

OPERATION MANUAL



HYDRAULIC PRESS

Model
HPF-50

Order Code P152

EDITION No : HPF-50-3

DATE OF ISSUE : 04/2023

MACHINE DETAILS

MACHINE	<input type="text" value="HYDRAULIC PRESS"/>
MODEL NO.	<input type="text" value="HPF-50"/>
SERIAL NO.	<input type="text"/>
DATE OF MANF.	<input type="text"/>

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NOTE:

This manual is only for your reference. At the time of the compiling of this manual every effort to be exact with the instructions, specifications, drawings, and photographs of the machine was taken. Owing to the continuous improvement of the HAFCO METALMASTER machine, changes may be made at any time without obligation or notice. Please ensure the local voltage is the same as listed on the specification plate before operating any electric machine.

SAFETY SYMBOLS

The purpose of safety symbols is to attract your attention to possible hazardous conditions

 **WARNING** *Indicates a potentially hazardous situation causing injury or death*

 **CAUTION** *Indicates an alert against unsafe practices.*

Note: Used to alert the user to useful information

**NOTE:**

In order to see the type and model of the machine, please see the specification plate. Usually found on the back of the machine. See example (Fig.1)

METALMASTER	
PRODUCT SPECIFICATIONS	
Model: HPF-50	Weight: 300kg
Capacity: 50 Tonne	MFG Date: 2019 12
Serial No: <input type="text"/>	
<small>www.machineryhouse.com.au www.machineryhouse.co.nz Made in China</small>	

FIG.1

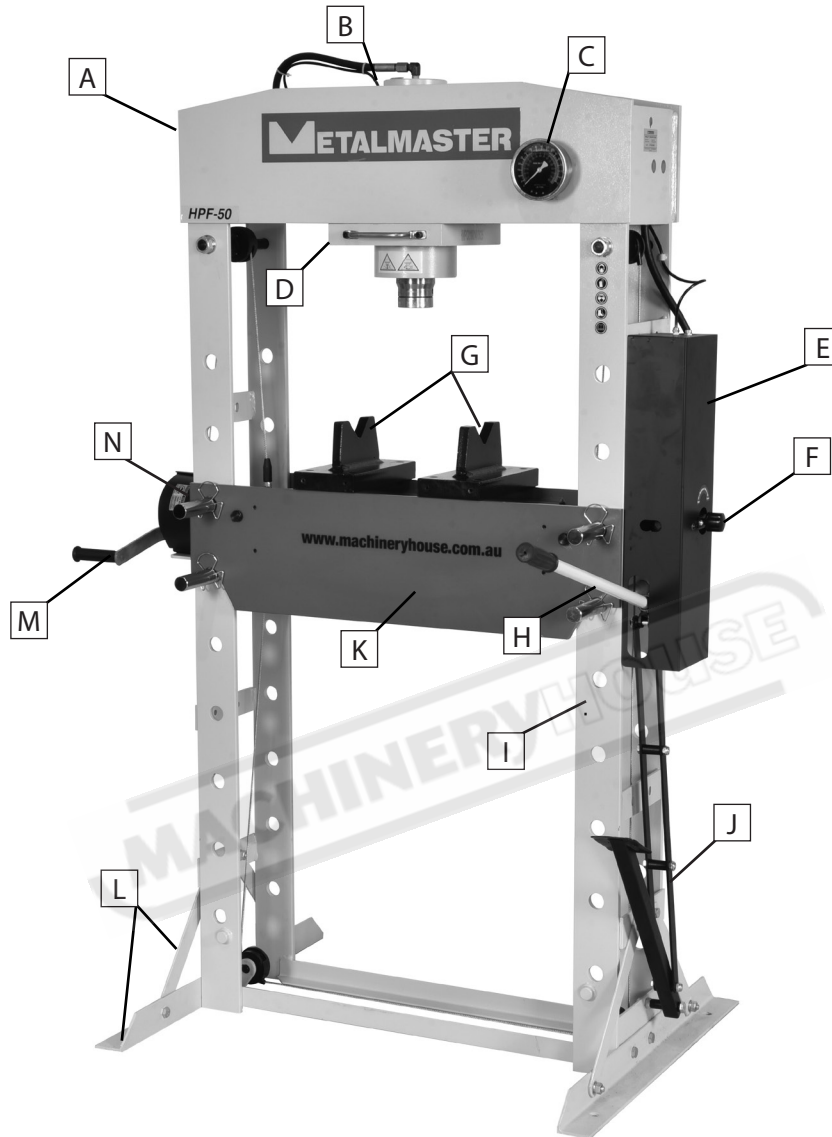
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1.1 SPECIFICATIONS

Order Code	P152
Model	HPF-50
Pressing Capacity (Tonne)	50
Hydraulic Ram Operation (Type)	Manual Hydraulic - Hand/ Foot
Pump Type	Two Speed
Air Pressure (psi)	n/a
Sliding Ram (left-right) (Yes/No)	Yes
Width Between Front Posts (mm)	730
Width Between Side Posts (mm)	205
Table Top Opening - (Front to Back) (mm)	185
Ram To Table (Max.) (mm)	1050
Piston Ram Stroke (mm)	200
Ram Diameter (mm)	Ø75
Dimensions (W x D x H) (mm)	1360 x 800 x 1900
Shipping Size (W x D x H) (mm) Carton 1 (cm)	202 x 100 x 32 (332Kkg)
Shipping Size (W x D x H) (mm) Carton 2	n/a
Nett Weight (kg)	300

1.2 IDENTIFICATION



A	Main Frame	H	Hydraulic Pump Handle
B	Cylinder	I	Upright Supports
C	Pressure Gauge	J	Press Operating Foot Pedal
D	Ram Baseplate	K	Bed or Working Table
E	Hydraulic Pump	L	Press Feet and Stays
F	Release Valve	M	Table Winch
G	Pressing Plates	N	Support Pins with Safety Clips

2.1 GENERAL WORKSHOP SAFETY

DO NOT use any machine unless you have read the manual or have been instructed in the use of the machine in its safe use and operation



WARNING

This manual provides safety instructions on the proper setup, operation, maintenance, and service of this machine. Save this manual, refer to it often, and use it to instruct other operators. Failure to read, understand and follow the instructions in this manual may result in serious personal injury—including amputation, or death.

The owner of this machine is solely responsible for its safe use. This responsibility includes, but is not limited to proper installation in a safe environment, personnel training and authorization to use, proper inspection and maintenance, manual availability and comprehension, of the application of the safety devices, integrity, and the use of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.



Safety glasses must be worn at all times in work areas. Earmuffs should be worn if the work area is noisy.



Sturdy footwear must be worn at all times in work areas.



Gloves should NOT be worn when operating the controls of the machine



Long and loose hair must be contained with a net or under a hat

OWNER'S MANUAL. Read and understand this owner's manual before using the machine.

CHECK DAMAGED PARTS. Regularly inspect the machine for any condition that may affect the safe operation. Immediately repair or replace damaged or parts that are incorrectly fitted before operating.

TRAINED OPERATORS ONLY. Operators that have not been trained have a higher risk of being seriously injured. Only allow trained or supervised people to use this machine. When the machine is not being used, disconnect the power, to the machine to prevent unauthorized use—especially around children. Make the workshop safe.

2.1 GENERAL WORKSHOP SAFETY Cont.

WEARING PROPER APPAREL Do not wear clothing, apparel or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to avoid accidental slips, which could cause loss of operating control.

HEARING PROTECTION. Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

USE CORRECT TOOL FOR THE JOB. Only use this tool for its intended purpose. Do not force the machine or its attachments to do a job for which they were not designed. Never make unapproved modifications. Modifying the machine or using it differently than intended may result in malfunction or mechanical failure that can lead to personal injury or death!

AWKWARD POSITIONS. Keep proper footing and balance at all times when operating the machine. Do not overreach! Avoid awkward hand positions that make operating control difficult. This could increase the risk of accidental injury.

FORCING MACHINERY. Do not force the machine. It will do the job safer and better at the rate for which it was designed.

NEVER STAND ON MACHINE. Serious injury may occur if the machine is tipped or if crush points are unintentionally contacted

STABLE MACHINE. Unexpected movement during operation greatly increases risk of injury or loss of control. Before using the machine , verify that it is stable

UNATTENDED OPERATION. To reduce the risk of accidental injury, never leave the machine in use while unattended.

MAINTAIN WITH CARE. Follow all maintenance instructions and lubrication schedules to keep the machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.

CHILDREN & BYSTANDERS. Keep children and bystanders at a safe distance from the work area. Stop using machine if they become a distraction.



WARNING.

Take care when operating this machine. Crush Points can occur between the Ram and the workpiece or between the workpiece and the table.

2.2 SAFE OPERATING PROCEDURE FOR HYDRAULIC PRESS

DO NOT use this machine unless you have been instructed in its safe use and operation and have read and understood this manual.



Safety glasses must be worn at all times in work areas.



Close fitting protective clothing or overalls are encouraged



Appropriate protective footwear with substantial uppers must be worn.



Rings and jewellery must NOT be worn in the workshop

PRE-OPERATIONAL SAFETY CHECKS

1. Ensure you are familiar with the operation of the hydraulic press.
2. Check for any hydraulic fluid leaks.
3. The press table must be clean and steel weights are flat and secure on press table.
4. Any forming die or cutting die must be inspected for safe use i.e. no cracks.
5. Ensure safety glasses or goggles are available and are worn by all persons in the vicinity.
6. Any test piece, project or material (work piece) to be pressed must be of an appropriate thickness and safe to use on this equipment.
7. Faulty equipment must not be used. Immediately check suspect machinery.

OPERATIONAL SAFETY CHECKS

1. Place your test piece, project or material (work piece) securely on the press table.
2. Ensure the pressure valve is closed before operation.
3. Use the press handle, in a pumping action, to slowly lower the press ram.
4. Use your shoulder muscles when operating – NOT your lower back.
5. Keep hands and fingers away from all clamping and moving parts.
6. Carefully and accurate alignment the press ram face with the work piece for even force to be applied.
7. Once the press ram makes contact with the work piece, closely watch the PSI gauge and note the pressure applied.
8. Once the work piece is pressed sufficiently, release the ram pressure at the release valve.
9. DO NOT apply excessive force with the press.

AFTER OPERATION COMPLETED

1. After use, clean the press down and place any tools and equipment in the appropriate storage area – including the press handle.
2. Place all scrap or waste in the appropriate bin.

POTENTIAL HAZARDS

- Beware of high forces applied
- Pinch and squash injuries
- Potentially uneven forces being applied to the work piece
- Eye injuries – flying or shattering objects
- Laceration injuries

2.3 LIFTING INSTRUCTIONS

On the day that the machine arrives, make sure that a crane or forklift with sufficient capacity is available to unload the machine from the vehicle. Ensure access to the chosen site is clear and that doors and ceilings are sufficiently high and wide enough to receive the machine. To handle the machine, the slings should be positioned so the machine is level when lifted. When using slings please take note of the sling angle and the loads that apply

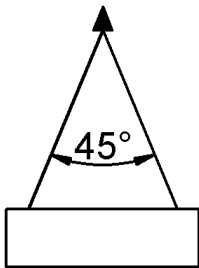


FIG 2.1.

When the slings are at a 45° angle then each sling is carrying the equivalent of 50% of load weight. (Fig.2.1).

When the slings are at a 90° angle then each sling will have a weight equal to 75% of the load on each sling. (Fig 2.2)

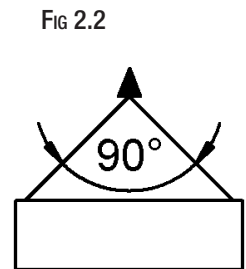


FIG 2.2

NOTE: THE MANUFACTURER RECOMMENDS NOT TO EXCEED 90° ANGLE

LIFTING POINTS

When lifting the machine only certified lifting slings should be used. (Fig.2.3)
 Ensure that when lifting, the machine does not tip over. Check that the lifting slings do not interfere with the hydraulic pipes or the gauge. Use timber or rubber mats to protect the press.
 Failure to follow these instructions could cause damage to the machine

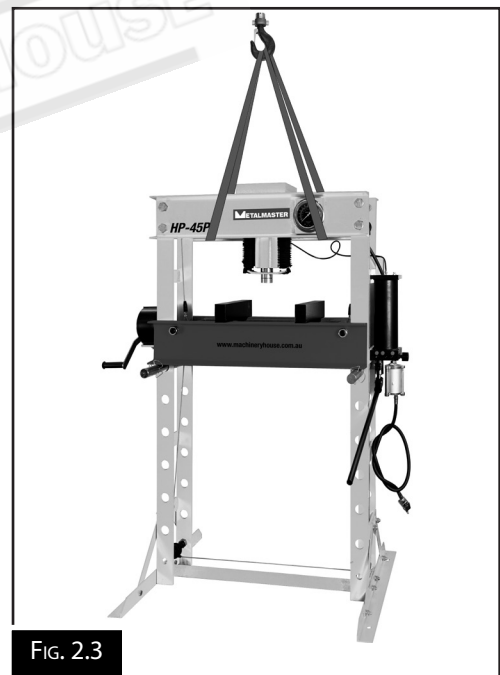


FIG. 2.3

	<p style="text-align: center;">!</p> <p style="text-align: center;">WARNING</p> <p><i>This machine and its parts are heavy! Serious personal injury may occur if safe moving methods are not used. To reduce the risk of a lifting or dropping injury, ask others for help and use the correct lifting equipment.</i></p>
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3. INSTALLATION

Ensure the press and its components suffered no damage during transit and that all the parts are present. Should any loss or damage become apparent, please contact your local dealer immediately.

IMPORTANT: We strongly recommend that the press be firmly secured to a firm and level floor using expansion bolts (not supplied). Holes are provided in the base supports for this purpose.

IMPORTANT: Do not locate your press where it will be open to the elements, as severe weather conditions will damage the hydraulic parts.

The position where your machine is operated is important for safe operation and the longevity of its components. For best results, operate this machine in a dry environment that is free from excessive moisture, hazardous chemicals, airborne abrasives, or extreme conditions.

Extreme conditions for this type of machinery are generally those where the environment is subject to vibration, shocks, or bumps.

Children or untrained people may be seriously injured by this machine. Only install in an access restricted location.

Lighting around the machine must be adequate enough that operations can be performed safely.

Consider the largest size of workpiece that will be processed through this machine and provide enough space around the machine for adequate operator material handling or the installation of auxiliary equipment.

3.1 SITE PREPARATION

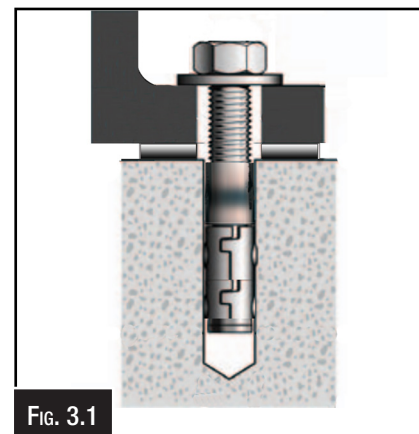
When selecting the site for the machine, consider the largest size of workpiece that will be processed through the machine and provide enough space around the machine for operating the machine safely. Consideration should be given to the installation of auxiliary equipment. Leave enough space around the machine to open or remove doors/covers as required for the maintenance and service as described in this manual.

It is recommended that the machine is anchored to the floor to prevent tipping or shifting. It also reduces vibration that may occur during operation.

3.2 OPTIONS FOR MOUNTING

The machine is best mounted on a concrete slab.

Masonry anchors with bolts are the best way to anchor the machinery, because the anchors sit flush with the floor surface, making it easy to unbolt and move the machine later, if needed. (Fig. 3.1)



3.3 ASSEMBLY

It is important to assemble the machine close to the site where the press will be placed. Care should be taken when moving the press as it will be top heavy.

IMPORTANT: Due to the weight of the press components, we recommend that you get assistance during assembly.

TO ASSEMBLE THE PRESS FOLLOW THE STEPS BELOW:

1. Find a flat large area and lay out the parts Ready for assembly. Make sure all the parts are there before you discard the packing.
2. Attach the feet and the bottom cross member to the side supports, using the nuts, bolts and washers.(Fig.3.2)
3. Add the stay bars to each side and bolt into place.



FIG.3.2

PUMP ASSEMBLY AND BED

The pump mounts on the right hand side of the press, on the two brackets provided.

To Mount The Pump;

1. Remove the cover from the pump by undoing the 4 bolts on the back of the cover.
2. Attach the hydraulic pump to the two brackets on the right hand side of the frame using the bolts and spring washers supplied. Ensure that the hydraulic pump is securely installed. (Fig.3.3)



FIG.3.3

Note: the hydraulic pump can easily be damaged if dropped during installation. Make sure that the pump is secure before releasing your hold of the hydraulic pump

3. Attach the two foot pedal straps to the pump and secure them to the pedal mechanism (Fig.3.3)
4. Secure the pedal plate to the foot pedal straps with a single bolt (Fig.3.4)

**FIG.3.4**

5. Secure the pedal assembly to the base of the press with a single bolt (Fig.3.5)

**FIG.3.5**

6. Locate the pump handle and screw in the pump handle mounting. (Fig.3.6)

**FIG.3.6**

7. Connect the hose from the ram to the top of the pump using PTFE tape. Tighten the fittings making sure there are no leaks
Replace the pump cover.
8. Make sure all the hoses are connected and check all the hose connections to make sure there are no leaks.(Fig.3.7)

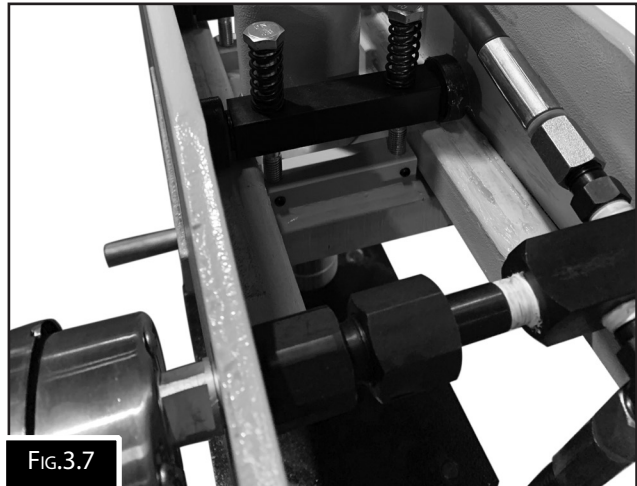


FIG.3.7

9. Fix the winch to the outside of the press on the left-hand side of the frame. (Fig.3.8)
Run the wire cable making sure that it sits in the bottom of the pulleys.



FIG.3.8

10. Insert the two lower bed support pins into the holes in the side support at a height of your choosing. Then lower the bed frame onto the pins. (Fig.3.9)
Connect the winch cable to the bed making sure that it is securely attached.
Using the winch adjust the table to locate the two remaining pins in the upper holes.

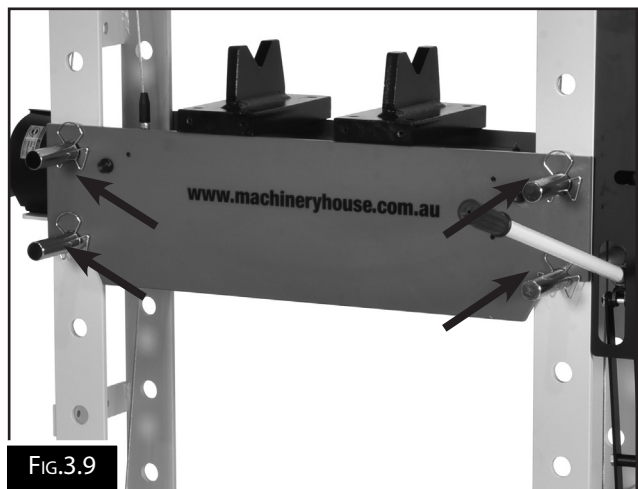


FIG.3.9

11. Make sure that the support pins have been secured with the safety clips supplied for each end of each support pins.
(Fig.3.10)

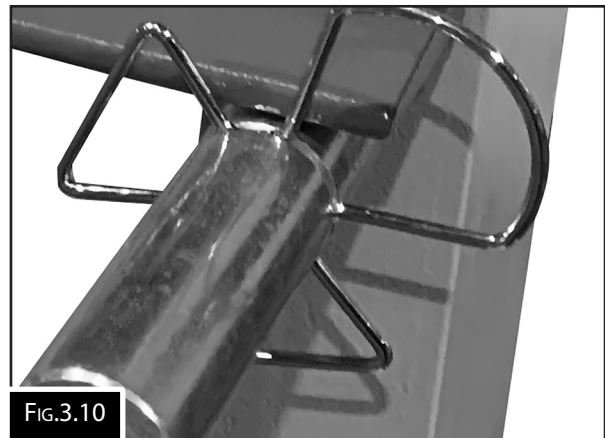


FIG.3.10

3.4 BLEEDING THE HYDRAULIC SYSTEM

The HPF-50 has been fitted with a 2 speed pump that changes from high speed to slow speed automatically based on the pressure.

Before using the press, any air in the system needs to be removed. This type of pump has a self-bleeding system where, provided there is adequate oil in the reservoir, the system will bleed trapped air with the simple procedure below.

TO BLEED THE SYSTEM:

NOTE: Before starting this procedure, make sure that the ram is in the fully up position

1. Remove oil filler cap and fill with #32 grade hydraulic oil until the oil is at the bottom of the thread of the filler hole.
2. Leave the filler cap off during the next steps.
3. Turn the release valve clockwise until it is tight. (Fig3.11)
4. Operate the pump with either the handle or the foot pedal until the ram has extended half way.
5. Turn the release valve 2 full turns anticlockwise and slowly operate the pump until the ram has fully retracted.
6. Replace the filler cap.
7. The hydraulic system should now be free of air. Repeat the process if the handle or foot pedal still feels spongy.



FIG.3.11



WARNING.

A hydraulic hose burst can have devastating effects. Hydraulic fluid has the capacity to travel at lightning speed. Hydraulic fluid in the eyes can cause blindness or hydraulic poisoning. Always wear safety glasses

4. OPERATION

4.1 POSITIONING THE BED

IMPORTANT: *Due to the weight of the bed, always use the winch to raise or lower the bed.*

1. Position the bed at the desired height, so that it will be as close as possible to the ram when the workpiece is mounted on it.
2. Take up the tension with the winch and remove the two upper pins.
3. Lift the table slightly and remove the bottom pins. Use two pins to place under the table when the table is in position.
4. Using the winch adjust the table to the final position and place the two remaining pins in the upper holes.
5. Replace the safety clips on both ends of the supporting pins.

CAUTION

When raising the bed height always place pins under the table as you raise or lower it as a precaution should the table drop. Failure to work in this way could cause injury to the operator if the bed was to fall.

4.2 POSITIONING THE RAM

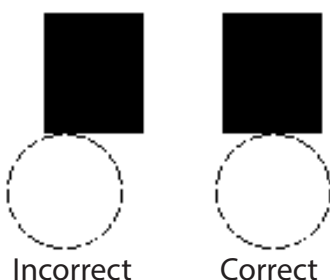
The press is designed with a quick action method when moving the ram. It can be quickly positioned in either direction as required by sliding the ram baseplate along the cross-beam using the handle. (Fig.4.1)
The head is secured when pressure is applied to the ram.



FIG.4.1

CAUTION

Always position the ram directly above the workpiece.



NOTE: *Always make sure you are pressing with the whole ram nose piece. Center the ram over the work, do not press with only the edge of the nose piece. This can cause injury by ejecting the part, or damage to the ram.*

4.3 PRESSING PROCESS

1. Place the workpiece on the bed. It must be completely stable and supported by packing or shims where required. Steel pressing plates are supplied, (Fig.4.2) which locate on the bed. Place the workpiece on a combination of these to give it stability.

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

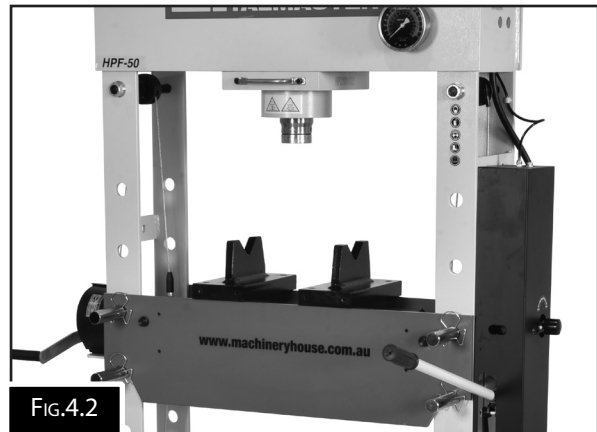


FIG.4.2

2. Close the release valve by turning it clockwise until tightly closed. (Fig. 4.3)
3. Press the foot pedal to bring the ram very lightly into contact with the workpiece.
4. Position the workpiece or slide the ram to one side so that the desired point of contact is directly beneath the centre of the ram.



FIG.4.3

5. When satisfied that the workpiece is correctly aligned and is completely stable in that position, and slowly pump the handle or press the foot pedal so that the ram begins to exert pressure on the work piece. Continue to pump the handle or press the foot pedal whilst standing to the side. Do NOT stand directly in front of the work, and constantly monitor the process, ensuring the ram and workpiece remain completely in line and there is no risk of the workpiece slipping. Closely watch the PSI gauge and note the pressure applied. (Fig. 4.4)

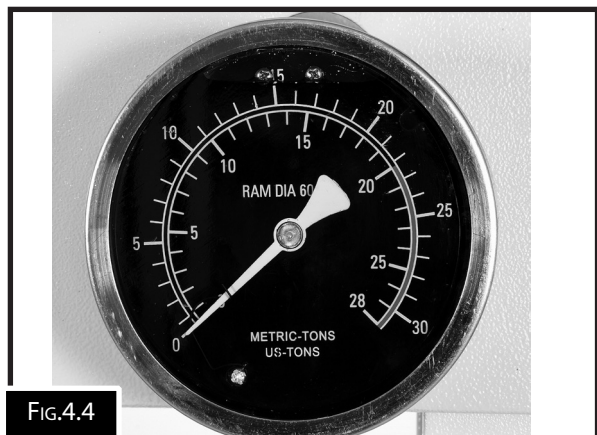


FIG.4.4

6. When the process is complete, turn the release valve anticlockwise in small increments to release ram pressure and allow removal of the workpiece.

WARNING

Do not exceed the rated capacity of the press. Do not allow any person who is inexperienced in the use of hydraulic presses, to use the press unless they are under direct supervision

5. 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 requires specialized knowledge and facilities. It is recommended that a thorough annual inspection of the press be made and that any defective parts be replaced with genuine Metalmaster 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 the necessary repairs are made.
- If the press is not to be used for any length of time, store it with the ram retracted and the operating handle in the lowered position to protect the moving parts.

5.1 INSPECTION SCHEDULE

- Check the press frame to make sure all bolts are tight and inspect for cracked welds, bent, loose or missing parts.
- Check the hydraulic connections for leaks. Replace or properly repair any damaged or leaking hydraulic components before using. In the event of leaking seals, oil can be topped up via the plug on the top of the pump. Oil should be level with the bottom of the hole. If necessary top up with hydraulic oil, This task must be carried out with the ram fully retracted.
- If any rust is apparent it must be removed completely and the paint restored

5.2 FILLING THE HYDRAULIC OIL



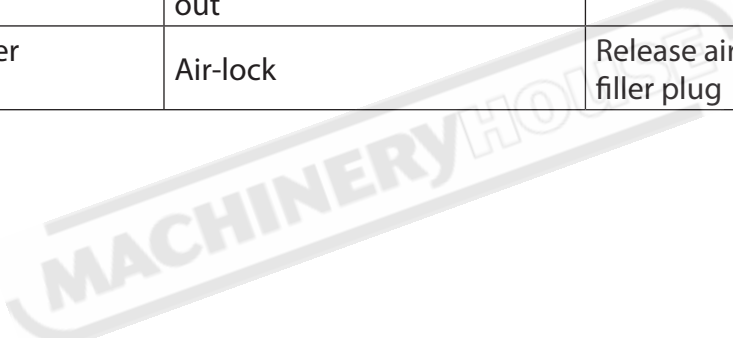
When filling the oil the ram must be in the FULLY UP POSITION before any filling of the oil takes place. Failure to do so will cause overflowing of the oil, creating a slip hazard.


REPLACEMENT PROCEDURE

1. Unscrew the outlet hose from the pump with the coupler at the distribution block.
2. Remove the Spring Retainer Bolt, Spring and Pedal Linkage Bolt.
3. Remove the Pump from the press and hold by the bottom mount bracket in a vice.
4. Remove the 4 top 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 #32 Grade Hydraulic Oil up to bottom of the filler cap thread when the top of the pump is fitted to 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 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. Replace the filler cap.
12. The Pump and Ram should be bled and ready for operation at this time, however repeat steps 9 to 11 if the handle/pedal feels spongy.

5.3 TROUBLESHOOTING

Problem	Probable Cause	Remedy
Pump unit will not work	Dirt on the valve seat/worn seals	Bleed pump unit or have unit overhauled with new seals
Pump will not produce pressure. Pump feels hesitant under load. Pump will not lower completely	Air-lock	Open the release valve and remove the oil filler plug. Pump the handle a couple of full strokes and close the release valve. Replace the filler plug.
Pump will not deliver pressure	Reservoir could be overfilled or have low oil level	Check oil level by removing the filler plug and topping up to the correct level.
Pump feels hesitant under load	Pump cup seal could be worn out	Have the cup seal replaced.
Pump will not lower completely	Air-lock	Release air by removing the filler plug





CAUTION

It is impossible to cover all possible safety guidelines. Every workshop environment is different. Always consider safety first, as it applies to the individual working conditions. Always use this and any other machinery with caution and respect. Failure to do so could result in, serious personal injury or damage to equipment

SPARE PARTS SECTION

HYDRAULIC PRESS

Model

HPF-50

Order Code P152

EDITION No : HPF-50-3

DATE OF ISSUE : 04/2023

The following section covers the spare parts diagrams and lists that were current at the time this manual was originally printed. Due to continuous improvements of the machine, changes may be made at any time without notification.

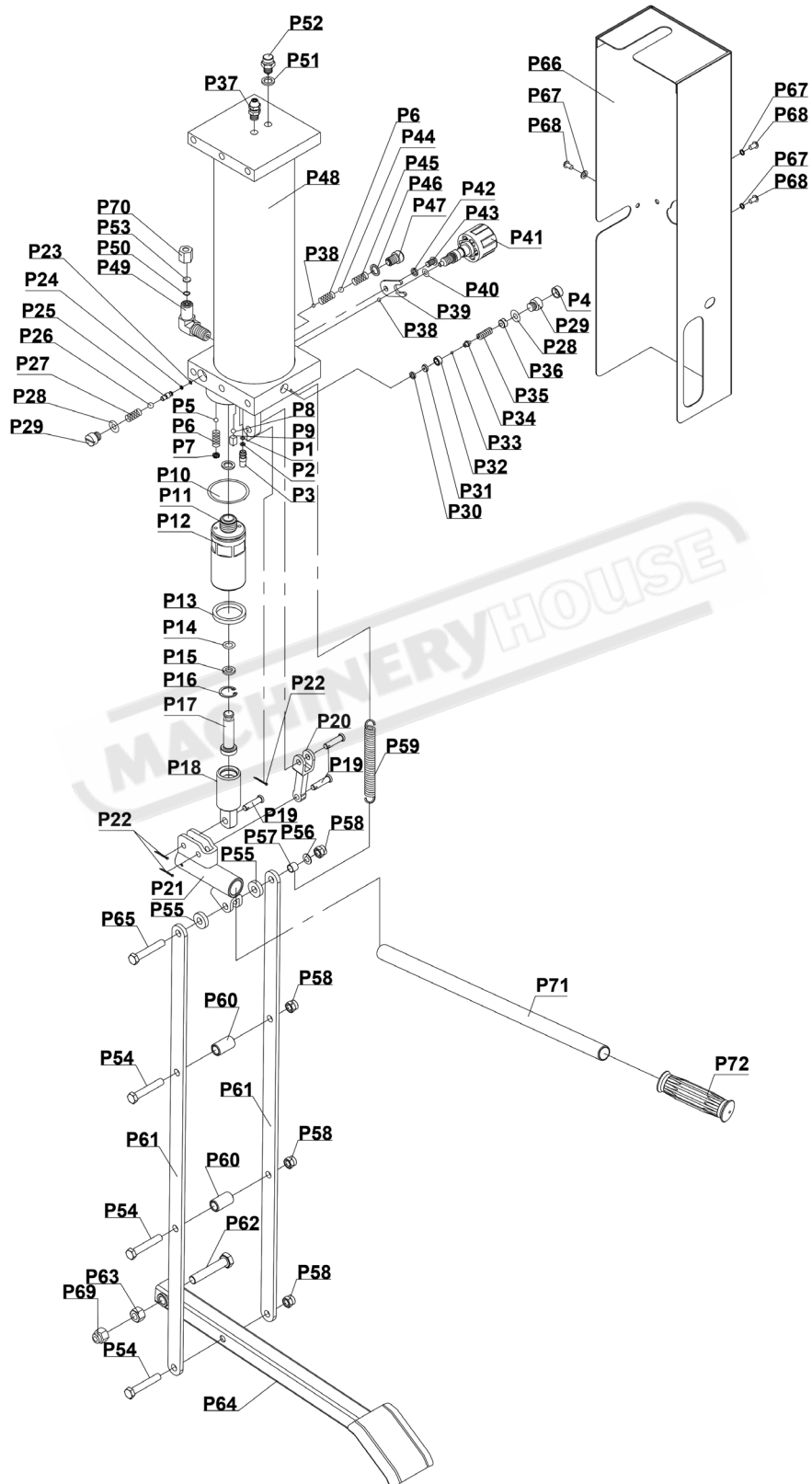
HOW TO ORDER SPARE PARTS

1. Have your machines **model number, serial number & date of manufacture** on hand, these can be found on the specification plate mounted on the machine
2. A scanned copy of your parts list/diagram with required spare part/s identified
3. Go to www.machineryhouse.com.au/contactus and fill out the enquiry form attaching a copy of scanned parts list.

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HPF-50 PUMP SPARE PARTS DIAGRAM

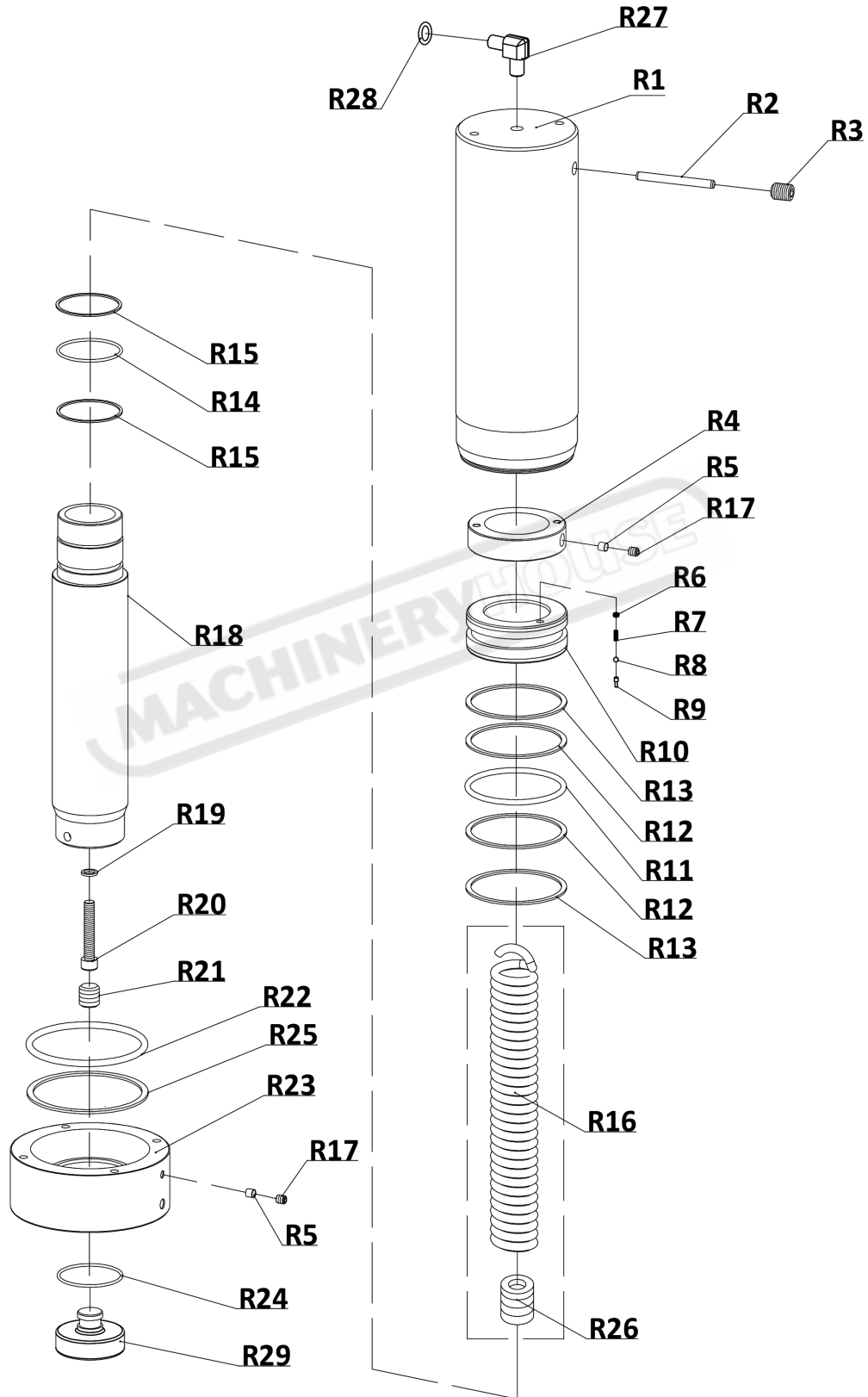


HPF-50 PUMP SPARE PARTS LIST

No.	Description	Qty	No.	Description	Qty
P1	O RING	1	P37	SCREW	1
P2	WASHER	1	P38	STEEL BALL	2
P3	DELIVERY VALVE	1	P39	U LIMIT	1
P4	CAP	1	P40	O RING	1
P5	STEEL BALL	1	P41	RELEASE VALVE	1
P6	SPRING	2	P42	LOCK WASHER	1
P7	SCREW	1	P43	SCREW	1
P8	STEEL BALL	1	P44	STEEL BALL	1
P9	SQUARE STEEL	1	P45	SPRING	1
P10	COPPER	1	P46	COPPER	1
P11	O RING	1	P47	SCREW	1
P12	PUMP CORE SEAT	1	P48	PUMP ASSEMBLY	1
P13	U RING	1	P49	ELBOW PIPE	1
P14	O RING	1	P50	O RING	1
P15	WASHER	1	P51	WASHER	1
P16	RETAINER RING	1	P52	SCREW	1
P17	SMALL PUMP CORE	1	P53	WASHER	1
P18	BIG PUMP CORE	1	P54	BOLT	3
P19	PIN	3	P55	SUPPORT BOARD	2
P20	CONNECTING ROD	1	P56	BUSHING	1
P21	HANDLE BRACKET	1	P57	FLAT WASHER	1
P22	PIN	3	P58	NUT	1
P23	O RING	1	P59	SPRING	4
P24	WASHER	1	P60	CONNECTION TUBE	1
P25	VALVE ROD	1	P61	CONNECTING ROD	2
P26	STEEL BALL	1	P62	BOLT	1
P27	SPRING	1	P63	NUT	1
P28	O RING	2	P64	FOOT PEDAL	1
P29	SCREW	2	P65	BOLT	1
P30	COPPER	1	P66	PROTECTIVE COVER	1
P31	WASHER	1	P67	FLAT WASHER	1
P32	SCREW	1	P68	SCREW	3
P33	VALVE BALL	1	P69	NUT	3
P34	STEEL BALL SEAT	1	P70	NUT	1
P35	SPRING	1	P71	HANDLE TUBE	1
P36	SCREW	1	P72	HANDLE BAR	1

NOTE: SOME INDIVIDUAL PARTS MAY ONLY BE AVAILABLE AS AN ASSEMBLY

HPF-50 RAM SPARE PARTS DIAGRAM

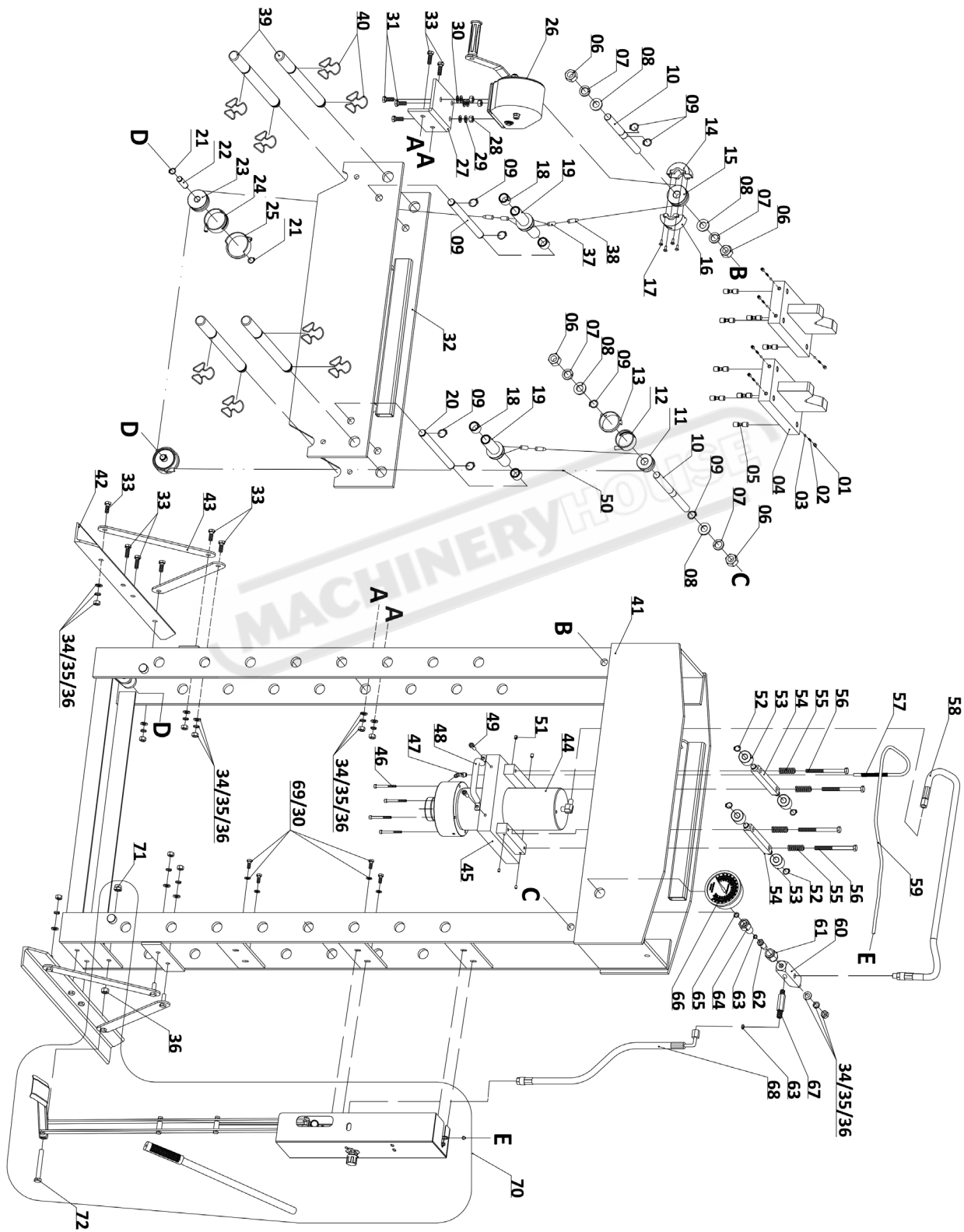


HPF-50 RAM SPARE PARTS LIST

No.	Description	Qty	No.	Description	Qty
R1	RAM ASSEMBLY	1	R16	SPRING	1
R2	PIN	1	R17	SCREW	2
R3	SCREW	1	R18	PISTON ROD	1
R4	NUT	1	R19	COPPER RING	1
R5	NYLON BLOCK	2	R20	SCREW	1
R6	SCREW	1	R21	SCREW	1
R7	SPRING	1	R22	O-RING	1
R8	STEEL BALL	1	R23	NUT	1
R9	LIMIT VALVE CORE	1	R24	O-RING	1
R10	PISTON SADDLE	1	R25	PTFE RING	1
R11	O-RING	1	R26	SLEEVE	1
R12	PTFE WASHER	2	R27	JOINT	1
R13	NYLON WASHER	2	R28	O-RING	1
R14	O-RING	1	R29	SADDLE	1
R15	PTFE RING	2			

NOTE: SOME INDIVIDUAL PARTS MAY ONLY BE AVAILABLE AS AN ASSEMBLY

HPF-50 PRESS SPARE PARTS DIAGRAM



HPF-50 PRESS SPARE PARTS LIST

No.	Description	Qty	No.	Description	Qty
1	SCREW	8	37	JOINT	3
2	SPRING	8	38	WIRE SHEATH	3
3	BALL	8	39	PIN	4
4	BLOCK	2	40	CLIP	8
5	SCREW	8	41	WELDED FRAME	1
6	NUT	4	42	BASE SECTION	2
7	LOCK WASHER	4	43	SUPPORT	4
8	WASHER	4	44	CYLINDER ASSY	1
9	RETAINING RING	8	45	PLATE FOR CYLINDER	1
10	PIN	2	46	SCREW	4
11	ROLLER	1	47	JOINT	1
12	PROTECTIVE COVER 3	1	48	HANDLE ASSY	1
13	PROTECTIVE COVER 4	1	49	SCREW	2
14	PROTECTIVE COVER I	1	50	WIRE ROPE	1
15	ROLLER 3	1	51	SCREW	4
16	PROTECTIVE COVER II	1	52	RETAINING RING	4
17	SCREW	4	53	ROLLER	4
18	DRIVE PIPE	4	54	LOCATION BEAM	2
19	DRIVE PIPE	2	55	SPRING	4
20	CASING COMPONENT	2	56	BOLT	4
21	RETAINING RING	4	57	SPRING	1
22	PIN	2	58	OIL HOSE 1	1
23	ROLLER 2	2	59	PU PIPE	1
24	PROTECTIVE COVER 1	2	60	JOINT 2	1
25	PROTECTIVE COVER 2	2	61	NUT	1
26	HAND WINCH	1	62	SCREW	1
27	FIXED PLATE	1	63	O-RING	2
28	NUT	3	64	JOINT FOR GAUGE	1
29	LOCK WASHER	3	65	NYLON RING	1
30	WASHER	7	66	GAUGE	1
31	BOLT	3	67	JOINT	1
32	BED FRAME	1	68	OIL HOSE	1
33	BOLT	14	69	BOLT	4
34	WASHER	15	70	FOOT PUMP ASSY	1
35	LOCK WASHER	15	71	NUT	1
36	NUT	16	72	BOLT	1

NOTE: SOME INDIVIDUAL PARTS MAY ONLY BE AVAILABLE AS AN ASSEMBLY

HPF-50 PRESS SPARE PARTS LIST

No.	Description	Qty	No.	Description	Qty
61	PU Hose	1	75	Pump Ass'Y	1
62	Screw	4	76	Cover For Pump	1
63	Plate	2	77	Screw	4
64	Nut	4	78	Washer	4
65	Link Rod	2	79	Handle	1
66	Sleeve For Spring	1	80	Washer	4
67	Connection Rod	2	81	Grip For Handle	1
68	Support	4	82	Spring	1
69	Leg	2	83	Fixed Plate	1
70	Nut	1	84	Cable	1
71	Foot Pedal	1	85	Handle	1
72	Screw	3	86	Screw	2
73	Screw	1	87	Bolt	6
74	Screw	1	88	Lock Washer	3

NOTE: SOME INDIVIDUAL PARTS MAY ONLY BE AVAILABLE AS AN ASSEMBLY

WARNING

General Machinery Safety Instructions

Machinery House
requires you to read this entire Manual before using this machine.

- 1. Read the entire Manual before starting machinery.** Machinery may cause serious injury if not correctly used.
- 2. Always use correct hearing protection when operating machinery.** Machinery noise may cause permanent hearing damage.
- 3. Machinery must never be used when tired, or under the influence of drugs or alcohol.** When running machinery you must be alert at all times.
- 4. Wear correct Clothing.** At all times remove all loose clothing, necklaces, rings, jewelry, etc. Long hair must be contained in a hair net. Non-slip protective footwear must be worn.
- 5. Always wear correct respirators around fumes or dust when operating machinery.** Machinery fumes & dust can cause serious respiratory illness. Dust extractors must be used where applicable.
- 6. Always wear correct safety glasses.** When machining you must use the correct eye protection to prevent injuring your eyes.
- 7. Keep work clean and make sure you have good lighting.** Cluttered and dark shadows may cause accidents.
- 8. Personnel must be properly trained or well supervised when operating machinery.** Make sure you have clear and safe understanding of the machine you are operating.
- 9. Keep children and visitors away.** Make sure children and visitors are at a safe distance for you work area.
- 10. Keep your workshop childproof.** Use padlocks, Turn off master power switches and remove start switch keys.
- 11. Never leave machine unattended.** Turn power off and wait till machine has come to a complete stop before leaving the machine unattended.
- 12. Make a safe working environment.** Do not use machine in a damp, wet area, or where flammable or noxious fumes may exist.
- 13. Disconnect main power before service machine.** Make sure power switch is in the off position before re-connecting.
- 14. Use correct amperage extension cords.** Undersized extension cords overheat and lose power. Replace extension cords if they become damaged.
- 15. Keep machine well maintained.** Keep blades sharp and clean for best and safest performance. Follow instructions when lubricating and changing accessories.
- 16. Keep machine well guarded.** Make sure guards on machine are in place and are all working correctly.
- 17. Do not overreach.** Keep proper footing and balance at all times.
- 18. Secure workpiece.** Use clamps or a vice to hold the workpiece where practical. Keeping the workpiece secure will free up your hand to operate the machine and will protect hand from injury.
- 19. Check machine over before operating.** Check machine for damaged parts, loose bolts, Keys and wrenches left on machine and any other conditions that may effect the machines operation. Repair and replace damaged parts.
- 20. Use recommended accessories.** Refer to instruction manual or ask correct service officer when using accessories. The use of improper accessories may cause the risk of injury.
- 21. Do not force machinery.** Work at the speed and capacity at which the machine or accessory was designed.
- 22. Use correct lifting practice.** Always use the correct lifting methods when using machinery. Incorrect lifting methods can cause serious injury.
- 23. Lock mobile bases.** Make sure any mobile bases are locked before using machine.
- 24. Allergic reactions.** Certain metal shavings and cutting fluids may cause an allergic reaction in people and animals, especially when cutting as the fumes can be inhaled. Make sure you know what type of metal and cutting fluid you will be exposed to and how to avoid contamination.
- 25. Call for help.** If at any time you experience difficulties, stop the machine and call you nearest branch service department for help.

WARNING

Hydraulic Press Safety Instructions

Machinery House
requires you to read this entire Manual before using this machine.

- 1. Maintenance.** Check oil levels and fill to correct oil levels if necessary. Apply oil to surface of ram to maintain good lubrication.
- 2. Press Condition.** Press must be maintained for a proper working condition. Never operate a Press that has low oil levels, damaged or worn parts. Scheduled routine maintenance should be performed on a scheduled basis. Check all hoses, pressure head, and support rods for cracks or damage. Replace if necessary.
- 3. V-Block Condition.** Never operate a Press with damaged or badly worn V-blocks. Replace if required.
- 4. Hand Hazard.** Keep hands away from the pressure head and out of support rod holes, under any circumstances, while the machine is in operation mode. Serious injury can occur.
- 5. Gloves & Glasses.** Always wear leather gloves and approved safety glasses when using this machine.
- 6. Work area hazards.** Keep the area around the Press clean from oil, tools, objects & chips. Pay attention to other persons in the area and know what is going on around the area to ensure unintended accidents.
- 7. Overloading Press.** Do not exceed the press capacity indicated on the gauge.
- 8. Warning Labels.** Take note of any warning labels on the machine and do not remove them.
- 9. Material Hazard.** Do not compress springs or other objects that could be ejected from the press. Do not compress objects that could shatter. Serious injury can occur.
- 10. Secure Press.** Make sure you bolt the machine down so it is secure when in operation.
- 11. Use Correct Air Pressure** Exceeding the maximum PSI rating of Press may cause unpredictable operation, injury and damage to machine. If this rating is not stated in manual suggest NOT to exceed 125psi.
(Applies to Pneumatic model only).
- 12. Disconnect Air Pressure** before servicing Press, or leaving unattended.
(Applies to Pneumatic model only).
- 13. Air Hose - Trip Hazard** Hoses can easily become a tripping hazard when laid across the floor in a disorganized fashion.
(Applies to Pneumatic model only).
- 14. Call for help.** If at any time you experience difficulties, stop the machine and call your nearest branch service department for help.

PLANT SAFETY PROGRAM

NEW MACHINERY HAZARD IDENTIFICATION, ASSESSMENT & CONTROL

Hydraulic Press

Developed in Co-operation Between A.W.I.S.A and Australia Chamber of Manufactures
This program is based upon the Safe Work Australia, Code of Practice - Managing Risks of Plant in the Workplace (WHSA 2011 No10)

Item No.	Hazard Identification	Hazard Assessment	Risk Control Strategies (Recommended for Purchase / Buyer / User)
B	CRUSHING	HIGH	Do not exceed maximum capacity. Check equipment for damage prior to use. Wear safety boots. Never put any part of your body between hydraulic ram and material. Always support material properly on hydraulic press. Ensure press is bolted down on level solid ground. Ensure table is as close as possible to ram and support pins are correctly positioned before using. Do not exceed recommended maximum PSI rating. (applies to Pneumatic model only) Use equipment in the correct manner as to avoid parts being ejected out under pressure.
C	CUTTING, STABBING OR PUNCTURING	MEDIUM	Use equipment in the correct manner as to avoid parts being ejected out under pressure.
E	STRIKING	MEDIUM	Use equipment in the correct manner as to avoid parts being ejected out under pressure.
G	HIGH PRESSURE AIR	MEDIUM	Disconnect air supply to press prior to checks or maintenance. Do not exceed recommended maximum PSI rating. (applies to Pneumatic model only)
Plant Safety Program to be read in conjunction with manufactures instructions			



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Authorised and signed by:
Safety officer:


 Manager:

Revised Date: 4th December 2017