



OPERATION MANUAL

FLOOR SAW MFS 14



WARNING

To reduce the risk of injury, all operators and maintenance personnel must read and understand these instructions before operating, changing accessories, or performing maintenance on Masalta power equipment. All possible situations cannot be covered in these instructions. Care must be exercised by everyone using, Maintaining or working near this equipment.

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SAFETY INFORMATION

1.1 Safety Precautions

Before using this equipment, study the entire owner's manual to become familiar with its operation. Do not allow untrained or unauthorized personnel, especially children, to operate this equipment. Use only factory authorized parts for service.

This manual contains DANGER, WARNING, CAUTION callouts which must be followed to reduce the possibility of personal injury, damage to the equipment, or improper service.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.



WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

SAFETY INFORMATION

1.2 Operating Safety

Failure to follow instructions in this manual may lead to serious injury or even death! This equipment is to be operated by trained and qualified personnel only! This equipment is for industrial use only.

The following safety guidelines should always be used when operating the concrete saw:

- **DO NOT** operate or service this equipment before reading the entire manual. Always read, understand, and follow procedures in operator's Manual before attempting to operate equipment.
- **ALWAYS** be sure to operator is familiar with proper safety precautions and operating techniques before using the saw. This equipment should not be operated by persons under 18 years of age.
- **NEVER** operate this equipment without proper protective clothing, shatterproof glasses, steel-toed boots and other protective devices required by the job.
- **NEVER** operate this equipment when not feeling well due to fatigue, illness or under the influence of drugs or alcohol.
- **NEVER** use accessories or attachments, which are not recommended by MASALTA for this equipment. Damage to the equipment and/or injury to user may result.
- The manufacturer does not assume responsibility for any accident due to equipment modifications.
- Whenever necessary, replace nameplate, operation and safety decals when they become difficult to read.
- **ALWAYS** check the machine for loosened threads or bolts before starting.
- **NEVER** touch the hot exhaust manifold, muffler or cylinder. Allow these parts to cool before servicing engine or saw.
- **High Temperatures** – Allow the engine to cool before adding fuel or performing service and maintenance functions. Contact with hot components can cause serious burns.
- **NEVER** operate the saw in any enclosed or narrow area where free flow of the air is restricted. There is a risk of carbon monoxide poisoning. It could cause serious damage to the saw or engine and may cause injury to people.
- **ALWAYS** use extreme caution when working with flammable liquids. When refueling, stop the engine and allow it to cool. Do not smoke around or near the machine.
- **NEVER** operate the saw in an explosive atmosphere or near combustible materials. Fire and/or explosions may result from errant sparks from the equipment.
- Stop the engine when leaving the saw unattended. Block the unit when leaving or when using on a slope.
- Maintain this equipment in a safe operating condition at all times. Never use fuel as a cleaning agent.
- **ALWAYS** store equipment properly when it is not being used. Equipment should be stored in a clean, dry location out of the reach of children.

SAFETY INFORMATION

1.3 Blade Safety

- Use appropriate steel centered diamond blades manufactured for use on concrete saws.
- ALWAYS inspect diamond blades before each use. The blade should exhibit no cracks, dings, or flaws in the steel centered core and/or rim. Center (arbor) hole must be undamaged and true. Examine blade flanges for damage, excessive wear and cleanliness before mounting blade. Blade should fit snugly on the shaft and against the inside/outside blade flanges.
- Ensure that the blade is marked with an operating speed greater than the blade shaft speed of the saw.
- Only cut the material that is specified by the diamond blade. Read the specifications of the diamond blade to ensure the proper tool has been matched to the material being cut.
- ALWAYS keep blade guards in place. Exposure of the diamond blade must not exceed 180 degrees.
- Ensure that the diamond blade does not come into contact with ground or surface during transportation. **DO NOT** drop the diamond blade on ground or surface.
- The engine governor is designed to permit maximum engine speed in a no-load condition. Speeds that exceed this limit may cause the diamond blade to exceed the maximum safe allowable speed.
- Ensure that the blade is mounted for proper operating direction.

1.4 Transportation Safety

- Use the lifting bail and appropriate lifting equipment to ensure the safe movement of the saw.
- **DO NOT** use the handle bars and/or front pointer as lifting points.
- **NEVER** tow the saw behind a vehicle.
- Ensure that both pointer bars are positioned appropriately to minimize their exposure during transportation.
- Safeguard against extreme saw attitudes relative to level. Engines tipped to extreme angles may cause oil to gravitate into the cylinder head making the engine difficult to start.
- **NEVER** transport the saw with the blade mounted.





1.5 Service Safety

- **NEVER** lubricate components or attempt service on a running machine.
- **ALWAYS** allow the machine a proper amount of time to cool before servicing.
- Keep the machinery in running condition.
- Fix damage to the machine immediately and always replace broken parts.
- Dispose of hazardous waste properly. Examples of potentially hazardous waste are used motor oil, fuel and fuel filters.
- **DO NOT** use food or plastic containers to dispose of hazardous waste.






SAFETY INFORMATON

1.6 Safety Labels

MASALTA machines use international pictorial labels where needed. These labels are described below:

Label	Meaning
	<p>DANGER! Engines emit carbon monoxide; operate only in well-ventilated area. Read the Operation Manual for machine information. No sparks, flames, or burning objects near the machine. Shut off the engine before refueling. Use only clean, filtered unleaded gasoline.</p>
	<p>WARNING! Read and understand the supplied Operation Manual before operating the machine. Failure to do so increase the risk of injury to yourself or others.</p>
	<p>WARNING! Always wear hearing and eye protection when operating the machine.</p>
	<p>CAUTION! Lifting point.</p>

SAFETY INFORMATION

Label	Meaning
 <p>A rectangular warning label with a black border. On the left, there are four lines of text: '▲ WARNING', '▲ WARNUNG', '▲ ADVERTENCIA', and '▲ AVERTISSEMENT'. On the right, there is a pictogram showing a hand touching a hot surface with a red flame-like effect and a red arrow pointing to the right. The number '12345' is printed at the bottom right.</p>	<p>WARNING! Hot surface!</p>
 <p>A rectangular warning label with a black border. At the top, it says '▲ WARNING'. Below that is a pictogram of a hand being caught in a rotating wheel. At the bottom, there are three lines of text: '▲ WARNUNG', '▲ ADVERTENCIA', and '▲ AVERTISSEMENT'. The number '12345' is printed at the bottom right.</p>	<p>WARNING!</p>
 <p>A rectangular warning label with a black border. It features two circular pictograms. The left one shows a hand being cut by a circular blade. The right one shows a foot being cut by a circular blade. In the center, there are four lines of text: '▲ WARNING', '▲ WARNUNG', '▲ ADVERTENCIA', and '▲ AVERTISSEMENT'. The number '12345' is printed at the bottom right.</p>	<p>WARNING! Be care of your hand and foot when cutting.</p>
 <p>A rectangular warning label with a black border. On the left, there is a pictogram of a heavy object falling from a height. On the right, there are four lines of text: '▲ WARNING', '▲ WARNUNG', '▲ ADVERTENCIA', and '▲ AVERTISSEMENT'. The number '12345' is printed at the bottom right.</p>	<p>WARNING!</p>
 <p>A black nameplate for a 'FLOOR SAW'. It includes a CE mark in the top right corner. The text on the plate is as follows: Model: MFS14 kW: [] hp: [] kg: [] It: [] Manuf. Yr: 20 [] Serial No.: QS14 At the bottom, there is a logo for 'PRALTA' and the text: 'Masalta Engineering Co., Limited', 'Ward Road, Bache Industrial Estate, Wahi, Chiba', and 'www.masalta.com.cn'.</p>	<p>A nameplate listing the model number and serial number is attached to each unit. Please record the information found on this plate so it will be available if the nameplate is lost or damaged. When requesting service information, the serial number should be specified of the unit.</p>

OPERATION

2. OPERATION

2.1 Controls & Components



Ref.	Description	Ref.	Description
1	Refueling	6	Trolley wheel
2	Handle for Blade high Adjustment	7	Splash Guard
3	Throttle Control	8	Blade Guard
4	Water Tank Filling	9	Diamond Blade
5	Handle for Operating	10	Pointer Wheel

OPERATION

2.2 Application

Floor saw has been specifically designed as the ideal machine for the professional contractor who is engaged in concrete and asphalt flat cutting. It is the most common type of diamond blade cutting. It is possible to cut both concrete (green or cured, with or without rebar) or asphalt with a floor saw. Our saw utilized for jobs requiring precision cutting including floors, pavements, walkways, ramps and other flat sawing applications. This type of cutting is described as “flat” because the pavement is cut somewhere close to a horizontal plane.

2.3 Operating Principle

The following instructions were compiled to provide you information on how to obtain long and trouble free use of the unit. Periodic maintenance of this unit is essential. Read the manual in its entirety and follow the instructions carefully. Failure to do so may injure yourself or a bystander.

2.4 Assembling the Blade

1. Water hose coupler – Disconnect the water hose coupler.
2. Inner Flange (Collar) – This flange is fixed upon the blade shaft. The inside surface of the flange must be free of debris and permit a tight closure on the surface of the blade.
3. Diamond Blade – Ensure that the proper diamond blade has been selected for the job. Pay close attention to the directional arrows on the blade. The blade’s operating directional arrows must point in a “down – cutting” direction to perform correctly. When placing the blade onto the blade shaft, ensure the arbor hole of the blade matches the diameter of the shaft.
4. Outside Blade Flange (Collar) – Ensure that the outside blade flange is placed flush against the diamond blade. The inside surface of the flange must be free of debris and permit a tight closure on the surface of the blade core.
5. Blade Hex Nut – Unscrew the blade shaft nut, DO NOT overtighten the nut when finalizing the assembly.
6. Blade Guard – Pull the cover on, tighten the screw beside the blade guard cover

2.5 To Start

1. Turn the throttle control level to the middle position.
2. Set the engine ON/OFF switch to the “ON” position.
3. If it is cold start, turn the choke lever to close position.
4. Grip the recoil starter handle and pull it until you feel slight resistance. Then pull sharply and quickly. Return the recoil starter handle to the starter case before releasing.
5. Grip the recoil starter handle and pull it a little to feel a slight resistance. Then pull it powerfully from there. To release the handle do not release it at the position where it has been pulled to, but release it after returning closely to the starter case.

OPERATION

6. If the engine has started, while listening to explosion sounds, return the choke lever slowly to full-open position. Be sure to perform a warm-up run for the period 3 to 5 minutes at low speed, while paying careful attention to gasoline leakage or abnormal sound.
7. If it is difficult to start the engine by repeatedly pulling the starter rope, pull off the spark plug and check the sparking performance. If the plug is wet due to excessive fuel intake or soiled, replace the coil or clean sufficiently to its internals. With the ignition plug removed, pull the recoil starter handle 2-3 times to discharge excessive blended gas.

2.6 Cutting

1. Before the saw is placed into operation, run the engine for several minutes. Check for fuel leaks, and noises that would associate with a loose blade guard covers.
2. Rotate the throttle lever to “rabbit” position.
3. To begin sawing, lower the rotating blade allowing it to cut to the present depth.
4. When blade has reached full cutting depth, slowly walk behind the saw at a rate that will allow the engine to operate without losing optimum RPM.
5. When the end of the cut has been reached, raise the blade out of the cut by pulling back on the handlebars (using a downward pressure) until the raise/lower rod drops into its slot with the blade in the raised position.
6. If cutting is complete, shut the saw down using the following “ To Stop Procedures”.

2.7 To Stop

Stop the engine under normal conditions:

1. Place the engine throttle lever in the slow position, and listen for the engine speed to decrease. Allow engine to run for 2 or 3 minutes for proper cool down.
2. Turn the engine ON/OFF switch to the “OFF” position.
3. Place the fuel valve lever to the “tortoise” position.

MAINTENANCE

3. MAINTENANCE

3.1 Blade Removal and Replacement

1. Disconnect the water hose coupler.
2. Ensure the Engine ON/OFF switch on the engine are turned to the "OFF" position.
3. Place the PMF14 Saw on a stable level working surface.
4. Ensure the blade is raised and the raise/lower rod is locked into position.
5. Raise the blade by rotating the handlebars
6. Loosen the screw, lifting up the blade guard cover to gain access to the diamond blade.
7. Use the provided blade nut and blade shaft locking wrenches to replace the diamond blade.
8. While holding the blade shaft with the locking Wrench, remove the blade hex nut (counter-clockwise direction) and outer blade flange.
9. Remove the old blade and install a new blade in the same rotational direction as marked on the blade.
10. Reinstall the outer blade flange and hex nut. Tighten the nut firmly (clockwise direction). DO NOT OVER TIGHTEN.

3.2 Blade Guard Check

1. Ensure the capacity of the blade guard matches the diameter of your diamond blade.
2. Check that the guard is bolted firmly upon the saw frame.

3.3 V-belt Alignment and Tension

1. Remove the bolts that secure the V-belt cover to the saw frame.
2. Check uniform parallelism of V-belt and pulley (sheaves). Use a straight-edge or machinist's square against both pulleys and adjust both pulleys until equally aligned.
3. DO NOT over or under tighten the V-belt. Severe damage can occur to the saw and engine crank shaft if the belt is over-tensioned. A decrease of power to the blade and poor performance will result if the belt is under-tensioned (loose on pulleys).

MAINTENANCE

3.4 Troubleshooting

3.4.1 Blade Troubleshooting

SYMPTOM	POSSIBLE PROBLEM	SOLUTION
Blade slows or stops cutting, still remains on blade	Blade too hard for the material being cut?	Consult Dealer for correct blade. Try cutting very soft material (sandstone, silica brick, cinder block) to "Redress" the blade.
	Engine torque diminished because of loose V-belt?	Tighten and/or replace V-Belt.
	Insufficient Engine power?	Check throttle setting. Check Engine horsepower.
	Improper direction of rotation?	Check that the blade is properly oriented and rotational arrow points in a "Down-Cutting" direction.
	Blade is slipping on the blade shaft?	Check that the blade & flange pin are properly installed on the blade shaft.
Blade does not cut straight and/or true.	Blade being used on misaligned saw?	Check blade shaft bearings and alignment integrity.
	Blade is excessively hard for the material being cut?	Check specification of the blade with the material being cut. Consult Dealer for information.
	Blade being used at improper RPM?	Ensure blade surface feet per minute speed (SFPM) is approximately 6,000.
	Blade improperly mounted on arbor shoulders and flanges?	Ensure blade is properly affixed on the blade shaft.
	Excessive force applied to blade while cutting?	DO NOT force the blade in the cut. Apply a slow and steady pace when sawing.
Blade discoloring, crackling and/or wearing excessively.	Blades too hard for the material being cut?	Consult Dealer for correct blade. Try cutting very soft material (sandstone, silica brick, cinder block) to "Redress" the blade.
	Blade improperly mounted on arbor shoulders and flanges?	Ensure blade is properly affixed on the blade shaft.
	Blade not receiving enough cooling air?	Ensure proper flow & volume of water is provided for wet cutting blades. Ensure sufficient cooling air is circulated about a dry cutting blade.
	Arbor hole out of round?	Ensure blade is properly affixed on the blade shaft.
	Incorrect blade chosen for material being cut?	Check specification of the blade with the material being cut. Consult Dealer or for information.
	Excessive force applied to blade while	DO NOT force the blade in the cut. Apply a slow and steady pace when sawing.

MAINTENANCE

3.4.2 Engine Troubleshooting

SYMPTOM	POSSIBLE CAUSE	SOLUTION
Difficult to start, "fuel is available, but no SPARK at spark plug".	Spark plug bridging?	Check gap, insulation or replace spark plug.
	Carbon deposit on spark plug?	Clean or replace spark plug.
	Short circuit due to deficient spark plug insulation?	Check spark plug insulation, replace if worn.
	Improper spark plug gap?	Set to proper gap.
Difficult to start, "fuel is available, and SPARK is present at the spark plug".	ON/OFF switch is shorted?	Check switch wiring, replace switch.
	Ignition coil defective?	Replace ignition coil.
	Improper spark gap, points dirty?	Set correct spark gap and clean points.
	Condenser insulation worn or short circuiting?	Replace condenser.
Difficult to start, "fuel is available, spark is present and compression is normal".	Spark plug wire broken or short circuiting?	Replace defective spark plug wiring.
	Wrong fuel type?	Flush fuel system, and replace with correct type of fuel.
	Water or dust in fuel system?	Flush fuel system.
	Air cleaner dirty?	Clean or replace air cleaner.
Difficult to start, "fuel is available, spark is present and compression is low".	Choke Open?	Close Choke.
	Suction/exhaust valve stuck or protruded?	Re-seat valves.
	Piston ring and/or cylinder worn?	Replace piston rings and or piston.
	Cylinder head and/or spark plug not tightened properly?	Torque cylinder head bolts and spark plug.
	Head gasket and/or spark plug gasket damaged?	Replace head and spark plug gaskets.

MAINTENANCE

SYMPTOM	POSSIBLE CAUSE	SOLUTION
No fuel present at the carburetor.	Fuel not available in fuel tank?	Fill with correct type of fuel.
	Fuel filter clogged?	Replace fuel filter.
	Fuel tank cap breather hole clogged?	Clean or replace fuel tank cap.
	Air in fuel line?	Bleed fuel line.
"Weak in power" compression is proper and does not misfire.	Air cleaner not clean?	Clean or replace air cleaner.
	Improper level in carburetor?	Check float adjustment.
		Rebuild carburetor.
	Defective spark plug?	Clean or replace spark plug.
Improper spark plug gap?	Set to proper gap.	
"Weak in power" compression is proper but misfires.	Water in fuel system?	Flush fuel system and replace with correct type fuel.
	Ignition coil defective?	Replace ignition coil.
	Dirty spark plug?	Clean or replace spark plug.
Engine overheats.	Wrong fuel type?	Flush fuel system, and replace with correct type of fuel.
	Spark plug heat value improper?	Replace with correct type of spark plug.
	Cooling fins dirty?	Clean cooling fins.
Rotational speed fluctuates.	Governor adjusted correctly?	Adjust governor.
	Governor spring defective or missing?	Replace governor spring.
	Fuel flow restricted?	Check entire fuel system for leaks or clogs.
Recoil starter malfunction.	Recoil mechanism clogged with dust and dirt?	Clean recoil assembly with soap and water.
	Spiral spring loose?	Replace spiral spring.

MAINTENANCE

3.5 Transporting

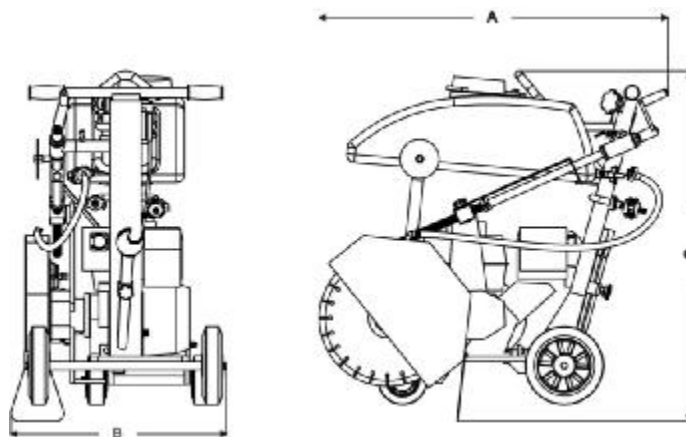
1. Shutdown engine for transportation.
2. The blade must be removed from the saw during all transport and lifting.
3. For transportation, tighten fuel tank cap securely to prevent fuel from spilling.
4. Use the parking brake during transportation
5. Use lifting point when lifting machine
6. Make sure lifting device has enough capacity to hold machine

TECHNICAL DATA

4. TECHNICAL DATA

Model	MFS14-1	MFS14-3	MFS14-4
Engine type	Kipor170	Robin EX17	Lombardini LD225
Power kw(hp)	3.1(4.2)	4.2(5.7)	4.0(5.5)
Weight kg(lb)	83(183)	70(154)	70(154)
Max cutting depth cm(in)	18.5(7.2)		
Blade size cm(in)	30-35(12-14)		
Depth adjustment	Handle rotation		
Driving	Manual push		
Water tank capacity (L)	28		

Dimension:



Ref.	Dimension (MM)
A	1050
B	910
C	480

Sound Specification (According to 2000/14/EC)

Guaranteed sound power level	108 dB(A)
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Hand-Arm vibration Specification (According to ISO 5394, EN 1033 and EN500-4): 5.0m/s²

WARRANTY

MASALTA products are covered by warranty for a period of twelve (12) months from the date of purchase against defects in material or workmanship provided that:

- I The product concerned has been operated and maintained in accordance with the operating instructions.
- I Has not been damaged by accident, misuse or abuse.
- I Has not been tampered with or repaired by any unauthorized person.

The owner is responsible for the cost of transportation to and from the authorized repairer and the unit is at the owners risk while in transit to and from the repairer.

Impact damage is not covered under warranty. Clutches are not covered under any warranty.

Engines are officially guaranteed by Honda, Robin, Kipor manufacturer. Please refer to the annex for engine warranty.

MAINTENANCE RECORD

PREVENTATIVE MAINTENANCE AND ROUTINE SERVICE PLAN

MASTERPAC green concrete saw has been assembled with care and will provide years of service. Preventative maintenance and routine service are essential to the long life of your saw. After reading through this manual thoroughly, you will find that you can do some of the regular maintenance yourself. However, when in need of parts or major service, be sure to see your dealer. For your convenience we have provided this space to record relevant data about your saw.

Invoice Number:		Type of Machine:	
Date Purchased:		Dealer Name:	
Serial Number:		Dealer Phone:	

REPLACEMENT PARTS USED					MAINTENANCE LOG	
PART NO.	DESCRIPTION	QTY	COST	DATE	DATE	OPERATION

EC DECLARATION OF CONFORMITY
CE-KONFORMITÄTSERKLÄUNG
DECLARACIÓN DE CONFORMIDAD DE LA CE
DÉCLARATION DE CONFORMITÉ C.E.

MASALTA ENGINEERING CO., LTD
Weisi Road, Baohe Industrial Estate, HeFei 230051, China

hereby certifies that the construction equipment specified hereunder / bescheinigt, da. das Bauger.t / certifica que la máquina de construcción / atteste que le matériel :

1. Category / Art / Categoría / Catégorie:
Floor Saw

2. Type / Typ / Tipo / Type:
MFS 14

has been produced in accordance with the following standards:/in übereinstimmung mit folgenden Richtlinien hergestellt worden ist:/ha sido fabricado en conformidad con las siguientes normas: / a été produit conformément aux dispositions des directives européennes ci-après :

2000/14/EC outdoor
2006/42/EC
2004/108/EC/EN55012:2007
EN13862/2001



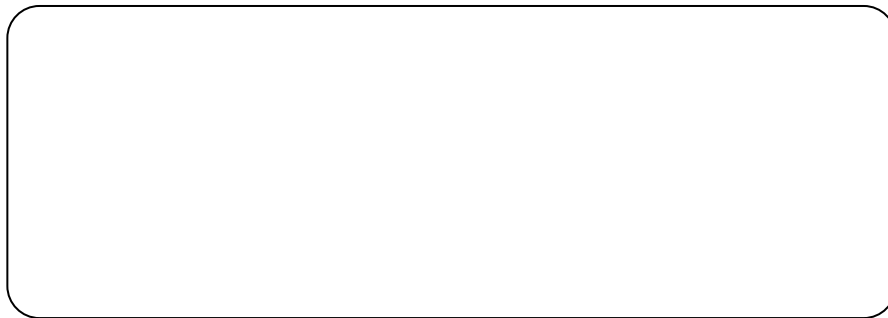
15.02.10

Hermann Josef Lensing
Research and Development Manager

Date / Datum / Fecha / Date



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