

**DUAL RECYCLING COMPACTOR** 

OPERATION, SERVICE, AND INSTALLATION
ISSUED MARCH 2017

CUSTOMER NAME: _	
SERIAL NUMBER:	
OLIVIAL NOMBLIN.	

**COMPACTION & RECYCLING SOLUTIONS** 

0031-RJDRC-0317



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

Marathon Customer Care: 1.800.633.8974



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.

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# RamJet® DRC II Dual Recycling Compactor

OPERATION, SERVICE, AND INSTALLATION
ISSUED MARCH 2017
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# SECTION 1 GENERAL INFORMATION

#### INTRODUCTION

Thank you for purchasing a Marathon® RamJet® DRC II Compactor!

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.

If you purchased a GreenBuilt® DRC II, refer to the GreenBuilt Power Unit Manual that was sent along with this manual for information regarding the solar power unit.

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:

ANSI STANDARD NO. Z245.2, "STATIONARY COMPACTORS SAFETY REQUIREMENTS"

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:

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 and schematics of the electrical and hydraulic systems are 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 maintenance 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

### **A** 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 ram is pressing against a load, move the ram rearward 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. Stored hydraulic energy must be removed from the compactor hydraulic circuit for complete Lock-Out and Tag-Out. Make sure that this energy has been relieved by manually depressing the solenoid valve pin located in the center of each coil end of the directional control valve.
- 8. 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:

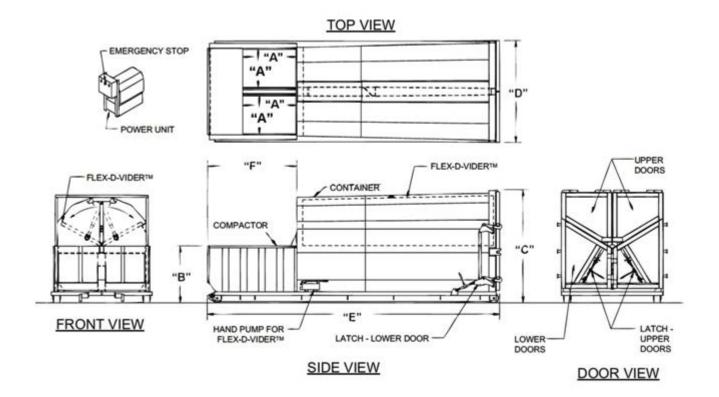
- 1. Check the compactor and the immediate area around the compactor to ensure that nonessential items have been removed and that the compactor components, guards and covers are operationally intact.
- 2. Check the work area to ensure that all employees have been safely positioned or removed from any 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.

#### **SPECIFICATIONS**



SPECIFICATIONS	DRC II
DIMENSIONS	
"A" - Clear Top Opening (LxW, each side)	48" x 34 1/2"
"B" - Compactor (only) Height	52 7/16"
"C" - Container Height	104"
"D" (max) - Overall Width	96"
"E" (max) - Overall Length	276"
"F" - Compactor (only) Length	82 3/8"
Cylinder	4 1/2" Bore, 2 1/2" Rod
Cylinder Stroke	55 1/4"
Force	31,800 lbs
Ram Face PSI	18.7
System Pressure	2,000 psi (max)
Pump Flow	10 gpm
Control Panel	UL listed
Motor	10 hp
Programmable Controller	Standard
Control Voltage	120 VAC
Compactor Weight (Approximate)	16,000 lbs.

#### 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.

#### **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.

#### **GREASE LUBRICANT RECOMMENDATION**

Use a grease gun. Before engaging grease gun, clean the fitting. Always pump enough grease to purge the joint of contaminated grease and wipe off the excess grease. Lubricate a unit as recommended on the lubrication decal on the unit and in the Operation, Service, and Installation Manual. Use NLGI 000 grease.

#### **RECOMMENDED OILS**

The following oils by brand name are approved for use in the hydraulic system on this equipment and considered to be all temperature hydraulic fluids.

- Union-UNAX-46, UNAX-AW46
- Gulf-Harmony 47, Harmony 48-AW
- Exxon-Teresstic 46, NUTO 46
- Texaco-Rando 46
- Chevron-AW 46
- Shell-Turbo 46, Tellus 46
- Citgo-Pacemaker 46, Tellus-AW46
- Conoco-Super Hydraulic Oil 46

Automatic Transmission Fluid (for 15 HP and smaller units only)

Quaker State-Dextron II (ATF)

Cold Weather Fluid

Amoco-Rycon MV

#### WARNING DECALS ON THE UNIT

### **M** 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.

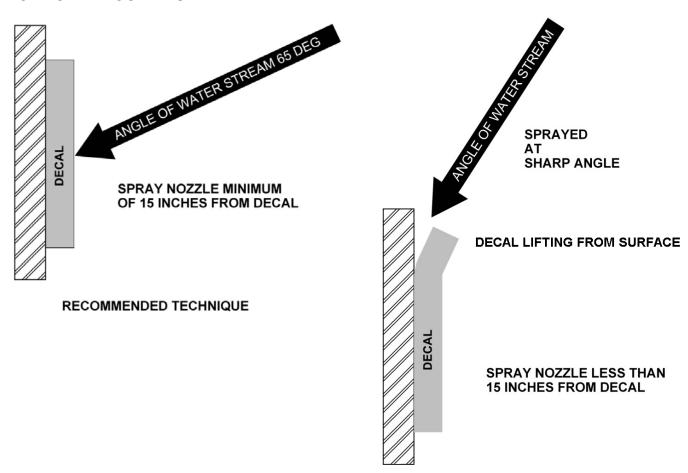
- Spray nozzle opening: 40° wide pattern
- Spray angle: 65° from unit's body
- Distance of nozzle to decal: 15" minimum
- Water pressure: less than or equal to 800 psi
- Length of time: not more than 30 sec.
- Do not use sharp angles to clean the decals this can lift the decals from the unit.
- NEVER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

#### C. Remove Difficult Debris

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

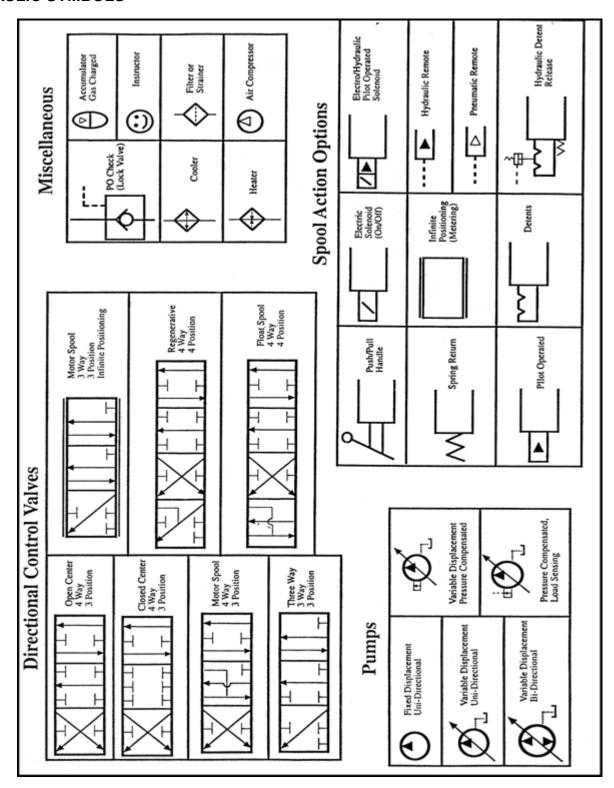
- Spot clean the decal with Isopropyl Alcohol and a micro-fiber cloth (rag)
- If these methods do not work on a problem area, call a Marathon Equipment Company Dealer or Marathon Equipment Company Customer Support.

#### **DECAL CARE - CONTINUED**

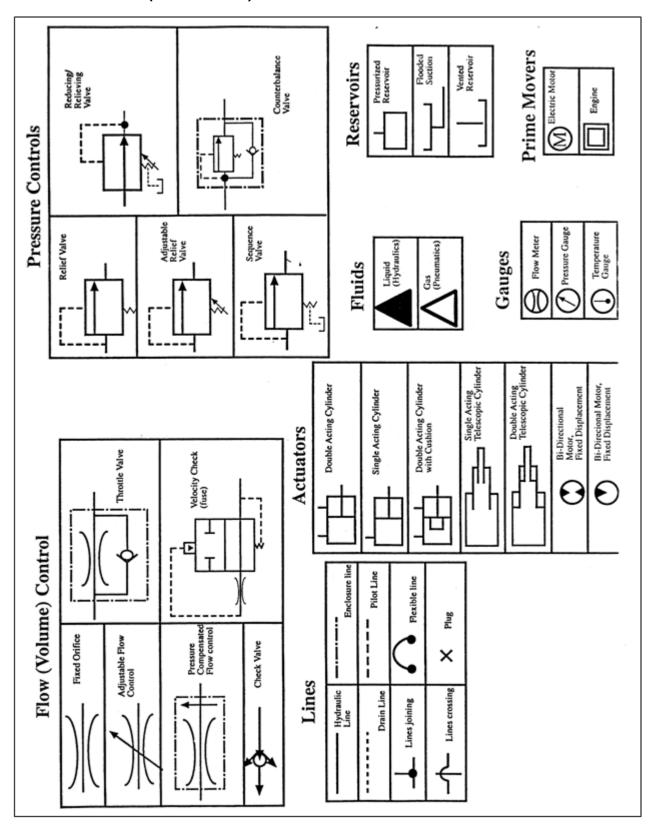


**INCORRECT TECHNIQUE** 

#### **HYDRAULIC SYMBOLS**



#### **HYDRAULIC SYMBOLS (CONTINUED)**



#### **ELECTRICAL SYMBOLS**

### SYMBOL DEFINITIONS

III BATTERY

√ FUSE

SOLENOID

(CR1) 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

T PRESSURE SWITCH

LIMIT SWITCH NORMALLY OPEN

LIMIT SWITCH NORMALLY CLOSED

 $\dashv$  CAPACITOR

# SECTION 2 INSTALLATION

#### CONTACT INFORMATION



Technical Service and Warranty:

877-258-1105

Parts:

800-528-5308

For parts visit our eCommerce Marketplace 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.

### **A** CAUTION

Review this manual before making the installation. Study the job site 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.

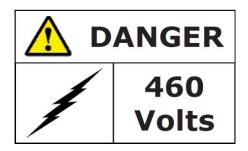
#### **Decals**

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

#### **NOTICE**

Installation is not complete until all decals are in place.

#### ELECTRICAL AND HYDRAULIC INSTALLATION



The motor control panel contains high voltage components. Only authorized service personnel should be allowed inside. See **Lock-Out & Tag-Out Instructions** 6 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** chart).



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 Power Pack Installation**

1. The remote power pack 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.

### A 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.

2. For a through-the-wall power pack installation, see the diagram **Through-The-Wall Power Unit Installation** this section. Special care should be taken to protect the hoses from abrasive objects.

Connect the hydraulic hoses to the power pack, exercising care to follow the port decals (A or B) on the packer and the power pack. In the event the decals have been obliterated, the hose leading from the rear of the cylinder should be installed in the side port of the block to which solenoid valve is bolted (A Port). The hose leading from rod end of the cylinder should be connected to the end of the block to which the solenoid valve is bolted (B Port). Refer to **Power Unit** diagrams in the Service section of this manual.

#### **ELECTRICAL AND HYDRAULIC 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.)

### **A** 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** chart and **Wire Size** 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.

1. With the ram fully retracted, check to be sure the oil reservoir is full to the 3/4 level on the sight gauge (Refer to the maintenance chart for hydraulic oil recommendations). The hydraulic system pressure has been factory set and the entire unit has been operated prior to shipment.

### **A** CAUTION

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

2. Depress the start button and check the pump shaft for proper rotation.

### **A** CAUTION

If the pump rotates backward, stop immediately. The pump will be damaged if it is operated in reverse even for short periods. Reversing any two incoming power lines will change the motor/pump rotation.

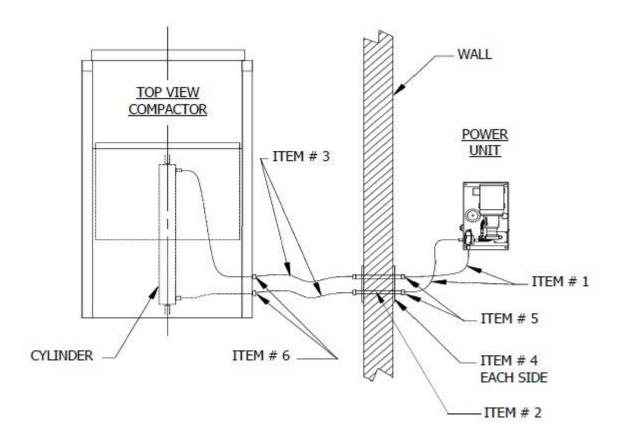
3. Make sure that the operators are trained in the proper use of this equipment

#### THROUGH-THE-WALL POWER UNIT INSTALLATION

If the remote power unit is to be mounted through-the-wall, the following list of material and diagram is the suggested method.

LIST OF MATERIAL		
ITEM #	QUANTITY	DESCRIPTION
1	2	Hydraulic Hose, Hi-Pressure (sized to power unit*), 36" long
2	2	Pipe, Schedule 80 (sized to power unit*), 36" long
3	2	Hydraulic Hose, Hi-Pressure (sized to power unit*), 48" long
4	2	Steel plate with holes for Item # 2, 3/16" x 8" x 12"
5	4	Coupling, Female (sized to fit hose & pipe*)
6	3	Quick disconnect

<sup>\* 1/2&</sup>quot; for hose lengths of 20'-0" or less. Consult factory for longer lengths.



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# **SECTION 3 OPERATION**

#### CONTACT INFORMATION



Technical Service and Warranty:

877-258-1105

Parts:

800-528-5308

For parts visit our eCommerce Marketplace 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.



ONLY TRAINED AND AUTHORIZED PERSONNEL SHOULD BE ALLOWED INSIDE PANEL BOX. The panel box contains high voltage components. See **Lock-Out/Tag-Out Instructions** 6.

### **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!

### **M** 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** 6.

### **M** 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** 6.

### **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.

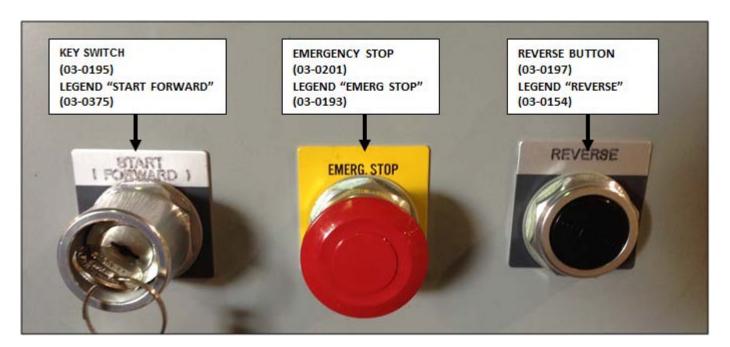
### **WARNING**

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**

- 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 one time (complete
  extension and retraction of the ram) then stop. After use, turn the key to the counterclockwise position and remove
  the key.
- 2. **EMERGENCY STOP PUSHBUTTON** When depressed, this pushbutton will stop all powered operation of the compactor.
- 3. **REVERSE PUSHBUTTON** This pushbutton will reverse the compaction ram when depressed. The motor must be running for the REVERSE button to operate. See the **Manual Override Instructions** for details of the operation.

#### 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), then 200 PSI is left before the pressure switch is activated to shut the unit off and container is full (unit will run when light flashes). 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 required with units equipped with doors, security doors, or access gates. It prevents the unit from operating while a door or gate is open.

#### OPERATING INSTRUCTIONS

### **M** WARNING

At initial machine start-up and each time after the DRC II is emptied, make sure that the shut-off valve on the hand pump is open. To open the valve, turn the knob counterclockwise. See the **Flex-D-Vider Hand Pump Operation** (34) in this manual for location and operation of the pump and shut-off valve. Operating the compactor with the hand pump shut-off valve closed may cause serious damage to the Flex-D-Vider.

1. The DRC II has two separate charge box compartments for disposing of material. To begin a compaction cycle, place the material to be discarded into the appropriate charge box compartment.

#### **NOTICE**

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

- 2. Insert the key into the key switch. Turn it clockwise and depress for 1 to 2 seconds and release. The unit will make one complete cycle, 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!

#### **Manual Override Instructions**

If the ram is stopped in any position:

- To move the ram forward, turn the key switch (START) clockwise and depress.
- To move the ram rearward, hold the REVERSE button down, turn and depress the key switch, release the key switch (START), then release the REVERSE button.

While the ram is moving:

- To reverse the ram while it is moving forward, press the REVERSE button.
- To cause the ram to move forward while it is moving rearward, depress the key switch (START).

# SECTION 4 HAULER INFORMATION

#### HAULER INSTRUCTIONS – GENERAL

#### Before hauling to the landfill:

- 1. Disconnect the power unit hoses on the side of the compactor. Make sure the hoses are laid in an area where they will not get damaged.
- 2. Close and secure any hopper doors or gates.
- 3. Make sure that each bottom container door chain is secured in the key hole on the latch side of the container floor.
- 4. Make sure the latches for the bottom doors and top doors are closed completely.
- 5. Ensure 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 landfill:

See the next page for **Door/Latch Operation** instructions.

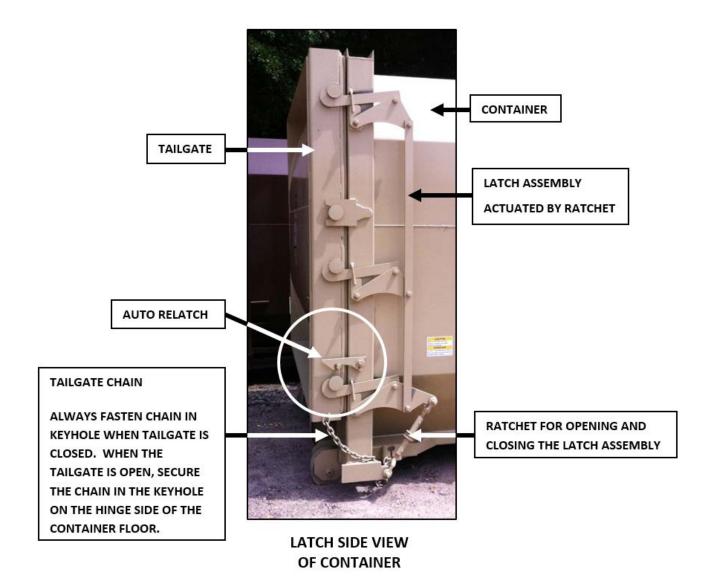
- 1. For units with the optional door seal, to prevent leakage, the door seal and mating surface should be wiped clean and inspected after the unit has been emptied.
- 2. If the seal is damaged, notify maintenance personnel and have the seal replaced as soon as possible.

#### After returning from the landfill:

- 1. After setting the unit down, connect the power unit hoses to the compactor. Ensure the hoses are not laying across sharp corners or any abrasive surface.
- 2. Close and secure any hopper doors or gates.
- 3. Ensure that each container door chain is secured in the keyhole on the side of the container floor.
- 4. Make sure that the latches for the bottom doors and the top doors are closed completely.
- 5. Make sure that the shut-off valve on the Flex-D-Vider<sup>®</sup> hand pump is open (turn the knob counter-clockwise to open).

# RamJet® DRC II Hauler Information

#### **TAILGATE/LATCH OPERATION**



# RamJet® DRC II Hauler Information

#### **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



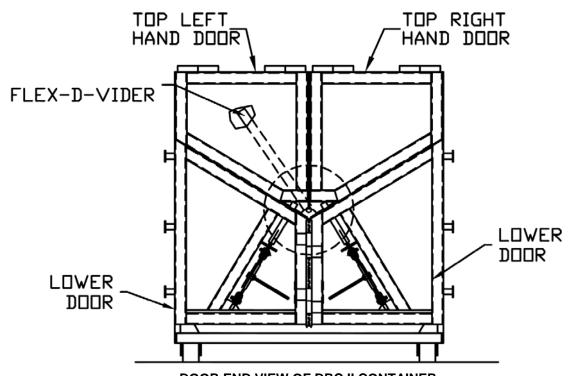
**AUTO RELATCH** 

IN POSITION TO GRAB AND HOLD TAILGATE DURING TAILGATE CLOSING 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.

# RamJet® DRC II Hauler Information

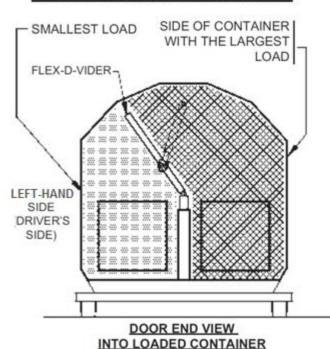
#### CONTAINER DUMPING

When dumping the DRC II, the side with the largest load should be dumped first. To determine which side has the largest load, look at the direction of the position indicator of the Flex-D-Vider<sup>®</sup> as shown in the diagram below. The largest load will be opposite of the indicator direction.



DOOR END VIEW OF DRC II CONTAINER

# EXAMPLE OF A LOAD IN A DRC II CONTAINER AND HOW TO DUMP IT



### To Empty The Container:

**First**, Open the lower right-hand door latch and both upper door latches. Dump this side (passenger's side) of the container. After dumping this side, Close all doors and latches.

**Next**, Raise the Flex-D-Vider off of the remaining material in the left-hand side of the container. See instructions on the next page for **Flex-D-Vider Hand Pump Operation** 34.

**Finally**, Open the left-hand lower door latch and dump this side of container. After dumping, Close the door and the latch.

# **WARNING**

Make sure that the hand pump shut-off valve is open after dumping all container contents. See next page for details.

# RamJet® DRC II Hauler Information

### FLEX-D-VIDER® HAND PUMP OPERATION

Prior to emptying the second part of the container (smallest load), The Flex-D-Vider must be lifted off of the material. To lift the Flex-D-Vider, use the hand pump on the side of the container.

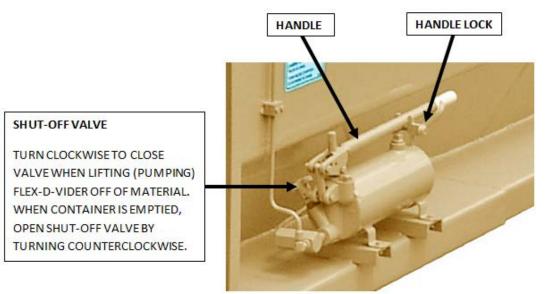
### To Operate The Hand Pump:

- Close the shut-off valve (clockwise turn) on the back side of the pump. Then pump the Flex-D-Vider up off of the
  material.
- After emptying the container, Open the shut-off valve (counter-clockwise turn) on the hand pump.

# **WARNING**

The Flex-D-Vider can only be lifted to a position of approximately 10 degrees from vertical. Do not attempt to pump the Flex-D-Vider higher than this position. Do not attempt to operate the hand pump until the first section of the container has been dumped.





# SECTION 5 SERVICE

#### CONTACT INFORMATION



Technical Service and Warranty:

877-258-1105

Parts:

800-528-5308

For parts visit our eCommerce Marketplace 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

# **A** 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 ram is pressing against a load, move the ram rearward 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. Stored hydraulic energy must be removed from the compactor hydraulic circuit for complete Lock-Out and Tag-Out. Make sure that this energy has been relieved by manually depressing the solenoid valve pin located in the center of each coil end of the directional control valve.
- 8. 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.

#### PERIODIC MAINTENANCE

# **A** WARNING

Never enter any part of the compactor/container until the unit has been locked-out and tagged-out. See **Lock-Out/Tag-Out Instructions** 6.

### Monthly

- Check external hoses for chafing, rubbing, or other deterioration or damage.
- Check for any obvious unsafe conditions in the compactor area.
- Check oil level in hydraulic reservoir. Level should be 3/4 of sight gauge with the cylinder fully retracted.
- Wash out debris from behind compactor ram.
- · Lubricate the ram guide tracks.

### Quarterly

- Check functional operation of controls and options (stop button, timers, lights, etc.).
- Check hydraulic cylinder, internal hoses, and connections for leakage; check hoses for chafing and wear.
- Lubricate container door hinges, ground rollers, and guide rollers. Grease fittings are provided on these items.
- Check the oil level in the hand pump (Flex-D-Vider®) located on the side of the container. Oil level should be to the bottom of the dipstick port. Do not overfill.

### **Annually**

- Lubricate electric motor bearings annually per the manufacturer's instructions.
- Change hydraulic fluid in power unit. See **Recommended Fluids** 9 for the hydraulic system.
- Change fluid in hand pump. See Hand Pump Maintenance (For Flex-D-Vider) 421.

#### **Filter Maintenance**

- At a minimum, the hydraulic filter should be cleaned annually.
- The filter may be removed from the unit by disconnecting the union on the suction side of the pump, removing the
  four bolts retaining the cover plate, and lifting the filter from the reservoir. Care should be exercised in cleaning the
  filter to ensure that the element is not torn.
- Clean the element with a soft brush and standard industrial solvent.
- Replace the filter after cleaning and tighten the union securely. Pump noise and a "crackle" sound is most often
  caused by air entering the pump suction line. Tightening the suction fittings will usually eliminate the problem.

### PRESSURE SETTINGS



Never enter any part of the compactor/container until the unit has been locked-out and tagged-out. See **Compactor Lock-Out/Tag-Out Instructions** 6.

### **Hydraulic System Pressure Check**

When the hydraulic cylinder used in the DRC II is fully extended or retracted, it bypasses internally. This prevents the hydraulic system from reaching relief pressure.

- 1. To set the pressure, first disconnect the hydraulic lines from the compactor.
- 2. Using 1/2" pipe plugs, block the pipe thread connections on a spare set of 1/2" quick disconnects. Connect the plugged quick disconnects to the power unit hydraulic hoses (an alternate method is to remove the hoses and plug the ports in the valve sub plate).
- 3. To set the relief pressure, back out the adjustment screw on the relief valve. Install a pressure gauge in the 1/4" port on the check valve.
- 4. Press the start button and turn the relief valve adjustment screw clockwise until the desired pressure is reached (see chart below).
- 5. Tighten the relief valve adjustment locknut.
- 6. Reconnect the hydraulic hoses.

PRESSURE SETTING							
MODEL	MODEL HP GPM		RELIEF VALVE	RESERVOIR	CYLINDER		
MODEL	ПР	GPIVI	SETTING	CAPACITY	BORE	ROD	STR
DRC II	10	10	2000 PSI	20 Gal.	4 1/2"	2 1/2"	55 1/4"
NOTE: On units with the Advance Warning Light, set the pressure 200 PSI below pressure switch setting.							

#### CYLINDER REMOVAL

# **A** WARNING

Never enter any part of the compactor/container until the unit has been locked-out and tagged-out. See **Lock-Out/Tag-Out Instructions** 6.

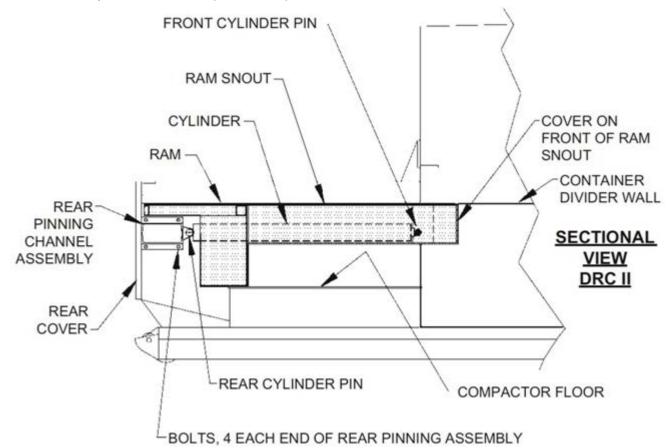
### To remove the cylinder in the DRC II:

- 1. Remove the rear cover on the compactor body.
- 2. Remove the cylinder hoses.
- 3. Remove the rear cylinder pin.
- 4. Support the rear pinning channel assembly and remove the four bolts from each end of the assembly. Remove the channel assembly from the compactor.
- 5. Support and slide the ram and cylinder rearward until the front of the ram snout is clear of the container divider wall. Remove the cover from the front of the ram snout.

### **NOTICE**

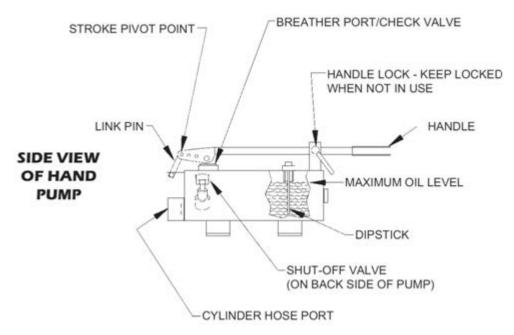
The ram will have to be slid rearward off of the compactor floor

- 6. Remove the tack welds from the front cylinder pin retaining washers (one on each side of the ram snout). While supporting the front of the cylinder through the opening in the front of the ram snout, remove the front cylinder pin.
- 7. Remove the cylinder from the ram.
- 8. To install the cylinder, reverse the previous steps.



### HAND PUMP MAINTENANCE (FOR FLEX-D-VIDER®)

To understand the use of the hand pump, see hauler instructions - Flex-D-Vider Hand Pump Operation 34 of this manual.



#### Fluid Level

Hydraulic fluid may be added to the Flex-D-Vider via either the breather port or the dipstick port. See **Recommended Fluids** Do not fill above the bottom of the dipstick port. Overfilling will damage the breather/check valve assembly. Do not fill with the Flex-D-Vider cylinder retracted (Flex-D-Vider in vertical position).

### Fluid Change & Pump Priming

With normal use (Flex-D-Vider pump used two or three times per week in a low dust environment) it is recommended to change the fluid annually at a minimum.

#### To change fluid:

- 1. First, make sure that the Flex-D-Vider is all the way down (cylinder rod will be fully extended).
- 2. Close the shut-off valve on the hand pump and disconnect the hose at the cylinder hose port.

### NOTICE

Have a container (min. 5 gal.) ready to catch draining fluid.

3. Open the shut-off valve and loosen dipstick to drain old fluid.

#### To add fluid and prime pump:

- 1. After all fluid has drained, reconnect hose and fill pump with new fluid via either the breather port or the dipstick port. Do not fill above the bottom of the dipstick port.
- 2. To prime the pump, first make sure the link pin is in the first stroke pivot point hole (as shown above).
- 3. Open the shut-off valve and pump the handle several times.
- 4. Next, close the shut-off valve and pump the handle for a few strokes.
- 5. Then, open the shut-off valve and leave open until it is time to move the Flex-D-Vider (during container dumping).

# Service

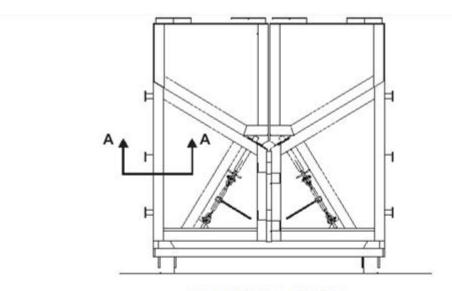
FUSES AND CIRCUIT BREAKERS					
MOTOR SIZE	VAC	FULL LOAD AMP	DUAL ELEMENT FUSE MAX. SIZE	CIRCUIT BREAKER MAX. SIZE	SERVICE DISCONNECT AMP.
10 HP, 1 PH	208	51.5	100	125	100
	230	49.0	90	125	100
10 HP, 3 PH	208	27.5	50	80	60
	230	25.6	50	70	60
	460	12.8	25	35	30
	575	11.4	20	30	30

WIRE SIZES					
	THW COPPER 7	THW COPPER 75°C (165°F)			
MOTOD CIZE	VOLTAGE	LENGTH	LENGTH		
MOTOR SIZE	VOLTAGE	TO 100'	TO 200'	TO 300'	
10 HP, 1 PH	208	4	1	1/0	
	230	4	2	1/0	
10 HP, 3 PH	208	6	4	2	
	230	8	4	3	
	460	12	10	8	
	575	12	12	10	

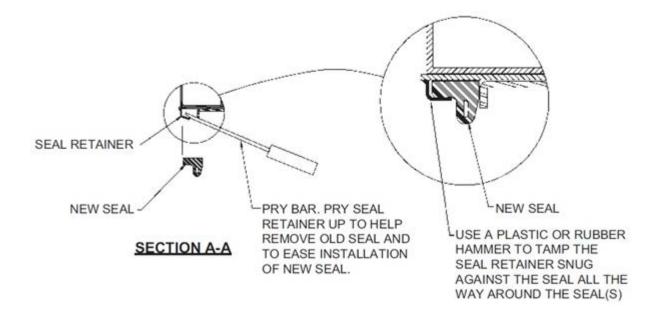
### **TAILGATE SEAL REPLACEMENT (OPTION)**

For units with the optional door seal on either or both bottom doors, use the following guidelines and diagram to replace the seal when it becomes damaged or worn.

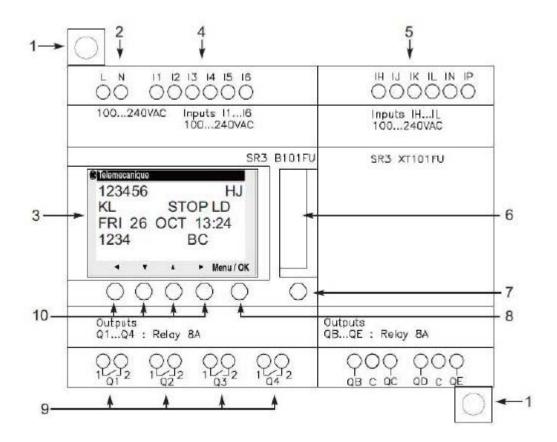
- 1. When removing the old seal, pry the seal retainer up slightly to allow for seal removal.
- 2. When installing the new seal, slide it under the retainer completely, then tamp the retainer with a plastic or rubber hammer until it is snug on the seal.



**REAR VIEW - DOORS** 



### **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)

### **Multicycle Counter Selection**

STEPS	DIRECTIONS
1	Press the Menu Button
2	Press the Down Arrow Button to select PARAMETER
3	Press the Menu Button
4	Press the Up or Down Arrow to select CC2
5	Press the > Arrow Button twice until the P=0003 is flashing
6	Press the Up or Down Arrow Button to select cycle count*
7	Press the Menu Button
8	Press the Menu Button with the YES blinking
9	Press the Menu Button

<sup>\* 4</sup> is the maximum number of cycles that can be selected.

### **Ram Stop Forward Option**

STEPS	DIRECTIONS
1	Press the Z1 Button & hold to display the ram selection.
2	Press the Z1 Button to change the ram selection.

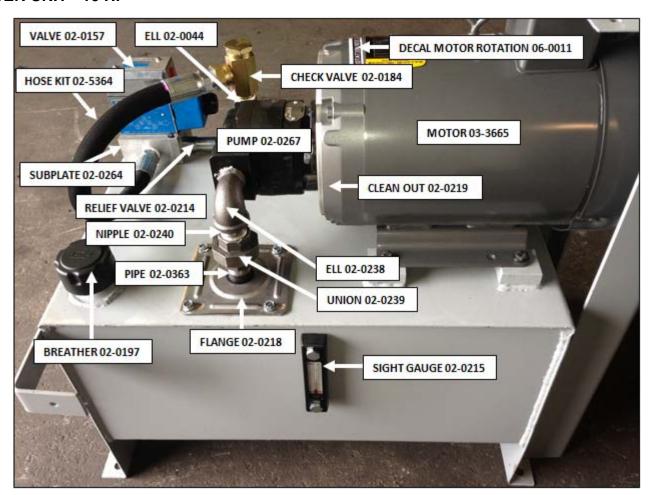
### **Extend/Retract Timer Adjustment**

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 (Extend 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 (Retract Timer)	
10	Press the Menu Button to return to normal operation.	

### **Timer Settings (in Seconds)**

MODEL NO.	RAM STOP REAR		RAM STOP FORWARD	
	TT1	TT2	TT1	TT2
DRC II	23	17	17	23

# **POWER UNIT - 10 HP**



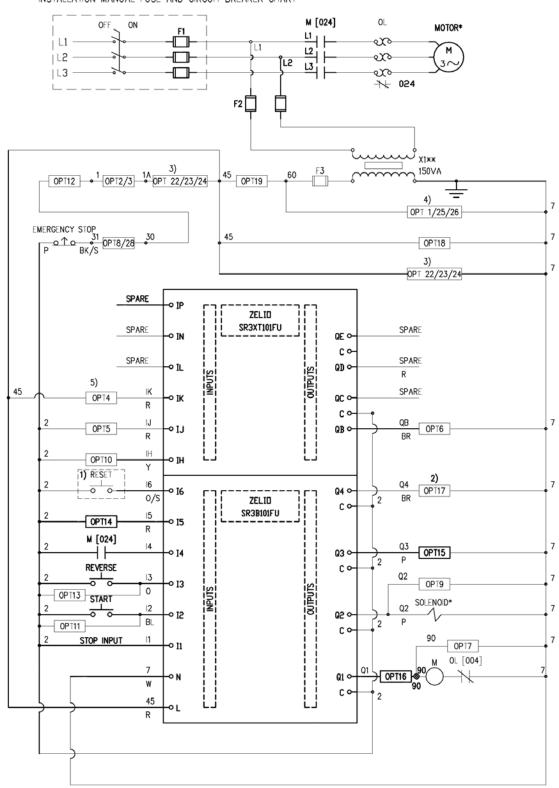
# **POWER UNIT - 10 HP - PARTS LIST**

Match reference number with the drawings on the previous page. To order replacement parts, call our Parts Department at 800-528-5308.

PART#	DESCRIPTION	QUANTITY
02-0044	ELL 3/4 NPTM X 3/4 NPTF 90	1
02-0050	FILTER SUCTION 1 13 GPM 100 ME	1
02-0157	VALVE 4-WAY DIRECTIONAL CONTROL	1
02-0184	VALVE CHECK 3/4 NPTM X 3/4 NPT	1
02-0197	BREATHER 3/4 FILLER	1
02-0214	VALVE RELIEF 20 GPM CART PILOT	1
02-0215	GAUGE SIGHT LEVEL 5 INCH	1
02-0219	CLEAN OUT COVER 6	1
02-0238	ELL 1 NPTM X 1 NPTF 90 SCH 40	2
02-0239	UNION 1 NPT	1
02-0240	NIPPLE 1 NPT CLOSE	1
02-0264	SUBPLATE 05 1 STN 1/2 NPTF R O	1
02-0267	PUMP 10 GPM GEAR	2
02-0363	PIPE 1 SCH 40 X 10 1/4	1
02-0366	PIPE 1/2 SCH 40 X 9 RETURN (INSIDE RESERVOIR)	1
03-3665	MOTOR 10HP 208/230/460V 60HZ 3	3
06-0011	DECAL MOTOR ROTATION 3/4 x 4	1
02-5364	HOSE KIT	1
02-0264	SUBPLATE	1
02-0214	RELIEF VALVE	1
02-0218	FLANGE	1

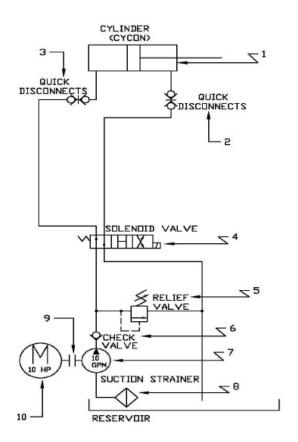
### **ELECTRICAL SCHEMATIC - E9018**

NOTE: MAIN DISCONNECT/BRANCH CIRCUIT PROTECTION
MUST BE SUPPLIED BY CUSTOMER REFER TO SERVICE/
INSTALLATION MANUAL FUSE AND CIRCUIT BREAKER CHART



# **HYDRAULIC SCHEMATIC - TYPICAL (CYCON)**

- 1. Cylinder
- 2. Quick Disconnect (Female)
- 3. Quick Disconnect (Male)
- 4. Valve, 4-Way
- 5. Relief Valve
- 6. Check Valve
- 7. Pump
- 8. Suction Filter
- 9. Hub Coupling (Not on Closed-Coupled Units)
- 10.Motor



# NOTICE

Single cylinder unit shown. For dual cylinder units, connect identical cylinder in parallel.

TROUBLESHOOTING C	HART	
PROBLEM	CAUSE	SOLUTION
UNIT WILL NOT START	No electrical power to unit	1a. Turn on main disconnect. 1b. Replace fuses/reset breakers
	No electrical power to control circuit	<ul><li>2a. Check primary and secondary sides of transformer.</li><li>2b. Check for correct voltage. Check control fuses.</li><li>2c. Check stop button.</li><li>2d. Check start button to be sure contact closes when depressed.</li></ul>
	No electrical power to motor	3a. Check heater resets
UNIT WILL NOT CONTINUE RUNNING	Motor starter is in- operative.	1a. Check motor starter coil & wiring.
WHEN START BUTTON IS RELEASED	Motor starter auxiliary contacts are inoperative	2a. Check motor starter contacts and wiring
	Reverse Button is inoperative	3a. Check wiring
	Secondary contact on start button is inoperative	4a. Check contact, wired black and orange, to be sure it is operating properly 4b. Check wiring
MOTOR RUNS BUT RAM DOES NOT MOVE	Insufficient oil in reservoir	1a. Fill reservoir with oil
NORMALLY	2. Low relief pressure	2a. Check relief pressure (refer to PROCEDURES-HYDRAULIC PRESSURE CHECK and PRESSURE SETTINGS for correct pressure.  2b. Clean orifice in relief valve and reset pressure  2c. Check "O" rings on relief valve for damage or leakage
	3. Oil leakage in cylinder	3a. Check cylinder for bypassing 3b. Replace seal kit, inspect rod and cylinder tube for scoring/nicks 3c. Replace cylinder
	4. Defective pump	4a. Replace pump
	Oil leakage from hose fittings	5a. Tighten hose fittings
	6. Low voltage	6a. Check voltage
	7. Pump may be driven in the wrong direction of rotation	7a. Stop immediately to prevent seizure. Check direction of drive rotation (proper rotation direction is indicated by arrow on motor)
	Shaft broken, or shaft key sheared	8a. Visually inspect motor and pump shaft and hub couplings for damage. Replace if necessary.
	Intake pipe from     reservoir blocked, or oil     viscosity too heavy to prime	9a. Drain system. Add clean fluid of proper viscosity and specifications. Filter as recommended. Check system filter for cleanliness.
	10. Intake air leaks (foam in oil or sounds like gravel in pump)	10a. Check intake connections. Tighten securely
	11. Units shift slowly	11a. Flow control valve (restrictor) clogged, remove\clean orifice.
	12. Valve response sluggish	12a. Contaminated oil-drain and flush system. 12b. Inadequate voltage, check voltage. 12c. Disassemble valve & clean

TROUBLESHOOTING CHART			
PROBLEM	CAUSE	SOLUTION	
UNIT WILL NOT REVERSE	Solenoid valve is in- operative	1a. Check coil in solenoid valve	
	2. Reverse button in-operative	2a. Check reverse button contacts	
PUMP MAKES NOISE- SOUNDS LIKE GRAVEL	Partly clogged intake strainer or restricted intake pipe	<ol> <li>Pump must receive intake fluid freely or cavitation results.</li> <li>Drain system, clean intake pipe and clean or replace strainer</li> </ol>	
	2. Defective bearing	2a. Replace pump	
	Air leak at pump intake pipe joints	3a. Tighten joints as required.	
PUMP SHAFT SEAL LEAKING	1. Seal worn or damaged	1a. Replace seals or pump.	
EXCESSIVE HEAT	1. Continuous running	<ul> <li>1a. When over 140° F or hot in comparison with circuit lines, pump should be shut down immediately. Before restarting, insure that fluid cooling capacity is adequate to remove system generated heat.</li> <li>1b. Install oil cooler (air or water type)</li> <li>1c. Install oil temperature shut down switch</li> <li>1d. Check to be sure CYCON Power Pack has not been exchanged for Pressure Shifting Power Pack.</li> </ul>	
	2. Undersized hydraulic lines	2a. Replace with larger hydraulic lines	
	High ambient temp in relation to oil temp.	3a. Use lower viscosity oil	
	4. Excessive system leakage	4a. Check system for bypassing or leaks	
RAPID WEAR	Abrasive matter in the hydraulic oil being circulated through pump	<ul><li>1a. Install adequate filter or clean filter.</li><li>1b. Replace oil more often and clean tank</li></ul>	
	Viscosity of oil too low at working conditions	2a. Replace oil with factory recommended oil.	
	3. Pressure too high	3a. Reduce pump pressures to factory specifications.	
	Air recirculation causing pump noise	4a. Tighten all fittings.	
ERRATIC OPERATION	Valve sticking or binding	1a. Disassemble & clean as necessary	
	2. Viscosity of oil too high	2a. Change oil to factory recommended viscosity	
	3. Air in system	3a. Check for leaks, tighten fittings	
	4. Low oil	4a. Fill reservoir with oil	
	5. Low voltage	5a. Check primary & secondary sides of transformer for correct voltage	
OVERLOADS TRIP FREQUENTLY	NOTE: Excessive overload trip	1a. Check for correct voltage (incoming power.)     1b. Check fuses or breakers at disconnect     1c. Check heater elements to be sure they are tight     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  ping and/or motor or coil failures may occur if voltage surges or	
	voltage drops are frequent in yo	our area. This circumstance can be remedied by the installation of ower 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 eCommerce Marketplace 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.

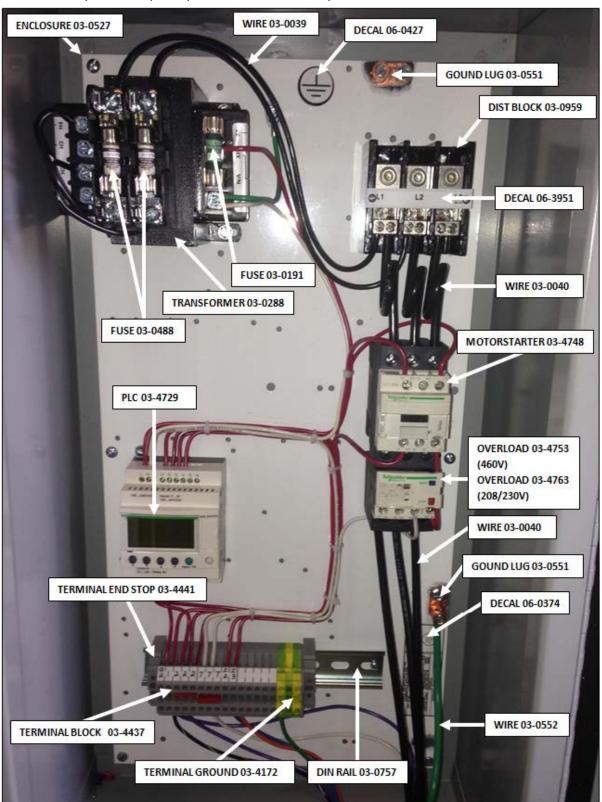
Normal Business Hours:

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

(Central Standard Time)

### 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.



### **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.

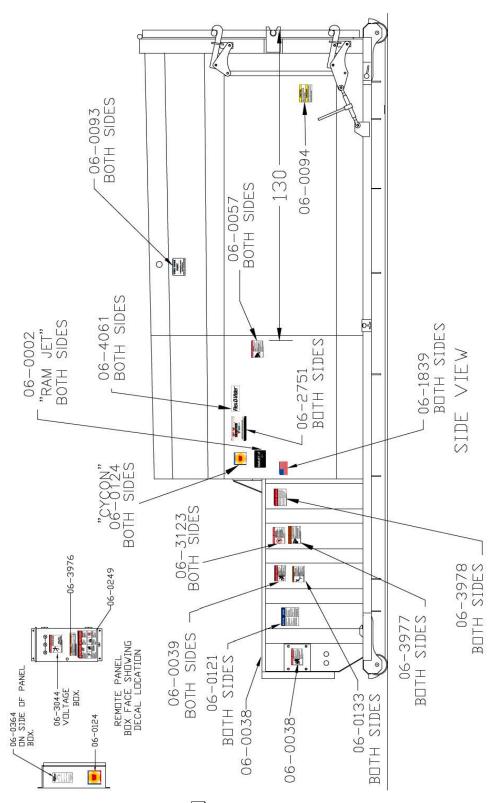
When ordering replacement decals, use the chart below with the **Decal Placement Drawing** or look for the part number in the lower right hand corner of the decal. For optional equipment, see **Decals for Optional Loading Configurations** 60.

PART#	DESCRIPTION	QUANTITY
06-0002	RAM JET - MARATHON EQUIPMENT COMPANY	4
06-0038	CAUTION: DO NOT REMOVE ACCESS COVER EXCEPT	3
06-0039	DANGER: DO NOT ENTER	3*
06-0040	CAUTION: KEEP OUT (USED ON HOPPER)	3*
06-0249	DANGER: HIGH VOLTAGE HAZARD	2
06-0052	CAUTION: GATE MUST BE CLOSED BEFORE	1*
06-0057	CAUTION: STAND CLEAR WHEN CONTAINER IS	3
06-1839	AMERICAN FLAG	3
06-0072	QUICK CLEAN TANK	1
06-0093	FIRE HOSE PORT	2
06-0094	NOTICE WIPE OFF SEAL AFTER DUMPING	2
06-0124	CYCON	2
06-0121	CAUTION: FEDERAL REGULATION PROHIBITS	2
06-3123	DANGER! CONFINED SPACE	3
06-0268	WARNING: AFTER CONTAINER HAS BEEN DUMPED	1
06-2751	MARATHON COMPACTION & RECYCLING SOLUTIONS	4
06-3977	WARNING: DO NOT OPERATE	2
06-3978	DANGER: DO NOT OVERRIDE	2
06-0133	WARNING: KEEP OFF!	2
06-4061	FLEX-D-VIDER	1

<sup>\*</sup>Quantity varies according to optional equipment configuration. See **Decals for Optional Loading Configurations** 6th. for details.

### **DECAL PLACEMENT**

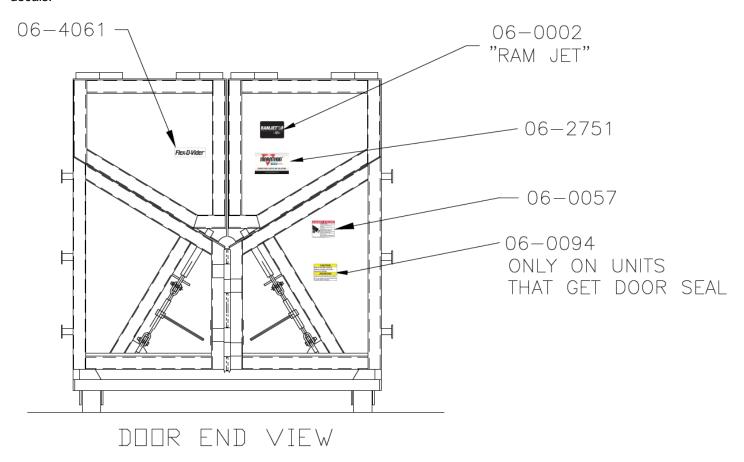
Match the decal numbers below with the descriptions and quantity on the **Decal Parts List** for ordering replacement decals.



See **Decals for Optional Loading Configurations** for decals on optional configurations.

### **DECAL PLACEMENT (CONTINUED)**

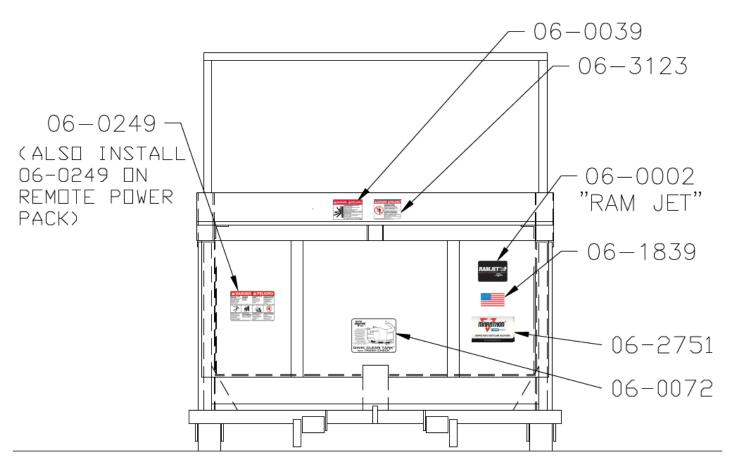
Match the decal numbers below with the descriptions and quantity on the **Decal Parts List** of for ordering replacement decals.



See Decals for Optional Loading Configurations of for decals on optional configurations.

## **DECAL PLACEMENT (CONTINUED)**

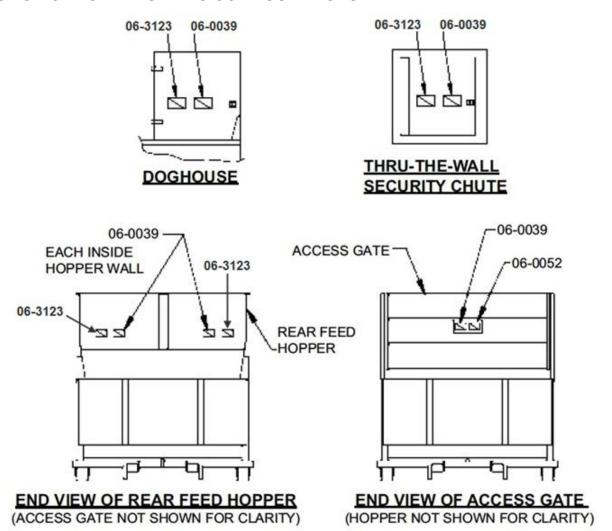
Match the decal numbers below with the descriptions and quantity on the **Decal Parts List** for ordering replacement decals.

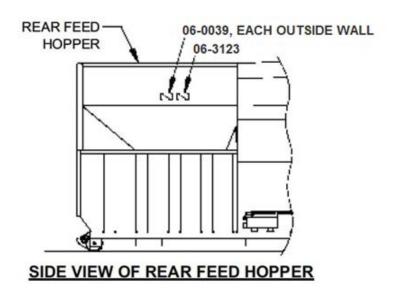


PACKER END VIEW (WITH CONTAINER FRONT PANEL REMOVED)

See **Decals for Optional Loading Configurations** 60 for decals on optional configurations.

# **DECALS FOR OPTIONAL LOADING CONFIGURATIONS**





### **DECAL IMAGES**

06-0038 06-0039 06-0249



bloqueo/rotulado.

ACE IF DAMAGED OR LOST. REEMPLACELA SI SE DANA O SE PIERDE.





06-0002 06-0121

Si no se cumple con esta disposición, se puede causar la muerte o lesiones graves



#### **AVISO NOTICE**

- Federal law prohibits operation of equipment by persons under 18
- Machine may only be loaded and operated by persons who have been authorized and properly
- U.S. Department of Labor age restrictions apply.
- The key in the "ON-OFF" switch must be turned to the "OFF" position and removed when this equipment is NOT in operation. The key is to remain in the custod of persons 18 years and older.
- Las leves federales prohíben que nas menores de 18 años de edad operen los equipos.
- Las personas que han sido autorizadas y debidamente entrenadas son las únicas que pueden cargar y operar la máquina
- Sujeta a las restricciones de edad del Departamento del Trabajo de Estados Unidos.
- l a llave en el interruntor "ON-OFF" (ENCENDIDO/APAGADO) se debe girar a la posición "OFF" (APAGADO) v retirarla cuando este equipo no está en funcionamiento. La llave de personas mayores de 18 años

06-1839

06-0057 06-3123 06-0072



uede causar la muerte o lesiones grave

ACE IF DAMAGED OR LOST, REEMPLACELA SI SE DANA O SE PIERDE OO NOT PAINT OVER THIS LABEL, IT

#### A DANGER A PELIGRO PERMIT REQUIRED!



CONFINED SPACE!
Follow lockout and tagout procedures before entering.
Failure to comply will result in death or serious injury.

#### PERMISO REQUERIDO! ESPACIOS ESTRECHOS!

Seguir los procedimientos de bloqueo y rotulado antes de entrar. Si no se cumple con esta disposición, se causará la muerte o lesiones graves.

DO NOT PAINT OVER THIS LABEL, REPLACE IF DAMAGED OR LOST. NO PINTE ENGINA DE ESTA ETIQUETA, REEMPLÂCELA SI SE DANA O SE PIERDE.



### **DECAL IMAGES**

06-0268

WARNING

AFTER CONTAINER HAS BEEN DUMPED **BE SURE HAND PUMP** VALVE IS OPEN. **TURN VALVE COUNTER CLOCKWISE TO OPEN.** 

06-0040

### 🕰 DANGER **A**PELIGRO CRUSHING/SHEARING HAZARD! KEEP OUT!

Failure to comply could result in death or serious injury.

PELIGRO DE APLASTAMIENTO/CIZALLAMIENTO PROHIBIDA LA ENTRADA!

Si no se cumple con esta disposición, se puede causar la muerte o lesiones graves.

NOT PAINT OVER THIS LABEL, REPLACE IF DAMAGED OR LOST, PINTE ENCIMA DE ESTA ETIQUETA, REEMPLACELA SI SE DANA O SE PIERDE,

06-0052

#### DANGER A PELIGRO CRUSHING/SHEARING HAZARD! Gate must be closed before operating equipment. Failure to do so could result in death or serious injury.

#### PELIGRO DE APLASTAMIENTO/CIZALLAMIENTO!

Cerrar la compuerta antes de hacer funcionar el equipo.

Si no se cumple con esta disposición. se puede causar la muerte o lesiones graves.

06-3977

A WARNING A ADVERTENCIA



06-0093

Do not operate or service this equipment until

ailure to do so could lead to death or ser

No utilice este equipo ni le preste servicio h que no haya sido debidamente entrenado y que no haya sido debidamente entrenado y calificado para su uso, según el manual de funcionamiento y servicio del fabricante.

El incumplimiento de esta norma podría result

OT PAINT OVER THIS LABEL, REPLACE IF DAMAGED OR LOST,

06-3978

A DANGER

DO NOT override or tamper with safety devices. They are installed for your safety.

Failure to comply will result in death or serious injury.

NO sobrepase ni altere los dispositivos de seguridad. Se han instalado para su seguridad. El incumplimiento de esta norma podría resultar en la muerte o

lesiones graves.

DO NOT PAINT OVER THIS LABEL. REPLACE IF DAMAGED OR LOST, NO PINTE ENCIMA DE ESTA ETIQUETA, REEMPLACELA SI SE DAMA O SE PIERDE.

06-0133

**A PELIGRO** 



# A WARNING A ADVERTENCIA

KEEP OFF! FALL/CRUSH HAZARD! Do not climb on equipment.

Use work platform for servicing. Failure to comply could result in death or serious injury.

#### PROHIBIDA LA ENTRADA! RIESGO DE CAIDAS/APLASTAMIENTO!

No treparse al equipo. Usar la plataforma de trabajo para hacer reparaciones. Si no se cumple con esta disposición, se puede causar la muerte o lesiones

06-0094

**FIRE HOSE** PORT

**LUMBRERA PARA MANGUERA** CONTRA INCENDIOS CAUTION

Wipe off seal after dumping. Failure to comply may cause equipment damage.

## ATENCION

Limpiar el sello después del vaciado. Si no se cumple con esta disposición, se puede dañar el equipo.

06-2751



06-0124



06-4061



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