OPERATOR'S SAFETY AND SERVICE MANUAL

SCREEDEMON

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

WS500. 1430000



WET SCREED

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⚠ WARNING ⚠

CALIFORNIA PROPOSITION 65 WARNING

Engine exhaust and some of its constituents and dust produced during the use of this product contain chemicals known in the state of California to cause cancer, birth defects, and other reproductive harm.

For more information go to **www.P65Warnings.ca.gov**

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 information 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 combustion engine discharges 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 AREA!



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.



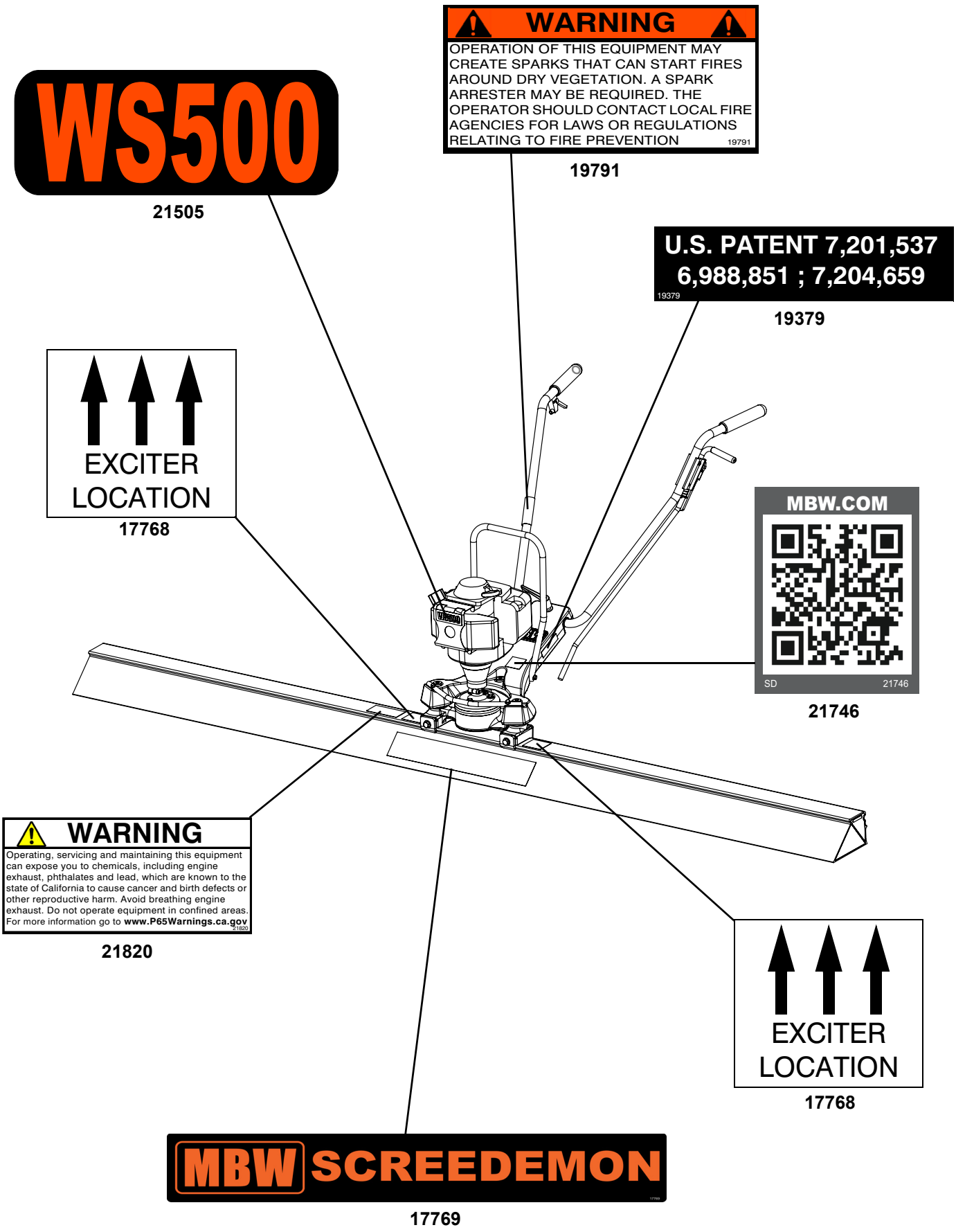
DUST PROTECTION: Machining, crushing or handling of stone, concrete, masonry, metal and other materials may generate dust, mist and fumes containing chemicals such as silica known to cause serious or fatal injury or illness such as respiratory disease, silicosis, cancer, birth defects, or other reproductive 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.

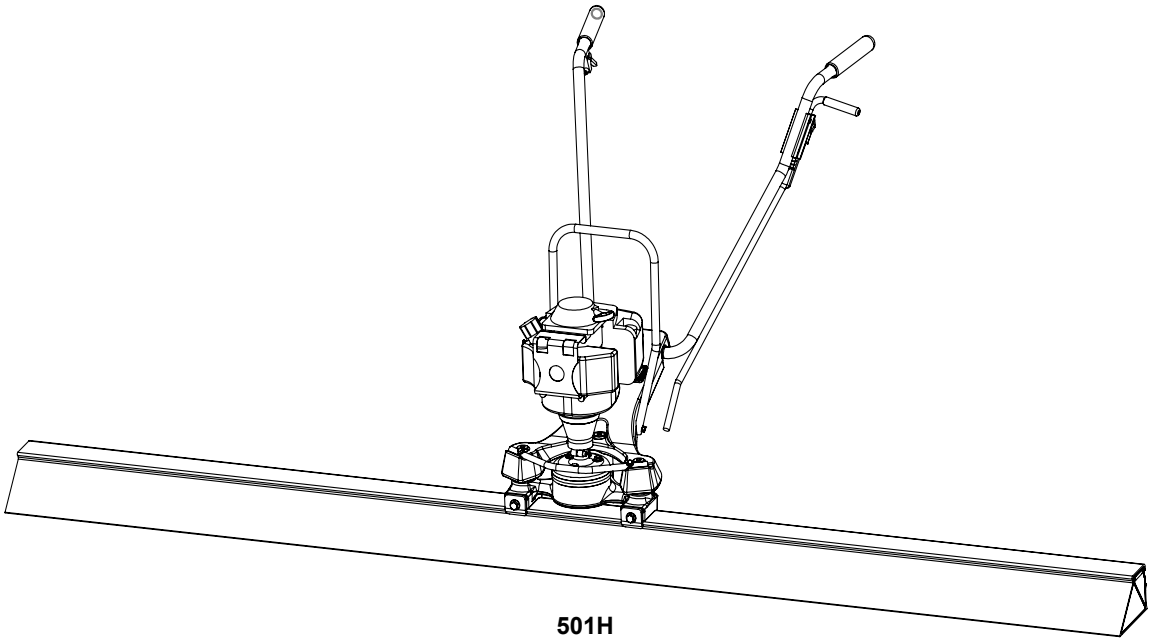
Safety Decals

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.



Safety Decals

SPECIFICATIONS



501H

	501H
Operating Weight	30 lbs (13.6 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

	Magnesium Blades		Aluminum Blades	
Width	**Part #**	**Weight**	**Part #**	**Weight**
4 ft (1.21 m)	**17804**	8.1 lb (3.7 kg)	-	-
6 ft (1.83 m)	**17806**	12.1 lb (5.5 kg)	**23006**	16.5 lb (7.5 kg)
8 ft (2.44 m)	**17808**	16.1 lb (7.3 kg)	**23008**	22.0 lb (10.0 kg)
10 ft (3.05 m)	**17810**	20.1 lb (9.1 kg)	**23010**	27.5 lb (12.5 kg)
12 ft (3.66 m)	**17812**	24.0 lb (10.9 kg)	**23012**	33.0 lb (15.0 kg)
14 ft (4.27 m)	**17814**	28.0 lb (12.7 kg)	-	-
16 ft (4.88 m)	**17816**	32.0 lb (14.5 kg)	-	-
18 ft (5.49 m)	**17818**	36.0 lb (16.3 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.

1. Loosen the bolts that secure the clamps to the exciter assembly.
2. 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.

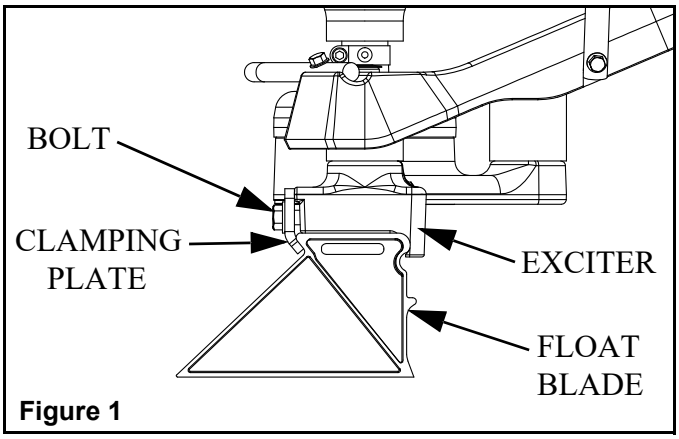


Figure 1

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.

⚠ WARNING ⚠

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.

⚠ CAUTION ⚠

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

⚠ CAUTION ⚠

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

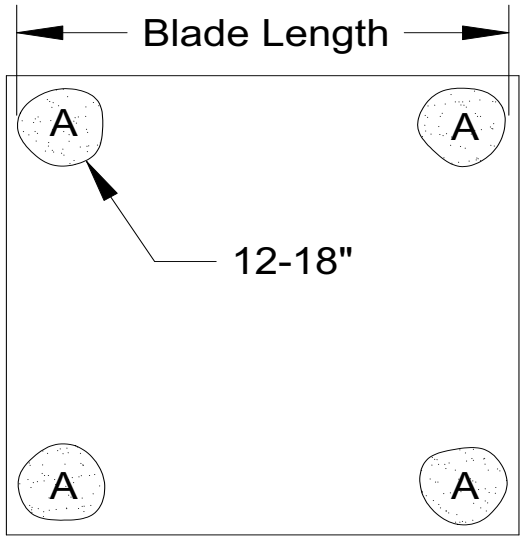
The ScreeDemon can be used with or without forms. The following describes the use of the ScreeDemon without forms.

1. 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.

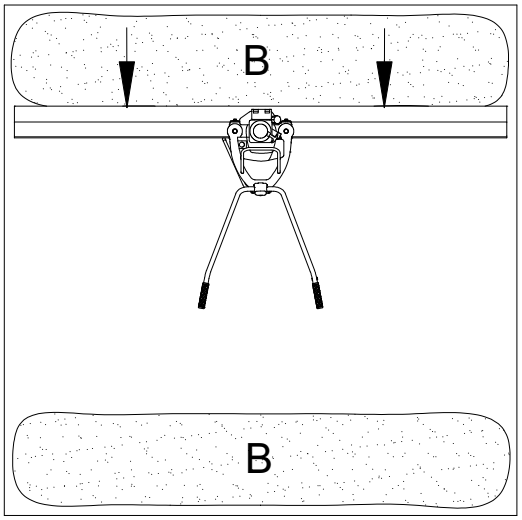
NOTE: Use a laser receiver, transit level, or grade stakes to help establish the correct grade.

2. 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.

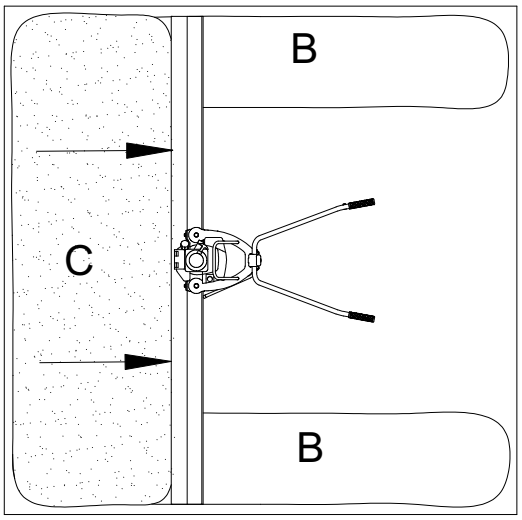
3. Place one end of the float blade on each of the parallel strips (B) and screed the concrete (C) in between the strips. Be sure the float blade follows the contour of the parallel strips.



Step 1.



Step 2.



Step 3.

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.

Refer to Figure 2.

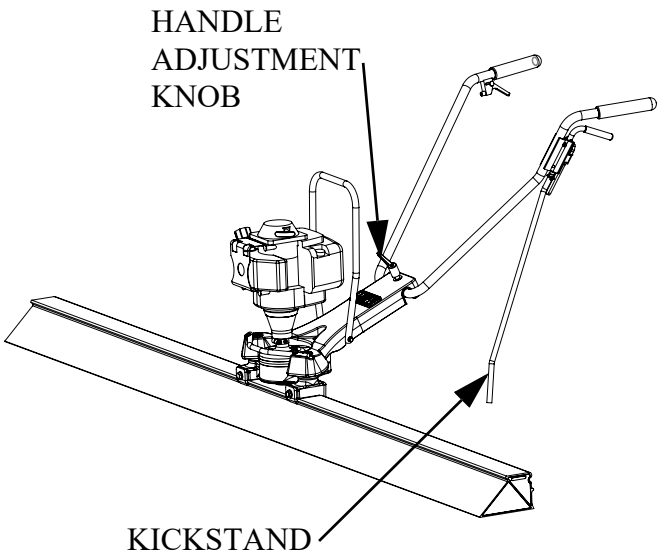


Figure 2.

Transporting

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.

Refer to Figure 3.

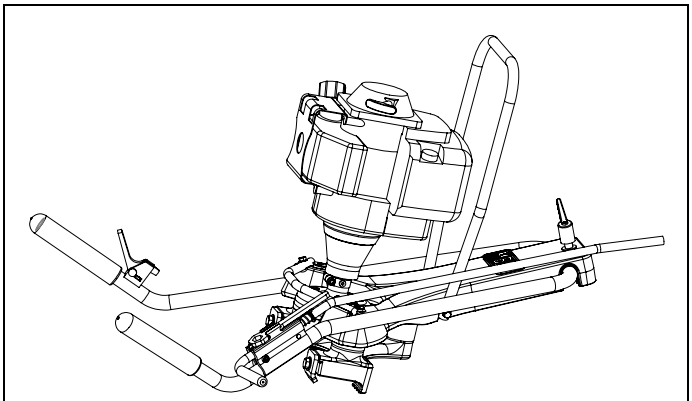


Figure 3.

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.

⚠ 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	X			
Hardware	Check and tighten as needed[1]		X		X
Shockmounts	Check for cracks or tears		X		X

1. Check all hardware after the first 5 hours of use, then follow the maintenance schedule.
2. Service kit #20192

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 (#21, page 12) from the engine (#9).
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 1/4-20 hex head cap screws and sealing washers (#29 & #24, page 12) from the engine mounting flange.
5. Remove the plug (#1) from the engine mounting flange.
6. Loosen the 1/4-20 socket head cap screw (#10, page 14) inside the exciter housing (#3, 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 (#21) from the engine.
2. Remove three plugs (#23) and 1/2-13 socket head cap screws (#34).
3. 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 (#5) from the exciter housing (#3). Unthread the center shockmount (#5) from the exciter (#9).
2. Loosen the three 1/4-20 socket head cap screws (#11) securing the exciter cover (#6) to the exciter housing. Back the socket head cap screws out about 1/4".

3. Gently tap on the socket head cap screws with a rubber mallet to push the exciter cover out of the exciter housing.
4. Remove the 1/4-20 socket head cap screws after the exciter cover is free from the exciter housing.
5. Remove the two bearings (#4) from the exciter housing, and exciter cover.

Exciter Assembly

Refer to Exciter Assembly, page 14.

1. Press a bearing (#4) into the exciter housing (#3) and exciter cover (#6).
2. 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.
3. Apply a light coat of grease to the top step of the exciter cover (#6). Place a new o-ring (#1) onto the greased step.
4. Apply medium strength thread locker to the threaded holes in the cover.
5. 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 1/4-20 socket head cap screws (#11).
6. Thread the four shockmounts (#5) into the exciter housing and exciter.
7. Apply medium strength thread locker to the 1/4-20 socket head cap screw (#10) and thread it into the exciter housing.

Engine Mounting Flange & Engine Assembly

Refer to Engine and Engine Mount, page 16

1. Inspect the rubber seal (#8). 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 1/4-20 socket head cap screw (#10, page 14) on the exciter.



Figure 4.

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 (#5, page 14) on top of the exciter housing (#3, page 14). This only needs to be hand tight.
7. Secure the engine mounting flange with three sealing washers (#24, page 12) and three 1/4-20 hex head cap screws (#29, 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 (#9) 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 6mm socket head cap screw (#2) at the base of the engine.)
12. Reattach the throttle cable (#21, 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

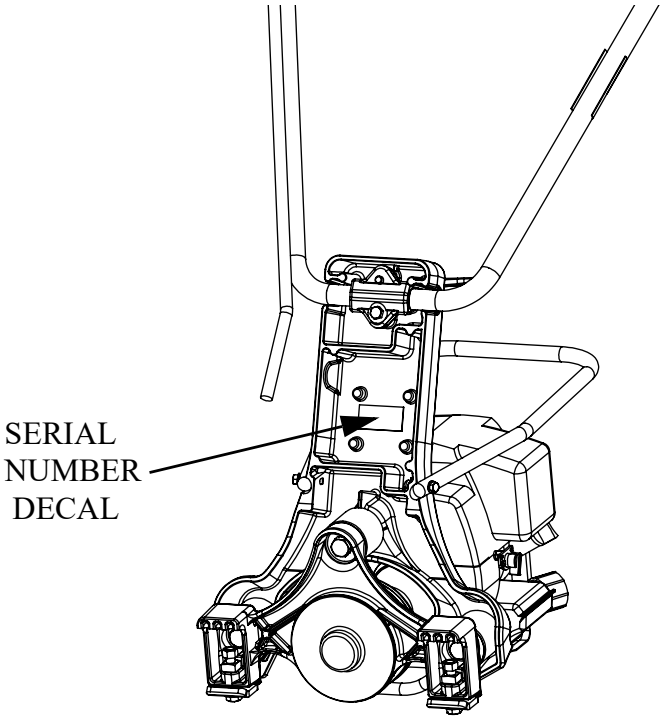
The warranty is stated in this book on page 18. Failure to return the Warranty Registration Card renders the warranty null and void.

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.



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

- The model/serial number decal is located on the underside of the a-frame.

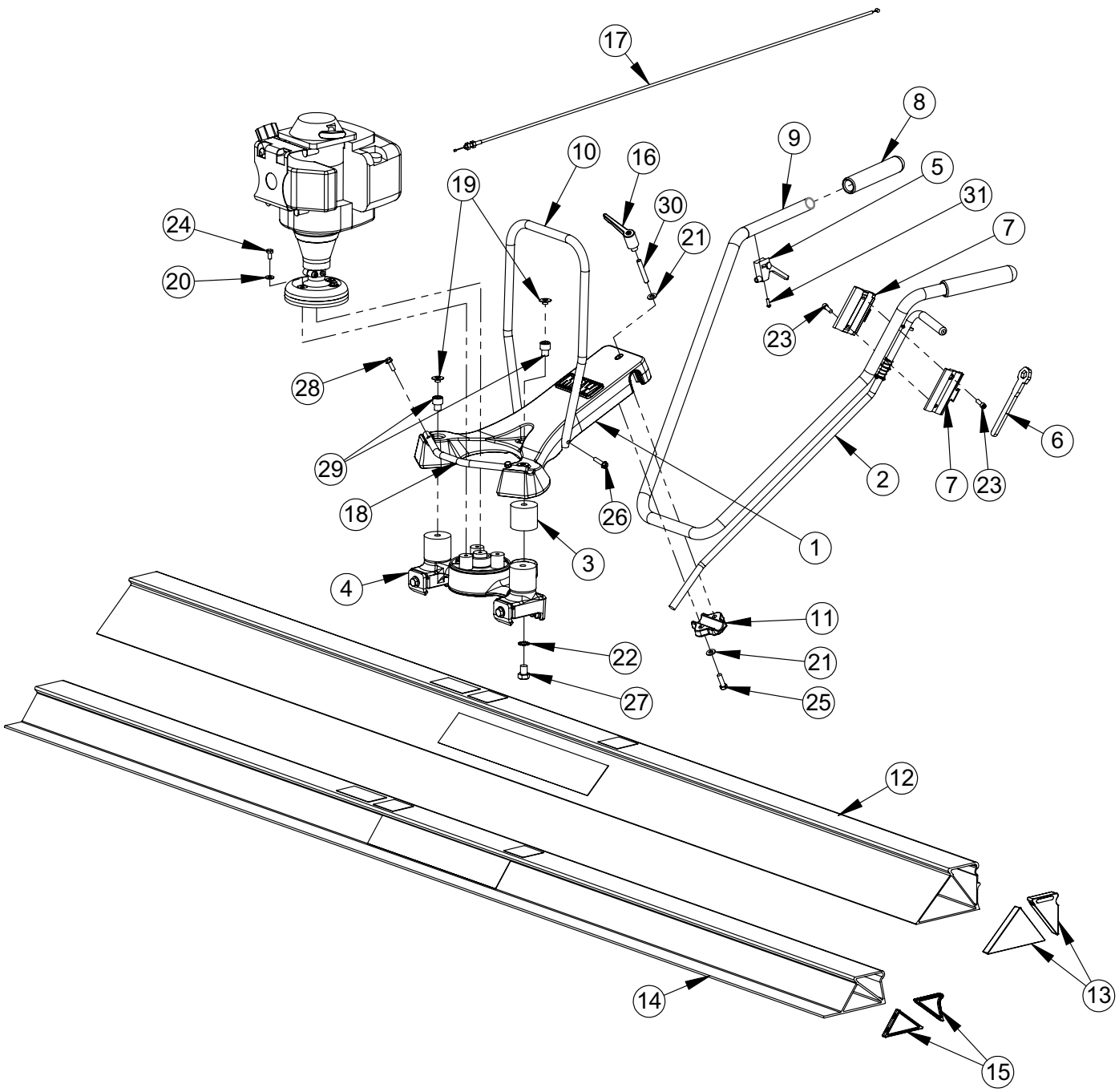
Write Model Number here

Write Serial Number here

Contact Information

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Slinger, WI 53086-0440
Phone: (262) 644-5234
Fax: (262) 644-5169
Email: mbw@mbw.com
Website: www.mbw.com

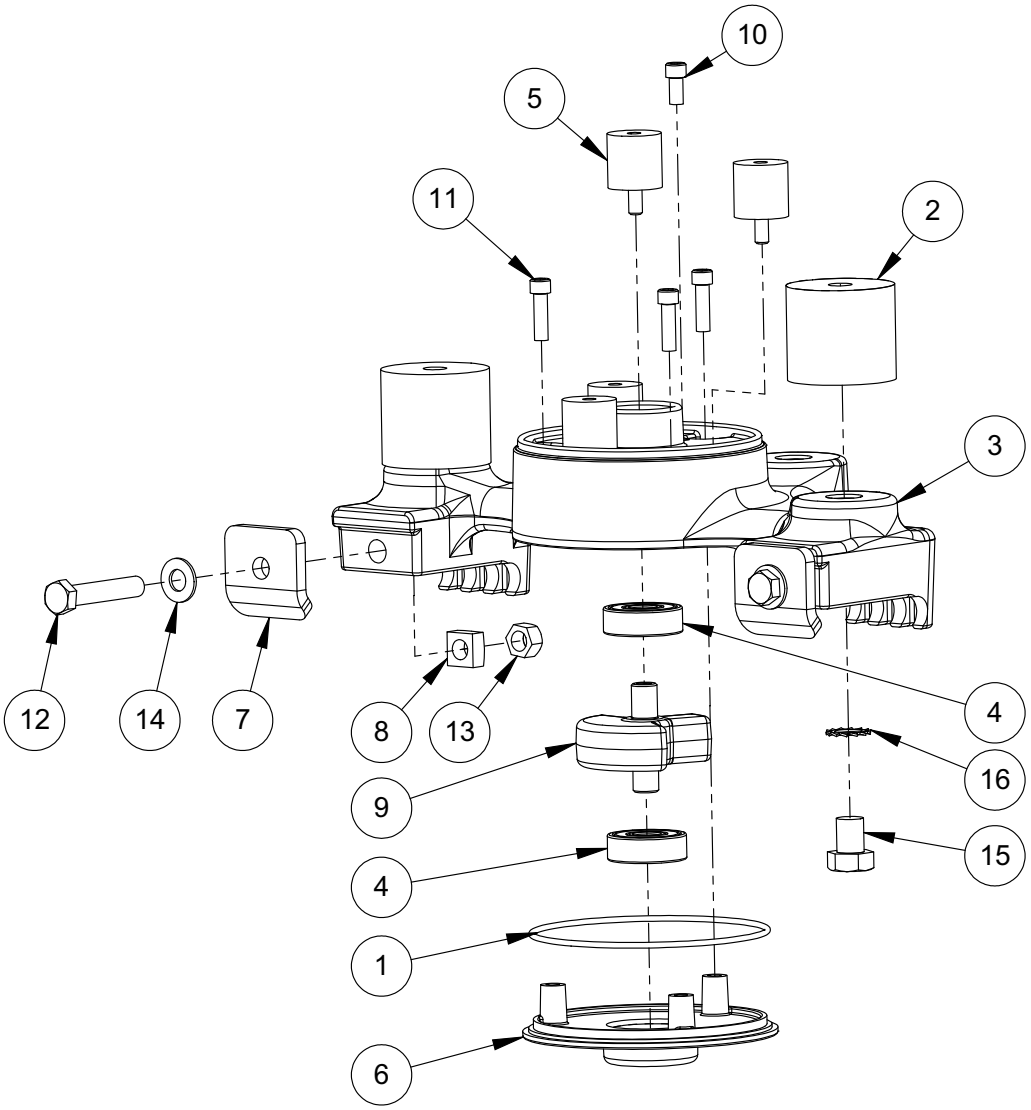
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Main Assembly

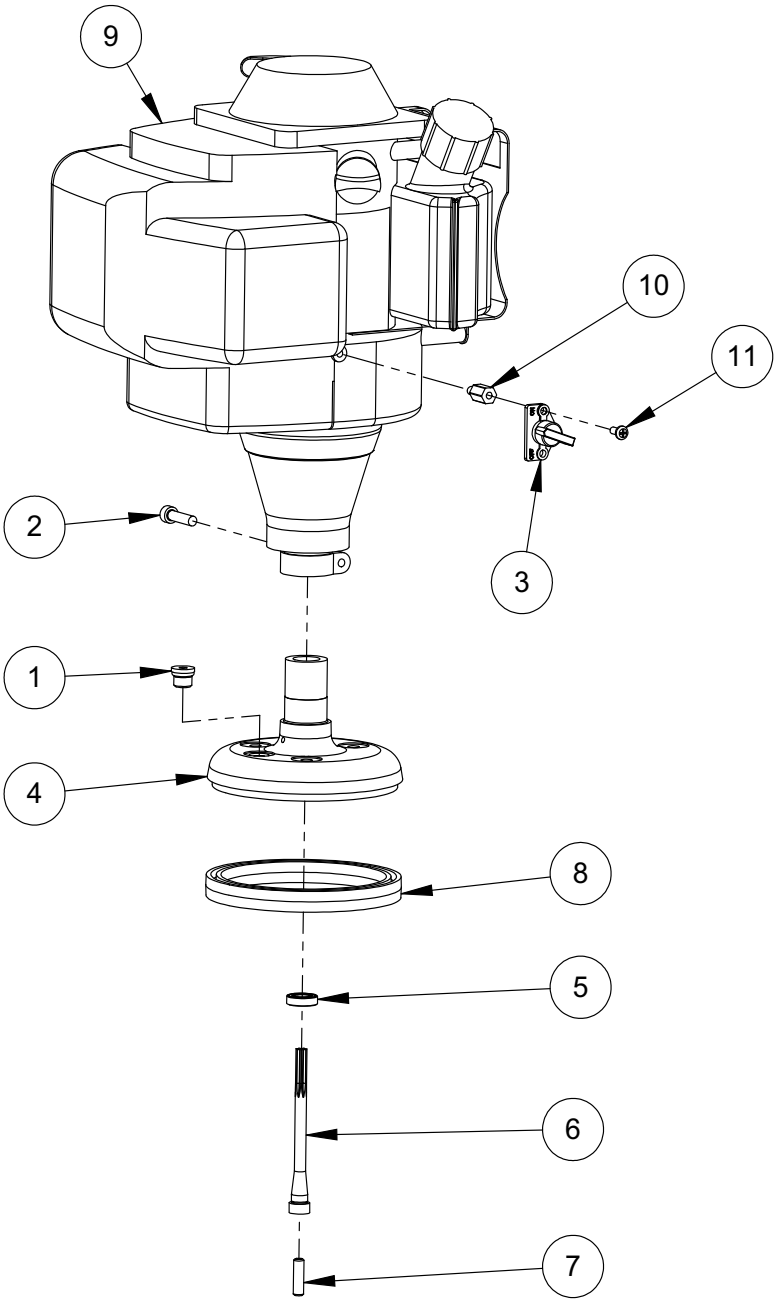
ITEM	PART NO.	DESCRIPTION	QTY
1.	23139	A FRAME	1
2.	23158	KICKSTAND ASSEMBLY	1
3.	17170	SHOCKMOUNT 2.00” OD x 1-3/4” LONG	1
4.	23049	EXCITER ASSEMBLY	1
5.	22937	TRIGGER, THROTTLE, 501H	1
6.	23148	WRENCH	1
7.	23147	KICKSTAND MOUNT	2
8.	18472	GRIP, HANDLE	2
9.	23151	OPERATING HANDLE	1
10.	23157	LIFTING HANDLE	1
11.	23059	HANDLE CLAMP	1
12.	17804	4’ FLOAT, MAGNESIUM	1
	17806	6’ FLOAT, MAGNESIUM	1
	17808	8’ FLOAT, MAGNESIUM	1
	17810	10’ FLOAT, MAGNESIUM	1
	17812	12’ FLOAT, MAGNESIUM	1
	17814	14’ FLOAT, MAGNESIUM	1
	17816	16’ FLOAT, MAGNESIUM	1
	17818*	18’ FLOAT, MAGNESIUM	1
13.	17831	END CAPS, FLOAT (CONTAINS ALL 4 CAPS NEEDED FOR MAGNESIUM FLOAT)	1
14.	23106	6’ FLOAT, ALUMINUM	1
	23108	8’ FLOAT, ALUMINUM	1
	23110	10’ FLOAT, ALUMINUM	1
	23112	12’ FLOAT, ALUMINUM	1
15.	23084	END CAPS, FLOAT (CONTAINS ALL 4 CAPS NEEDED FOR ALUMINUM FLOAT)	1
16.	21181	HANDLE, ADJUSTMENT	1
17.	22938	CABLE, THROTTLE, 501H	1
18.	23057	FRONT HANDLE	1
19.	23060	PLUG, 1/2	3
20.	17639	WASHER, SEALING	3
21.	F05PW	WASHER, 5/16” SAE	2
22.	M12ETLW	LOCK WASHER, M12	1
23.	F042006SCS	SOCKET HEAD CAP SCREW, 1/4”-20 x 3/4”	2
24.	F042004HCS	HEX HEAD CAP SCREW, 1/4”-20 x 1/2”	3
25.	F051808HCS	HEX HEAD CAP SCREW, 5/16”-18 x 1”	1
26.	23153	FLANGE SCREW, 1/4”-20 x 1”	2
27.	F081305HCS	HEX HEAD CAP SCREW, 1/2”-13 x 5/8”	1
28.	F042006FWS	FLANGE SCREW, 1/4”-20 x 3/4”	2
29.	F081304SCS	SOCKET HEAD CAP SCREW, 1/2”-13 x 1/2”	3
30.	23058	STUD, 5/16”-18 x 2”	1
31.	23136	THREAD FORMING SCREW, #8-32 x 1/2”	1

*Dual power heads required for 18’ blades and above.



Exciter Assembly

ITEM	PART NO.	DESCRIPTION	QTY
1.	06237	O-RING, 4.22 ID X 0.103	1
2.	17170	SHOCKMOUNT, 2” OD X 1-3/4” LONG	2
3.	22820	HOUSING, EXCITER	1
4.	17640	BEARING, BALL	2
5.	17643	SHOCKMOUNT, 1” OD X 1” LONG	4
6.	23155	COVER, EXCITER, BLACK	1
7.	18547	KIT, CLAMPS (INCLUDES TWO CLAMPS AND ALL NECASSARY HARDWARE)	1
8.	17736	NUT, SQUARE, 3/8”-16	2
9.	19864	EXCITER, SCREEDEMON	1
10.	F042004SCS	SOCKET HEAD CAP SCREW, 1/4-20 X 1/2”	1
11.	F042007SCS	SOCKET HEAD CAP SCREW, 1/4”-20 X 7/8”	3
12.	F061616HCS	HEX HEAD CAP SCREW, 3/8”-16 X 2”	2
13.	F0616DLN	LOCKNUT, 3/8”-16 DEFORMED	2
14.	F06PW	WASHER, 3/8”	2
15.	F081305HCS	HEX HEAD CAP SCREW, 1/2”-13 X 5/8”	2
16.	M12ETLW	LOCK WASHER, M12	2



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.	23154	FLANGE, ENGINE MOUNT, BLACK	1
5.	17635	BEARING, BALL, SEALED, 6800	1
6.	17636	SPLINE SHAFT	1
7.	17637	STUD, 1/4-20 X 7/8	1
8.	17711	RUBBER SEAL	1
9.	17709	ENGINE, HONDA GX35NTT3	1
10.	21702	STUD, KILLSWITCH	1
11.	F023203PMS	PHMS, #8-32 X 3/8 ZP	1
	KITS:		
	23183	KIT, MOUNT, ENGINE (INCLUDES ITEMS 4 TO 8)	1
	17885	ADHESIVE, 426 LOCTITE, 10g (NOT SHOWN)	1
	Q22260VK4013	HONDA CLUTCH HOUSING ASM	

WARRANTY

1.IN GENERAL - The warranties described in this document are provided by M-B-W, INC. and MBW EUROPE, LTD. ("MBW") to define what is, what is not, and for how long machines and parts are covered against material defects and/or defective workmanship. To obtain warranty service, the purchaser must, within the Warranty Period (defined in Paragraph 3): (i) report the product defect to an authorized repair center, (ii) make a written request for repair, (iii) provide proof of purchase to the authorized repair center, and (iv) deliver the equipment to the authorized repair center. A list of authorized repair centers is available on the MBW website (mbw.com) or by contacting MBW at 800-678-5237.

2.COVERED - MBW's obligation under this limited warranty is limited to the cost of the parts and the labor to repair any defect in material and/or workmanship at an authorized MBW repair center. Transportation charges are not covered by this limited warranty.

3.WARRANTY PERIODS - The Warranty Period begins on, as applicable: (i) the product purchase date by an end user or (ii) the first day the product is put into rental or two years after invoice date from MBW to Dealer, whichever starts the warranty period first. To insure that your warranty is in place, fill out the warranty card and mail it in or register your product online at www.mbw.com/service-support/warranty-registration. The warranty is nontransferable.

The Warranty Period ends after:

A.New Ground compaction equipment - 2 years.
B.New Concrete finishing equipment - 1 year.
C.New Utility equipment - 1 year.
D.Demonstration equipment - 6 months.
E.Wear parts: lubricants, filters, belts and shock mounts - 30 days.

4.NOT COVERED- This warranty does not include, and MBW specifically excluded from any warranty:

A.Used equipment - all used equipment is not warranted and is sold 'as is' 'where is' with all defects.
B.Replacement electrical parts, including but not limited to: electric motors, circuit boards, switches, are not warranted or returnable.
C.OEM: engines, batteries, and chargers. Those warranties are covered by the manufacturer.
D.Consumable parts: trowel and screed blades.
E.Equipment that has been: altered, abused, neglected, not maintained, or modified to run outside its specifications. Any modification to the machine or its parts makes this warranty null and void.
F.Other: damage to a product from normal wear, air freight, overtime, pickup and delivery, temporary replacement rentals, freight damage, or other similar incidents.
G.Product used in a fashion it was not designed for.
H.Parts and labor not performed by authorized dealers.

It is at MBW's discretion if warranty applies and has the right to adjusts labor rates on a claim by claim basis.

5.OTHER - IT IS EXPRESSLY AGREED THAT THIS SHALL BE THE SOLE AND EXLUSIVE REMEDY UNDER THIS WARRANTY. UNDER NO CIRCUMSTANCES SHALL MBW BE LIABLE FOR ANY COSTS, LOSS, EXPENSE, DAMAGE, SPECIAL DAMAGES, DIRECT DAMAGES, INCIDENTAL DAMAGES, EXEMPLARY, CONSEQUENTIAL, OR PUNITIVE DAMAGES ARISING DIRECTLY OR INDIRECTLY FROM THE USE OF MBW PRODUCT OR DAMAGES FOR LOSS OF USE, LOSS OF ANTICIPATED PROFITS, INCOME, OR ECONOMIC LOSSES OF ANY KIND. **MBW'S** LIABILITY TO BUYER UNDER THESE WARRANTIES FOR THE PRODUCT IS LIMITED AS SET FORTH HEREIN, WHETHER BASED UPON WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY **OR ANY OTHER THEORY OF LIABILITY, INCLUDING BUT NOT LIMITED TO FRAUD, MISREPRESENTATION, BREACH OF CONTRACT, PERSONAL INJURY, PRODUCTS LIABILITY OR ANY OTHER THEORY.**

MBW'S LIABILITY UNDER ANY WARRANTY HEREUNDER, WHETHER EXPRESS OR IMPLIED, SHALL NOT EXCEED THE COST OF REPAIR OR REPLACEMENT OF DEFECTIVE PARTS OF THE PRODUCT OR THE PRODUCT. BUYER MAY NOT BRING ANY ACTION UNDER THESE WARRANTIES MORE THAN ONE YEAR AFTER THE CAUSE OF ACTION HAS ACCRUED.

THE FORGOING WARRANTY IS EXPRESSED IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED 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 SPECIFICALLY DISCLAIMS AND EXCLUDES ANY AND ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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 MBW PRODUCT.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

OPERATOR'S SAFETY AND SERVICE MANUAL

SCREEDEMON

This manual covers the following serial numbers
and higher for each model listed:
EWS500.....6020001



WET SCREED

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⚠ WARNING ⚠

CALIFORNIA PROPOSITION 65 WARNING

Engine exhaust and some of its constituents and dust produced during the use of this product contain chemicals known in the state of California to cause cancer, birth defects, and other reproductive harm.

For more information go to **www.P65Warnings.ca.gov**

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 information 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 combustion engine discharges 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 AREA!



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.



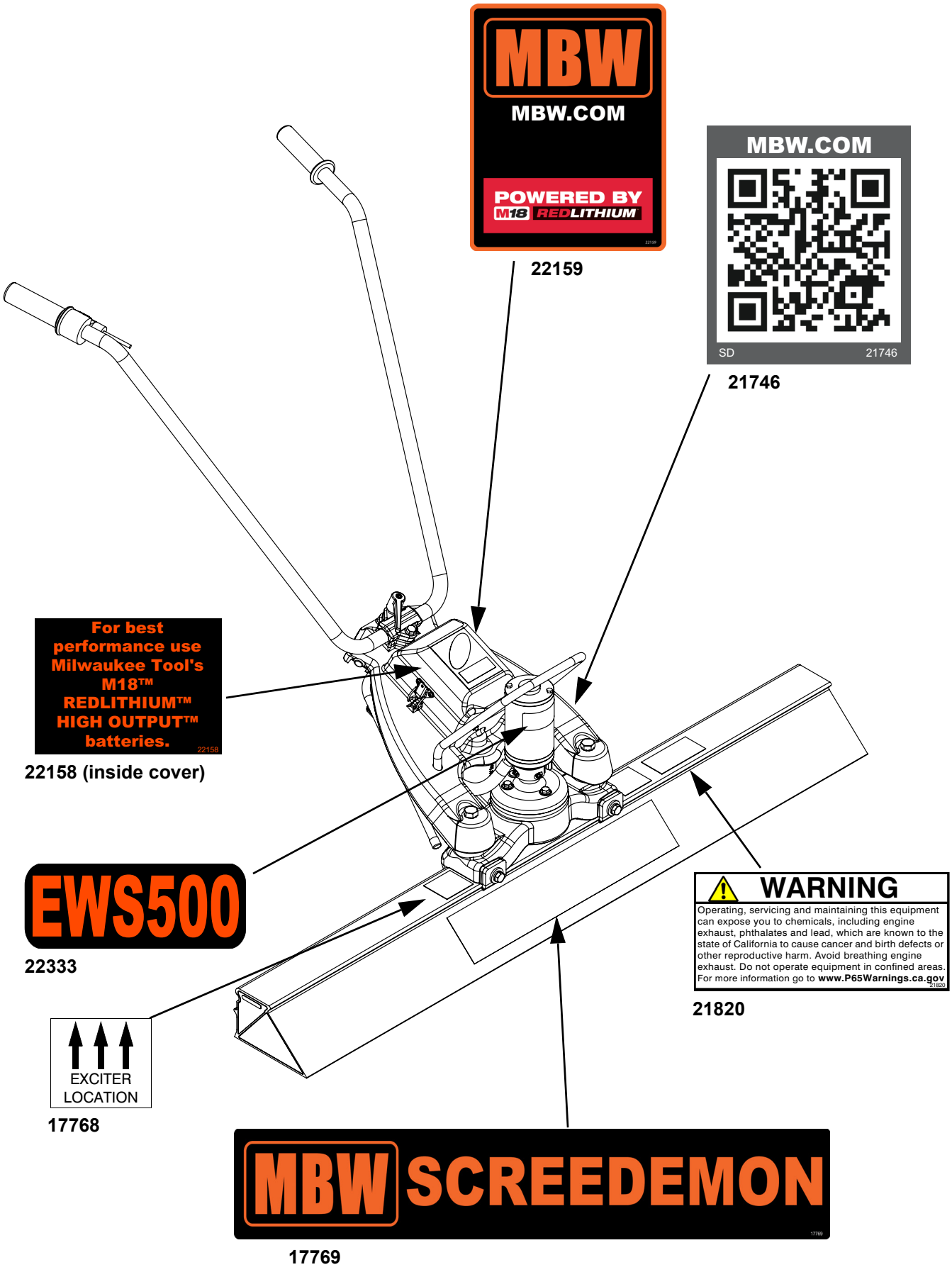
DUST PROTECTION: Machining, crushing or handling of stone, concrete, masonry, metal and other materials may generate dust, mist and fumes containing chemicals such as silica known to cause serious or fatal injury or illness such as respiratory disease, silicosis, cancer, birth defects, or other reproductive 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.

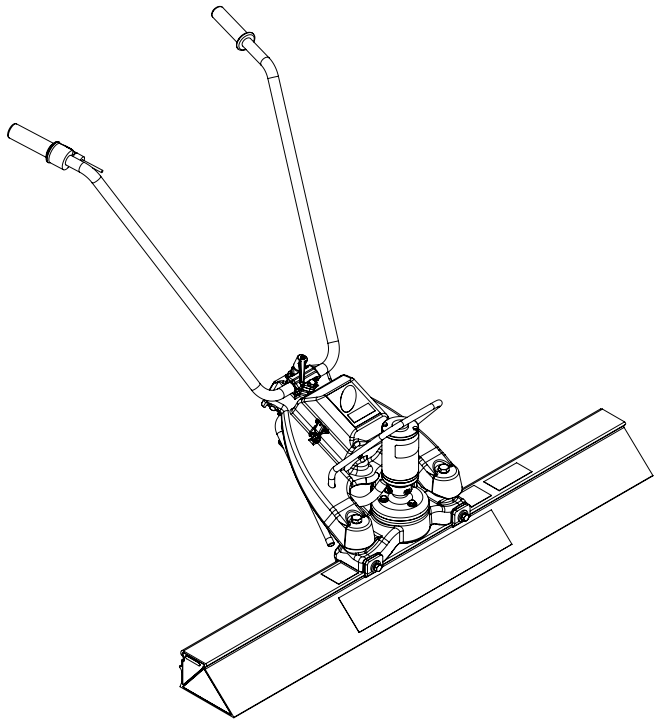
Safety Decals

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.



Safety Decals

SPECIFICATIONS



	500M
Operating Weight	33.5 lbs (15.2 kg) including 12 amp hr battery

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)

Specifications subject to change without notice

OPERATION

Introduction

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

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.

Attaching Blade

Refer to Figure 1.

1. Loosen the bolts that secure the clamps to the exciter assembly.
2. 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.

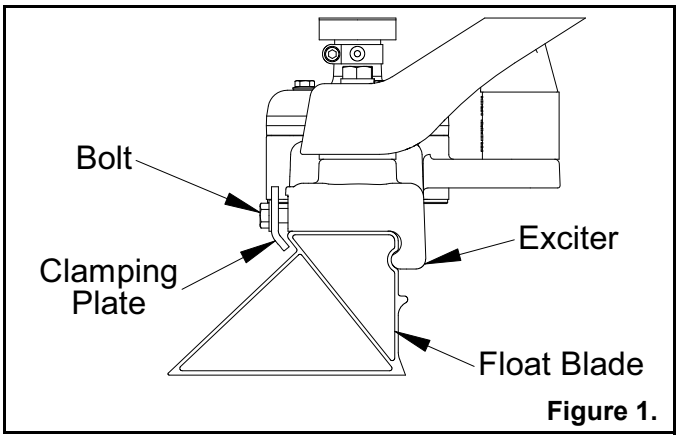


Figure 1.

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 Screed

1. Insert battery and latch cover. Throttle must be fully closed when battery is in inserted.

For Best performance use only Milwaukee Tool's M18™ REDLITHIUM™ HIGH OUTPUT™ batteries.

2. Turn throttle.

Stopping Screed

1. Move throttle to idle position.

⚠ WARNING ⚠

Always stop the motor before:

Replacing battery.

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.

⚠ CAUTION ⚠

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

⚠ CAUTION ⚠

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

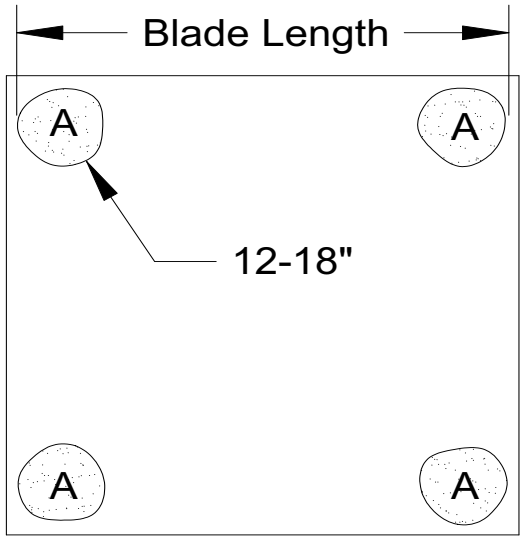
The ScreeDemon can be used with or without forms. The following describes the use of the ScreeDemon without forms.

1. 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.

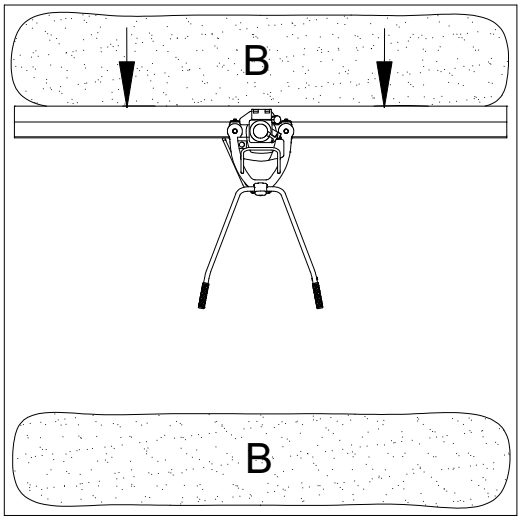
NOTE: Use a laser receiver, transit level, or grade stakes to help establish the correct grade.

2. 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.

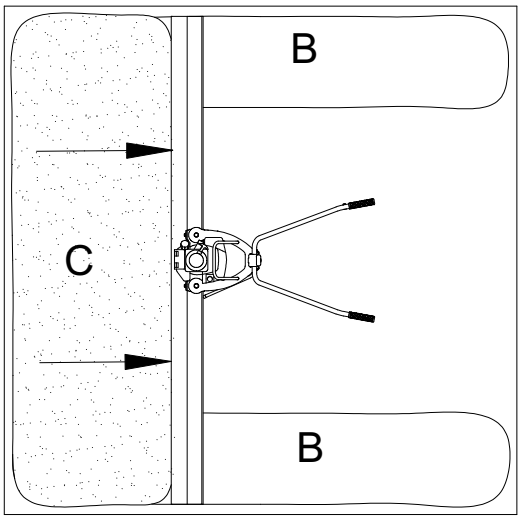
3. Place one end of the float blade on each of the parallel strips (B) and screed the concrete (C) in between the strips. Be sure the float blade follows the contour of the parallel strips.



Step 1.



Step 2.



Step 3.

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 lever counter-clockwise. Reorienting the lever by depressing the center button.
2. Move the handle to the desired position.
3. Tighten the handle adjustment lever.

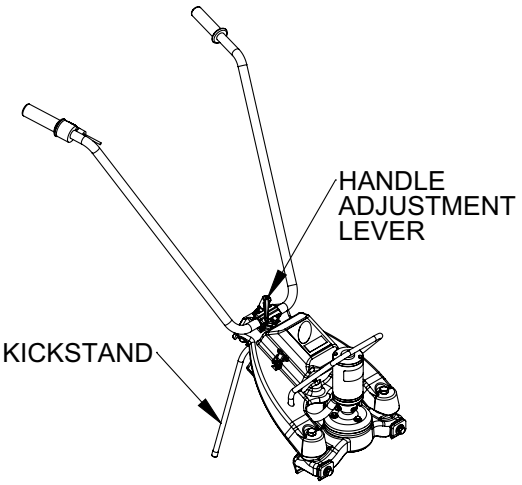


Figure 2.

Kickstand

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

Transporting

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.

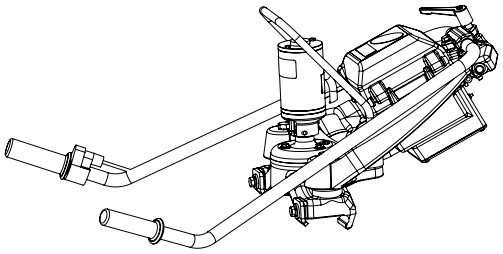


Figure 3.

MAINTENANCE

⚠ WARNING ⚠

Always exercise the stopping procedure and remove battery 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.

⚠ 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
Hardware	Check and tighten as needed[1]		X		X
Shock mounts	Check for cracks or tears		X		
Shock mounts	Replace				X

1. Check all hardware after the first 5 hours of use, then follow the maintenance schedule.
2. Service kit pn 20192

Motor Maintenance

The electric motor is a sealed unit and no periodic maintenance is required.

Battery Maintenance

For battery care, maintenance, and charging information refer to Milwaukee Tool Technical documentation included with battery.

Cleaning

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

1. Remove battery.
2. Use a hose to remove any excess concrete. Avoid spraying water into battery compartment.
3. 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.

4. Remove the blade.
5. Insert battery, Start motor and run the exciter for about 10 seconds.
6. Remove battery.

Checking and Replacing Shock Mounts

For the best reliability, replacing the shock mounts once per year is recommended.

For instructions on replacing shockmounts, refer to ‘Motor Removal’ and ‘Exciter disassembly, page 8.

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. Washing 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 Parts 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
5/8-18	83 ft•lbs	112 ft•lbs	180 ft•lbs
3/4-16	144 ft•lbs	200 ft•lbs	315 ft•lbs
1-8	188 ft•lbs	483 ft•lbs	682 ft•lbs
1-14	210 ft•lbs	541 ft•lbs	764 ft•lbs
1-1/2-6	652 ft•lbs	1462 ft•lbs	2371 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

Motor Removal

Refer to Motor Assembly, page 26.

1. Remove battery.
2. Remove bottom cover (#5,page 22) from ScreeDemon to access wiring compartment
3. Identify and detach motor wiring (terminals 1 and 2) by inserting a small screwdriver in terminal strip hole above wire to be disconnected, and levering screwdriver to release wire clamp.
4. Loosen two pinch bolts (#8) securing motor adapter (#4) to exciter assembly (#5) and remove motor. Take care to not lose woodruff key (#1).
5. Pull hose (#3) off of motor adapter (#4) and pull wiring through.
6. Motor (#2) can be removed from adapter (#4) by removing the nuts (#6).

Exciter Disassembly

Refer to Exciter Assembly, page 18.

1. Remove battery.
2. Loosen two pinch bolts securing motor adapter to exciter assembly, and pull motor assembly off. Take care not to lose woodruff key.
3. With screed bar removed, flip machine upside down and remove three bolts securing shockmounts. Exciter assembly is now disconnected from the machine.
4. Remove the plug (#2) from the flange.
5. Use an 1/8” allen wrench to loosen the set screw (#18) inside the exciter housing, directly below the hole.
6. Stick a rod of screwdriver straight down through both holes to prevent rotation of exciter.
7. Remove the three hex head cap screws (#19) and sealing washers (#5) from the mounting flange.
8. Rotate the drive shaft (#13) counter clockwise with a screwdriver in the key way to remove the drive shaft and remove cover (#12).
9. Unthread the three shockmounts (#7) from the exciter housing (#4). Unthread the center shockmount from the exciter (#14) using a rod to prevent the rotation of the exciter as in step 8.
10. Loosen the three socket head cap screws (#20) securing the cover (#8). Back the screws off about a 1/4”

11. Gently tap on the socket head screws with a rubber mallet to push the exciter cover out of the exciter housing, then finish removing screws.
12. Remove the bearings (#6) from the exciter housing, exciter cover, and eccentric shaft.

Exciter Assembly

Refer to Exciter Assembly, page 18.

1. Press a bearing (#6) into the exciter housing (#4) and exciter cover (#8).
2. Turn the exciter housing upside down and place the threaded end of the eccentric weight (#14) into the bearing in the housing.
3. Apply a light coat of grease to the step of the cover (#8) and new o-ring (#1).
4. Apply a medium strength thread lock to the threaded holes in the cover.
5. Line up the mounting holes between the exciter housing and exciter cover and assemble. Take care not to cut the o-ring. Secure the cover with three screws (#20) and fiber washers (#11)
6. Thread the shockmounts (#7) into the housing.
7. Apply medium strength locker to threads of center shockmount and thread into eccentric.
8. Inspect the rubber seal on mount (#12). Replace if there are any tears or wear. If the seal is in good condition, skip to step 12.
9. Clean the surfaces of the mounting flange where the rubber seal was glued.
10. Apply a small bead of Loctite 426 adhesive (MBW #17885) to the lip on the engine mounting flange as shown below.



11. Place a new rubber seal onto the mounting flange and hold it for 10 seconds to allow the adhesive to set.
12. Apply medium strength locker to the threads on the end of the drive shaft (#13).
13. Position the mounting flange on the exciter assembly so that the plug hole aligns with the set screw on the exciter (#18).
14. Set the mounting flange in place while turning the drive shaft clockwise to tighten into the center shockmount.
15. Secure the flange in place with three sealing washers (#5) and screws (#19).
16. Apply medium strength locker to the set screw (#18) and install into exciter housing.
17. Replace the plug (#2).

Motor Installation

Refer to Motor Assembly, page 26.

1. Apply a light coating of grease to the ID of motor adapter (#4) and slide it onto exciter assembly (#5).
2. Connect hose (#3) between electrical compartment and motor adapter.
3. Install woodruff key (#1) into shaft of motor. Use of super glue may help retain key if needed to keep in place during assembly.
4. Apply a light coating of grease to motor shaft and install onto adapter. Take care to ensure the woodruff key remains in place and that the wiring is routed into electrical compartment.
5. Secure motor to motor adapter with washers (#7) and nuts (#6). Use a medium strength thread locker on the nuts.
6. Position motor adapter (#4) such that hose (#3) does not rub on exciter assembly.
7. Tighten motor adapter onto shaft with pinch bolts (#8). Use medium strength thread locker.
8. Connect motor wiring as shown on Electrical Assembly, page 22.

Motor Adapter Bearing Replacement

Refer to Motor Mount, page 20.

1. Follow directions 1-8 in “Exciter Disassembly”
2. Press bearing (#2) out of adapter (#1)
3. Apply light coating of Loctite 603 bearing retainer to OD of new bearing and press into place.
4. Drive shaft should slip into place.
5. Follow “Exciter Assembly” instruction steps 12-17

TROUBLESHOOTING

If your Electric ScreeDemon fails to operate as expected, the first test will always be to confirm a genuine Milwaukee battery is fully installed and charged. Removing and reinstalling the battery will re initialize the throttle control board, clearing any faults that were detected during operation.

Battery Interface

The purpose of the battery interface is to supply 18 volts to the throttle control board. Typically the battery interface is known to be in good condition if the LED lights come on when a battery is inserted. To further trouble shoot the battery interface, follow the steps below.

Refer to Electrical Assembly, page 22.

1. Remove bottom cover (#5) over the throttle control board.
2. Identify wires at terminals 3 and 4. These are the wires which supply power to the board.
3. Insert a known-good battery.
4. Measured voltage between terminals 3 and 4 should be 18 volts, within 3 volts.
5. If voltage levels are not as described, replace battery interface.

Electronic Throttle

The purpose of the electronic throttle is to provide a signal to the throttle control board. The throttle contains a 0-5k ohm potentiometer to supply this signal. To verify function of the electronic throttle, complete the following steps.

1. Remove battery from machine.
2. Remove bottom cover from electrical enclosure.
3. Identify, and remove black, brown, and blue wires from terminals 6,7, and 8, Respectively. To remove wires, press small button above terminal with small screwdriver while gently pulling on wires.
4. The measured resistance between the blue and black wires should be 5k ohms, within 500 ohms.
5. The measured resistance between the black and brown wires should be under 20 ohms and increase smoothly to over 4.5k ohms as the throttle is turned.
6. If resistance measured isn't as described, replace electronic throttle.
7. When reinserting the wires, be very cautious that all of the conductors remain contained in the terminal.

18v Motor

The motor utilized by the MBW ScreeDemon is a permanent magnet, brushed dc motor. It is a permanently sealed and water tight motor designed to last the life of the machine and survive wash down with a low pressure hose. To verify that motor is performing to specifications, follow the steps below.

1. Loosen pinch bolts securing the motor in place and remove the motor from the exciter assembly. Take care to not lose the woodruff key.
2. Motor shaft should spin freely without binding. If shaft does not spin freely, replace motor.
3. Insert a battery and turn throttle. Motor shaft should spin counter clockwise while viewing the shaft end.
4. If motor does not spin, verify power is being supplied to it appropriately by the following steps.
5. Remove the bottom over the electronics compartment.
6. Probe wires in locations 1 and 2. While applying throttle, voltage should increase from 0 to 18 volts.
7. If proper voltage as described above and motor does not spin, replace motor.

Throttle Control Circuit Board

The MBW ScreeDemon uses an integrated circuit to control the power flow between the battery interface and the motor. This circuit board also controls the LED lights, and provides over-current protection for the motor. If over-current protection circuitry is tripped, the LED lights will blink several times before the board resets. To verify performance of the throttle control board, follow the steps below.

1. LED lights should illuminate for approximately 30 seconds after a battery is installed, while the motor is running, and approximately 30 seconds after the motor stops running. A short dip in the brightness of lights during these periods might be observed and it is normal.
2. If over-current conditions persistently occur, confirm that the eccentric weight freely rotates, no shockmounts are torn or worn, and remove any excessive concrete buildup.
3. If ScreeDemon does not operate, and tests for the battery interface, electronic throttle, and motor do not show faults, replace throttle circuit board.

Parts Replacement Cycles and Tolerances

Bearings	Replace anytime a bearing is rough, binding, discolored or removed from housing or shaft.
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 & Gaskets	Replace if a leak is detected and at every overhaul or tear down.

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REPLACEMENT PARTS

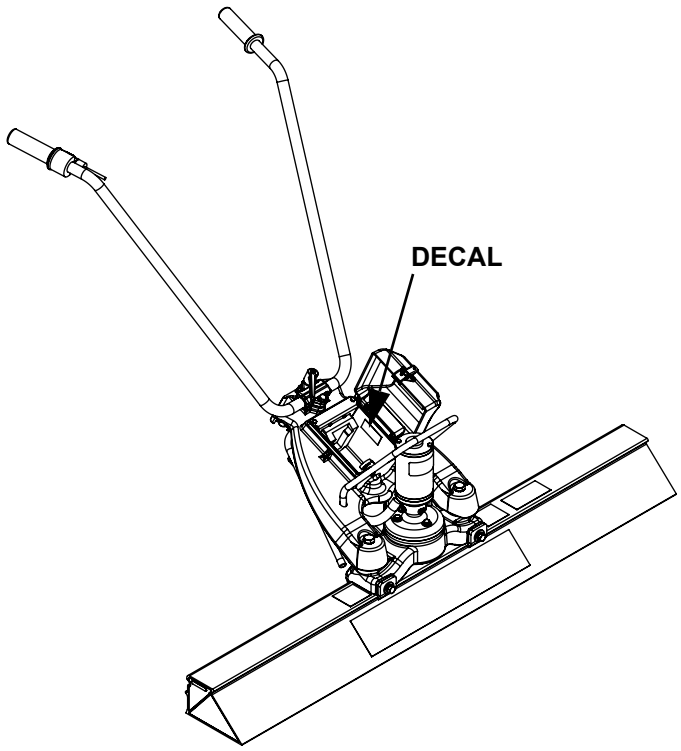
The warranty is stated in this book on page 28. Failure to return the Warranty Registration Card renders the warranty null and void.

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
- 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.



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

- Decal inside battery compartment

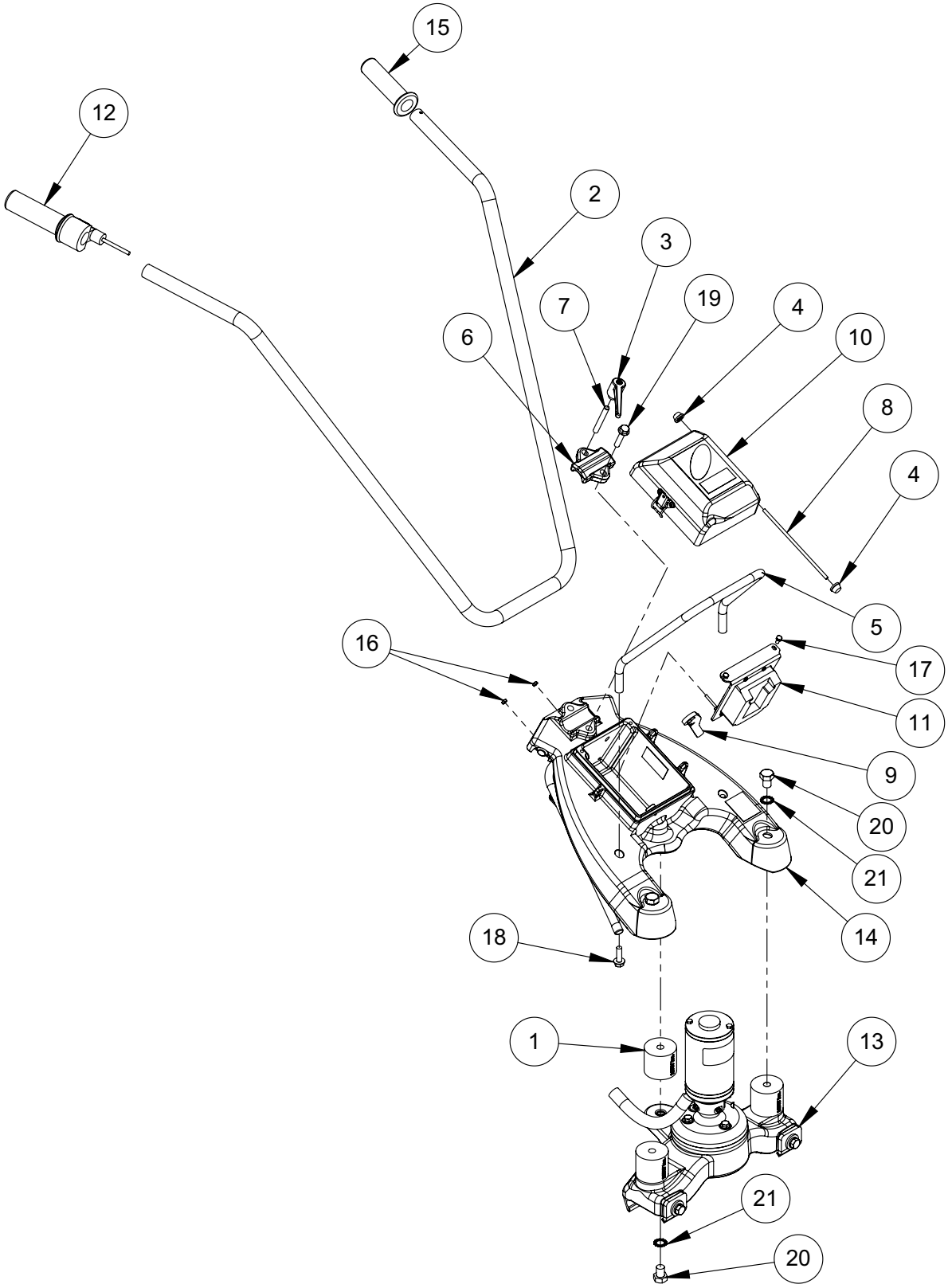
Write Model Number here

Write Serial Number here

Contact Information

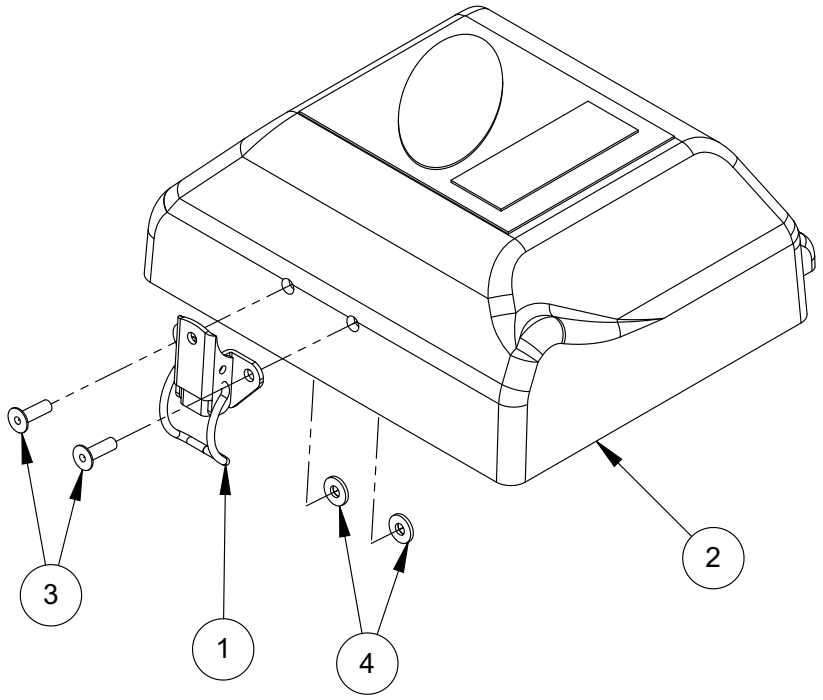
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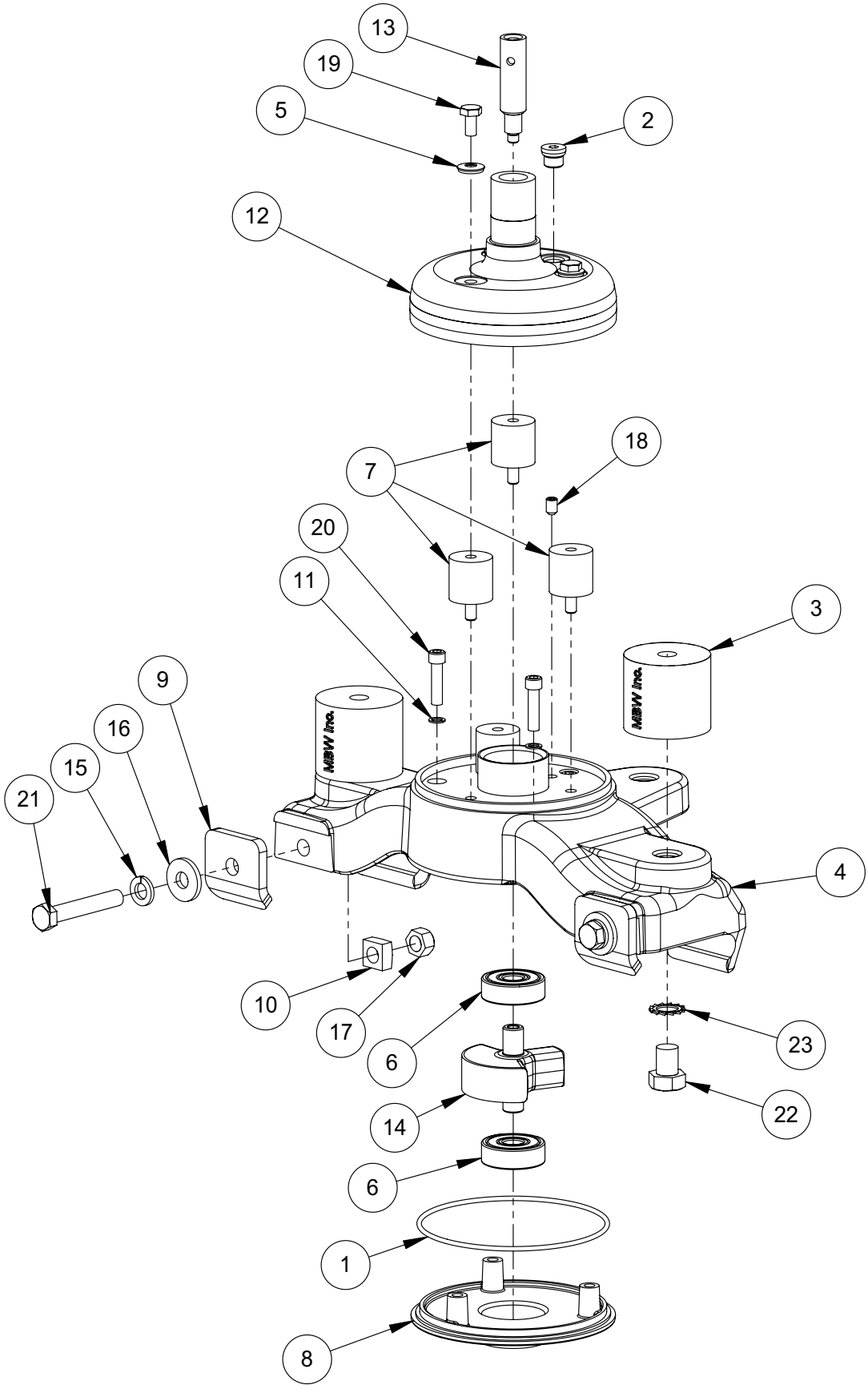
Main Assembly

ITEM	PART NO.	DESCRIPTION	QTY
1.	17170	SHOCKMOUNT, 2” OD X 1-3/4 LONG	3
2.	22408	HANDLE, 500M, MASKED	1
3.	21181	HANDLE, ADJUSTABLE, NYLON	1
4.	22112	PUSH NUT	2
5.	22117	HANDLE, LIFTING	1
6.	22119	HANDLE CLAMP, MACHINED	1
7.	21781	5/16 X 2-1/2 STUD	1
8.	22125	HINGE PIN	1
9.	22126	WRENCH, 9/16	1
10.	22135	COVER ASM	1
11.	22138	BATTERY CONNECTOR ASM	1
12.	22143	THROTTLE, ELECTRONIC	1
13.	22271	EXCITER, SCREED, M18	1
14.	22150	AFRAME, SUB ASM	1
15.	22591	HANDLE GRIP, SCREED	1
16.	F0132HN	NUT, HEX #6-32 ZP	2
17.	F032403HCS	HHCS, #10-24 X 3/8 GR5 ZP	10
18.	F051808FWS	FWLS, 5/16-18 X 1 ZP	2
19.	F051812FWS	FWLS, 5/16-18 X 1-1/2 ZP	1
20.	F081305HCS	HHCS, 1/2-13 X 5/8 GR5 ZP	3
21.	M12ETLW	LOCKWASHER, M12, EXT TOOTH	3



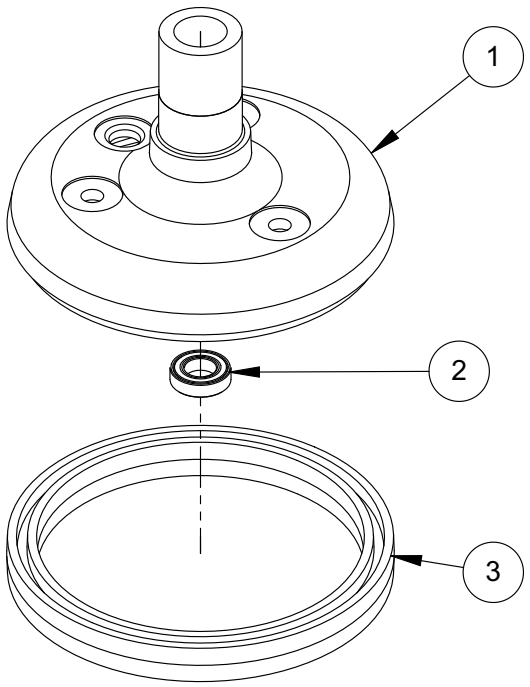
Cover Assembly

ITEM	PART NO.	DESCRIPTION	QTY
1.	22136	DRAW LATCH	1
2.	22135	COVER ASM (INCLUDES ALL PARTS SHOWN)	1
3.	22528	RIVET, POP 5/32 X 3/8	2
4.	F01PW	WASHER 5/32 X 3/8 X 18 GA ZP	2

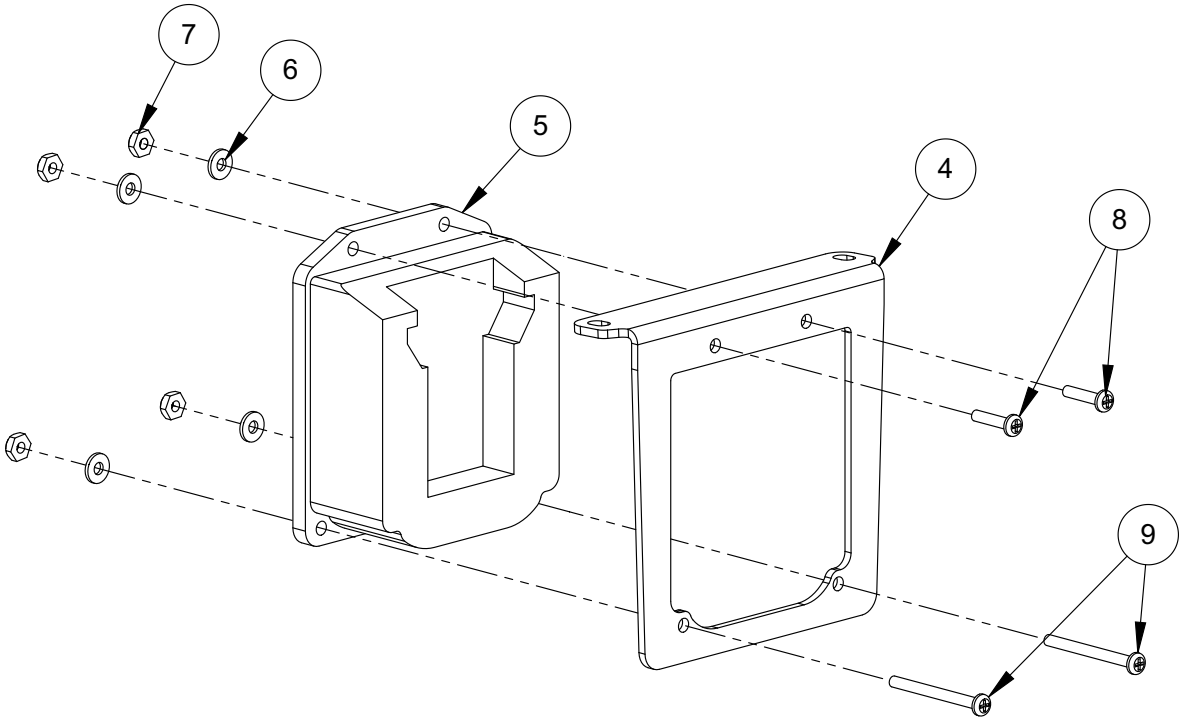


Exciter Assembly

ITEM	PART NO.	DESCRIPTION	QTY
1.	06237	O-RING, 4.33 ID X .103	1
2.	09618	FITTING, PARKER 4HP50N	1
3.	17170	SHOCKMOUNT, 2” OD X 1-3/4” LG	3
4.	17629	HOUSING, EXCITER	1
5.	17639	WASHER, SEALING	3
6.	17640	BEARING, BALL, SEALED 6301	2
7.	17643	SHOCKMOUNT, 1” OD X 1” LONG	4
8.	17645	COVER, EXCITER	1
9.	17725	PLATE, CLAMPING	2
10.	17736	NUT, SQUARE, CROWNED, 3/8-16	2
11.	17863	WASHER, FIBER, .25 X .38 X .03	3
12.	22133	MOTOR MOUNT	1
13.	22134	MOTOR ADAPTER	1
14.	22270	EXCITER, SCREEDEMON, M18	1
15.	F06LW	LOCKWASHER, 3/8 ZP	2
16.	F06SW	WASHER, 25/64 X 1 X 1/8 ZP	2
17.	F0616DLN	LOCKNUT, DEFORMED 3/8-16	2
18.	F042003SSS	SSS, 1/4-20 X 3/8”	1
19.	F042004HCS	HHCS, 1/4-20 X 1/2 GR5 ZP	3
20.	F042008SCS	SCS, 1/4-20 X 1/2 X 1	3
21.	F061618HCS	HHCS, 3/8-16 X 2-1/4 GR5 ZP	2
22.	F081305HCS	HHCS, 1/2-13 X 5/8 GR5 ZP	2
23.	M12ETLW	LOCKWASHER, M12 EXT. TOOTH	2
	22271	EXCITER ASM (includes all parts shown above)	

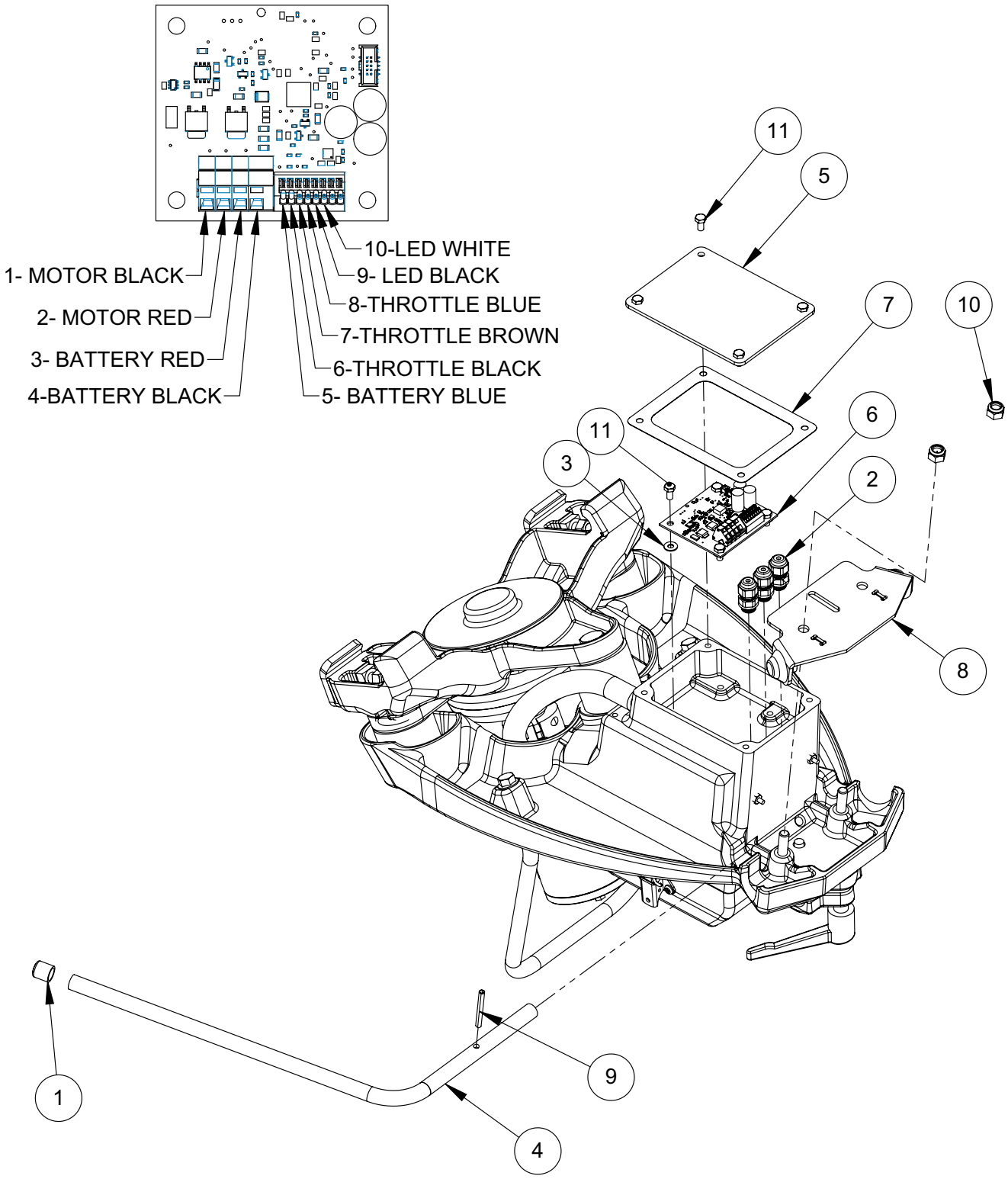


Motor Mount



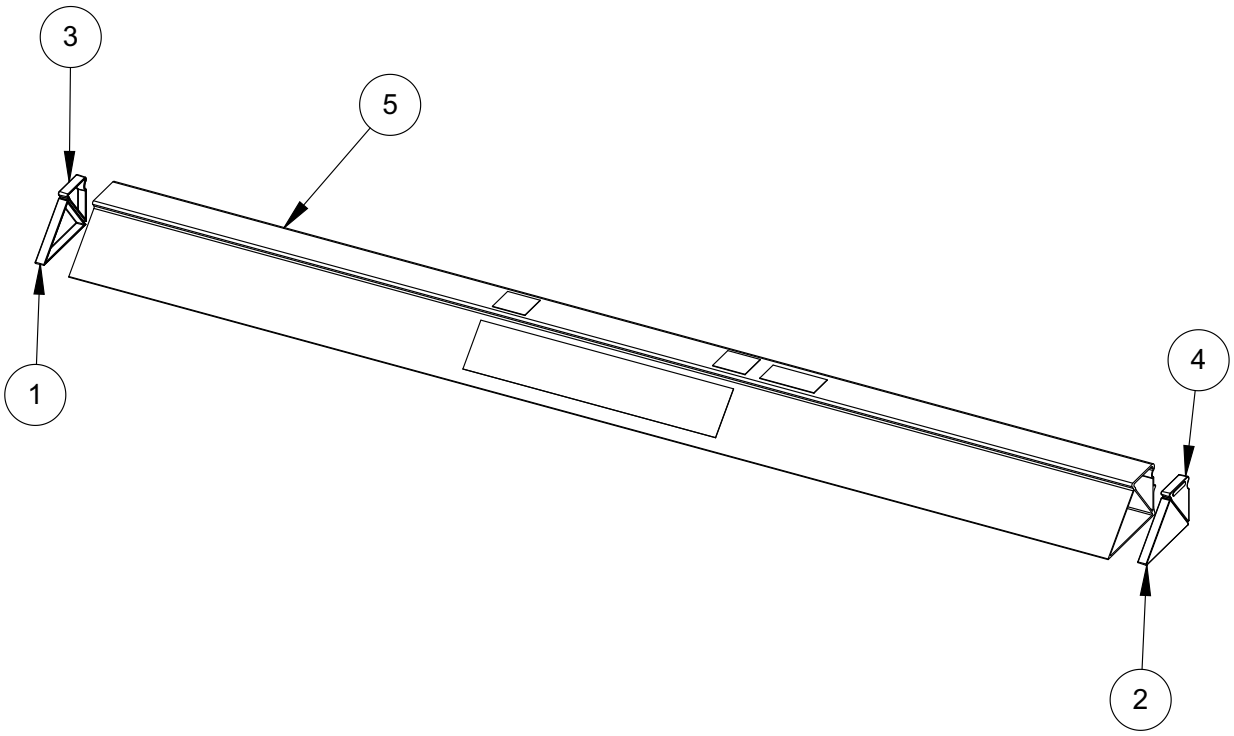
Battery Mount

ITEM	PART NO.	DESCRIPTION	QTY
1.	17634	FLANGE, ENGINE MOUNT	1
2.	17635	BEARING, BALL, SEALED	1
3.	17711	SEAL, RUBBER	1
4.	22139	BATTERY MOUNT	1
5.	22147	SOCKET, 18 VOLT BATTERY	1
6.	F01PW	WASHER, 5/32 X 3/8 X 18 GA	4
7.	F0132HN	NUT, HEX #6-32	4
8.	F013205PMS	PMS #6-32 X .625	2
9.	F013212PMS	PMS, #6-32 X 1.5	2
	22153	BATTERY, MILWAUKEE, 12 AMP HR	
	22154	CHARGER, MILWAUKEE	



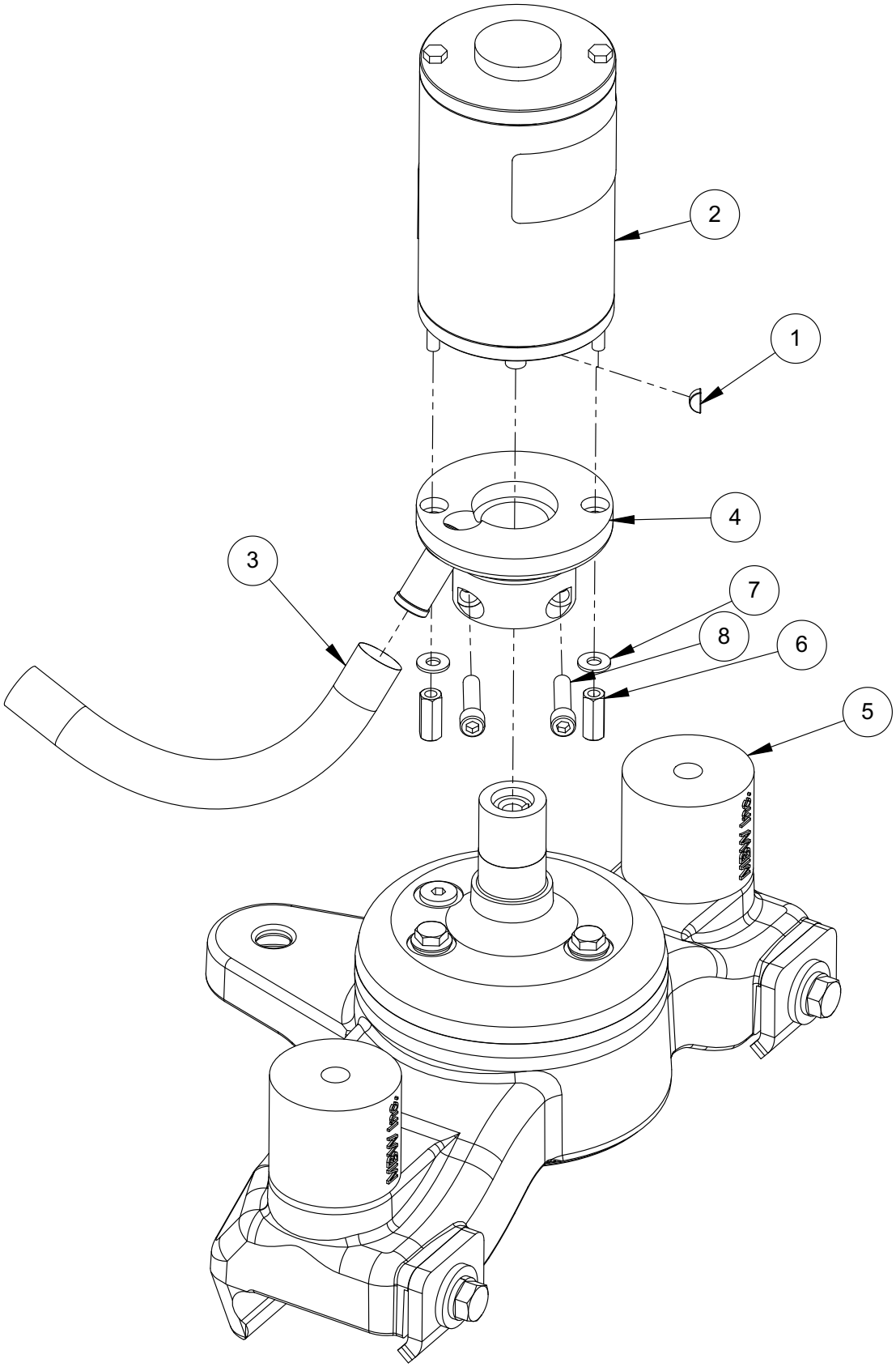
Electrical Assembly

ITEM	PART NO.	DESCRIPTION	QTY
1.	17662	CAP, VINYL, 7/16 ID	1
2.	22110	CORD GRIP	3
3.	22111	WASHER, PLASTIC, #10	4
4.	22122	SUPPORT LEG	1
5.	22123	COVER, ELECTRONICS	1
6.	22141	THROTTLE CONTROL BOARD	1
7.	22142	GASKET, ELECTRONICS	1
8.	22276	LIGHT ASM, 500M	1
9.	F0312SP	PIN, SPIRAL 3/16 X 1-1/2	1
10.	F0518ELN	LOCKNUT, 5/16-18 ZP	2
11.	F032403HCS	HHCS, #10-24 X 3/8	10



Screed Board Assembly

ITEM	PART NO.	DESCRIPTION	QTY
1.	17712	CAP, END, C SERIES, RF	1
2.	17714	CAP, END, C SERIES, LF	1
3.	18564	CAP, END, C SERIES, RR	1
4.	18565	CAP, END, C SERIES, LR	1
5.	17802	2’ FLOAT	1
	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	1
	17831	KIT, CAPS (INLUDES PARTS 1-4)	
		*Dual power heads required for 18’ blades	



Motor Assembly

ITEM	PART NO.	DESCRIPTION	QTY
1.	22114	KEY, WOODRUFF, 403	1
2.	22115	MOTOR, SCREEDEMON	1
3.	22146	HOSE, 1/2 X 10	1
4.	22151	MOTOR MOUNT ASM	1
5.	22271	EXCITER, SCREED, M18	1
6.	22277	COUPLING NUT, 10-32	2
7.	F03PW	WASHER, 7/32 X 1/2 X 18GA	2
8.	F042008SCS	SCS, 1/4-20 X 1	2

WARRANTY

1.IN GENERAL - The warranties described in this document are provided by M-B-W, INC. and MBW EUROPE, LTD. ("MBW") to define what is, what is not, and for how long machines and parts are covered against material defects and/or defective workmanship. To obtain warranty service, the purchaser must, within the Warranty Period (defined in Paragraph 3): (i) report the product defect to an authorized repair center, (ii) make a written request for repair, (iii) provide proof of purchase to the authorized repair center, and (iv) deliver the equipment to the authorized repair center. A list of authorized repair centers is available on the MBW website (mbw.com) or by contacting MBW at 800-678-5237.

2.COVERED - MBW's obligation under this limited warranty is limited to the cost of the parts and the labor to repair any defect in material and/or workmanship at an authorized MBW repair center. Transportation charges are not covered by this limited warranty.

3.WARRANTY PERIODS - The Warranty Period begins on, as applicable: (i) the product purchase date by an end user or (ii) the first day the product is put into rental or two years after invoice date from MBW to Dealer, whichever starts the warranty period first. To insure that your warranty is in place, fill out the warranty card and mail it in or register your product online at www.mbw.com/service-support/warranty-registration. The warranty is nontransferable.

The Warranty Period ends after:

A.New Ground compaction equipment - 2 years.
B.New Concrete finishing equipment - 1 year.
C.New Utility equipment - 1 year.
D.Demonstration equipment - 6 months.
E.Wear parts: lubricants, filters, belts and shock mounts - 30 days.

4.NOT COVERED- This warranty does not include, and MBW specifically excluded from any warranty:

A.Used equipment - all used equipment is not warranted and is sold 'as is' 'where is' with all defects.
B.Replacement electrical parts, including but not limited to: electric motors, circuit boards, switches, are not warranted or returnable.
C.OEM: engines, batteries, and chargers. Those warranties are covered by the manufacturer.
D.Consumable parts: trowel and screed blades.
E.Equipment that has been: altered, abused, neglected, not maintained, or modified to run outside its specifications. Any modification to the machine or its parts makes this warranty null and void.
F.Other: damage to a product from normal wear, air freight, overtime, pickup and delivery, temporary replacement rentals, freight damage, or other similar incidents.
G.Product used in a fashion it was not designed for.
H.Parts and labor not performed by authorized dealers.

It is at MBW's discretion if warranty applies and has the right to adjusts labor rates on a claim by claim basis.

5.OTHER - IT IS EXPRESSLY AGREED THAT THIS SHALL BE THE SOLE AND EXLUSIVE REMEDY UNDER THIS WARRANTY. UNDER NO CIRCUMSTANCES SHALL MBW BE LIABLE FOR ANY COSTS, LOSS, EXPENSE, DAMAGE, SPECIAL DAMAGES, DIRECT DAMAGES, INCIDENTAL DAMAGES, EXEMPLARY, CONSEQUENTIAL, OR PUNITIVE DAMAGES ARISING DIRECTLY OR INDIRECTLY FROM THE USE OF MBW PRODUCT OR DAMAGES FOR LOSS OF USE, LOSS OF ANTICIPATED PROFITS, INCOME, OR ECONOMIC LOSSES OF ANY KIND. **MBW'S** LIABILITY TO BUYER UNDER THESE WARRANTIES FOR THE PRODUCT IS LIMITED AS SET FORTH HEREIN, WHETHER BASED UPON WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY **OR ANY OTHER THEORY OF LIABILITY, INCLUDING BUT NOT LIMITED TO FRAUD, MISREPRESENTATION, BREACH OF CONTRACT, PERSONAL INJURY, PRODUCTS LIABILITY OR ANY OTHER THEORY.**

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THE FORGOING WARRANTY IS EXPRESSED IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED 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 SPECIFICALLY DISCLAIMS AND EXCLUDES ANY AND ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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 MBW PRODUCT.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

NOTES

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