Owners Manual

40,000KG AIR/HYDRAULIC JACK

INDUSTRIAL WORKSHOP EQUIP

INDUSTRIAL DUALTY

May-23

Superior quality sino

1984

Specifications TRUCK JACK AIR/HYDRAULIC 2-STAGE 40,000KG

- 1ST Stage: 40,000kg Safe Working Capacity
- 2nd Stage: 20,000kg Safe Working Capacity
- Lift Range: 143-360mm
- 1st Stage Hydraulic Lift: 60mm
- 2nd Stage Hydraulic Lift: 57mm
- Adaptors: 8, 50,100mm
- Operating Air Pressure: 100-120psi
- Handle Length: 1220mm
- Chassis: 510(L) x 215(H) x 300(W)
- Nett Weight: 41kg
- Carton: 670 x 340 x 230mm
- Gross Weight: 43kg

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

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 sate use and operation, and have been given permission to use this



Safety glasses must be worn when operating this equipment



Safety footwear must be worn when operating this equipment

Safety gloves must be worn when operating this equipment

PRE-OPERATIONAL SAFETY CHECKS

- Support load by appropriate means after lifting
- 2. Do not exceed rated capacity
- 3. Centre load on the jack
- 4. Only use attachments and/or adapters supplied with or sold specifically for the jack
- 5. Only lift areas of the vehicle designated by the vehicle manufacturer.
- 6. Use as lifting device only
- 7. Use only on hard, level surface
- 8. Do not modify jack

OPERATIONAL SAFETY CHECKS

- 1. This jack should be used for lifting and lowering only. The raised load should be supported on approved support stands. No person should get any part of the body under a load that is supported by this jack.
- 2. Position the jack to only lift on the areas of the load specified by the manufacturer.
- 3. Use support stands after lifting the load always support the load with appropriately rated support stands before working on the load.
- 4. Do not overload this jack beyond its rated capacity. Overloading this jack beyond its rated capacity can cause damage to or failure of the jack.
- 5. Use only on hard level surfaces capable of sustaining the load. Use on other than hard level surfaces can result in jack instability and possible loss of load.
- 6. Centre load on jack saddle before lifting vehicle.
- 7. Off centre loads and loads lifted when the jack is not level can cause loss of load or damage to the jack.
- 8. Keep hands & feet clear of the jack hinge mechanism & ground contact area when lowering the load.
- 9. NEVER LIFT THE LOAD OFF AIRBAG BRACKETS. ALWAYS LIFT OFF AN AXLE OR CHASSIS LIFT POINT
- 10. Use a qualified person to maintain the jack in good condition. Keep it clean for best and safest performance.

THIS JACK IS A LIFTING DEVICE ONLY & IS DESIGNED FOR LIFTING PART OF THE TOTAL VEHICLE/LOAD. DO NOT MOVE OR DOLLY THE VEHICLE/LOAD WHILST THE VEHICLE/LOAD IS ON THE JACK.



operating this equipment Close fitting/protective clothing must be

worn when operating this equipment

Long loose hair must be contained when



ASSEMBLY, OPERATION, PREVENTITIVE MAINTENANCE

1. FEATURES

This **"Borum Industrial"** pneumatic heavy-duty Air Hydraulic Truck Jack has a powerful air motor to lift heavy loads. The efficient quick lift system is designed to easily manage 40,000kg in the first stage lift position and 20,000kg at the higher 2nd stage extension. The compact design easily fits between dual tandem axles. Ideal for lifting axles, farm vehicles, heavy-duty machinery, industrial equipment and more. This Borum Air/Hydraulic Truck Jack utilises compressed air to activate a booster cylinder, to move hydraulic oil within the cylinder up & down. It adopts a industrial hydraulic design combination of compressed air and hydraulic pressure, to create, strong jacking capacity and low lifting clearance in one jack. The two wheel floor support design lets you really get under your loads with a 135mm minimum height. Designed to lift buses and other large, low-clearance vehicles with maximum stability. Includes height adaptors.



Assembly of Handle: After removing from the packing material, make sure the product is in perfect condition and that there are no visible damaged parts. Dispose of the packaging material responsibly. Go to Parts List for Handle Diagram.

- 1. Remove the screw(H15) in Handle-2(H25) and connect handle-2(H25) to the handle connector(H16) on handle-1(H14), then secure them using the screw(H15)
- 2. Loosen the nut(H21) on the tie rod-4(H23) to the connector(H22) and secure them
- 3. Insert the R-Pin(H24) to the tie rod-4(23)
- 4. Insert the handle assembly(43) to the handle socket(39) and connect it to the connector(42), then secure them by using screw(41) then secure (43) to (39) by using screw(41)
- 5. Push the unconnected ends(C & D) of the air hoses(H18 & H19) through the tube(o) on handle-2(H25)
- 6. Connect (C) to the air hose fitting(34) with a black air hose
- 7. Connect (D) to the air hose fitting(34) with an orange hose

Prior to first use "Purge Air" from the hydraulic system:

- 1. Open the release valve by turning the handle knob(H10) counter-clockwise
- 2. Connect air supply to hose connector(H01)
- 3. Turn on air valve by moving the control knob to UP position for 60secs to eliminate air in the hydraulic system
- 4. Close the release valve by turning the handle knob(H10) clockwise
- 5. Test the Garage Jack operation without load, by raising it to full height
- 6. Lower gently by turning the handle knob(H10) in small increments to control rate of descent
- 7. The Garage Jack is now ready for first use

NOTE: Air can accumulate within a hydraulic system during shipment or after prolonged use. This entrapped air causes the jack to respond slowly or feel "spongy". **If the jack does not respond, correctly repeat steps 1-6 on a monthly basis**

3. 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.

- Consult the vehicle owner's manual to determine the location of lift points.
- Be sure to set the vehicle in park with the emergency brake on and wheels securely chocked.
- Be sure that the vehicle and the Truck Jack are on a hard, level surface.

4. OPERATION

- 1. Connect compressed air supply to the Truck Jack. (Compressed air should be clean, dry, and regulated at 100-120psi). Install an air filter/lubricator in the workshop airline, because water in the airline will damage the jack.
- 2. Make sure the Truck Jack and vehicle are on a hard level surface.
- 3. Always set the vehicle parking brake and block the wheels.
- 4. Close the release valve by turning the handle knob clockwise
- 5. Move the control knob to UP to raise the saddle to the contact point.
- 6. Check the placement of the Truck Jack. The load must be centered on the jack saddle. Avoid jack wheel obstructions such as gravel, tools, or uneven expansion joints.
- 7. Position the Truck Jack under the vehicle using the manufacturer's recommended lifting points on the chassis.
- 8. Move the control knob to UP to finish lifting the vehicle.
- 9. Always immediately position approved jack stands under the vehicle at points that will provide stable support in accordance with the vehicle manufactures recommendations.
- 10. Always lower the vehicle slowly onto the jack stands by gently turning the release valve knob counter-clockwise.

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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 jack shall always be maintained in accordance with the maintenance instructions (Section 7). No alterations or modifications shall be made to this Jack.
- Inspections shall be performed in accordance with this owner's manual.
- The jack 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 Borum jack should always be stored in a dry location on a level surface with the lift ram pistons in the fully retracted position, where it will not be exposed to corrosive vapours, abrasive dust, or any other harmful elements.

7. MAINTENANCE

Monthly maintenance is recommended. Lubrication is critical to jacks 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 jack well maintained and operational.

Important: Dirt is the greatest single cause of failure in hydraulic units. Keep the jack clean and well lubricated to prevent foreign matter from entering the system. If the jack has been exposed to rain, snow, sand, or grit it must be cleaned before it is stored or used.

- Only use replacement parts that are approved by the manufacturer. Disconnect the air supply before performing any maintenance operation.
- Lubricate the ram, linkages, saddle, wheels and pump mechanism with light oil.
- Visually inspect for cracked welds, bent, loose, missing parts or hydraulic oil leaks.
- Any hydraulic jack found to be damaged, worn or operates abnormally must be removed from service until repaired by an authorised service representative.
- Regularly clean all surfaces and maintain all labels and warnings.
- Check and maintain the hydraulic ram oil level.
- Check the ram every three months for any sign of rust or corrosion. Clean as needed and wipe with an oily cloth. When not in use always leave the saddle and ram all the way down.
- Always store your jack in the fully retracted position. This will help protect critical areas from corrosion. Do not use brake or transmission fluids or regular motor oil as they can damage the seals.

ONLY USE HIGH QUALITY HYDRAULIC FLUID – ISO68

8. SERVICE & REPAIR

Any Borum jack 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.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	ACTION
Jack will not lift	 Release valve in wrong position Low/no oil in reservoir Air-locked system Load is above capacity of jack Delivery valve and/or bypass valve not working correctly Seals worn out or defective 	 Move release valve to UP position Fill with oil and bleed system Bleed system Use correct equipment Clean to remove dire or foreign matter. Replace oil Install appropriate seal kit
Jack lifts only partially	Too much or not enough oil	Check oil level
Jack advances slowly	Pump not working correctly	Install seal kit, or replace power unit Install seal kit
Jack lifts load, but doesn't hold	 Leaking seals Cylinder packing is leaking Valve not working correctly (suction, delivery, release or bypass). Air-locked system 	 Install seal kit Install seal kit Inspect valves. Clean and repair seat surfaces Bleed system as per instructions
Jack leaks oil	 Worn or damaged seals 	Install seal kit
Jack will not retract	 Release valve control in wrong position 	 Move Release valve to DOWN position
Jack retracts slowly	Cylinder damaged internally	Send jack to authorised service centre

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PARTS LIST PUMP



Part #	Description	QTY	Part #	Description	QTY
1	Steel Ball	1	11	Ball Cup	1
2	Screw	2	12	Steel Ball	1
3	Washer	2	13	Pump	1
4	Steel Ball	1	14	O Ring	1
5	Spring	1	15	O Ring	1
6	Steel Ball	2	16	Release Screw Seat	1
7	Plug Screw	1	17	Pin	1
8	O Ring	1	18	Release Valve Rod	1
9	Pressure Regulating Screw	1	19	Joint 8"-6	1
10	Spring	1			

PARTS LIST PUMP ASSEMBLY

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Part #	Description	QTY	Part #	Description	QTY
1	Adaptor	1	9	Joint 4"-6	1
2	Cylinder	1	10	Joint 4"-8	1
3	Pump Assembly	1	11	PU Hose 8*6*105	1
4	Joint 8"-φ6	1	12	Screw	4
5	O Ring	1	13	Reservoir Assembly	1
6	Copper Washer	1	14	Bolt	1
7	PU Hose 6*4*235	1	15	Joint 8"-6	1
8	Air Motor	1			

PARTS LIST RAM



Part #	Description	QTY	Part #	Description	QTY
1	Piston Rod (2nd stage)	1	9	Nylon Ring	1
2	O Ring	1	10	Seal Ring	1
3	Nylon Ring	1	11	O Ring	1
4	Seal Ring	1	12	O Ring	1
5	O Ring	1	13	Spacing Collar	1
6	Piston Head (2nd stage)	1	14	O Ring	1
7	O Ring	1	15	Ram Assembly	1
8	Piston Rod (1st stage)	1			

PARTS LIST RESERVOIR

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Part #	Description	QTY	Part #	Description	QTY
1	Plug Screw	4	11	Joint 4"-φ8	1
2	Seal Ring	6	12	Steel Ball	1
3	O Ring	2	13	Spring	1
4	Valve Core	1	14	Screw	1
5	Spring	1	15	Joint 8"-6	2
6	Bolt	1	16	Reservoir Assembly	1
7	Valve Block	1	17	Filter	1
8	Seal Ring	2	18	Joint 4"-6	1
9	Valve	2			
10	Spring	2			

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PARTS LIST HANDLE

Part #	Description	QTY
H01	Knob	1
H02	Pin	1
H03	Tie Rod-1	1
H04	Air Hose Fitting	1
H05	Screw	2
H06	Screw	2 2 1
H07	Air Inlet Hose	
H08	Handle	1
H09	Silencer	1
H10	Air Valve	1
H11	Screw	4
H12	Air Hose Fitting	2 2
H13	Screw	2
H14	Connector	1
H15	Bushing	2
H16	Tie Rod-2	1
H17	Handle	1
H18	Screw	1
H19	R Pin	1
H20	Spring	1
H21	Slotted Pin	1
H22 /	Pulling Handle	1
H23	Pin	1
H24	Connector	1
H25	Nut	4
H26	Connector	1
H27	Connector	1



PRODUCT INFORMATION TIPS

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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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