



OPERATING & SAFETY INSTRUCTIONS

ACTIONRAM HYDRAULIC PIPE BENDER

Read this manual and follow all the safety rules and operating instructions before using this product.

ACTIONRAM HYDRAULIC PIPE BENDER

SUMMARY

- Powerful 6-tonne hydraulic system with 150mm stroke
- Suitable for pipe sizes: 10mm, 13mm, 20mm, 25mm (3/8", 1/2", 3/4", 1")
- Handles wall thicknesses from 1.5mm to 3.5mm
- Bends angles from 0° to 90° with no need to preheat pipes (cold bending)
- Fast, simple setup for efficient use on the job site
- User-friendly design for quick and easy operation
- Includes a full die set for multiple pipe sizes
- Supplied in a heavy-duty steel storage case for easy transport and protection

SPECIFICATIONS

Model	Hydraulic Ram Output (Ton)	Ram Stroke (mm)	Bending Range (O.D) (mm)	Bending Shoes (inch)	G.W. (kg)	Packing Size (mm)
HHW-1A	6	150	Ø16-Ø33	3/8" 1/2" 3/4" 1"	17	430x380x130

WORK AREA

- Keep your work area clean, well-lit and free of distractions.
- Restrict access to only those wearing proper safety gear.
- Store tools safely in a dry place, out of children's reach.

PPE GUIDELINES

- Wear impact-resistant goggles with front and side protection.
- Use a full-face shield with goggles when working with debris or particles.
- Wear gloves appropriate to the materials being handled and to minimise the effects of tool vibration.
- Wear protective clothing appropriate for the task.
- Use non-slip footwear for better balance and stability.
- Wear steel-toe boots or caps to protect against falling objects.

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SAFETY GUIDELINES

PLEASE READ AND RETAIN THESE INSTRUCTIONS

For your safety, ensure full understanding of this product and its proper operation before assembly or use. The owner and operator must be familiar with safe usage practices and the potential risks involved. If there is any uncertainty about the correct and safe use of the equipment, contact SafetyLiftingGear for guidance.

Before Each Use:

- Inspect the equipment thoroughly.
- Tighten all loose components.
- Do not use the equipment if any part appears broken, bent, cracked, or otherwise damaged.
- If in doubt about the condition of the equipment, consult SafetyLiftingGear.

OPERATING INSTRUCTIONS

PLEASE READ AND FOLLOW ALL SAFETY INSTRUCTIONS CAREFULLY TO AVOID INJURY OR EQUIPMENT DAMAGE **WARNING**

- **Do not** use to bend pipe that is currently part of an assembled pipeline or network. Use **only** on free standing, empty pipe.
- Ensure the pipe matches the bending die diameter exactly.
- If pipe does not bend, **STOP**, release hydraulic pressure and remove pipe from bender. **Do not** reapply the force in attempt to bend.
- Use only on hard, level surfaces.
- **Do not** pull, push or lean against assembled bender.
- No alteration of this product is allowed.
- Do not use this device for any purpose other than that for which it is intended.
- Failure to heed these warnings may result in personal injury and/or property damage.

BEFORE USE

Before bending, make sure the swaging blocks are properly inserted through the upper and lower wing plates and securely locked in place.

Always measure your conduit before starting the bend.

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OPERATING INSTRUCTIONS

PREPARING THE UNIT

- Oil Filler Screw:
 - Turn it **one full turn open** before using the unit.
 - Tighten it fully when storing or moving the unit to prevent hydraulic oil leakage.
 - This also acts as a vent.
- Remove Air from the System:
 - Open the release knob one full turn.
 - Pump the handle several times.
 - Close the release knob.

BENDING PROCESS

1. Raise the upper wing plate.
2. Insert the swaging blocks into the correct holes on the lower wing plate .
3. Choose the correct bending die for your pipe size and measure the minimum required pipe length on each end.
4. Attach the bending die to the plunger bracket.
5. Lower the upper wing plate onto the swaging blocks.
6. Mark the pipe at the desired bend location.
7. Place the pipe into the bender and align the mark with the center of the bending die.

Tip:

To avoid kinking the pipe, don't apply force in one continuous motion on the same spot. Instead, bend partway, release pressure, shift the pipe slightly left or right, then continue bending.

If the pipe doesn't bend easily:

Stop immediately, release the pressure, and remove the pipe.
Do not force it.

8. Use the hand pump slowly, watching the bend angle until it reaches the desired position.

RELEASING THE PIPE

1. Slowly turn the release knob counterclockwise to retract the cylinder.
2. Control the release speed by adjusting how much you open the valve.
3. Once the plunger is fully retracted, remove the pipe from the bender.

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MAINTENANCE

IMPORTANT: INSPECT THE EQUIPMENT REGULARLY AND CHECK FOR DAMAGE BEFORE USE.

Always use high-quality hydraulic oil and avoid mixing different types of oil. Do not use brake fluid, alcohol, glycerin, motor oil, or contaminated oil. Improper fluids can cause serious damage to the ram cylinder and pump, rendering them inoperative. We recommend using #32 low freezing point hydraulic oil or an equivalent.

- Keep the cylinder fully retracted and the release knob open when not in use.
- Keep equipment clean.
- Lubricate moving parts of the pump handle.
- Avoid sharp kink in the hose.
- If hydraulic oil needs to be added, refill through the oil filler screw hole until the oil level is within 3/8" of the hole, then reinstall the oil filler screw.

REFILLING OIL:

1. Remove the oil filler screw.
2. Turn the pump upside down and drain the oil through the filler screw hole.
3. Refill with oil until the level is within 3/8" of the filler screw hole opening, then reinstall the oil filler screw.
4. After refilling, remove air from the system by opening the release knob and rapidly pumping the handle several times. Once done, reinstall the oil filler screw.

NOTE:

- Ensure waste oil is disposed of in accordance with local authority regulations.
- Do not allow dirt or other foreign material to enter the hydraulic system when filling.

STORAGE:

When not in use, always keep the cylinder plunger fully retracted. Store it in a dry, protected area, away from corrosive vapors, dust, or other harmful elements.

LUBRICATION:

Apply a light lubrication oil to pivot points, axles, and hinge sections every 3 months to prevent rust.

RUST PREVENTION:

Inspect the cylinder every 3 months for any signs of rust or corrosion. Clean as necessary and wipe it down with an oil saturated cloth.

TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSE
Cylinder will not advance	Pump release knob not tightly closed
	Pump oil level is low
	Overload
	Pump malfunction
Cylinder advances part way	Pump oil level is low
	Cylinder plunger binding
Cylinder advances in spurts	Air trapped in hydraulic system
	Cylinder plunger binding
Cylinder advances but will not hold	Cylinder seals damaged
	Pump malfunction
Cylinder leaks oil	Worn or damaged seals
	Internal cylinder damage
Cylinder will not retract or retracts slowly	Release knob is closed or not open enough
	Pump reservoir overfilled
	Restricted oil flow
	Broken or weak retraction spring
	Internal cylinder damage