

Operator Manual & Parts List

MAJOR POST DRIVER



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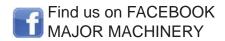
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Disclaimer

While every effort has been made in the production of this manual to ensure that the information contained herein is full and correct, Major assumes no responsibility for errors or omissions.

Major reserves the right to modify the machinery and the technical data contained within the manual without prior notice.

Further to this, Major assumes no liability for any damages which may result from the use of the information contained within this manual.

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EEC certificate of conformity for machines

(conforming to Directive 98/37/EEC)

Company: Major Equipment Ltd.

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Ballyhaunis, Co. Mayo, Ireland.

Tel. +353949630572 Fax +353949630788

declares in sole responsibility that the product:

POST DRIVER

When properly installed, maintained and used only for it's intended purpose, complies with all the essential Health & Safety requirements of:

- THE SUPPLY OF MACHINERY (SAFETY) REGULATIONS 2008.
- **S.I. No. 299 of 2007**, Safety, Health and Welfare at Work (General Application) Regulations 2007 (Ireland).
- Health & Safety at Work, etc. Act 1974 (c.37) (UK).
- EN ISO 14121-1: 2007 'Safety of machinery. Principles for risk assessment'.
- **EN ISO 13857** Safety of machinery: Safety distances to prevent hazard zones being reached by upper and lower limbs.

I certify on behalf of Major Equipment Int. Ltd., that this machine when properly installed and operated correctly, complies with all the essential Health & Safety requirements of all legislation referred to above.

Signature : _____

Managing Director

Date 12/01/2012

Introduction

Thank you

We appreciate having you as a customer and wish you many years of safe and satisfied use of your machine.

Using Your Operator's Manual

This manual is an important part of your machine and should remain with the machine when you buy it. Reading your operator's manual will help you and others avoid personal injury or damage to the machine. Information given in this manual will provide the operator with the safest and most effective use of the machine.

Sections in your operator's manual are placed in a specific order to help you understand all the safety messages so you can operate this machine safely. You can also use this manual to answer any specific operating or servicing questions.

Safety Issues

Your manual contains special messages to bring attention to potential safety concerns, machine damage as well as helpful operating and servicing information. Please read all the information carefully to avoid injury and machine damage.

Product Identification

Machine Serial Numbers

If you need to contact MAJOR or your MAJOR dealer for information on servicing or spare parts, always provide the product model and serial numbers.

We suggest that you record your machine details below:

Model No:

Serial No:

Date of Purchase:

Dealer Name:

Product Description

Dealer Telephone:

The MAJOR Post Driver is an attachment for tractors. The driver (weight box) is raised hydraulically and then released in a free fall. Do not risk injury or death by ignoring good safety practices. All accidents can be avoided.

Product Specifications

Mass	Circa 800 kg
Hammer weight	350 kg
Width	106 cm
Height	300 cm
Length	80 cm
Height Hammer raised	410 cm
Attachment to tractor	3 point linkage
Hydraulic connections	¾" male q/r
Grease points	8 + slider
Post size	Max 11' x 12 "

Rope Specification:

Description: 28mm 3 strand White Nylon

Rope

Minimum Breaking Load: 15.8 Tonne

Specification: To BSEN 696: 1995

Register Your Product and Warranty Online

To register your product through the Internet, simply go to the Support section on www.major-equipment.com. Completing the information, either online or with the product warranty card, will ensure the customer that their product receives all post sales service and important product information.

Safety

Machine Safety Labels

The machine safety labels shown in this section are placed in important areas on your machine to draw attention to potential safety hazards.

On your machine safety labels, the words DANGER, WARNING, and CAUTION are used with this safety-alert symbol. DANGER identifies the most serious hazards.

The operator's manual also explains any potential safety hazards whenever necessary in special safety messages that are identified with the word, CAUTION, and the safety-alert symbol.



The Major Post Driver comes equipped with all safety labels in place. They are intended to help you operate your machine safely.

- 1. Read and follow the safety label directions.
- 2. Keep safety labels clean and legible.
- 3. Replace damaged or missing safety labels.

To prevent Serious Injury or Death

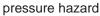
- Avoid unsafe operation or maintenance.
- Do not operate or work on this machine without reading and understanding the operator's manual.
- If manual is lost, contact your nearest dealer for a new manual.



Read the Manual:

Thoroughly read and understand the manual







CRUSH INJURY - Keep hands clear of the strike plate and top of the post when operating the machine.



IF FITTING A HYDRAULIC TOP LINK, ENSURE IT IS FITTED WITH FLOW RESTRICTORS AS TO REDUCE SPEED OF THE MACHINE TIPPING FRONT TO BACK.

THIS IS TO REDUCE RISK OF INJURY

CONSULT YOUR DEALER OR MANUFACTURER FOR MORE INFORMATION

Hydraulic top link hazard



protection

must be

worn during

operation

Crush Injury: keep hands clear of the strike plate and weight box when operating. Keep quarding in place



Post location: ensure that the post os on the strike plate

TOP LINK	TILT	DRIVER (WEIGHT BOX)
FWD BACK	RIGHT LEFT	DOWN

Spool instructions

Operating Safely

- Never put hands or fingers between hammer plate or post
- Never stand directly in front of Post Driver while operating. Stand at 45° to machine in case post is pushed outwards during hammer action.
- The operator should be wearing long sleeve shirt, long legged pants, hearing and eye protection, hard hat, steeltoe capped boots and gloves
- Any other persons who are working nearby, must also wear hearing protection

Users should become thoroughly familiar with the contents of this manual before using, servicing and mounting the implement to the tractor and all other pertinent operations.

Never wear jewellery, loose clothing such as ties, scarves, belts, unbuttoned jackets or dungarees with open zips which could become caught up in moving parts. Always wear approved garments complying with accident prevention provisions such as non-slip shoes, ear muffs, goggles and gauntlets. Wear a jacket with reflecting stickers if the implement is used near public highways.

Consult your retailer, the Labour Health Service or your nearest equivalent authority for information about the current safety provisions and specific regulations to comply with in order to ensure personal safety

Do's

- ALWAYS use genuine MAJOR parts for best results.
- ALWAYS use suitable tools for the job.
- ALWAYS work in good, safe working conditions.
- ALWAYS use safety equipment.

Don'ts

- NEVER leave weight box suspended for periods of time
- NEVER leave an unproped body unattended.
- NEVER work without supervision.



Major Equipment International Limited requires that anyone operating or maintaining the MAJOR Post Driver read and understand all safety, operation and maintenance data contained in this manual.

IMPORTANT

Never operate freefall mechanism without a post under hammer plate or excessive strain to the machine will occur.

The MAJOR Post Driver is an attachment for tractors. The driver (weight box) is raised hydraulically and then released in a free fall. Never operate the post driver if unauthorised persons are in the area. Cease operations if unauthorised people approach and inform them of the potential hazards so they understand why you will not continue they leave the area.

Hazards associated with post driving may be

- Crush injuries.
- Hydraulic oil leaks
- Noise exposure,
- Eye injury or facial injury by splinters,
- Trip/slip/falls depending on ground conditions & housekeeping,
- Overhead electrical contact,
- Underground utility or Electrical contact

Do not risk injury or death by ignoring good safety practices. All accidents can be avoided.

Driving Safely on Public Roads

- Ensure you are in compliance with all local regulations regarding transporting equipment on public roads and highways
- Ensure that the machine is securely attached to the tractor
- Ensure Weight Box is at lowest part of beam when in transport.
- Be aware of any height restrictions on route i.e. overhead cables etc.

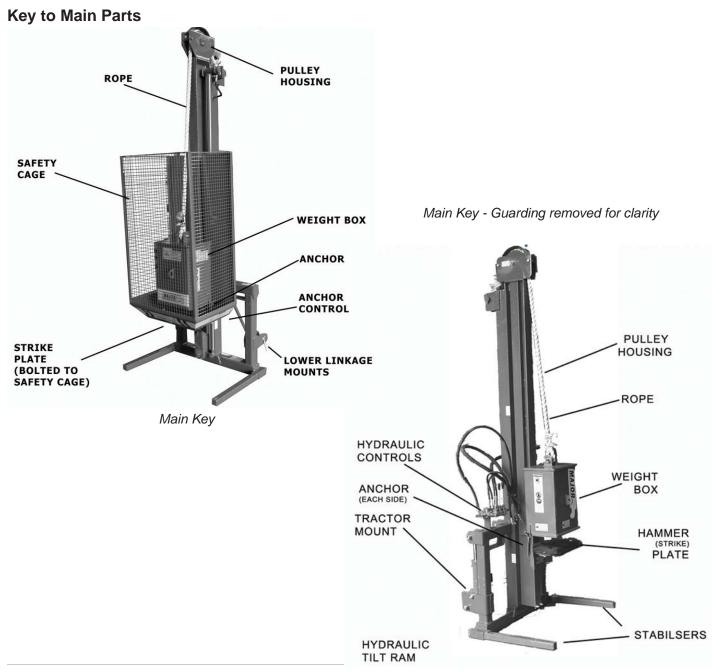
Safe Storage of the Machine

- Make sure the unit is sitting firm and solid and will not tip over
- Brace angle adjustment ram (tilt Ram)
- · Rest weight and post cap on a post driven into the ground when storing for long periods

Operating the Machine

Inspections before Use

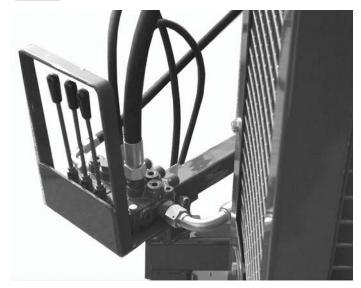
- Grease every 20 hours of operation and pre/post season
- Ensure tractor is of sufficient weight to be stable with Post Driver
- Ensure that the Post Driver is properly attached to the tractors three point linkage
- Check that all hydraulic fittings are tight
- Check rope is in good condition & replace with correct type when wear is detected.
- Check that guarding is present & not damaged.
- Check for damaged, worn, missing parts and replace if necessary
- Check safety labels are in place on beam and hammer and that they are clean and legible. Replace if necessary

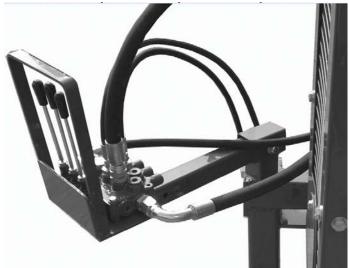


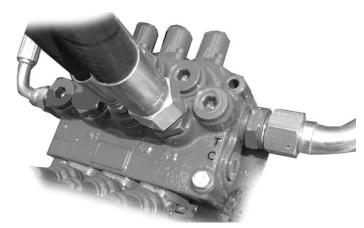
Pre-Use Assembly



Important: The spool bank must be relocated and bolted into "working position" use" position prior to operation.







Closed Centre Hydraulics: NOTE: If tractor hydraulics are closed center type, the spool must be altered to suit by:

- Remove the bung located beside the return hose (marked 'c')
- Remove the ¾" Return hose from the port marked 'T'
- Fit the Return hose in the threaded port marked 'C'
- · Use the Bung to Block the port marked 'C'

Spool Controls



Use the spool controls smoothly. The weight box drops quickly with only a small adjustment on the spool.



Spool Levers:

TOP LINK	TILT	DRIVER (WEIGHT BOX)
FWD	RIGHT	DOWN
Ţ	I	I
BACK	LFFT	UP

Operation with Hydraulic Top Link

If the operator connects a hydraulic top link operator must aware of the quick action of the machine tipping forward.

NOTE: This machine is not fitted with an hydraulic top link. If fitting a hydraulic top link ensure it is fitted with flow restrictors as to reduce the speed of the machine tipping forward. Consult your dealer or manufacturer for more information.

Hitching to the Tractor



You are responsible for safe operation and maintenance of the Post Driver. The most important safety device on the equipment is a safe operator.

NOTE: always operate on level ground when hitching/unhitching the implement. This will prevent dangerous movement. Never allow anyone to stand between the tractor and the machine.

- 1. Adjust both lift arms of the tractor until they are level in relation to each other.
- 2. Hitch the lower linkage arms to the machine and connect the top link and PTO shaft. Ensure that the locking pins are secure.
- 3. With the machine lowered in its operating position, adjust the top link until the main frame is vertical.

Operating the Machine



WARNING: Stand at 45° to hammer weight: not in front, as post may splinter or burst forward.

NOTE: For posts of small cross-section it may be necessary to limit the height the hammer is dropped from to prevent the post breaking up under impact load

- 1. Position the tractor and the Post Driver at location where post is to be driven
- 2. Apply brake securely and put transmission into park/neutral
- 3. Lower Post Driver to the ground with tractor link arms. Ensure stabilisers are in place unless operating near ground obstacle which requires removal of stabiliser. Use extreme care when operating under such conditions and re-attach stabiliser as soon as possible. Side-tilt: On even ground adjust tilt ram such that the Post Driver sits firmly on the ground.
- 4. Be aware of height restrictions e.g. overhanging trees, overhead cables, etc.
- 5. Operate main ram to lift hammer and plate above height of post
- 6. Position the post, if the posts are not square on top of the hammer plate, please make sure that the highest point of the post is centred and up against the beam.
- 7. Lower hammer and plate onto post and unhook chains attached to weight box



Stop driving if post encounters an impassable object, or if it begins to crack, or top begins to mushroom. Consider a pilot hole if ground conditions create the post driving conditions mentioned.

- 8. Lift hammer a short distance, then drop by pushing lever to max lower position. Repeat short strokes to start post. Once the post has started, the hammer should be raised no more than two feet and dropped
- 9. Repeat until post is at required height

Finishing and Moving Away

- 1. Hook anchors onto hammer and lift strike plate off driver (weight box) using hydraulic control.
- 2. Lift the Post Driver off ground with tractor link arms and move away from post such that the hammer can be lowered before moving to the next location.

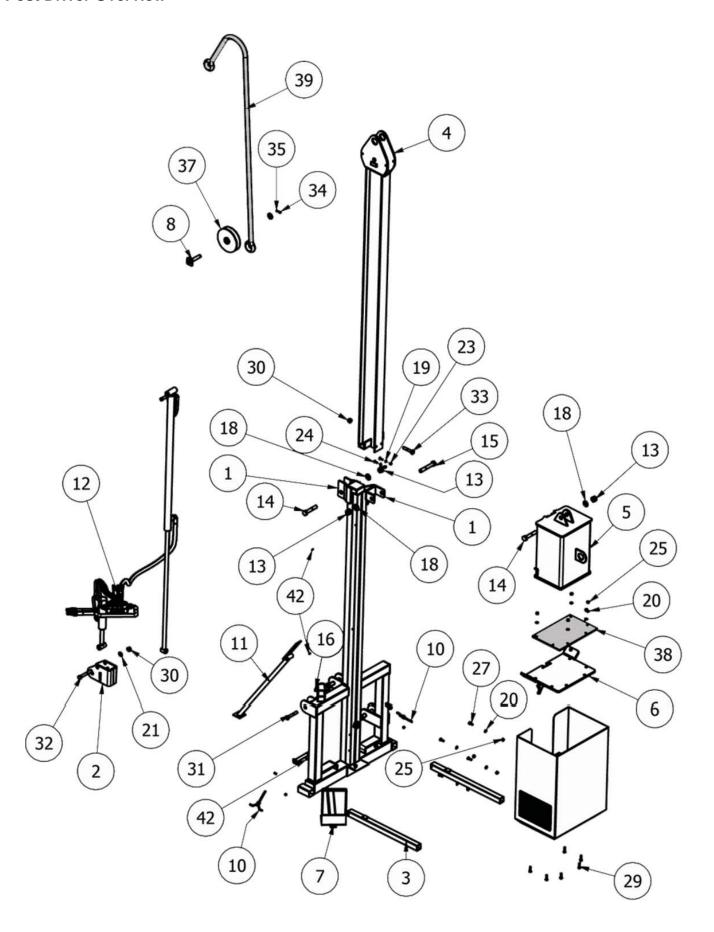


Note:

The hammer weighs 350 kg and must be kept near the bottom of the beam at all times while the tractor is in motion.

Spare Parts

Post Driver Overview

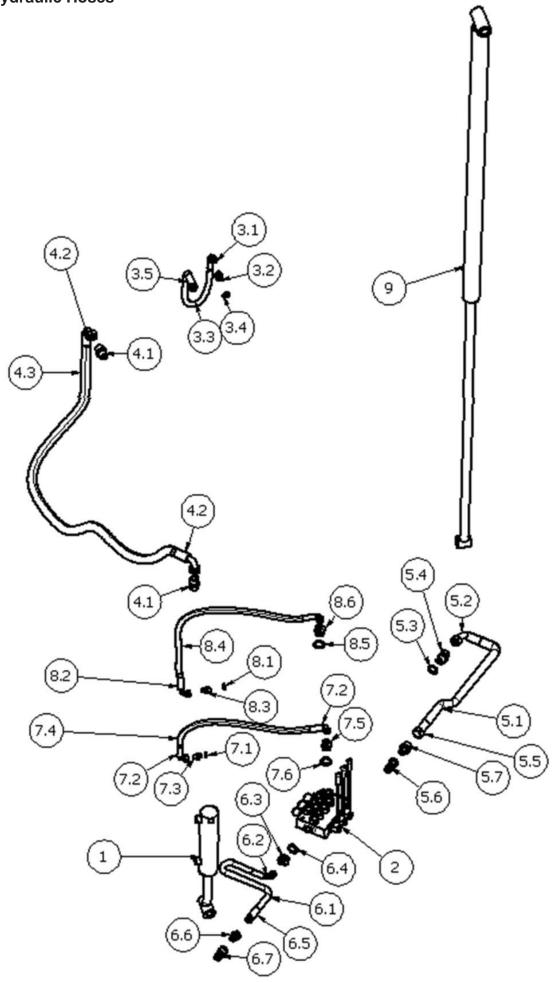


Post Driver Parts List

Item	Part No	Description
1	PD-0001	Main Welded Asm PD
2	PD-0017	Sliding Lower Linkage
3	PD-0024	STAND LEGS
4	PD-0026	MASTASM
5	PD-0028	HAMMER ASM
6	PD-0042	POST BACKING PLATE ASM
7	PD-0053	SPOOL CONTROL BRACKET
8	PD-0061	TOP PULLEY PIN ASM
9	PD-0073	HAMMER GUARD
10	PD-0084	HAMMER TRANS PIN
11	PD-0089	SAFETY STAND LEG
12	PD-HYD-ASM	FULL HYDRAULIC ASM PD
13	1F	1" FINE NYLOC NUT
14	1x5FBZP	1"x5" FINE BOLT
15	1x6FBZP	1"x6" FINE BOLT
16	272	SHAFT LOCK PIN DIA 11
17	54779	EYE NUT M8 COARSE
18	FW1	DIA 1" FLAT WASHER
19	FWM10	M10 FLAT WASHER
20	FWM12	M12 FLAT WASHER
21	FWM20	M20 FLAT WASHER
22	FWM8	M8 FLAT WASHER

14	Don't No.	Description
item	Part No	Description
23	M10	M10 NYLOC NUT
24	M10x25SZP	M10x25 SET BOLT
25	M12	M12 NYLOC NUT
26	M12HEX	M12 PLAIN NUT
27	M12x30SZP	M12x30 SET BOLT
28	M12x35BZP	M12x35 BOLT
29	M12x40BZP	M12x40 BOLT
30	M20	M20 NYLOC NUT
31	M20x110BZP	M20x110 BOLT
32	M20x130BZP	M20x130 BOLT
33	M20x90BZP	M20x90 BOLT
34	M8	M8 NYLOC NUT
35	M8x40BZP	M8x40 BOLT
36	M8x60BZP	M8x60 BOLT
37	PD-0058	Pulley Post Driver
38	PD-0062	RUBBER BUFFER (HAMMER)
39	PD-ROPE	HAMMER ROPE
40	S37	LINCH PIN DIA 6
41	S80	CAT 2 PIN DIA 25.4x142mm
42	S849	GREASE NIPPLE M6 STR
43	12T-BBS	BLADE BACK SPACER

Post Driver Hydraulic Hoses



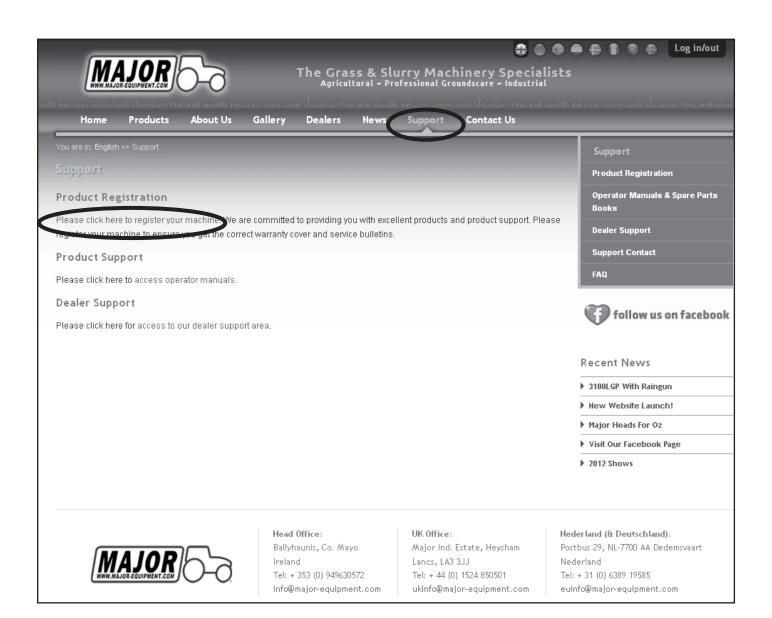
Post Driver Hydraulic Hoses Parts List

Item	Part No	Description
2	ML-3-A1	3 bank mono-bloc da/da/sa
3	PD-0082	3/8" Breather Pipe Asm
3.1	CRP3890	3/8" CRIMP (90 Deg)
3.2	EMM38	3/8" M/M CONNECTOR
3.3	PD-0081	3/8" x250mm Hyd Hose
3.4	EDOW38	3/8" DOWTY WASHER
3.5	CRP3800	3/8" CRIMP (STRAIGHT)
4	PD-HYD	3/4" Ram Feed Hose ASM
4.1	EMM34	3/4" M/M CONNECTOR
4.2	CRP3490	3/4" CRIMP (90 Deg)
4.3	PD-HYD-001	3/4" x 1200mm PIPE
5	PD-HYD-003	3/4" HYD SEND HOSE
5.1	PD-HYD-002	3/4" x 1600mm HYD HOSE
5.2	CRP3490	3/4" CRIMP (90 Deg)
5.3	EDOW34	3/4" DOWTY WASHER
5.4	EMM34	3/4" M/M CONNECTOR
5.5	CRP3400	3/4" CRIMP (STRAIGHT)
5.6	QRM12	1/2" QUICK RELEASE MALE
5.7	EMM1234	1/2-3/4" M/M CONNECTOR
6	PD-HYD-005	3/8" RETURN HYD HOSE
6.1	PD-HYD-004	3/8" x 1600mm HOSE
6.2	CRP3890	3/8" CRIMP (90 Deg)

Item	Part No	Description
6.3	EMM3438	3/4"-3/8 M/M CONNECTOR
6.4	EDOW34	3/4" DOWTY WASHER
6.5	CRP3800	3/8" CRIMP (STRAIGHT)
6.6	EMM3812	1/2-3/8" M/M CONNECTOR
6.7	QRM12	1/2" QUICK RELEASE MALE
7	PD-HYD-01	3x8" x HYD HOSING ASM
7.1	EDOW14	1/4" DOWTY WASHER
7.2	CRP1490	1/4" CRIMP (90 Deg)
7.3	EMM14	1/4" M/M CONNECTOR
7.4	PD-0070	3/8" x 850mm HOSE
7.5	EMM3414	3/4-1/4" M/M CONNECTOR
7.6	EDOW34	3/4" DOWTY WASHER
8	PD-HYD-02	3/8" HYD HOSE ASM
8.1	EDOW14	1/4" DOWTY WASHER
8.2	CRP1490	1/4" CRIMP (90 Deg)
8.3	EMM14	1/4" M/M CONNECTOR
8.4	PD-0069	3/8" x 850mm HOSE
8.5	EDOW34	3/4" DOWTY WASHER
8.6	EMM3414	3/4-1/4" M/M CONNECTOR
9	PD-MAST-RAM- ASM	PD-MAST-RAM ASM

Warranty: This machine is guaranteed for 12 months. No warranty is given where the machine is being used as a hire machine. Warranty is against faulty workmanship or parts, with the exception of components not of MAJOR'S manufacture or design, i.e. hydraulic components, universally jointed shafts, chains and tyres, etc., which are subject to the original manufacturers conditions. To register your machine for warranty, please go to the support section of our website www.major-equipment.com and enter your

details.





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