

Clarke® STRONG-ARM

10 TON HYDRAULIC PRESS

Model Nos. CSA10F and CSA10B



OPERATING & MAINTENANCE INSTRUCTIONS



SPARE PARTS and SERVICING

Please contact your nearest dealer, or
CLARKE International, on one of the following numbers.

PARTS & SERVICE TEL: 020 8988 7400

PARTS & SERVICE FAX: 020 8558 3622

or e-mail as follows:

PARTS: Parts@clarkeinternational.com

SERVICE: Service@clarkeinternational.com

Thank you for purchasing this CLARKE 10 Ton Hydraulic Press.

Please read this manual thoroughly and follow the instructions carefully, in doing so you will ensure the safety of yourself and that of others around you, and you can look forward to the press giving you long and satisfactory service.

Please note that this manual is an integral part of the Hydraulic Press and must always accompany it, even in the event of sale.

The press owner and/or user must read and fully understand the operating instructions and recommendations before using this press.

CLARKE International shall not be held liable to any damage to persons or equipment due to improper or non-permitted use of the press.

GUARANTEE

This CLARKE product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt as proof of purchase. This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission. This guarantee does not effect your statutory rights.

SAFETY PRECAUTIONS

- During assembly or if the press is moved, ALWAYS use a lifting appliance - crane or hoist etc., do not man handle.
- The press MUST BE located on firm level ground, or a sturdy workbench, with adequate light. The operator must never work in his/her own shadow.
- Before applying a load, be certain that all press bed support pins are fully engaged, and the hydraulic ram is fully located into the ram mount. Ensure also that hydraulic hoses and couplings are completely sound.
- Before use always ensure the workpiece is firmly secure and stable.
- Always clean spills of hydraulic oil immediately as this can be extremely dangerous in a workshop environment.
- Do not exceed the rated capacity.
- Do not allow any person, who is inexperienced in the use of hydraulic presses, to use the machine unless they are under direct supervision.

- Do not allow anyone to work directly in front of the machine when it is in use.
- Never tamper with the machine. The safety valve is calibrated and sealed at the factory, do not attempt to change these settings.
- Use **ONLY** the recommended hydraulic oil.
- Never use the machine for any purpose other than that for which it is designed.
- Components of this press are specially designed to withstand the rated capacity. Do not substitute bolts, pins, or any other components.
- Always apply the load on the centre of ram plunger. Offset loads can damage the ram or ram mount and may cause work piece to eject.
- Before operating, check for signs of cracked welds, bent bed pins, loose or missing bolts, or any other structural damage. Do not operate if any of these conditions exist. Have repairs made only by authorised service centres.
- Remove all loads from press bed before attempting to adjust bed height. Beware of possible falling bed.
- Press only on a work piece supported by the press bed.
- When using accessories such as arbor plates, be certain they are centered on press bed, and are in full contact with the bed.
- Parts being pressed may splinter, shatter, or be ejected from the press. Due to varied applications, it is your responsibility to always use adequate guards, wear eye protection and heavy protective clothing when operating this press.
- Keep hands and fingers out of the press and away from the parts that may pinch and shift.
- It is the owners responsibility to keep warning decals legible and intact. Replacement decals may be obtained from Clarke International Spare Parts Dep't.
- Failure to heed these warnings may result in damage to the equipment, or failure resulting in property damage, personal, or even fatal injury.
- NEVER operate the ram without the bed locating pins fully in place.
- DO NOT use extension tubes on the pump handle. Excessive effort can cause severe damage.

ASSEMBLY

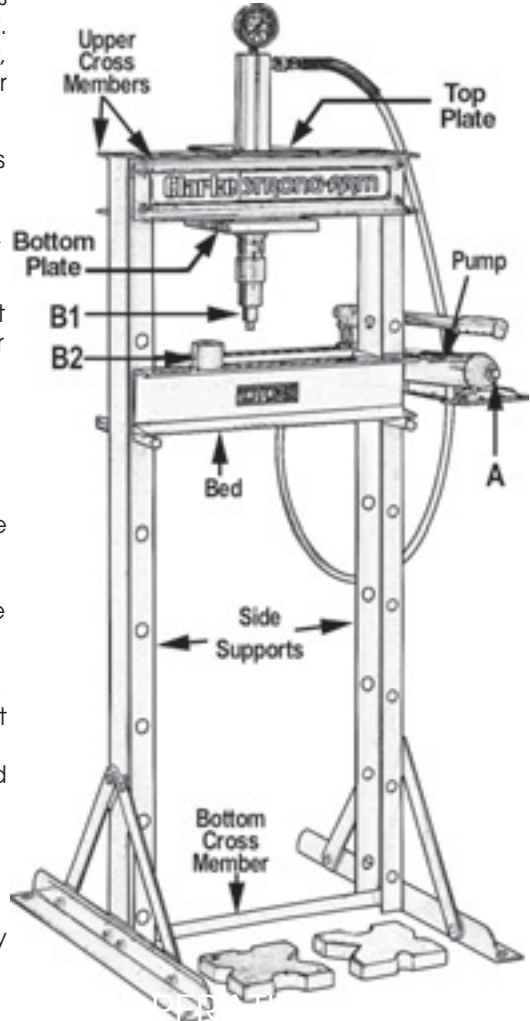
A. CSA10F

Fig.1

Ensure the press and its components suffered no damage during transit. Should any damage be apparent, contact your Clarke dealer immediately.

1. Attach the feet and foot struts to the side supports using the nuts, bolts and washers provided, leaving them finger tight.
2. Raise the assembly and rock it to ensure that no part is under stress and that the structure is completely stable before tightening all nuts securely.
3. Feed the ram assembly down through the hole in the top plate and screw it fully into the threaded hole in the bottom plate. The pressure gauge at this point should be facing the front.
4. Attach the pump assembly to the frame by hooking the front edge into the recess in one end of the pump platform and securing at the opposite end with the screws provided. Finally, screw on the hose assembly to the ram inlet.

Your Hydraulic Press is now ready for use.

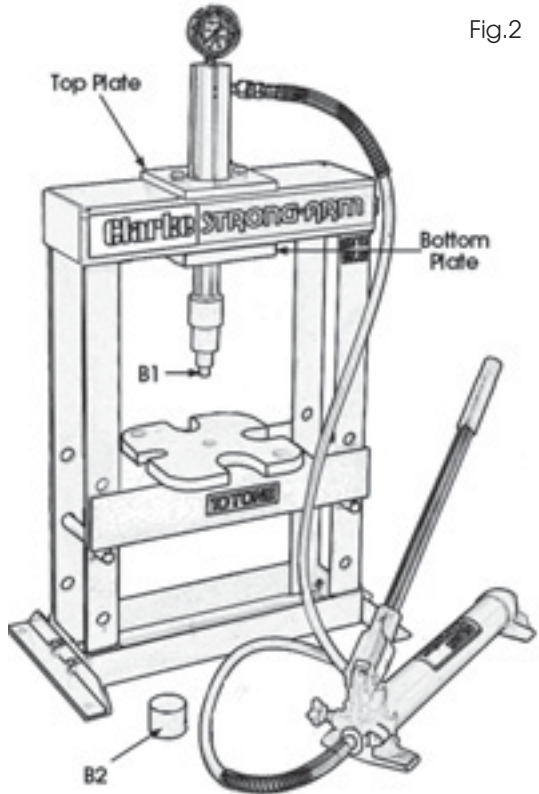


B. CSA10B

Fig.2

1. Bolt the feet to the side members using the nuts bolts and washers provided.
2. Bolt on the top and bottom plates in the manner shown in fig. 2, ensuring the bottom plate is that with the threaded hole at its centre. Do not fully tighten the nuts.
3. Feed the ram assembly down through the hole in the top plate and screw it fully into the threaded hole in the bottom plate. The pressure gauge at this point should be facing the front. Centralise the ram between the top rails before tightening the securing bolts

It is strongly recommended that the Bench Press be securely bolted to a sturdy workbench



HYDRAULIC PUMP/RAM OPERATION

The pump is provided with handwheel, which opens or closes a valve in the pump to raise the ram or lower it under pressure.

Turn the handwheel clockwise and pump the handle to operate (or lower) the ram. Turning the handwheel anticlockwise releases the pressure and the ram will rise.

OPERATION

1. Position the bed to the desired height, so as it will be as close as possible to the ram when the workpiece is mounted.

Raise one side of the bed, and insert a pin into a locating hole directly beneath the bed. Repeat the process at the other side, until the bed is level and at the desired height, with the pins fully 'home'.

2. The workpiece is placed on top of the bed, or on top of the arbour, or clover leaf, plate and must be completely stable. To achieve this you must use packing or shims where required.

NOTE: Any packing pieces or shims used, MUST be capable of withstanding the extreme pressure that will be brought to bear, and MUST be of sufficient size with sufficient surface contact, so as to avoid the possibility of slipping or springing taking place. Mating surfaces MUST be horizontal so that the force being exerted will be vertical and NOT at an angle.

3. Two Mandrels are provided, either of which should be screwed to the end of the Ram, depending upon the size of workpiece bearing surface. One of these is 'stepped' and is shown fitted at B1, Figs. 1 and 2. The other has a larger bearing surface area and is shown at B2.
3. Turn the Pump Handwheel, fully clockwise and pump the handle to bring the ram **very lightly** into contact with the workpiece.

Manoeuvre the workpiece so that the desired point of contact is **directly beneath the centre of the ram**.

4. When satisfied that the workpiece is correctly lined up and is completely stable in that position, slowly pump the handle so that the ram begins to exert pressure on the workpiece.

Continue to pump the handle, whilst standing to the side of the press (DO NOT stand directly in front of the work), and constantly monitor the process, ensuring the ram and work remain completely in line, and there is no risk of slipping.

5. When the process is complete, turn the Pump Handwheel anticlockwise to release ram pressure

MAINTENANCE

A Visual inspection must be made before each use of the press, checking for leaking hydraulic fluid, and damaged, loose or missing parts.

Owners and/or users should be aware that repair of this equipment may require specialised knowledge and facilities. It is recommended that a thorough annual inspection of the press be made and that any defective parts, decals or warning labels be replaced with genuine Clarke parts.

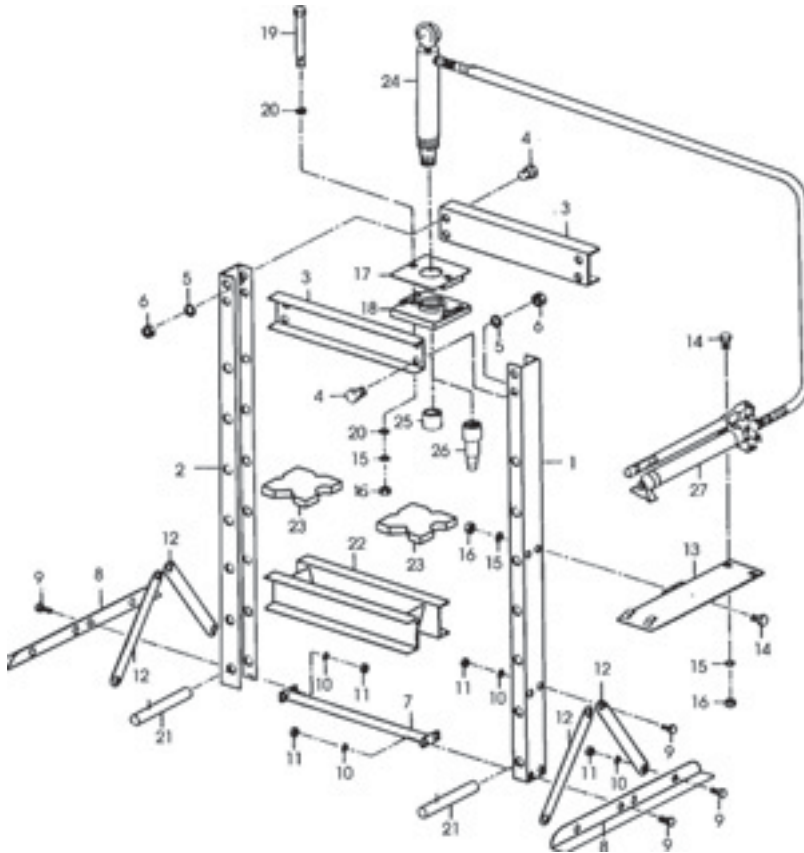
Any press which appears to be damaged in any way, is found to be badly worn, or operates abnormally **SHOULD BE REMOVED FROM SERVICE** until necessary repairs are made.

- Periodically check the press frame to make sure all bolts are tight and inspect for cracked welds, bent, loose or missing parts.
- Periodically check the hydraulic connections for possible leaks. Replace or properly repair damaged or leaking hydraulic components before using.
- Periodically apply a light smear of oil to the moving parts and the bed support pins.
- If oil leaks, caused by a loose union/connection etc., have been repaired, check the hydraulic pump oil level, by removing the pump from its mounting, holding it vertically on its nose, and removing the filler/dipstick, shown at 'A', Fig.1. Top up if necessary to the level on the dipstick, with CLARKE Hydraulic Oil, Part No. 3050830 only.

This operation is carried out with the ram fully retracted.

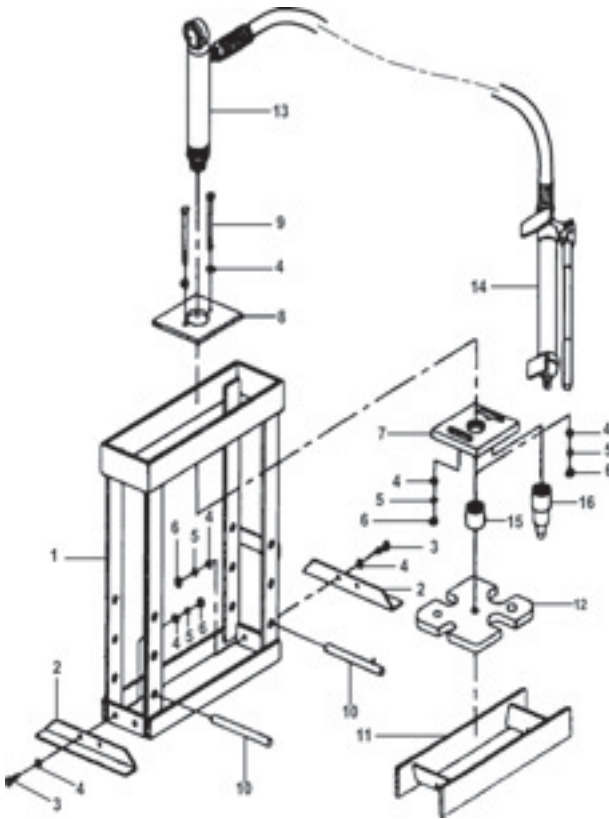
- Replace the Hydraulic oil every TWO years. This operation requires the dismantling of the hydraulic system, for which you should consult your CLARKE dealer.

PARTS DIAGRAM - CSA10F



No.	Description	Qty	Part No.	No.	Description	Qty	Part No.
1	Frame	1	CSA1001	15	Spring Washer	6	CSA1015
2	Frame	1	CSA1002	16	Nut 3/8"	6	CSA1016
3	Bridge	2	CSA1003	17	Support Plates	1	CSA1017
4	Bolt M12	8	CSA1004	18	Ram Support	1	CSA1018
5	Spring Washer	8	CSA1005	19	Bolt 3/8 x 6"	2	CSA1019
6	Nut M12	8	CSA1006	20	Washer	4	CSA1020
7	Union Support	1	CSA1007	21	Support pins	2	CSA1021
8	Base Supports	2	CSA1008	22	Bed Flat	1	CSA1022
9	Bolt 5/16" X 1"	12	CSA1009	23	Arbour Plates	2	CSA1023
10	Spring Washer	12	CSA1010	24	Ram compl.	1	CSA1024
11	Nut 5/16"	12	CSA1011	25	Adapter	1	CSA1025
12	Support Plates	4	CSA1012	26	Adapter	1	CSA1026
13	Pump Support	1	CSA1013	27	Pump compl.	1	CSA1027
14	Bolt 3/8 x 1"	4	CSA1014	-	Seal Kit	1	CSA1028

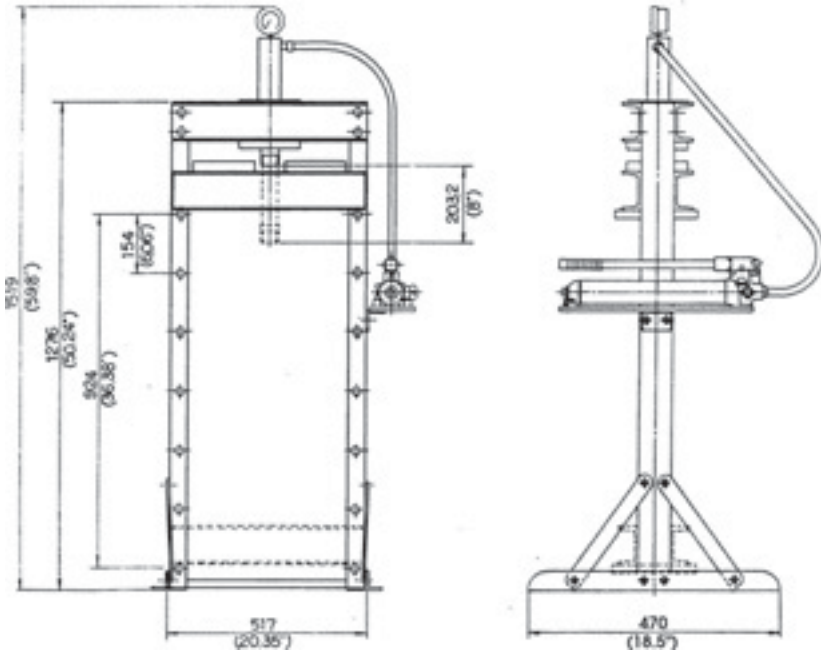
PARTS DIAGRAM - CSA10B



No.	Description	Qty	Part No.	No.	Description	Qty	Part No.
1	Frame	1	CSA10B01	10	Support Pins	2	CSA10B10
2	Foot	2	CSA10B02	11	Bed	1	CSA10B11
3	Bolt M10	4	CSA10B03	12	Arbour Plate	1	CSA10B12
4	Flat Washer	12	CSA10B04	13	Ram Assembly	1	CSA10B13
5	Spring Washer M10	6	CSA10B05	14	Pump Assembly	1	CSA10B14
6	Nut M10	6	CSA10B06	15	Mandrel	1	CSA10B15
7	Bottom Plate	1	CSA10B07	16	Mandrel Stepped	1	CSA10B16
8	Top Plate	1	CSA10B08	-	Seal Kit	1	CSA1028
9	Bolt M10	2	CSA10B09				

SPECIFICATIONS

CSA10F - Part No. 7613010



CSA10B - Part No. 7614000

