

RamJet[®] RJ-575HD

HORIZONTAL COMPACTOR

OPERATION, SERVICE, AND INSTALLATION

ISSUED APRIL 2020

CUSTOMER NAME: _____

SERIAL NUMBER:

COMPACTION & RECYCLING SOLUTIONS

0066-RJ575HD-0420



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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[®] RJ-575HD

OPERATION, SERVICE, AND INSTALLATION ISSUED APRIL 2020 0066-RJ575HD-0420

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General Information

SECTION 1 GENERAL INFORMATION

General Information

INTRODUCTION

Thank you for purchasing a Marathon® RamJet® Horizontal 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.

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:

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

General Information

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.

General Information

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.

General Information

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.

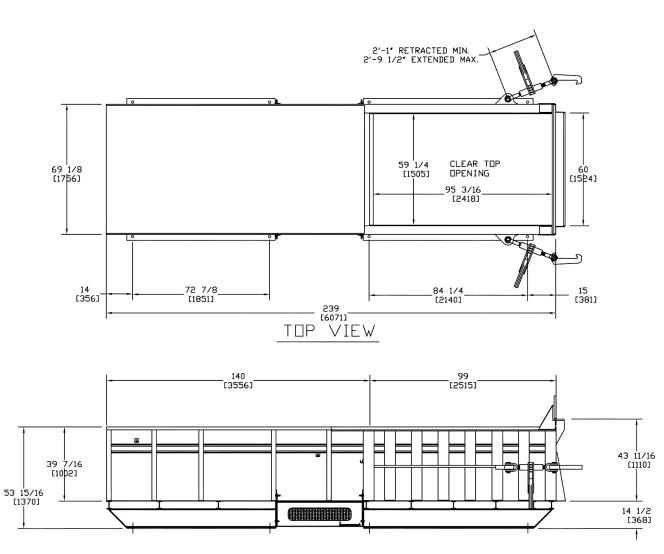
- 5. Notify affected employees that the servicing or maintenance is completed and the compactor is ready for use.
- 6. Reassess area to determine all hazards are protected.

General Information

SPECIFICATIONS

These are the standard specifications and dimensional drawing for the RJ-575HD.

MODEL	RJ-575HD
CLEAR TOP OPENING (LENGTH, WIDTH)	59 1/4 x 95 3/16
CYCLE TIME	36
NORMAL FORCE	84,600
MAXIMUM FORCE	96,200
RAM PEN. (IN)	13.5
MOTOR (HP)	30
PUMP (GPM)	52
CYLINDER BORE (IN)	7
CYLINDER ROD (IN)	4
SYSTEM PRESSURE (NORMAL, MAXIMUM)	2200/2500



SIDE VIEW

General Information

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.

\Lambda WARNING

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

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

General Information

WARNING DECALS ON THE UNIT

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

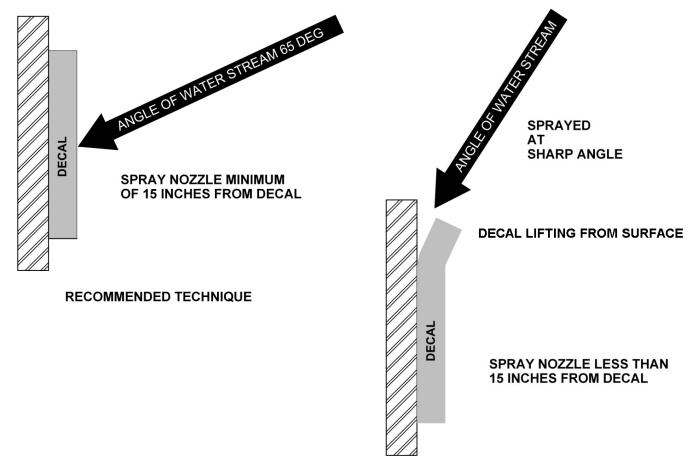
When normal cleaning procedures do not remove difficult debris from the decals, try the following:

- 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.

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General Information

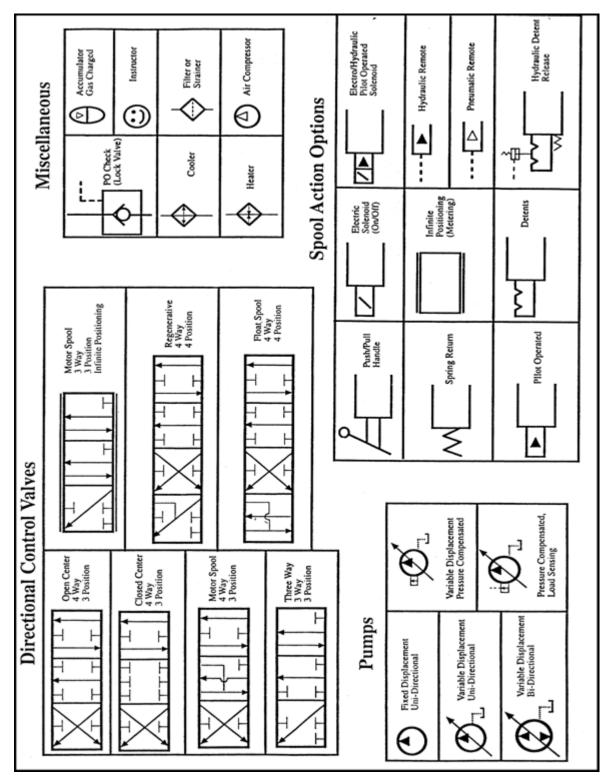
DECAL CARE (CONTINUED)



INCORRECT TECHNIQUE

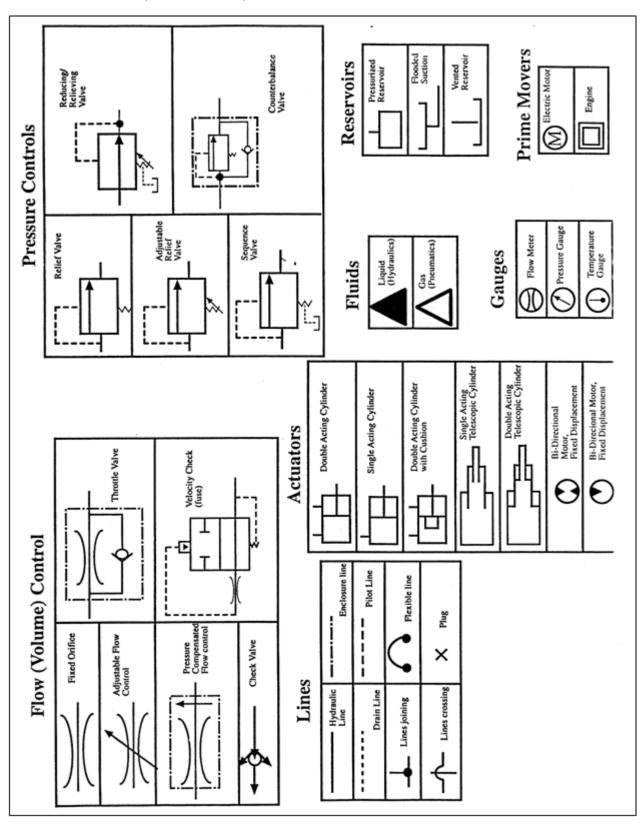
General Information

HYDRAULIC SYMBOLS



General Information

HYDRAULIC SYMBOLS (CONTINUED)



General Information

ELECTRICAL SYMBOLS

SYMBOL DEFINITIONS

d di BATTERY FUSE SOLENOID CONTACT RELAY CR1 CR1 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 0 LIMIT SWITCH NORMALLY CLOSED ~ ~ ЧĆ CAPACITOR

RJ-575HD Horizontal Compactor Installation

SECTION 2 INSTALLATION

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:

8:00am - 5:00pm

(Central Standard Time)

CONCRETE PAD REQUIREMENTS

Review this manual before starting the installation. Study the jobsite and installation requirements carefully to be certain all necessary safeguards and 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 American National Standards Institute Z245.2 standard.

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.

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 and container. It should be of minimum 3,000 PSI concrete steel reinforced 6" thick. It is preferred that the concrete pad be flush with the surrounding ground level.

NOTICE

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

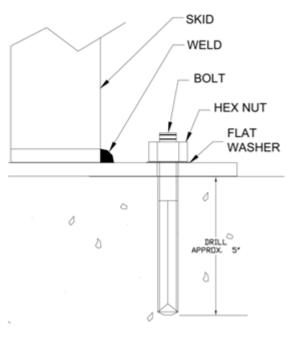
 To provide accessibility, concrete pad should be positioned to allow 28" clearance between any obstacle and the outside edge of grab claw per ANSI Z245.21. Allow a minimum of 45' of clear space from end of pad for container handling vehicle.

NOTICE

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

Anchoring

The skid plates should be anchored to concrete pad using eight (8) min. 1" x 6" long anchor bolts to secure the skid plates to the concrete. It is best if these holes are drilled in the concrete after prelocating the compactor in its desired location. Holes in the skid plates are 1-5/16" Dia. to permit the use of a 1" Dia. concrete bit. The holes in the concrete should be approximately 5" deep. When the compactor has been permanently located, shim to compensate for unevenness in pad. Set anchor bolts, tighten all nuts securely, and weld the skids to the skid plates. Container guides (optional) should be anchored in the same manner, spacing between guides determined by rail spacing of the container.



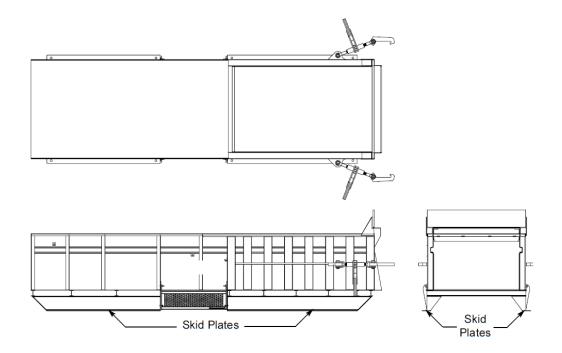
RJ-575HD Horizontal Compactor Installation

CONCRETE PAD REQUIREMENTS (CONTINUED)

Anchoring (Continued)

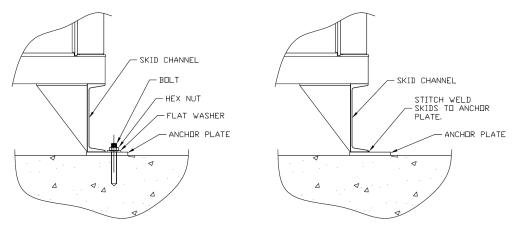
Anchoring of Skid Plates (shipped loose).

- 1. Position compactor to the desired location.
- 2. Align skid plates under the skids. Center from end to end, and flush with the inside of the skid.
- Anchor the skid plates using (2) two 1" anchor bolts per plate (customer furnished, red head type recommended). Eight (8) total.
- 4. Weld compactor skids to the skid plates with a continuous 1/4" fillet weld.



ANCHORING AND WELDMENT OF SKIDS TO ANCHOR PLATES

Anchor plates are shipped loose with compactor and should be pre-located on pad. Once anchor plates have been anchored to the pad, sit compactor in place on top of the anchor plates. Stitch weld skids to anchor plates with 6" stitch welds at 18" centers maximum on all skids. Skids will vary in length requiring spacing to vary but should not exceed 18" centers.



Installation

STEEL INSTALLATION PROCEDURES

Dock Installation

If the appropriate accessories are ordered from Marathon Equipment Co., the compactor 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 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. Also, due to compactor height variations, the bottom of the access hole should be at least 2" above the compactor height. 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 decals locations, see **Decals** and **Decal Placement for Standard Units** in the "Replacement Parts" section of this manual.

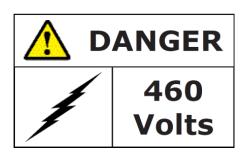
Note: Installation is not complete until all decals are in place.

Container Guides

If container guides (optional) are used with the compactor and container, each guide 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 prelocating the container guides in their desired location. When the guides have been placed in position, and the anchor bolts have been set, tighten all nuts securely.

Installation

ELECTRICAL AND HYDRAULIC INSTALLATION



The Panel Box 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's electrical panel box location, not to exceed 50'0" from the compactor. This fused disconnect switch should be sized in accordance with the compactor (see **Fuse and Circuit Breaker Charts**).

All equipment should 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 appliance.

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

Remote Power Pack Installation

1. If the power unit is remote, it should be installed and anchored as required by the customer. If push buttons are mounted in the face of the panel box, be certain these controls are located as to be in a convenient, but not hazardous, location to the customer.

Controls 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. If installation requires this pushbutton control 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** at the end of this section.
- 3. Connect the hydraulic hoses between the compactor body and the power unit. The rear port (base end) on the compactor is "A" port. The front port (rod end) on the compactor is "B" port.
- 4. The Limit Switch is connected to the power unit with Sealtite. To install, bolt the limit switch to the pre-drilled hole pattern outside the compactor body (right-hand side towards the rear for compactors with power unit connection on the right-hand side; left-hand side towards the rear for compactors with power unit connection on the left hand side). Other compactor mounted electrical options are color coded and referenced to the schematic shipped with the compactor. Make sure all wires are connected properly. Check local codes to assure that Sealtite is acceptable.

RJ-575HD Horizontal Compactor Installation

ELECTRICAL AND HYDRAULIC INSTALLATION (CONTINUED)

Pushbutton Control Panel

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

Controls 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. If installation requires this pushbutton control 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 electrical panel box, in accordance with local electrical codes, using knock-outs in bottom of panel box. See Fuse & Circuit Breaker Charts for Motors and Wire Size Chart, in the Service section, to determine the proper service disconnect amperage rating and the proper wire size.

Note: High legs should be installed to L3 on motor starter.

2. Check voltage at fused disconnect switch to be certain it is the same as is shown on compactor or remote power pack.

Start-Up Instructions

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 **Periodic Maintenance** page for hydraulic oil recommendations). The hydraulic system pressure has been factory set and the entire unit has been operated prior to shipment.

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

Put fused disconnect switch in "ON" position when ready to start machine. Depress the start button and check the motor fan for proper rotation (should be clockwise). 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. Follow all **Lock-Out & Tag-Out Instructions** in the "Service" section.

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

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SECTION 3 OPERATION

RJ-575HD Horizontal Compactor 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 8:00

8:00am - 5:00pm

(Central Standard Time)

RJ-575HD Horizontal Compactor Operation

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.

A 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**

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

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!

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

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**

A 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.

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.

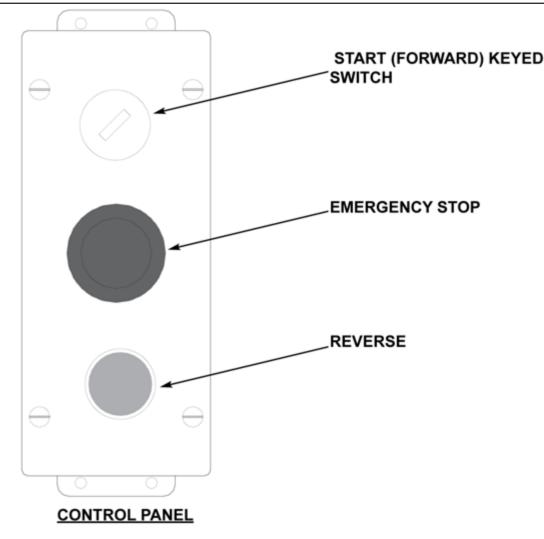
NOTICE

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

Operation

CONTROLS FOR UNITS WITH 30HP POWER PACK

Use ONLY Marathon reinforced receiver containers with Marathon RJ-575-HD, RJ-575-HDPC and RJ-575-EHDPC Compactors. Use of a non-OEM receiver container with a Marathon RJ-575-HD, RJ-575-HDPC and RJ-575-EHDPC Compactor could result in container damage, property damage, and/or personal injury – up to and including death.



Control Description

- KEYED START (FORWARD) SWITCH This switch requires a key for operation. Insert the key and turn clockwise
 to the START position. Depress and hold the key for one to two seconds and release. The compactor will cycle one
 time (complete extension and retraction of the ram) and stop. After use, turn the key to the counterclockwise position
 and remove the key.
- 2. EMERGENCY STOP MUSHROOM HEAD 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 Keyed Start Switch must be energized for the REVERSE button to operate.

SECTION 4 SERVICE

RJ-575HD Horizontal Compactor 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)

RJ-575HD Horizontal Compactor Service

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.
- 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.

Service

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.

RJ-575HD Horizontal Compactor Service

PERIODIC MAINTENANCE

Never enter any part of the compactor until the unit has been Locked-Out and Tagged-Out.

Daily

- Check oil level in reservoir. Level should be 3/4 of the sight gauge with the ram retracted fully.
- Check for oil leaks.
- Check oil filter indicator on the power unit reservoir. Change filter if necessary.
- Check for any unsafe conditions in the compactor area.

Weekly

- Clean air breather on reservoir.
- Visually inspect oil filter indicator.
- Verify proper operation of the photocell (if applicable).

Monthly

- Check for any unsafe condition such as exposed electrical lines or operator obstructions in the operating area.
- · Check external hoses for chafing, rubbing, or other deterioration and damage.
- Lubricate the ram hold down bars using an all purpose grease.
- Check unit for cracked welds, bowing, and structural deterioration.
- Remove cleanout cover(s) from the side(s) of the compactor body. Clean out the debris from behind the ram. Replace cover(s) when cleanout is complete.

Three Months

- Check hydraulic cylinder, internal hoses, and connections for leakage: check hoses for chafing and wear.
- Check all decals to be sure they all are readable and in good condition.

Six Months

- Change return oil filter.
- Send oil sample out for evaluation. Change if required. See **Recommended Oils** hin "General Information" Section.
- · Check the compactor structure for cracked welds or other damage.
- Check motor starter contacts on the motor starter in the panel box.

Service

PERIODIC MAINTENANCE (CONTINUED)

Never enter any part of the compactor until the unit has been locked out and tagged out.

Annually

- Change the hydraulic oil or filter it twice through a 3 micron filter. If the oil is filtered,
- Lubricate the electric motor bearings per the manufacturers suggestions.
- Check the cylinder pins for wear. Rotate the cylinder rod 180 degrees.

Filter Maintenance

- The hydraulic filter(s) should be cleaned at regular yearly intervals.
- Units with multi-sectioned pumps may be removed by removing the four bolts from the pump flange and the four bolts on the suction flange.
- Care should be exercised in cleaning the filter to insure 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 connections 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.
- For units with external return line filters, these filters should be replaced when performing filter maintenance.

Issued April 2020

Service

MAINTENANCE SCHEDULE FORM

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

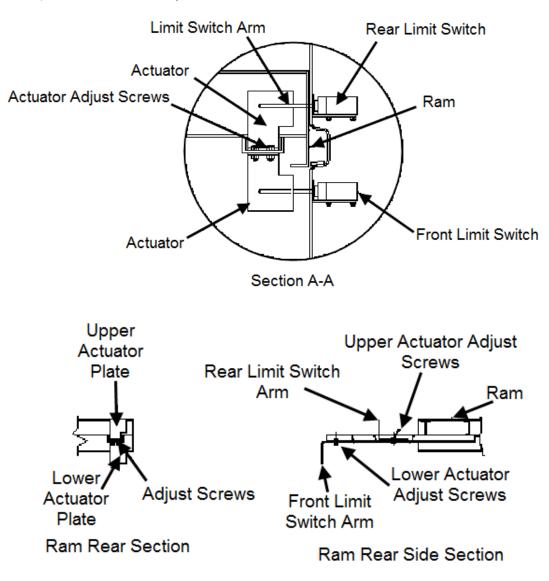
		MA	INTENANCE SC	HEDULE		
		Monthly		Every 3 Months		
	CHECK UNSAFE CONDITIONS	CHECK HOSES		CLEAN OUT DEBRIS FROM BEHIND RAM	CHECK CYLINDER	CHECK DECALS FOR VISIBILITY
Jan						
Feb						
Mar						
Apr						
May						
June						
July						
Aug						
Sept						
Oct						
Nov						
Dec						

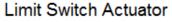
	MAINTENANCE SCHEDULE					
	E	very 6 Mon	ths	Annually		
	CHANGE OIL FILTER	CHECK STRUCTURE	CHECK MOTOR STARTER	CHANGE HYD OIL	LUBRICATE THE MOTOR BEARINGS	CHECK CYL PINS
Jan						
Feb						
Mar						
Apr						
May						
June						
July						
Aug						
Sept						
Oct						
Nov						
Dec						

LIMIT SWITCH ADJUSTMENT

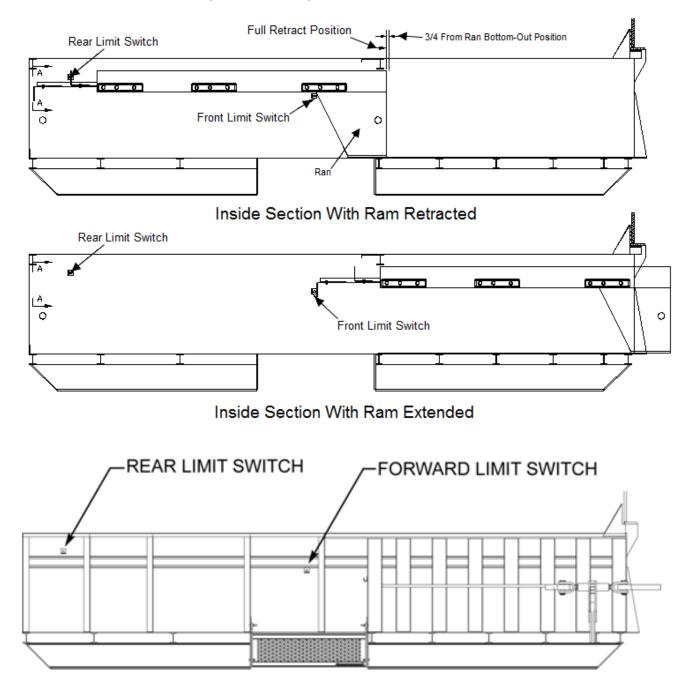
Lock-Out and Tag-Out compactor prior to any service or maintenance. See **Compactor Lock-Out/Tag-Out Instructions**

- 1. Retract the ram completely. Lock-Out and Tag-Out compactor.
- 2. Mark the ram front position on the compactor side. Power up the compactor And run the ram forward 3/4"-1" and stop. Lock-out and tag-out the compactor.
- 3. Remove the top cover or side access cover to gain access to the actuator.
- 4. Loosen the actuator screws and slide the actuator back against the limit switch arm until the limit switch clicks. Retighten the screws.
- 5. Replace the access cover(s). Make sure that all personnel are clear of the Compactor.
- 6. Test run the compactor to make sure adjustment is correct.





LIMIT SWITCH ADJUSTMENT (CONTINUED)



PRESSURE SETTINGS - 30HP/52GPM

A WARNING

Lock-Out and Tag-Out compactor prior to any service or maintenance. See **Compactor Lock-Out/Tag-Out Instructions**

The following adjustments will need to be made with the power unit running.

See Start-Up Sequence and Pre-Operation Instructions 25.

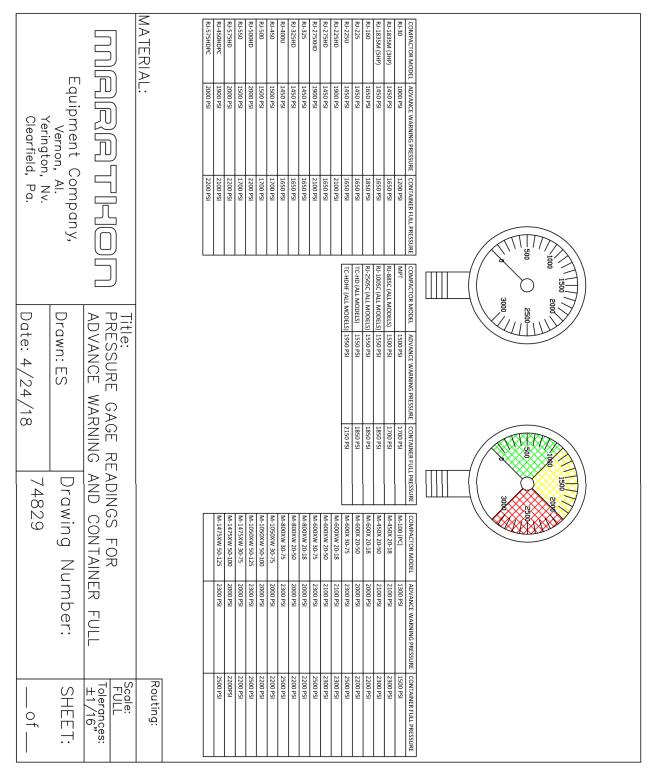
- 1. Turn fused disconnect to "OFF" position and padlock.
- 2. Relieve any pressure in system by manually depressing solenoid valve pin located in center of coil end of pilot valve.
- 3. Remove gauge port plug located in check valve on pump discharge line and install a 0-3000 hydraulic liquid filled pressure gauge.
- 4. Remove or lower forward limit switch actuator. This is done to prevent ram from retracting while checking pressures.
- 5. Loosen lock nut on relief valve, turn adjustment knob counter clock wise several turns.
- 6. Remove silver colored cap from pressure switch lid and turn adjusting screw counter clock wise several turns.
- 7. Turn fused disconnect to "ON" position.
- 8. Start machine and allow cylinder to fully extend. Slowly turn adjusting knob on relief valve clock wise until pressure reaches 2200 PSI.
- Slowly turn adjusting screw clockwise on pressure switch 1 circuit 1 while watching pressure gauge, continue to turn until input I7 highlights on the PLC screen.
- 10. Loosen screws on pressure switch lid and pull lid "UP" so that switch cannot be activated.
- 11.Restart machine, allow cylinder to fully extend, and turn adjusting knob on relief valve until pressure reaches 2500 PSI on the pressure gauge.
- 12.Lock knob in place with relief valve lock nut.
- 13. Tighten pressure switch lid screws.
- 14. Run machine several times to make sure it will shut down at end of stroke.
- 15. Return limit switch actuator to original position and cycle machine several times to insure proper operation.

NOTICE

Units with advanced warning light, set pressure to 200 PSI below shutdown pressure switch.

Service

PRESSURE GAUGE READINGS FOR COMPACTORS



Service

CHARTS - 30HP POWER UNIT

FUSES AND CI	RCUIT BREAKE	RS			
THREE PHASE					
MOTOR SIZE	VAC	FULL LOAD AMP	DUAL ELEMENT FUSE MAX.SIZE	CIRCUIT BREAKER MAX.SIZE	SERVICE DISCONNECT AMP.
30 HP	208	88	150	225	200
	230	80	150	200	200
	460	40	70	100	100
	575	32	60	80	60

WIRE SIZES				
THREE PHASE	THW COPPER 75°C (165°F)			
MOTOR SIZE	VOLTAGE	LENGTH		
MOTOR SIZE	VOLTAGE	TO 100'	TO 200'	TO 300'
30 HP	208	#2	1/0	3/0
	230	#2	#1	2/0
	460	#6	#6	#4
	575	#8	#8	#6

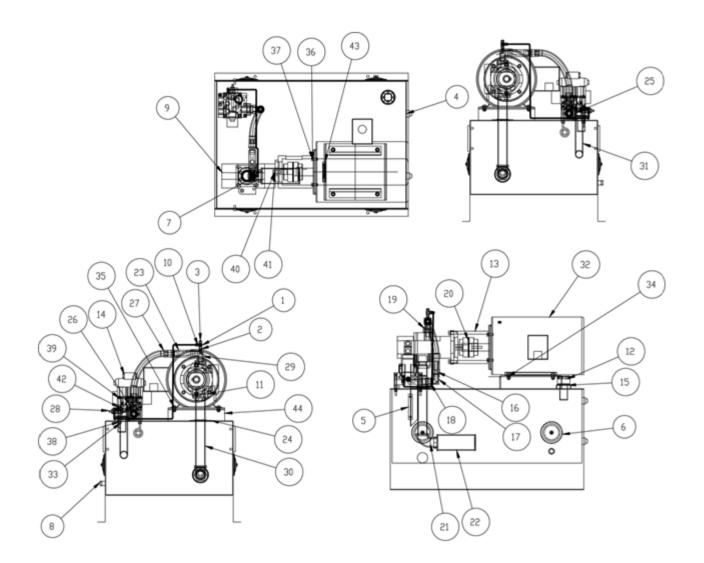
Wire size based on 75° Celsius temperature rating of insulation.

Ambient 30° Celsius 86° Fahrenheit.

NOTICE

The fuse, circuit breaker, and disconnect sizes may change if a conveyor is used. Please contact the Marathon Equipment Company Technical Service Department, at 877-258-1105, for more information.

POWER UNIT - 30HP/52GPM



CONTINUED ON NEXT TWO PAGES

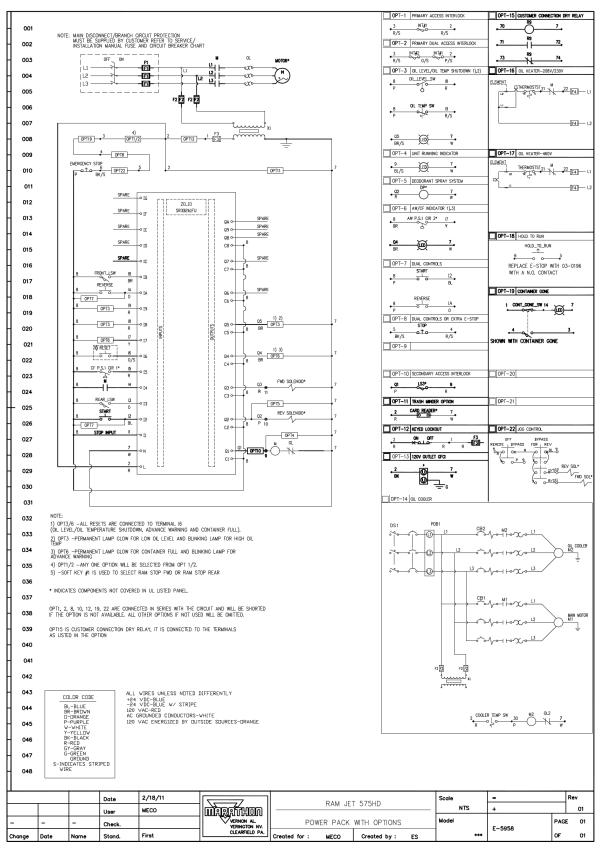
POWER UNIT - 30HP/52GPM (CONTINUED)

PARTS LIST				
PART #	REF #	DESCRIPTION		
02-0062	1	TEE 1/4 NPTF		
02-0063	2	NIPPLE 1/4 NPT	NIPPLE 1/4 NPT	
02-0065	3	PLUG 1/4 NPT SOCKET HEAD		
02-0123	4	PLUG 1 1/4 NPT		
02-0215	5	GAUGE SIGHT LEVEL 5 INCH		
02-0219	6	CLEAN OUT COVER 6		
02-0294	7	ADAPTER 1/8 NPTF X 1/4 NPTM		
02-0316	8	PLUG 3/4 NPT		
02-0353	9	PUMP 52GPM COMM SHRNG		
02-0631	10	TUBING END 1/4 X 1/8 NPTM		
02-0638	11	FLANGE C61 2 NPT		
02-0647	12	BREATHER 2 IN HOLE		
02-0662	13	ADAPTER PUMP/MTR		
02-0667	14	VALVE 4-WAY 08 T 3-POS		
02-0856	15	BREATHER WELD RISER		
02-0874	16	HOSE END 1 WB X 1 JICF		
02-0898	17	ELL 16 ORM X 1 JICM 90		
02-0906	18	ADAPTER 16 ORF X 20 ORM		
02-0931	19	FLANGE C61 1 NPT W/BOLTS		
02-0932	20	HUB COUPLING		
020935	21	ELL 2 NPTM X 2 NPTF 90		
02-0938	22	FILTER SUCTION 2		
02-0970	23	VALVE CHECK 1 NPTF 65PSI		
02-1065	24	FLANGE SUCTION 2		
02-3023	25	FLANGE C61 1 1/4 #20 O-RING		
02-3043	26	SUBPLATE 08 1 1/4 PORTS		
02-3076	27	HOSE END 1 WB X 1 NPTM		
02-3113	28	VALVE RELIEF 50GPM		
02-3114	29	ELL 1" NPTM W/1/4 HOLE		
02-3115	30	PIPE 2" SCH 40 X 17 1/2		
02-3116	31	PIPE 1 1/2 SCH 40 X 10 THRD		
03-1179	32	MOTOR 30 HP 1760 TEFC		
05-0015	33	NUT 3/8-16 UNC HEX SELF-LOCKING		
05-0018	34	NUT 1/2-13NC HEX SELF-LOCKING		
05-0052	35	WASHER 1/2 FLAT		
05-0061	36	BOLT 1/2-13 X 1 1/4 HEX HD GR2		
05-0064	37	WASHER 1/2 LOCK		
05-0159	38	WASHER 3/8 LOCK		
05-0199	39	BOLT 1/2-13 X 2 1/2 SHCS		
05-0243	40	WASHER LOCK 5/8 GRADE 8		
05-0338	41	BOLT 5/8 X 1 1/2 GR 2 HHCS ZIN		

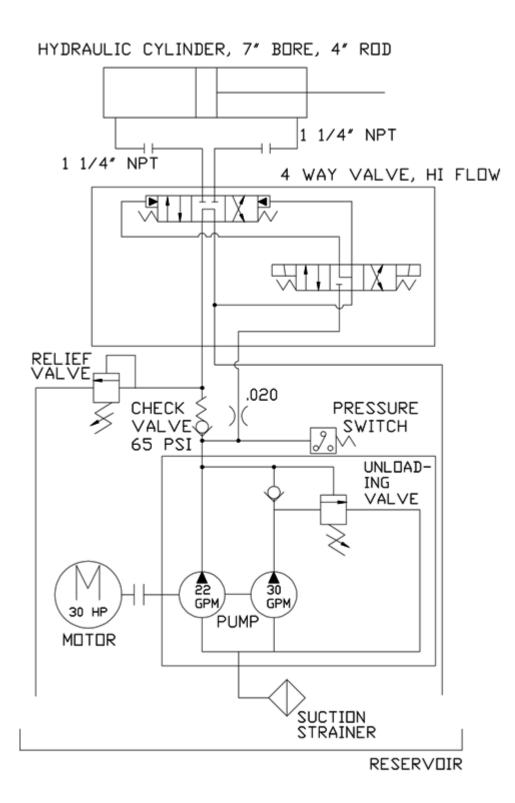
POWER UNIT - 30HP/52GPM (CONTINUED)

PARTS LIST				
PART # REF # DESCRIPTION		DESCRIPTION		
05-2146	42	BOLT 3/8-16 X 5 SOCKET HD CAPS		
06-0011	43	DECAL MOTOR ROTATION 3/4 X 4		
09-4540	44	1/4 PL X 14 X 21-1/16		
02-0880	45	HOSE 1 WB 4000PSI		
02-0632	46	TUBING 1/4 OD .035 WALL STEEL		

ELECTRIC SCHEMATIC - E-5958



HYDRAULIC SCHEMATIC - 30HP/52GPM E-231



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SECTION 5 REPLACEMENT PARTS

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

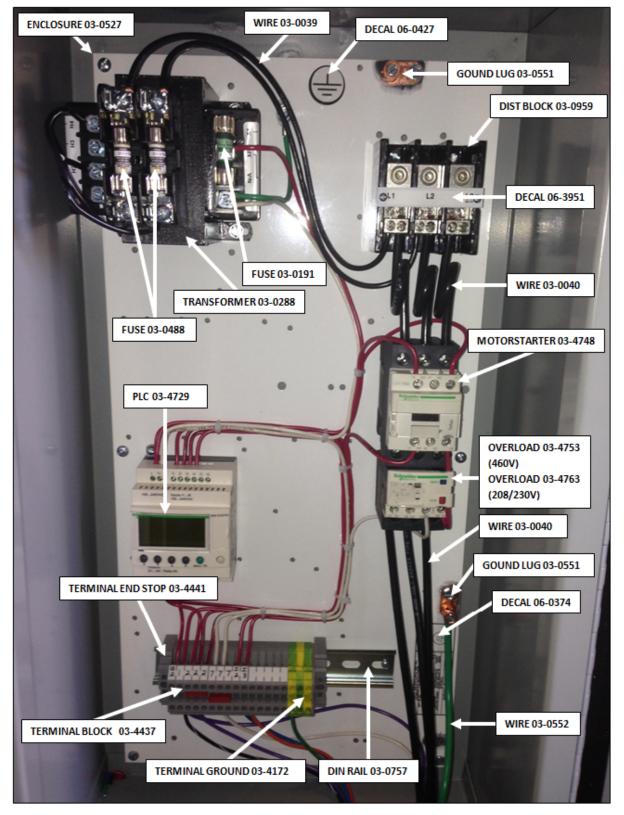
8:00am - 5:00pm

(Central Standard Time)

Replacement Parts

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.



Replacement Parts

DECAL PARTS LIST

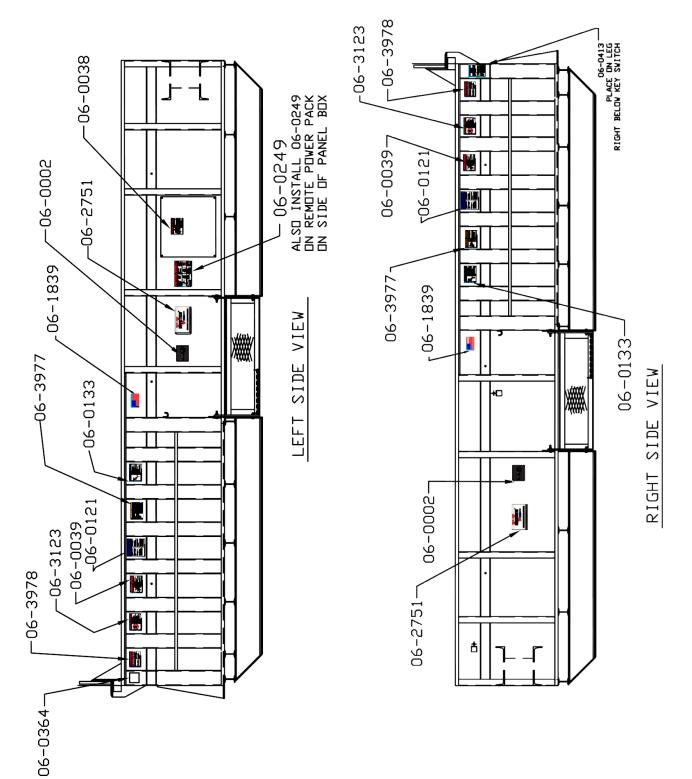
Warning Decal Requirements

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.

PART #	DESCRIPTION	QTY
06-0121	NOTICE: FEDERAL REGULATIONS PROHIBIT OPERATION OF THIS EQUIPMENT BY PERSONS UNDER 18 YEARS OF AGE.	2
06-0249	DANGER: LOCK OUT AND TAG OUT POWER BEFORE PERFORMING ANY MAINTENANCE, REPAIR, OR ADJUSTMENT, OR BEFORE ENTERING MACHINE.	2
06-0002	RAM-JET	2
06-0038	WARNING: DO NOT REMOVE ACCESS COVER EXCEPT FOR SERVICING; FOLLOW LOCKOUT/TAGOUT PROCEDURES.	6
06-0039	DANGER: DO NOT ENTER	3
06-0364	COMPACTOR SERIAL NUMBER	1
06-3977	WARNING: DO NOT OPERATE	2
06-3978	DANGER: DO NOT OVERRIDE	2
06-0133	WARNING: KEEP OFF!	2
06-1839	AMERICAN FLAG	1
06-2751	MARATHON COMPACTION & RECYCLING SOLUTIONS	
06-3123	DANGER: PERMIT REQUIRED! CONFINED SPACE!	3
06-0413	WARNING: CRUSH HAZARD	1

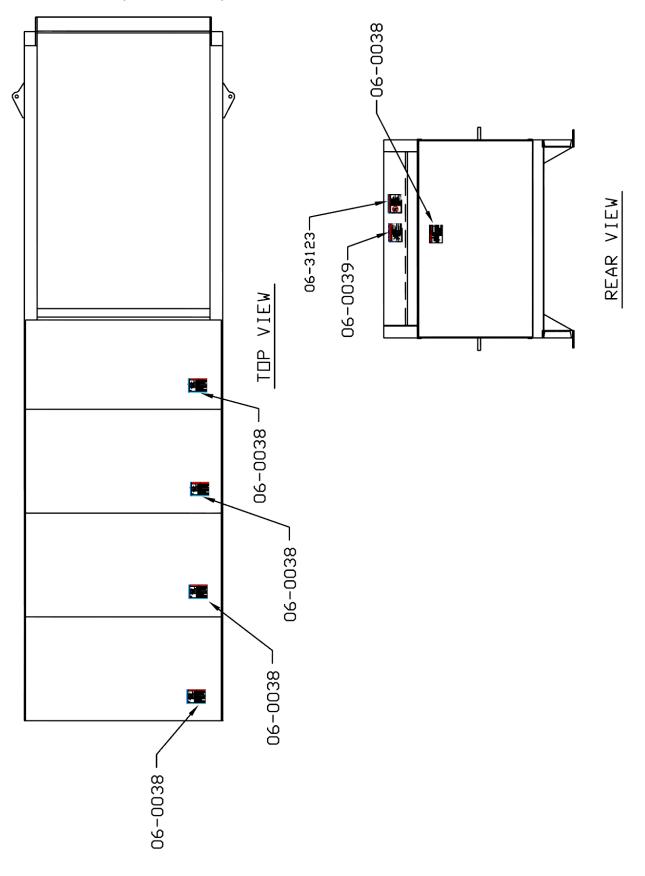
RJ-575HD Horizontal Compactor Replacement Parts

DECAL PLACEMENT



RJ-575HD Horizontal Compactor Replacement Parts

DECAL PLACEMENT (CONTINUED)



Replacement Parts

DECAL IMAGES

06-0038



06-0249			
	NGER	A PEL	IGRC
HIGH VOLTAGE HAZARD! Lock out and tag out power before performing any maintenance, repair, adjustment, or before entering machine. Failure to comply will result in de	CRUSHING/ SHEARING HAZARD! Keep clear.	PRESSURIZED FLUID HAZARD! Relieve pressure before performing maintenance or repairs. umple cen esta disposición, se cai	PERMIT REQUIRE CONFINED SPAC Follow company confined space and lockout/tagout procedures before entering. sará la merte o lesiones gr
\mathbf{x}			
iPELIGRO DE ALTO VOLTAJE! Bloquear y rotular la energía eléctrica antes de hacer trabajos de mantenimiento, reparaciones, ajustes o de entrar a la máquina.	;PELIGRO DE APLASTAMIENTO/ CIZALLAMIENTO! Mantenerse alejado.	¡PELIGRO DE FLUIDO PRESURIZADO! Alivie la presión antes de efectuar trabajos de mantenimiento o reparación.	PERMISO REQUERID ESPACIOS ESTRECH Seguir Ios procedimientos de bloqueo y rotulado antes de entrar.

0 UIRED PACE! ny e and fore ones (IERIDO! RECHOS

06-0039

CRUSHING/SHEARING HAZARD! DO NOT ENTER! Keep all body parts out of machine during operation. Failure to comply will result in death or serious injury. PELIGRO DE APLASTAMIENTO/CIZALLAMI NO ENTRAR! INO ENTRAR: Mantenga todas las partes del cuerpo fuera de la máquina durante el funcionamiento. Si no se cumple con esta disposición, se causará la muerte o lesiones graves

06-0002



06-2751



06-0364

MARATHON
VERNON, AL - PHOENIX, AZ 1-800-633-8974
COMPACTORS CUL
168F
MODEL NO.
SERIAL NO.
DATE OF MFG. PLANT #
FORCE RATING (MAX., LBS.)
MANUFACTURED IN ACCORDANCE WITH ANSI STANDARDS IN EFFECT AT DATE OF MANUFACTURE
MADE IN USA 06-0364

06-0121

NOTICE	AVISO
 Federal law prohibits operation of equipment by persons under 18 years of age. 	 Las leyes federales prohíben que personas menores de 18 años de edad operen los equipos.
 Machine may only be loaded and operated by persons who have been authorized and properly trained. 	 Las personas que han sido autorizadas y debidamente entrenadas son las únicas que pueden cargar y operar la máquina
U.S. Department of Labor age restrictions apply.	 Sujeta a las restricciones de edad del Departamento del Trabajo de Estados Unidos.
 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 custody of persons 18 years and older. 	La llave en el interruptor "ON-OFF" (ENCENDIDO/APAGADO) se debe girar a la posición "OFF" (APAGADO y retirarla cuando este equipo no está en funcionamiento. La llave debe permanecer hajo el cuidado de personas mayores de 18 año;

06-0133





06-3978

DO NOT override or tamper	NO sobrepase ni altere los
with safety devices. They	dispositivos de seguridad.
are installed for your safety.	Se han instalado para su
	seguridad. El incumplimiento
Failure to comply will result	de esta norma podría
in death or serious injury.	resultar en la muerte o
	lesiones graves.

06-0413



06-1839

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www.marathonequipment.com

Customer Care: 800-633-8974

Parts Central: 800-528-5308 www.mecomerchant.com

Technical Service and Warranty: 877-258-1105

Customer Support:

Marathon Equipment Company P.O. Box 1798 Vernon, AL 35592-1798