



Before using this Mud Hog®,
study and understand entire
Owner's Manual.

Serial Number _____

RMH12 12ft³(0.34m³) RefractoryMud Hog® Mixing Station Owner's Manual



**Refractory
Mud Hog®**
EZ Grout Corporation
1-800-417-9272

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Introduction

Congratulations on purchasing one of the finest pieces of masonry equipment on the market today! If this is your first EZ Grout product, you will not be disappointed. If you have previously owned an EZ Grout product you will find the same high quality and dependability that you have come to expect from EZ Grout

About this Manual

The purpose of this manual is to inform the owner, employer, and the operator's of the unit, how to safely operate this piece of equipment, and make them aware of any hazards. It also contains important information regarding assembly, set up, operation, and maintenance. It is the Owner/Employer's responsibility to make sure that anyone who operates this machine understands all safety warnings. If you do not understand any items in this manual, please contact the dealer where this product was purchased, or the manufacturer at the number listed throughout this manual. If you have any suggestions about how to make this manual easier to understand, contact the manufacturer. Keep this manual available for reference wherever this piece of equipment is being used and make it available to any operators.

General Information

Illustrations in this manual may show details or components that may not be the same as your machine. Continuing improvements to the design of this machine may have caused changes that are not reflected in this manual. The information in this document is subject to change without notice.

Safety Information

The following safety symbols and signal words will be used throughout this manual and on the product, for your safety and the safety of others, please become familiar with their meaning and heed their warnings.



This symbol, either used alone or with a signal word, is used to call your attention to instructions involving your safety and/or the safety of others. Failure to follow these instructions *could* result in personal injury or death.



DANGER

This signal word is used to identify a hazard which, if not avoided, *will* result in death or serious injury.



WARNING

This signal word is used to identify a hazard which, if not avoided, *could* result in death or serious injury.



CAUTION

This signal word is used to identify a hazard which, if not avoided, *could* result in minor or moderate injury.

NOTICE

This signal word is used to identify a hazard which, if not avoided, *could* result in property or equipment damage. It also may be used for special instructions related to performance, maintenance or general items.

Safety Precautions



WARNING

Failure to obey the following safety instructions could result in DEATH or SERIOUS INJURY.

Read and understand entire manual before operating the Mud Hog®

For your safety and the safety of others, replace any missing or damaged warning decals by contacting the manufacturer at 1-800-417-9272.

Make sure anyone operating the Mud Hog® is thoroughly familiar with its operation. Keep all unauthorized and untrained personnel, especially children, away from Mud Hog®.

Never operate machine with safety grate, guards or safety devices removed or open. Do not alter any safety guards.

Stay clear of mixing paddles while machine is running. Keep all body parts, clothing, jewelry and solid objects away from moving parts.

Never perform any work on the Mud Hog® while it is running. Before working on or cleaning the Mud Hog®, shut off engine and disconnect spark plug wire.

Never operate the Mud Hog® under the influence of alcohol, drugs, or medications

This Mud Hog® has been designed and built as a material mixing station, and should not be used for anything other than its intended purpose.

Consult forklift manufacturers specifications to insure load capacity is not exceeded.

Never stand under an elevated Mud Hog®.

Stay clear of moving parts while machine is in operation.

Model	Empty Weight	Max Gross Weight
RMH12	1895Lbs.(860kg)	3895lbs.(1766kg)

Do not exceed Maximum Gross Weight

When towing, refer to vehicle manufactures specs to insure load capacity is not exceeded.

Always check axle, tires, and safety chains before towing Mud Hog®.

Always cross and connect safety chains before towing Mud Hog®.

Never attempt to ride the Mud Hog®.

Operate only in properly vented environments. The mixer requires a free flow of air and emits carbon monoxide gas.

Avoid breathing dust produced while using the Mud Hog®. Dust may contain crystalline silica and may cause serious health problems.

Do not operate near combustible materials.

Do not smoke around Mud Hog®.

Always know the location of nearest fire extinguisher, first aid kit, and emergency personnel phone numbers in case of emergency.

Safety Precautions

(Continued)



CAUTION Failure to obey the following safety instructions could result in MINOR or MODERATE INJURY.

Inspect all hoses, fasteners, bolts and welds for nicks, cracks, cuts, damage, wear or looseness before each use. Repair as needed.

Always wear approved PPE, including glasses, hearing protection, hard hats, and ventilation masks when operating a Mud Hog®.

Do not use the Mud Hog® as a lifting device or with accessories or attachments not recommended by EZ Grout, as damage to equipment or injury to operator may occur.

Avoid contact with hot hydraulic fluid.

Allow system to cool before performing any repairs or service, such as adding fuel or oil.

NOTICE

Use only factory authorized parts.

Used lubricants such as engine and hydraulic oil, and hazardous waste must be taken to an authorized disposal or recycling center.

Consult Honda® Owners manual for engine maintenance and warnings.

California - Proposition 65 Warning

Engine exhaust and some of its constituents, and some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects and other reproductive harm. Some examples of these chemicals are:

Lead from lead based paints - Crystalline silica from bricks - Cement and other masonry products - Arsenic and chromium from chemically treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: ALWAYS work in a well ventilated area, and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles

Setup Instructions

Before operating the Mud Hog® it should be properly set up on the job site. The Mud Hog® may be lifted by using a forklift. The MH12 weighs 1695 lbs. (768.8 kg) empty and 3695 lbs. (1676.0 kg) full. Check forklift ratings before attempting to move the Mud Hog®.

1. Raise Mud Hog® with fork lift.
2. While raised, set the Mud Hog® to the desired height by adjusting the mixer feet. Each mixer foot allows for 1" (25.4 mm) adjustment, has a 5/8" (15.8 mm) hitch pin, and a hair pin as the keeper. Make sure each pin is locked into position. In the full down position, the Mud Hog® can dump into most mortar pans. Level the Mud Hog® as close as possible.
3. Verify that all mixer feet are touching the ground and that the Mud Hog® is level and cannot rock in any direction. If one of the mixer feet is not touching and cannot be adjusted to touch the ground, shim under that foot with a board to create solid footing.
4. Perform the daily maintenance as described in the "Daily Maintenance" section of this manual.
5. Check all hydraulic operations using both levers on the hydraulic control valve.

Operating Instructions



WARNING This equipment is to be operated by trained and qualified personnel over the age of 18. Death or serious injury can result.

1. Slide forks under the Mud Hog® and place in desired location.
2. Remove pins and adjust legs to desired height and reinsert pins.
See Setup Instructions for proper procedure.



WARNING NEVER put your hands inside mixer drum while equipment is running. Death or serious injury can result.

3. Start engine.
See engine manuals for proper procedure.
4. Fill with material, add water and mix to desired consistency and dump.

NOTE: In the unlikely event that the mixing paddles plug, momentarily reverse the paddles.

Daily Maintenance



WARNING Before performing any described maintenance items, make sure engine is turned off and spark plug wire is disconnected. Death or serious injury can result.

1. Check engine oil daily.
2. For engine maintenance, refer to the engine manufacturer's manual furnished with the Mud Hog®.
3. Check and grease all grease fittings
See Grease Fitting Location drawing in this manual for grease fitting locations
4. Check hydraulic oil level. Add as needed. Change bi-yearly or if contaminated. Change hydraulic filter monthl . Use only recommended premium grade ISO68 Heavy Duty hydraulic oil or equivalent. Do not use contaminated fluid. (Premium grade ISO32 oil may be used in colder climates)
5. For maximum performance, thoroughly clean inside and out at mid-day or lunch break and again at the end of each day's use. Do not allow a buildup of material to form on the blades and seals.
6. Check all hydraulic hoses and equipment for leaks. Fix any leaks before operating the Mud Hog®.
7. Check all welds and bolts. If a cracked weld is found, do not operate the Mud Hog® until repaired by qualified personnel. Tighten any loose bolts.
8. Check Paddle Shaft Seal for excessive wear. If any mortar or concrete is leaking past the seal, change the seals immediately.
9. Check paddle rubbers for wear. Adjust or replace as needed.

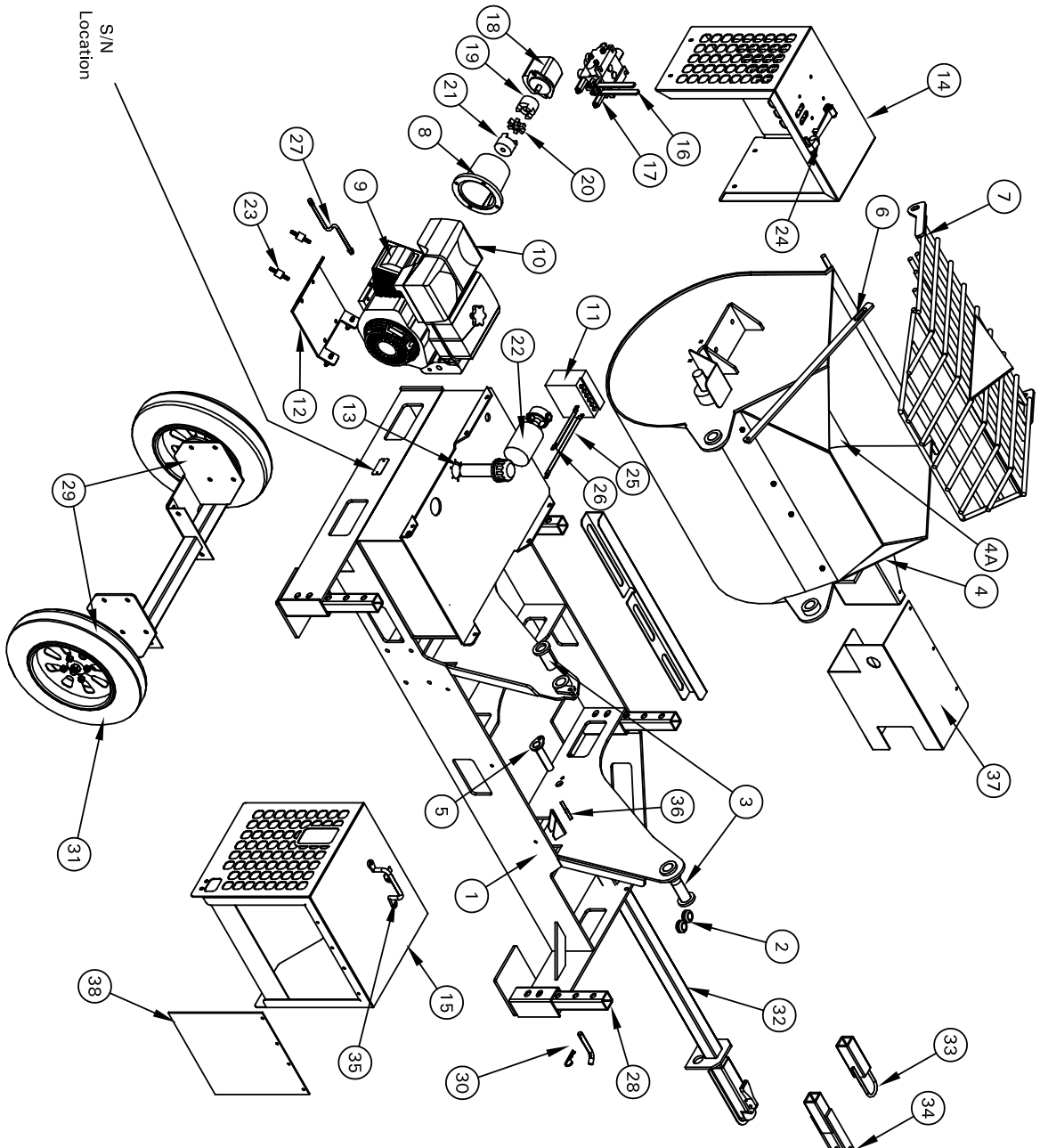
Obtaining Spare Parts

Spare parts for your Mud Hog® may be obtained by the following procedure:

1. Record the information from the serial number tag located on the frame near the hydraulic reservoir.
2. Using the parts reference table in this manual, record the part number or component.
3. Contact your local Mud Hog® dealer or EZ Grout Corporation at 1-800-417-9272 with the information recorded.

Clean Up

1. Turn off engine and disconnect spark plug wire. If electric powered, turn off local service disconnect and lock out.
2. For maximum performance, thoroughly clean inside and out at mid-day or lunch break and again at the end of each day's use. Do not allow a buildup of materials to form on the blades and seals.
3. Hose out and brush down mixing drum, then spray and brush paddles until all excess material is removed.
4. Grease the fittings and brush the face of drum seals until clean

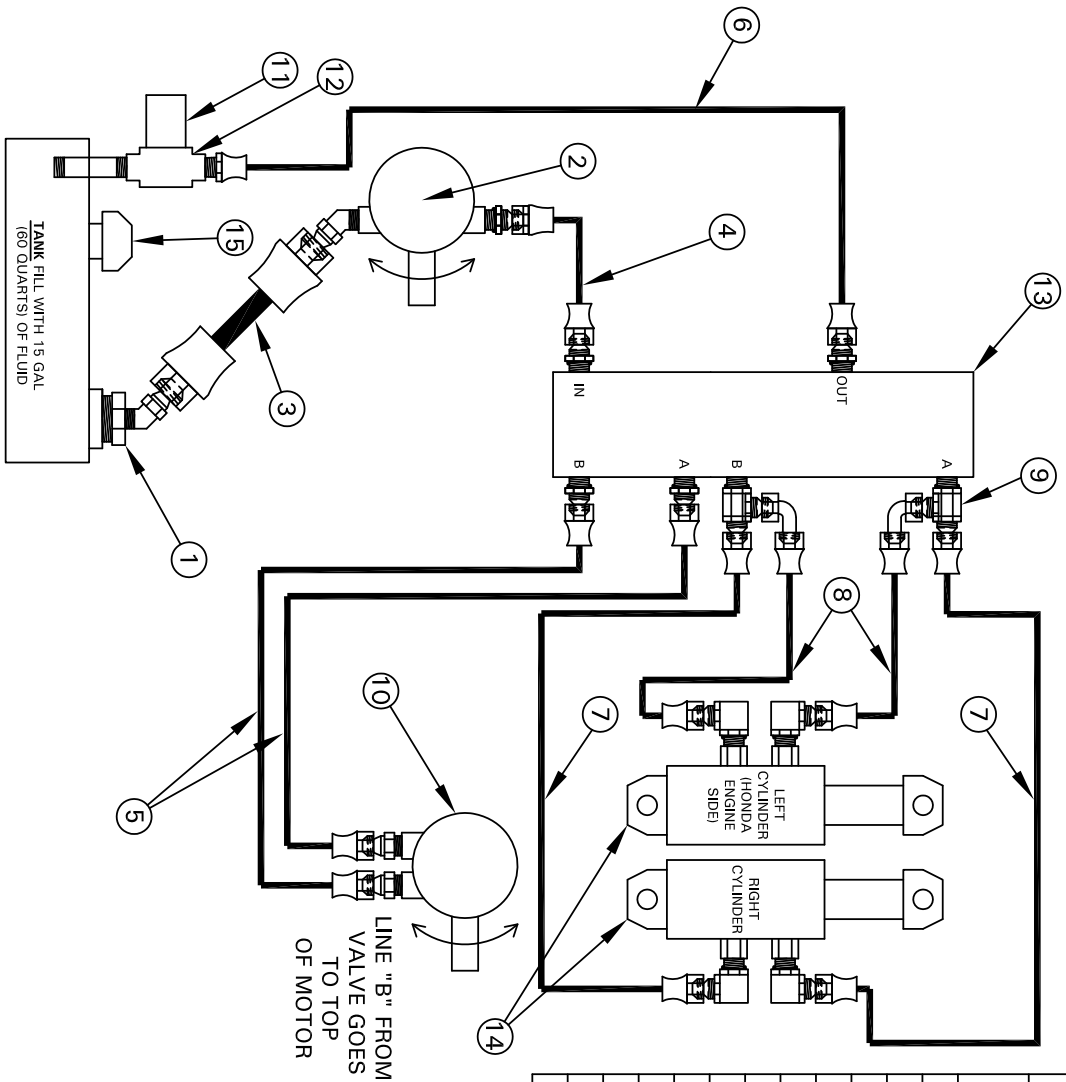


S/N Location

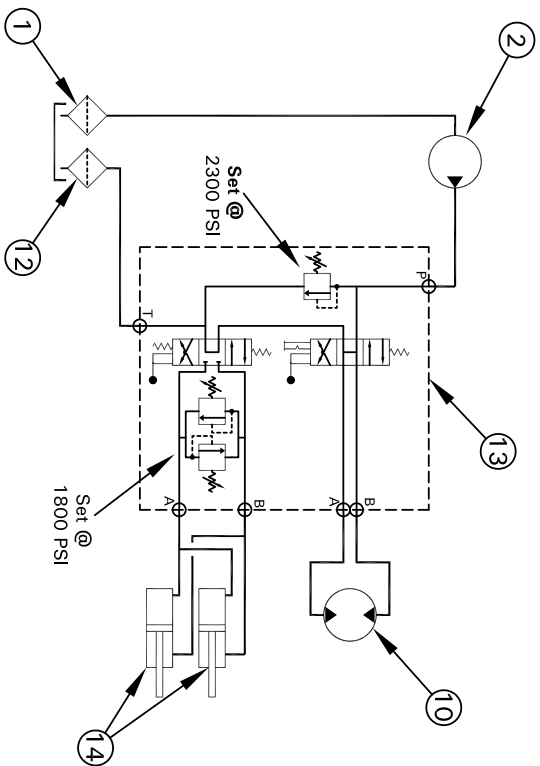
RMH12 Mud Hog® - FRAME

ITEM	PART NUMBER	QTY	DESCRIPTION
1	MH12-A-2	1	Frame
2	13-127	2	Hydraulic Hose Holder Grommets
3	MH-A-74	2	Trunion Pin (Each)

ITEM	PART NUMBER	QTY	DESCRIPTION
4	RMH12-A-1	1	Drum
4A	MH12-62	2	Drum Liner
5	MH-A-84	2	Lower Cylinder Pins
6	MH12-15	1	Grate Opener
7	MH12-A-11	1	Grating
8	02-514	1	Pump Adapter
9	14-103	1	13 HP Honda® Engine
	14-106	1	Kubota Diesel Engine (Optional)
	(See Page 7)	1	Electric Motor (Optional)
10	14-209	1	Exhaust Purifier (Optional)
11	03-118	1	Battery
12	MH12-8	1	Honda® Engine Isolation Plate
13	MH12-64	1	Electric Motor Mounting Plate
14	02-318	1	Hydraulic Oil Fill Assy. w/ dipstick
15	MH12-A-20	1	Engine Hood (Fixed)
16	MH12-A-21	1	Engine Hood (Hinged)
17	MH12-59	2	Control Valve Handles
18	02-642	1	Control Valve - Sandwich Type
19	02-517	1	Hydraulic Pump (For Gas & 60HZ)
20	02-521	1	Hydraulic Pump (For 50HZ only)
21	15-101	1	Pump Half Coupler
22	15-118	1	Coupler Spider
23	15-102	1	Motor Half Coupler
24	02-316	1	Hydraulic Filter Element
25	02-802	4	Engine Isolation Mount
26	20-103	1	Hood Hold Down
27	MH-A-85	1	Negative Battery Cable
28	MH-A-86	1	Positive Battery Cable
29	20-120	1	Engine Drain Hose (Drainzitt)
30	RMH12-A-2	4	Leg
31	MH12 Axle	1	Axle Kit (Includes (1)07-107 (2)07-108, (1)09-418, (1) Tongue, (2) MH12-58, Mounting Hardware
32	09-418	4	Hitch Pin w/ Hair Pin
33	07-108	2	Wheel Tire Combination
34	MH10-A-27	1	2" Ball Tongue
35	MH10-A-28	1	Drawbar Tongue (Pental Type)
36	MH10-A-29	1	Clevis Tongue
37	20-100	1	Grab Handle
38	MH-539-1	2	Drum Rest
39	RMH-83	1	Hydraulic Motor Guard
40	MH12-63	1	Vinyl Engine Cover



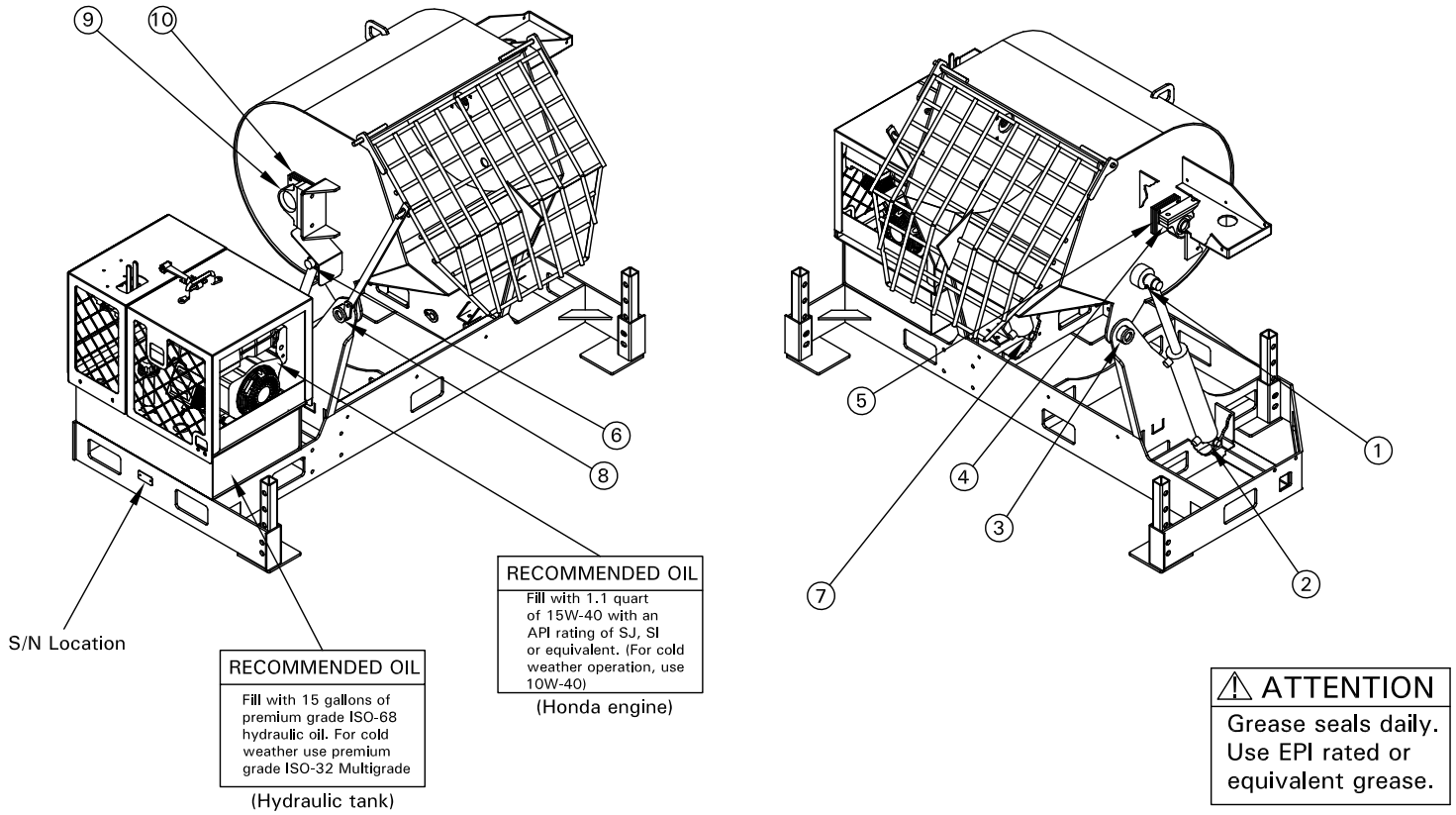
ITEM	PART NUMBER	QTY	DESCRIPTION
1	02-302	1	Hydraulic Suction Strainer
2	02-517	1	Hydraulic Pump (For Gas and 60HZ Electric motors)
	02-521	1	Hydraulic Pump (For 50HZ Electric motors only)
3	MH12-A-22	1	MH12 Hose Assembly, T to P, 15" OAL, JICF/JICF
	MH12-A-40	1	MH12 Hose Assembly, T to P, 21" OAL, JICF/JICF (Elec. Only)
4	MH12-A-23	1	MH12 Hose Assembly, P to V, 29" OAL, JICF/JICF
5	MH12-A-27	2	MH12 Hose Assembly, V to M, 133" OAL, JICF/JICF
6	MH12-A-26	1	MH12 Hose Assembly, V to T, 27" OAL, JICF/NPTM
7	MH12-A-29	2	MH12 Hose Assembly, V to RC, 103" OAL, JICF/JICF
8	MH12-A-28	2	MH12 Hose Assembly, V to LC, 56" OAL, JICF/JICF90°
9	02-220	2	O-ring to JIC Run Tee
10	02-427	1	Hydraulic Motor
11	02-316	1	Hydraulic Filter Element
12	02-315	1	Hydraulic Filter Body
13	02-642	1	Control Valve - Sandwich Type
14	02-701	2	Hydraulic Cylinder (16" Stroke)
15	02-318	1	Hydraulic Breather



RMH12 Mud Hog® - HYDRAULICS

Rev. B S/N 379 +

Check ALL grease fitting locations DAILY. Grease as needed.



RMH12 Mud Hog® - GREASE FITTING LOCATION

Warning labels and locations:

**U.S. Patents
#7,165,877**

Patent Label: On hydraulic motor end of drum and end of hood.

WARNING!
Stay clear of drum when in the raised position.

Drum Label: Located on upper right back of drum and lower right side of hydraulic tank.

WARNING!
Never open grate while mixer is running. Turn off Honda while cleaning.

Honda Label: On back of drum.

WARNING!
Pinch Point: Stay clear of moving parts while machine is in operation

Pinch Label: Located on hood, hydraulic motor mount, and both sides of drum supports.

WARNING!
HOT SURFACE. DO NOT TOUCH.

Heat Label: Located on tank and hood.

WARNING!
Do not remove while mixer is running.

Grate label: Located on grate opener bar.

Before using this equipment, study entire Owner's Manuals.

Owners Manual: Located on rear of hydraulic tank.

WARNING!

- 1) Pinch point. Keep hands clear.
- 2) Stay clear moving parts while machine is in operation.
- 3) Keep all body parts, solid objects, clothing, and jewelry away from moving parts and hinges.

Pinch Label: Located on the upper left side of engine hood and front of frame.

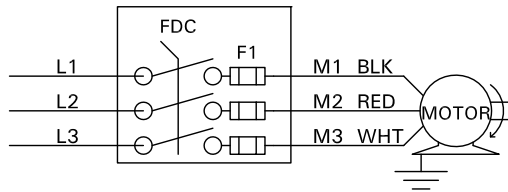


Oil Label: Located on hydraulic tank.

RMH12 Mud Hog® OPTIONAL ELECTRIC MOTOR

3Ø MOTOR

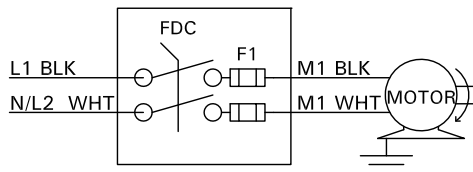
CLOCKWISE ROTATION
FROM BACK OF MOTOR



MOTOR							
VOLT	FUSE	PART NO.	H.P.	FLA	FRAME	RPM	DISCONNECT
575V 60HZ	20	03-704	10	10	215TC	3500	30A
460V 60HZ	30	03-713	10	11.8	215TC	3500	30A
415V 50HZ	30	03-713	10	13.1	215TC	2900	30A
380V 50HZ	30	03-713	10	14.3	215TC	2900	30A
230V 60HZ	40	03-713	10	23.6	215TC	3500	60A
208V 60HZ	50	03-713	10	26.1	215TC	3500	60A

CLOCKWISE ROTATION
FROM BACK OF MOTOR

1Ø MOTOR



MOTOR							
VOLT	FUSE	PART NO.	H.P.	FLA	FRAME	RPM	DISCONNECT
230V 60HZ	60	03-712	10	41.5	215TC	3500	60A
230V 50HZ	60	03-712	10	41.5	215TC	2900	60A
208V 60HZ	60	03-712	10	44	215TC	3500	60A

Limited Warranty

The manufacturer warrants that products manufactured shall be free from defects in material and workmanship that develop under normal use for a period of one year on all products from the date of shipment. The foregoing shall be the exclusive remedy of the buyer and the exclusive liability of the manufacturer. Our warranty excludes normal replaceable wear items, i.e. gaskets, wear parts, seals, O-rings, belts, drive chains, clutches, etc. Any equipment, part or product which is furnished by the manufacturer but manufactured by another, bears only the warranty given by such other manufacturer. (Manufacturer agrees to furnish free of charge a written description of problem or cause.) Warranty is voided by product abuse, alterations, use of equipment in applications for which it was not intended, use of non-manufacturer parts, or failure to follow documented service instructions. The foregoing warranty is exclusive of all other warranties whether written or oral, expressed or implied. No warranty of merchantability or fitness for a particular purpose shall apply. The agents, dealers, and employees of Manufacturer are not authorized to make modifications to this warranty, or additional warranties binding on the Manufacturer. Therefore, additional statements, whether oral or written, do not constitute warranty and should not be relied upon.

The Manufacturer's sole responsibility for any breach of the foregoing warranty provisions, with respect to any product or part not conforming to the Warranty or the description herein contained, is at its option (a) to repair, replace, or refund such product or parts upon the prepaid return thereof to location designated specifically by the Manufacturer. Product returns not shipped prepaid will be refused (b) as an alternative to the foregoing modes of settlement- the Manufacturer's dealer may repair defective units with reimbursement for expenses. A written description of problem or cause must accompany all warranty claims.

Except as set forth here in above and without limitation of the above, there are no warranties or other affirmation which extend beyond the description of the products on the fact here of, or as to operational efficiency, product reliability, or maintainability or compatibility with products furnished by others. In no event, whether as a result of breach of contract or warranty or alleged negligence, shall the Manufacturer, be liable for special or consequential damages including but not limited to: Loss of profits or revenue, loss of use of the product or any associated product, cost of capital, cost of substitute products, facilities or services or claims of customers. Manufacturer does not assume responsibility for any accident due to equipment modification.

No claim will be allowed for products lost or damaged in transit. Such claims should be filed with the carrier within fifteen days.

Effective July 20, 2005

Warranty

Limited Warranty

The manufacturer warrants that products manufactured shall be free from defects in material and workmanship that develop under normal use for a period of one year on all products from the date of shipment. The foregoing shall be the exclusive remedy of the buyer and the exclusive liability of the manufacturer. Our warranty excludes normal replaceable wear items, i.e. gaskets, wear parts, seals, O-rings, belts, drive chains, clutches, etc. Any equipment, part or product which is furnished by the manufacturer but manufactured by another, bears only the warranty given by such other manufacturer. (Manufacturer agrees to furnish free of charge a written description of problem or cause.) Warranty is voided by product abuse, alterations, use of equipment in applications for which it was not intended, use of non-manufacturer parts, or failure to follow documented service instructions. The foregoing warranty is exclusive of all other warranties whether written or oral, expressed or implied. No warranty of merchantability or fitness for a particular purpose shall apply. The agents, dealers, and employees of Manufacturer are not authorized to make modifications to this warrant , or additional warranties binding on the Manufacturer. Therefore, additional statements, whether oral or written, do not constitute warranty and should not be relied upon.

The Manufacturer's sole responsibility for any breach of the foregoing warranty provisions, with respect to any product or part not conforming to the Warranty or the description herein contained, is at its option (a) to repair, replace, or refund such product or parts upon the prepaid return there of to location designated specifically by the Manufacture . Product returns not shipped prepaid will be refused (b) as an alternative to the foregoing modes of settlement the Manufacturer's dealer may repair defective units with reimbursement for expenses. A written description of problem or cause must accompany all warranty claims.

Except as set forth here in above and without limitation of the above, there are no warranties or other affirmatio which extend beyond the description of the products on the fact here of, or as to operational efficienc , product reliability, or maintainability or compatibility with products furnished by others. In no event, whether as a result of breach of contract or warranty or alleged negligence, shall the Manufacturer, be liable for special or consequential damages including but not limited to: Loss of profits or revenue, loss of use of the product o any associated product, cost of capital, cost of substitute products, facilities or services or claims of customers. Manufacturer does not assume responsibility for any accident due to equipment modification

No claim will be allowed for products lost or damaged in transit. Such claims should be filed with the carrier within fifteen days

Effective July 20, 2005

EZ Grout Corporation is the exclusive manufacturer of the patented **Grout Hog®** Grout Delivery System the **Mud Hog®** Hydraulic Mixing Station, the **Hog Trough®** mud pan, the **Hog Cart™**, the **Hog Slopper™**, the **Booger Hog®** Wall Scrubber, the **Hog Leg®** Wall Brace System, and the **Hog Crusher™** Material Recycling System.



Fax Warranty Registration form to 740-962-2037
or submit online at www.ezgrout.com
by clicking on "Products" then "Warranty Cards".

Warranty Registration

Contact: _____

Company Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____ Email: _____

Purchased From: _____

Purchased Date: _____ Serial No.: _____

Please complete this warranty card, and return via mail, fax or email, within 30 days of purchase to validate your manufacturer's warranty for all EZ Grout products.

Warranty provisions of this machine are handled directly through the manufacturer.

EZ Grout Corporation * 405 Watertown Road, Waterford, OH 45786 *

Fax: 740-962-2037 * Email: warranty@ezgrout.com

Please take a minute to fill out the survey below so that we can better serve our customers

EZ Survey

1. Where did you first hear about EZ Grout? (Check One)

Masonry Magazine Website Newsletter Referral Masonry Construction

Other: _____

2. What influenced you to buy Quality Price Easy to use Other

3. Who is your Sales Representative? _____

4. Are you satisfied with the customer service you received Yes No

Explain: _____

5. What other EZ Grout products do you own? _____

6. Would you like to be featured in our Newsletter? Yes No

If yes, where can we reach you and what is the best time? _____

Comments: _____
