

# Owners Manual

Product Code: 2022T

**MADE FOR THE  
TRADE**

**TQ TRADEQUIP**  
*the trusted brand in equipment*

## TRANSMISSION LIFTER



### Specifications

- Safe Working Capacity: RWD/FWD/AWD  
GVM <2,300KG
- Rated Capacity: 500kg
- Working Height: 895mm – 1875mm
- Lift Platform Size: 340mm x 240mm
- Lifting Platform Bracket Ranges ID: 420mm x 435mm Maximum 340x340mm
- Tilt Angle: Left 7°
- Tilt Angle: Right 15°
- Nett Weight: 73kg



### About the **TradeQuip** brand

The '**TradeQuip**' brand of workshop equipment, is designed for use in a demanding workshop environment by professional users. With proven and trusted "Made for the Trade" reliability, '**TradeQuip**' branded products offer the very best in performance for an affordable price. All backed by a 1year trade guarantee across 1,000+ distributors Australia wide.

**TQ TRADEQUIP**  
*the trusted brand in equipment*

**TQPRO**  
Trusted by serious professionals

**BORUM**  
INDUSTRIAL WORKSHOP EQUIPMENT

**WARNING**

**IMPORTANT: READ ALL INSTRUCTIONS BEFORE USE**



**WARNING**

The instructions and warnings contained in this manual should be read and understood before using or operating this equipment. Do not allow anyone to use or operate this equipment until they have read this manual and have developed a thorough understanding of how this equipment works. Failure to observe any of the instructions contained in the manual could result in severe personal injury to the user or bystanders, or cause damage to the equipment and property. Keep this manual in a convenient and safe place for future reference.

Whilst every effort has been made to ensure accuracy of information contained in this manual, the TQB Brands Pty Ltd policy of continuous improvement determines the right to make modifications without prior warning.

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**USE THIS PRODUCT FOR ITS INTENDED PURPOSE ONLY**

**INTENDED USE**

Designed for the removal, installation, and transportation (in the lowered position) of passenger vehicle transmissions that are raised by an in-ground or above-ground lift.

## STANDARD OPERATING PROCEDURE

**DO NOT** use this machine unless you have been trained and assessed to a competent level in its safe use and operation, and have been given permission to use this



Safety glasses must be worn when operating this equipment



Long loose hair must be contained when operating this equipment



Safety footwear must be worn when operating this equipment



Close fitting/protective clothing must be worn when operating this equipment



Rings and jewellery must not be worn when operating this equipment

### PRE-OPERATING SAFETY CHECKS

Save these instructions. For your safety, read, understand, and follow the information provided with and on this **500kg Telescopic Transmission Lifter** before using.

- DO NOT exceed the maximum lifting load capacity of 500kg.
- Only use this telescopic transmission lifter on a surface that is stable, level, smooth, dry and capable of sustaining the load. Keep the surface free from unrelated materials and ensure that there is adequate lighting.
- DO NOT use on tarmac, or any other soft surface as the transmission may sink or topple.
- Vehicle must be properly and adequately supported before commencing work with this transmission lifter.
- This transmission lifter 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 than it is designed for.
- Always centre the load on the saddle of this transmission lifter and be sure the transmission is stable and secure before raising or lowering.
- DO NOT use the telescopic transmission lifter to lift or support a heavy load such as a differential with axle or a transmission with bell housing which is bulky and difficult to balance, and may cause the transmission lifter to tip over and lead to equipment damage and/or serious personal injury.
- Never move this telescopic transmission lifter with a load any higher off the ground than necessary and always move it slowly and carefully.
- Transfer the load immediately to appropriate support device for service or repair.
- DO NOT operate this telescopic transmission lifter when you are tired or under the influence of alcohol, drugs or any intoxicating medication.
- DO NOT allow untrained persons to operate this product and DO NOT make any modifications to this product.
- DO NOT tamper with the safety valve.
- DO NOT expose the telescopic transmission lifter to rain or any other kind of inclement weather.
- When servicing, use only TradeQuip identical replacement parts. Use of any other parts will void the warranty.
- Use the right product for the job. There are certain applications for which this Telescopic Transmission Lifter was designed. Do not modify the Telescopic Transmission Lifter and do not use the Telescopic Transmission Lifter for a purpose for which it was not intended.



### WARNING:

**Vehicle must be properly and adequately supported before commencing work with this Transmission Lifter.**

### INTENDED USE:

Designed for the removal, installation and transportation (in the lowered position) of passenger vehicle transmissions that are raised by an in-ground or above-ground lift.

## ASSEMBLY, OPERATION, PREVENTITIVE MAINTENANCE

### 1. FEATURES

This **TradeQuip "Made for the Trade"** 500kg Transmission Lifter is designed for passenger Car transmissions. Features a universal mounting cradle that provides a 2 way tilt range and a manually operated hydraulic system with smooth hydraulic lift and descent. The hydraulic system also includes a bypass system to prevent over extension and accidental overloading. The sturdy and stable design offers safety and security when removing and installing large and heavy transmissions.

### 2. ASSEMBLY

Unpack the product and check contents with the exploded drawing and the parts list. Should there be any damaged or missing parts, contact your place of purchase immediately.

1. Locate the two leg assemblies. Assemble them to each other, and to the base of the cylinder set using the Bolts, Spring Washers and Nuts provided. Tighten all fasteners securely.
2. Locate the four swivel castor assemblies, four Nuts and four Spring Washers. Attach a castor to each of the legs in the leg sets using a Spring Washer and Nut. Tighten securely.
3. Locate the saddle set. Position the saddle on top of the ram. Install nut to secure the saddle in place. Tighten securely.
4. Locate the two handles. Position the handles around the reservoir. Secure in place with the four Bolts, Spring Washers and Nuts provided. Tighten securely.



### OPEN BREATHER VALVE BEFORE USE

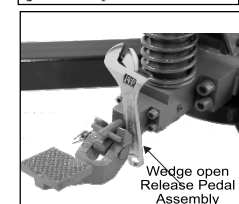
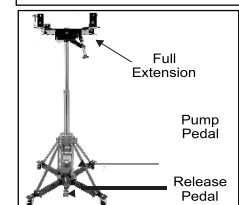
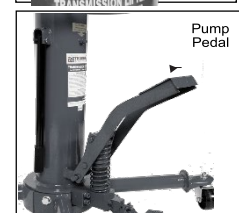
### 3. BEFORE USE

Ensure Breather Valve is open before use.

Prior to use conduct a visual inspection checking for abnormal conditions, such as cracked welds, leaks, and damaged, loose, or missing parts.

#### Bleed Hydraulic Transmission Lifter:

1. Please note this process requires two people to safely bleed these Transmission Lifters!
2. Remove the Filler Bung/Breather and if required, refill with \*32 Grade Hydraulic until the oil is lapping the bottom of the filler hole then replace the Filler Bung/Breather and open the Breather air vent screw.
3. Begin with the Pump Pedal in the raised position. Pump the lift rams to full extension.
4. At full extension resistance will be felt at the pedal and the pedal travel will stall, remove your foot from the pump pedal.
5. With the Pump Pedal in the raised position, depress the Release pedal and wedge open with suitable wedge, taking care to be clear of the lowering Lift Ram.
6. With the Release Pedal wedged open, begin to pump the Pump Pedal approximately 10 times then remove the wedge from the Release Pedal.
7. This will circulate the oil through the release and pressure circuits simultaneously bleeding the pump mechanism.
8. If necessary, repeat the process steps 2 to 5.



**At this point both the Pump and Lift Ram should be free of air and the Jack ready for operation.**

**If the pump still feels spongy or load is slow to raise, seek the services of a qualified Hydraulic repairer.**

\*The TradeQuip range of transmission lifts use grade 32 Grade Hydraulic Oil for the correct operation and compatibility with the seals used in their construction.

#### 4. OPERATION



**Warning:** Vehicle must be properly and adequately supported before commencing work with this telescopic transmission lifter.

1. The telescopic transmission lifter may easily be moved by gripping the ring handle and rolling it on its castors. Locate the transmission lifter under the transmission. Repeatedly press the pump pedal with your foot to raise the ram until the saddle set almost contacts the underside of the transmission. Adjust the position of the transmission lifter so that it is centred directly under the centre of gravity of the transmission.
2. It is important for your safety to make a good contact point between the saddle set and the transmission. This will assure that the transmission is properly supported and balanced once removed from the vehicle and resting on the transmission lifter. Using the grips, adjust the angle of the saddle so that it is best aligned with the transmission. Press the pump pedal again until the saddle contacts and will support the weight of the transmission.
3. The positions of the chains and hook screws can be adjusted using the wing nuts & bolts. Secure the transmission to the saddle by passing the chains over the top of the transmission and securing them to the hook screws. Tighten the chains by tightening the wing nuts. Double check that the transmission is safely and securely attached to the saddle set.
4. Remove the bolts and fittings attaching the transmission to the vehicle and separate the transmission, as recommended by the vehicle service manual.
5. Lower the transmission slightly by briefly pressing the pedal release. Recheck the transmission to ensure that it is securely and safely attached to the saddle. Make any necessary adjustments. When it is safe to do so, lower the transmission all the way by depressing the pedal release.
6. Using the handle, and stabilising the transmission on the transmission lifter, roll the transmission out from under the vehicle to the work location where it will be repaired. It is ideal to have assistance when you lower and move the transmission.



**Warning:** The use of this transmission lifter is limited to the removal, installation, and transportation in the lowest position of transmissions and differentials. It is not designed to store transmissions or other parts. No transmission or other part should be left on the transmission lifter for an extended period of time.

#### 5. INSPECTION

Prior to each use conduct a visual inspection checking for abnormal conditions, such as cracked welds, leaks, and damaged, loose, or missing parts.

#### 6. STORAGE

This transmission lifter should always be stored with the lift ram fully retracted in a dry location on a level surface.

#### 7. MAINTENANCE

Replace or repair damaged parts. Use recommended parts only. Non-authorized parts may be dangerous and will invalidate the warranty.

1. The hydraulic system is closed and will normally require no maintenance.
2. The mechanical parts of the transmission lifter, such as the pedal and release should be occasionally lubricated with heavy oil or grease.
3. Protect the transmission lifter cylinder from dirt or grit, when in the raised position. If it becomes dirty, wipe off with a clean cloth.
4. Maintain and store the transmission lifter in a protected environment. Do not expose to rain or excess moisture.
5. Clean the transmission lifter with clean water and a damp cloth. Do not use a pressure washer near the seal, piston or valves. Lubricate following cleaning.
6. If the transmission lifter allows a load to slowly lower on its own, you may have insufficient lifter oil or worn/damaged seals.
  - Check oil level. If the oil level is OK, contact an authorised repair facility.
  - Damaged seals may be caused by overloading, or exposure to harmful condition or inappropriate use of a pressure washer.

**Note:** If the transmission lifter can be pumped up to its highest position, it indicates that there is enough oil. If the lifter fades from this position, it indicates that the problem is likely the seals.

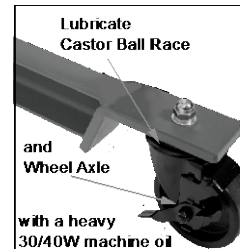
7. To check the oil level, be sure the lifter is in its lowest position. Remove the oil filler plug. The oil level should be at the bottom of the filler plug hole. You can visually see the oil, or test with your finger. If the oil level is low, add good quality hydraulic lifter oil ISO VG32.

**Important:** Dirt is the greatest single cause of failure in hydraulic units. Keep the transmission lifter clean and well lubricated to prevent foreign matter from entering the system.

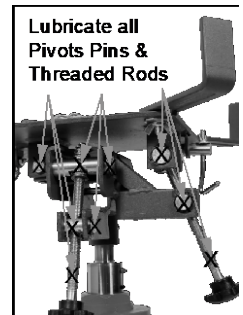
Pivots and pins in all manual pump and release mechanisms [marked X] should be lubricated with a Light Bearing Grease or 30/40W Machine Oil to ensure long life and prevent premature wear.



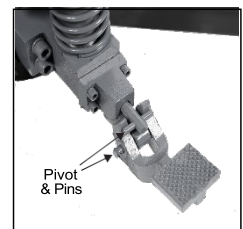
Wheel axles and Castor ball races should be lubricated with a Light Bearing Grease or 30/40W Machine Oil to ensure long life and prevent premature wear.



Cradle Pins, Pivots and Threaded Adjustor Rods [marked X] should be lubricated with a Light Bearing Grease or 30/40W Machine Oil to ensure long life and prevent premature wear.



Pedal Type Release Mechanisms should be lubricated with a light bearing grease or 30W/40W Machine Oil.



If the transmission lifter has been exposed to rain, snow, sand, or grit it must be cleaned before it is stored or used.

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.**

## 8. SERVICE & REPAIR

Any Transmission Lifter found damaged in any way or found to be worn or operates abnormally it should be removed from service until repaired by an authorised service agent. Owners and / or operators should be aware that repair of this product may require specialised equipment and knowledge. Only authorised parts, labels, decals shall be used on this equipment. Annual inspection of the transmission lifter is recommended and can be made by an authorised repair facility to ensure that your equipment is in optimum condition and that the equipment has the correct decals and safety labels specified by the manufacturer.

## TROUBLESHOOTING

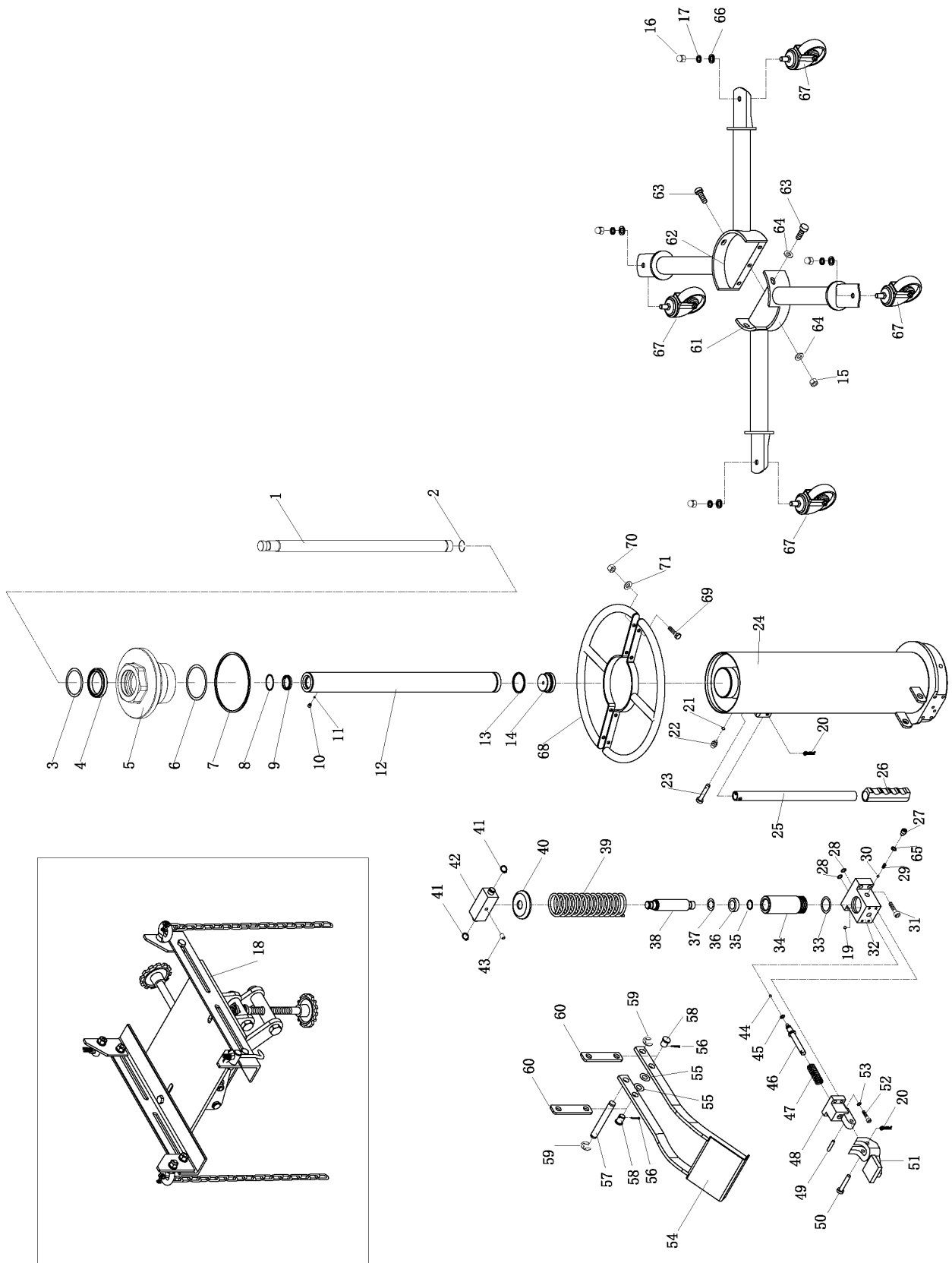
Problem	Symptom	Cause	Conclusion	Solution
Lifter will not lift using foot pump	Pump has no resistance, lift ram will not raise	Release pedal valve pin obstructed  Air in hydraulic system  Load weight exceeds lift capacity  Pump circuit protection valve actuated  Overload actuated	Valve seat/check ball failure.  Air cavitation in pump and/or lift ram  Higher capacity lifter required  Pump circuit protection valve needs reset  Relief valve needs reset	Clean mechanism, bleed system, ensure all fasteners are tight. Bleed system as per instructions  Select higher capacity lifter  Depress release pedal, valve will reset  Contact qualified technician for repairs
Lifter will not hold load	Load cannot be sustained, lift ram drops under load  Pump pedal rises	Release valve unable to close  External Leak at lift ram.  Damaged main seal  Main check valve obstructed	Valve shaft misaligned  Transmission lifter operated with breather closed for extended period causing air ingress to hydraulic system and reservoir pressurisation.  Replace main ram seals  Replace main check valve ball and reseal valve seat	Contact qualified technician for repairs  With ram fully retracted, open the breather to let pressurised air escape, Bleed system.  Contact qualified technician for repairs
Lifter will not lower after unloading	Lift ram rises after retracting  Lift ram will not retract	Reservoir overfilled and breather closed  Breather closed	Ram failure due to reservoir pressurised caused by excess reservoir level and closed breather valve  Breather closed causing hydraulic lock	Fully retract ram and drain excess oil and bleed system as per instructions  Open breather and bleed system Contact qualified technician for repairs
Poor lift performance	Pump has no resistance, lift ram will not raise to full stroke	Fluid level low  Air trapped in system breather closed, pump failure due to cavitation caused by air pressure build up in reservoir	Fill fluid to correct level  Lift ram raised for extended period causing air ingress to hydraulic system	Fill fluid to correct fluid level and bleed system  With ram fully retracted, open the breather to let pressurised air escape bleed system  Contact qualified technician for repairs

## PARTS LIST

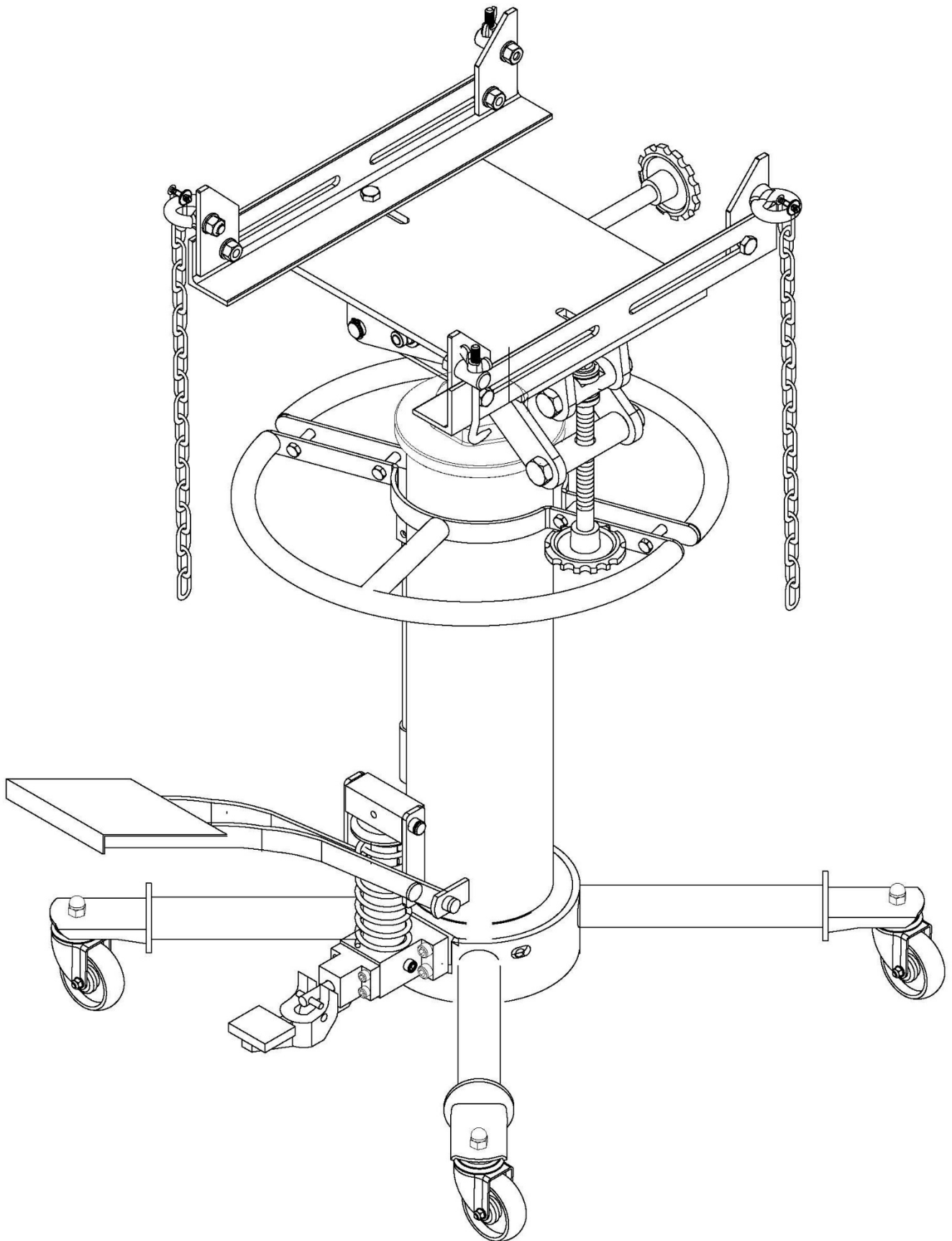
Part#	Description	QTY	Part#	Description	QTY
1	Secondary Ram	1	37	Seal ring	1
2	Snap ring	1	38	Piston	1
3	O-ring	1	39	Spring	1
4	Seal ring	1	40	Spring cover	1
5	Nut	1	41	Shaft ring	2
6	O-ring	1	42	Cross beam	1
7	Seal ring	1	43	Screw	1
8	O-ring	1	44	Steel ball	1
9	Seal Ring	1	45	O-ring	1
10	Screw	1	46	Release valve core	1
11	Steel ball	1	47	Spring	1
12	Primary Ram	1	48	Release valve seat	1
13	Snap ring	1	49	Pin	1
14	Cap	1	50	Shaft pin	1
15	Nut	1	51	Release pedal	1
16	Nut	1	52	Screw	4
17	Lock Washer	1	53	Lock washer	4
18	Saddle	1	54	Lift pedal	1
19	Steel ball	1	55	Washer	2
20	R-pin	1	56	Cotter pin	2
21	Seal ring set	1	57	Pin	1
22	Air vent screw	1	58	Pin	1
23	Shaft pin	1	59	Circlip	2
24	Ram assembly	1	60	Link	2
25	Handle tube	1	61	Base (left leg)	1
26	Handle sleeve	1	62	Base (right leg)	1
27	Plug screw	1	63	Bolt	6
28	O-ring	1	64	Washer	6
29	Spring	1	65	Copper washer	1
30	Steel ball	1	66	Flat Washer	4
31	Screw	1	67	Caster	4
32	Pump assembly	1	68	Handle	2
33	Copper washer	1	69	Bolt	4
34	Piston seat	1	70	Nut	4
35	Shaft ring	1	71	Washer	4
36	Seal ring	1			



PARTS LIST DIAGRAM



PARTS DRAWING



PRODUCT INFORMATION TIPS

# PRODUCT INFORMATION

## How to extend the life of your Transmission Lifter

### *10 Top Tips*

### to extend the life of your TQB BRANDS Transmission Lifter

**1 Open the breather valve prior to use.**

Opening the breather prior to operation ensures the efficient hydraulic operation of the lift ram and pump preventing pump and ram cavitation resulting in poor operation and or possible hydraulic oil loss.



**2 Regularly lubricate the tilt adjust rods, pivot points.**

Lubrication of all pivots, pins, adjusters, and castor wheels ensures smooth operation during lifting and adjustment procedures while removing a transmission.



**3 Regularly lubricate the castors axles & ball races to ensure smooth movement of the loaded jack.**



**4 Always store in the fully lowered position.**

Storage in the lowered position ensures the lift ram assembly is sealed from exposure to weather fluctuations and keeps the hydraulic ram seals in a relaxed condition ready to work when required.



**5 Never use trans lifter for supporting loads.**

To ensure long life of the hydraulic lift ram seals, a load must not be supported above the fully lowered position. Once a transmission is removed from a vehicle the loaded transmission lift must be fully lowered where the internal mechanical travel stops can support the load. Transmission lifts must not be used for suspension support during repairs. Please use a suitable auxiliary stand for this purpose.



**6 Centering the load on the platform.**

Correct balance of the load is a critical factor where unbalanced loads can affect the smooth lowering and raising operation. Always consult your vehicle manufacturer specifications for the correct lift point when attaching transmission lifter to a transmission.



**7 Use correct model for intended application.**

The following chart explains model suitability based on GVM and Transmission type.

	TQB BRANDS Recommendation for Under Hoist Transmission Jack Applications							
	GVM LESS THAN 2000KG	GVM LESS THAN 2300KG	GVM LESS THAN 2500KG	GVM LESS THAN 3200KG	GVM LESS THAN 3500KG	2 WHEEL DRIVE	ALL WHEEL DRIVE	4X4 & LIGHT COMMERCIAL
2049T/59T	Y					Y		
2002T/22T	Y	Y				Y	Y	
2052	Y	Y	Y			Y	Y	
PROTL500	Y	Y	Y			Y	Y	
2053T/63T	Y	Y	Y	Y		Y	Y	Y
PROTL1000	Y	Y	Y	Y	Y	Y	Y	Y

**8 Hazards and Obstructions.**

All wheeled TQB Brands equipment must be used on smooth surface free of cracks, crevices and tripping hazards that can foul the wheels during operation or relocation.

**9 Read the user Manual thoroughly and keep a copy easily accessible.**

The user's manuals are important to the initial set up and ongoing maintenance and come with each transmission jack, they are also downloadable from our webpage at [www.tqbbrands.com.au](http://www.tqbbrands.com.au)

**10 Visit our webpage for instructional videos.**

We have created instructional videos for our range of transmission jacks which include bleeding procedures and product comparisons. You'll find these at [www.tqbbrands.com.au](http://www.tqbbrands.com.au)



## WARRANTY

TradeQuip products have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship for a period of 12 months from the date of purchase except where tools are hired out when the guarantee period is ninety days from the date of purchase.

Should this piece of equipment develop any fault, please return the complete tool to your nearest authorised warranty repair agent or contact TQB Brands Pty Ltd Warranty team – [warranty@tqbbrands.com.au](mailto:warranty@tqbbrands.com.au).

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accident, or repairs attempted or made by any personnel other than the authorised TQB Brands Pty Ltd repair agent.

This guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

Your TQB Brands Pty Ltd guarantee is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the 12 month period.

### Consumer Guarantee

Our goods come with a guarantee that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.



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