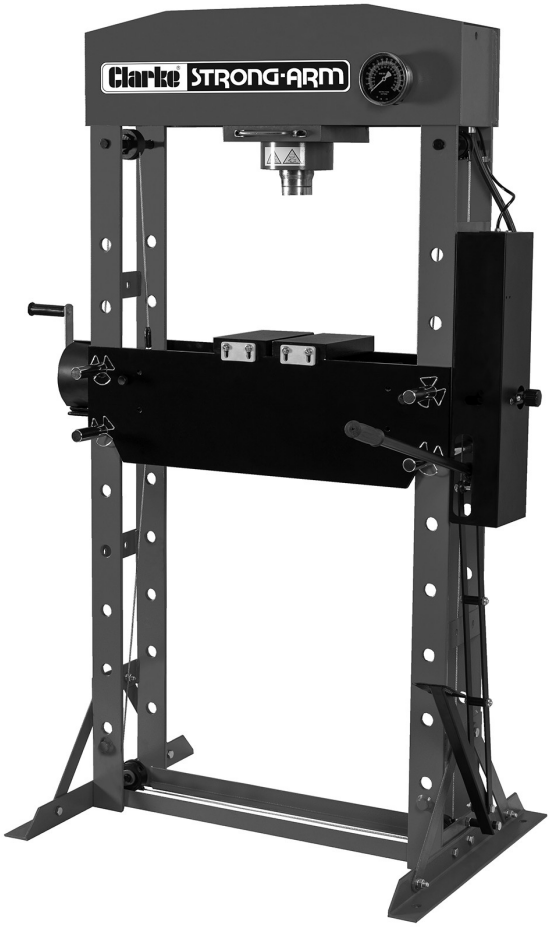
Clarke®

STRONG-ARM



50 TONNE HYDRAULIC PRESS

MODEL NO: CSA50FPC

PART NO: 7615205

OPERATION & MAINTENANCE INSTRUCTIONS

UK CA | CE

ORIGINAL INSTRUCTIONS

DL0726

INTRODUCTION

Thank you for purchasing this CLARKE 50 Tonne Hydraulic Press.

Before attempting to operate the press, it is essential that you read this manual thoroughly and carefully follow all instructions given. In doing so you will ensure the safety of yourself and that of others around you, and you can also look forward to the press giving you long and satisfactory service.

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

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 affect your statutory rights.

SAFETY SYMBOLS

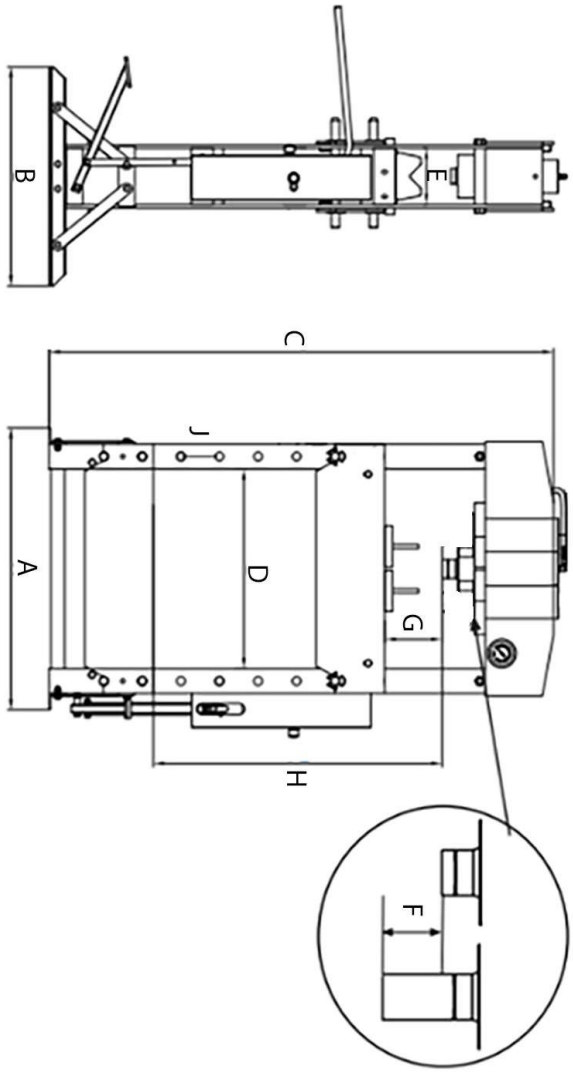
	Hazard: shattered workpiece		Hazard: crushed hands
	Wear Safety Shoes		Wear safety glasses
	Read instruction manual before use		Wear protective gloves

The above safety symbols appear on the product.

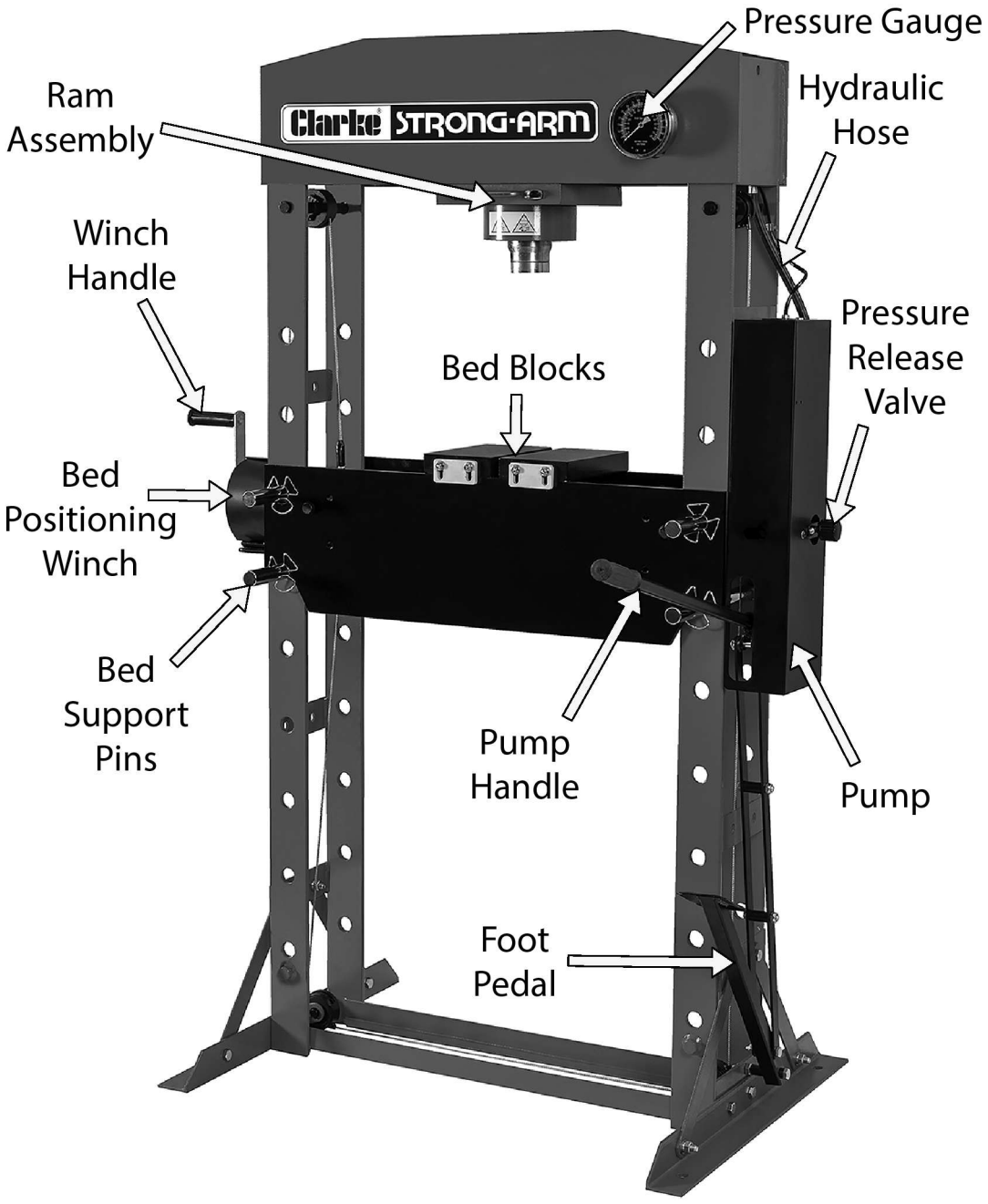
SAFETY PRECAUTIONS

- Due to the weight of the press, lifting equipment and the help of an assistant will be required during installation. Secure the press to a firm level floor using suitable anchor bolts (not supplied).
- Before starting work, check for cracked welds, loose or missing bolts, a damaged screen (if fitted), or any structural damage. **DO NOT** operate if any of these conditions exist. Have repairs made only by your service centre.
- Before work, always ensure that hydraulic hoses and couplings are completely sound.
- **NEVER** tamper with the press components or modify them. The safety valve is calibrated and sealed at the factory; do not attempt to change the setting.
- Use only the recommended hydraulic oil, CLARKE HP 32 Hydraulic Oil, Part No. 3050830
- The components of this press are designed to withstand the rated load. **DO NOT** substitute any other components or exceed the rated load of the press.
- Before applying pressure, ensure the workpiece is firmly secure and stable.
- **ALWAYS** clean up spills of hydraulic oil immediately as this can be dangerous in a workshop environment.
- **DO NOT** let any person who is unfamiliar with hydraulic presses use the press unless they are under direct supervision.
- Keep children and unauthorised personnel away from the work area.
- **ALWAYS** position the (optional) safety screen directly front of the workpiece.
- **ALWAYS** apply the load under the centre of the ram. Offset loads can damage the ram and may cause the work piece to be ejected.
- **ALWAYS** ensure the workpiece is properly supported by the press bed.
- When using accessories such as pressing plates, be certain they are centered below the ram and are in full contact with the bed.
- Parts being pressed may shatter or be ejected from the press. Always use adequate guards, and wear eye protection and protective clothing when using this press.
- **Keep hands and fingers away from parts that may pinch or shift.**
- **NEVER** use extension tubes to increase the length of the pump handle. Excessive effort can cause damage and/or accidents.
- Wear approved impact safety goggles and heavy duty work gloves.
- Failure to heed these warnings may result in damage to the equipment, or serious personal injury.

TECHNICAL SPECIFICATIONS

Rated Load	50 Tonne
Ram Shaft Diameter	68 - 75 mm
Net Weight	243 kg
Ram travel per stroke	1.72 mm
No of strokes to full extension	78
Pressure Gauge type	Oil Filled (Accuracy class 2.5)
Length of Handle	600 mm
Pump Oil Capacity	1200ml (HP 32)
Dimensions	
A - Base Width - 11010 mm	
B - Base Depth - 750 mm	
C - Height to the Top of the Frame - 1835 mm	
D - Operating Width - 725 mm	
E - Frame Width- 205 mm	
F - Top of Bed at Highest Position to Ram - 65 mm	
G - Top of Bed at Lowest Position to Ram - 1040 mm	
H - Ram Travel - 205 mm	
J - Distance Between Holes in the Centre - 130 mm	

OPERATING FEATURES



PREPARATION FOR USE

WARNING: DUE TO THE WEIGHT OF THE PRESS, LIFTING EQUIPMENT OR THE HELP OF AN ASSISTANT WILL BE REQUIRED DURING INSTALLATION.

LOCATING THE PRESS

Using suitable lifting equipment if required, lift the frame assembly upright and manoeuvre it to its intended location in the workshop.

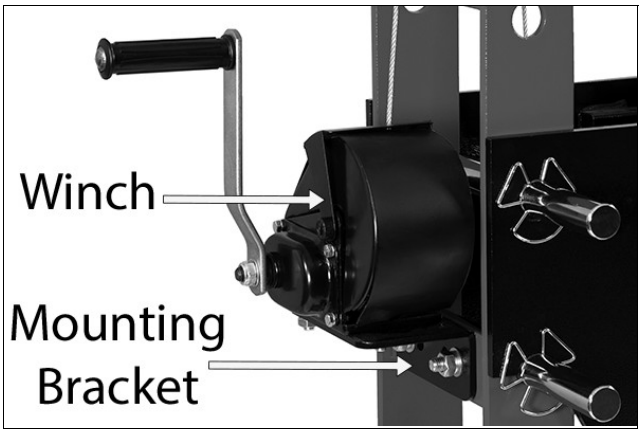
The press must be firmly secured to a firm and level floor using expansion bolts (not supplied). Holes are provided in the feet for this purpose.

Do not locate your press where it will be exposed to the elements as harsh weather conditions will damage the hydraulic parts.

FITTING THE WINCH

During transit, the winch is positioned at 180^{o} to its working position inside the frame and must be correctly mounted.

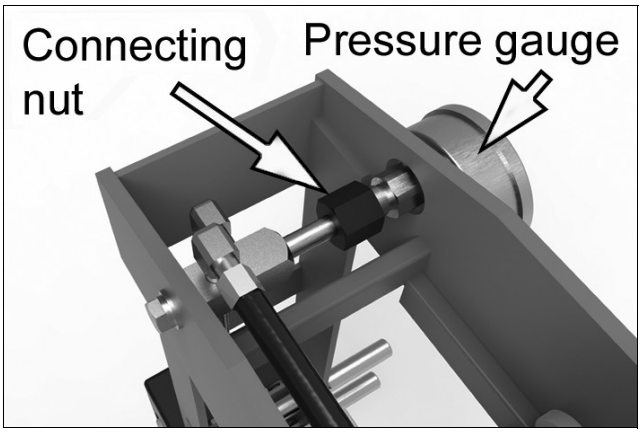
1. Turn the winch and bracket around and re-fit to the frame with the bolts and washers supplied, noting that the handle will be outside the frame for operation.



FITTING THE PRESSURE GAUGE

1. Remove the travel plug and install the pressure gauge.
2. Fit the gauge through the frame and secure with the connecting nut supplied.

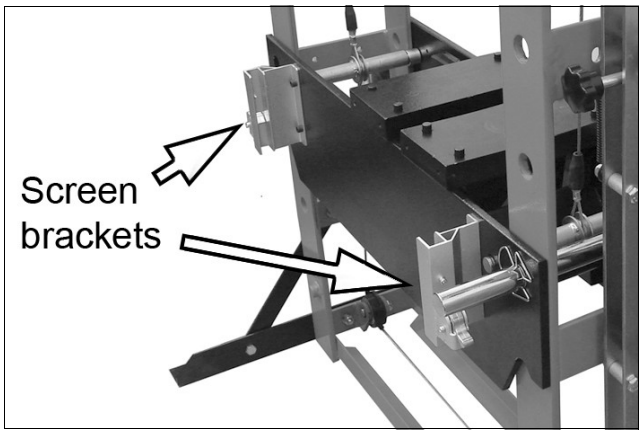
- We recommend sealing threads with PTFE tape where hydraulic oil is to be contained. Take care not to let any oil escape while connecting the hoses.



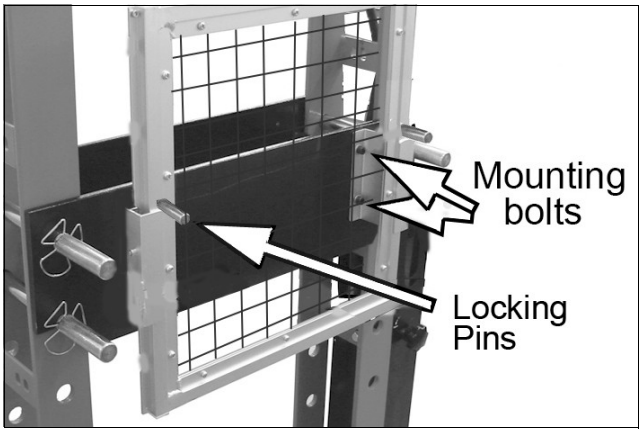
PROTECTIVE SCREEN (OPTIONAL)

A protective screen CPS50T is available from your CLARKE dealer, part no: 7615262.

1. Bolt the protective screen brackets to the pressing bedplate.

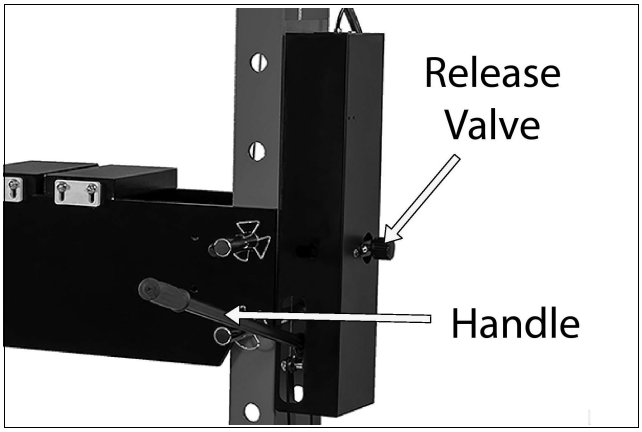


2. Fit the protective screen assembly to the brackets and ensure it can be set in one of the available positions using the latches on each side.



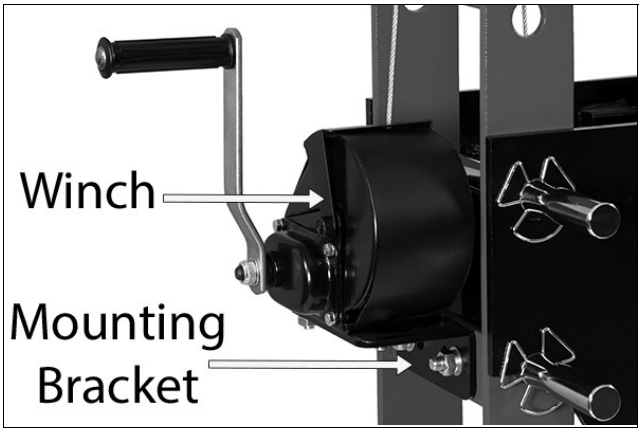
PURGING THE HYDRAULIC SYSTEM

1. Open the release valve by turning anti-clockwise.
2. Pump the handle or foot pedal several full strokes to eliminate any air bubbles from the system.
3. Close the release valve, turning clockwise.

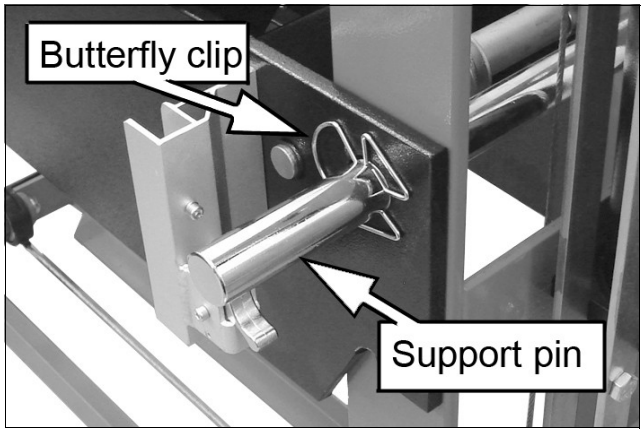


POSITIONING THE PRESSING BED

1. Use the winch to raise the pressing bed into a suitable position.
    - The arrows on the winch indicate the direction of movement.
    - The pressing bed should be as close as possible to the ram when the workpiece is mounted on it.



2. When satisfied that the bed is at the correct height insert the locking pins into their positions and secure with the butterfly clips.

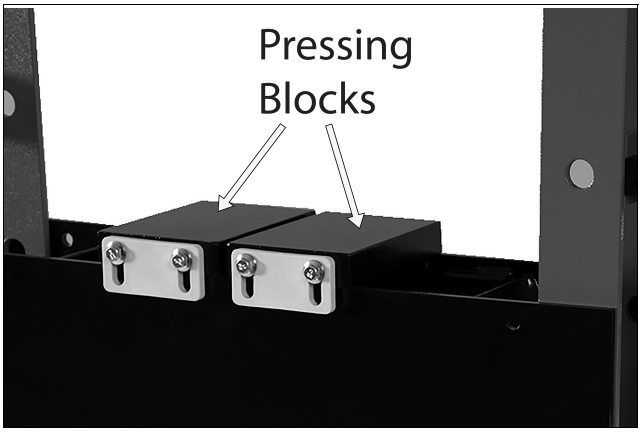


POSITIONING THE PRESSING BLOCKS

The pressing blocks can be placed on the bed with either the flat face or the V-supports facing upwards.

They are prevented from slipping out of position by the yellow retaining plates which can be adjusted with the two bolts, as shown.

Check all parts are secure and correctly aligned before using the press.



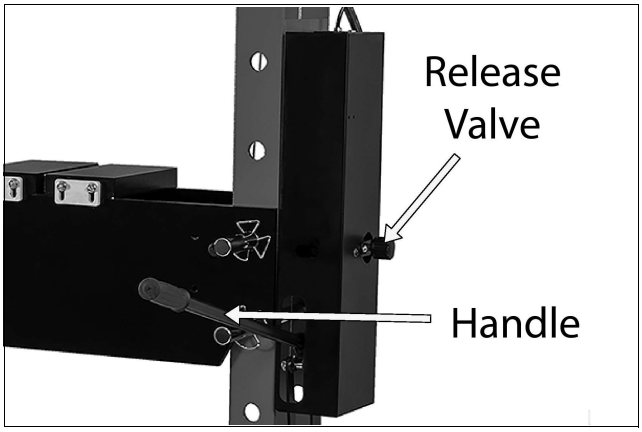
OPERATION

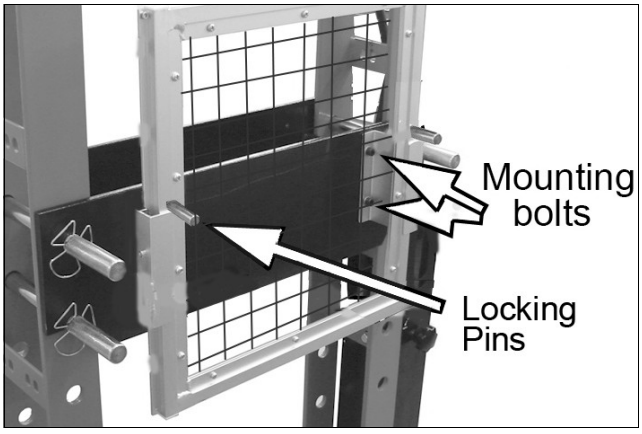
1. Place the workpiece on the bed. It must be completely stable and supported by packing or shims where required. Pressing plates (bed blocks) are supplied, which locate on the bed. Place the workpiece on these to give it stability.

CAUTION: DO NOT POINT LOAD SUCH ACCESSORIES AS THEY ARE NOT DESIGNED TO TAKE THE FULL FORCE OF THE RAM IN ONE SPOT. ENSURE THEY ARE ADEQUATELY SUPPORTED.

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.***

2. Close the release valve by turning clockwise until tightly closed.
3. Pump the handle or foot pedal to bring the ram very lightly into contact with the workpiece.
4. Manoeuvre the workpiece or slide the ram to one side so that the desired point of contact is directly beneath the centre of the ram.
5. When satisfied that the workpiece is correctly aligned and is completely stable in that position, slide the protective screen (if fitted) into position before starting any pressing.
    - The latches will support the screen in a selection of positions.
6. Slowly pump the handle or foot pedal so that the ram begins to exert pressure on the workpiece.





7. Continue to pump the handle and constantly monitor the pressing, ensuring the ram and work remain completely in line with no risk of slipping.
8. Observe the reading on the pressure gauge and take care not to exceed the rated working pressure of the press.
    - The scale from 50 metric tonnes upward is highlighted in red, indicating pressure is being applied above the rated maximum working pressure.

9. When the pressing task is complete, turn the release valve control knob anticlockwise in small increments to release ram pressure and allow removal of the workpiece and lower the protective screen.

MAINTENANCE

ROUTINELY

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 CLARKE parts.

If the press 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 piston withdrawn to protect the surface of the moving parts.

PERIODICALLY

Check the press to make sure all bolts are tight and inspect for cracked welds, bent, loose or missing parts.

Clean any foreign material from the ram carrier. Keep the protective screen (if fitted) clean at all times.

Check the hydraulic connections for leaks. Replace or properly repair any damaged or leaking hydraulic components before using. Note any loss of oil and if oil is seen to become foul, replace using CLARKE hydraulic oil, Part No. 3050830.

If any rust is apparent on the structure it must be removed completely and the paint restored.

DISPOSAL OF UNWANTED MATERIALS

One of the most damaging sources of environmental pollution is oil products. Never throw away used oil with domestic refuse or flush it down a sink or drain. Collect any oil in a leak proof container and take it to your local waste disposal site.

Should hydraulic components become completely unserviceable and require disposal, draw off the oil into an approved container and dispose of the product and the oil according to local regulations.

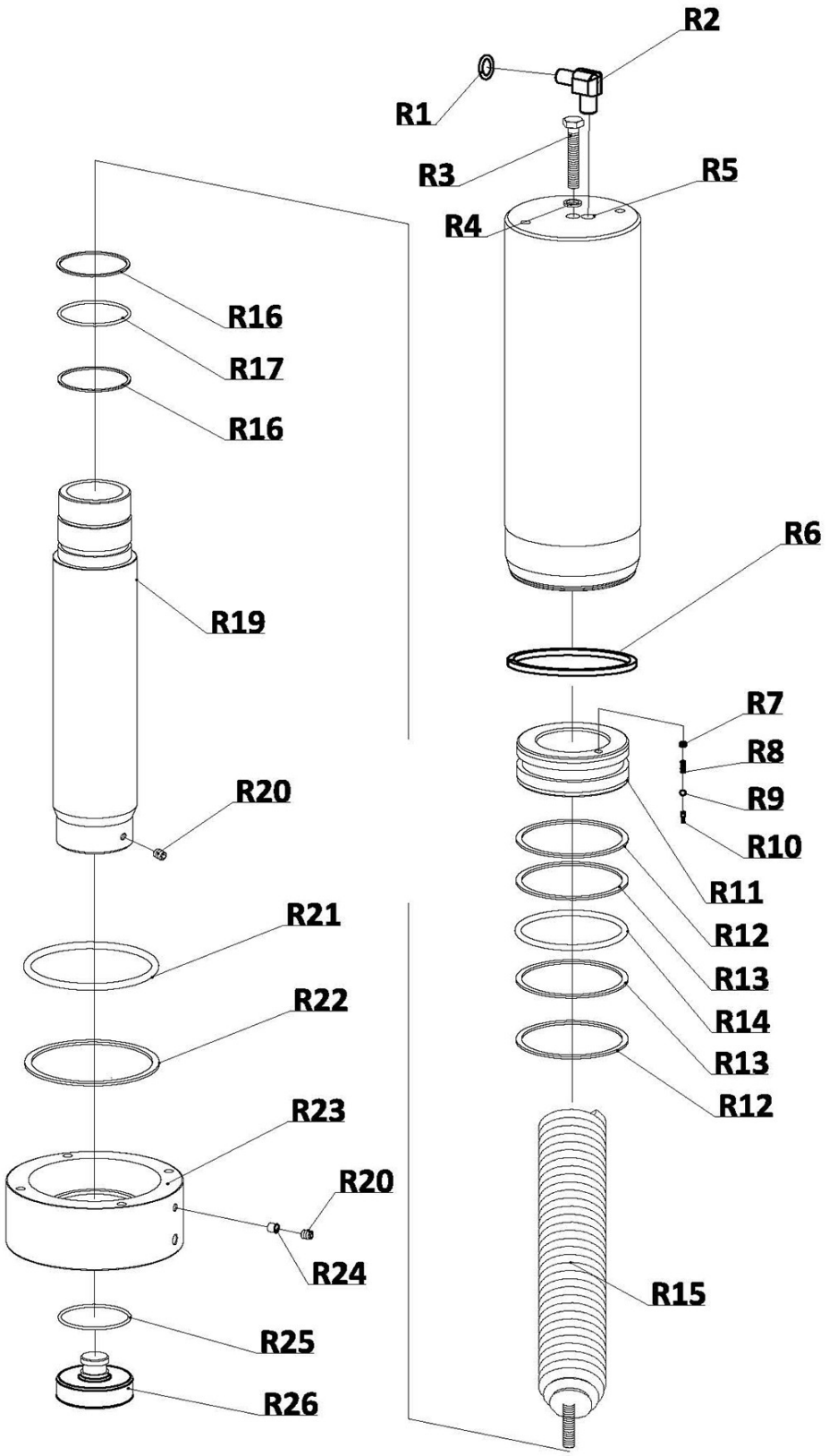
When requesting spare parts, please quote the number on the diagrams/parts lists on pages 12-17.

TROUBLESHOOTING

Problem	Probable Cause	Remedy
Pump will not work.	Dirt on valve seat/worn seals.	Bleed pump unit or have unit overhauled with new seals by your dealer.
Pump will not produce pressure. Pump feels hesitant under load.	Air-lock.	See “Purging the Hydraulic System” on page 8. Open the release valve and pump the handle a couple of full strokes. Close the release valve.
Pump feels hesitant under load.	Pump cup seal could be worn out.	Have the cup seal replaced by your dealer.
Piston will not retract completely.	Air-lock.	Release air by removing the filler plug.

If this does not solve the problem, contact the CLARKE Service department on 020 8988 7400.

RAM PARTS DIAGRAM

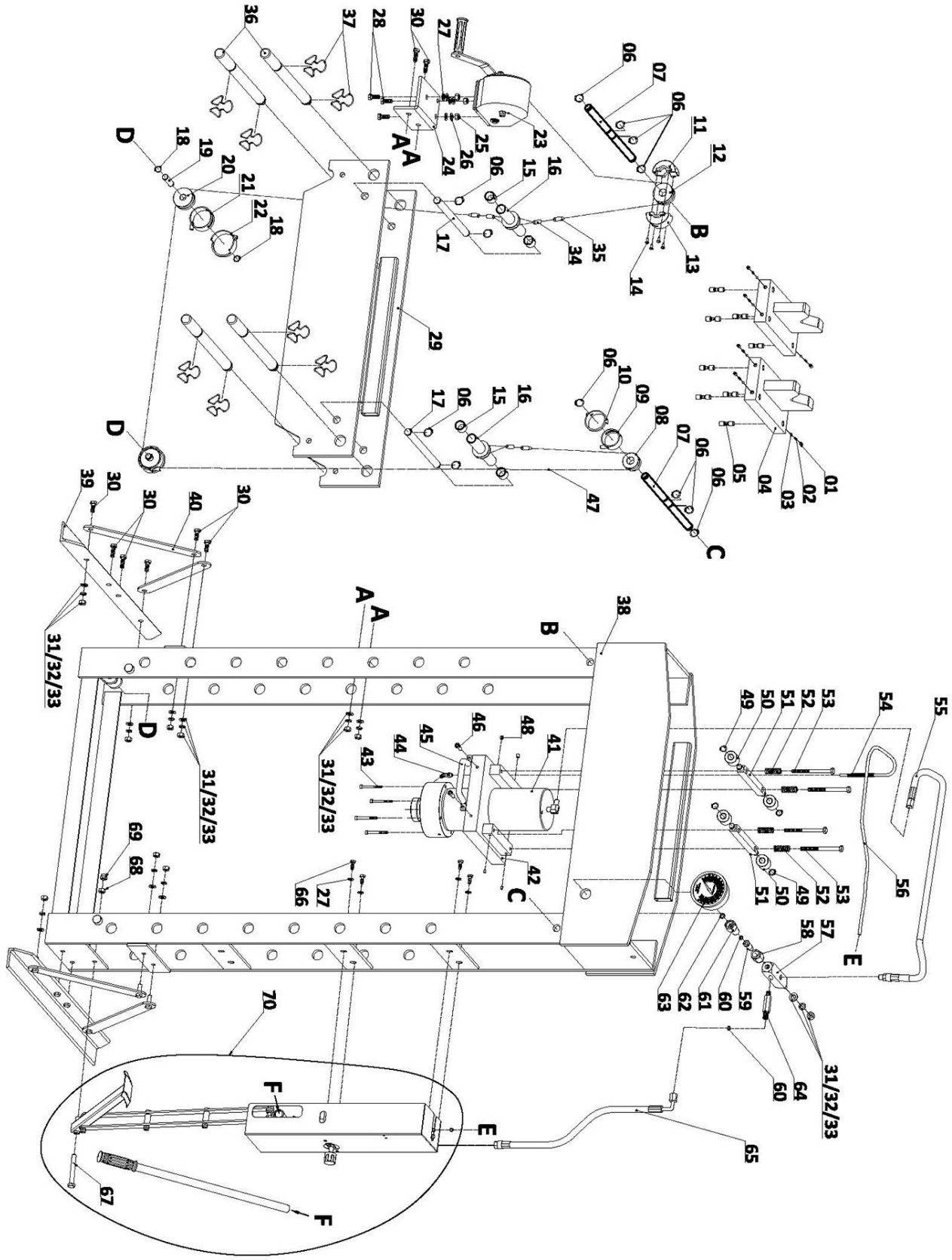


NO	DESCRIPTION
R1	O-Ring
R2	Joint
R3	Screw
R4	Copper Washer
R5	Ram
R6	Retaining Ring
R7	Screw
R8	Spring
R9	Steel Ball

NO	DESCRIPTION
R10	Valve Core
R11	Piston Head
R12	Washer x 2
R13	Washer x 2
R14	O-Ring
R15	Spring
R16	Washer x 2
R17	O-Ring
R18	Piston Rod

NO	DESCRIPTION
R19	Screw x 2
R20	O-Ring
R21	Washer
R22	Nut
R23	Seating Block
R24	O-Ring
R25	Saddle
R26	Bottom Cap

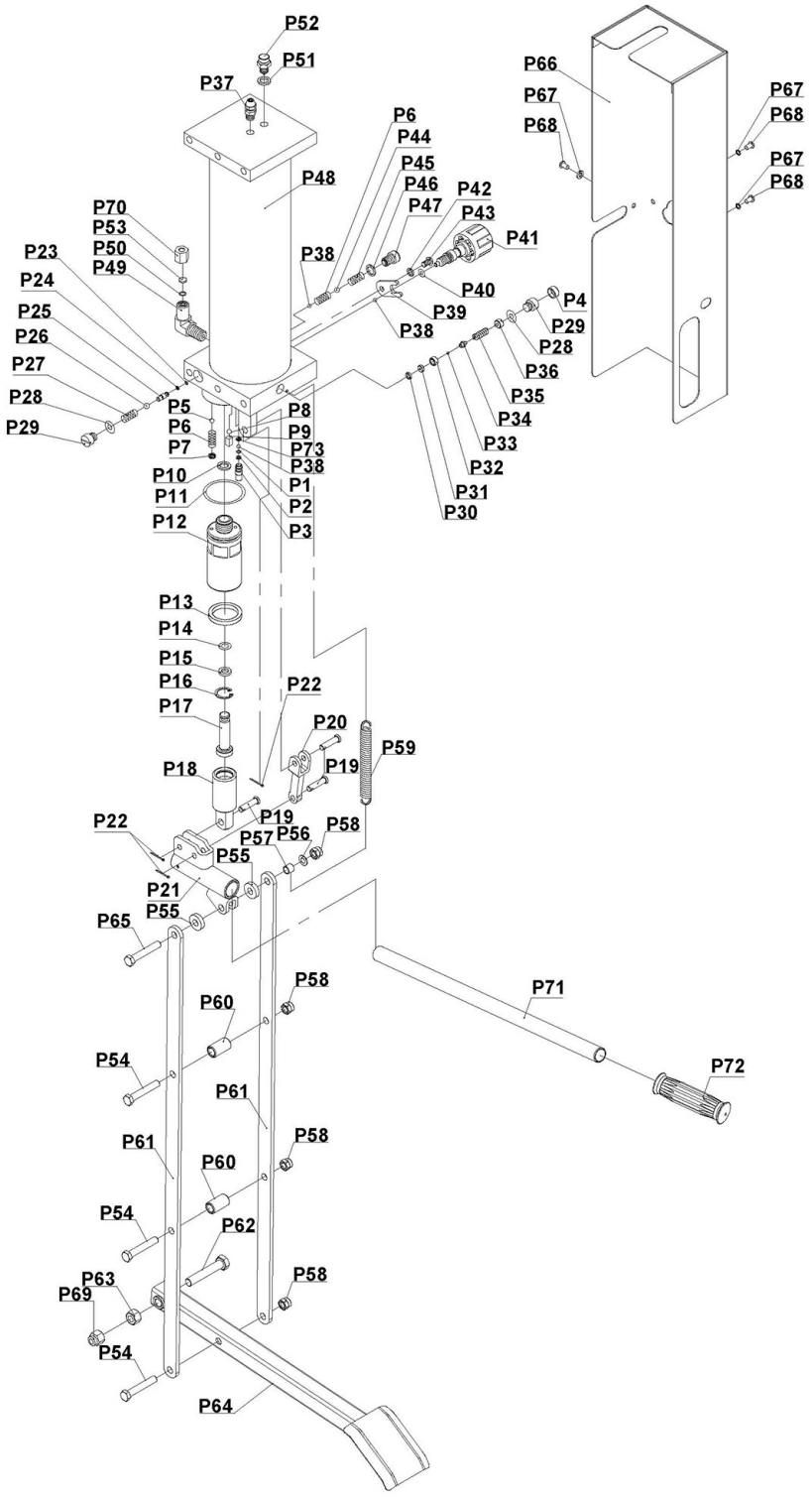
FRAME ASSEMBLY PARTS DIAGRAM



NO	DESCRIPTION
1	Screw x 8
2	Spring x 8
3	Steel Ball x 8
4	Steel Block x 2
5	Limiter Screw x 8
6	Retaining Ring x 12
7	Roller x 2
8	Small Roller
9	Protective Cover
10	Protective Cover
11	Protective Cover
12	Roller
13	Protective Cover
14	Screw x 4
15	Sleeve x 4
16	Sleeve Assembly x 2
17	Bed Frame Lifting Device x 2
18	Retaining Ring x 4
19	Roller Pin x 2
20	Big Roller x 2
21	Protective Cover x 2
22	Protective Cover x 2
23	Hand Winch
24	Hand Winch Plate
25	Nut x 3
26	Lock Washer x 3
27	Washer x 7
28	Bolt x 3
29	Bed Frame
30	Bolt x 14
31	Washer x 15
32	Lock Washer x 15
33	Nut x 15
34	Connector x 3
35	Cable Protection x 3

NO	DESCRIPTION
36	Pin x 4
37	Circlip x 8
38	Welded Frame
39	Leg x 2
40	Support x 4
41	Ram
42	Ram Plate
43	Screw x 4
44	Connector
45	Handle
46	Screw x 2
47	Cable
48	Screw x 4
49	Retaining Ring x 4
50	Roller x 4
51	Ram Location Beam x 2
52	Spring x 4
53	Bolt x 4
54	Spring
55	Oil Hose
56	PU Hose
57	Connector
58	Nut
59	Screw
60	O-Ring x 2
61	Connector
62	Nylon Washer
63	Pressure Gauge
64	Connector
65	Oil Hose
66	Bolt x 4
67	Bolt
68	Nut
69	Nut
70	Pump Assembly

PUMP PARTS DIAGRAM



NO	DESCRIPTION
P1	O-Ring
P2	PTFE Washer
P3	Valve Seat

NO	DESCRIPTION
P38	Steel Ball x 3
P39	U-Limit
P40	O-Ring

NO	DESCRIPTION
P4	Cap
P5	Steel Ball
P6	Spring x 2
P7	Screw
P8	Steel Ball
P9	Limit Steel Block
P10	Copper Ring
P11	O-Ring
P12	Pump Core Seat
P13	U-Ring
P14	O-Ring
P15	Retaining Ring
P16	Retaining Ring
P17	Small Pump Core
P18	Big Pump Core
P19	Pin x 3
P20	Connect Bar
P21	Socket Assembly
P22	Pin x 3
P23	O-Ring
P24	Nylon Washer
P25	Valve Bar
P26	Steel Ball
P27	Spring
P28	O-Ring x 2
P29	Screw x 2
P30	Copper Ring
P31	Washer
P32	Screw
P33	Valve Ball
P34	Steel Ball Seat
P35	Spring
P36	Screw
P37	Joint

NO	DESCRIPTION
P41	Release Valve
P42	Lock Washer
P43	Screw
P44	Steel Ball
P45	Spring
P46	Copper Washer
P47	Screw
P48	Pump
P49	Joint
P50	O-Ring
P51	Nylon Washer
P52	Screw
P53	Nylon Washer
P54	Bolt x 3
P55	Socket Plate x 2
P56	Washer
P57	Sleeve
P58	Nut x 4
P59	Spring
P60	Connecting Tube x 2
P61	Connecting Bar x 2
P62	Bolt
P63	Nut
P64	Foot Pedal
P65	Bolt
P66	Protection Cover
P67	Washer x 3
P68	Screw x 3
P69	Nut
P70	Nut
P71	Handle Tube
P72	Handle Sleeve
P73	Retaining Washer

DECLARATIONS OF CONFORMITY

UK CA

Clarke® INTERNATIONAL

Hemnall Street, Epping, Essex, CM16 4LG

DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following legislation:

2006/42/EC *Machinery Directive*

The following standards have been applied to the product(s):

EN ISO 16092-1:2018, EN ISO 16092-3:2018

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned legislation has been compiled and is available for inspection by the relevant enforcement authorities.

The UKCA mark was first applied in: 2026

Product Description:	Hydraulic Press
Model Number(s):	CSA50FPC
Serial/Batch Number:	Refer to product/packaging label
Date of Issue:	26/03/2026

Signed: .....

J.A Clarke

Director

CSA50FPC UKCA Clarke DOC 032626 Page 1 of 1

DECLARATIONS OF CONFORMITY

CE

Clarke®
INTERNATIONAL

Fitzwilliam Hall, Fitzwilliam Place, Dublin 2

DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following legislation:

2006/42/EC *Machinery Directive*

The following standards have been applied to the product(s):

EN ISO 16092-1:2018, EN ISO 16092-3:2018

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned legislation has been compiled and is available for inspection by the relevant enforcement authorities.

The CE mark was first applied in: 2026

Product Description:	Hydraulic Press
Model Number(s):	CSA50FPC
Serial/Batch Number:	Refer to product/packaging label
Date of Issue:	26/03/2026

Signed:

J.A Clarke

Director

CSA50FPC CE Clarke DOC 032626

Page 1 of 1

A SELECTION FROM THE VAST RANGE OF

Clarke®

QUALITY PRODUCTS













AIR COMPRESSORS
From DIY to industrial, Plus air tools, spray guns and accessories.

GENERATORS
Prime duty or emergency standby for business, home and leisure.

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From DIY to auto/industrial.

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Cranes, body repair kits, transmission jacks for all types of workshop use.

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All sizes for car and commercial use.

PARTS & SERVICE:
0208 988 7400

Parts Enquiries
Parts@clarkeinternational.com

Servicing & Technical Enquiries
Service@clarkeinternational.com

SALES: UK 01992 565333 or Export 00 44 (0)1992 565335

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www.clarkeinternational.com