

Superior quality since
1984



Owners Manual

HYDRAULIC WORKSHOP PRESS

BORUM

INDUSTRIAL WORKSHOP EQUIPMENT

**INDUSTRIAL
QUALITY**



Specifications

- Safe Working Capacity: 50,000kg
- Working Range: 88-1068mm
- Overall Height: 1918mm
- Overall Width: 1030mm
- Overall Depth: 750mm
- Bed Outside: 220mm
- Bed Inside: 147mm
- Bed Width: 730mm
- Piston Ram Stroke: 175mm
- Ram Diameter: 60mm
- Bed Height Settings: 9
- Weight: 307kg

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 **12month 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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Intended Use

For industrial straightening, bending & pressing. Removing and installing gears, bearings and bushings.

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



Safety footwear must be worn when operating this equipment



Safety gloves must be worn when operating this equipment



Long loose hair must be contained when operating this equipment



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



Hearing protection must be worn where noise levels are in excess of 85 dB(A) occupational exposure limit

PRE-OPERATIONAL SAFETY CHECKS

1. The maximum load is 50,000kg. DO NOT exceed this rated capacity. Never apply excessive force to a workpiece and always use the pressure gauge to accurately determine the applied load. Burst hazard exists if hose or connection pressure exceeds rated pressure.
2. Borum Workshop Presses are designed for automotive, truck, implement, fleet, and industrial repair shops where pressing, bending, straightening, forming, holding is required. Each press includes a cylinder, a pump, and lifting bar which provides a safe way to raise and lower the bed frame, and a pressure gauge which provides for monitoring the applied press force.
3. Keep children and unauthorised persons away from the work area.
4. Do not operate this Borum Workshop Press whilst wearing loose clothing. Remove ties, watches, rings and other loose jewellery, and contain long hair in a suitable hair net.
5. Wear approved impact safety goggles, full-face impact safety shield and heavy-duty work gloves when operating this Borum Workshop Press.
6. Keep proper balance and footing, do not overreach and wear non-skid footwear.
7. Inspect this Borum Workshop Press 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.
8. Check to ensure that all applicable bolts and nuts are firmly tightened.
9. Keep hands and feet away from the bed area at all times.
10. Do not use this Borum Workshop Press to compress springs or any other item that could disengage and cause a potential hazard. Never stand directly in front of loaded press and never leave loaded press unattended.
11. Do not operate this Borum Workshop Press when you are tired or under the influence of alcohol, drugs or any intoxicating medication.
12. Do not expose this Borum Workshop Press to rain or any other kind of bad weather
13. Do not allow untrained persons to operate this Borum Workshop Press.
14. Do not make any modifications to this Borum Workshop Press.
15. Do not use brake fluid or any other improper fluid and avoid mixing different types of oil when adding hydraulic oil. Only good quality hydraulic jack oil can be used.
16. If this Borum Workshop Press needs repairing and/or there are any parts that need to be replaced, have it repaired by an authorised technicians and only use the replacement parts supplied by the manufacturer.
17. Always ensure the operator has read an onsite risk assessment.
18. Check workspace and walkways to ensure no slip-hazards are present. Provide a 1 metre clearance around this equipment.
19. Faulty equipment must not be used. Immediately report suspect equipment.

OPERATIONAL SAFETY CHECKS

1. Only use this Borum Workshop Press on a surface that is stable, level, dry and not slippery, and capable of sustaining the load. Keep the surface clean, tidy and free from unrelated materials and ensure that there is adequate lighting.
2. Ensure that workpiece is always centre-loaded and secure.
3. Use a safe working posture (beware of hair catching).
4. Use a qualified person to maintain the press in good condition. Keep it clean for best and safest performance.

ASSEMBLY, OPERATION, PREVENTITIVE MAINTENANCE

1. FEATURES & MODELS

This "Borum Industrial" 50,000kg Hydraulic Workshop Press is designed for automotive, truck, implement, fleet, and industrial repair shops where pressing, bending, straightening, forming, holding work requires high pressure hydraulics. Polished inner cylinder walls extend the life of the hydraulic seals to minimize abrasion and wear, while the cylinder ram and pistons are also polished and chromed, guided by high performance seals, wear rings and dust seals. Includes winch to adjust bed height and dial gauge for dual metric/tons pressure readings.

"Borum Industrial" Air Hydraulic Workshop Presses are available in a variety of capacities and sizes. The press frames are designed for maximum strength, reliability and durability. The strong frames and powerful high-pressure hydraulics will provide years of dependable service in many applications. When components need to be removed or assembled, "Borum Industrial" hydraulic presses deliver the controlled power to safely remove and install bearings, gears, U-joints, bushings, ball joints and pulleys with precision and versatility!

2. ASSEMBLY

Unpacking: after removing the packing material, make sure the product is in perfect condition and that there are no visible damaged parts. The packaging materials (Polyethylene bags, polystyrene etc.), must be disposed of responsibly in an appropriate refuse collection container. These materials must not be left within the reach of children as they are potential sources of danger.

Components of this Hydraulic Press are heavy. Assembly requires two adults.

Using the parts list and assembly diagram page 8, lay out and identify all pieces before assembly.

The bed frame (31) is put in the bottom in order to convenient for package and transport, then fixed on the post by two bolts M12.

Figure 1:

Place the frame (1) in the upright position. Slide each base support (26) under the frame. Line up the bolt holes and insert the bolts (24) through the frame and base support, then secure in place with the washers (28) and nuts (29).

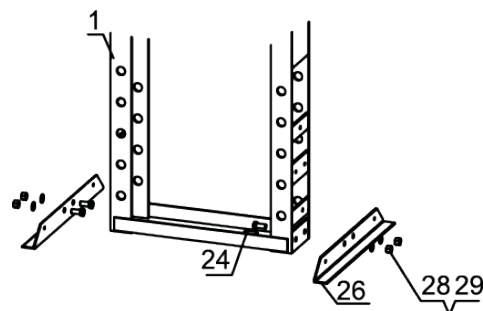


Figure 1

Figure 2:

Attach the base side supports (27) to the frame and base support using the bolts (25), washers (17) and nuts (18).

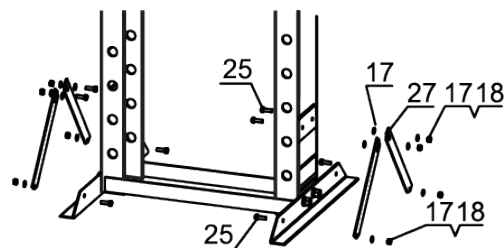


Figure 2

Figure 3:

Attach the Winch(14) to the frame using the bolts(19) washers(20) & (17), and nuts(21).

Attach the spring(47) of pedal set using the bolt(15) Attach the pedal using the connecting bolt(49), nut(21), washer (20) and nut(51).

Attach the pedal set to handle using bolt(21), nuts(44) & (45).

Attach the pump cover(41) to the pump using bolts(42) and washer(53).

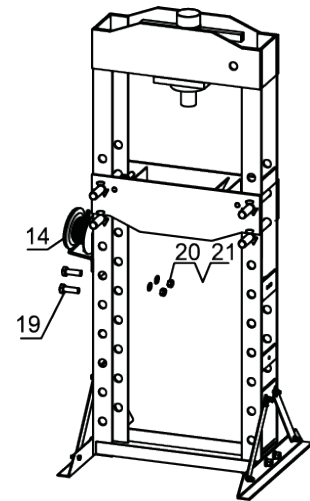


Figure 3

Figure 4:

Attach the hydraulic pump(43) to the frame using the bolts (19) & (25), washers(20) & (17), and nut(18).

Attach the spring(47) of pedal set using the bolt(15) Attach the pedal using the connecting bolt(49), nut(21), washer (20) and nut(51).

Attach the pedal set to handle using bolt(21), nuts(44) & (45).

Attach the pump cover(41) to the pump using bolts(42) and washer(53).

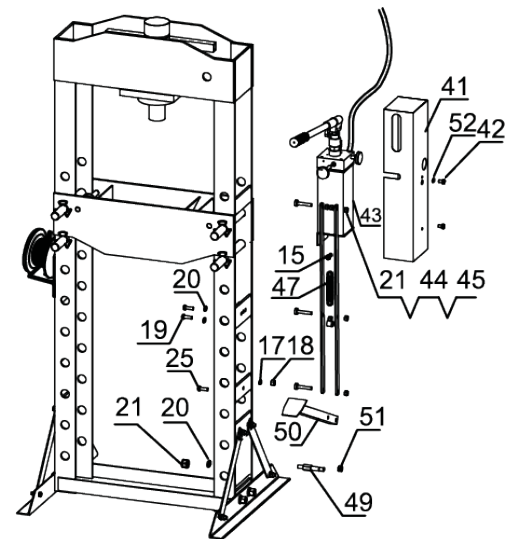


Figure 4

Figure 5:

Attach the hose to the tee coupler using O-ring(31). Attach the gauge(40) using O-ring(37). Place the bed plates(12) on to the press table.

WARNING!

Take care not to allow the press plate to drop onto the pins and ensure your hands and fingers are clear of the press plate when lowering.

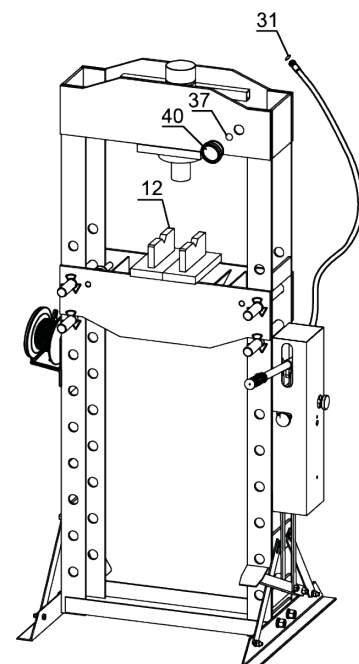


Figure 5

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.

Before the first use, fix the base to the floor using suitable anchor bolts. Ensure that the standing surface of the machine site is firm and horizontal, and that sufficient lighting is provided overhead.

Testing

- Before 1st and each following use, thoroughly test the ram(2) and pump(43) for correct operation prior to actual use. If the pump seems to be spongy or not to be working properly, follow the bleeding procedure below to bleed the hydraulic system.

Bleeding the Pump

Important: Before first use, ensure the correct hydraulic oil level is in the pump. Then thoroughly test the ram and pump for the operation prior to commencing use. If the pump operation feels spongy or the ram lowers while the release valve is closed there may be air in the pump.

Bleed the pump as follows;

Air trapped in this type of hydraulic system will give a spongy feel at the handle and/or pedal and have limited movement at the ram per pump stroke.

This type of pump is a self-purging system. Providing there is adequate oil in the hydraulic reservoir, the system will purge trapped air with the simple step by step procedure below;

1. Remove Oil Fill Screw. The Seal Ring should come off with it
2. The fluid level should be near the bottom of the Oil Filler hole
3. If required, top up with 32 grade hydraulic oil until oil is lapping bottom of Oil Filler hole
4. Leave the oil filler cap off during the next steps.
5. Open the release valve by turning counter-clockwise
6. Operate the pump either with the handle or pedal 5-10 times or until the ram has extended half way.
7. Close the release valve by turning it clockwise and slowly operate the pump until the ram has returned to firm operation.
8. Repeat steps 5-6-7 if not satisfactory.
9. Replace the filler cap.

The Pump and Ram should be purged of trapped air after one or two bleeds, however repeat the process if the handle/pedal continues to feel spongy before calling for service.

⚠ IMPORTANT ⚠

PUMP SPEED SETTINGS

**ONLY OPERATE 'FAST' UP TO LOAD
SWITCH TO 'SLOW' WHEN UNDER LOAD**

**ALWAYS LIFT LOAD TO RAM
NEVER OVER EXTEND THE RAM**

4. OPERATION

- Adjust the press bed to the highest position possible using the bed winch(14) to position the work piece as close as possible to the ram
- Once the press bed frame is at the highest position, lock the bed frame by Support Pins(22) and Butterfly Clips(23)
- Place the workpiece on the Bed Plates(12). Adjust the bed 'v' plates to safely support the stationary part of the work piece. Note: The steel bed plates must be used as a pair
- The pump uses a 2speed (Slow-Fast) hydraulic pump system that in fast mode is ONLY used to advance the ram to the load surface. Once the ram and workpiece have been centre aligned, the Slow-Fast knob must be turned to 'slow mode' to provide the high-pressure delivery of oil required for the pressing procedure
- Pump handle and/or foot pedal to apply load onto workpiece (check applied pressure on pressure gauge)
- When work is done (stop pumping handle and/or foot pedal) slowly and carefully remove load from workpiece by turning the release valve counter-clockwise in small increments
- Once ram has fully retracted, remove workpiece from bed frame

5. MAINTENANCE

- Maintenance should be carried out on a daily basis for a press working **every day**.
- Clean the outside of the press with dry, clean and soft cloth and periodically lubricate the hoist, wheel shaft assembly, the joints and all moving parts with a light oil in normal service.
- DO NOT allow lubricant to spill onto the bed plates or frame of the workshop press.
- When not in use, store this Borum Workshop Press in a dry location with ram and piston fully retracted.
- When press efficiency drops, bleed air from the hydraulic system as described above.
- Check the hydraulic oil: remove the oil filler nut (49) on the top of the reservoir, if the oil is not adequate, fill with 22#(ISO6743) hydraulic jack oil as necessary, then replace the oil filler nut, purge away air from the hydraulic system as described before.
- This equipment should not be repaired or modified without approval from a certified technical support engineer.

Hydraulic Oil

The pump uses a slow-fast pump system that in fast mode is used only to advance the ram to the load surface, once the ram takes up the load the slow-fast knob must be turned to slow mode to provide the high pressure delivery of oil required for pressing applications.

You will require the following tools & equipment.

- 6mm hex key
- Drain receptacle of approximately 10 litres capacity
- 5 litres of 32 Grade hydraulic oil

Full Oil Replacement Procedure

1. Follow the pump outlet hose to the coupler and unscrew the coupler.
2. Remove the Spring Retainer Bolt, Spring and Pedal Linkage Bolt.
3. Remove the Pump Assembly from the press and mount via the bottom mount bracket in a suitable bench vice.
4. Remove the 4 Reservoir Cap Screws and remove the Upper Pump Assembly from the reservoir.
5. Drain the oil into a suitable waste oil container and flush the reservoir.
6. Replace the oil with new *32Grade Hydraulic Oil up to the filler cap thread that will be visible on the inside of the reservoir.
7. Replace the Upper Pump Assembly on to the reservoir, re-attach the pump assembly on to the press and reconnect the Spring Retainer Bolt and Spring, Pedal Linkage Bolt and Hose.

8. Remove oil filler cap and leave off during the next steps.
9. Turn the slow –fast knob anticlockwise 2 full turns, turn the release knob clockwise till tight.
10. Operate the pump either with the handle or pedal until the ram has extended half way.
11. Turn the release knob 2 full turns anticlockwise and slowly operate the pump until the ram has fully retracted.
12. Replace the filler cap.

The Pump and Ram should now be purged and ready for operation. However repeat the process if the handle/pedal feels spongy.

6. STORAGE

This Borum Workshop Press should always be stored in a dry location on a level surface with the hydraulic ram in the fully retracted position.

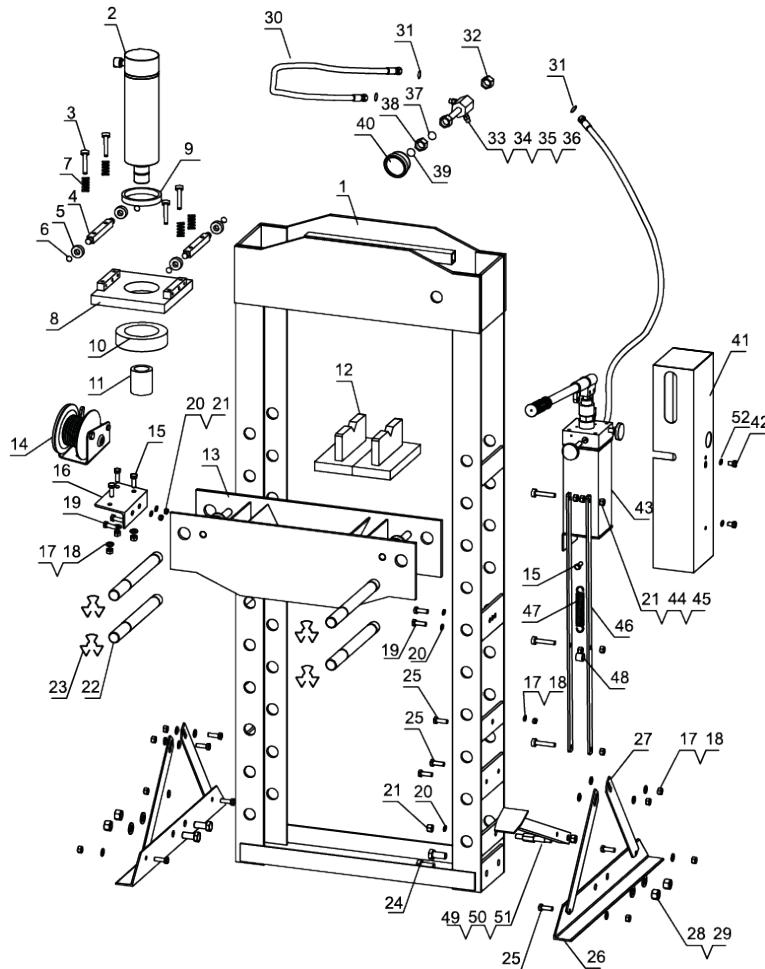
7. SERVICE & REPAIR

Any Borum Industrial Workshop Press 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 drill press 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

RAM WILL NOT PRESS LOAD	RAM BLEEDS OFF AFTER PRESS OPERATION	RAM WILL NOT RETRACT AFTER UNLOADING	POOR LIFT PERFORMANCE	RAM WILL NOT EXTEND TO FULL EXTENSION	CAUSES AND SOLUTIONS
✗	✗		✗		Release valve not tightly closed Ensure release valve tightly closed
✗					Overload condition Remedy overload condition
✗	✗		✗		Power unit malfunctioning Replace the power unit
		✗	✗		Reservoir overfilled Remove pump, then drain fluid to proper level
		✗			Linkage binding Clean and lubricate moving parts
✗				✗	Fluid level low Ensure proper fluid level
✗			✗	✗	Air trapped in system Purge air from system

PARTS DIAGRAM & PARTS LIST



Part	Description	QTY
1	Frame	2
2	Ram	14
3	Bolt	4
4	Roller	14
5	Bearing	14
6	Retaining Ring	14
7	Spring	2
8	Ram Base Plate	4
9	Ram Small Nut	2
10	Ram Big Nut	2
11	Cap Head	2
12	Arbor Plate	1
13	Press Bed	1
14	Winch	3
15	Bolt	6
16	Winch Plate	3
17	Washer	3
18	Nut	4
19	Bolt	8
20	Washer	4
21	Nut	2
22	Support Pin	4
23	Butterfly Clip	4
24	Bolt	4
25	Bolt	8
26	Base Support	1

Part	Description	QTY
27	Base Side Support	1
28	Washer	1
29	Nut	4
30	Hose	2
31	O-ring	1
32	Nut	2
33	Tee Coupler	8
34	Coupler	8
35	Coupler Bolt	1
36	Coupler Nut	1
37	O-ring	1
38	Coupler Nut	2
39	O-ring	4
40	Gauge	4
41	Pump Cover	4
42	Bolt	1
43	Pump	1
44	Bolt	2
45	Bolt	4
46	Connecting Rod	1
47	Spring	4
48	Bushing	4
49	Connecting Rod	1
50	Pedal	1
51	Bolt	1
52	Washer	1

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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