OPERATOR'S MANUAL

TL-6100
W/O Air Model

TL-A6100
W/ Air Model

1,000Lbs. TELESCOPIC TRANSMISSION JACK (WITH/WITHOUT AIR MOTOR)

SPECIFICATIONS

Model	Capacity	Base Size (LXW)	Min. Height	Max. Height	Net Weight
TL-6100	1,000 Lbs.	37" X 31"	38"	74 1/2"	154Lbs.
TL-A6100	1,000 Lbs.	37" X 31"	38"	74 1/2"	165Lbs.

WARNING

Study, understand, and follow all printed materials provided with/on this device before use. Do not exceed rated capacity. Use only on hard, level, seamless surface. Use of this jack is limited to the removal, installation and transportation of transmissions, transfer cases and transaxles. Adaquately support the vehicle before starting repairs. Failure to read these markings may result in personal injury and/or property damage.

! Safety Messages !

Ensure the load's center of gravity is centered on the saddle. Use only chains and slings provided. If loaded jack must be moved, make certain that load is secured by appropriate means, is stable, is in lowest possible position. This is a lifing and lowering device only. Transfer load Immediately to appropriate support device for service or repair. No alterations shall be made to this product.

Assembly

1. Assemble the swivel casters on the jack legs using lock washers and nuts provided.
2. Assemble the legs (with the casters) to the jack's base, and slightly secure with the Allen socket bolts and lock washers provided.
3. Position the jack (with legs) on a hard level surface. Tighten the Allen socket bolts while all four casters are contacting the floor and the jack appears vertical to the floor.
4. Locate the draw bar and the two hex bolts in the carton. Insert the draw bar into its socket on the cylinder, and secure with the hex bolts provided.
5. Saddle assembly: Loosen the bolt from outside the saddle adapter. Mount the saddle adapter onto the top of the piston rod. Once mounted, tighten the bolt and secure entire saddle assembly.
6. Use the tilt adjusting knob to adjust the saddle angle to a relatively horizontal position.
7. Attach the two corner support brackets onto the universal saddle, and fasten with the hex bolts and nuts.
8. Locate the fixing bracket in the chain pack. Assemble the fixing bracket on the corner support bracket and secure with the hook and screw caps. Assemble chains and chain hardware to the corner support bracket.
9. The chains and chain hardware are provided to secure the transmission, transfer box, or differential to the saddle assembly by the different shape of their housing. When using, both ends of the chain should be anchored to the bracket.

Setup Instructions

1. To prevent oil leak during shipment, a shipping plug is used to ensure the best sealing function. Remove the shipping oil plug, and replace it with the vented oil plug provided.
2. The reservoir tube is shipped filled with hydraulic oil. Before using the jack for the first time, press the release pedal to open the release valve, and operate the foot pump eight full strokes to distribute the oil.

Operating Instructions

1. Follow the vehicle's recommended service procedure for removal of the component.
2. Position the jack under the vehicle.
3. Raise the jack by operating the foot pump until the saddle touches the component.
4. Adjust the support brackets to fit the component.
5. Use the tilt crank to align the saddle with the component.
6. Finish raising the jack to the component. Secure the chain assembly around the component.

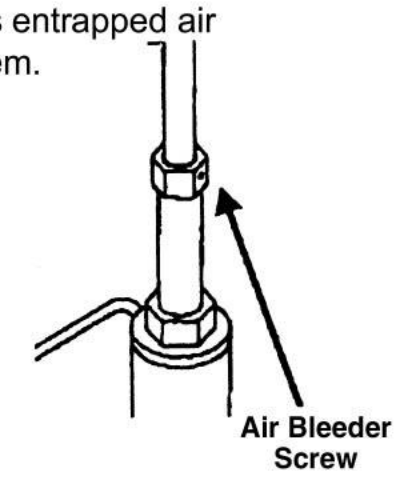
Bleeding Air from the Hydraulic System

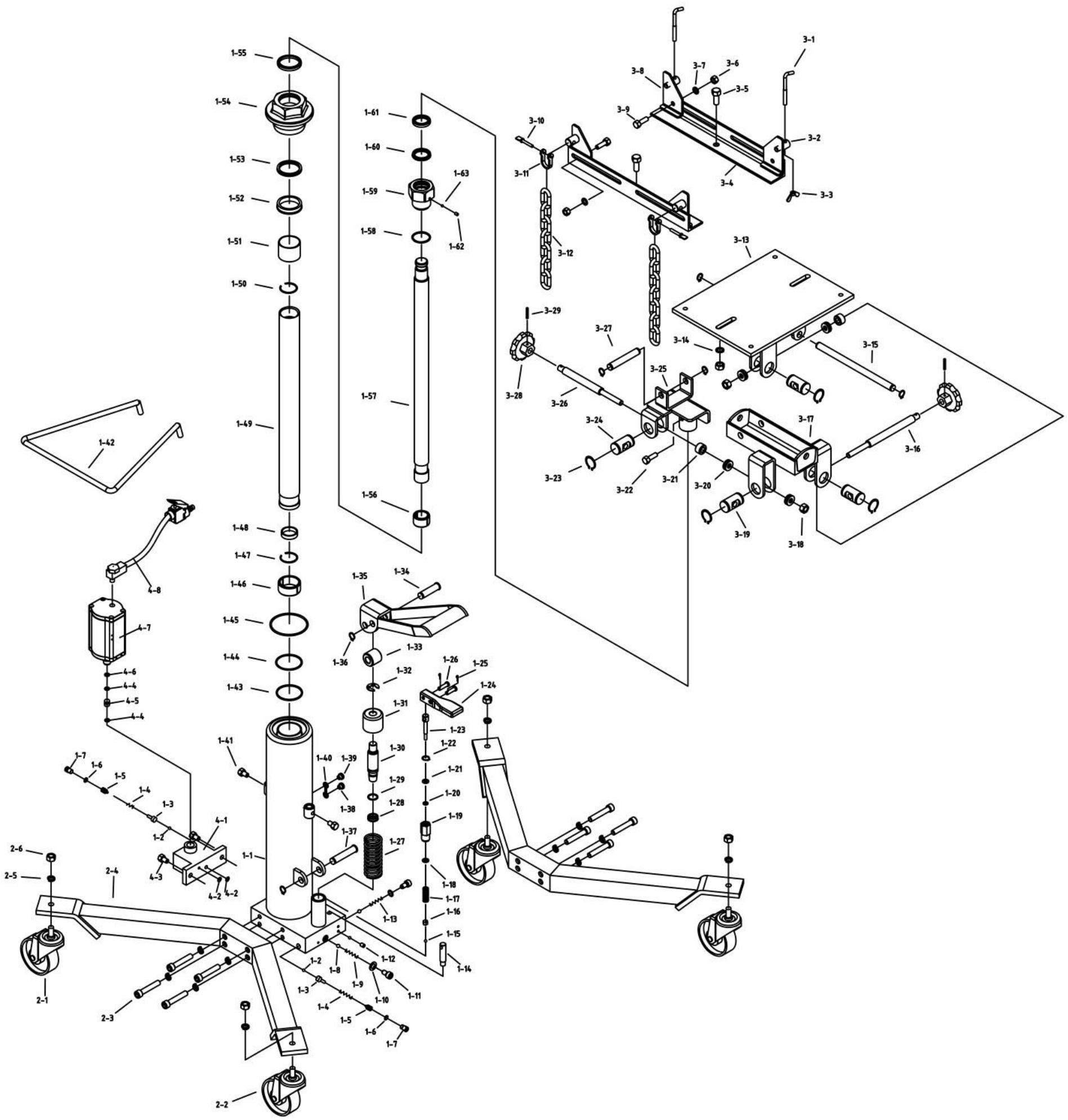
Air can accumulate within a hydraulic system during shipment or after prolonged use. This entrapped air causes the jack to respond slowly or feel "spongy." Use the steps below to bleed the system.

Follow these steps to bleed the air in the oil system:

1. Pump the jack to the highest point where the first and the second piston rams are both at maximum height.
2. Get the help of another person to keep the release pedal depressed, and activate the foot pedal about 20 times.
3. Let go of the release pedal; the air in the oil system should be bled successfully.

Follow these steps to bleed the air in the second cylinder:





TROUBLESHOOTING

Symptom	Possible Causes	Corrective Action
Jack will not lift load	• Overload condition • Air supply inadequate	• Remedy overload condition • Ensure adequate air supply
Jack bleeds off after Lift	• Overload condition	• Remedy overload condition
Jack will not lower after unloading	• Reservoir overfilled • Linkages Dinding	• 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 / vent screw to let pressurized air escape, then reinstall oil filler screw / vent screw
Will not lift to full extension	• Fluid level low	• Ensure proper fluid level

1. Locate the air bleeder screw at the top nut, which is on the top of the first piston rod.
2. Pump the jack to its maximum height. Use an Allen socket wrench to loosen the air bleeder screw for no more than two 360˚ turns. Push the saddle assembly downward to exert the air in the cylinder out until nothing but oil drains out of the bleeding hole.
3. Tighten the bleeder screw and double check. It may be necessary to repeat the above steps several times.

Maintenance

Regularly lubricate all moving parts of the jack. Pay special attention to the lift screw and related linkages.

1. 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 the oil level. With the saddle fully lowered, remove the oil filler screw, and check the oil level. Oil should be at the bottom of the filler screw holes. Fill if necessary.
3. Use only hydraulic jack oil. Do not use hydraulic brake fluid.
4. If the jack fails to operate, check the oil level and/or bleed unit before seeking service.
5. Do not use this jack as a wash rack when washing or steam cleaning transmissions.

Parts List

Item No.	Description	Q'TY	Item No.	Description	Q'TY	Item No.	Description	Q'TY
1-1	Oil Cylinder Ass'y	1	1-37	Pin	1	3-4	Corner Bracket	2
1-2	Steel Ball	1	1-38	Screw	1	3-5	Bolt	2
1-3	Ball Seat	1	1-39	Screw	1	3-6	Nut	4
1-4	Spring	1	1-40	Sealing Gasket	1	3-7	Flat Washer	4
1-5	Screw	1	1-41	Bolt	2	3-8	Fixing Bracket B	2
1-6	O-ring	1	1-42	Draw Bar	1	3-9	Bolt	4
1-7	Bolt	1	1-43	Nylon Washer	1	3-10	Screw	2
1-8	Steel Ball	2	1-44	O-ring	1	3-11	Link	2
1-9	Spring	1	1-45	O-ring	1	3-12	Safety Chain	2
1-10	Copper Washer	2	1-46	Bushing	1	3-13	Universal Saddle	1
1-11	Bolt	2	1-47	Snap Ring	1	3-14	Flat Washer	2
1-12	Screw	4	1-48	Bushing	1	3-15	Shaft	1
1-13	Spring	1	1-49	Inner Cylinder	1	3-16	Screw	1
1-14	Rod	1	1-50	Snap Ring	1	3-17	Bracket	1
1-15	steel Ball	5	1-51	Bushing	1	3-18	Locknut	2
1-16	Ball Seat	1	1-52	Bushing	1	3-19	Shaft	2
1-17	Spring	1	1-53	Y-seal	1	3-20	Bearing	4
1-18	Copper Washer	1	1-54	Screw Cap	1	3-21	Bushing	2
1-19	Oil Release Valve	1	1-55	Dustproof	1	3-22	Bolt	1
1-20	O-ring	1	1-56	Bushing	1	3-23	Snap Ring	8
1-21	Washer	1	1-57	Piston Rod	1	3-24	Shaft	2
1-22	Snap Ring	1	1-58	O-ring	1	3-25	Bracket	1
1-23	Oil Release Rod	1	1-59	Screw Cap	1	3-26	Screw	1
1-24	Oil Release Pedal	1	1-60	Y-seal	1	3-27	Shaft	1
1-25	Pin	2	1-61	Dustproof	1	3-28	Knob	2
1-26	Pin	2	1-62	Steel Ball	1	3-29	Pin	2
1-27	Spring	1	1-63	Air Bleed Screw	1	4-1	Air Valve Block	1
1-28	Y-seal	1	2-1	Swivel Caster A	2	4-2	O-ring	2
1-29	O-ring	1	2-2	Swivel Caster B	2	4-3	Screw	2
1-30	Pump Plunger	1	2-3	Bolt	8	4-4	Copper Washer	2
1-31	Spring Cover	1	2-4	Leg	2	4-5	Oil Valve Body	1
1-32	Snap Ring	1	2-5	Lock Washer	12	4-6	Nylon Gasket	1
1-33	Bushing	1	2-6	Nut	6	4-7	Air Valve Assembly	1
1-34	Pin	1	3-1	Hook	2	4-8	Air Hose Assembly	1
1-35	Foot Pedal	1	3-2	Fixing Bracket A	2			
1-36	Snap Ring	6	3-3	Screw Cap	2			