OPERATOR'S SAFETY AND SERVICE MANUAL



SCREEDEMON

This manual covers the following serial numbers and higher for each model listed:

WS500 1418000



WET SCREED

MBW, Inc.

250 Hartford Rd • PO Box 440 Slinger, WI 53086-0440 Phone: (262) 644-5234 Fax: (262) 644-5169 Email: mbw@mbw.com Website: www.mbw.com

MBW (UK) Ltd.

Units 2 & 3 Cochrane Street Bolton BL3 6BN, England Phone: 01204 387784 Fax: 01204 387797

MBW France S.A.R.L

Phone: 3 44 07 15 96 Fax: 3 44 07 41 28

L17763 / 04.18.T ©MBW, Inc. 2018 Printed in the USA

TABLE OF CONTENTS

SAFETY INFORMATION1	Maintenance Schedule
Introduction	Engine Maintenance
Safety Precautions	Engine Speed
Safety Decals	Cleaning
SPECIFICATIONS	SERVICE
	Torque Chart
OPERATION	Engine Mounting Flange Removal 8
Introduction	Handle Removal
Before Starting & Operating 4	Exciter Disassembly
Attaching Blade4	Exciter Assembly
Starting Engine	Engine Mounting Flange & Engine Assembly 9
Stopping Engine	Parts Replacement Cycles and Tolerances 10
Operation	
Handle Adjustment 6	REPLACEMENT PARTS11
Kickstand 6	Main Assembly
Transporting	Exciter Assembly
MAINTENANCE	Engine and Engine Mount
	WARRANTY18



WARNING



CALIFORNIA PROPOSITION 65 WARNING

Engine exhaust and some of its constituents are known in the state of California to cause cancer, birth defects, and other reproductive harm.

SAFETY INFORMATION

Introduction

This Safety Alert Symbol is used to call attention to items or operations which may be dangerous to those operating or working with this equipment. The symbol can be found throughout this manual

and on the unit. Please read these warnings and cautions, along with all decals, carefully before attempting to operate the unit. Make sure every individual who operates or works with this equipment is familiar with all safety precautions.



WARNING



GENERAL WARNING. Indicates important to the proper operation of the equipment. Failure to observe may result in damage to the equipment and/or severe bodily injury or death.



CAUTION



GENERAL CAUTION. Indicates information important to the proper operation of the equipment. Failure to observe may result in damage to the equipment.

Safety Precautions



LETHAL EXHAUST GAS: An internal engine discharges combustion carbon monoxide, a poisonous, odorless, invisible gas. Death or serious illness may result if inhaled. Operate only in a properly ventilated area. NEVER OPERATE IN A CONFINED ARFA!



DANGEROUS FUELS: Use extreme caution when storing, handling and using fuels, as they are highly volatile and explosive in vapor state. Do not add fuel while engine is running. Stop and cool the engine before adding fuel. DO NOT SMOKE!



SAFETY GUARDS: It is the owner's responsibility to ensure that all guards and shields are in place and in working order.



IGNITION SYSTEMS: Breakerless, magneto, and battery ignition systems can cause severe electrical shocks. Avoid contacting these units or their wiring.



SAFE DRESS: Do not wear loose clothing, rings, wristwatches, etc. near machinery.



NOISE PROTECTION: Wear OSHA specified

hearing protection devices.

EYE PROTECTION: Wear OSHA specified eye shields, safety glasses, and sweat bands.



FOOT PROTECTION: Wear OSHA specified steel-tipped safety shoes.

HEAD PROTECTION: Wear OSHA specified

safety helmets.



OPERATOR: Keep children and bystanders off and away from the equipment.



DUST PROTECTION: Machining, crushing or handling of stone, concrete, masonry, metal and other materials may generate dust, mist and fumes containing chemicals such as

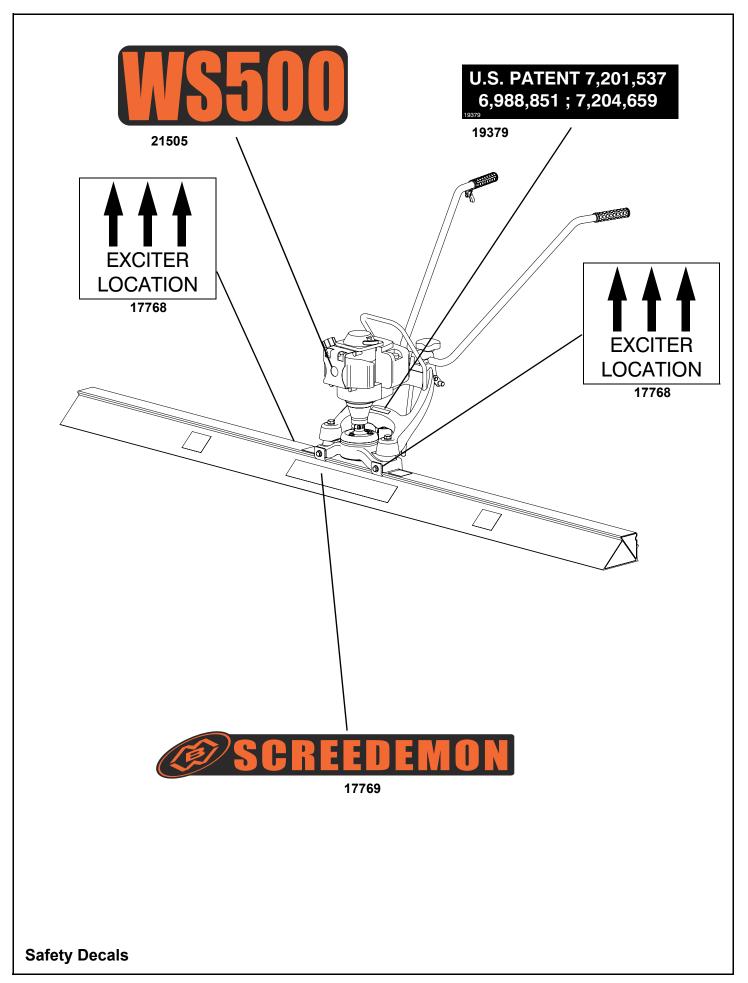
silica, known to cause serious or fatal injury or illness, such as respiratory disease, silicosis, cancer, birth defects, or other reproductive harm.

- Control dust, mist and fumes at the source where possible. Water should be used to control dust whenever feasible.
- Use good work practices and follow the recommendations of the manufacture, OSHA/NIOSH and other occupational trade associations.
- When hazards cannot be eliminated the operator and any bystanders should always wear a OSHA specified respirator for materials being handled.

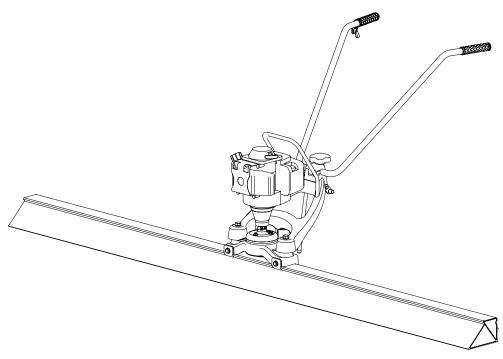
REFERENCES: For details on safety rules and regulations in the United States, contact your local Occupational Safety and Health Administration (OSHA) office. Equipment operated in other countries must be operated and serviced in accordance and compliance with any and all safety requirements of that country. The publication of these safety precautions is done for your information. MBW does not by the publication of these precautions, imply or in any way represent that these are the sum of all dangers present near MBW equipment. If you are operating MBW equipment, it is your responsibility to insure that such operation is in full accordance with all applicable safety requirements and codes. All requirements of the United States Federal Occupational Safety and Health Administration Act must be met when operated in areas that are under the jurisdiction of that United States Department.

Safety Decals

Carefully read and follow all safety decals. Keep them in good condition. If decals become damaged, replace as required. If repainting the unit, replace all decals. Decals are available from authorized MBW distributors. Order the decal set listed on the following page(s).



SPECIFICATIONS



500H

	500H
Operating Weight	29 lbs (13.2 kg)
Engine Make	Honda
Engine Model	GX35NTT3
Displacement	(2.13 in ³) 35 cm ³
Spark Plug	NGK CMR5H
Electrode Gap	0.024 -0.028in (0.6-0.7mm)
Engine Oil Type	SAE 10W30
Engine Oil Capacity	3.4 oz (0.1L)
Fuel Type	Regular Unleaded
Fuel Tank Capacity	0.17 gal (0.64 L)

Blade Specifications

Part #	Width	Weight
17804	4 ft (1.21 m)	8.1 lb (3.7 kg)
17806	6 ft (1.83 m)	12.1 lb (5.5 kg)
17808	8 ft (2.44 m)	16.1 lb (7.3 kg)
17810	10 ft (3.05 m)	20.1 lb (9.1 kg)
17812	12 ft (3.66 m)	24.0 lb (10.9 kg)
17814	14 ft (4.27 m)	28.0 lb (12.7 kg)
17816	16 ft (4.88 m)	32.0 lb (14.5 kg)
17818	18 ft (5.49 m)	36.0 lb (16.3 kg)
17820	20 ft (6.10 m)	40.0 lb (18.1 kg)
17824	24 ft (7.32 m)	47.9 lb (21.7 kg)

Specifications subject to change without notice

OPERATION

Introduction

MBW equipment is intended for use in very severe applications. They are powered by four cycle engines and are available in different sizes and a selection of engines.

This parts manual contains only standard parts. Variations of these parts as well as other special parts are not included. Contact your local MBW distributor for assistance in identifying parts not included in this manual.

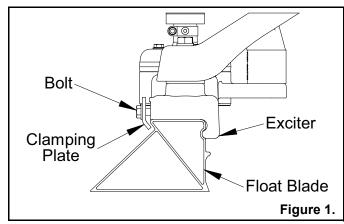
Before Starting & Operating

- REMEMBER! It is the owner's responsibility to communicate information on the safe use and proper operation of this unit to the operators.
- Review ALL of the Safety Precautions listed on page 1 of this manual.
- Familiarize yourself with the operation of the machine and confirm that all controls function properly.
- Know how to STOP the machine in case of an emergency.
- Make sure hands, feet, and clothing are at a safe distance from any moving parts.
- OIL LEVEL Check the oil level in the engine. For more information see "Lubrication" under the respective engine's "Owners Manual" or the Maintenance section of this manual.
- AIR CLEANER Check to ensure element is in good condition and properly installed.
- FUEL SUPPLY The engines on MBW equipment require an automotive grade of clean, fresh, unleaded gasoline.
- FUEL FILTER If clogged or damaged, replace.

Attaching Blade

Refer to Figure 1.

- Loosen the bolts that secure the clamps to the exciter assembly.
- Lay the float blade on the floor with the decals facing upward.
- 3. Center the exciter between the "Exciter Location" decals on the float blade.
- 4. Tilt the exciter forward and hook the small leg of the clamping plates under the front lip of the float blade.



- 5. Set the exciter onto the blade so the rear part of the exciter casting lines up with the rear cavity of the float blade.
- 6. Tighten the clamping plate bolts.

Starting Engine

- 1. Turn engine switch to "ON".
- 2. Press the primer bulb repeatedly until fuel can be seen in the clear plastic return tube.
- 3. Choke engine if necessary (you may not need to choke a warm engine).
- 4. Pull starter rope repeatedly until engine starts.
- 5. If choke was moved to the closed position to start, gradually move it to the open position as the engine warms up.
- 6. Allow engine to warm up for one or two minutes.

Stopping Engine

- 1. Move throttle to idle position.
- 2. Let engine idle for one or two minutes.
- 3. Turn switch on engine to "STOP" position.
- 4. Turn off fuel valve.



Always stop the engine before:

Adding fuel.

Leaving the equipment unattended for any amount of time.

Before making any repairs or adjustments to the machine.

Operation

Before placing the ScreeDemon in concrete make sure the clamps securing the exciter to the float blade are tight.

A CAUTION



Keep the blade clamps tight at all times. Operating the ScreeDemon with the clamps loose will damage the float blade.

A

CAUTION



Never run the ScreeDemon above idle when the float blade is not in contact with concrete. This can damage the float blade.

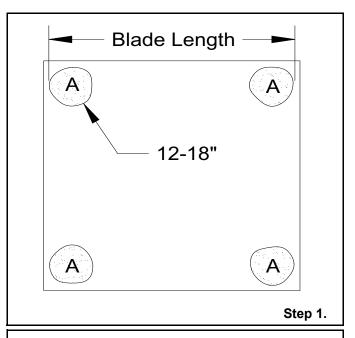
The ScreeDemon can be used with or without forms. The following describes the use of the ScreeDemon without forms.

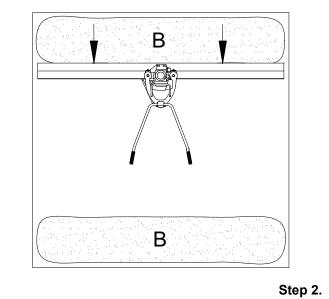
 Use a hand float to make a 12-18" diameter wet pad (A) at the desired grade in the four corners of the area you wish to screed. The outer extents of the wet pads should not exceed the length of the float blade being used.

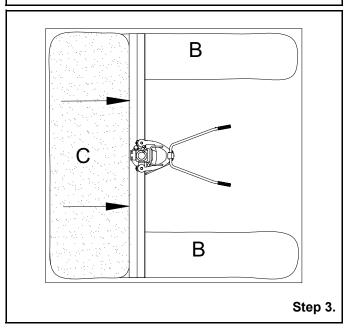
NOTE: Use a laser receiver, transit level, or grade stakes to help establish the correct grade.

 Run the ScreeDemon between the wet pads to create two parallel strips (B) that define the grade for the remainder of the wet screeding. These strips should be 12-18" wide.

3. Place one end of the float blade on each of the parallel strips (B) and screed the concrete (C) in between the strips. Be sure the float blade follows the contour of the parallel strips.







Handle Adjustment

The operator can adjust the handle on the ScreeDemon to a comfortable position.

Refer to Figure 2.

- 1. Loosen the handle by turning the handle adjustment knob counter-clockwise.
- 2. Move the handle to the desired position.
- 3. Tighten the handle adjustment knob.

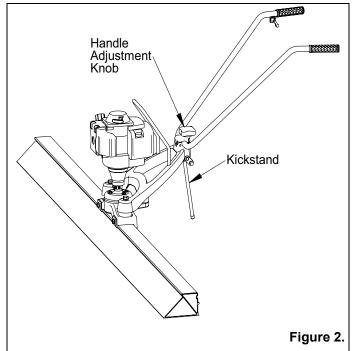
Kickstand

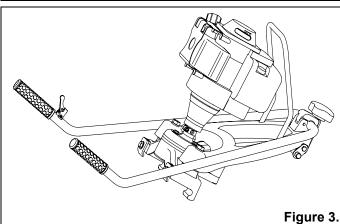
The kickstand will support the ScreeDemon in an upright position when not in use.



It is recommended to transport the ScreeDemon with the float bar removed. The float bar is more likely to be damaged if attached to the main unit during transport.

The handle can be collapsed for easier transport. See Figure 3.





MAINTENANCE



WARNING



Always exercise the stopping procedure before servicing or lubricating the unit.

After servicing the unit, replace and fasten all guards, shields, and covers to their original positions before resuming operation.

A

CAUTION



Always verify fluid levels and check for leaks after changing fluids.

Do not drain oil onto ground, into open streams, or down sewage drains.

Maintenance Schedule

SYSTEM	MAINTENANCE	EACH USE	EVERY 20 HOURS	EVERY 100 HOURS	YEARLY
Engine	Refer to engine operator/owner manual	Х			
Hardware	Check and tighten as needed ¹		Х		Х
Shockmounts	Check for cracks or tears		Х		Х

^{1.} Check all hardware after the first 5 hours of use, then follow the maintenance schedule.

Engine Maintenance

Refer to the engine owner's manual for maintenance intervals and procedures.

Engine Speed

The idle speed of the engine should not exceed the following:

Honda - 3500 rpm

If the idle speed is greater the clutch may not disengage. Check engine owner's manual for procedure on setting idle speed.

Cleaning

Clean any concrete from the ScreeDemon immediately after each use. DO NOT allow concrete to harden on the screed.

- 1. Use a hose to remove any excess concrete.
- 2. Remove any buildup with hard plastic bristle brush.

NOTE: DO NOT use a wire brush, hammer, or pressure washer to remove concrete from the main unit or float blade.

- 3. Remove the blade.
- 4. Start engine and run the exciter for about 10 seconds.
- 5. Shut down the engine.

SERVICE

Assembly and disassembly should be performed by a service technician who has been factory trained on MBW equipment. The unit should be clean and free of debris. Cleaning unit before disassembly is recommended.

- Prior to assembly, wash all parts in a suitable cleaner or solvent.
- Check moving parts for wear and failure. Refer to the Replacement section in this manual for tolerance and replacement cycles.
- All shafts and housings should be oiled prior to pressing bearings. Also, ensure that the bearings are pressed square and are seated properly.
- All bearings should be replaced when rebuilding any exciter or gearbox.
- All gaskets and seals should be replaced after any disassembly.

Torque Chart

SIZE	GRADE 2	GRADE 5	GRADE 8	
1/4-20	49 in•lbs	76 in∙lbs	9 ft•lbs	
1/4-28	56 in∙lbs	87 in∙lbs	10 ft•lbs	
5/16-18	8 ft•lbs	13 ft∙lbs	18 ft•lbs	
5/16-24	9 ft•lbs	14 ft•lbs	20 ft•lbs	
3/8-16	15 ft∙lbs	23 ft·lbs	33 ft•lbs	
3/8-24	17 ft•lbs	26 ft∙lbs	37 ft•lbs	
7/16-14	24 ft•lbs	37 ft•lbs	52 ft•lbs	
7/16-20	27 ft•lbs	41 ft•lbs	58 ft•lbs	
1/2-13	37 ft•lbs	57 ft•lbs	80 ft•lbs	
1/2-20	41 ft•lbs	64 ft•lbs	90 ft•lbs	
9/16-12	53 ft•lbs	82 ft•lbs	115 ft•lbs	
5/8-11	73 ft•lbs	112 ft•lbs	159 ft•lbs	
M 6	3 ft•lbs	4 ft∙lbs	7 ft•lbs	
M 8	6 ft•lbs	10 ft•lbs	18 ft•lbs	
M 10	10 ft•lbs	20 ft·lbs	30 ft•lbs	
CONVERSIONS				
in•lbs x 0.083 = ft•lbs				
	ft•lbs x 12 = in•lbs			
ft•lbs x 0.1383 = kg•m				
ft•lbs x 1.3558 = N•m				

Engine Mounting Flange Removal

Refer to Engine and Engine Mount, page 16.

- 1. Disconnect the throttle cable (#18, page 12) from the engine (#8).
- 2. Loosen the 6mm socket head cap screw (#2) located at the base of the engine.
- 3. Pull the engine off the engine mounting flange (#4).

NOTE: Silicon is used to seal the connection between the engine and the engine mounting flange. Rotating the engine will help break this seal.

- 4. Remove the three hex head cap screws and sealing washers (#20 & #5, page 12) from the engine mounting flange.
- 5. Remove the plug (#1) from the engine mounting flange.
- 6. Use an 1/8" allen wrench to loosen the pipe plug (#12, page 14) inside the exciter housing (#4, page 14) directly below the hole.
- 7. Stick a rod or screwdriver straight down through both holes.
- 8. Rotate the spline shaft (#6) until the exciter hits the rod and the spline shaft can no longer turn.
- 9. Use a pliers to grab the spline shaft below the spline. Rotate the shaft counter-clockwise to remove the engine mounting flange.

Handle Removal

Refer to Main Assembly, page 12.

- 1. Disconnect the throttle cable (#18) from the engine.
- 2. Remove the hex head cap screw (#26) and lockwasher (#27) securing the rear shockmount (#2) to the exciter (#15).
- 3. Remove the two hex head cap screws (#26) and lockwashers (#27) located at the base of the handle mount (#9).
- 4. Remove the handle mount from the exciter.

Exciter Disassembly

Refer to Exciter Assembly, page 14.

The engine mounting flange must be removed before disassembling the exciter. See Engine Mounting Flange Removal, page 8.

1. Unthread the three shockmounts (#7) from the exciter housing (#4). Unthread the shockmount from the exciter shaft (#6).

- 2. Loosen the three socket head cap screws (#13) securing the exciter cover (#8) to the exciter housing. Back the socket head cap screws out about 1/4".
- Gently tap on the socket head cap screws with a rubber mallet to push the exciter cover out of the exciter housing.
- Remove the socket head cap screws and the fiber washers (#11) after the exciter cover is free from the exciter housing.
- 5. Remove the bearings (#5) from the exciter housing, exciter cover, and exciter shaft.
- 6. Remove the socket head cap screw (#13) securing the exciter weight (#3) to the exciter shaft (#6).

Exciter Assembly

Refer to Exciter Assembly, page 14.

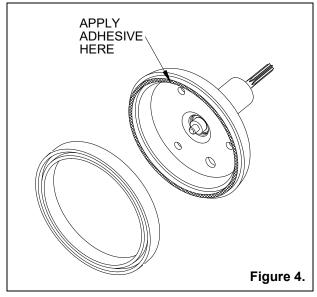
- 1. Press a bearing (#5) into the exciter housing (#4) and exciter cover (#8).
- 2. Slide the exciter weight (#3) onto the exciter shaft (#6).
- Apply a medium strength threadlocker to the socket head cap screw (#13) and use it to secure the exciter weight into the exciter shaft.
- Turn the exciter housing up-side-down and place the the threaded end of the exciter shaft/weight assembly into the bearing in the housing.
- Apply a light coat of grease to the top step of the exciter cover (#8). Place a new o-ring (#1) onto the greased step.
- 6. Apply medium strength thread locker to the threaded holes in the cover.
- Line up the mounting holes between the exciter housing and exciter cover and assemble the exciter cover to the exciter housing. Take care not to cut the o-ring. Secure the cover with three socket head cap screws and fiber washers (#11).
- 8. Thread the four shockmounts (#7) into the exciter housing and exciter shaft.
- Apply medium strength thread locker to the socket head set screw (#12) and thread it into the exciter housing.

Engine Mounting Flange & Engine Assembly

Refer to Engine and Engine Mount, page 16

- Inspect the rubber seal (#9). Remove if there are any tears or if it is worn. If the rubber seal is in good condition, skip to step #5.
- 2. Clean the surfaces of the engine mounting flange (#4) where the rubber seal was glued.

3. Apply a small bead of Loctite 426 adhesive (MBW #17885) to the lip on the engine mounting flange. See Figure 4.



- 4. Place a new rubber seal onto the engine mounting flange and hold it in place for 10 seconds to allow the adhesive to set up.
- 5. Position the engine mounting flange (#4) so the plug hole lines up with the socket head set screw (#12, page 14) on the exciter.

NOTE: Do not use any sealant or adhesive between the bottom of the rubber seal and the top of the exciter.

- 6. Set the engine mounting flange in place while turning the spline shaft (#6) clockwise to thread the shaft into the center shockmount (#7, page 14) on top of the exciter housing (#4, page 14). This only needs to be hand tight.
- 7. Secure the engine mounting flange with three sealing washers (#5, page 12) and three hex head cap screws (#20, page 12).
- 8. Replace the plug (#1).
- 9. Place a small bead of 100% silicon sealant around the engine mounting flange about 1/2" from the top. Also fill the slot on the engine housing with silicone.
- 10. Orient the engine (#8) so the fuel tank faces away from the operating position and slide the engine over the engine mounting flange.

NOTE: Make sure the engine slides all the way down to the step on the engine mounting flange. The engine may have to be lifted and rotated to engage the splines.

- 11. Tighten the socket head cap screw (#2) at the base of the engine.)
- 12. Reattach the throttle cable (#18, page 12 to the engine.

Parts Replacement Cycles and Tolerances

Bearings	Replace anytime a bearing is rough, binding, discolored or removed from housing or shaft.
Engine Components	Refer to your engine manufacturer's Owner's Manual.
Hardware	Replace any worn or damaged hardware as needed. Replacement hardware should be grade 5 and zinc plated unless otherwise specified.
Safety Decals	Replace if they become damaged or illegible.
Seals, O-rings, & Gaskets	Replace if a leak is detected and at every overhaul or teardown.

REPLACEMENT PARTS

The warranty is stated in this book on page 19. Failure to return the Warranty Registration Card renders the warranty null and void.

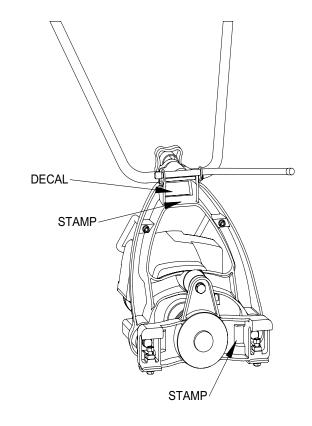
MBW has established a network of reputable distributors/ dealers with trained mechanics and full facilities for maintenance and rebuilding, and to carry an adequate parts stock in all areas of the country. Their sales engineers are available for professional consultation. If you cannot locate an MBW distributor in your area, contact MBW or one of our Sales Branches listed below.

When ordering replacement parts, be sure to have the following information available:

- Model and Serial Number of machine when ordering MBW parts
- Model and Serial Number of engine when ordering engine parts
- · Part Number, Description, and Quantity
- Company Name, Address, Zip Code, and Purchase Order Number
- · Preferred method of shipping

REMEMBER - You own the best! If repairs are needed, use only MBW parts purchased from authorized MBW distributors.

Write Model Number here	
Write Serial Number here	



The unit's serial number can be found in the following locations:

- The model/serial number decal is located on the handle support on the underside of the handle clamp.
- The serial number is stamped on the handle support below the serial number decal.
- The serial number is also stamped on the underside of the exciter housing between the exciter and the shockmount bolt.

Contact Information

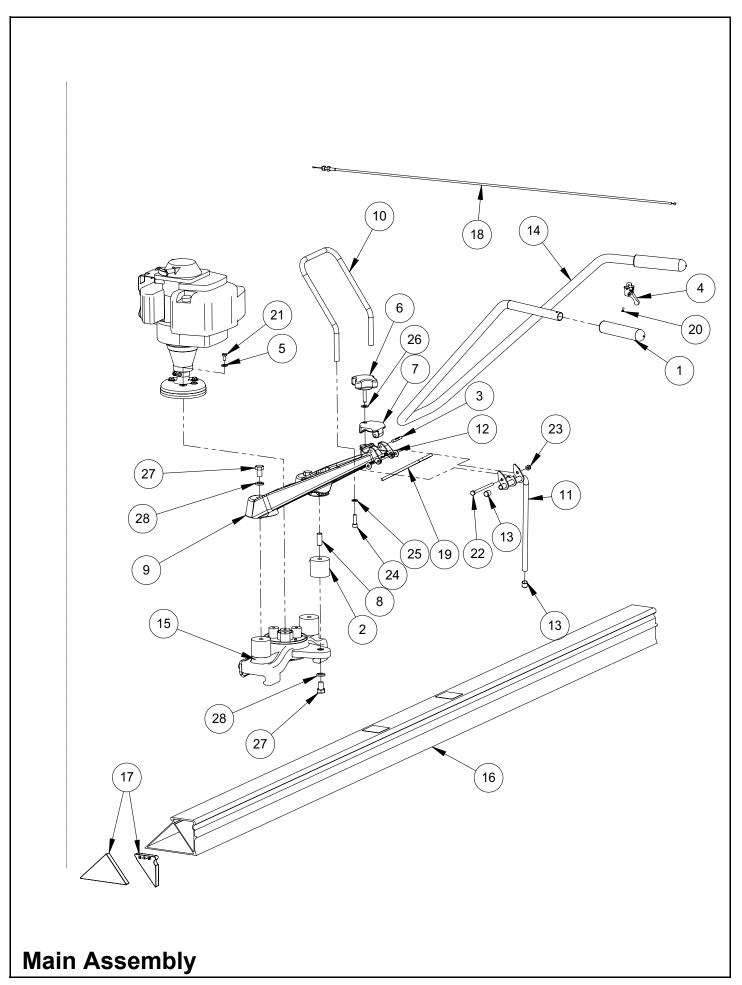
MBW, Inc.

250 Hartford Rd • PO Box 440 Slinger, WI 53086-0440 Phone: (262) 644-5234 Fax: (262) 644-5169

Email: mbw@mbw.com Website: www.mbw.com MBW (UK) Ltd.

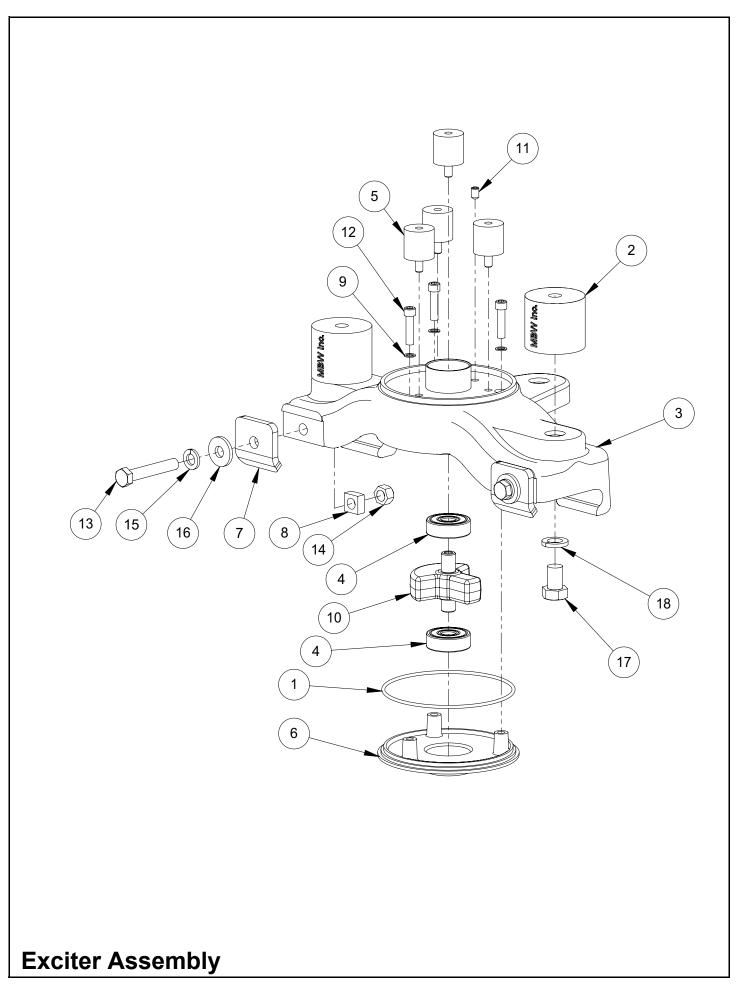
Units 2 & 3 Cochrane Street Bolton BL3 6BN, England Phone: 01204 387784 Fax: 01204 387797 **MBW France S.A.R.L**

Phone: 3 44 07 15 96 Fax: 3 44 07 41 28

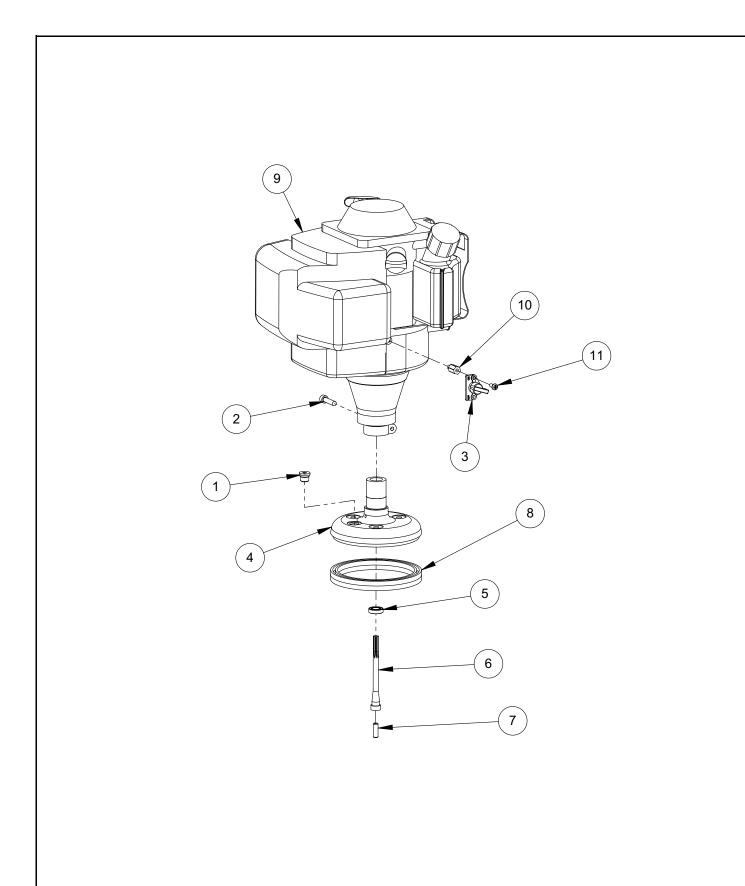


ITEM	PART NO.	DESCRIPTION	QTY
1.	18472	GRIP, HANDLE	2
2.	17170	SHOCKMOUNT, 2" OD X 1-3/4" LONG	1
3.	17245	DOWEL PIN, 1/4" X 1.75"	1
4.	17263	LEVER, THROTTLE	1
5.	17639	WASHER, SEALING	3
6.	20887	KNOB, CLAMPING W/ STEEL STUD	1
	17647	KNOB, CLAMPING <u>SERIAL NO. 1415759 & LOWER</u>	1
7.	17649	CLAMP	1
8.	17651	STUD, 1/2-13 X 1-1/2" LONG	1
9.	21707	MOUNT, HANDLE(INCLUDES ITEMS 3, 7, & 8)	1
10.	17656	HANDLE, LIFTING	1
11.	17660	STAND SERIAL NO. 141XXXX& LOWER	1
	21710	STAND	
12.	17661	WASHER, NYLON	2
13.	17662	CAP	2
14.	17719	HANDLE	1
15.	17726	EXCITER ASSEMBLY	1
16.	17804	4' FLOAT	1
	17806	6' FLOAT	1
	17808	8' FLOAT	1
	17810	10' FLOAT	1
	17812	12' FLOAT	1
	17814	14' FLOAT	1
	17816	16' FLOAT	1
	17818*	18' FLOAT	
	17820*	20' FLOAT	
	17824*	24' FLOAT	
17.	17831	END CAPS, FLOAT (CONTAINS ALL 4 CAPS NEEDED FOR FLOAT)	1
18.	17919	CABLE, THROTTLE (HONDA ENGINE)	1
	17793	CABLE, THROTTLE (ROBIN ENGINE)	1
19.	21711	WRNECH, 9/16	
20.	F013203TCS	THREAD CUTTING SCREW, #6-32 X 3/8"	2
21.	F042004HCS	HEX HEAD CAP SCREW, 1/4"-20 X 1/2"	3
22.	F042032HCS	HEX HEAD CAP SCREW, 1/4"-20 X 4"	1
23.	F0420ELN	LOCKNUT, 1/4"-20	1
24.	F051808SCS	SOCKET HEAD CAP SCREW, 5/16"-18 X 1"	2
25.	F05LW	LOCKWASHER, 5/16"	2
26.	F05SW	WASHER, 5/16"	1
27.	F08LW	LOCKWASHER, 1/2"	3
28.	F081306HCS	HEX HEAD CAP SCREW, 1/2"-13 X 3/4"	3
	KITe:		
	<u>KITS:</u> 20949	KIT, SCREED DEMON KNOB & A-FRAME (INCLUDES ITEMS 6, 9,11-13,& 26)	
	21733	KIT, SCREED DEMON KNOB & A-FRAME (INCLUDES ITEMS 6, 9, 11-13,& 26) KIT, HANDLE LIMITER	
		, and the second	

^{*}Dual power heads required for 18' blades and above.



ITEM	PART NO.	DESCRIPTION	QTY
1.	06237	O-RING, 4.33 ID X 0.103	1
2.	17170	SHOCKMOUNT, 2" OD X 1-3/4" LONG	2
3.	17629	HOUSING, EXCITER	1
4.	17640	BEARING, BALL	2
5.	17643	SHOCKMOUNT, 1" OD X 1" LONG	4
6.	17645	COVER, EXCITER	1
7.	18547	KIT, CLAMPS (INCLUDES TWO CLAMPS AND ALL NECASSARY HARDWARE)	1
8.	17736	NUT, SQUARE, 3/8"-16	2
9.	17863	WASHER, FIBER, 0.25 X 0.38 X 0.03	3
10.	19864	EXCITER, SCREEDEMON	1
11.	F042003SSS	SOCKET HEAD SET SCREW, 1/4-20 X 3/8"	1
12.	F042008SCS	SOCKET HEAD CAP SCREW, 1/4"-20 X 1"	3
13.	F061618HCS	HEX HEAD CAP SCREW, 3/8"-16 X 2-1/4"	2
14.	F0616DLN	LOCKNUT, 3/8"-16 DEFORMED	2
15.	F06LW	LOCKWASHER, 3/8"	2
16.	F06SW	WASHER, 3/8"	
17.	F081306HCS	HEX HEAD CAP SCREW, 1/2"-13 X 3/4"	2
18.	F08LW	LOCKWASHER, 1/2"	2
L			



Engine and Engine Mount

ITEM	PART NO.	DESCRIPTION	QTY
1.	09618	FITTING, PLUG	1
2.	15304	SCS, M6 X 25mm	1
3.	17296	SWITCH, ENGINE STOP	1
4.	17634	FLANGE, ENGINE MOUNT	1
5.	17635	BEARING, BALL, SEALED, 6800	1
6.	17636	SPLINE SHAFT (DOES NOT INCLUDE ITEM 8)	1
7.	17637	STUD, 1/4-20 X 3/4	1
8.	17711	RUBBER SEAL	1
9.	19211	ENGINE, HONDA GX35NTT3 (INCLUDES 3, 10 & 11)	1
10.	21702	STUD, KILLSWITCH	1
11.	F023203PMS	PHMS, #8-32 X 3/8 ZP	1
	1775		
	KITS:	MOUNT ENGINE (NIGHT PEG ITEMS 4 TO S)	
	17638	MOUNT, ENGINE (INCLUDES ITEMS 4 TO 8)	1
	17885	ADHESIVE, 426 LOCTITE, 10g (NOT SHOWN)	1
		I	

WARRANTY

WHAT DOES THIS WARRANTY COVER? MBW, Incorporated (MBW) warrants each New Machine against defects in material and workmanship for a period of twelve (12) months. "New Machine" means a machine shipped directly from MBW or authorized MBW dealer to the end user. This warranty commences on the first day the machine is sold, assigned to a rental fleet, or otherwise put to first use.

MBW warrants each Demonstration Machine against defects in material and workmanship for a period of six (6) months. "Demonstration Machine" means a machine used by MBW or its agents for promotional purposes. This warranty commences on the first day the machine is sold, assigned to a rental fleet, or otherwise put to first use.

This warranty covers the labor cost for replacement or repair of parts, components, or equipment on New Machines or Demonstration Machines, and MBW shall pay labor costs at MBW's prevailing rate to affect the warranted repair or replacement. MBW reserves the right to adjust labor claims on a claim-by-claim basis.

This warranty covers the shipping cost of replacement parts, components, or equipment via common ground carriers from MBW to an authorized MBW dealer. Air freight is considered only in cases where ground transportation is not practical.

MAY THIS WARRANTY BE TRANSFERRED? This warranty is non-transferable and only applies to the original end user of a new machine or demonstration machine.

WHAT DOES THIS WARRANTY NOT COVER?

- 1. This warranty does not cover any Used Equipment. "Used Equipment" means any MBW machine or equipment that is not a New Machine or a Demonstration Machine. All Used Equipment is sold **AS IS/WHERE IS WITH ALL FAULTS.**
- 2.This warranty does not cover any New Machine, Demonstration Machine, or their equipment, parts, or components altered or modified in any way without MBW's prior written consent. This warranty does not cover the use of parts not specifically approved by MBW for use on MBW products. This warranty does not cover misuse, neglect, shipping damage, accidents, acts of God, the operation of any New Machine or Demonstration Machine in any way other than recommended by MBW in accordance with its specifications, or any other circumstances beyond MBW's control. This warranty does not cover any New Machine or Demonstration Machine repaired by anyone other than MBW factory branches or authorized MBW distributors.
- 3.This warranty does not cover, and MBW affirmatively disclaims, liability for any damage or injury resulting directly or indirectly from design, materials, or operation of a New Machine or Demonstration Machine or any other MBW product. MBW's liability with respect to any breach of warranty shall be limited to the provisions of this document and in no event shall exceed an amount equal to the purchase price of the New Machine or Demonstration Machine purchased from MBW.
- 4. This warranty does not cover engines, motors, and other assemblies or components produced by other manufacturers and used on a New Machine or Demonstration Machine, as said engines, motors, and other assemblies or components may have warranties provided by the manufacturer thereof. This warranty does not apply to consumable items, such as v-belts, filters, trowel and screed blades, seals, shock mounts, batteries, and the like, all of which are sold AS IS/WHERE IS WITH ALL FAULTS.
- 5.This warranty does not cover the cost of transportation and other expenses which may be connected with warranty service but not specifically mentioned herein.

6.This warranty does not cover any updates to any New Machine, Demonstration Machine, or any other MBW product. MBW reserves the right to improve or make product changes without incurring any obligation to update, refit, or install the same on New Machines or Demonstration Machines previously sold.

WHAT MUST YOU DO TO OBTAIN WARRANTY COVERAGE? Each New Machine or Demonstration Machine is accompanied by a Warranty Registration Card. You must sign, date, and return the Warranty Registration Card to the place of origin of the New Machine or Demonstration Machine, either to MBW, Inc. at P.O. Box 440, Slinger, Wisconsin 53086, MBW (UK), Ltd. at Units 2 & 3 Cochrane Street, Bolton BL3 6BN, United Kingdom or MBW FRANCE SARL at ZA D'Outreville, 5 Rue Jean Baptiste Neron, Bornel 60540 France, within ten (10) days after purchase, assignment to a rental fleet, or first use. This signed warranty card is the buyer's affirmation that he has read, understood, and accepted the warranty at the time of purchase. Failure to return the warranty card as specified herein renders the warranty null and void. In order to receive warranty coverage consideration, warranty claims must be submitted within thirty (30) days after the New Machine or Demonstration Machine fails. Warranty claims must be submitted to MBW, Inc., MBW (UK), Ltd. or MBW FRANCE SARL, and written authorization for the return of merchandise or parts under the warranty must be obtained before shipment to MBW.

WHAT WILL MBW DO? MBW's obligation under this warranty is limited to the replacement or repair of parts for a New Machine or Demonstration Machine at MBW factory branches or at authorized MBW distributors, and such replacement or repair is the exclusive remedy provided hereunder. Labor must be performed at an authorized MBW distributor. MBW reserves the right to inspect and render a final decision on each warranty case, and MBW's repair or replacement is solely within the discretion of MBW

IT IS EXPRESSLY AGREED THAT THIS SHALL BE THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY. UNDER NO CIRCUMSTANCES SHALL MBW BE LIABLE FOR ANY COSTS, LOSS, EXPENSE, DAMAGES, SPECIAL DAMAGES, INCIDENTAL DAMAGES, OR PUNITIVE DAMAGES ARISING DIRECTLY OR INDIRECTLY FROM THE USE OF THE NEW MACHINE OR DEMONSTRATION MACHINE WHETHER BASED UPON WARRANTY, CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR ANY OTHER LEGAL THEORY.

THE FOREGOING WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR USE, AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL OTHER OBLIGATIONS OR LIABILITY ON MBW'S PART. MBW NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME ON BEHALF OF MBW ANY OTHER LIABILITY OR WARRANTY IN CONNECTION WITH THE SALE OR SERVICE OF ANY NEW MACHINE, DEMONSTRATION MACHINE, OR ANY OTHER MBW PRODUCT.

EXTENDED RAMMER WARRANTY - MODELS R422, R442, R482 & R483.

This extended warranty commences on the last day of MBW's standard, one year, "limited warranty" and runs for an additional four years (48 months). This extended warranty is limited to part replacement and shipping costs of rammer **bellows and non-metallic slide bearings only.** This extended warranty does not cover labor, down time, or any other cost beyond that of component replacement and freight. This extended warranty is subject to all limitations set fourth in MBW's "limited warranty", above.