



INSTALLATION, OPERATION & MAINTENANCE MANUAL



MODEL:

TJ1T

2,200 LB CAPACITY HYDRAULIC TRANSMISSION JACK

! FOLLOW THIS MANUAL CAREFULLY TO ENSURE THE EQUIPMENT WILL FUNCTION CORRECTLY AND PROVIDE MANY YEARS OF DEPENDABLE SERVICE. FAILURE TO FOLLOW THESE INSTRUCTIONS AND SAFETY WARNINGS MAY RESULT IN PERSONAL INJURY OR PROPERTY DAMAGE. KEEP THIS MANUAL IN A SAFE DRY PLACE FOR FUTURE REFERENCE.



**Products May Be
Upgraded Without Notice
Please Visit**

WWW.TITANLIFTS.COM

**For The Latest Version Of
This Manual**



TITAN MARKETING, LLC

PO Box 7069 Greenwood, IN 46142
1.888.908-4826 FAX (317) 215.2770
www.titanlifts.com

To Our Valued Customers:

Thank you for purchasing a Titan Lifts® product. We hope this high quality equipment provides you with years of dependable service.

It is unfortunate that rare situations may occur with the products you purchase from Titan Lifts®. We value your business as well as the trust you have and need to maintain your relationship with us. Titan Lifts® carries liability coverage that may protect our customers if a situation does occur. However, as in all accidents there must be proof of liability for a claim to be made. Our insurance company requires the following procedures be observed in order to consider a claim:

- A. The claimant must contact the Titan Lifts® distributor immediately with the facts of the situation.
- B. If any equipment is damaged, including vehicles or shop equipment, Titan Lifts® must be given the opportunity to send an impartial representative to the site for proper assessment of the situation.
- C. The Vehicle cannot be moved until either an impartial representative has reviewed the accident or clear and precise pictures are taken that reflect all the pertinent information for an impartial representative to be able to access the information from a distance. Titan Lifts® or its representatives must approve the pictures before anything can be moved.
- D. If any potential liability is determined on behalf of Titan Lifts®, two estimates must be submitted for damages to be reimbursed.

It is imperative that the claimant complies with these procedures, because without proper assessment of the situation a claim will be denied.

ARBITRATION NOTICE

The installation or use of this equipment shall constitute an acknowledgement that the user agrees to resolve any and all disputes or claims of any kind whatsoever, which relate in any way to the equipment, by way of binding arbitration, not litigation. No suit or legal action may be filed in any state or federal court. Any arbitration shall be governed by the Federal Arbitration Act, and administered by the American Mediation Association, Indianapolis Indiana. The maximum amount that an arbitrator may award and all damages shall not exceed the retail value of this equipment.

WARRANTY NOTICE

This equipment must be assembled and used in the manner according to the documentation provided to be covered by warranty.

Damaged or missing components must be reported within 72 hours of receipt to your freight carrier and to the distributor. Claims must be filed to cover cost.

If you have any questions or if we can be of any further assistance, please don't hesitate to contact a Titan Lifts® representative at 1-888-908-4826. Thank you for the opportunity to continue to serve your lift equipment needs.

SPECIFICATIONS


Rated capacity		2,200 LB
Stroke	1ST STAGE	19-1/4"
	2ND STAGE	20"
Min. Height:		37"
Max. Height:		76-1/4"
Net Weight		148 LB


SAFETY PRECAUTIONS

1. The maximum load capacity is 2,200 lb. DO NOT exceed this rated capacity.
2. This jack is used as an aid in the removal and installation of a transmission or a differential as individual components. DO NOT use it for any other purpose it is not designed to perform.
3. DO NOT use this transmission jack as a vehicle lifting device or as a vehicle support.
4. Keep children and unauthorized persons away from the work area.
5. Remove loose clothing. Remove ties, watches, rings and other loose jewelry, and contain long hair.
6. Always wear ANSI approved safety goggles when operating this jack.
7. Keep proper balance and footing, do not overreach and wear nonskid footwear.
8. Only use this equipment on a surface that is stable, level, smooth and capable of sustaining the load. Keep the surface clean, tidy and free from unrelated materials and ensure that there is adequate lighting.
9. Inspect the jack before each use. DO NOT use if bent, broken, cracked, leaking or otherwise damaged, any suspect parts are noted or it has been subjected to a shock load.
10. Vehicle must be properly and adequately supported before starting repairs.
11. DO NOT use this jack to lift or support assemblies such as a differential with axle, or a transmission with bell housing which will be bulky and difficult to balance, and may cause the jack to tip over and lead to property damage and/or serious personal injury.
12. Center load on the saddle and be sure the setup is stable and secure.
13. Never move this jack with a load any higher off ground than necessary and move it slowly and carefully.
14. Transfer load immediately to appropriate support device for service or repair.
15. DO NOT operate this jack when you are tired or under the influence of alcohol, drugs or any intoxicating medication.
16. DO NOT allow untrained persons to operate this product and DO NOT make any modifications to this product.

17. DO NOT expose the equipment to rain or snow.
18. Use a qualified person to maintain the equipment in good condition. Keep it clean for best and safest performance.
19. If the equipment needs repair and/or there are any parts that need to be replaced, have it repaired by authorized technicians and only use the replacement parts supplied by the manufacturer.
20. **WARNING:** The warnings, cautions and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

ASSEMBLY

 **WARNING:** READ ENTIRE MANUAL AND COMPLY WITH ALL SAFETY AND SERVICE PRECAUTIONS. DEATH, PERSONAL INJURY AND / OR PROPERTY DAMAGE MAY OCCUR IF INSTRUCTIONS ARE NOT FOLLOWED CAREFULLY.

 **WARNING:** BEFORE OPERATING THE POSITIONING JACK, MAKE SURE THAT ALL THE HARDWARE IS SECURE AND THAT EACH UNIT HAS BEEN TESTED PROPERLY.

ASSEMBLY - REFER TO PARTS LIST

- 1) Take out all the parts from the box.
- 2) Lay the pump on the floor, connect 2pcs of Base (R48) to the pump (R36) by using Flat Washer (R54), Lock Washer (R55) and Bolt (R56). Then tighten all of them.
- 3) Connect 4pcs of casters (R53) with Base (R48) by using Flat Washer (R52), Lock Washer (R51) and Nut (R50).
- 4) Connect one end of the supporting bars (R24 R25 R26) to the base (R48) by using Bolt (R49), Nut (R22) and Lock Washer (R23).
- 5) Adjust the supporting bars (R24 R25 R26) to the length you want, align the holes with the Support Ring (R19), insert Bolt (R21) into the hole and lock it by Nut (R22) and Lock Washer (R23).
- 6) After the 4 supporting bars are assembled, tighten all the bolts and nuts.
- 7) Attach the Adaptor (R57) to the piston of the pump and secure it with Bolt (S19).
- 8) Attach 4 Adjustable Brackets (S02) to the Adaptor (S03) using Bolt (S01), Washer (S04) and Wing Nut (S05).
- 9) Connect Chain (S28) to Plate (S03) using Bolt (S29), Washer (S27) and Nut (S26).
- 10) Attach Hook (S06) with Hook Base (S07) using Wing Nut (S08). Then connect Hook Base (S07) to the Plate (S03) using Washer (S24) and Nut (S25).

OPERATING INSTRUCTIONS



WARNING: ENSURE THAT YOU READ, UNDERSTAND AND APPLY THE SAFETY INSTRUCTIONS AND WARNINGS BEFORE USE. FAILURE TO HEED THESE INSTRUCTIONS MAY RESULT IN PROPERTY DAMAGE AND/OR PERSONAL INJURY.

1. Roll the transmission jack into position and pump the foot pedal (R43) until saddle reaches desired height.

NOTE: Follow vehicle manufacturer's recommended procedures for removing the load as outlined in vehicle service manual or repair guide.

2. Carefully center load on the saddle. Ensure the load's center of gravity is centered on the saddle and the setup is stable and secure.

NOTE: Before lowering load check to ensure all tools and personnel are clear and it is safe to lower the load.

3. SLOWLY and CAREFULLY operate the release pedal R40 to lower the load to its lowest possible position.
4. If necessary, CAREFULLY and SLOWLY move the jack.
5. Transfer load immediately to appropriate support device for service or repair.

MAINTENANCE

1. When not in use, store the jack in a dry location with saddle in lowest position.
2. Periodically check the piston rod for signs of rust or corrosion. Clean exposed areas with a clean oiled cloth.

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

3. A coating of light lubricating oil to pivot points, axles and hinges will help to prevent rust and ensure that casters, foot pedal and pump assemblies move freely. Periodically lubricate the pivot points, axles and hinges with a light lubricating oil as needed.
4. With jack in its lowest position, remove the air vent screw (R33) to check the hydraulic oil level. If it is not adequate, add high quality hydraulic jack oil as necessary. Insert and tighten the air vent screw. Then purge air from hydraulic system as described in Page 5.

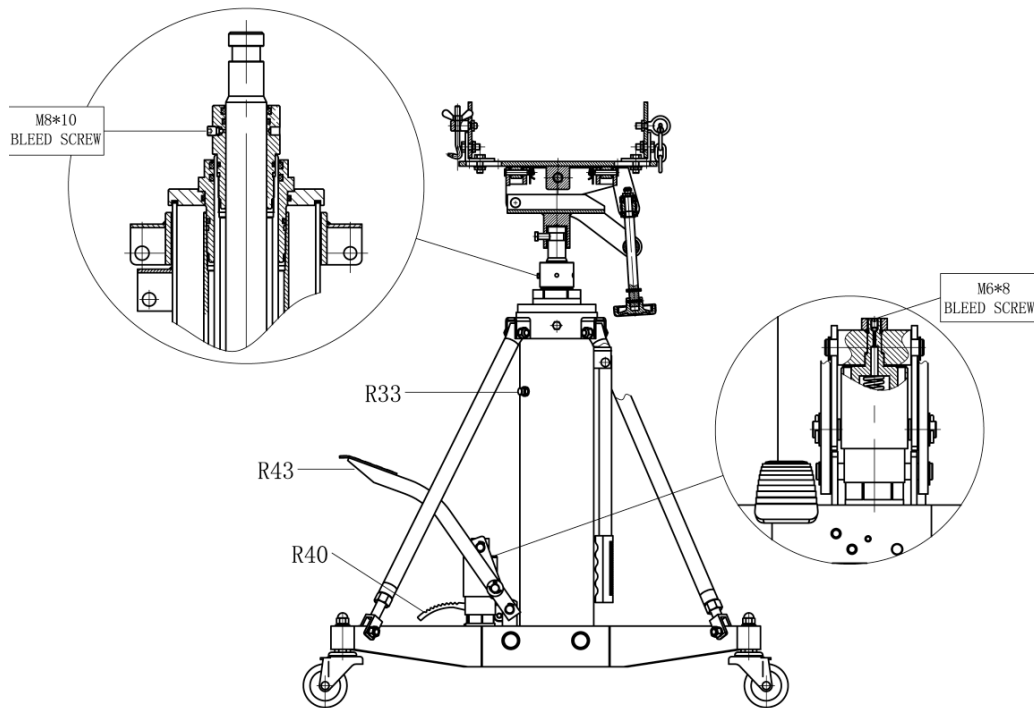
Warning: DO NOT use brake fluid or any other improper fluid and avoid mixing different types of oil when adding hydraulic oil.

5. To ensure best performance and longer equipment life, replace the complete hydraulic oil at least once a year. With jack in its lowest position, remove the air vent screw (R33), lay the jack on its side and drain the oil into a suitable container. Ensure that no dirt gets into the system. Set the jack in its level upright position, fill with approved hydraulic jack oil. Then replace the air vent screw (R33) and purge away air from hydraulic system as described in Page 5.

Note: Dispose of hydraulic oil in accordance with local regulations.

6. If equipment efficiency drops, purge air from hydraulic system as described in Page 5.
7. It is recommended that an annual inspection be done by qualified technicians.

PURGE AIR FROM HYDRAULICS



Please follow these instructions to eliminate the air in the pump core if the product is lifting slowly or fails to raise.

1. Loosen Screw R33.
2. Press the Release Pedal R40 until the 2 pistons (1st stage and 2nd stage) are in the lowest position.
3. Use a 3mm Wrench to loosen M6*8 bleed screw but DO NOT take it all the way out.
4. Operate the Pedal R43 two or three times until there is hydraulic oil (without air bubbles) flowing from the bleed screw hole.
5. At the same time, use a 3mm Wrench to tighten M6*8 bleed screw.
6. Operate Pedal 43 to check. Repeat the above steps if the product still doesn't work.

Please follow these instructions to eliminate the air in the ram if the product is not lifting or descending smoothly.

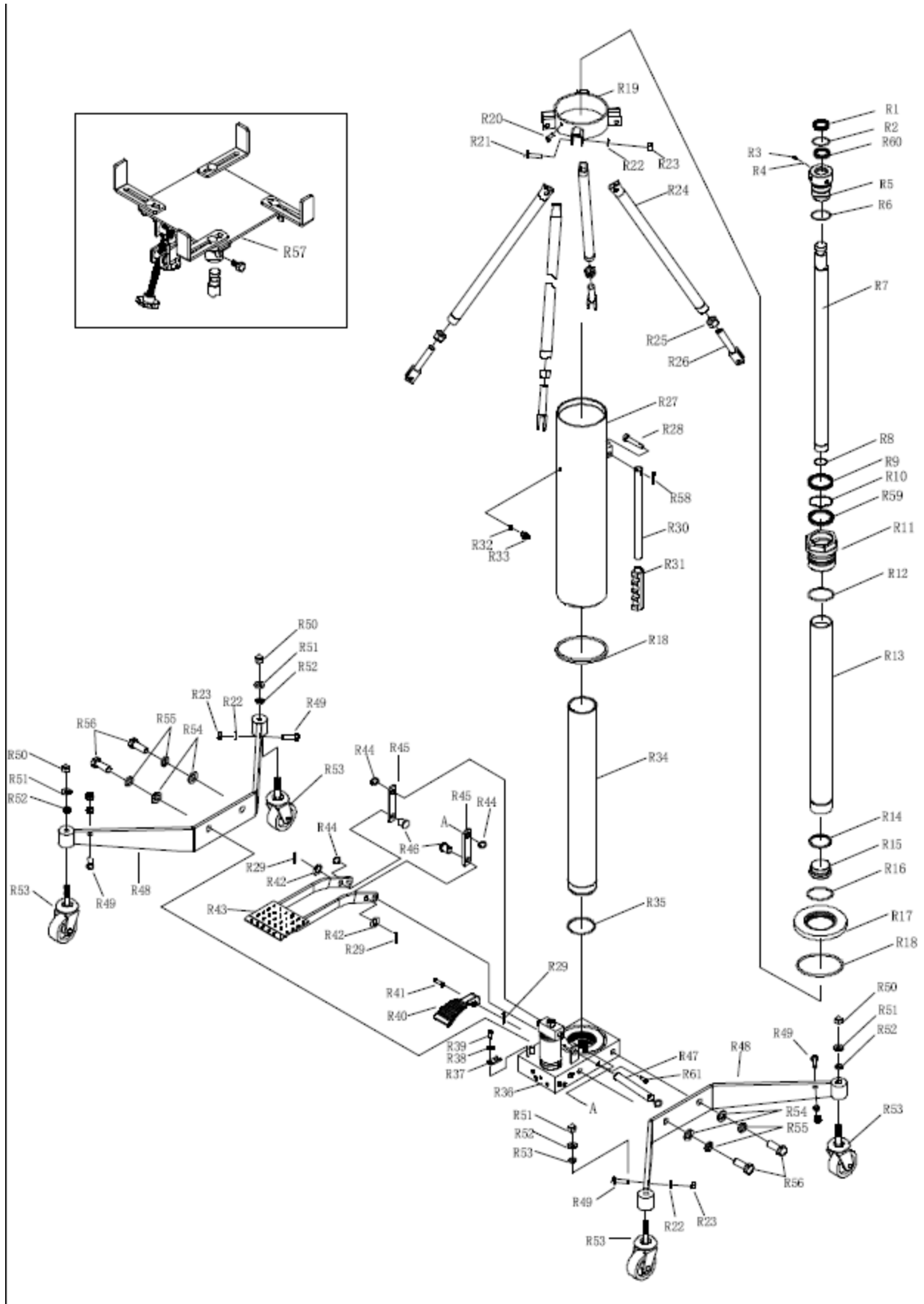
7. Loosen Screw R33.
8. Operate Pedal R43 to raise the adaptor to the highest position.
9. Use a 4mm Wrench to loosen M6*8 bleed screw but DO NOT take it all the way out.
10. Operate the Pedal R43 two or three times until there is hydraulic oil (without air bubbles) flowing from the bleed screw hole.
11. At the same time, use a 4mm Wrench to tighten M6*8 bleed screw.
12. Press Release Pedal R40 to make the 2 pistons lower. Repeat the above steps again if the pistons are not lowering smoothly.

TROUBLESHOOTING

Problem	Cause	Solution
Unit fails to lift	<ol style="list-style-type: none"> 1. Not enough oil 2. Air in the hydraulic system 3. Internal leak 	<ol style="list-style-type: none"> 1. Refer to maintenance section and fill to correct fluid level 2. Refer to air purge instructions to remove air 3. Contact dealer for repair
Unit lifts slowly	<ol style="list-style-type: none"> 1. Air in the hydraulic system 2. Internal leak 	<ol style="list-style-type: none"> 1. Refer to air purge instructions to remove air 2. Contact dealer for repair
Lift or descent not smooth	<ol style="list-style-type: none"> 1. Piston rod needs lubrication 2. Air in the ram 	<ol style="list-style-type: none"> 1. Add lubricating oil to the piston rod and run the piston up and down 2. Refer to air purge instructions to remove air
When unloaded, the first stage piston can be raised but the second stage can't be raised	<ol style="list-style-type: none"> 1. Not enough oil 2. Air in the ram 	<ol style="list-style-type: none"> 1. Refer to maintenance section and fill to correct fluid level 2. Refer to air purge instructions to remove air
When under load, the first stage piston can be raised but the second stage can't be raised	<ol style="list-style-type: none"> 1. Not enough oil 2. Air in the ram 3. Over the max. load 4. Wrong adjustment of safety valve 	<ol style="list-style-type: none"> 1. Refer to maintenance section and fill to correct fluid level 2. Refer to air purge instructions to remove air 3. Check the weight of the load 4. Contact dealer for repair
Unit fails to keep pressure	<ol style="list-style-type: none"> 1. The release pedal is not operating properly 2. Internal leak 	<ol style="list-style-type: none"> 1. Check the release pedal for any obstructions 2. Contact dealer for repair

PARTS DIAGRAMS & LISTS

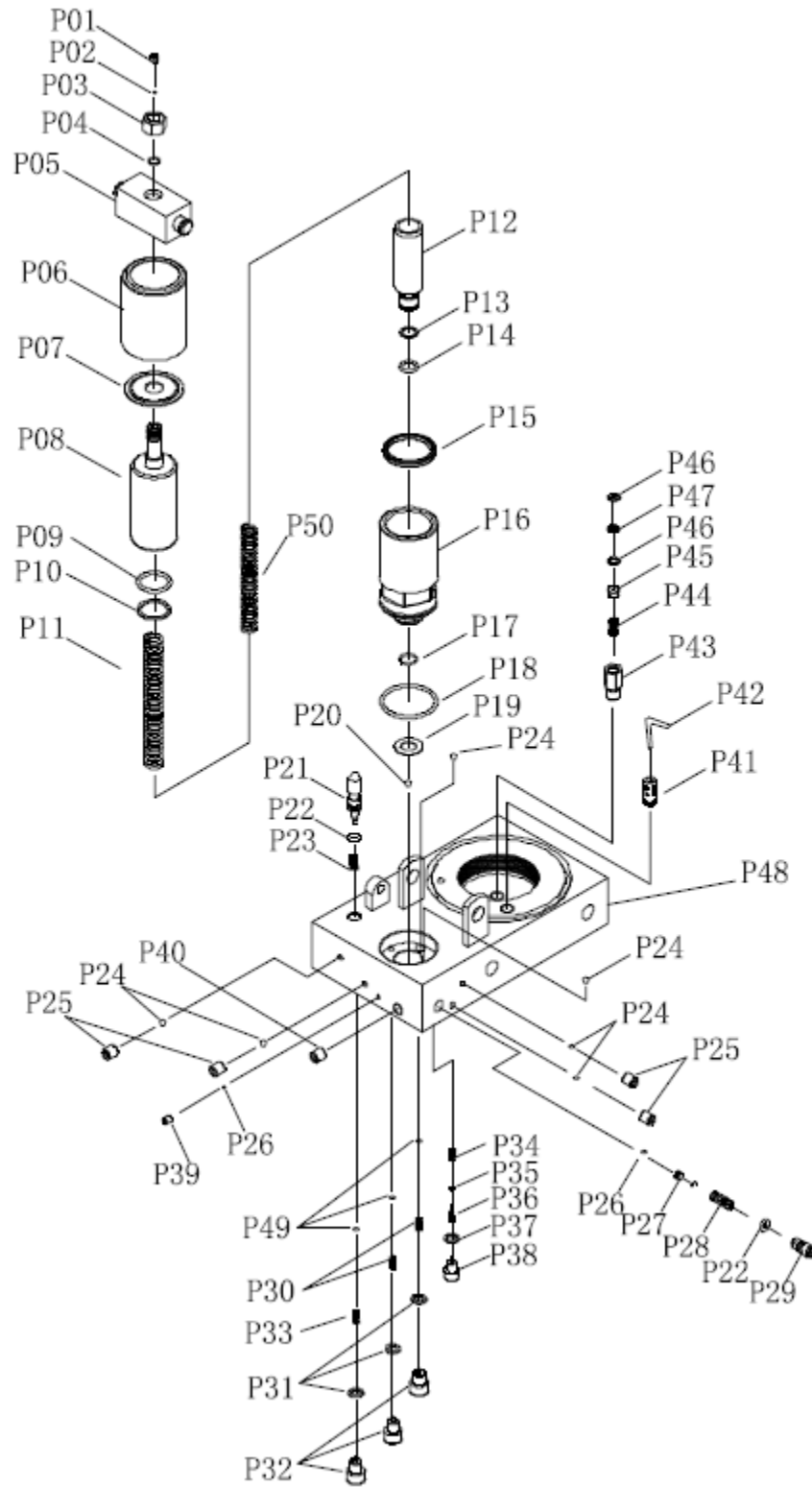
DIAGRAM 1



PARTS LIST 1

NO.	DESCRIPTION	QTY	NO.	DESCRIPTION	QTY
R1	Dust Ring	1	R32	Seal Washer	1
R2	O Ring	1	R33	Air Vent Screw	1
R3	Screw	1	R34	Ram	1
R4	Steel Ball	1	R35	Ram Washer	1
R5	Big Nut 2	1	R36	Pump	1
R6	O Ring	1	R37	Limit Collar 2	1
R7	Piston Rod(2nd.Stage)	1	R38	Lock Washer	1
R8	Retaining Ring	1	R39	Screw	1
R9	Dust Ring	1	R40	Release Pedal	1
R10	O Ring	1	R41	Pin B	1
R11	Big Nut 1	1	R42	Flat Washer	2
R12	O Ring	1	R43	Foot Pedel Assembly	1
R13	Piston Rod(1st.Stage)	1	R44	Retaining Ring	4
R14	Retaining Ring	1	R45	Connect Rod	2
R15	End Cap	1	R46	Pin	2
R16	O Ring	1	R47	Pin	1
R17	Base	1	R48	Foot Base	2
R18	Washer	2	R49	Bolt	4
R19	Support Ring	1	R50	Nut	4
R20	Bolt	1	R51	Lock Washer	4
R21	Bolt	4	R52	Flat Washer	4
R22	Lock Washer	8	R53	Caster	4
R23	Nut	8	R54	Flat Washer	4
R24	Support Bar	4	R55	Lock Washer	4
R25	Nut	4	R56	Bolt	4
R26	Bolt	4	R57	Adaptor	1
R27	Oil Tank	1	R58	Cotter Pin	1
R28	Pin	1	R59	Washer	1
R29	Cotter Pin	3	R60	Washer	1
R30	Handle	1	R61	Screw	2
R31	Handle Grip	1			

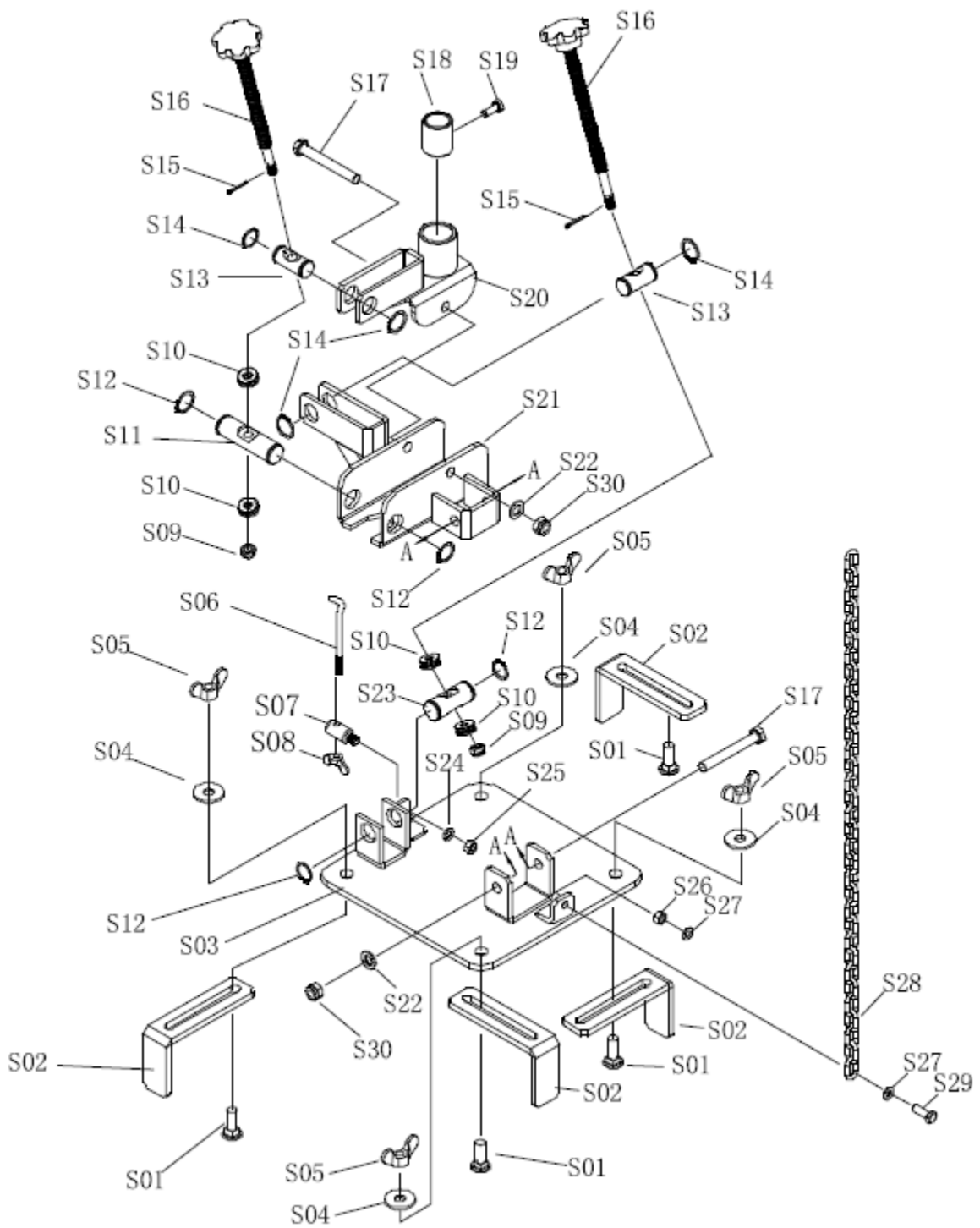
DIAGRAM 2



PARTS LIST 2

NO.	DESCRIPTION	QTY	NO.	DESCRIPTION	QTY
P1	Screw	1	P26	Steel Ball	2
P2	Steel Ball	1	P27	Base for Steel Ball	1
P3	Nut	1	P28	Spring	1
P4	O Ring	1	P29	Screw	1
P5	Bushing	1	P30	Spring	2
P6	Dust Cap	1	P31	Washer	3
P7	Dust Cover	1	P32	Screw	3
P8	Big Pump Core	1	P33	Spring	1
P9	O Ring	1	P34	Spring	1
P10	PTFE Washer	1	P35	O Ring	1
P11	Spring	1	P36	Push Bar	1
P12	Small Pump Core	1	P37	Copper Ring	1
P13	PTFE Washer	1	P38	Screw	1
P14	O Ring	1	P39	Screw	1
P15	Washer	1	P40	Screw	1
P16	Base for Pump Core	1	P41	Connector	1
P17	Retainer Ring	1	P42	Filter	1
P18	O Ring	1	P43	Base for Valve	1
P19	Copper Ring	1	P44	Spring	1
P20	Steel Ball	1	P45	Valve Core	1
P21	Release Valve Core	1	P46	Retainer Ring	2
P22	O Ring	2	P47	Filter	1
P23	Spring	1	P48	Pump Assy	1
P24	Steel Ball	6	P49	Steel Ball	3
P25	Screw	4	P50	Spring	1

DIAGRAM 3



PARTS LIST 3

NO.	DESCRIPTION	QTY	NO.	DESCRIPTION	QTY
S01	Bolt	4	S16	Adjusting Handle	2
S02	Adjustable Bracket	4	S17	Bolt	2
S03	Base for Adaptor	1	S18	Bushing	1
S04	Flat Washer	4	S19	Bolt	1
S05	Nut	4	S20	Base for Bracket	1
S06	Hook	1	S21	Bracket	1
S07	Base for Hook	1	S22	Flat Washer	2
S08	Wing Nut	1	S23	Pin 2	1
S09	Nut	2	S24	Flat Washer	1
S10	Axle	4	S25	Nut	1
S11	Pin 3	1	S26	Nut	1
S12	Retainer Ring	4	S27	Flat Washer	2
S13	Pin 1	2	S28	Chain	1
S14	Retainer Ring	4	S29	Bolt	1
S15	Cotter Pin	2	S30	Nut	2

WARRANTY REGISTRATION

In order to utilize the warranty on this Titan Lifts product, you must register your product with us. The simplest way to do this is to visit [TITANLIFTS.COM/WARRANTIES](https://www.titanlifts.com/warranties) and submit your information online. If you prefer to send your information through the mail, please fill out the form below and send this page to us at :

**Titan Lifts
PO Box 7069
Greenwood, IN 46142**

EQUIPMENT MODEL: _____ SERIAL NUMBER: _____
TYPE OF POWER UNIT: _____ SERIAL NUMBER: _____
DATE OF PURCHASE: _____
PLACE PURCHASED: _____
NAME: _____
STREET: _____
CITY, STATE, ZIP: _____
PHONE: _____
EMAIL: _____

OPT OUT OF PROMOTIONS



In order to receive your warranty, return this card or visit [TITANLIFTS.COM/WARRANTIES](https://www.titanlifts.com/warranties) within 30 days.



LIMITED WARRANTY

The **Titan 2 Post lifts, 4 Post lifts and Bridge Jacks** are backed by a standard **1-year** replacement parts warranty and a **5-year** structural warranty from the date of purchase, to the original purchaser only. The **1-year** replacement parts warranty covers power units, hydraulic cylinders, and all other assembly components such as, but not limited to: turn plates, slip plates, cables, chains, valves, switches etc. This does not cover normal wear items such as, but not limited to: rubber lifting pads and nylon slide blocks. Titan Elite model lifts have been discontinued but still qualify under the same terms as shown above.

Titan SL-6600 Scissor Lifts and PREMIER Series 2 Post Lifts are backed by a **2-year** replacement parts warranty and a **5-year** structural warranty from the date of purchase, to the original purchaser only. The **2-year** replacement parts warranty covers power units, hydraulic cylinders, and all other assembly components such as, but not limited to: valves, switches, capacitors etc. This does not cover normal wear items such as, but not limited to: rubber lifting pads, nylon slide blocks and rubber arm pads.

Titan MRL-6000 Scissor lifts are backed by a standard **1-year** replacement parts warranty and a **5-year** structural warranty from the date of purchase, to the original purchaser only. The **1-year** replacement parts warranty covers power units, hydraulic cylinders, and all other assembly components such as, but not limited to: valves, switches, capacitors etc. This does not cover normal wear items such as but not limited to rubber lifting pads.

Titan ROT-4500 Rotisseries are backed by a standard **1-year** replacement parts warranty from the date of purchase, to the original purchaser only. The **1-year** replacement parts warranty covers components such as, but not limited to: hydraulic cylinders, caster assemblies, bearings etc. This does not cover normal wear items such as, but not limited to, mounting adapters.

Titan Standard Duty and Heavy Duty motorcycle lifts are backed by a standard **1-year** replacement parts warranty from the date of purchase, to the original purchaser only. The **1-year** replacement parts warranty covers power units, hydraulic cylinders, pneumatic cylinders, and all other assembly components such as, but not limited to: cables, caster wheels, valves, switches, wheel vises etc. This does not cover normal wear items such as, but not limited to: rubber wheel vise pads.

Titan Light Duty motorcycle lifts are warrantied for replacement parts only to the original purchaser for a period of **90 days** from the date of purchase. This **90 day** replacement parts warranty covers items such as, but not limited to: hydraulic cylinder, casters, pedal assemblies, wheel vises etc. This does not cover normal wear items such as, but not limited to: rubber wheel vise pads.

Titan Bulldog Moto Cradle Wheel Chock is warrantied for replacement parts, only to the original purchaser, for a period of **2-years** from the date of purchase.

XL Tool by Titan Wheel Service Machines and Helper Arm Assemblies are backed by a standard **1-year** replacement parts warranty from the date of purchase, to the original purchaser only. The **1-year** replacement parts warranty covers internal boards, motors, pneumatic cylinders, and all other assembly components such as, but not limited to: cabinet, switches, valves, fittings etc. This does not cover normal wear items such as but not limited to: rubber pads, jaw protectors, air hoses, quick nut assemblies.

Titan shop equipment products and accessories are warrantied for replacement parts only to the original purchaser for a period of **90 days** from the date of purchase. This **90 day** replacement parts warranty covers products such as but not limited to: EZ -Mover Jacks, Mini Jacks, tie down products, wheel service accessories, Bulldog Moto Cradle Wheel Chock accessories, dollies, stands, Multi-purpose Jacks, etc.

Titan TJ1T, FJ2T, and FJ3T are warrantied for replacement parts only to the original purchaser for a period of **1 year** from the date of purchase.

All non-serialized items will require proof of purchase in the form of a sales receipt from an authorized Titan Lifts dealer showing the date of purchase for any warranty consideration.

For **all** warranty considerations, Titan Marketing, LLC will supply replacement parts only during the warranty period. The original purchaser is responsible for all shipping, handling, and any labor charges incurred. Hydraulic/Pneumatic cylinders may qualify for exchange under warranty if reported within the first 30 days from date of sale. After the first 30 days from date of sale, a seal kit and installation instructions will be sent for cylinder repairs. All defective parts must be returned to Titan for inspection and examination. Any parts that are found to be defective will be replaced or repaired to proper working order. Other items not listed above may be considered general wear parts and therefore, will not be covered under warranty. These warranties **do not** extend to **defects** caused by ordinary wear, abuse, misuse, shipping damage, improper installation, voltage or lack of required maintenance. Titan Marketing, LLC is **not** to be held responsible for any **failure** that results from an accident, purchaser/operator abuse, neglect, or failure to operate products in accordance with instructions provided in the owner's manual(s) supplied. Damage caused by rain, excessive humidity, corrosive environments or other contaminants are not covered under warranty. **THESE WARRANTIES DO NOT EXTEND TO ANY COSMETIC DEFECT NOT INTERFERING WITH EQUIPMENT FUNCTIONALITY OR ANY INCIDENTAL, INDIRECT, OR CONSEQUENTIAL LOSS, DAMAGE, OR EXPENSE THAT MAY RESULT FROM ANY DEFECT, FAILURE OR MALFUNCTION OF A TITAN MARKETING LLC PRODUCT OR THE BREACH OR DELAY IN PERFORMANCE OF THE WARRANTY.**

 **WARNING** 

The warnings, precautions and instructions in this manual cannot cover all possible conditions and situations that may occur. The operator must understand that the operator must supply common sense and examine caution factors when using this product to determine safety in all circumstances being used.



TITAN MARKETING, LLC

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