107	Caster w/ Brake	2
11	G36-3-2300-101	Tilt Screw Assembly	1
12	G36-3-2301-103	Tilt Screw Assembly	1
13	G37-4-4200-104	Saddle Plate	1
14	G52-4-4102-101	Chain & Hook	2
15	G37-3-2903-209	Saddle Support Bar	4
16	G37-3-2902-207	Saddle Adjustable Bracket	2
17	G37-3-2901-205	Saddle Support Seat	1
-	G37-3-9901-109	Repair Kit for Hydraulic Unit	-

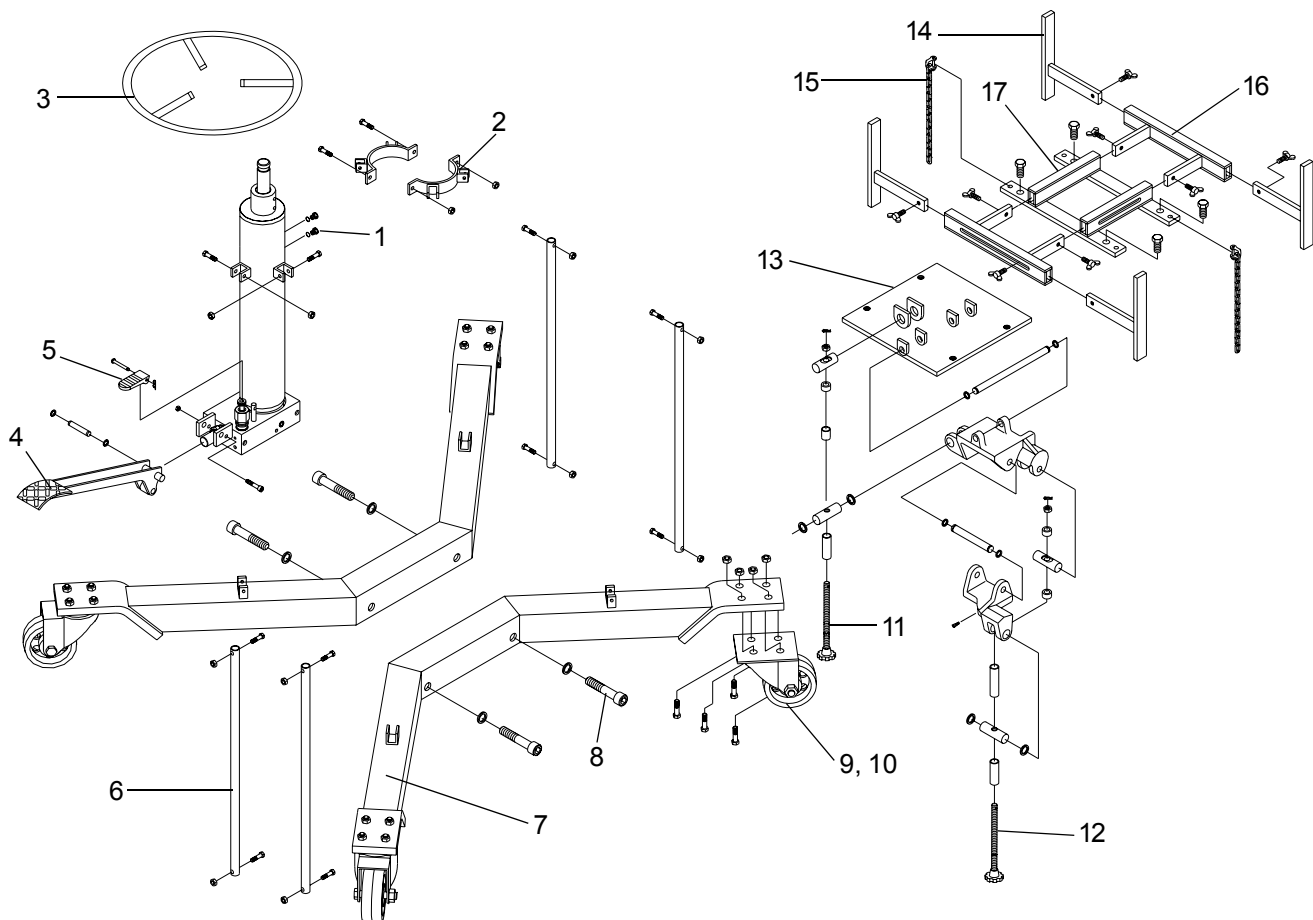


Figure 6 - Replacement Parts Illustration for Model KTI-63505

## Replacement parts for Model 63511

Item	Part#	Description	Qty
1	505-9-0092-207	Oil Filler Plug	1
2	G52-1-1000-100	Hydraulic Unit	1
3	G36-6-7000-102	Chain	2
4	G52-3-4204-103	Saddle Assembly	1
5	G52-6-4207-107	Angle Bar	2
6	G52-6-4402-105	Tilt Screw	1
7	G52-6-4401-103	Tilt Screw	1
8	G52-6-1709-106	Tilt Knob	2
9	G52-3-4300-109	Saddle Holder	1
10	G52-4-5200-106	Caster Assembly	4
11	G52-3-9903-104	Handle	1
12	G52-6-1701-100	Release Valve	1
13	G34-6-1709-104	Release Valve Knob	1
14	G52-6-3004-108	Position Handle	1
15	653-1-0127-409	Hex. Bolt	6
16	653-1-0159-008	Hex. Bolt	1
-	G52-3-9901-100	Repair Kit for Hydraulic Unit	-

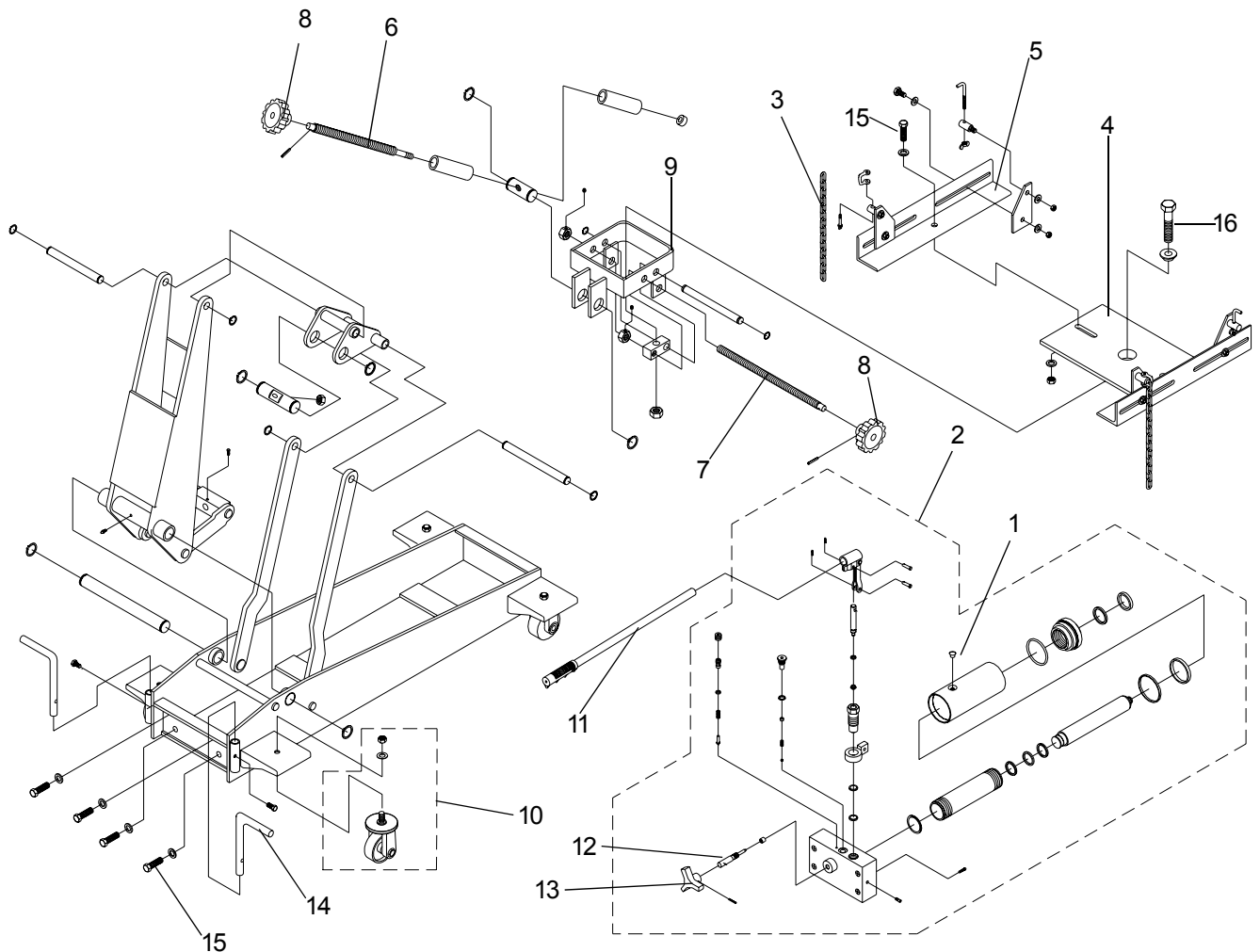


Figure 7 - Replacement Parts Illustration for Model KTI-63511

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