

INDUSTRIAL HYDRAULIC PIPE BENDERS WITH STAND 9TONNE / 15TONNE

MODELS NO: PBS90.V2, PBS91.V4

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



manual









Wear ear protection instruction protection

Wear protective gloves

Wear safety footwear

1. SAFETY

- Ensure the pipe bender is in sound condition and good working order. Take action for immediate repair or replacement of damaged parts. Use recommended parts only. The use of improper parts may be dangerous and will invalidate the warranty.
- Keep pipe bender and associated parts clean for best and safest performance.
- Locate the pipe bender in a suitable, well lit working area.
- Keep working area clean, tidy and free from unrelated materials.
- Use on level and solid ground, preferably concrete.
- Ensure all non-essential persons keep a safe distance whilst the pipe bender is in use.
- Wear appropriate safety equipment, including eye protection, ear protection, protective gloves and safety footwear.
- WARNING! Cut pipe edges may be sharp, take care when handling any cut steelwork.
- Check that bending die is correctly seated on ram and that the roller shafts are fully engaged in the frame and pinned before operating hydraulic unit.
- Keep hands away from die and rollers when bending pipe.
- Use a qualified person to lubricate and maintain the hydraulic unit.
- Confirm that the recommended hydraulic oil is used during maintenance.
- × DO NOT top up system with brake fluid. Use hydraulic oil only.
- **DO NOT** operate the pipe bender if damaged.
- **DO NOT** allow untrained persons to operate the pipe bender.
- **DO NOT** exceed the rated capacity of the hydraulic unit (see Section 3).
- DO NOT use the pipe bender for purposes other than that for which it is intended.
- **DO NOT** alter the pressure control valve.
- When not in use, store pipe bender, with the hydraulic ram in the down position, in a dry, childproof area.

NOTE: When using hydraulic type pipe benders, the bent pipe or tube is prone to deformation on both the inside and outside curvature. The pipe or tube can be deformed into an oval shape or creased depending on the wall thickness of the material. This is not a fault and largely unavoidable. Consider packing the pipe or tube with dried sand or similar medium before bending as this may help to alleviate deformation of the pipe or tube. Pack the sand tight and cap both ends.

2. INTRODUCTION

PBS91.V4

Tripod mounted pipe bender suitable for bending pipes up to 180°. Integral 15tonne ram. Suitable for bending DIN classified medium and heavy pipe. 2-Speed hydraulic pump gives fast pipe positioning and the power to bend 75mm pipe. Supplied with eight (15mm(1/2") - 75mm(3") interchangeable pipe dies and packed in a heavy wooden crate for easy transportation.

PBS90.V2

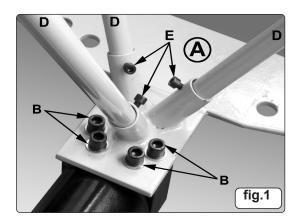
Tripod mounted pipe bender suitable for bending pipes up to 180°. Integral 9tonne ram. Suitable for bending DIN classified medium and heavy pipe. 2-Speed hydraulic pump gives fast pipe positioning and the power to bend 50mm pipe. Supplied with six (15mm(1/2") - 50mm(2")) interchangeable dies. Packed in a heavy wooden crate for easy transportation.

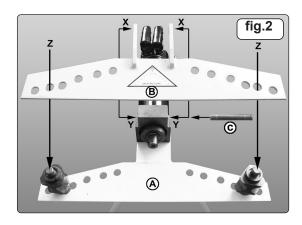
3. SPECIFICATION

	PBS90.V2	PBS91.V4
Die Sizes:	15mm(1/2"), 20mm(3/4"), 25mm(1"), 32mm(1-1/4"), 40mm(1-1/2"), 50mm(2")	15mm(1/2"), 20mm(3/4"), 25mm(1"), 32mm(1-1/4"), 40mm(1-1/2"), 50mm(2"), 63mm(2-1/2"), 75mm(3")
Height:	700mm	700mm
Maximum Load:	9tonne	15tonne
Maximum Pipe Diameter:	50mm	75mm

4. ASSEMBLY

- □ WARNING! Ensure that you have read and understood Section 1 Safety Instructions before operating the pipe bender.
- WARNING! When the pipe bender is packed in its box, it is extremely heavy and will require at least 2 people to move it.
- □ **WARNING!** The pump unit itself is also very heavy and should be handled with care.
- **4.1.** Remove the pump unit from the box and place it upside down on a smooth flat clean surface.
- 4.2. Identify the four 12mm socket cap mounting bolts and slide a spring washer and then a plain washer onto each bolt. Referring to fig.1 align the four mounting holes in the lower plate (A) with the threaded holes in the block at the front of the pump unit. Insert the four 12mm socket cap bolts and screw down finger tight. Take the 10mm hex key provided and fully tighten the four bolts.
- 4.3. Adjacent to the mounting bolts are three tubular sockets for the tripod legs. Insert a tripod leg into each socket. See D in fig.1.
- **4.4.** Screw an 8mm socket cap bolt through the side of each socket to clamp the legs in place as shown at E in fig.1. Tighten each bolt using the 6mm hex key.
- **4.5.** Turn the assembly the right way up so that it is standing on its tripod legs. Care should be taken when doing this, get another person to help you as the unit is heavy.
- 4.6. Locate the bending rollers (see Z fig.2) into suitable holes in the lower plate (A) so that they are displaced equally either side of the pump unit.
- 4.7. Identify the pivot pin (C) for the upper plate (B) and have it ready for insertion. (see fig.2.)
- 4.8. Lower the upper plate (B) onto the pipe bender so that the upward facing shafts of the bending rollers locate into the plate and the pivot arms are lying either side of the front of the pump block. Referring to fig.2, align holes 'X' in the pivot arms with the hole 'Y' in the pump block and fully insert the pivot pin (C).

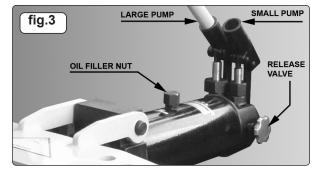


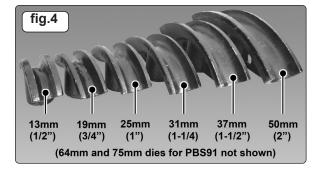


5. OPERATION

- WARNING! Ensure that you read, understand and apply Section 1 Safety Instructions before operating the pipe bender.

 NOTE: When using hydraulic type pipe benders, the bent pipe or tube is prone to deformation on both the inside and outside curvature. The pipe or tube can be deformed into an oval shape or creased depending on the wall thickness of the material. This is not a fault and largely unavoidable. Consider packing the pipe or tube with dried sand or similar medium before bending as this may help to alleviate deformation of the pipe or tube. Pack the sand tight and cap both ends.
- 5.1. The nut on the oil filler located on the top of the pump body doubles as a vent and needs to be opened one turn before using the unit. The nut should be done up tightly if the unit is moved or stored away for a long period, to prevent hydraulic oil spillage. See fig.3.
- **5.2.** Before using the pipe bender purge any air from the hydraulic system by opening the relief valve situated on the side of the unit anticlockwise and pumping the handle several times. Close release valve.
- **5.3.** Hinge up the top plate. Select the required die (see fig.4) and place it onto the end of the ram piston. See fig.5.
- 5.4. Position the rollers according to the triangular label in the centre of the top plate. See fig.2-B.
- **5.5.** Rotate the rollers so that the most appropriate of the three contours available will be against the pipe.
- 5.6. Introduce the pipe between the die and the rollers, swing down the upper plate ensuring that it locates correctly onto the roller shafts and position the pipe so that the centre of the required bend is in the centre of the die.
- 5.7. Close the release valve by turning the knob clockwise. Insert the pump handle into the socket above the larger of the two pumping pistons (see fig.3) and pump to close the gap between the die and pipe. Before applying bending pressure do a final check on the positioning of the pipe. Now insert the handle into the socket above the smaller of the pumping pistons and pump until the required degree of bend is achieved.
- **5.8.** Open the release valve and the piston will retract under spring tension. Raise upper plate and remove or reposition the pipe as required.
- **5.9.** After use, store the pipe bender with the ram fully retracted and the pumping pistons in the down position.





6. MAINTENANCE

- 6.1. Maintenance and repair must be carried out by qualified person. Contact your Sealey stockist for details.
- 6.2. Check all fittings are tight before each use.
- 6.3. Lubricate all moving parts at regular intervals.
- 6.4. Always keep the pipe bender clean, dry, and protect from harsh conditions.
- 6.5. Should you need to replace the oil ensure the piston is fully retracted. An excess of oil will render the press inoperative.
- 6.6. Use only appropriate Sealey hydraulic jack oil. **DO NOT** use brake fluid. Contact your local Sealey stockist for details. Purge the system to remove any air.
- 6.7. Check your model parts information for spares.
- 6.8. Annually, replace hydraulic oil using Sealey Hydraulic Jack Oil with ram fully down.

IMPORTANT: NO RESPONSIBILITY IS ACCEPTED FOR INCORRECT USE OF THE MACHINE.

Hydraulic products are only repaired by local service agents. We have service/repair agents in all parts of the UK.

DO NOT RETURN PRODUCT TO US. Please telephone us on 01284 757500 to obtain the address and phone number of your local Sealey stockist.





ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.



Note: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice. Please note that other versions of this product are available. If you require documentation for alternative versions, please email or call our technical team on technical@sealey.co.uk or 01284 757505.

Important: No Liability is accepted for incorrect use of this product.

Warranty: Guarantee is 12 months from purchase date, proof of which is required for any claim.