



# OPERATION MANUAL SURFACE FINISHING SCREED MCD





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.

## CONTENTS

SAFETY INSTRUCTIONS	.1-2
HEALTH & SAFETY	2
OPERATING INSTRUCTIONS	.2-5
SERVICE & MAINTENANCE	.5-6
SPECIFICATION	6-7

TROUBLE SHOOTING GUIDE7
WARRANTY8
MAINTENANCE RECORD8
EC DECLARATION

## SAFETY INSTRUCTIONS

For your own personal protection and for the safety of those around you, please read and ensure you fully understand the following safety information. It is the responsibility of the operator to ensure that he/she fully understands how to operate this equipment safely. If you are unsure about the safe and correct use of our SCREED, consult your supervisor.



**CAUTION:** Improper maintenance can be hazardous. Read and Understand this section before you perform any maintenance, service or repairs.

- I Ensure, that all symbols on the machine, can always be clearly read.
- I Do not leave any tools or parts lying around on the work floor, as this can cause accidents.
- I Watch where you are going, the ground can be slippery.
- I Take care that you do not injure yourself on objects, such as scaffolding and reinforcement materials, which can be found directly or indirectly in the working area.
- I Be careful when lifting and carrying the SCREED. Do not bend forwards when picking up the apparatus, bend you knees. Ensure that the working area is within your reach, that you do not have to bend forward.
- I When cleaning the machine, ensure that no water or cleaning detergents get into the motor housing.
- I When the machine is not being used for longer periods of time, then it must be stored in a dry and clean area.
- I Pay attention to your own safety and the safety of your colleagues.
- I Regular maintenance of the machine promotes safe operation.

#### The following safety-aspects specifically apply to those machines equipped with a petrol engine:

- I Do not use an Screed, fitted with a petrol engine, indoors or in poorly ventilated places, such as pits etc.
- I Make sure that there is sufficient ventilation in spaces which are surrounded by walls. Never inhale exhaust gasses, they can damage your health and that of your colleagues.
- I To avoid getting an electric shock, do not touch the high-tension cable or spark plug cap while the engine is running.
- I Check for fuel leaks before running the machine.
- I Do wear working-gloves, safety glasses and protecting clothing during refueling.
- I Make sure that there is sufficient ventilation during refueling.
- I Refueling is only allowed after the engine has been cooled off sufficiently.
- I Refueling, while the engine is hot, might lead to a very dangerous situation. It is strictly forbidden to refuel:

## SAFETY INSTRUCTIONS

- In the direct vicinity of open fire or other flammable materials,
- While smoking cigarettes etc.
- In explosion endangered spaces.

## **HEALTH & SAFETY**

## Vibration

Some vibration from the poker is transmitted through the flexible hose to the operator's hands.

## PPE (Personal Protective Equipment).

Suitable PPE must be worn when using this equipment i.e. Safety Goggles, Ear Defenders, Dust Mask and Steel Toe capped footwear (with anti-slip soles for added protection). Wear clothing suitable for the work you are doing. Always protect skin from contact with concrete.

## **OPERATING INSTRUCTIONS**

## How to assemble the SCREEDEASY

- 1. First determine whether you want to use SCREED as a form-to form screeder or as a free screeder.
- 2. The SCREED is supplied in 2 components: the power-unit and the beam profile.
- 3. The power-unit is equipped with a quick disconnect system, with which the power-unit can be mounted on to the beam profile.
- 4. To connect the power-unit to the beam profile loosen the 3 wing bolts about 8mm, until the front clamping plate fits into the collar of the profile. Now tighten the 3 wing bolts.
- 5. Now unfold the twin control handle, adjust it to the proper height, and tighten the 2 clamps.
- 6. Make sure that the Screed Easy is properly assembled and that the ON-OFF switch is in the ON position.
- 7. Make sure that the fuel tank is filled with unleaded fuel only.
- 8. In case the Screed Easy is used for form-to-form screeding make sure that the forms are set to the right level.

Note: Moment requirement for bolt (item no.6) should be 118N.M $\pm$ 5N.M.

## Start and Stop Procedure for the Engines

## HONDA ENGINE

Pre-Operation Check:

- 1. Engine oil level
- Remove the oil filler cap and check the oil level: it should reach the top of the oil filter neck.
- If the level is low, fill to the top of the oil filler neck with the recommended oil.

Add the engine oil slowly to avoid overflowing, as the engine oil tank capacity is small.

Every 10 hours, check the engine oil level and replenish oil up to the top of the oil filler neck if the engine is operated for more than 10 hours continuously.

Use Honda 4-stroke, or an equivalent high detergent, premium quality motor oil certified to meet or exceed U.S. automobile manufacturer's requirements for service classification SG, SF. Motor oils classified SG, SF will show this designation on the container. SAE 10W-30 is recommended for general,

## **OPERATING INSTRUCTIONS**

exceed U.S. automobile manufacturer's requirements for service classification SG, SF. Motor oils classified SG, SF will show this designation on the container. SAE 10W-30 is recommended for general, all temperature use.

## CAUTION:

Using nondetergent oil or 2-stroke engine oil could shorten the engine's service life. The recommended operating range of this engine is  $-5^{\circ}$ C to  $40^{\circ}$ C (23°F to  $104^{\circ}$ F)

2. Air cleaner

## CAUTION:

Never run the engine without the air cleaner. Rapid engine wear will result. Check cleaner for dirt or obstruction of element.

## 3. Fuel

Use automotive gasoline (Unleaded or lowleaded is preferred to minimize combustion chamber deposits).

Never use an oil/gasoline mixture or dirty gasoline. Avoid getting dirt, dust or water in the fuel tank.

4. Retightening bolts and nuts

Check for loose bolts and nuts. Tighten the bolts and nuts properly and securely, if necessary.

## Starting the Engine

- 1. Turn the engine switch to the ON position (on the equipment side).
- 2. Move the choke lever to the CLOSED position.

Note: Do not use the choke if the engine is warm or the air temperature is high.

- 3. Press the priming pump several times until a fuel flow in the fuel return tube is visually noticed.
- 4. Pull the starter grip lightly until resistance is felt, then pull briskly.

#### Operation

- 1. Gradually move the choke lever to the OPEN position. Warm up the engine until it run smoothly.
- 2. Position the throttle control lever for the desired engine speed (on the equipment side).

#### Stop the Engine

To stop the engine in an emergency, turn the engine switch to the OFF position (on the equipment side). Under normal conditions, use the following procedure:

- 1. Position the throttle control lever fully to LOW (on the equipment side).
- 2. Turn the engine switch to the OFF position (on the equipment side).

## CHINESE PETROL ENGINE (2-STROKE)

#### Preparation

1. Refuel

Use the mixture of the gasoline and the 2-stroke engine oil, the volume ratio is 25-30:1 (Graph 1)

2. Check and clean the air filter

The air filter must be often cleaned, or the polluted air filter will lower the output power of the engine. If the air filter is blocked by dusts, use gasoline to clean the air filter, then dip in the oil, wring oil out and put the air filter back.

## **OPERATING INSTRUCTIONS**

## Start up

- 1. Turn on the gasoline switch until the gasoline flows out of the clear plastic pipe.
- 2. Close the chock totally. If the engine is heated, the chock must be totally opened.
- 3. Open the throttle half.
- 4. Draw the starter several times slowly, and then draw quickly.

Note: If the excessive gasoline causes the start difficulty, take down the ignition plug and the input pipe, open the chock and the throttle totally, draw the starter several times, then install the input pipe and start the engine. After the start up, open the chock totally.

## Running

- 1. After the engine starts, run 3-5 minutes at a low speed.
- 2. When the engine is heated enough, adjust the throttle handle to the corresponding according to needed speed.

Note: Don't accelerate abruptly due to bad lubrication of the engine at the beginning of start up.

Avoid the speedy idle motion and over speed motion. If the throttle is totally opened the engine will run over speed, which not only shortens the service life of the engine but also causes more problems in the engine.

Stop

- 1. Reduce the gasoline engine to the slowest speed and run 3-5 minutes.
- 2. Press the stop switch and stop the engine. (Only the gasoline engine leaving factory, no stop switch)

## Operation and use of the SCREED

- 1. Place the SCREED beam on the rail supports or if you want to use the Screed as a free screed, directly on the freshly poured concrete surface.
- 2. Now start the engine and allow a three minute warming-up period before setting the throttle handle to the desired engine speed.
- 3. After setting the engine speed start moving the SCREED backwards, the travel-speed depends on the consistency of the concrete.
- 4. After the job is finished, remove the Screed from the concrete and switch off the petrol engine.
- 5. After use, clean the Screed Easy according to the instructions described in the maintenance section of this manual. Place the Screed Easy on a dry, clean and stable surface.
- 6. If you do not expect to use the engine for a long period of time, drain the fuel tank and let the engine run at idle speed until the fuel in the carburetor is used and the engine stops.

## Please observe the following instructions:

- I Make sure to refill the fuel tank in time. Do not let the engine run so all the fuel is used. This might cause starting problems.
- I Prevent the Screed Easy of sinking into the concrete. After the engine has been switched on, immediately move the Screed Easy backwards.
- When using a low slump concrete, move the Screed Easy slowly across the surface of the concrete.
  When using a high slump concrete, move the Screed Easy faster across the surface of the concrete.
- I When the Screed Easy is used as a wet screed it is recommended to first compact the freshly poured concrete with a poker vibrator while at the same time set the height of the floor by means of a laser device.

## **OPERATING INSTRUCTIONS**

## **Operating the SCREED**

The drive-unit of the SCREED is started by pulling the recoil-starter of the engine. The vibrating beam of the SCREED compacts, levels and smooths freshly poured concrete in one operation. The SCREED features a dual purpose beam and can be used for form-to-form screeding or for free screeding.

By rotating the power-unit 180 degrees, the operator can choose between screeding, using forms/rails, or free screeding.

### **SERVICE & MAINTENANCE**

#### Maintenance

The SCREED is designed to give many years of trouble free operation. It is recommended that an approved dealer carries out all major maintenance and repairs. Always use our genuine replacement parts, the use of spurious parts may void your warranty.

It is recommended to spray the aluminum blade and quick disconnector prior to operation, with a high quality form oil.

Clean the quick disconnector and beam on a daily basis.

Only qualified personnel, familiar with the contents of this operation manual, are allowed to carry out maintenance and repair jobs to the SCREED.

After use store the SCREED in a clean, dry and dust free place.

#### **Daily Service**

In order to achieve a maximum cooling effect the ventilation openings must stay free from dirt, grease and concrete. Check them at the end of each working day. If necessary clean them with a brush or a damp cloth. For detailed engine servicing instructions, please read the operation instructions supplied by the manufacturer.

## SPECIFICATION

## Motor

MCD-2	Chinese Petrol Engine (2-stroke)	1.4 kW output
MCD-3	Petrol, Robin EH035 (4-stroke)	1.2 kW output
MCD-4	Honda GX35 (4-stroke)	1.0 kW output

Operation Mass:(Engines assembly without blades)

MCD-2	12.7kgs
MCD-3	12.9kgs
MCD-4	12.7kgs

## Weight of Blades

Blade Model	MCB4	MCB6	MCB8	MCB10	MCB12	MCB14	MCB16
Blade Size m (ft)	1.2 (4)	1.8 (6)	2.4 (8)	3.0 (10)	3.7 (12)	4.3 (14)	4.9 (16)
Weight kg (lbs)	2.90(6.4)	4.36(9.6)	5.81(12.8)	7.27(16.0)	8.72(19.2)	10.16(22.4)	11.61(25.6)

\* SCREEDY blades are available in length from 4 ft. (1.22m) to 16ft (4.88m)

\* The total weight of the machine should be the weight of engines assembly plus weight of blades.

Acoustic Noise (According to 2000/14/EC)

Measured sound power level: 47db Guaranteed sound power level: 50dB

Uncertainty: 3dB

## Hand-Arm-Vibration:

(as per ISO8662, part 1, m/s<sup>2</sup>): 7.8 m/s<sup>2</sup>

## Nameplate:



## SPECIFICATION

Max. Working Size: (LXWXH) 488X45X100CM



## TROUBLE SHOOTING GUIDE

If the SCREEDEASY is not operating properly then one or more of the following problems could be the cause.

PROBLEM	CAUSE	SOLUTION
The SCREEDEASY has	1. There is an excess of	1. Make sure to maintain a roll of concrete
insufficient vibration and	concrete in front of the	of 20 to 30mm evenly spread out along
as a result the concrete	leading edge.	the front of the leading beam.
floor cannot be leveled	2. The choosen width of	2. Choose a smaller profile width, or fit 2
and smoothed in the	the beam is too big.	drive units to 5.5 or 6 meter beams.
proper way.		
The SCREEDEASY	1. Insufficient fuel in the	1. Refill the fuel tank.
engine fails to start or	fuel tank.	2. Read the operation instructions of the
runs irregularly.	2. The starting procedure	gasoline engine carefully and repeat the
	was not executed in	starting procedure.
	the proper way.	
	3. A failure in the engine.	

These products are covered by warranty for a period of six (6) months from the date of purchase against defects in material or workmanship provided that:

· The product concerned has been operated and maintained in accordance with the operating instructions.

 $\cdot$  Has not been damaged by accident, misuse or abuse.

 $\cdot$  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 warranted by their manufacturer.

## MAINTENANCE RECORD

#### PREVENTATIVE MAINTENANCE AND ROUTINE SERVICE PLAN

This Surface Finishing Screed has been assembled with care and will provide years of service. Preventative maintenance and routine service are essential to the long life of your Surface Finishing Screed. 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 Surface Finishing Screed.

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

REPLACEMENT PARTS USED					MAINTENANCE LOG		
PART NO.	DESCRIPTION	QUANTITY	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: Surface Finishing Screed
- 2. Type / Typ / Tipo / Type: MCD

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 :

2006/42/EC 2004/108/EC/EN55012:2007 (EMC) EN12649/2008

punie.

15.02.10

\_\_\_\_\_

Hermann Josef Lensing Research and Development Manager

Date / Datum / Fecha / Date



## Distributed By

## MASALTA ENGINEERING CO., LTD

Add: 20 Dalian Road, Baohe Industrial Estate, Hefei, China Tel: 86-551-64846600, 64846601 Fax: 86-551-64846616, 64846626 E-mail: <u>sales@masalta.com.cn</u>, <u>masalta@mail.hf.ah.cn</u>, <u>Http://www.masalta.com.cn</u>