



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

Serial Number _____

*RMH20 20ft³(0.56m³)
Refractory Mud Hog®
Mixing Station
Owner's Manual*



Mud Hog®
EZ Grout Corporation
1-888-344-7688

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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, 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/Employers 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 included 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 will likely 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 1-888-344-7688.

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 all moving parts.

Never perform any work on the Mud Hog® while it is running. Before working on or cleaning the Mud Hog®, shut off motor and service disconnect box.

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.

Model	Empty Weight	Max Gross Weight
RMH20	3400Lbs.(1542.2kg)	6400 bs.(2902.9kg)

Do not exceed Maximum Gross Weight

Never stand under an elevated Mud Hog®.

Stay clear of moving parts while machine is in operation.

Never attempt to ride the Mud Hog®.

Operate only in properly vented environments.

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

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

SAFETY PRECAUTIONS



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 operator might result.

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.

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 jobsite. The Mud Hog® may be lifted by using a forklift. The RMH20 weighs 3400 lbs.(1542.2kg)empty and 6400lbs.(2902.2kg)full. Check forklift ratings before attempting to move the Mud Hog®.

1. Raise Mud Hog® with fork lift.
2. Fully extend the outriggers by removing the hitch pins, extend the outriggers, and reinsert hitch pins. Each outrigger has a 3/4”(1.9cm) hitch pin and a 1/4”(.6cm) hair pin as the keeper. Make sure the pin is locked into position.

 **Warning! Do not operate the Mud Hog® without the outriggers fully extended to provide a stable base. Death or serious injury can result.**

3. While raised, set the Mud Hog® to the desired height by adjusting the mixer feet. Each mixer foot allows for 1” (25.4mm) adjustment, has a 5/8” (15.8mm) 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
4. 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.

 **Warning! If setting in a permanent position, bolt Mud Hog® feet to floor to prevent tipping. Death or serious injury can result.**

5. Perform the daily maintenance as described in the “Daily Maintenance” section of this manual.
6. Check all hydraulic operations using both levers on the hydraulic control valve and the auxiliary valve handles.

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. Fully extend outriggers, remove pins and adjust legs to desired height and reinsert pins.
See Setup Instructions for proper procedure
3. Connect to power source and start Mud Hog®.
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.

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

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 rear of 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 1-888-344-7688 with the information recorded.

DAILY MAINTENANCE

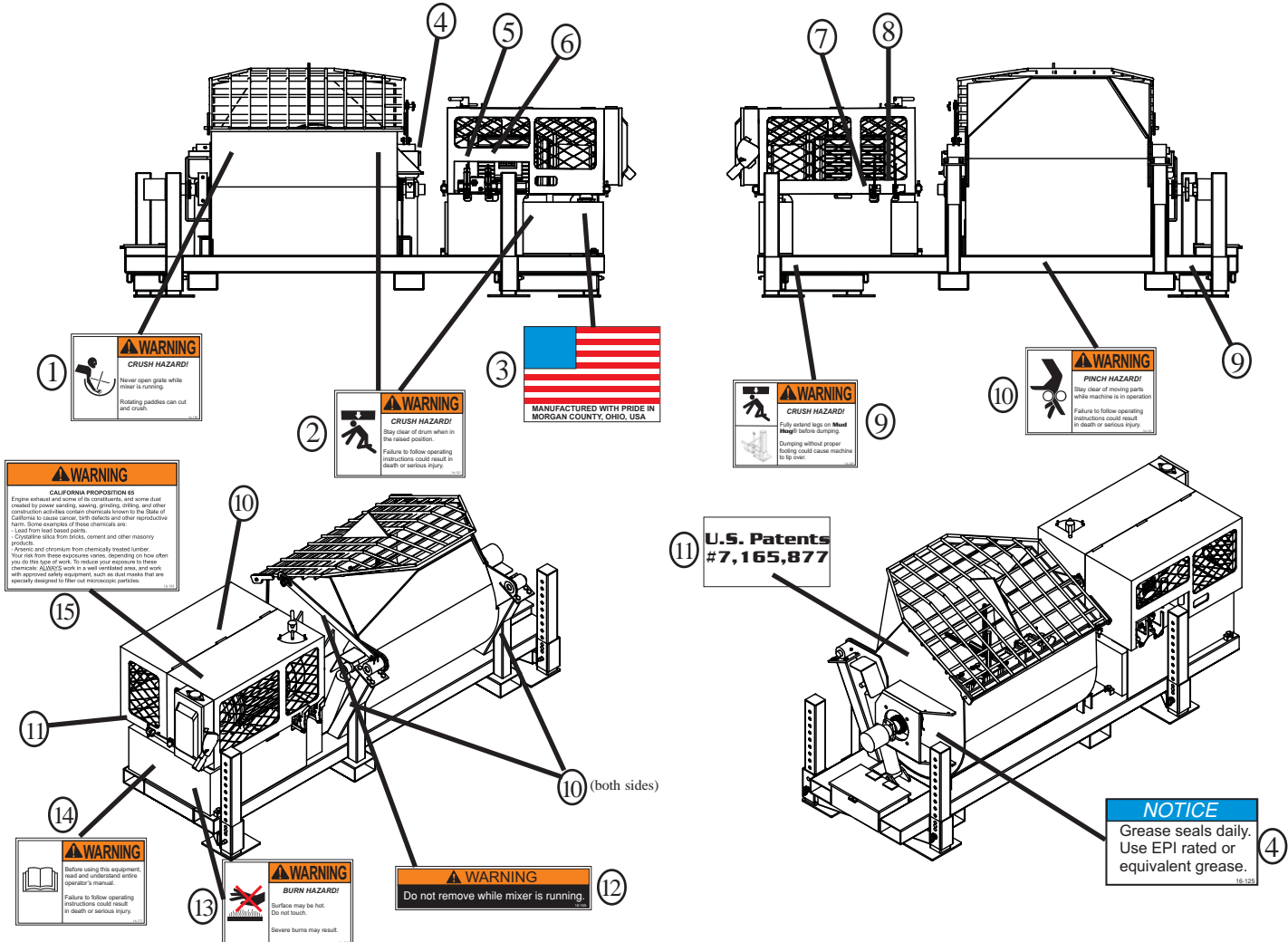
 **Warning! Before performing any described maintenance items, make sure Mud Hog® is turned off and power source is disconnected. Death or serious injury can result.**

1. Check and grease all grease fittings.
(Grease fitting location can be found on the Grease Fitting Location drawing in this manual)
2. Check hydraulic oil level. Add as needed. Change bi-yearly or if contaminated. Change hydraulic filters monthly. Use only recommended premium grade ISO68 Heavy Duty hydraulic oil or equivalent premium grade oil. Do not use contaminated fluid. (Premium grade ISO32 oil may be used in colder climates)
3. 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.
4. Check all hydraulic hoses and equipment for leaks. Fix any leaks before operating the Mud Hog®.
5. 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.
6. Check paddle shaft seal for excessive wear. If any mortar or concrete is leaking past the seal, change the seals immediately.
7. Check paddle rubbers for wear. Adjust or replace as needed.

CLEANUP

1. Turn off motor, disconnect power source 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.

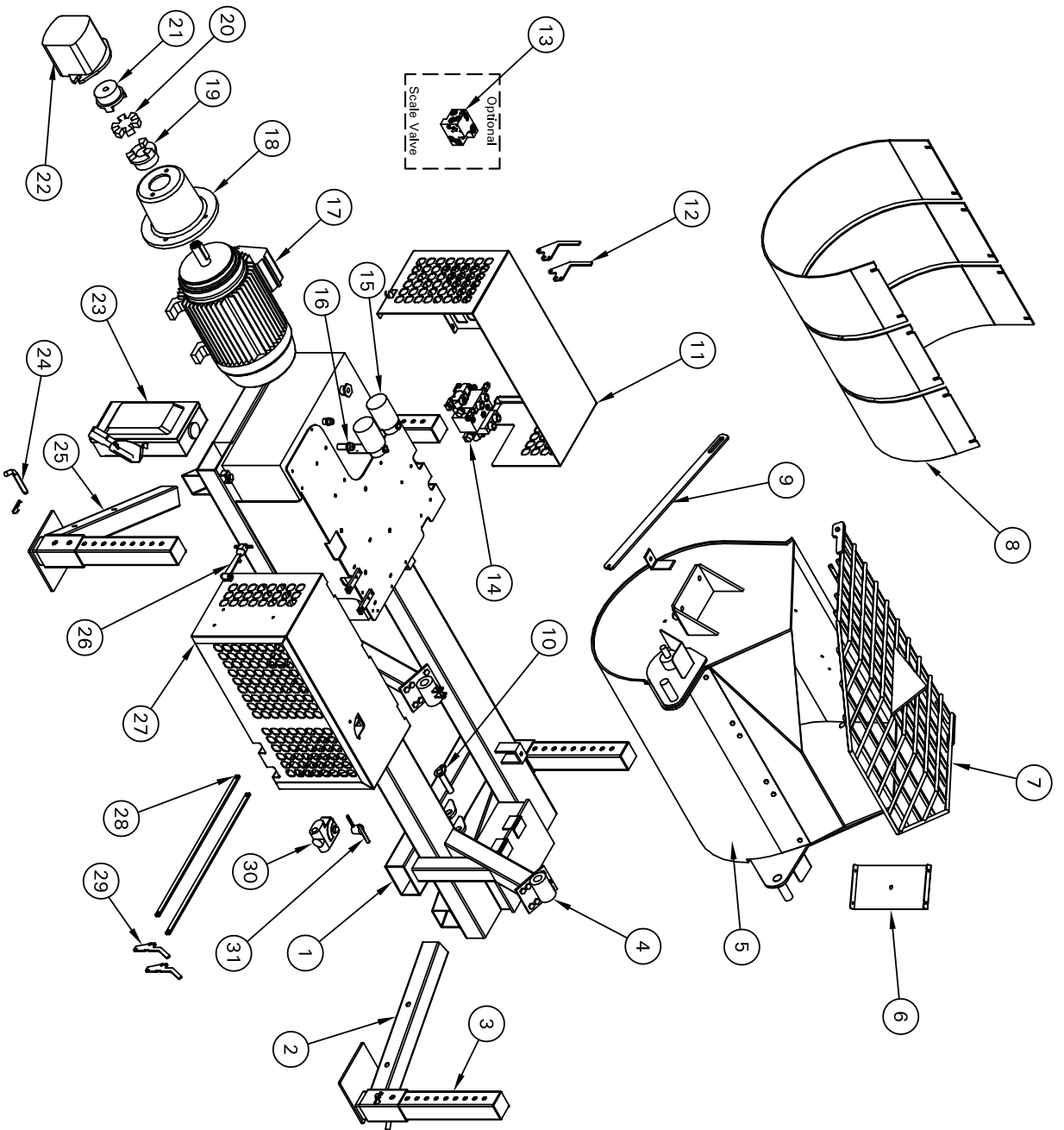
WARNING LABELS AND LOCATIONS



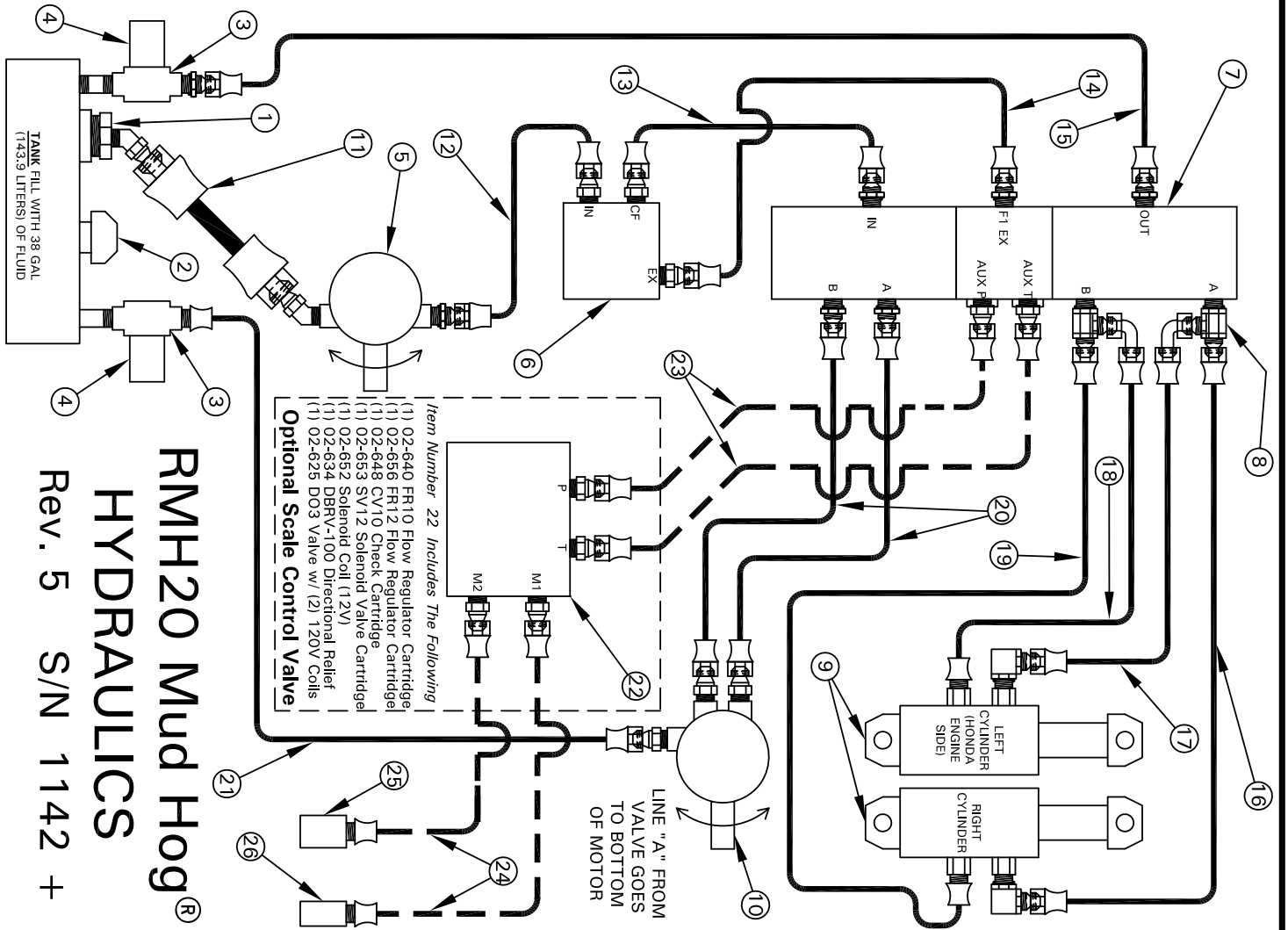
RMH20 Mud Hog® - WARNING LABELS AND LOCATION

ITEM	PART NUMBER	DESCRIPTION	QTY
1	16-159	Never Open Grate Decal	1
2	16-121	Stay Clear of Drum Decal	2
3	16-106	U.S. Flag Decal	1
4	16-125	Grease Seals Daily Decal	2
5	16-163	Push to Dump/Pull to Lower	1
6	16-161	Push for Forward/Pull Reverse	1
7	16-150	Push to Lower/Pull to Dump	1
8	16-162	Push for Reverse/Pull Forward	1
9	16-129	Fully Extend Legs Decal	2
10	16-131	Small Pinch Point Decal	5
11	16-157	U.S. Patents Decal	2
12	16-165	Do Not Remove Decal	2
13	16-112	Hot Surface Decal	1
14	16-177	Read Owners Manual Decal	1
15	16-193	Proposition 65 Decal	1

RMH20 Mud Hog® - FRAME



ITEM	PART NUMBER	QTY	DESCRIPTION
1	RMH20-A-23	1	RMH20 Frame
2	MH-A-18	1	Right Outrigger (non motor side)
3	MH-A-19	1	Leg Kit
4	MH-A-16	1	Trunion Kit
5	RMH20-A-24	1	Drum
6	RMH-11	1	Hydraulic Motor Guard
7	MH-A-12	1	Standard Grating
8	RMH-82	3	Drum Liner
9	MH-86	1	Gate Opener
10	MH-A-84	2	Lower Cylinder Pin
11	RMH20-A-25	1	Engine Hood (Hinged)
12	MH-A-87	1	Control Valve Handle Kit
13	02-689	1	Optional Scale Valve
14	02-642 / 02-688	1	Hyd. Control Valve & Valve Block
15	02-316	2	Hydraulic Filter Element
16	02-319	1	Hydraulic Breather
17	03-711	1	Electric Motor (230V-460V)
18	02-516	1	Pump Adapter
19	15-137	1	Motor Half Coupling
20	15-138	1	Coupling Spider
21	15-136	1	Pump Half Coupling
22	02-509	1	Hydraulic Pump
23	03-811	1	Service Disconnect Box 230V
24	03-812	1	Service Disconnect Box 480V
25	09-425	6	Hitch Pin w/ Hair Pin
26	MH-A-17	1	Left Outrigger (Elec. Motor Side)
27	20-103	2	Hood Hold Down
28	RMH20-A-26	1	Engine Hood (Fixed)
29	MH-183	2	Valve Handle Linkage
30	MH-A-88	1	Aux. Valve Handle Kit
31	02-628	1	Flow Control Valve
	RMH-500	1	Flow Control Valve Handle



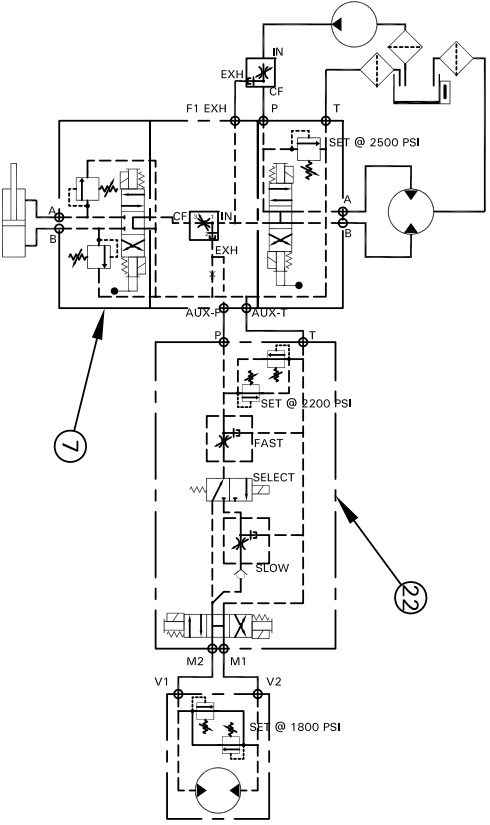
RMH20 Mud Hog®

HYDRAULICS

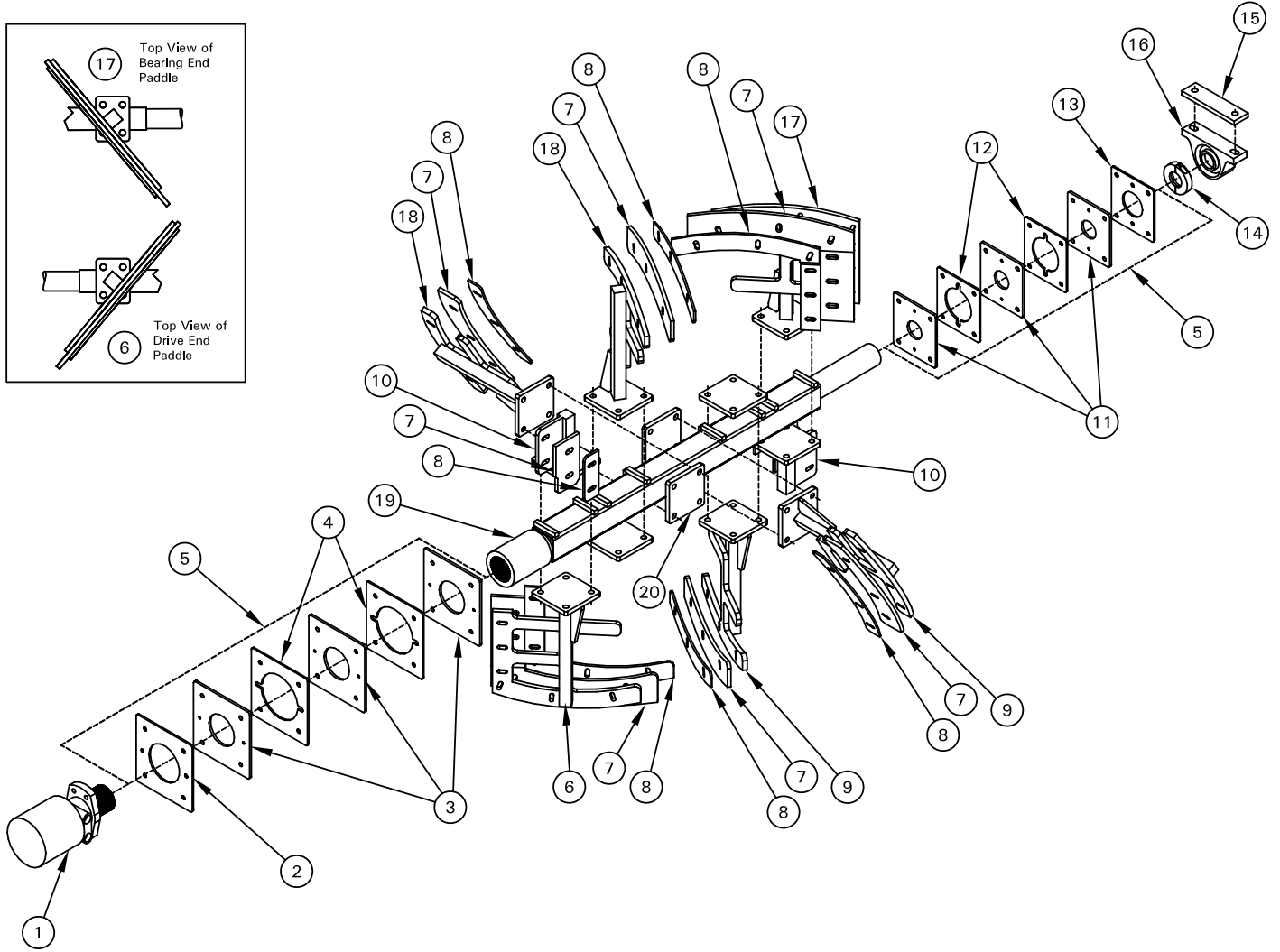
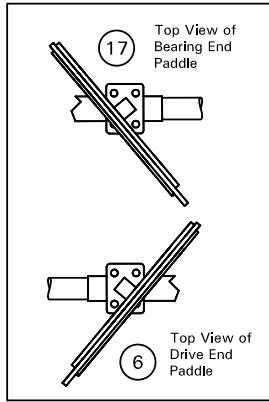
Rev. 5 S/N 1142 +

- Item Number 22 Includes The Following**
- (1) 02-640 FR10 Flow Regulator Cartridge
 - (1) 02-656 FR12 Flow Regulator Cartridge
 - (1) 02-648 CV10 Check Cartridge
 - (1) 02-653 SV12 Solenoid Valve Cartridge
 - (1) 02-652 Solenoid Coil (12V)
 - (1) 02-634 DBRV-100 Directional Relief
 - (1) 02-625 DO3 Valve w/ (2) 120V Coils

ITEM	PART NUMBER	QTY	DESCRIPTION
1	02-302	1	Hydraulic Suction Strainer
2	02-318	1	Hydraulic Breather
3	02-315	2	Hydraulic Filter Body
4	02-316	2	Hydraulic Filter Element
5	02-509	1	Hydraulic Pump
6	02-628	1	Flow Control Valve
7	02-642 / 02-688	1	02-642 Control Valve (with 02-688 Block)
7A	02-656	1	FR12 Flow Regulating Cartridge For 02-688
8	02-220	2	O-ring to JIC Run Tee Fitting
9	02-701	2	Hydraulic Cylinder (16" Stroke)
10	02-417	1	Hydraulic Motor
11	RMH20-A-1	1	RMH20 Hose Assembly, T to P, 40" OAL, JICF/JICF
12	RMH20-A-2	1	RMH20 Hose Assembly, P to FV, 39" OAL, JICF/JICF
13	RMH20-A-3	1	RMH20 Hose Assembly, FV to V, 35" OAL, JICF/JICF
14	RMH20-A-4	1	RMH20 Hose Assembly, FV to V Block, 37" OAL, JICF/JICF
15	RMH20-A-5	1	RMH20 Hose Assembly, V to T, 23" OAL, JICF/JICF
16	RMH20-A-6	1	RMH20 Hose Assembly, V to TRC, 110 1/2" OAL, JICF/JICF
17	RMH20-A-7	1	RMH20 Hose Assembly, V to TLC, 93" OAL, JICF90°/JICF
18	RMH20-A-8	1	RMH20 Hose Assembly, V to BLC, 53" OAL, JICF90°/NPTM
19	RMH20-A-9	1	RMH20 Hose Assembly, V to BRC, 98" OAL, JICF/NPTM
20	RMH20-A-10	2	RMH20 Hose Assembly, V to M, 173" OAL, JICF/JICF
21	RMH20-A-11	1	RMH20 Hose Assembly, M to T, 176" OAL, JICF/NPTM
<i>Optional Scale Control Valve Components Listed Below</i>			
22	02-689	1	Scale Valve Control Block
23	RMH20-A-12	2	RMH20 Hose Assembly, V Block to SV, 27" OAL, JICF/JICF
24	RMH20-A-13	2	RMH20 Hose Assembly, SV to UGH, 23" OAL, JICF/NPTM
25	02-218	1	Female Quick Connect
26	02-219	1	Male Quick Connect

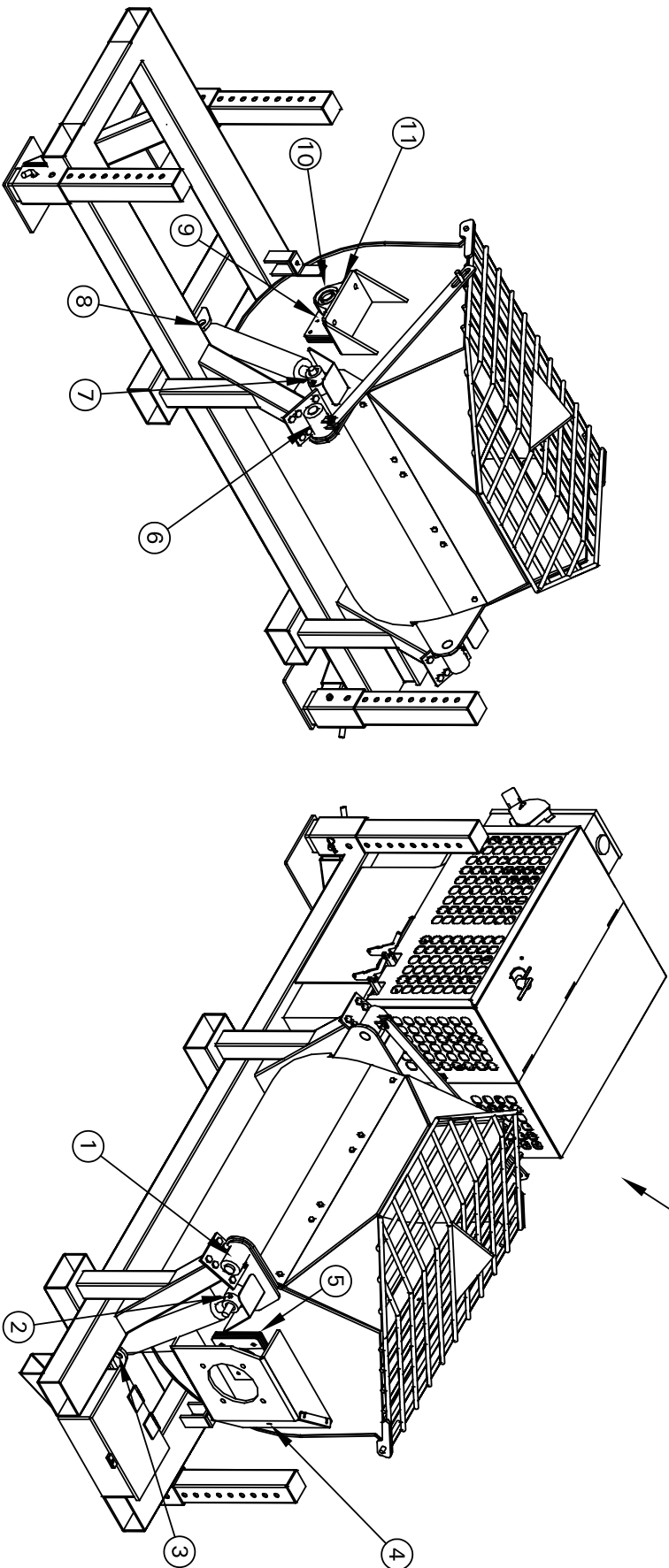


RMH20 Mud Hog® MECHANICAL



ITEM	PART NUMBER	QTY	DESCRIPTION	ITEM	PART NUMBER	QTY	DESCRIPTION
1	O2-417	1	Hydraulic Motor	15	RMH-28	1	Shaft Bearing Shim
2	RMH-18	2	Hydraulic Motor End - Shaft Seal Outer Plate	16	15-125	1	Paddle Shaft Bearing
3	RMH-19	3	Hydraulic Motor End - Shaft Seal Rubber	17	RMH20-A-16	1	Bearing End Outer Paddle
4	RMH-17	2	Hydraulic Motor End - Shaft Seal Inner Plate	18	RMH20-A-15	2	Drive End Center Paddle
5	RMH-A-2	1	RMH20 Shaft Seal Kit	19	RMH-53	1	RMH20 Paddle Shaft
-	09-313	8	Shaft Seal Bolts	20	RMH-13	4	Paddle Mounting Plates
6	RMH20-A-14	1	Drive End Outer Paddle		RMH20-A-20 PADDLE KIT	1	Paddle kit Includes (1)RMH20-A-14, (2)RMH20-A-15, (1)RMH20-A-16, (2)RMH20-A-17, (2)RMH20-A-18, (1)RMH20-A-19, (1)RMH20-A-22, (4)RMH-13, (1) Bolt Kit
7	RMH20-A-22	1	Paddle Rubber Kit w/ Bolts (No Covers)				
7A	RMH20-A-21	1	Optional Steel WearPlate Kit (Not Recommended)				
8	RMH20-A-19	1	Paddle Cover Kit (No Rubbers, Bolts)				
9	RMH20-A-17	2	Bearing End Center Paddle				
10	RMH20-A-18	2	Cleaner Paddle				
11	RMH-23	3	Bearing End Shaft Seal Rubber				
12	RMH-21	2	Bearing End - Shaft Seal Inner Plate				
13	RMH-22	1	Bearing End - Shaft Seal Outer Plate				
14	01-726	1	Shaft Collar (Bearing End Only)				

Check ALL grease fitting locations DAILY. Grease as needed.



RMH20 Mud Hog® - GREASE FITTING LOCATION

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 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

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: Direct Distributor _____

PURCHASE DATE: _____ SERIAL NO. _____

PLEASE COMPLETE THIS WARRANTY CARD, AND RETURN VIA MAIL, FAX, OR E-MAIL, 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: _____
