

# Operation Manual

## 6-ton Bench Shop Press 6188g

# wiltec



Illustration similar, may vary depending on model

Read and follow the operating instructions and safety information before using for the first time.

Technical changes reserved!

Due to further developments, illustrations, functioning steps, and technical data can differ insignificantly.

Updating the documentation

If you have suggestions for improvement or have found any irregularities, please contact us.



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## Introduction

Thank you for purchasing this quality product. **To minimise the risk of injury we urge that our clients take some basic safety precautions when using this device. Please read the operation instructions carefully and make sure you have understood its content.**

Keep these operation instructions safe.

## Specific safety precautions

- Keep hands away from arbour plates and press pin during use.
- Do not move workpiece while compressed.
- Release load before service or maintenance.
- Keep area under arbour plates clear. If arbour plates rest on obstruction (e.g., bolt, debris, etc.), it creates an uneven press, causing excess stress and possible breakage.
- Avoid off-centre loads. Do not operate if workpiece tilts or binds during compression.
- Stop and release compression if you suspect imminent structural failure. If safe, inspect thoroughly and reposition before proceeding.
- Do not compress springs or other elastic objects. They could disengage hazardously.
- Wear approved safety goggles, heavy-duty work gloves, and steel-toe work boots during set up and/or use.
- Keep bystanders out of work area.
- Do not stand directly in front of the press when loaded. Do not leave the press unattended when loaded.
- Do not operate the hydraulic ram beyond rated capacity.
- Inspect before every use; do not use if parts are loose or damaged.
- Ram service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.
- When servicing a ram, use only identical replacement parts – refer to attached, product-specific parts list and diagram. Follow instructions in the “Maintenance instructions” section of this manual. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of injury.
- Only use with accessories rated to handle the forces exerted by this tool during operation. Other accessories not designed for the forces generated may break and forcefully launch pieces.
- Use only with ram included with this press.
- Industrial applications must follow the national safety requirements.
- This product is not a toy. Keep it out of reach of children.
- Maintain labels and nameplates on the shop press. These carry important safety information. If unreadable or missing, contact the manufacturer for a replacement.
- The warnings, precautions, 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.

**Save these instructions!**

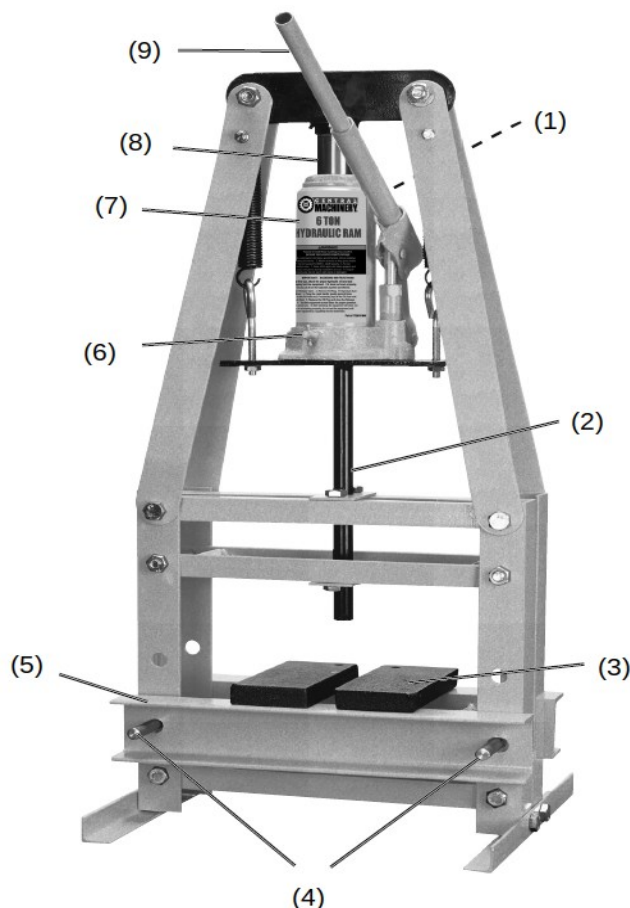
## Technical specifications

<b>Max. capacity (t)</b>	6
<b>Working distance (mm)</b>	50–110 (2"–4")
<b>Press pin diameter (cm)</b>	1.59 (5/8")
<b>Weight (kg)</b>	21.5

**Setup – before use**

**Note:** For additional information regarding the parts listed in the following pages, refer to the parts list and explosion view near the end of this manual.

*Components and controls*



**Figure A**

Nº	Name	Nº	Name
1	Fill plug (on back)	6	Release valve
2	Press pin	7	Ram
3	Arbour plates	8	Piston
4	Press apron support pins	9	Ram handle
5	Press apron		

*Assembly instructions*

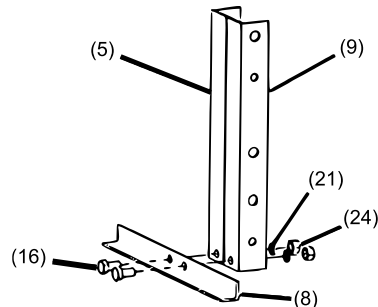
1. Read the entire important safety information section at the beginning of this manual including all text under subheadings therein before setting up or using this product.
2. Inspect the tool before use, looking for damaged, loose, and missing parts. If any problems are found, do not use the tool until it is repaired. Wear approved safety goggles, heavy-duty work gloves, and steel-toe work boots during set up and/or use.

**Note:** Finger tighten all connections until assembly is done, unless instructed otherwise. Assemble on a flat, level, hard surface. Use a helper when necessary.

3. Attach back (**Fig. B, 5**) and front (**Fig. B, 9**) posts to the foot (**Fig. B, 8**) with two sets of bolts (**Fig. B, 16**), spring washers (**Fig. B, 21**), and nuts (**Fig. B, 24**).

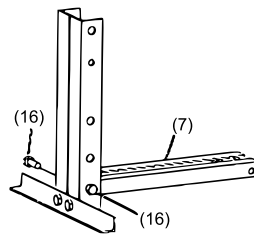
**Note:** Make sure holes align on back and front posts.

4. Repeat for other posts and feet.



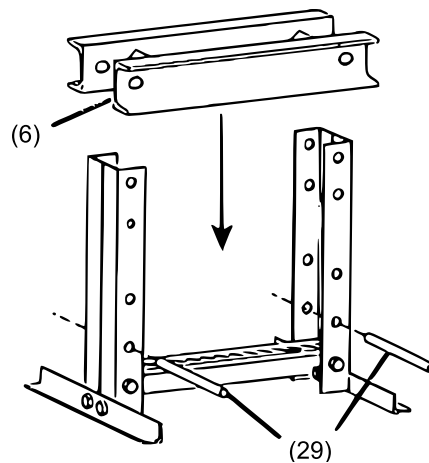
**Figure B**

5. Attach spreader (**Fig. C, 7**) to each side of the post assembly with two bolts (**Fig. C, 16**).
6. Repeat for other post assembly.



**Figure C**

7. Slide the press apron (**Fig. D, 6**) over the post assemblies and secure with the press apron support pins (**Fig. D, 29**).



**Figure D**

8. Attach the lower press pin guide (**fig. E, 14**) to the lower cross beam (**fig. E, 2**) with two bolts (**Fig. E, 16**). Tighten the connections securely.

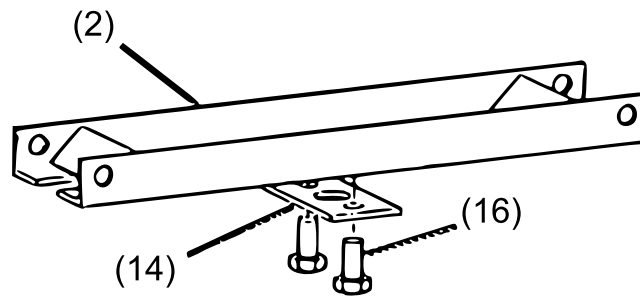


Figure E

9. Attach the upper press pin guide to the upper cross beam (Fig. F, 4) with two bolts (Fig. F, 16). Tighten the connections securely.

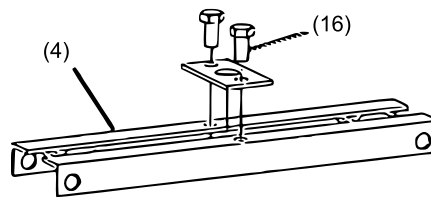


Figure F

10. Slide the lower cross beam assembly between the post assemblies and attach with two sets of bolts (Fig. G, 17), spring washers (Fig. G, 21), and nuts (Fig. G, 24).

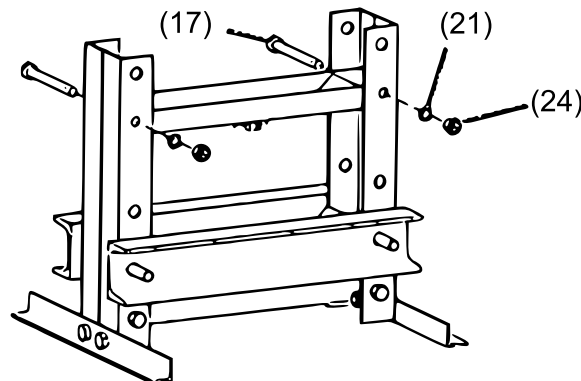


Figure G

11. Attach two header supports (Fig. H, 3) together with a bolt (Fig. H, 19), a spring washer (Fig. H, 23), and a nut (Fig. H, 28), leaving a gap for the header.
12. Repeat with other two header supports.

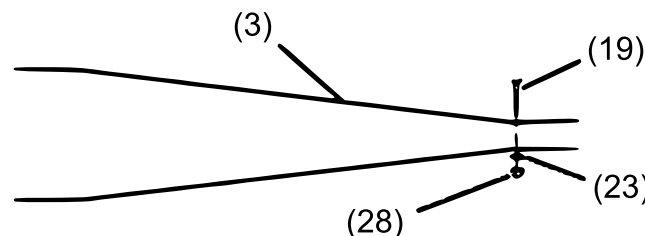


Figure H

13. Slide the header (Fig. I, 1) between the header support assemblies and attach with two sets of bolts (Fig. I, 20), spring washers (Fig. I, 22), and nuts (Fig. I, 25).

**Note:** Tighten the connections enough to avoid wobbling.

**Note:** Call a helper for the next step.

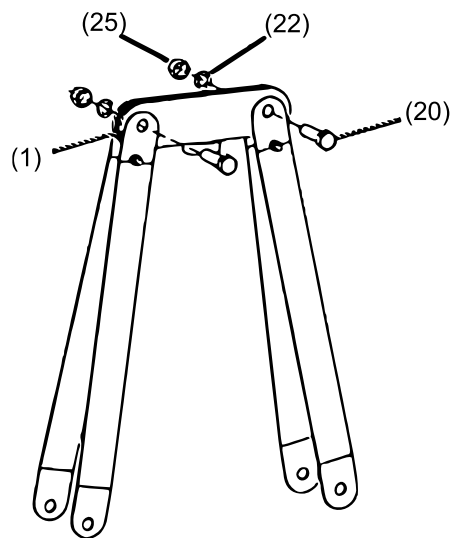


Figure I

14. Slide the upper cross beam assembly (Fig. J, B) between post assemblies and, at the same time, place the header support assemblies (Fig. J, A) outside the post assemblies.
15. Attach with two sets of bolts (Fig. J, 18), spring washers (Fig. J, 22), and nuts (Fig. J, 25).

**Note:** Tighten the connections enough to avoid wobbling.

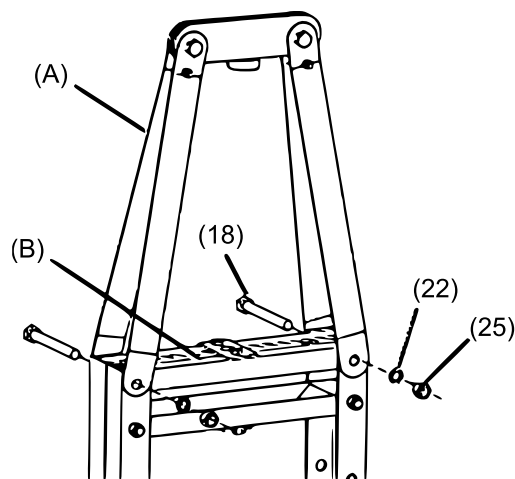


Figure J

16. Hang springs (Fig. K, 10) on the bolts that connect the header supports.

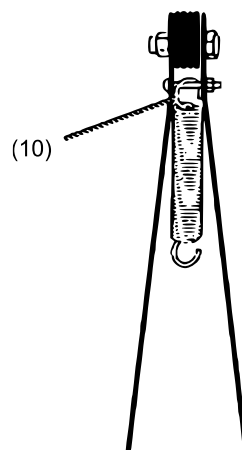


Figure K

17. Attach eye bolts (**Fig. L, 15**) to the ram plate (**Fig. L, 11**) by threading nuts (**Fig. L, 27**) on 1,27 cm ( $\frac{1}{2}$ " ) only.

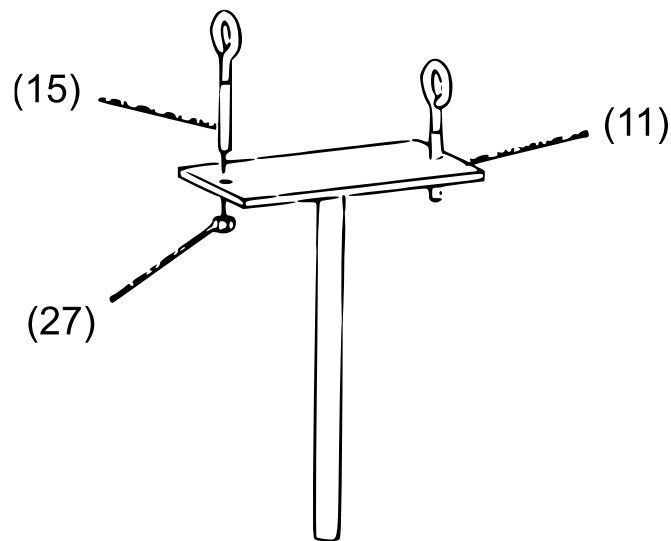


Figure L

18. Guide the press pin (**Fig. M, A**) through the press pin guides and let the ram plate rest on the upper cross beam.
19. Level and square all components, then tighten all connections securely, except for the eye bolts.

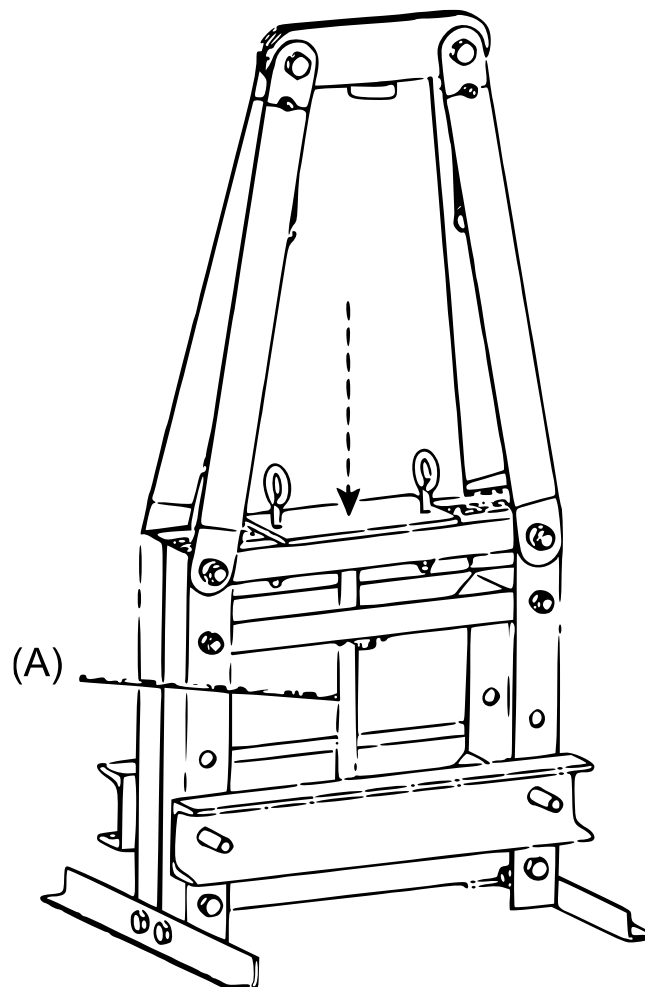


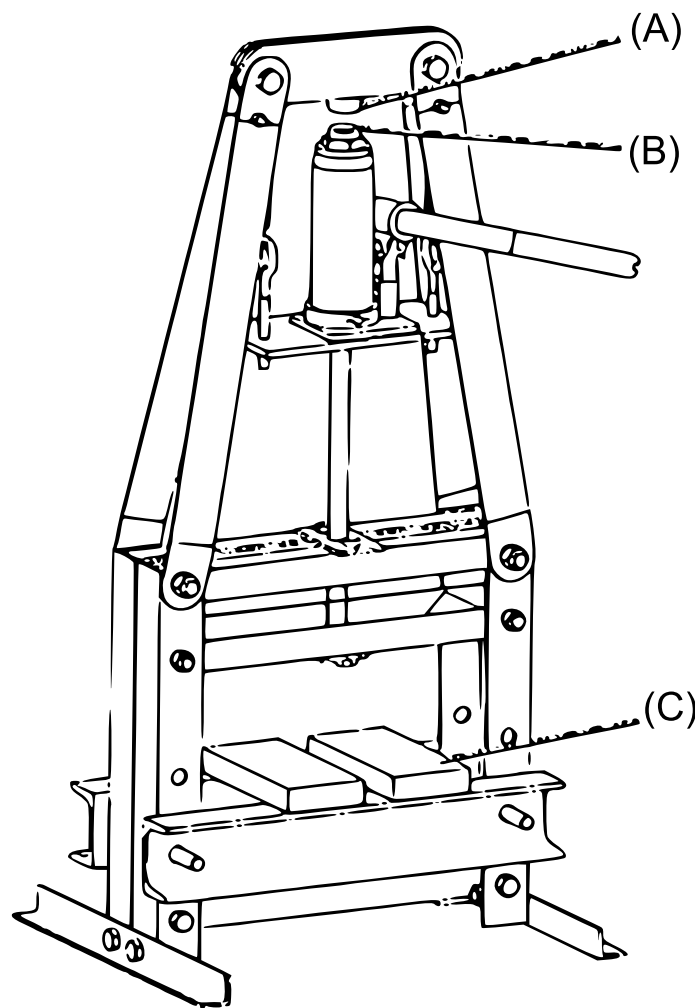
Figure M



20. Pull up on the ram plate and attach the eye bolts to the springs.
21. Push the ram piston all the way down, then place the ram (**Fig. N, B**) on the ram plate.

**Note:** If more space is needed to install ram, loosen eye bolts.

22. When the ram is in place, tighten the eye bolts evenly, making sure that the ram plate remains level.
23. Pump the ram handle until the piston is seated firmly in the piston ring (**Fig. N, A**), then tighten the eye bolts as needed.
24. Place the arbour plates (**Fig. N, C**) on the press apron.
25. Follow the instructions in "Bleeding the ram."



**Figure N**

26. Locate the shop press on a solid, level surface, capable of supporting the weight of the shop press and the workpiece.

## Operating instructions

### *Bleeding the ram*

**Important:** before first use, check for proper hydraulic fluid level in the ram. Then thoroughly test the ram for proper operation prior to its actual use. If the ram appears not to be working properly, it may be necessary to bleed its hydraulic system of excess air. To bleed the ram:



1. Remove the fill plug.
2. Place the slot on the ram handle over the release valve.
3. Turn the ram handle counter-clockwise to open the release valve.
4. Insert the ram handle into the fulcrum, then pump the ram handle quickly several times.
5. Check the fill hole and, if necessary, top off with hydraulic fluid.
6. Place the slot on the ram handle over the release valve screw.
7. Turn the ram handle clockwise to close the release valve.
8. Replace the fill plug.
9. Test the ram several times before putting into use.

#### General operating instructions

1. Adjust the press apron height as necessary.

**Note:** The press apron should be in the highest position possible with the workpiece as close as possible to the press pin.

2. Place the workpiece on the arbour plates. Adjust the arbour plates to support the stationary part of the workpiece.

#### Warning:

- Keep the area under the arbour plates clear. If the arbour plates rest on obstruction (e.g., bolt, debris, etc.), it creates an uneven press, causing excess stress and possible breakage.
  - When pressing two items together, the items must be lined up vertically. If not, one item may forcefully eject itself sideways from the unit.
3. Close the release valve.
  4. Pump the ram handle until the press pin contacts the workpiece. Continue to pump the ram handle to press the workpiece.
  5. After the work is completed, be careful when releasing the ram pressure. Slowly open the release valve, allowing the ram plate to rise.

**Warning:** During the release process the ram may rise quickly. Stay clear.

6. Store the shop press out of reach of children.

#### User-maintenance instructions

Procedures not specifically explained in this manual must only be performed by a qualified technician.

**Warning:** To prevent serious injury from tool failure: Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

1. Before each use, inspect the general condition of the shop press and ram. Check for broken, cracked, or bent parts, loose, or missing parts, and any condition that may affect the proper operation of the product. If a problem occurs, have the problem corrected before further use.  
**Do not use damaged equipment**
2. Before each use, thoroughly test the ram for proper operation prior to its actual use. If the ram appears not to be working properly, follow instructions in bleeding the ram.
3. Change the hydraulic fluid at least once every three years. To change the hydraulic fluid:
  - With the ram fully lowered, unhook the springs from the eye bolts, then remove the ram from the ram plate.
  - Remove the filler plug.
  - Tip the ram to allow the old hydraulic fluid to drain out of the unit completely, and dispose of the old hydraulic fluid in accordance with local regulations.
  - Completely fill the unit with a high-quality hydraulic fluid (not included) until the fluid just begins to run out of the fill hole.



- Reinstall the filler plug.
- Clean with a clean cloth using a detergent or mild solvent.
- Replace the ram onto the ram plate.

### Troubleshooting

**Warning:** To prevent serious injury: Be cautious when troubleshooting a malfunctioning ram. Completely resolve all problems before use. If the solutions presented in the troubleshooting guide do not solve the problem, have a qualified technician inspect and repair the ram before use. After the ram is repaired: Test it carefully without a load by raising it and lowering it fully, checking for proper operation, before returning the ram to operation.

**Do not use a damaged or malfunctioning ram!**

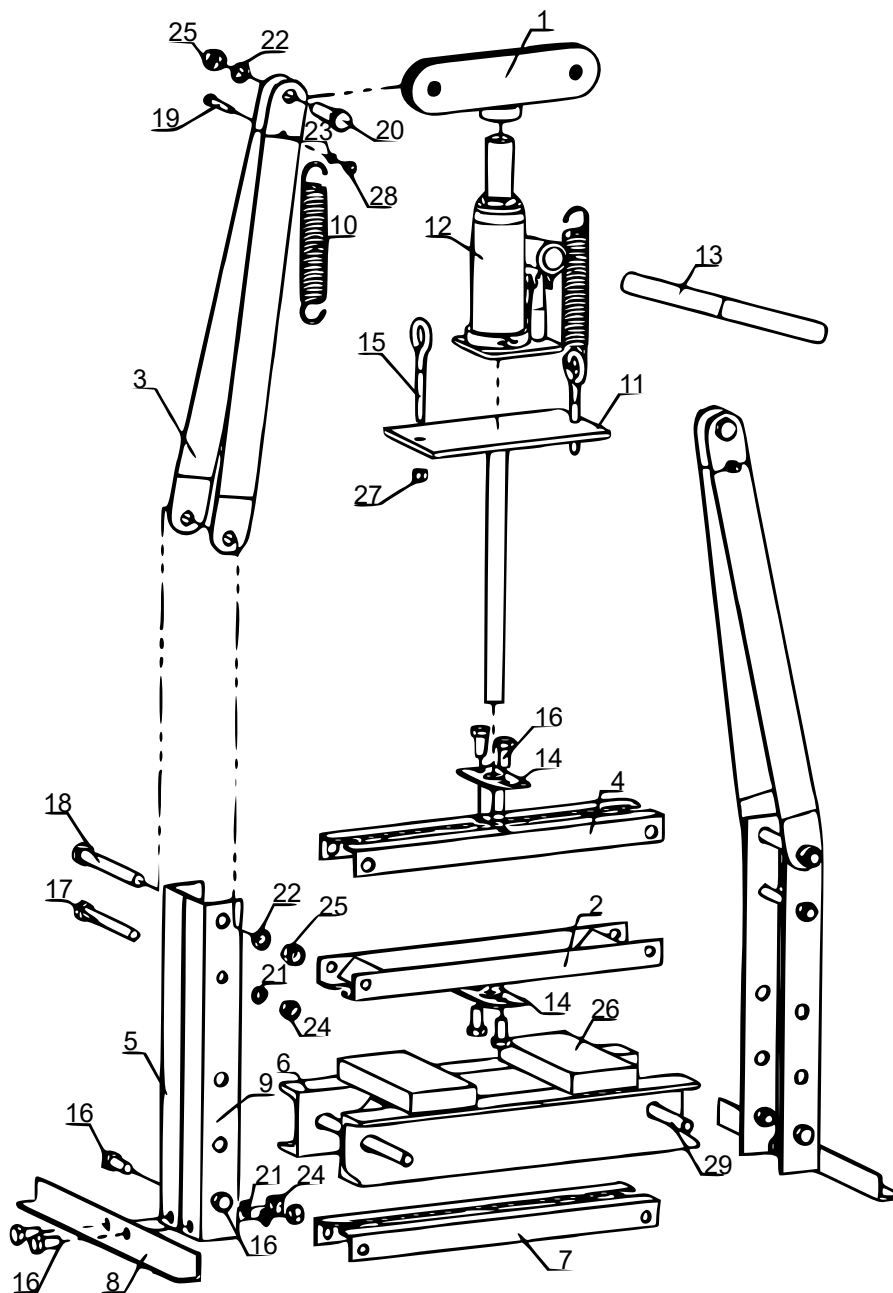
<i>Possible problems and reasons</i>				<i>Probable solution</i>
Pump stroke feels spongy	Piston will not lift all the way.	Handle moves up when ram is under load.	Fluid leaking from filler plug	(Make sur that the ram is not supporting a load while attempting a solution.)
X	X			Check that release valve is closed fully.
		X		Valves may be blocked and may not close fully. To flush the valves: 1. Lower the piston and securely close the release valve. 2. Manually lift the piston several inches. 3. Open the release valve and force the piston down as quickly as possible.
X	X			The ram may be low on fluid. Check the fluid level and refill if needed. Ram may require bleeding – see instructions.
			X	The unit may contain too much hydraulic fluid inside; check the fluid level and adjust if needed.

### Parts list

Nº	Name	Qty.	Nº	Name	Qty.
1	Header	1	16	Bolt (M10×20)	12
2	Lower cross beam	1	17	Bolt (M10×100)	2
3	Header support	4	18	Bolt (M12×110)	2
4	Upper cross beam	1	19	Bolt (M6×40)	2
5	Back post	2	20	Bolt (M12×45)	2
6	Press apron	1	21	Spring washer (M10)	10
7	Spreader	1	22	Spring washer (M12)	4
8	Foot	2	23	Spring washer (M6)	2
9	Front post	2	24	Nut (M10)	10

10	Springs	2	25	Nut (Mm12)	4
11	Ram plate	1	26	Arbor plate	4
12	Ram	1	27	Nut 8	2
13	Ram handle	1	28	Nut 6	2
14	Press pin guide	2	29	Press apron support pin	2
15	Eye bolt	2			

**Explosion view**



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