

Superior quality since
1984



Owners Manual

2000kg TRANSMISSION LIFTER

BORUM

INDUSTRIAL WORKSHOP EQUIPMENT

**INDUSTRIAL
QUALITY**



Specifications:

- Safe Working Capacity: 2,000kg
- 2 Way Tilt: 30° Fore - 30° Aft
- Minimum Height: 210mm
- Maximum Height: 900mm
- Minimum Cradle Dimension: 385 x 470mm
- Maximum Cradle Dimension: 570 x 470mm
- Swivel Castor Wheel Dia: 100mm
- Handle Length: 850mm
- Chassis Dimension: 1160 x 685mm
- Nett Weight: 130kg
- Carton: 1220 x 720 x 300
- Gross Weight: 140kg
-

About the Borum brand

Our **"heavy duty commercial"** range of Borum Industrial equipment has been manufactured to exacting standards for the past **34 years**. We specify industrial quality components and design to ensure a long and durable working life in **commercial transport, mining, earthmoving and railway** environments. Our Borum Industrial range of equipment is focused on achieving superior professional standards, reliability, quality, and are covered by a **12 month trade use warranty**.

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.

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.

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

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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

PRE-OPERATIONAL SAFETY CHECKS

1. DO NOT exceed this rated capacity.
2. Study, understand, and follow all instructions before operating this device.
3. Retain these instructions for future reference.
4. The equipment described in this manual could be potentially dangerous if improperly or carelessly operated. For the protection of all persons and equipment, only competently trained operators who are critically aware of the proper operating procedures, potential dangers, and specific application of this equipment should be allowed to use this equipment at any time.
5. Because of potential hazards associated with this type of equipment, no alterations shall be made to this product.
6. Failure to heed all warnings contained in this manual may result in personal injury and/or property damage.
7. All warranties applicable to this equipment are contingent on strict adherence to the operation and maintenance procedures in this manual.

OPERATIONAL SAFETY CHECKS

1. DO NOT exceed the maximum lifting load capacity of 2,000kg.
2. 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.
3. DO NOT use on tarmac, or any other soft surface as the transmission may sink or topple.
4. Vehicle must be properly and adequately supported before commencing work with this transmission lifter.
5. 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.
6. Always centre the load on the saddle of this transmission lifter and be sure the transmission is stable and secure before raising or lowering.
7. 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.
8. Never move this transmission lifter with a load any higher off the ground than necessary and always move it slowly and carefully.
9. Transfer the load immediately to appropriate support device for service or repair.
10. DO NOT operate this transmission lifter when you are tired or under the influence of alcohol, drugs or any intoxicating medication.
11. DO NOT allow untrained persons to operate this product and DO NOT make any modifications to this product.
12. DO NOT tamper with the safety valve.
13. DO NOT expose the transmission lifter to rain or any other kind of inclement weather.
14. When servicing, use only Red Label identical replacement parts. Use of any other parts will void the warranty.
15. Use the right product for the job. There are certain applications for which this Transmission Lifter was designed. Do not modify the Transmission Lifter and do not use the Transmission Lifter for a purpose for which it was not intended.

ASSEMBLY, OPERATION, PREVENTITIVE MAINTENANCE

1. FEATURES & MODELS

The **Borum Industrial 2,000kg Hydraulic Truck Transmission Jack** is perfect for earthmoving equipment and truck transmission installation and removal. Features a fully adjustable wide tilt cradle, smooth, manually operated hydraulic lifting and lowering and a 360° rotating handle for better load positioning.

This Super Heavy Duty Borum Brute of a Transmission Jack is specifically built to handle removal, transport and installation of transmissions, transfer cases or differentials on heavy duty trucks, buses, agricultural and construction equipment. It is fully adjustable cradle with wide adjustment and maximum tilt for easier alignment fitted with safety chains, this monster can handle all big transmission lifts. The handle is a long 850mm and conveniently pivots 360° around pump and the rugged industrial grade 100mm castors provide easy maneuverability. A safety overload bypass system prevents hydraulic damage and handy side trays provide convenient storage for small tools and parts.

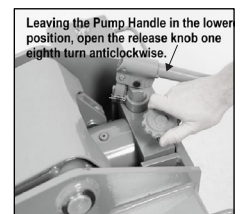
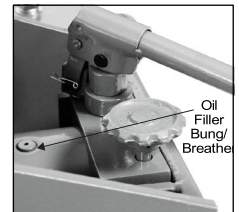
2. BEFORE USE

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

Purge the hydraulic system to eliminate any air in the system.

Bleeding Instructions:

1. Remove the Filler Bung and if required, refill with *32 Grade Hydraulic until the oil is approximately 6mm below the filler hole then replace the Filler Bung.
2. Leaving the Pump Handle in the lowered position, open the release knob one eighth turn anticlockwise.
3. With one foot on the front axle assembly, slowly raise the lift arm by hand to three quarter height and release, the lift arm will slowly fall back to lowered position.
4. Remove the oil filler bung from the top of the hydraulic ram and turn the release valve anticlockwise to open.
5. Replace the filler bung and pump the handle up and down quickly several times to bleed air from the pump system.
6. Recheck the hydraulic oil level and refill to 6mm below the fill port if required before replacing the filler bung.
7. If necessary, repeat the process steps 2 to 6



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.

3. OPERATION



Warning:

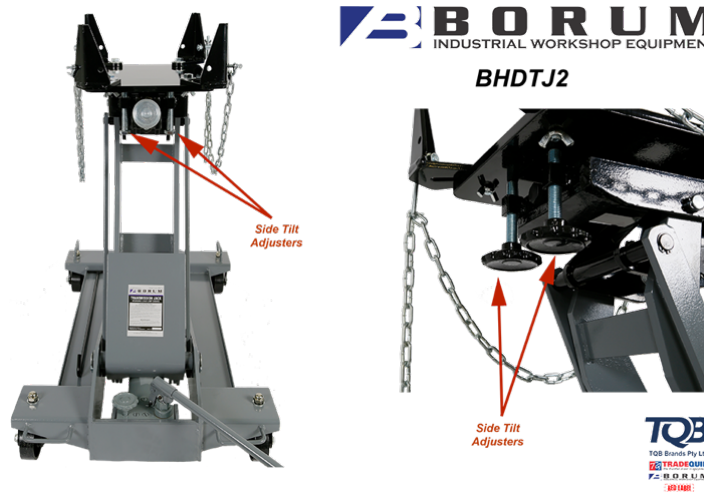
Vehicle must be properly and adequately supported before commencing work with this transmission lifter.

Removing a Transmission

1. Before each use check the hydraulic oil level and fill to 6mm below the fill port.
2. Once the vehicle is raised and secured on Jack Stands, clear the area underneath the vehicle.
3. Disconnect one end of the chain and allow it to hang free.
4. Move the transmission lifter underneath the transmission.
5. Close the release valve.
6. Pump the handle to raise the transmission lifter.
7. Stop just below the transmission and align the saddle to the transmission with the tilt knobs.
8. Continue raising the saddle up to the transmission to determine where you will need to adjust the supports. All four supports need to grip and make contact with the transmission.
9. After determining where they need to be set, loosen the threaded bolts on each support, and adjust it to the proper setting for the transmission. Tighten the bolts.
10. Raise the unit again to make contact with the transmission, making sure all of the supports are in firm contact.
11. Wrap the chain securely around the transmission, and hook the chain to the bracket on the other side of the saddle.
12. Once it is securely fastened, release the bolts holding the transmission in place.
13. Make sure the area is clear of people and tools, and check the transmission is securely held in place.
14. Slowly open the release valve to lower the transmission lifter.
15. Move the transmission lifter from under the vehicle and perform the necessary maintenance.

Re-installing a Transmission

1. Move the transmission lifter so that the transmission is lined up properly with its connection points.
2. Close the release valve.
3. Pump the handle to gradually raise the transmission lifter, while guiding the transmission lifter into place.
4. Secure the transmission into place using its hardware.
5. Ensure the transmission is securely installed.
6. Disconnect one end of the chain and allow it to hang free.
7. Clear the area near the transmission lifter, and slowly open the release valve to lower the lifter.
8. Move the transmission lifter clear of the vehicle.



4. STORAGE

This transmission lifter should always be stored in a dry location on a level surface with the lifting arm in the fully lowered position.

5. MAINTENANCE

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

Changing the Hydraulic Oil

1. Change the hydraulic jack oil at least once a year.
2. Fully lower the transmission lifter, remove the oil fill plug on the side of the hydraulic ram.
3. Tip the transmission lifter to allow the old hydraulic oil to drain out of the housing completely, dispose of the old hydraulic oil in accordance with local regulations.
4. With the transmission lifter upright, completely fill the hydraulic ram with a high quality hydraulic oil (not included) until the oil just begins to run out of the oil fill hole.
5. Open the release valve and pump the handle to bleed air from the system.
6. Reinstall the oil filler plug.
7. Clean with a clean cloth using a mild detergent.
8. Always store the transmission lifter in a safe, dry location.

Lubrication Instructions

1. All lower lift arm pivots and pins in all linkages should be lubricated with a Light Bearing Grease or 30/40W Machine Oil to ensure long life and prevent premature wear.
2. Wheels and Castor axles and bearing races should be lubricated with a Light Bearing Grease or 30/40W Machine Oil to ensure long life and prevent premature wear.
3. 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.
4. Pivoting Pump Handle Type Mechanisms should be lubricated with a light bearing grease or 30W/40W Machine Oil.

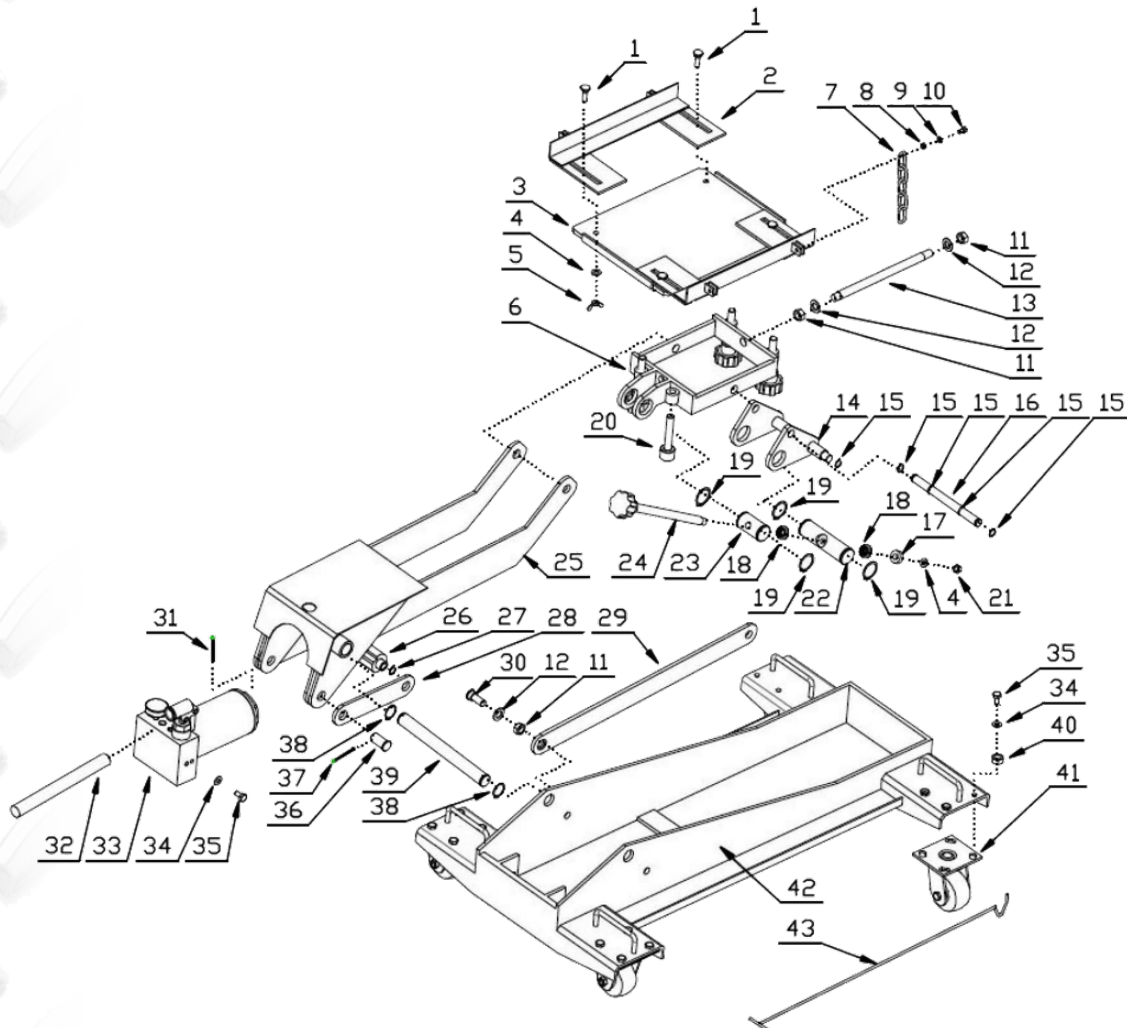
6. SERVICE & REPAIR

Any 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 Stands 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 LIST & DIAGRAM

Part	Description	Qty
1	Removable Screw	4
2	Sliding Block	2
3	Pad	1
4	Washer }12	5
5	Wing Nut M12	4
6	Head Stock	1
7	Chain	2
8	Nut M8	4
9	Washer }8	4
10	Bolt M8 x 30	4
11	Nut M16	4
12	Washer }16	4
13	Pin }16 x 285	1
14	Adjustable Shelf	1
15	Elastic Damping Ring }18	6
16	Pin }18 x 212	1
17	Thick Washer	1
18	Surface Bearing	2
19	Elastic Damping Ring }38	4
20	Adjustable Handle	4
21	Lock Nut M12	1
22	Pin }38 x 40mm	1

Part	Description	Qty
23	Pin }38 x 70	1
24	Adjustable Screw Rod	1
25	Lift Shaft	1
26	Pump Head Shaft	1
27	Elastic Damping Ring }22	2
28	Shot Rod	2
29	Long Rod	2
30	Long Rod Bolt	2
31	Cotter Pin }3.5 x 50	1
32	Handle	1
33	Pump	1
34	Washer }10	18
35	Bolt M10 x 25	18
36	Shot Rod Pin	2
37	Cotter Pin }2.5 x 35	2
38	Elastic Damping Ring }28	2
39	Pin }28 x 280	1
40	Nut M10	16
41	Swivel Castor Wheel	4
42	Main Frame	1
43	Towing Hook	1



TROUBLESHOOTING

Problem	Symptom	Cause	Conclusion	Solution
Jack will not lift using manual pump	Manual pump has no resistance, lift arm will not raise Manual pump has resistance, lift ram raises and falls with up and down pump strokes	Release handle valve pin obstructed Load weight exceeds lift capacity & overload actuated Main check ball fails to seal	Valve seat/check ball failure Higher capacity jack required Relief valve needs reset Obstruction in main check valve	Re-adjust release handle position Select higher capacity Jack Contact qualified technician for repairs Bleed pump and ram as per owners manual instructions
Jack will not hold load	Load cannot be sustained, lift ram drops under load Pump handle rises	Release valve closed but failure to raise lift arm Damaged main seal external leak at lift ram Main check valve obstructed	Valve check ball off centre not contacting valve seat correctly Replace main ram seals Replace main check valve ball and reseal valve seat	Contact qualified technician for repairs Contact qualified technician for repairs Contact qualified technician for repairs
Poor lift performance	Pump has no resistance, lift ram will not raise to full stroke	Low oil level Air trapped in system 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 level then bleed system With ram fully retracted, open the breather to let pressurised air escape then bleed system Contact qualified technician for repairs

PRODUCT INFORMATION TIPS

PRODUCT INFORMATION

How to extend the life of your Transmission Lifter

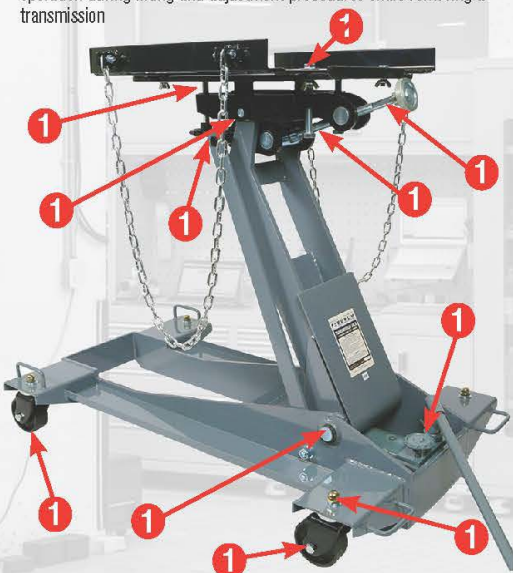
7 Top Tips

to extend the life of your **TQB BRANDS** or **BORUM** Transmission Lifter

Includes Models: 2081T, 2057T & BHDTJ2

1 Regularly lubricate the tilt adjust rods, pivot points and castors.

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



2 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.

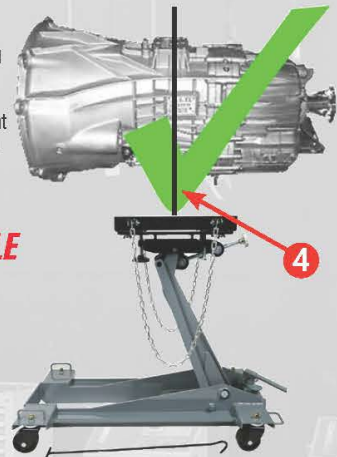


3 Never use trans lifter for supporting loads.

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.

4 Centering & balancing 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.



BALANCED LOADING EXAMPLE



5 Use correct model for intended applications.

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

	TQB BRANDS Recommendation for Application Domestic/Commercial Vehicles							
	GVM LESS THAN 2000KG	GVM LESS THAN 2300KG	GVM LESS THAN 2500KG	GVM LESS THAN 3200KG	GVM LESS THAN 3500KG	TWO WHEEL DRIVE	ALL WHEEL DRIVE	4 X 4
2081T	Y	Y	Y	N	N	Y	N	N
2057T	Y	Y	Y	Y	Y	Y	Y	Y
*BHDTJ2	Y	Y	Y	Y	Y	Y	Y	Y

* BHDTJ2 is also suitable for use with light to heavy commercial vehicles including agricultural and earthmoving vehicles with transmissions such as Multi Geared Manual, Automated Manual and Automatic such as Allison, Eaton, Fuller, Road Ranger, Dana, Rockwell, Meritor, TTC, Spicer, Volvo, Scania, ZF, Mercedes Benz, Man, Iveco, Isuzu, Mitsubishi FUSO, Hino, UD, Toyota.
Please always consult your Vehicle Manufacturer for suitability and safe practice.

6 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

7 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



WARRANTY

BORUM Industrial 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 12month 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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