TQ PRO

Trusted by serious professionals

OWNERS MANUAL

500KG HYDRAULIC

TRANSMISSION LIFTER

Professional
Reputable
Outstanding

STRONG
PRECISE
RELIABLE
WELL FINISHED

TQ PRO Trusted by serious professionals

LATEST APPLIED TECHNOLOGIES

Suitable for PASSENGER VEHICLES GVM less than 2,500KG

About the TQ Pro brand

TQ Pro top quality Tools and Equipment are designed and manufactured for specialist ***professional use in a garage and workshop*** environment. ***TQ Pro*** products are strong, reliable, and well finished for the expert tool user who appreciates professional design, reliability, and attention to detail. Covered by our ***12month trade use warranty***, our ***TQ Pro*** Tools & Equipment are made with pride to deliver the best combination of professional performance, presentation, and reliability.

Working Load Limit	Minimum Saddle Height	Maximum Saddle Height	Saddle Tilt Adjustments	Nett Weight
500kg	**940mm**	**1940mm**	**4 Way**	**65kg**

WARNING INFORMATION

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.

CONTENT

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SAFETY INSTRUCTIONS

⚠ SAFETY OPERATING INSTRUCTIONS

- DO NOT exceed the maximum lifting load capacity of 500kg.
- Only use this 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 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 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 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 use brake fluid or any other improper fluid to refill or top up the hydraulic system of this transmission lifter. Only use good quality hydraulic jack oil.
- DO NOT expose the transmission jack to rain or any other kind of inclement weather.
- Use a qualified person to maintain the transmission lifter in good condition. Keep the transmission lifter clean for best and safest performance.
- Use approved personal protection safety equipment such as eye protection, non-skid boots, full face impact shield and heavy duty work gloves. Keep proper footing and balance, do not overreach.

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LATEST APPLIED TECHNOLOGIES

ASSEMBLY, OPERATION, PREVENTITIVE MAINTENANCE

1. FEATURES

This ***TQ Pro*** 500kg Transmission Lifter is designed for transmission installation and removal. It features a universal mounting head that provides a wide fore and aft tilt range. The telescopic 2-stage design is ideal for reduced clearance lifts and the foot pedal operation keeps hands free during lowering. The manually operated hydraulic system includes a bypass system to prevent over extension and accidental overloading. The sturdy and stable design features four heavy duty castors for easy manoeuvrability around the workshop.

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. Attach the two leg assemblies (43) to the hydraulic main body (30) using bolts (50), washers (49), lock washers (48).
2. Fit the 4 castors (47,52) to the legs using washers (45), lock washers (46) & nuts (44).
3. Screw the cradle kit (04) onto the top of the lift ram rod, then assemble the adaptor as per the exploded drawing.

3. BEFORE USE

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

1. Following assembly and before first use, loosen the Air Vent Screw (26) then leave the Transmission Lifter for one hour to allow the hydraulic oil to settle before bleeding the system.

Bleeding Instructions

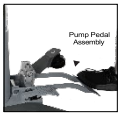
2. Remove the Oil Filler Bung/Breather and if required, top up with *32 Grade hydraulic oil until the oil is lapping the bottom of the Oil Filler Hole then replace the Oil Filler Bung/Breather.
3. Start with the Pump Pedal Assembly in the raised position.

4. Depress the Pump Pedal to full stroke and hold in that position. With a Hex key undo the Pump Bleed Screw 1 full turn counter-clockwise, aerated oil will begin to exit the Pump Bleed screw housing until a clear stream of oil with no air bubbles flows from the Pump Bleed Screw housing.

5. Tighten the Pump Bleed Screw and raise the Pump Pedal to fully raised position, repeat instructions 1 to 4 until no air bubbles appear in the oil stream at the bleeder housing.
   At this stage, the Pedal Pump Assembly should be clear of air.

In the next steps the Lift Ram assembly bleeding procedure is described

6. Start with the Pump Pedal Assembly in the raised position.
7. With an Allen key undo the Lift Ram Bleed Screw 1 full turn counter clockwise, aerated oil will begin to exit the Lift Ram Bleed Screw housing until a clear stream of oil with no air bubbles flows.



8. Tighten the Lift Ram Bleed Screw and raise the Pump Pedal to fully raised position.
9. Repeat instructions 6 to 8 until no air bubbles appear in the oil stream at the bleeder housing and tighten the Lift Ram Bleed Screw.
10. Recheck the oil level as described in step 1 and top up to correct oil level if required.

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

11. Test the hydraulic power unit without load by raising it to full height.
12. Lower the fully extended hydraulic ram by pushing the foot operated Release Pedal (34) down gently to control the rate of descent.
13. Your Hydraulic Transmission Lifter is ready for use.

*The range of TQPro Transmission Lifters use 32 Grade Hydraulic Oil for the correct operation and compatibility with the seals used in their construction.

4. OPERATION

To remove transmission from raised vehicle

1. Always loosen the Air Vent Screw (26) before use.
2. Roll the Transmission Lifter into position and lock the Castor Wheel (47) brakes.
3. Pump the foot operated Lift Pedal (38) until the Transmission Cradle (04) reaches the desired height.

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

4. Carefully centre the load on the cradle. Ensure the load's centre of gravity is centred on the cradle and the transmission is stable and secure. Use the chains to secure the load.

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

5. SLOWLY and CAREFULLY push the foot operated Release Pedal (34) to lower the load to its lowest position.

   NOTE: The speed of lowering is controlled by pressure on the release valve. The more the valve is opened the more rapidly the load descends. Always ensure the decent is slow and controlled.

6. Once the load is lowered, release the castor wheel brakes.
7. CAREFULLY and SLOWLY move the transmission lifter from under the vehicle.
8. Immediately transfer the load to a bench top or appropriate support device for service or repair.

To install transmission into raised vehicle

1. Always loosen the Air Vent Screw (26) before use.
2. Roll the Transmission Lifter into position and lock the Castor Wheel (47) brakes.
3. Transfer the load from the bench top or appropriate support device to the Transmission Lifter.
4. Carefully centre the load on the cradle. Ensure the load's centre of gravity is centred on the cradle and the transmission is stable and secure. Use the chains to secure the load.
5. Unlock the Castor Wheel brakes and carefully roll the transmission lifter into position beneath the vehicle and lock the castor wheel brakes.
6. Pump the foot operated Lift Pedal (38) until the Transmission reaches the desired height.

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

7. SLOWLY and CAREFULLY push the foot operated Release Pedal (34) to lower the load to its lowest position.

   NOTE: The speed of lowering is controlled by pressure on the release valve. The more the valve is opened the more rapidly the load descends. Ensure the decent is slow and controlled.

8. Once the cradle is lowered, release the castor wheel brakes.
9. CAREFULLY move the transmission lifter from under the vehicle.
10. When work is complete, ensure the cradle is at its lowest position and tighten the air vent screw to store.

⚠ WARNING

Dangerous dynamic shock loads are created by quick opening and closing the release valve when the load is being lowered. The resulting overload may cause hydraulic system failure which could cause property damage and/or severe personal injury.

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.
- The Transmission Lifter shall be maintained in accordance with the maintenance instructions. No alterations or modifications shall be made to the Transmission Lifter.
- Inspections shall be performed in accordance with this owner's manual.
- The Transmission Lifter must be inspected immediately if it is believed to have been subjected to abnormal load or shock.
- Owners and /or operators should be aware that repair of this product may require specialised equipment and knowledge (refer to maintenance section).

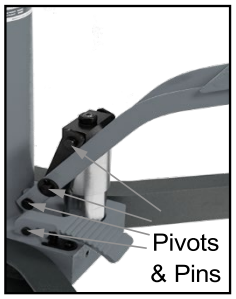
6. STORAGE

This TQ Pro Transmission Lifter should always be stored in a dry location on a level surface with the cradle fully lowered and the Air Vent Screw closed.

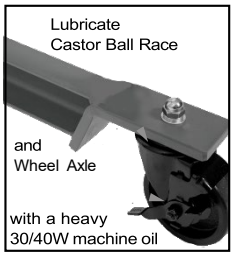
7. MAINTENANCE

Monthly maintenance is recommended. Lubrication is critical to Transmission Lifters as they support heavy loads. Any restriction due to dirt, rust, etc, can cause either slow movement or cause extremely rapid jerks damaging the internal components. The following steps are designed to keep the Transmission Lifter well maintained and operational.

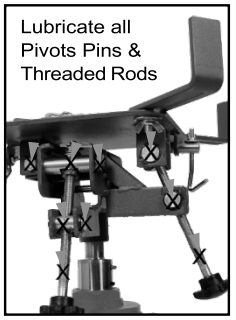
Pivots and pins in all manual pump and release mechanisms [marked X] should be lubricated with a Light Bearing Grease or 30/40W Machine Oil to ensure long life and prevent premature wear.



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.



Periodically grease the ram shaft divider with a light bearing grease via the grease nipple provided.

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

Important: Use only quality grade hydraulic jack oil. Avoid mixing different types of fluid and **NEVER** use brake fluid, turbine oil, transmission fluid, motor oil or glycerine. Improper fluid can cause premature failure of the Transmission Lifter and the potential for sudden and immediate loss of load. We recommend PENRITE HYDRAULIC JACK OIL or equivalent.

Periodically check the piston rod for signs of rust or corrosion. Clean exposed areas with a clean oiled cloth.

- A coating of light lubricating oil to pivot points and axles will help to prevent rust and ensure that castors, foot pedals and pump assemblies move freely. Periodically lubricate the pivot points and axles with a light lubricating oil as needed.
- When equipment efficiency drops, bleed air from hydraulic system. Bleed the hydraulic system to eliminate any air in the system by pushing down the release foot pedal (13) down and pumping the lift foot pedal (14) 15-20 times.
- With the Transmission Lifter in the lowest position remove the air vent screw (16) 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 bleed away air from the hydraulic system.
- Leave the Transmission Lifter for 60mins to allow oil to settle before bleeding the hydraulic system.
- Follow the Bleeding Instructions (Section 3: Before Use) to bleed the hydraulic system and eliminate any air in the system.
- To ensure best performance and longer equipment life replace the complete hydraulic oil at least once a year.
- With the Transmission Lifter in its lowest position remove the Air Vent Screw, lay the Transmission Lifter on its side and drain the oil into a suitable container.
- Ensure that no dirt gets into the system.
- Set the Transmission Lifter in its level upright position, fill with approved hydraulic jack oil.
- Replace the Air Vent Screw and bleed away air from hydraulic system as described in Section 3: Before Use.

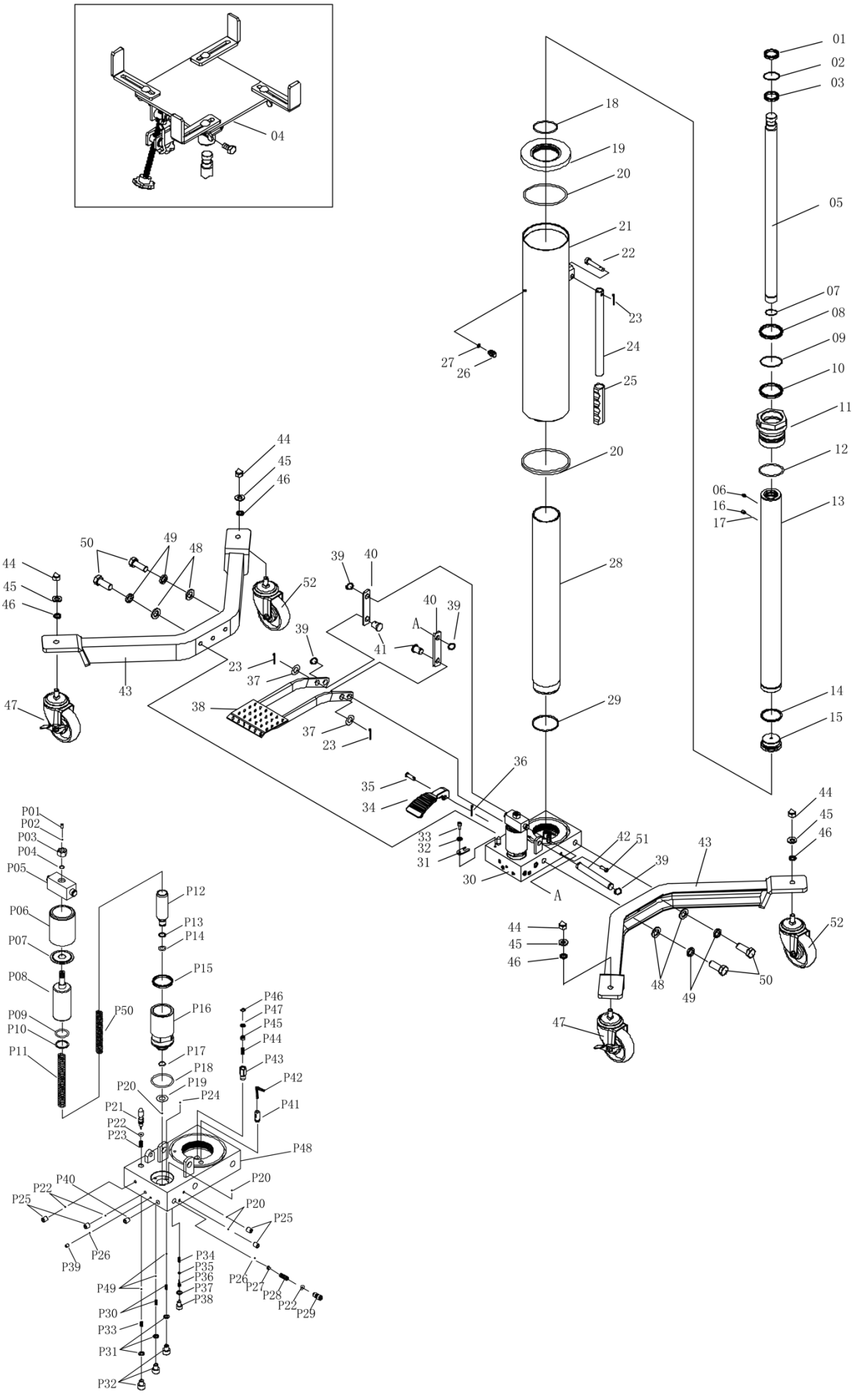
It is recommended that an annual inspection be conducted by a qualified technician.

WARNING: Never use sandpaper or abrasive material on these surfaces.

8. SERVICE & REPAIR

Any TQ Pro Transmission Lifter found damaged in any way, or found to be worn or operates abnormally 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 jack 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.

PARTS DIAGRAM



PARTS LIST

Part	Description	QTY
1	Dust Ring	1
2	O-Ring	1
3	U-Ring	1
4	Adaptor	1
5	Secondary Ram	1
6	Zerk	1
7	Circlip	1
8	Dust Ring	1
9	O-Ring	1
10	U-Ring	1
11	Primary Round Nut	1
12	O-Ring	1
13	Primary Ram	1
14	Circlip	1
15	Cap	1
16	Screw	1
17	Steel Ball	1
18	O-Ring	2
19	Seat	1
20	Seal Ring	2
21	Reservior	1
22	Pin	1
23	Cotter Pin	3
24	Handle	1
25	Handle Sleeve	1
26	Air Venting Screw	1
27	Seal Kit	1
28	Cylinder	1
29	Seal Ring	1
30	Base Assembly	1
31	U-Limit	1
32	Lock Washer	1
33	Screw	1
34	Release Pedal	1
35	Pin	1

Part	Description	QTY
36	Cotter Pin	1
37	Flat Washer	2
38	Lift Pedal	1
39	Circlip	4
40	Link	2
41	Pin	2
42	Pin	1
43	Channel Steel Leg	1
44	Nut	4
45	Lock Washer	4
46	Flat Washer	4
47	Castor with Brake	2
48	Flat Washer	4
49	Lock Washer	4
50	Bolt	4
51	Screw	2
52	Castor	2

P01	Screw	1
P02	Steel Ball	1
P03	Nut	1
P04	O-Ring	1
P05	Piston Sleeve	1
P06	Dust Cover	1
P07	Dust Cap	1
P08	Big Piston	1
P09	O-Ring	1
P10	Seal Ring	1
P11	Spring	1
P12	Small Piston	1
P13	Seal Ring	1
P14	O-Ring	1
P15	U-Ring	1
P16	Piston Seat	1

Part	Description	QTY
P17	Circlip	1
P18	O-Ring	1
P19	Copper Washer	1
P20	Steel Ball	6
P21	Release Valve Core	1
P22	O-Ring	2
P23	Spring	1
P24	Steel Ball	1
P25	Screw	4
P26	Steel Ball	2
P27	Ball Cup	1
P28	Spring	1
P29	Screw	1
P30	Spring	2
P31	Washer	3
P32	Screw	3
P33	Spring	1
P34	Spring	1
P35	O-Ring	1
P36	Pushrod	1
P37	Copper Washer	1
P38	Screw	1
P39	Screw	1
P40	Screw	1
P41	Fitting	1
P42	Oil Filter	1
P43	Valve Seat	1
P44	Spring	1
P45	Valve Core	1
P46	Circlip	1
P47	Filter	1
P48	Pump Assembly	1
P49	Steel Ball	3
P50	Spring	1

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	Dirt under release pin retainer	Hold pedal down and clean out pin cavity with an air duster
		Air in hydraulic system	Air cavitation in pump and/or lift ram	Bleed system as per instructions
		Load weight exceeds lift capacity	Higher capacity lifter required	Select higher capacity lifter
		Pump circuit protection valve actuated	Pump circuit protection valve needs reset	Depress release pedal, valve will reset
		Overload actuated	Relief valve needs reset	Contact qualified technician for repairs
Lifter will not hold load	Load cannot be sustained, lift ram drops under load	Release valve not tightly closed	Bypass through release valve	Ensure release valve tightly closed
		Damaged main seal	Replace main ram seals	Contact qualified technician for repairs
	Pump pedal rises	Main check valve obstructed	Replace main check valve ball and reseat valve seat	
Lifter will not lower after unloading	Lift ram rises after retracting	Reservoir overfilled and breather closed	Ram failure due to reservoir pressurised caused by excess reservoir level and closed breather valve	Fully retract ram and drain excess oil and bleed system as per instructions
	Lift ram will not retract	Breather closed	Breather closed causing hydraulic lock	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	Fill fluid to correct level	Fill fluid to correct fluid level and bleed system
		Air trapped in system breather closed, pump failure due to cavitation caused by air pressure build up in reservoir	Lift ram raised for extended period causing air ingress to hydraulic system	With ram fully retracted, open the breather to let pressurised air escape bleed system Contact qualified technician for repairs

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, adjustors, and castor wheels ensures smooth operation during lifting and adjustment procedures while removing a transmission.

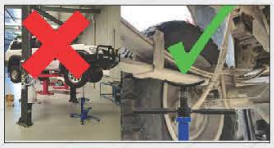
3 Regularly lubricate the castors axles & ball races to ensure smooth movement of the loaded jack.

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.

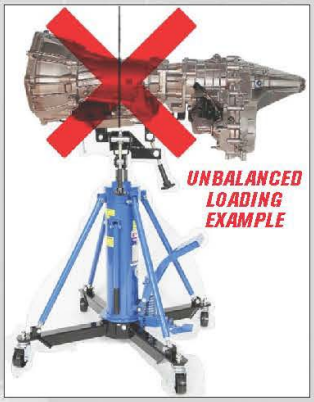
To ensure long life of the hydraulic lift ram seals, a load must not be supported above the fully lowered position.
Once a transmission is removed from a vehicle the loaded transmission lift must be fully lowered where the internal mechanical travel stops can support the load.
Transmission lifts must 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.

YouTube
Product Demonstration online



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

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

TRADEQUIP the trusted brand in equipment
TQ PRO Trusted by serious professionals
BORUM INDUSTRIAL WORKSHOP EQUIPMENT

WARRANTY

TQ Pro 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.

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.

TQB Brands Pty Ltd

TRADEQUIP the trusted brand in equipment

BORUM INDUSTRIAL WORKSHOP EQUIPMENT

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