



RamJet® Self-Contained Auger Compactor
ASC-210 AND ASC-215

OPERATION, SERVICE, AND INSTALLATION

ISSUED JANUARY 2025

CUSTOMER NAME: _____

SERIAL NUMBER: _____

COMPACTION & RECYCLING SOLUTIONS

0018-1-RJASC-0125



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Environmental Solutions Group
201 W. Main Street, Ste 300
Chattanooga, TN 37408

Marathon Customer Care: 1.800.633.8974



WARNING

IF INCORRECTLY USED, THIS EQUIPMENT CAN CAUSE SEVERE INJURY. THOSE WHO USE AND MAINTAIN THE EQUIPMENT SHOULD BE TRAINED IN ITS PROPER USE, WARNED OF ITS DANGERS, AND SHOULD READ AND FULLY UNDERSTAND THIS ENTIRE MANUAL BEFORE ATTEMPTING TO SET UP, OPERATE, ADJUST OR SERVICE THE EQUIPMENT. KEEP THIS MANUAL FOR FUTURE REFERENCE

IMPORTANT SAFETY NOTICE

Proper service and repair are important to the safe, reliable operation of the Marathon Equipment Company products. Service procedures recommended by Marathon Equipment Company are described in this Operation, Service, and Installation Manual and are effective for performing service operations. Some of these service operations may require the use of tools or blocking devices specially designed for the purpose. Special tools should be used when and as recommended. It is important to note that some warnings against the use of specific methods that can damage the product or render it unsafe are stated in the service manual. It is also important to understand these warnings are not exhaustive. Marathon Equipment Company could not possibly know, evaluate and advise the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each method. Consequently, Marathon Equipment Company has not undertaken any such broad evaluations. Accordingly, anyone who uses service procedures or tools which are not recommended by Marathon Equipment Company must first satisfy himself thoroughly that neither his safety nor the product safety will be jeopardized by the method he selects.

RamJet® Self-Contained Auger Compactor Container

TABLE OF CONTENTS

General Information

Introduction	4
Preface	5
Hazard Symbols and Definitions	5
Lock-Out/Tag-Out Instructions	6
Service/Parts Assistance	8
Recommended Oils	8
Grease Lubrication Recommendation	8
Guards and Access Covers	8
Warning Decals on the Unit	9
Decal Care	9
Electrical Symbols	11

Installation

Contact Information	14
Concrete Pad Requirements	15
Steel Installation Procedures	16
Electrical Installation	17

Operation

Contact Information	20
Compactor Pre-Operation Instructions	21
Control Panel - Standard	22
Control Panel - Models with Photoelectric Cycle Control	23
Operating Instructions - Models with Photoelectric Cycle Control	25
Optional Controls	26

Hauler Information

Hauler Instructions - General	28
Securing Tailgate into Chain Keeper	29
Tailgate/Latch Operation	31
Liquid Removal for Optional SL Units	33

Service

Contact Information	36
Compactor Lock-Out/Tag-Out Instructions	37
Periodic Maintenance	39
Maintenance Schedule Form	40
Principles of Operation	41
Fuse, Circuit Breaker, & Wire Size Charts	41
Tailgate Seal Replacement	42
PLC Maintenance - Layout & Description	43
Electrical Schematic	45
Troubleshooting Chart	46

Replacement Parts

Contact Information	48
Miscellaneous Hardware / Electrical	49

RamJet® Self-Contained Auger Compactor Container
TABLE OF CONTENTS

Typical Panel Box Configuration51

Decal Placement52

Decal Parts List53

Decal Images54

Decals for Optional Loading Configurations56

Index..... 57

RamJet® Self-Contained Auger Compactor Container ASC-210 AND ASC-215

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SECTION 1

GENERAL INFORMATION

RamJet® Self-Contained Auger Compactor Container

General Information

4

INTRODUCTION

Thank you for purchasing a Marathon® RamJet Self-Contained Auger Compactor Container!

This product is designed to give you reliable service and superior performance for years to come. The purpose of this manual is to provide the owner and/or operators with the necessary information to properly install, operate, and maintain the machine. Also included are sections regarding troubleshooting and service procedures. The manual is not intended as a primary training source, but as a reference guide for authorized, trained personnel. Each person involved in the operation, maintenance, and installation of the machine should read and thoroughly understand the instructions in this manual and follow ALL warnings.

Employers involved in the operation, maintenance, and installation of the machine should also read and understand the most current version of the following applicable standards:

A copy of this standard may be obtained from:

ENVIRONMENTAL INDUSTRIES ASSOCIATION
4301 CONNECTICUT AVENUE, NW SUITE 300
WASHINGTON, D.C. 20008

OSHA Standards - 29 CFR

Refer to:

- Part 1910.147: "The Control of Hazardous Energy (Lock-Out/Tag-Out)"
- Part 1910.212: "Machinery and Machine Guarding: General Requirements for all Machines"
- All other applicable OSHA Standards

ANY SERVICE OR REPAIRS THAT GO BEYOND THE SCOPE OF THIS MANUAL SHOULD BE PERFORMED BY FACTORY AUTHORIZED PERSONNEL ONLY!

If you should need further assistance, please contact your distributor. You will need to provide the equipment serial number, installation date, and electrical schematic number to your distributor.

If you have any safety concerns with the equipment or need further information, please contact us at:

Marathon Equipment Company
P.O. Box 1798
Vernon, AL 35592-1798
Attn: Field Service Department
877-258-1105

PREFACE

The following sections are a guide for maintenance and service of the Marathon Equipment Company unit. The sections cover preventive maintenance, adjustment, and troubleshooting hints. Before performing maintenance, check the work area carefully to find all the hazards present and make sure all necessary safeguards or safety devices are used to protect all persons and equipment involved. In order to diagnose a problem quickly and effectively, a service person must be thoroughly familiar with the machine. This Operation, Service, and Installation Manual explains the system and its major components. Diagrams of the electrical system is in the Service Section.



IMPORTANT!

- Before starting any maintenance, study this section of the manual.
- Read all hazard warnings and decals on the unit.
- Clear the area of other persons before performing any maintenance.
- Know and understand safe use of all controls.
- It is your responsibility to understand and follow manufacturer's instructions on equipment and care.

HAZARD SYMBOLS AND DEFINITIONS

Listed below are the definitions for the various levels of hazards. It is important that the operators of this equipment and people who service units read and understand all warnings as they relate to this equipment operation.

- **DANGER** – indicates an imminently hazardous situation, which **WILL** result in **DEATH** or **SERIOUS INJURY** if you don't follow proper instructions.
- **WARNING** – indicates an imminently hazardous situation, which **COULD** result in **DEATH** OR **SERIOUS INJURY** if you don't follow proper instructions.
- **CAUTION** – indicates an imminently hazardous situation, which will result in **MINOR** to **MODERATE INJURY** if you don't follow proper instructions.
- **NOTICE** – means unit or other property may be damaged if these instructions are not followed.

You must read and obey all warnings in any manual produced by Marathon Equipment Company to support your unit.

LOCK-OUT & TAG-OUT INSTRUCTIONS

DANGER



Before entering any part of the compactor, be sure that all sources of energy have been shut off, all potential hazards have been eliminated, and the compactor is locked-out and tagged-out in accordance with OSHA and ANSI requirements.

The specific Lock-Out and Tag-Out instructions may vary from company to company (i.e. multiple locks may be required, or other machinery may need to be locked-out and tagged-out). The following instructions are provided as minimum guidelines.

INSTRUCTIONS

1. Notify all affected employees that servicing or maintenance is required on the compactor and that the compactor must be shut down and locked out to perform the servicing or maintenance.
2. Perform a hazard assessment;
 - a. The authorized employee shall refer to the company procedure to identify the type and magnitude of the energy that the compactor utilizes, shall understand the hazards of the energy, and shall know the methods to control the energy.
3. Wear proper personal protective equipment.
4. If compactor is operating, it must be shut down by the normal stopping procedure. If the auger is pressing against a load, reverse the auger before shutting the compactor down.
5. De-activate the energy isolating device(s) so that compactor is isolated from the energy source(s).
 - a. Shut down all power sources.
 - b. Move the main disconnect lever to the OFF position.
6. Lockout the energy isolating device(s) with assigned individual lock(s).
 - a. Padlock the disconnect lever with a keyed padlock and take the key with you.
 - b. Along with the padlock, place an appropriate, highly visible, warning tag on the disconnect lever. The tag should provide a warning such as:
"Danger: Do not operate equipment. Person working on equipment." or
"Warning: Do not energize without the permission of _____."
 - c. Place operating components in such a position so as not to be subject to possible free fall and/or install additional blocking devices to prevent this potential for any raised or elevated component.
7. After locking and tagging the compactor, ensure that the compactor is disconnected from the energy source by first checking that no personnel are exposed, then verify the isolation of the equipment by operating the push button or other normal operating control(s) or by testing to make certain the equipment will not operate. Try to start and operate the compactor (as outlined in the Operating Instructions) to make sure the Lock-Out and Tag-Out is effective. If the Lock-Out and Tag-Out is effective, remove the key from the key switch and take it with you.
9. Before entering compactor perform hazard assessment for confined space requirements (hazardous fumes, dust, toxic material, or other hazards) per the OSHA confined space standard.
10. The compactor is now locked out.

LOCK-OUT & TAG-OUT INSTRUCTIONS (CONTINUED)

RESTORING SERVICE

When the servicing or maintenance is completed and the compactor is ready to return to normal operating condition, the following steps shall be taken:

1. Check the compactor and the immediate area around the compactor to ensure that nonessential items have been removed and that the compactor components, guards and covers are operationally intact.
2. Check the work area to ensure that all employees have been safely positioned or removed from any hazardous area.
3. Verify that the controls are in neutral.
4. Remove the lockout devices and re-energize the compactor.

NOTICE

The removal of some forms of blocking may require re-energizing of the compactor before safe removal.

5. Notify affected employees that the servicing or maintenance is completed and the compactor is ready for use.
6. Reassess area to determine all hazards are protected.

RamJet® Self-Contained Auger Compactor Container

General Information

8

SERVICE/PARTS ASSISTANCE

Assistance in troubleshooting, repair and service is available by contacting the authorized Marathon Equipment Company Dealer in your area. Parts are available at your Marathon Equipment Company Dealer or through Marathon Equipment Company. Marathon Equipment Company personnel are trained to give prompt, professional assistance.

ALWAYS give the machine serial number in all correspondence relating to the equipment.

RECOMMENDED OILS

The following oils by brand name are approved for use in this unit.

- Shell Omala S4 GX 150 or equivalent.

GREASE LUBRICANT RECOMMENDATION

Use a grease gun. Before engaging grease gun, clean the fitting. Remove the plug shown in Figure on next page, add enough grease to purge out of the plug hole. Wipe off excess grease and replace the plug.

Use NLG1000 grease.



GUARDS AND ACCESS COVERS

Before operating or performing maintenance, check the work area carefully to find all the hazards present and make sure all guards and safety devices are in place to protect all persons and equipment involved.

WARNING

DO NOT operate without all guards and access covers in place.

WARNING DECALS ON THE UNIT

WARNING

DO NOT operate without all guards and access covers in place.

Make sure you can read all warning and instruction decals. Clean decals if you cannot read the words. See below for directions on cleaning decals. Replace any decal that is damaged, missing, or is not readable. When you replace a part that has a decal, make sure a new decal is installed on the new part. See the Operation, Service, and Installation Manual for replacement decals. Order replacement decals from Marathon Equipment Company or an authorized dealer.

DECAL CARE

It is important that the decals are properly cleaned to make sure that they are readable and do not come off the unit. Use the following steps to clean the decals.

A. General Instructions

Following these instructions helps the decals adhere longer.

- Wash the decals with a blend of mild car wash detergent and clean water
- Rinse with clean water
- Let the unit air-dry or dry with a micro-fiber cloth
- Do not allow fuels to stay in contact with the decal for an extended period of time. Remove the fuel contamination as quickly as possible
- Do not use carnauba-based wax over the decals
- Do not use a mechanical brush while washing the decals.

B. Pressure Washer Precautions

Pressure washing can cause damage to decals. It can cause the edges of the decals to lift and peel the decal away from the unit. Over time, the decal can fade, crack or chip away.

Use pressure washing only when other cleaning methods are not effective. If you use a pressure washer, use the following precautions.

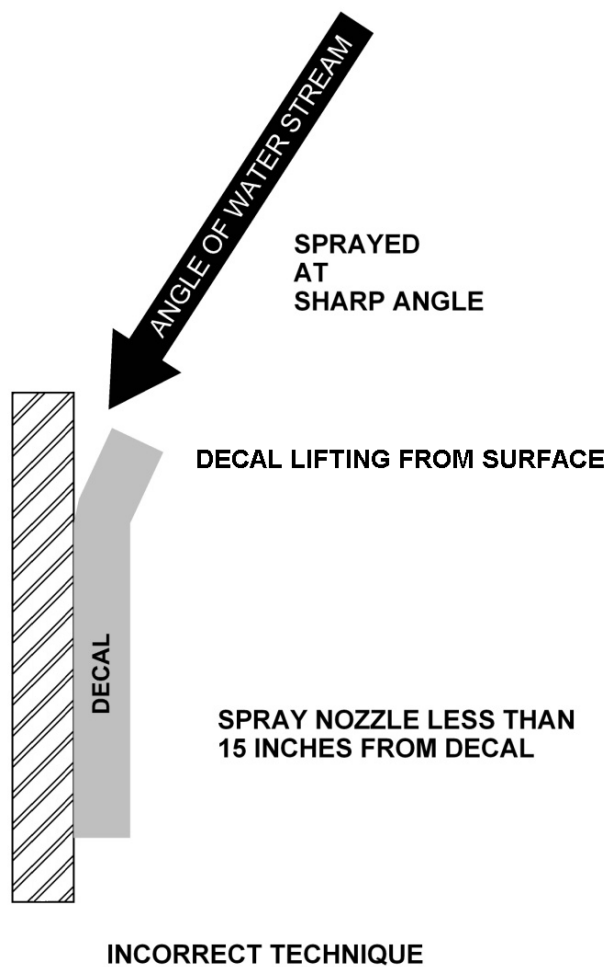
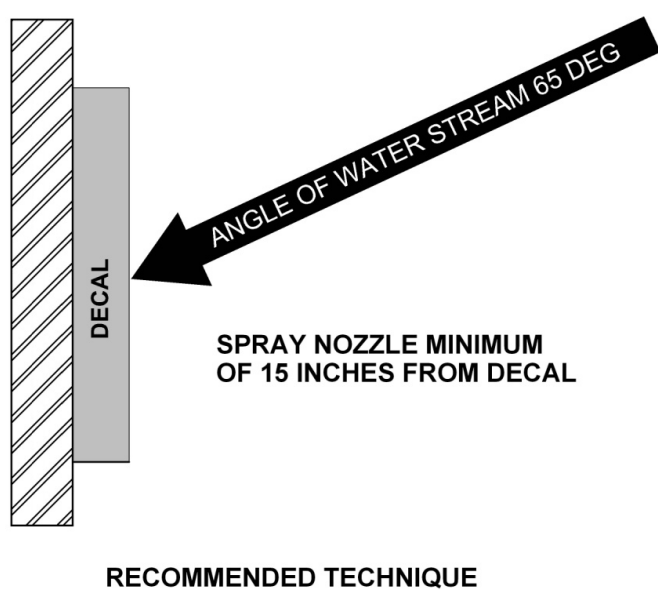
- Spray nozzle opening: 40° wide pattern
- Spray angle: 65° from vehicle's body
- Distance of nozzle to decal: 15" minimum
- Water pressure: less than or equal to 800 psi
- Length of time: not more than 30 sec.
- Do not use sharp angles to clean the decals – this can lift the decals from the unit.
- NEVER use a "turbo pressure nozzle".

C. Remove Difficult Debris

When normal cleaning procedures do not remove difficult debris from the decals, try the following:



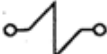






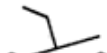





- Spot clean the decal with Isopropyl Alcohol and a micro-fiber cloth (rag)
- If these methods do not work on a problem area, call a Marathon Equipment Company Dealer or Marathon Equipment Company Customer Support.

DECAL CARE - CONTINUED



ELECTRICAL SYMBOLS

SYMBOL DEFINITIONS

	BATTERY
	FUSE
	SOLENOID
	CONTACT RELAY
	NORMALLY OPEN CONTACT OF CR1
	NORMALLY CLOSED CONTACT OF CR1
	INDICATOR LIGHT (GREEN)
	PUSH BUTTON SWITCH NORMALLY CLOSED
	PUSH BUTTON SWITCH NORMALLY OPEN
	TOGGLE SWITCH
	DIODE
	PRESSURE SWITCH
	LIMIT SWITCH NORMALLY OPEN
	LIMIT SWITCH NORMALLY CLOSED
	CAPACITOR

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SECTION 2

INSTALLATION

CONTACT INFORMATION



Technical Service and Warranty:

877-258-1105

Parts:

800-528-5308

For parts visit our e-commerce market place at www.mecomerchant.com.

If you do not have a user name and password, contact our Parts Department and they will assist with your registration.

Normal Business Hours:

Monday-Friday 8:00am - 5:00pm

(Central Standard Time)

CONCRETE PAD REQUIREMENTS

These installation instructions are not intended as a substitute for training and experience in proper use and safety procedures in operating this equipment. Marathon Equipment Co. does not assume responsibility for the installation procedures of this equipment. Conformance to applicable local, state, and federal laws concerning installation rests with the customer.

CAUTION

Review this manual before making the installation. Study the jobsite and installation requirements carefully to be certain all necessary safeguards or safety devices are provided to protect all personnel and equipment during the installation and as a completed system. Special attention is directed to the most current ANSI Z245.2 standard.

Concrete Pad

1. Preferred dimensions of the concrete pad are 10'0" wide and a length of 5'0" greater than the length of the compactor/ container. It should be level and of minimum 3000 PSI concrete steel reinforced, 6" thick. It is preferred that the concrete pad be flush with the surrounding ground level.

NOTICE

Units with four ground rollers must be installed on a level pad.

2. To provide accessibility, concrete pad should be positioned to allow 28" between machine and building wall if installed parallel with building. Allow a minimum of 45' of clear space from end of pad for container handling vehicle.

NOTICE

The clearances given are minimums. Your installation may require greater clearances depending on the site and the hauling equipment that will be used.

Container Guides

If container guides (optional) are used with the self-contained units, the guides should be anchored to the concrete pad with 3/4" X 6" (minimum) anchor bolts. These bolts should be concrete anchors or expansion type anchor bolts. To allow for construction variations, it is best if these holes are drilled in the concrete after pre-locating the container guides in their desired location. Drill holes and place anchor bolts in each location provided on the guides. When the guides have been placed in position, and the anchor bolts have set, tighten all nuts securely.

STEEL INSTALLATION PROCEDURES

Dock Installation

If the appropriate accessories are ordered from Marathon Equipment Co., the compactor/ container will be furnished with either a four-sided hopper or a three-sided hopper with a hinged gate. THESE ACCESSORIES SHOULD NOT BE ALTERED AS THEY ARE MANUFACTURED IN ACCORDANCE WITH THOSE STANDARDS WHICH PREVAIL AT THE TIME OF MANUFACTURE.

If the compactor/container cannot be directly abutted to the dock or if there is any difference in height between the dock and the compactor/container, an appropriately sturdy transition section should be provided by the customer and securely affixed to the dock. Along with the transition section, a compactor/container guidance/stop mechanism should be installed to assure that the unit does not bottom out against the transition section or dock during dock placement (See ANSI Z245.2 Safety Standards). Optional container guides with stops are available from Marathon and are recommended for proper dock placement of the compactor/ container.

Chute-Fed Installation

Compactors installed in this arrangement are normally fed "through-the-wall". The lower edge of the access hole in the wall should be a MINIMUM of 42" (and, if possible, not more than 58") from the inside floor level. A security door (in accordance with local code) should be installed in the wall opening. In the absence of a local code, this door should be constructed of 3/16" thick steel or of steel hollow core design and be lockable from the inside of the building.

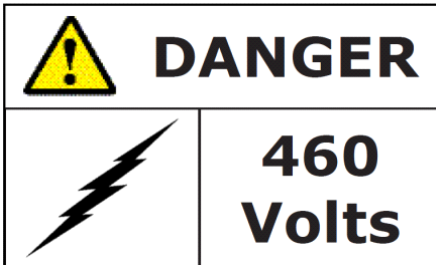
Decals

Be certain that the appropriate decals are in their proper locations at all times on the machine. For decal locations, see **Decals**^[54] and **Decals Placement**^[52] in the "Replacement Parts" section of this manual.

NOTICE

Installation is not complete until all decals are in place.

ELECTRICAL INSTALLATION



The motor control panel contains high voltage components. Only authorized service personnel should be allowed inside. See **Lock-Out & Tag-Out Instructions**^[37] in the Service section.



A lockable fused disconnect switch (customer furnished) must be installed and be within sight of the compactor motor control panel location, not to exceed 50'0" from the compactor. This fused disconnect switch should be sized in accordance with the compactor (See **Fuses and Circuit Breakers**^[41] chart).

DANGER

All equipment must be grounded per National Electric Code.

Grounding Instructions: This appliance must be connected to a grounded, metal, permanent wiring system; or an equipment grounding conductor must be run with the circuit conductors and connected to the equipment grounding terminal or lead on the compactor.

If there is any doubt whether the appliance is properly grounded, a qualified electrician should be consulted.

Remote MCP Installation

1. The remote MCP should be installed and anchored as required by the customer. If the operator station is mounted in the face of the motor control panel, be certain these controls are located as to be in a convenient, but not hazardous, location to the customer.

CAUTION

Operator Station must be located so that the Emergency Stop Button is readily accessible to the operator and within three (3) feet of the charging chamber access door. If installation requires the operator station to be located in a more remote area, a second Emergency Stop Button should be added and installed in the manner described above.



NOTE: Verify that one line of the 3 phase wire passes through the current transducer. This component monitors motor amperage for the AW/CF indicator.

ELECTRICAL INSTALLATION (CONTINUED)

Pushbutton Control Panel

If a remote operator station is furnished, it will be factory wired using Sealtite. If it is necessary to disconnect it from the wires (to install the operator station inside a building), exercise care that these wires are reconnected as originally furnished. (Check local codes to be certain that sealtite is acceptable.)

CAUTION

Operator Station must be located so that the Emergency Stop Button is readily accessible to the operator and within three (3) feet of the charging chamber access door. If installation requires this operator station to be located in a more remote area, a second Emergency Stop Button should be added and installed in the manner described above.

Electrical Connections

Run power lines, between fused disconnect switch (customer furnished) and compactor's motor control panel, in accordance with local electrical codes, using knock-outs in bottom of motor control panel. See **Fuses and Circuit Breakers**⁴¹ chart and **Wire Size**⁴¹ chart, in the Service section, to determine the proper service disconnect amperage rating and the proper wire size.

NOTICE

High legs should be installed to L3 on motor starter.

Check voltage at fused disconnect switch to be certain it is the same as is shown on compactor or remote power pack. If voltage is correct, put fused disconnect switch in "ON" position.

Start-Up Instructions

NOTICE

Make sure that the operators are trained in the proper use of this equipment prior to operation.

CAUTION

Make sure persons and material are clear of charge box area.

SECTION 3

OPERATION

CONTACT INFORMATION



Technical Service and Warranty:

877-258-1105

Parts:

800-528-5308

For parts visit our e-commerce market place at www.mecomerchant.com.

If you do not have a user name and password, contact our Parts Department and they will assist with your registration.

Normal Business Hours:

Monday-Friday 8:00am - 5:00pm

(Central Standard Time)

PRE-OPERATION INSTRUCTIONS

Employers should allow only authorized and thoroughly trained personnel to operate this compactor.

This compactor is equipped with a key operated locking system. Keys should be in possession of only authorized personnel. Turn off and remove the key after use.

DANGER

ONLY TRAINED AND AUTHORIZED PERSONNEL SHOULD BE ALLOWED INSIDE PANEL BOX. The panel box contains high voltage components. See **Lock-Out/Tag-Out Instructions** .


WARNING

Do not operate compactor until operating instructions are thoroughly understood. Wear safety glasses and gloves when operating this equipment.


WARNING

Stay clear of all internal compactor parts and all moving external compactor parts when in operation. Failure to do so could result in serious personal injury or death!

WARNING

Never enter any part of compactor unless the disconnect switch has been turned off, padlocked, and all stored energy sources have been removed. See **Lock-Out/Tag-Out Instructions** .

WARNING

Do not remove access covers except for servicing. Only trained and authorized service personnel should be allowed to service this equipment. All access doors on the compactor body should always be secured in place when the unit is operating. See **Lock-Out/Tag-Out Instructions** .

WARNING

Before starting compactor, be sure no one is inside. Be certain that everyone is clear of all operation points and pinch point areas before starting.

WARNING

If the compactor is equipped with a security gate or doghouse with security door, be sure that the security gate or door is closed before the compactor is started.

NOTICE

Federal regulation prohibits the use of this equipment by anyone under 18 years of age.

STANDARD CONTROL PANEL



CONTROL DESCRIPTION

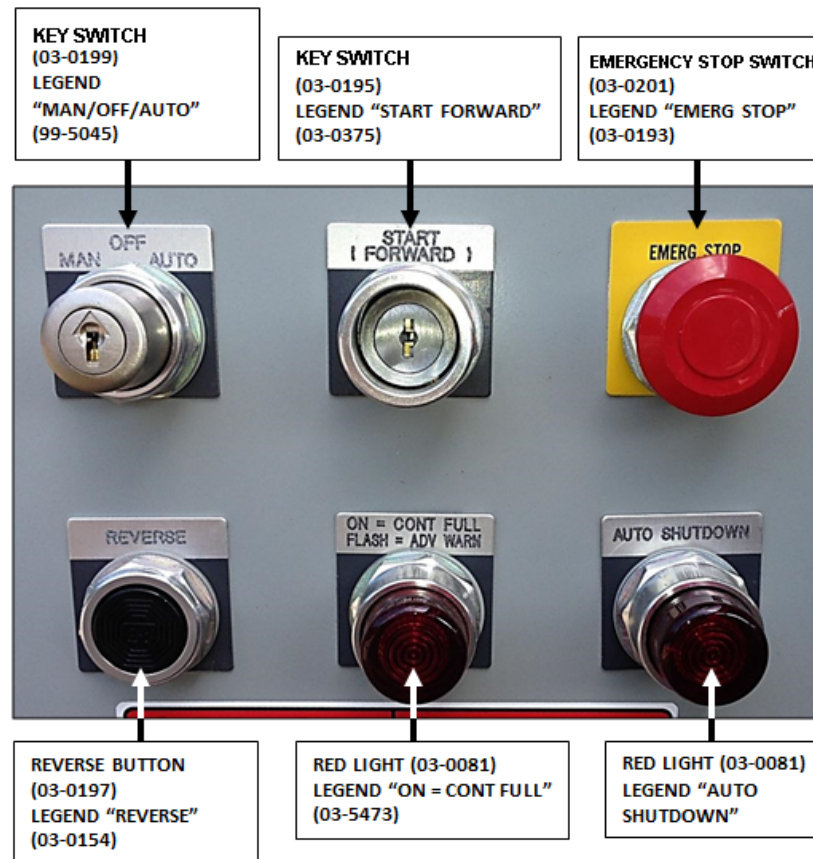
1. **KEYED SWITCH** - This switch requires a key for operation. Insert the key and turn counterclockwise to the ON position. The compactor will cycle one time then stop. After use, turn the key clockwise to the OFF position and remove the key.
2. **START PUSHBUTTON** - This button starts the auger in the Forward/Counterclockwise direction.
3. **EMERGENCY STOP PUSHBUTTON** - When depressed, this pushbutton will stop all powered operation of the compactor.
4. **REVERSE PUSHBUTTON** - This pushbutton will reverse the auger rotation when depressed. The motor must be running for the REVERSE button to operate. See the **Manual Override Instructions** for details of the operation.

OPERATING INSTRUCTIONS - STANDARD MODELS

1. First, place the material to be discarded into the compactor.
2. Depress the start button for 1 to 2 seconds and release. The unit will cycle for a predetermined time then stop.
3. Repeat, if necessary, after the compactor has stopped.
4. When you have finished using the compactor, remove the key from the key switch.

IN CASE OF EMERGENCY: Push the large RED button to STOP!

CONTROL PANEL - MODELS WITH PHOTOELECTRIC CYCLE CONTROL



CONTROL DESCRIPTION

1. **MANUAL-OFF / AUTOMATIC SHUTDOWN** - This switch controls the compactor operation mode, manual or automatic (automatic is photocell mode).
2. **KEYED START SWITCH** - This switch requires a key for operation. Insert the key and turn clockwise to the START position. Depress the key for one to two seconds and release. The compactor will cycle the preset number of times determined by the Multi-Cycle Counter, then stop. After use, turn the key to the counterclockwise position and remove the key.
3. **EMERGENCY STOP PUSHBUTTON** - When depressed, this pushbutton will stop all powered operation of the compactor.
4. **REVERSE PUSHBUTTON** - This pushbutton will reverse the auger rotation when depressed. The motor must be running for the REVERSE button to operate.

CONTROL DESCRIPTION (CONTINUED)

5. ADVANCE WARNING / CONTAINER FULL LIGHT - When the light starts flashing (ADVANCE WARNING). When the light stays on continuously (CONTAINER FULL), the container is full and is ready to be emptied before its next use. To deactivate the light, depress the illuminated light (the unit will not run while the light is continuously on).
6. AUTOMATIC SHUTDOWN LIGHT - Used with the photoelectric cycle control. If a blockage in the charge chamber causes the compactor to continue cycling, the timer will shut the compactor down after the preset time has passed. To deactivate the timer, the illuminated pushbutton is pressed after clearing the blockage.

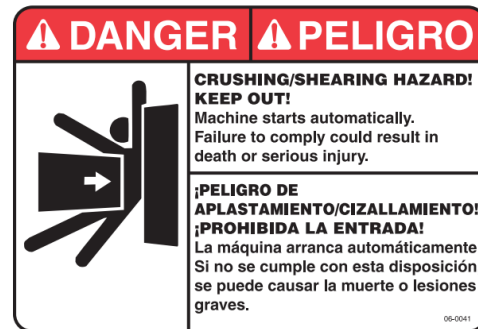
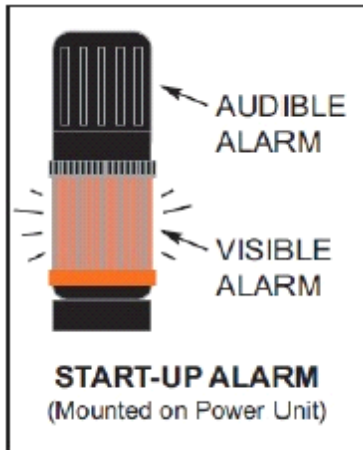
*For more information on the Multi-Cycle Counter, see **PLC Maintenance** ⁴³.

OPERATING INSTRUCTIONS - MODELS WITH PHOTOELECTRIC CYCLE CONTROL

NOTICE

This compactor features an ANSI Z245.21 (2013) SECTION 5.12.1 compliant start-up alarm that is both audible and visible during the activation of the AUTOMATIC mode.

Operating Instructions (Automatic Mode)



1. Place the material to be discarded into the compactor.

NOTICE

If you are loading the compactor through a door or gate, close it before starting the compactor.

2. Insert the first key into the "MANUAL - OFF - AUTOMATIC" key switch and turn to the "AUTOMATIC" position.
3. Insert the second key into the "START" switch and turn to the right.
4. Depress the key in the "START" switch and hold it continuously for 20 seconds.
 - Both the audible and visual start-up alarms will energize for 5 seconds.
 - After 5 seconds the audible alarm will stop, but the visual alarm will continue for an additional 15 seconds (for a total of 20 seconds).
 - After 20 seconds, the motor will start.
 - The light will continue to flash until the unit is manually turned off, automatically shuts down, or is switched to manual mode.



WARNING

In AUTOMATIC mode, the auger will restart automatically anytime the photocell detects ANY OBJECT in the charge box.

OPTIONAL CONTROLS

1. **SUSTAINED MANUAL PRESSURE CONTROL BUTTON (Hold-To-Run, Release-To-Stop)** This option requires the compactor operator to remain at the push button station while the compactor is in use. Actuation requires depressing the "Hold-To-Run" and "Start" buttons. After the unit has started, the "Start" button is released. If the "Hold-To-Run" button is released, the unit will stop instantly.
2. **ADVANCE WARNING / CONTAINER FULL LIGHT** - When the light starts flashing (ADVANCE WARNING). When the light stays on continuously (CONTAINER FULL), the container is full and is ready to be emptied before its next use. To deactivate the light, depress the illuminated light (The unit will not run while the light is continuously on).
3. **ACCESS INTERLOCK** - This is optional with units equipped with doors, security doors, or access gates. It prevents the unit from operating while a door or gate is open.
4. **PHOTOELECTRIC CYCLE CONTROL - (Photocell)** - Consists of a LED light source and a reflector. It can be mounted on a hopper or chute. Two holes, located so as to avoid any hazard, are located in opposite walls of the chute. When the light beam is blocked for 5 seconds, the audible alarm will sound for 5 more seconds, then the compactor is activated and will continue to run until the obstruction has been cleared or the watchdog timer times out.
5. **AUTOMATIC SHUTDOWN** - Used with the photoelectric cycle control. If a blockage in the charge chamber causes the compactor to continue cycling, the timer will shut the compactor down after the preset time has passed. To deactivate the timer, the illuminated auto shutdown pushbutton is pressed after clearing the blockage.
6. **START ON DOOR CLOSURE** - When switch is in auto the PLC counts door closures. The machine will start on predetermined count that is within the PLC.

SECTION 4

HAULER INFORMATION

HAULER INSTRUCTIONS – GENERAL

Before hauling to the dump site:

1. Disconnect electrical connections between the MCP and the compactor. Make sure they are placed in an area where they will not get damaged.
2. Close and secure any hopper doors or gates.
3. Make sure that the container tailgate safety chain is secured in the keyhole on the latch side of the container floor. See **Securing Tailgate into Chain Keeper**²⁹.
4. If the unit is a Streamline® model (SL), disconnect any drain hose(s) connected to the unit and plug all ports. See **Liquid Removal for Optional SL Units**³³.
5. Make sure that the hoist lifting the unit is compatible with the understructure on the unit.

NOTICE

Hold downs should be used to secure the front and rear of the of the container understructure to the hoist.

At the dump site:

See **Securing Tailgate into Chain Keeper**²⁹ and **Tailgate/Latch Operation**³¹.

1. To prevent leakage, the tailgate seal and mating surface should be wiped clean and inspected after the unit has been emptied. When cleaning the seal on unit, inspect for damage and replace if necessary.

WARNING

Never place any part of your body between the tailgate and the container. Use a mop or similar cleaning device with a long handle to clean the seal. Close inspection of the seal should be done only after the container has been lowered to a level position and the raised tailgate has been supported with a crane, forklift, or other positive maintenance prop.

2. Make sure all personnel are clear of the area around the compactor and the tailgate while being emptied.

After returning from the dump site:

1. After setting the unit down, reconnect electrical connections to the compactor. Make sure they are not laying across sharp corners or any abrasive surface.
2. Close and secure any hopper doors or gates.
3. Make sure that the container tailgate safety chain is secured in the keyhole on the latch side of the container floor.
4. If the unit is a Streamline model (SL), connect a compatible drain hose(s) to the unit.

SECURING TAILGATE CHAIN INTO CHAIN KEEPER

1. Open tailgate fully and swing it around until it abuts the side of the container.



2. Insert chain into hole in chain keeper and pull chain through the keeper until tight.



SECURING TAILGATE CHAIN INTO CHAIN KEEPER (CONTINUED)

3. Slide chain down into vertical chain keeper slot.



4. Turn chain and slide it into horizontal slot toward tailgate end of the container

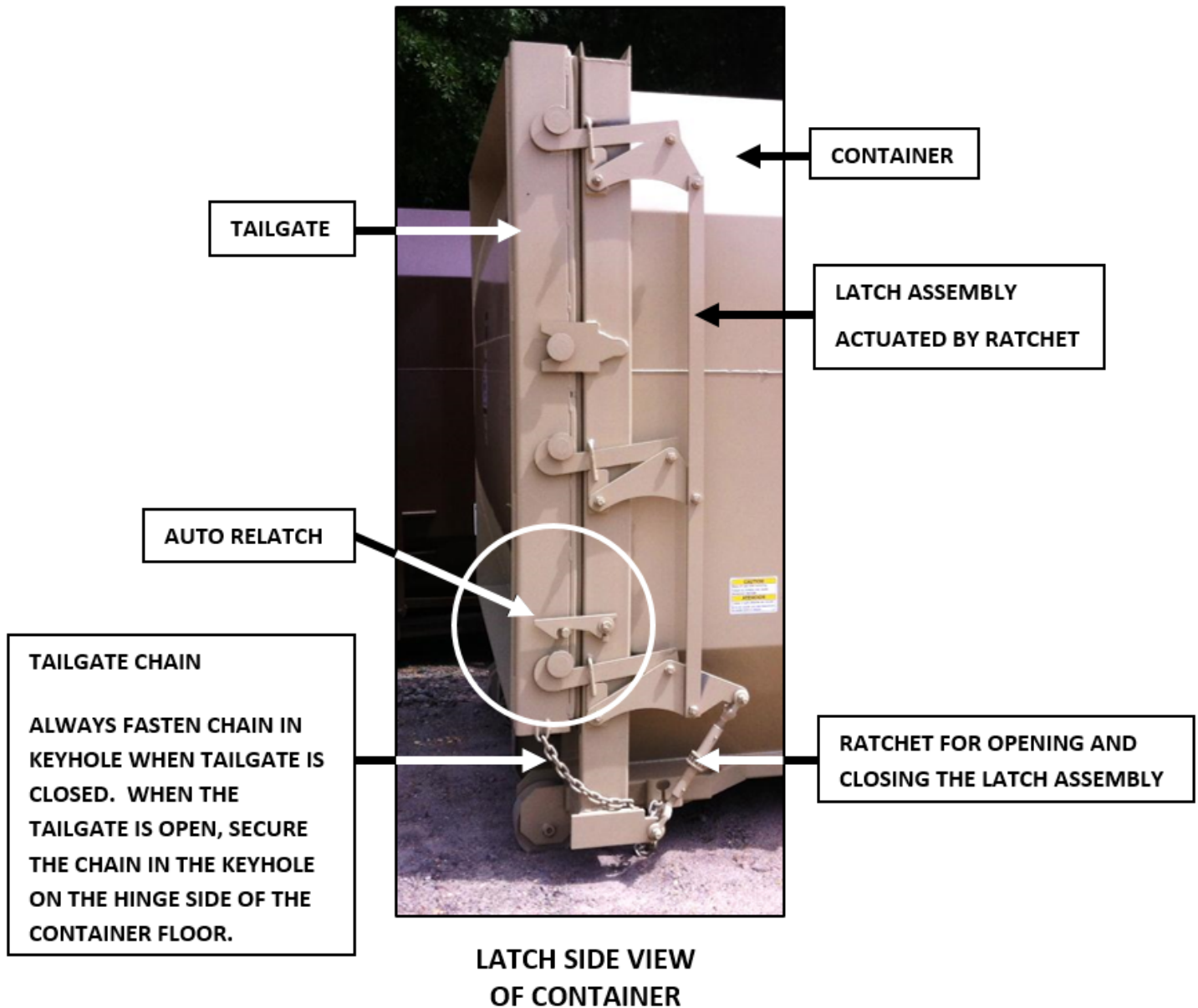


5. Ensure chain link is fully secured into horizontal door slot toward tailgate.



6. Ratchet latch side of container shown with chain engaged into chain keeper.

TAILGATE/LATCH OPERATION



TAILGATE/LATCH OPERATION (CONTINUED)



ROTATE THE AUTO RELATCH UP TO THE POSITION SHOWN AND OPEN THE LATCH AND TAILGATE.

AUTO RELATCH

IN POSITION TO OPEN TAILGATE



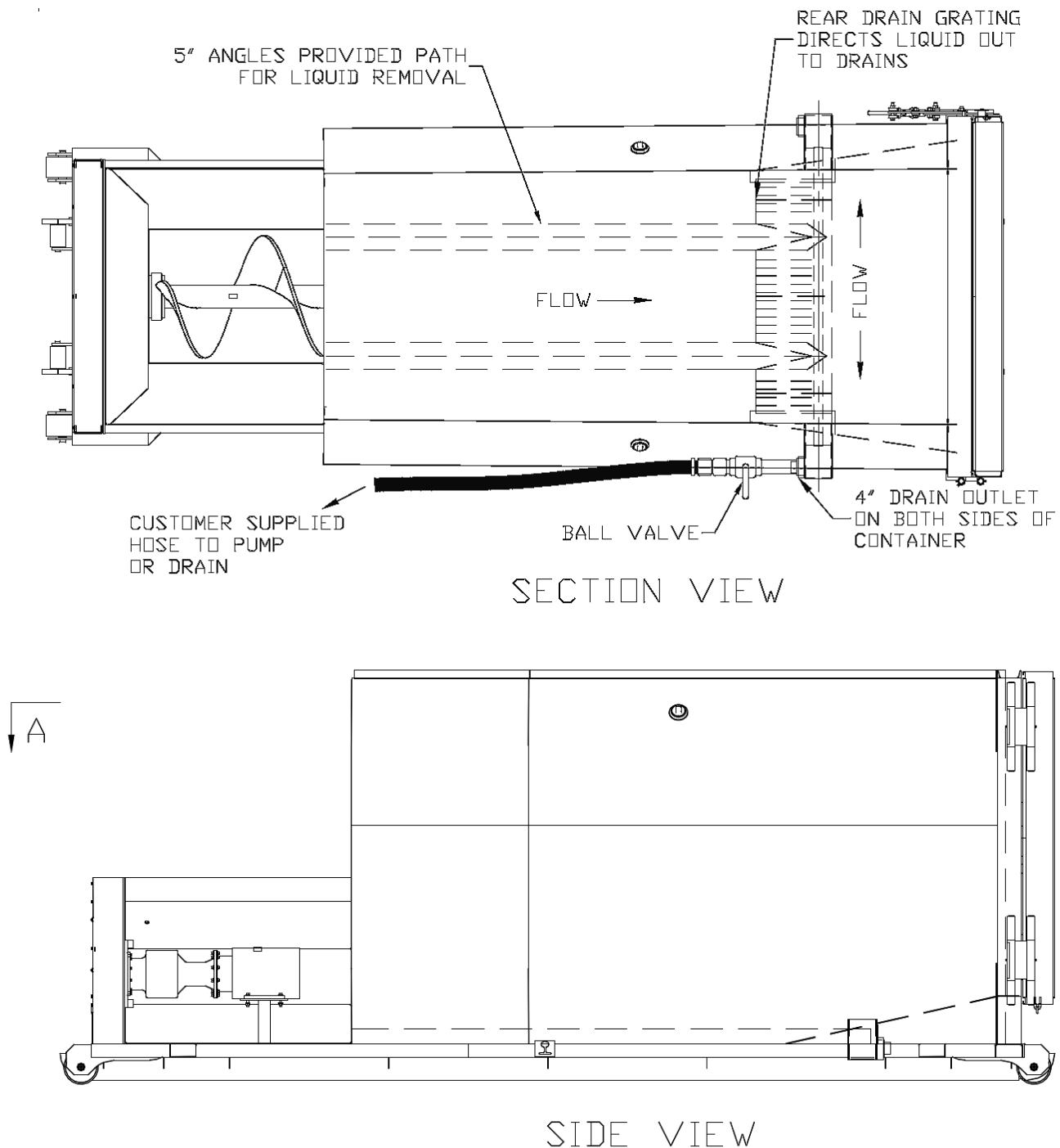
WHEN CLOSING THE TAILGATE, ROTATE THE AUTO RELATCH DOWN TO THE POSITION SHOWN AND PUSH THE TAILGATE SHUT UNTIL THE AUTO RELATCH GRABS THE PIN ON THE TAILGATE. AFTER THE TAILGATE IS SECURED BY THE AUTO RELATCH, THE LATCH ASSEMBLY IS CLOSED USING THE RATCHET. CONNECT THE TAILGATE CHAIN ON THE TAILGATE TO THE KEYHOLE ON THE SIDE OF THE CONTAINER FLOOR.

AUTO RELATCH

IN POSITION TO GRAB AND HOLD TAILGATE DURING TAILGATE CLOSING

LIQUID REMOVAL FOR OPTIONAL SL UNITS

The RamJet Self-Contained Auger Streamline® compactor/containers are designed with an internal drain system for liquid removal, ported to each corner of the machine container tailgate end only. The unit comes standard with one ball valve. This valve can be moved to either four drain outlets on the machine. The customer can attach a drain hose with a 3" NPT male fitting to the drain valve.



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SECTION 5

SERVICE

CONTACT INFORMATION



Technical Service and Warranty:

877-258-1105

Parts:

800-528-5308

For parts visit our e-commerce market place at www.mecomerchant.com.

If you do not have a user name and password, contact our Parts Department and they will assist with your registration.

Normal Business Hours:

Monday-Friday 8:00am - 5:00pm

(Central Standard Time)

LOCK-OUT & TAG-OUT INSTRUCTIONS

DANGER



Before entering any part of the compactor, be sure that all sources of energy have been shut off, all potential hazards have been eliminated, and the compactor is locked-out and tagged-out in accordance with OSHA and ANSI requirements.

The specific Lock-Out and Tag-Out instructions may vary from company to company (i.e. multiple locks may be required, or other machinery may need to be locked-out and tagged-out). The following instructions are provided as minimum guidelines.

INSTRUCTIONS

1. Notify all affected employees that servicing or maintenance is required on the compactor and that the compactor must be shut down and locked out to perform the servicing or maintenance.
2. Perform a hazard assessment;
 - a. The authorized employee shall refer to the company procedure to identify the type and magnitude of the energy that the compactor utilizes, shall understand the hazards of the energy, and shall know the methods to control the energy.
3. Wear proper personal protective equipment.
4. If compactor is operating, it must be shut down by the normal stopping procedure. If the auger is pressing against a load, reverse the auger before shutting the compactor down.
5. De-activate the energy isolating device(s) so that compactor is isolated from the energy source(s).
 - a. Shut down all power sources.
 - b. Move the main disconnect lever to the OFF position.
6. Lockout the energy isolating device(s) with assigned individual lock(s).
 - a. Padlock the disconnect lever with a keyed padlock and take the key with you.
 - b. Along with the padlock, place an appropriate, highly visible, warning tag on the disconnect lever. The tag should provide a warning such as:
"Danger: Do not operate equipment. Person working on equipment." or
"Warning: Do not energize without the permission of _____."
 - c. Place operating components in such a position so as not to be subject to possible free fall and/or install additional blocking devices to prevent this potential for any raised or elevated component.
7. After locking and tagging the compactor, ensure that the compactor is disconnected from the energy source by first checking that no personnel are exposed, then verify the isolation of the equipment by operating the push button or other normal operating control(s) or by testing to make certain the equipment will not operate. Try to start and operate the compactor (as outlined in the Operating Instructions) to make sure the Lock-Out and Tag-Out is effective. If the Lock-Out and Tag-Out is effective, remove the key from the key switch and take it with you.
8. Before entering compactor perform hazard assessment for confined space requirements (hazardous fumes, dust, toxic material, or other hazards) per the OSHA confined space standard.
9. The compactor is now locked out.

LOCK-OUT & TAG-OUT INSTRUCTIONS (CONTINUED)

RESTORING SERVICE

When the servicing or maintenance is completed and the compactor is ready to return to normal operating condition, the following steps shall be taken:

1. Check the compactor and the immediate area around the compactor to ensure that nonessential items have been removed and that the compactor components, guards and covers are operationally intact.
2. Check the work area to ensure that all employees have been safely positioned or removed from any hazardous area.
3. Verify that the controls are in neutral.
4. Remove the lockout devices and re-energize the compactor.

NOTICE

The removal of some forms of blocking may require re-energizing of the compactor before safe removal.

5. Notify affected employees that the servicing or maintenance is completed and the compactor is ready for use.
6. Reassess area to determine all hazards are protected.

PERIODIC MAINTENANCE

WARNING

Never enter any part of the self-contained compactor/container until the unit has been locked-out and tagged-out.

Monthly

- Check cords for chafing, rubbing, or other deterioration and damage.
- Check for any unsafe conditions in the compactor area.
- Check oil level in gear box. Level should be 3/4 of sight gauge.
- Lubricate auger bearings.

Three Months

- Check functional operation of controls and options (stop button, timers, lights, etc.).
- Lubricate the container door and tailgate hinges.
- Lubricate chain and sprockets

Annually

- Lubricate electric motor bearings annually per the manufacturer's instructions.

RamJet® Self-Contained Auger Compactor Container

Service

40

MAINTENANCE SCHEDULE FORM

Make copies of below table to record your maintenance on equipment.

MAINTENANCE SCHEDULE				
Monthly				
	CHECK UNSAFE CONDITIONS	CHECK OIL LEVEL IN GEAR BOX	CLEAN/WASH OUT DEBRIS	CHECK GREASE LEVEL IN BEARINGS
Jan				
Feb				
Mar				
Apr				
May				
June				
July				
Aug				
Sept				
Oct				
Nov				
Dec				

MAINTENANCE SCHEDULE			
	Every 3 Months		Annually
	CHECK FUNCTIONAL OPERATION OF CONTROLS	LUBRICATE CONTAINER DOOR/ TAILGATE HINGES	LUBRICATE MOTOR BEARINGS
Jan			
Feb			
Mar			
Apr			
May			
June			
July			
Aug			
Sept			
Oct			
Nov			
Dec			

PRINCIPLES OF OPERATION

Standard System Operating Characteristics

Upon startup, a contact is made that energizes the motor starter, starting the electric motor and at the same time energizing T1 timer in the program. When T1 is energized, the auger will turn counterclockwise (forward) for the predetermined amount of time in T1. When T1 timer times out, auger will stop. If auger sees high enough amperage it will reverse causing T2 timer to energize and shift the auger clockwise (reverse). Auger will run in reverse for a predetermined time in T2. When T2 timer times out, the motor starter contact will shift back forward and timer T1 will go for its' predetermined time then shut down. If amperage is high every time auger is going forward then after the predetermined count the auger will shut down.

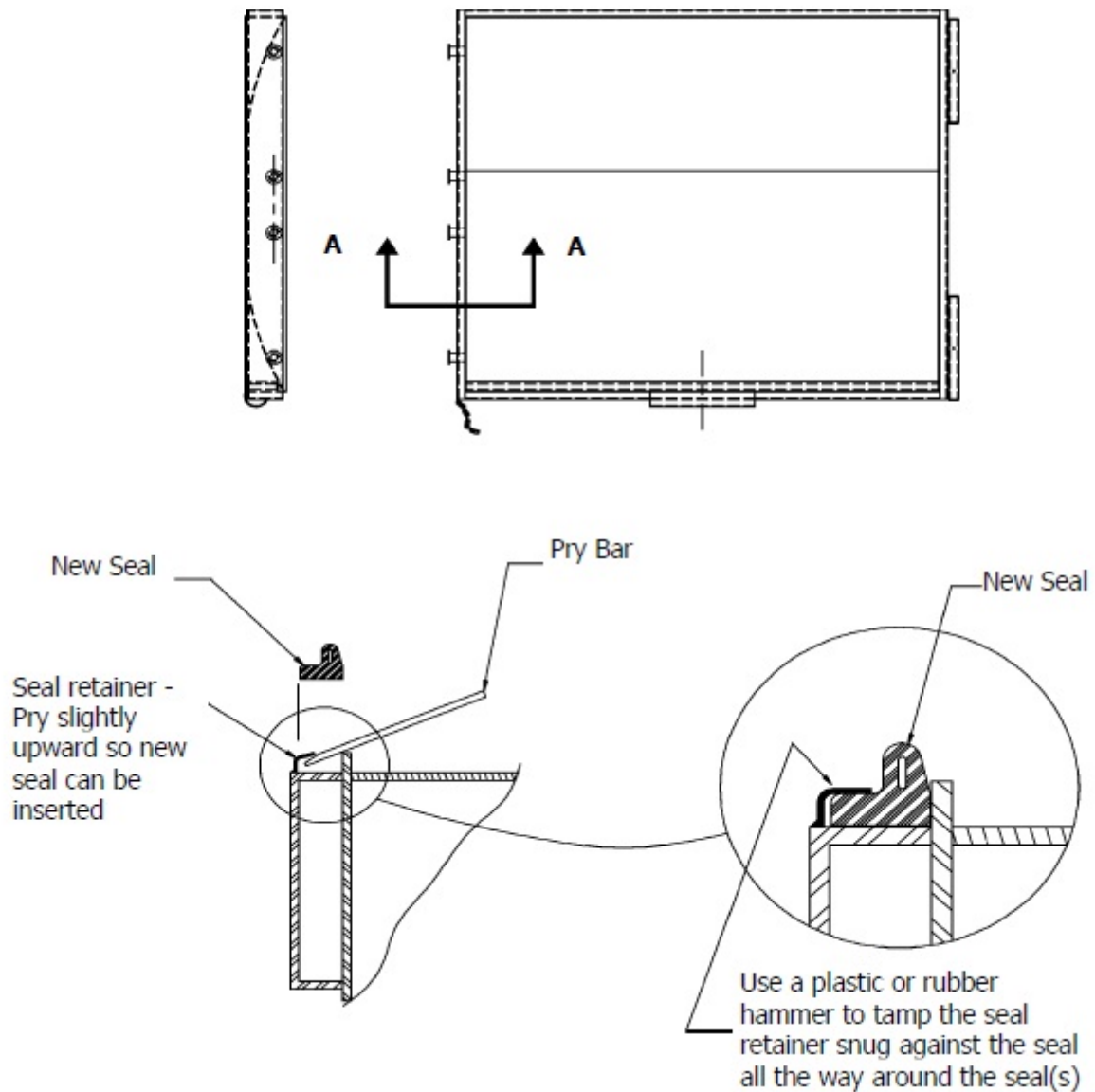
FUSES AND CIRCUIT BREAKERS					
Three Phase					
MOTOR SIZE	VAC	FULL LOAD AMP	DUAL ELEMENT FUSE MAX.SIZE	CIRCUIT BREAKER MAX.SIZE	SERVICE DISCONNECT AMP.
15 HP	208	47.3	60	90	60
	230	45.0	60	90	60
	460	22.5	30	40	30
	575	18.3	30	40	30
10 HP	208	27.5	50	80	60
	230	25.6	50	70	60
	460	12.8	25	35	30
	575	11.4	20	30	30

WIRE SIZES				
Three Phase	THW Copper 75°C (165°F)			
MOTOR SIZE	VOLTAGE	LENGTH		
		TO 100'	TO 200'	TO 300'
15 HP	208	4	2	1
	230	6	3	2
	460	10	8	6
	575	12	10	8
10 HP	208	6	4	2
	230	8	4	3
	460	12	10	8
	575	12	12	10

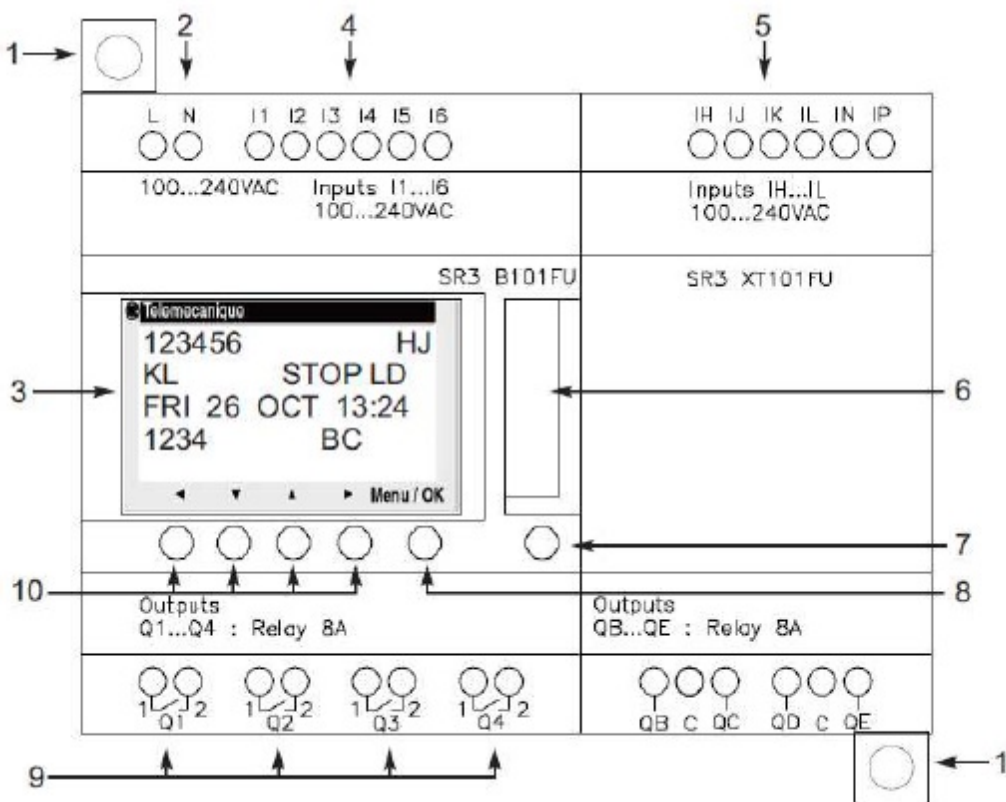
TAILGATE SEAL REPLACEMENT

When the tailgate seal becomes damaged or worn, replace the seal.

- When removing the old seals (top & bottom) mark the position of the seal joints.
- Pry the seal retainer up slightly to allow removal of the old seals.
- When installing the new seals, join the seals at the same position.



PLC MAINTENANCE - LAYOUT & DESCRIPTION



REFERENCE	DESCRIPTION
1	Retractable mounting feet
2	Screw terminal block for the power supply
3	LCD, 4 lines, 18 characters
4	Screw terminal block for inputs
5	Screw terminal block for discrete input
6	Connector for backup memory or PC connection cable
7	Shift key
8	Selection and validation key (Menu / Ok)
9	Relay output screw terminal block
10	Arrow keys

PLC MAINTENANCE - LAYOUT & DESCRIPTION (CONTINUED)

NOTICE

Repeating this process switches the current rotation of the auger stop forward or auger stop reverse.

PLC Maintenance - Forward/Reverse Timer Adjustment

STEPS	DIRECTIONS
1	Press the Menu Button
2	Press the Up or Down Arrow Button until you get to PARAMETER
3	Press the Menu Button
4	Press the Up or Down Arrow Button until TT1 is flashing (Forward Timer)
5	Press the < Arrow Button
6	Press the Up or Down Arrow Button until the desired time is flashing
7	Press Menu
8	Press Menu with YES blinking
9	Repeat Steps 4-8 with TT2 (Reverse Timer)
10	Press the Menu Button to return to normal operation.

RamJet® Self-Contained Auger Compactor Container

Service

46

TROUBLESHOOTING CHART

PROBLEM	CAUSE	SOLUTION
UNIT WILL NOT START	1. No electrical power to unit	1. Turn on main disconnect. 1b. Replace fuses/reset breakers.
	2. No electrical power to control circuit	2a. Check primary and secondary sides of transformer. 2b. Check for correct voltage. Check control fuses. 2c. Check stop button. 2d. Check start button to be sure contact closes when depressed.
	3. No electrical power to motor	3. Check overload.
UNIT WILL NOT CONTINUE RUNNING WHEN START BUTTON IS RELEASED	1. Motor starter is inoperative.	1. Check motor starter coil & wiring.
	2. Motor starter auxiliary contacts are inoperative	2. Check motor starter contacts and wiring.
	3. Reverse Button is inoperative	3. Check wiring.
	4. Secondary contact on start button is inoperative	4a. Check contact to be sure it is operating properly. 4b. Check wiring.
MOTOR RUNS BUT AUGER DOES NOT MOVE NORMALLY	1. Insufficient oil in gearbox	1. Fill with approved oil.
	2. Low voltage	2. Check voltage.
	3. Shaft broken, or shaft key sheared	3. Visually inspect auger shaft and sprocket for damage. Replace if necessary.
UNIT WILL NOT REVERSE	1. Motor starter is inoperative	1. Check coil in motor starter.
	2. Reverse button inoperative	2. Check reverse button contacts.
ERRATIC OPERATION	1. Low voltage	1. Check primary & secondary sides of transformer for correct voltage.
OVERLOADS TRIP FREQUENTLY		1a. Check for correct voltage (incoming power.) 1b. Check fuses or breakers at disconnect. 1c. Check adjustment on overload. 1d. Check wiring from starter to motor-make sure all connections are tight. 1e. Check motor leads to be sure all connections are tight surges or voltage.
	NOTE: Excessive overload tripping and/or motor or coil failures may occur if voltage surges or voltage drops are frequent in your area. This circumstance can be remedied by the installation of phase protectors which drop power to the motor if surges are present.	

SECTION 6

REPLACEMENT PARTS

CONTACT INFORMATION



Technical Service and Warranty:

877-258-1105

Parts:

800-528-5308

For parts visit our e-commerce market place at www.mecomerchant.com.

If you do not have a user name and password, contact our Parts Department and they will assist with your registration.

Normal Business Hours:

Monday-Friday 8:00am - 5:00pm

(Central Standard Time)

RamJet® Self-Contained Auger Compactor Container

Replacement Parts

49

MISCELLANEOUS HARDWARE PARTS LIST

PART #	DESCRIPTION
447966	RATCHET ASSEMBLY
02-1027	BALL VALVE FOR 250sISL
06-2880	GROUND ROLLER
06-3372	GROUND ROLLER RUBBER
06-3691	GUIDE ROLLER
12-2112	GUIDE ROLLER MOUNTING BRACKET
12-2114	BULL NOSE FOR SC
05-0136	PADDLE LATCH W/KEY LOCK
05-0294	SLAM LATCH
435622	DOUBLE HINGE FOR SELF-CONTAINED TAILGATE
03-0174	PUSHBUTTON INTERLOCK
03-0498	MAGNETIC INTERLOCK
03-0012	LIMIT SWITCH
03-0010	LIMIT SWITCH ARM
05-4991	LATCH SLAM LOCKABLE
05-5027	STRIKER FOR SLAM LATCH & MANUAL LATCH 45-4619
09-3658	SHIM PLATE FOR STRIKER 05-5027 ONLY
454619	LATCH BOLT ON FOR AUTO START

RamJet® Self-Contained Auger Compactor Container

Replacement Parts

50

ELECTRICAL PARTS LIST

PART #	DESCRIPTION
03-0288	CONTROL TRANSFORMER-MICRON 150VA, 208/230/460-120 VAC
03-0959	DISTRIBUTION BLOCK
03-5248	ZELIO SMART RELAY - PLC
03-4852	ZELIO EXPANSION MODULE - 6 INPUTS, 4 OUTPUTS OR
03-5483	ZELIO EXPANSION MODULE - 8 INPUTS, 6 OUTPUTS
03-4748	IEC MOTOR STARTER
03-4799	OVERLOAD FOR 460V
03-4437	IEC FINGER-SAFE TERMINAL BLOCKS
03-4732	POWER SUPPLY
03-5440	CURRENT TRANSDUCER
03-7045	MOTOR 10HP 208/230/460 VOLT TEFC
03-7046	MOTOR 10 HP 575 VOLT TEFC
03-6907	MOTOR 15HP 208/230/460 VOLT TEFC
03-6902	MOTOR 15HP 575 VOLT TEFC

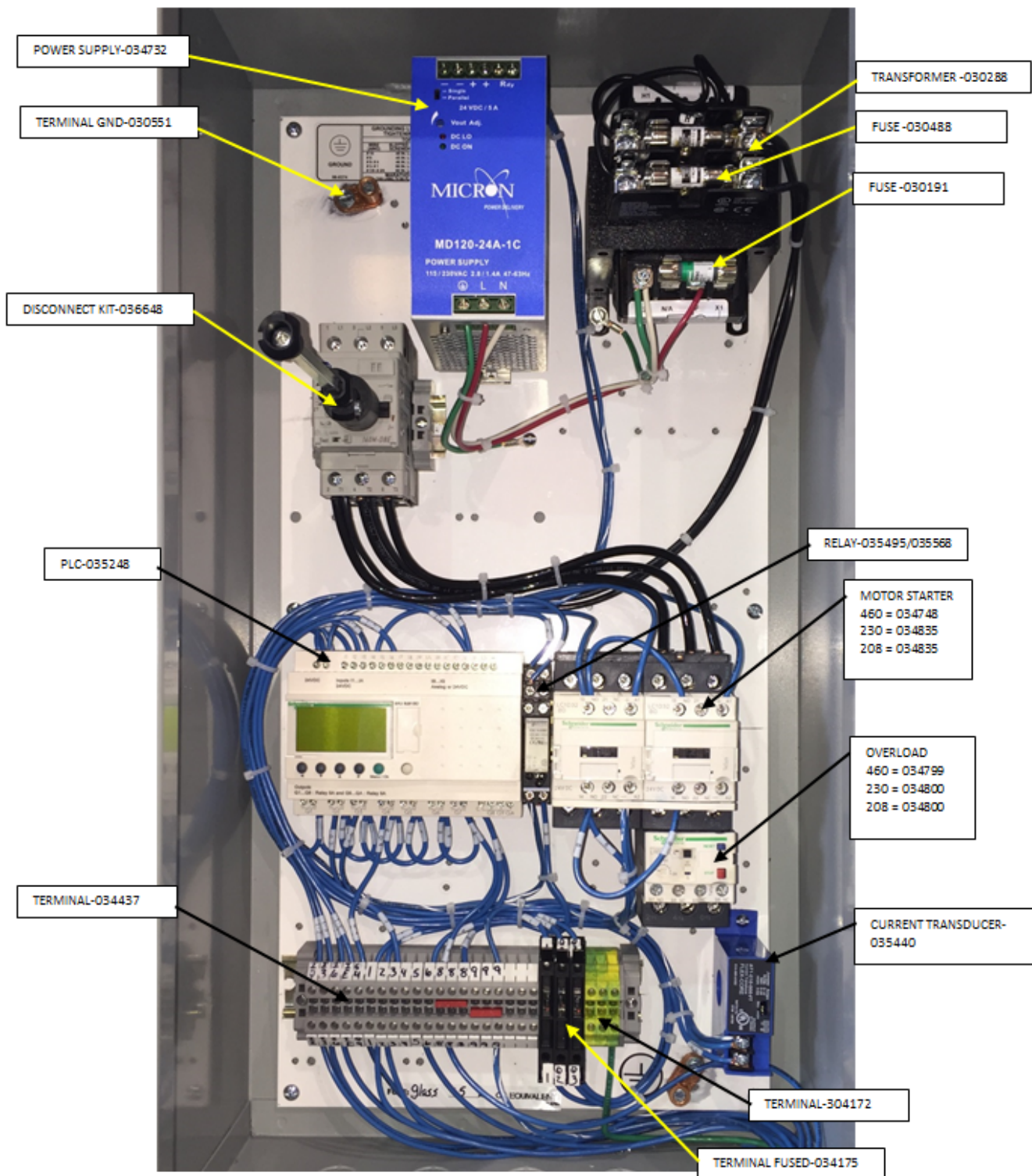
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Replacement Parts

51

TYPICAL PANEL BOX CONFIGURATION

The diagram below represents a typical panel box configuration for the self-contained compactors. The panel box on your compactor may differ depending on the model and/or optional equipment/controls. Refer to the chart below to identify components. To order replacement parts, please call our Parts Department at 800-528-5308.



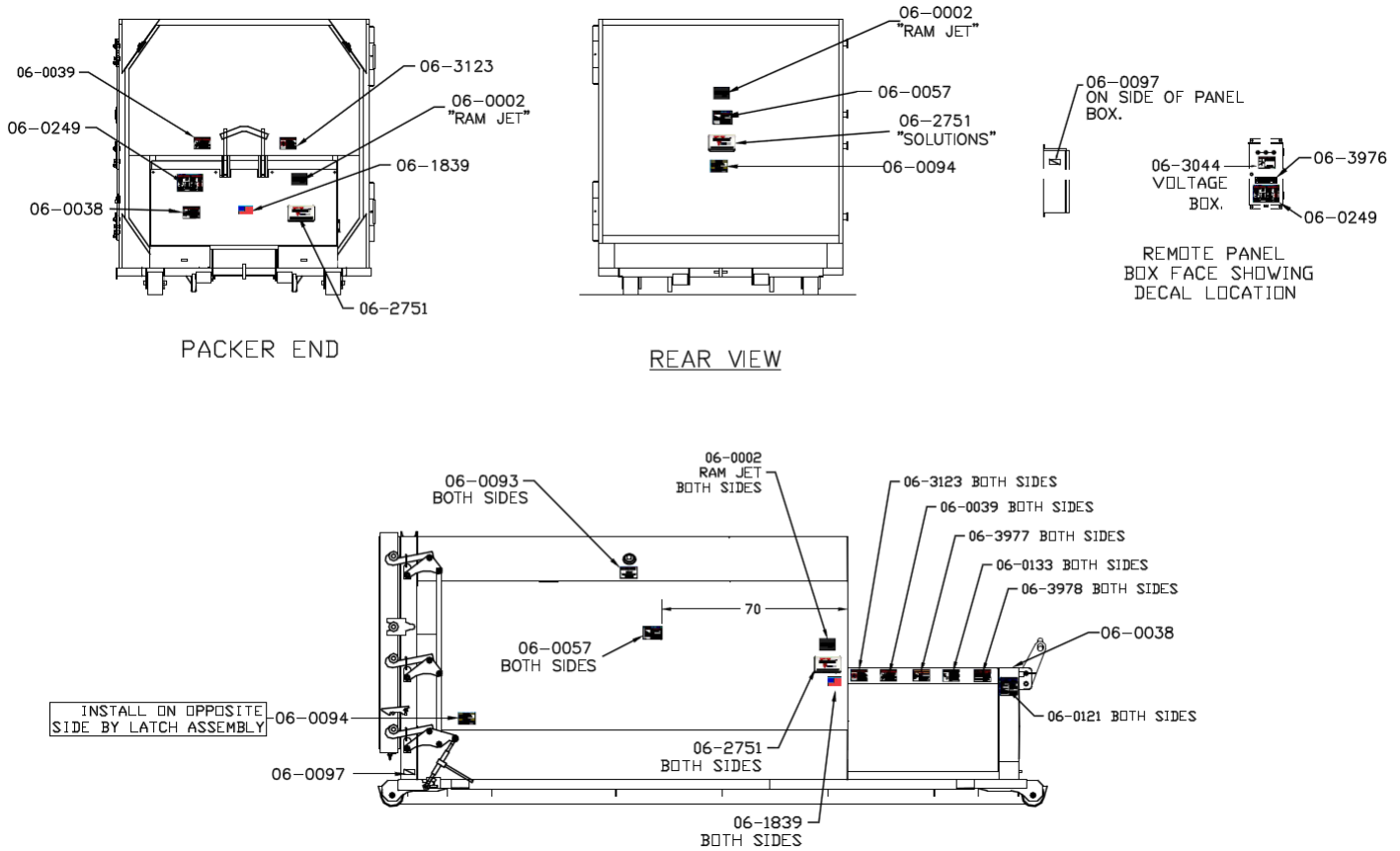
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Replacement Parts

52

DECAL PLACEMENT

Match part numbers to chart on next page. See next 3 pages for Decal Images.



RamJet® Self-Contained Auger Compactor Container

Replacement Parts

53

DECAL PARTS LIST

Warning Decal Requirements

When your compactor leaves the factory, several WARNING DECALS are installed for your protection. These labels are subject to wear and abuse due to the nature of operation. The FOLLOWING DECALS MUST BE MAINTAINED. Additional decals may be purchased through your distributor or from Marathon Equipment Company by calling the parts department at 800-528-5308.

When ordering replacement decals, use the chart below with the **Decal Placement Drawing** or look for the part number in the lower right hand corner of the decal. For optional equipment or HT Models, see **Decals for Optional Loading Configurations**.

	PART #	DESCRIPTION	QUANTITY
1	05-0325	RIVETS, 1/8 X 1/2 ALUM (to go with 06-0364)	4
2	06-0038	WARNING DO NOT REMOVE ACCESS COVER	2
3	06-0039	DANGER DO NOT ENTER	3****
5	06-0093	FIRE HOSE PORT	2
6	06-0094	NOTICE WIPE OFF SEAL AFTER....	2
7	06-0121	NOTICE FEDERAL REGULATION...NO <18 y.o.	2
9	06-0249	DANGER HAZARDOUS VOLTAGE	2
10	06-0097	COMPACTOR SERIAL NUMBER	2
11	06-1839	AMERICAN FLAG	3
12	06-0057	WARNING STAND CLEAR OF COMPACTOR	3
13	06-0002	RAM-JET	4
14	06-3123	CONFINED SPACE	3****
16	06-0040**	CAUTION: KEEP OUT	****
17	06-0052**	CAUTION: GATE MUST BE CLOSED....	****
19	06-0105***	DANGER: STAND CLEAR OF TAILGATE...	3
20	06-2751	MARATHON RECYCLING SOLUTIONS	4
21	06-3977	WARNING DO NOT OPERATE OR SERVICE	2
22	06-3978	DANGER, SAFETY DEVICES	2
23	06-0133	WARNING, KEEP OFF, DO NOT CLIMB	2
25	06-3044	DANGER, HAZARDOUS VOLTAGE	1
26	06-3976	WARNING, SHOCK AND ARC FLASH HAZARD	1
NOTE: SEE BELOW FOR * REFERENCE DESCRIPTIONS			
**ONLY ON OPTIONAL EQUIPMENT (ACCESS GATES, HOPPERS, &/OR DOGHOUSE.			
****QUANTITY VARIES DEPENDING ON OPTIONAL EQUIPMENT, NOTE QUANTITY ON MACHINE.			

RamJet® Self-Contained Auger Compactor Container Replacement Parts

54

DECAL IMAGES

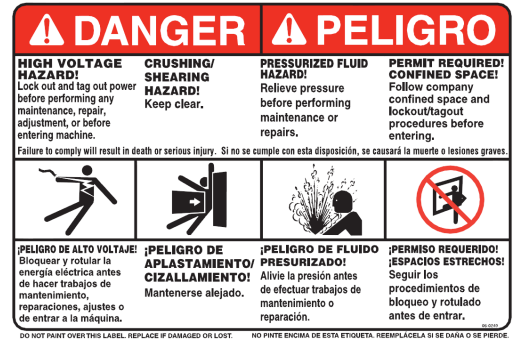
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06-0039



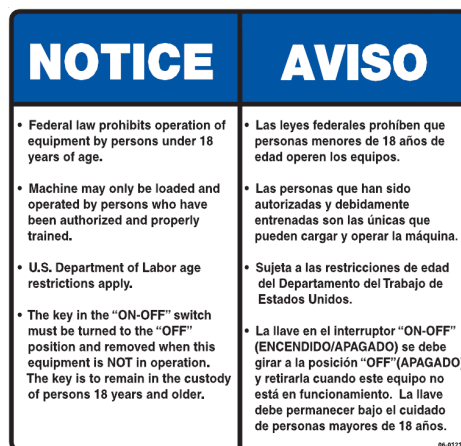
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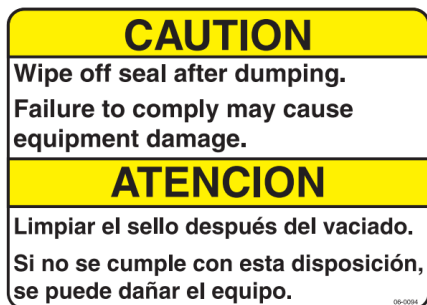
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06-0002



06-0094



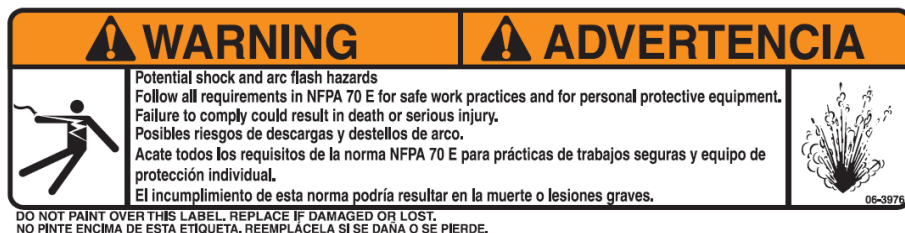
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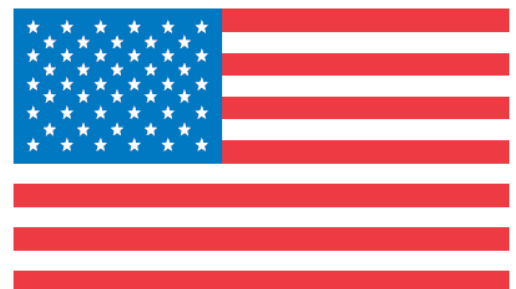
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06-3976



06-1839



RamJet® Self-Contained Auger Compactor Container

Replacement Parts

55

DECAL IMAGES

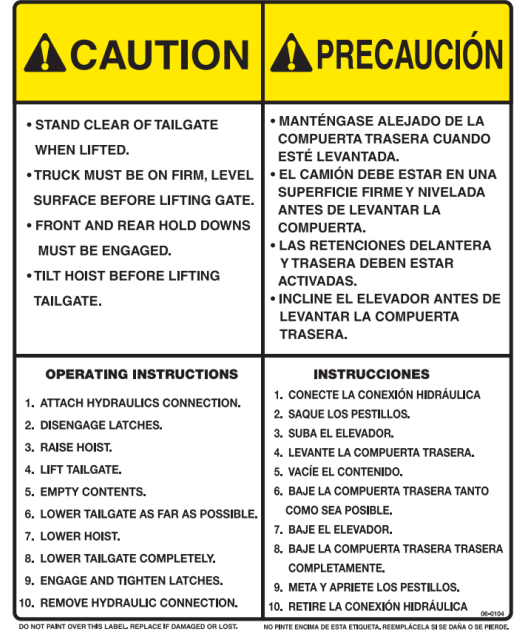
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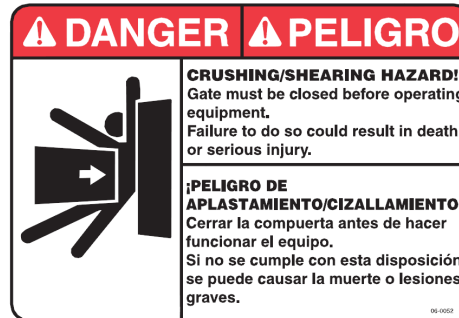
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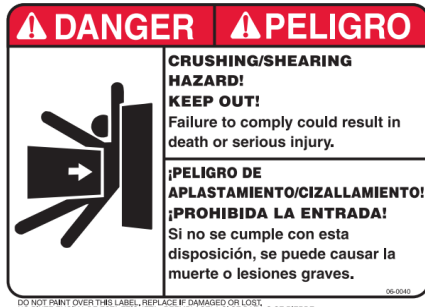
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06-0052



06-0040



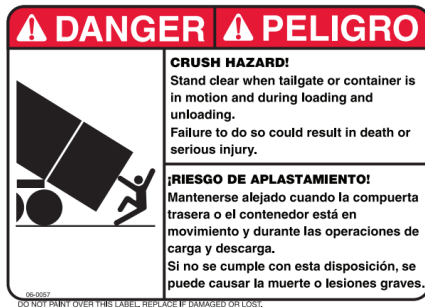
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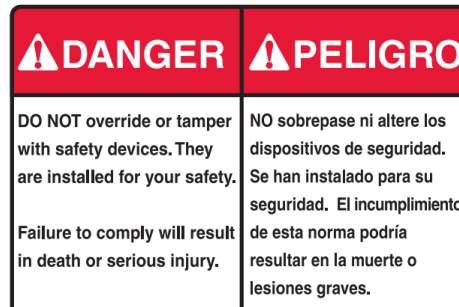
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06-0057

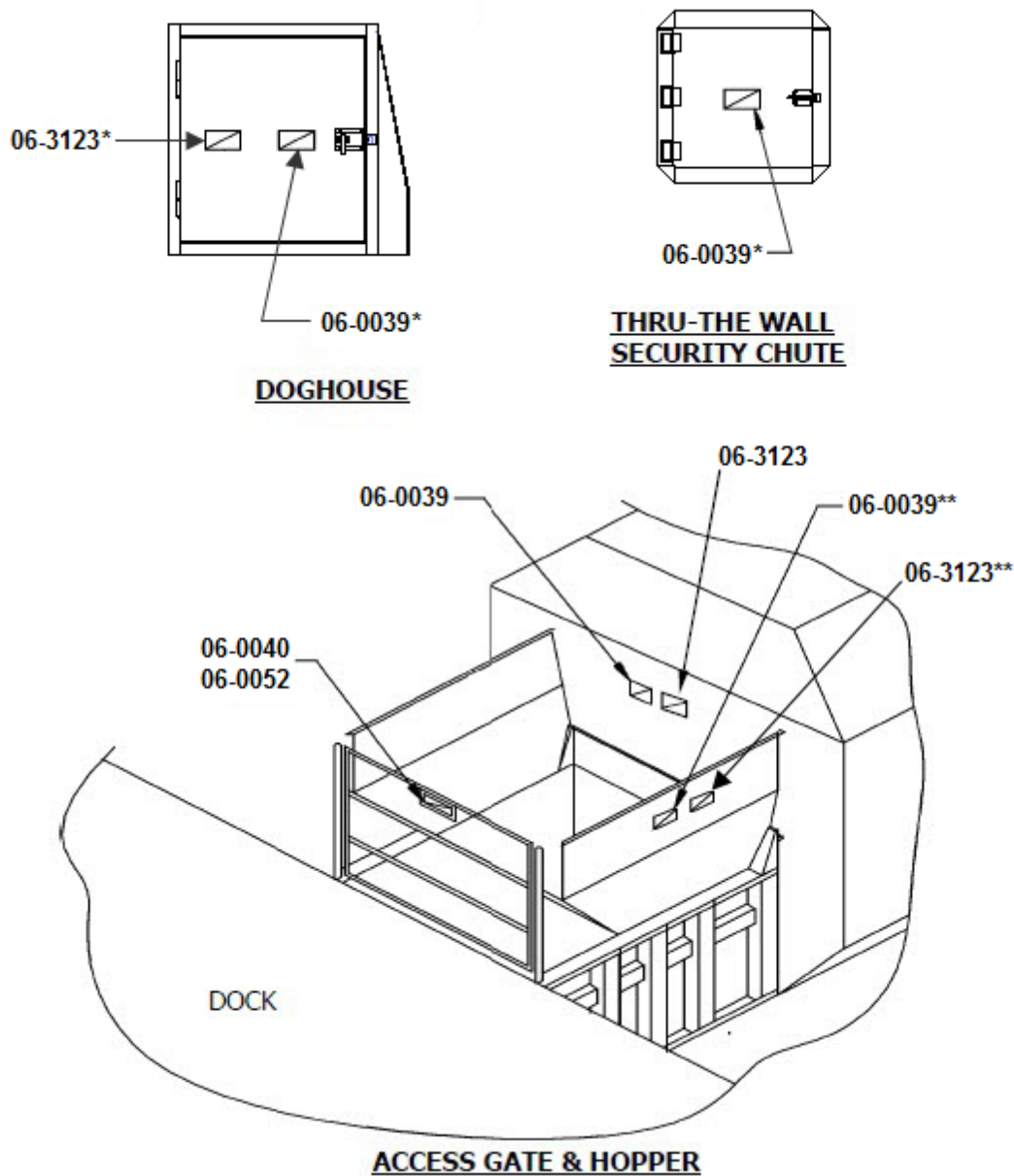


06-3978



DECALS FOR OPTIONAL LOADING CONFIGURATIONS

Match part numbers to **Decals** ⁵⁴ when ordering replacement decals.



* The doghouse decals are to also be placed on the inside wall of the doghouse or opposing side from the doghouse door, so that it is visible when the door is open. This applies to both door decals.

** Located on each outside wall.

RamJet® Self-Contained Auger Compactor Container

INDEX

57

C

circuit breakers 41
concrete pad requirements 15
contact information 14, 20, 36, 48
control panel - models with photoelectric cycle control 23
cylinder removal instructions 41

D

decals 9
decals 54
decals 53
decals 52
decals for optional loading configuration 56

E

electrical charts 41
electrical installation 17
electrical parts list 49
electrical schematic 45
electrical symbols 11

F

fuses 41

G

grease lubrication recommendation 8
guards and access covers 8

H

hauler instructions - general 28

I

introduction 4

L

liquid removal for optional SL units 33
lock-out/tag-out instructions 6, 37

M

maintenance schedule form 40
miscellaneous parts list 49

O

operating instructions 25
optional controls 26

P

periodic maintenance 39
plc maintenance 43
preface 5
pre-operation instructions 21
principles of operation 41

R

recommended oils 8

S

safety symbols and definitions 5
securing tailgate into chain keeper 29
service/parts assistance 8
standard control panel 22
steel installation procedures 16
system operating characteristics 41

T

tailgate seal replacement 42
tailgate/latch operation 31
troubleshooting chart 46
typical panel box configuration 51

W

warning decals on the unit 9
wire sizes 41



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800-633-8974

Parts Central:
800-528-5308

www.mecomerchant.com

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877-258-1105

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P.O. Box 1798
Vernon, AL 35592-1798