



# Heavy Duty Vertical Baler

## V-6030 HD

OPERATION, SERVICE, AND INSTALLATION

ISSUED JUNE 2019

CUSTOMER NAME: \_\_\_\_\_

SERIAL NUMBER: \_\_\_\_\_

**COMPACTION & RECYCLING SOLUTIONS**

**0003-VB-0619**



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

Marathon Customer Care: 1.800.633.8974



# WARNING

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

## IMPORTANT SAFETY NOTICE

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

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0003-VB-0619

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# **SECTION 1**

# **GENERAL INFORMATION**

# Heavy Duty Vertical Baler

## General Information

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### INTRODUCTION

Thank you for purchasing a Marathon® Vertical Baler!

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. Z245.5, "SAFETY REQUIREMENTS FOR INSTALLATION, MAINTENANCE AND OPERATION"**

**ANSI STANDARD NO. Z245.51, "SAFETY REQUIREMENTS FOR BALING EQUIPMENT"**

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

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**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**



# Heavy Duty Vertical Baler

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### 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.

# Heavy Duty Vertical Baler

## General Information

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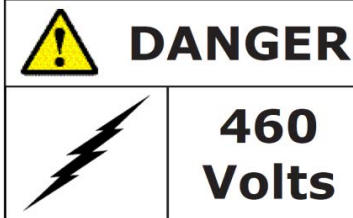
### LOCK-OUT/TAG-OUT INSTRUCTIONS

#### **DANGER**



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


#### **DANGER**

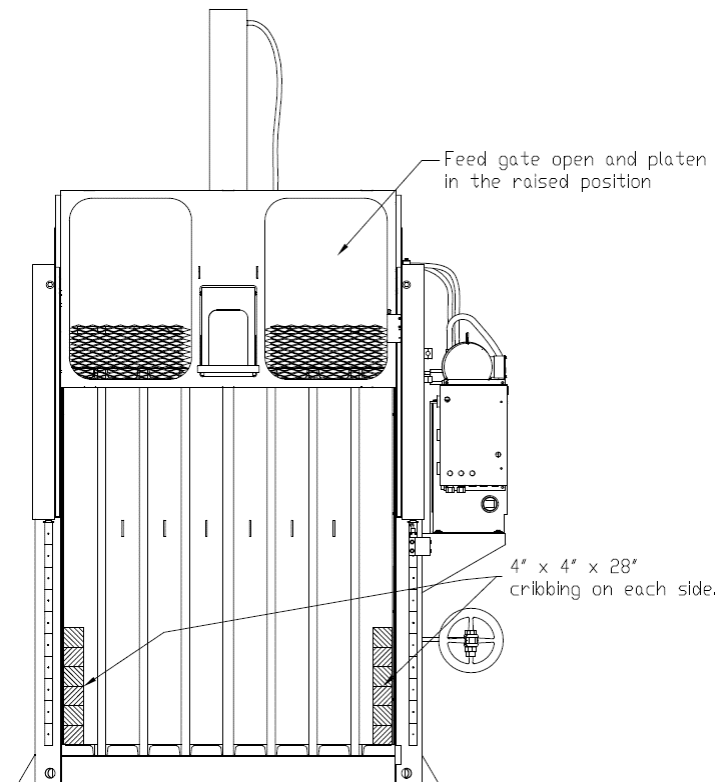


**ELECTRICAL:** The motor control panel contains high voltage components. Only authorized service personnel should be allowed inside the box. Authorized service personnel should be allowed inside the box only after the baler has been locked-out and tagged-out.

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. Remove the bale from the baler. See Bale Tie-off / Bale Eject Instructions . Perform steps 1-9.
2. Install six 4" x 4" x 28" timbers (new condition) horizontally (front to back) on each side of the charge chamber.



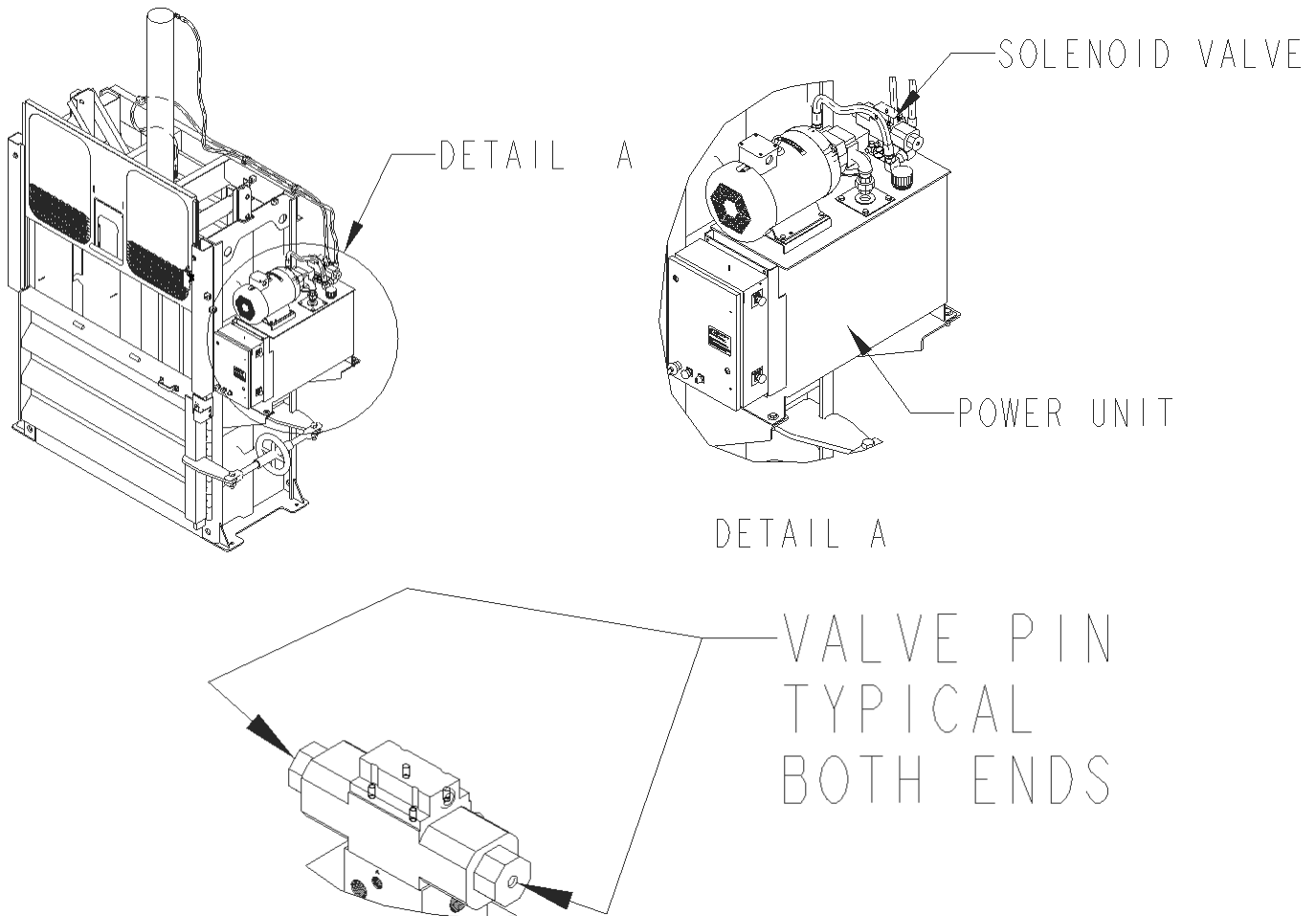
# Heavy Duty Vertical Baler

## General Information

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### LOCK-OUT/TAG-OUT INSTRUCTIONS (CONTINUED)

3. Close and latch the bale chamber door.
4. Lower the feed gate.
5. Lower the Platen by turning the Platen switch to the "Manual Lower" position and hold. Release the Platen switch once the platen is resting on the timber cribbing.
6. Move the main disconnect lever to the OFF position.
7. Padlock the disconnect lever with a keyed padlock and take the key with you.
8. 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. Warning: Do not energize without permission of \_\_\_\_\_."
9. After locking and tagging the baler, try to start and operate the baler (See Operating Instructions <sup>30</sup> Steps 8 & 9) to make sure that the lock-out and tag-out is effective. If so, remove the key from the key switch and take it with you.
10. Release stored hydraulic energy from the system by manually depressing the solenoid valve pin on each side of the valve. The solenoid valve is located on the top of the power unit.



# Heavy Duty Vertical Baler

## General Information

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### SPECIFICATIONS

<b>MODEL NUMBER</b>	<b>V-6030 HD</b>
<b>Performance</b>	
Cycle Time	56 Seconds
Total Force (1-Phase)	50,900 lb. (226 kN)
Platen Face Force (1-Phase)	30 PSI (207 kPa)
Total Force (3-Phase)	62200 LB. (277 kN)
Platen Face Force (3-Phase)	37 PSI (255 kPa)
<b>Electrical Equipment</b>	
Control Voltage	120 VAC
Motor	10 HP
RPM	1750 RPM
<b>Hydraulic Equipment</b>	
Pump Capacity	10.5 GPM
System Pressure (1-Phase)	1600 PSI (110 bar)
System Pressure (3-Phase)	2000 PSI (138 bar)
Maximum System Pressure (1-Phase)	1800 PSI (124 bar)
Maximum System Pressure (3-Phase)	2200 PSI (152 bar)
Cylinder Bore	6" (152 mm)
Cylinder Rod	3.5" (88.9 mm)
Cylinder Stroke	48" (1,219 mm)
Reservoir Capacity	20 GAL (75.7 liters)
<b>Bale Size</b>	
Bale Width	60" (1524 mm)
Bale Depth	30" (762 mm)
Bale Height	48" (1219 mm)
Bale Door Clearance	58 3/4" (1492 mm)
Overall Height	140 1/8" (3559 mm)
Overall Width	88 15/16" (2259 mm)
Overall Depth	44 3/4" (1137 mm)

# Heavy Duty Vertical Baler

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<b>MODEL NUMBER</b>	<b>V-6030 HD</b>
Overall Depth (w/opt wire guides)	52 1/2" (1,334 mm)
Weight	4800 lbs (2177 kg)
Bale Ties	14 ga. x 14' (356 mm)

# Heavy Duty Vertical Baler

## General Information

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### 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.

### 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

# Heavy Duty Vertical Baler

## General Information

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### GUARDS AND ACCESS COVERS

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

#### **WARNING**

---

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

---

### WARNING DECALS ON THE UNIT

#### **WARNING**

---

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

---

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

# Heavy Duty Vertical Baler

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### 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.

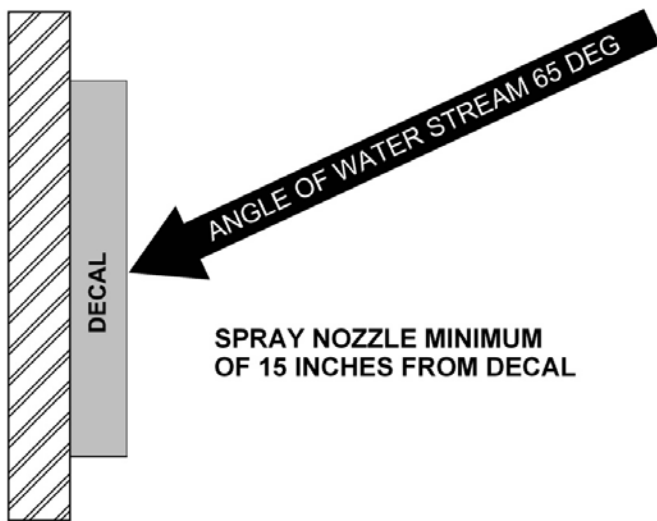


# Heavy Duty Vertical Baler

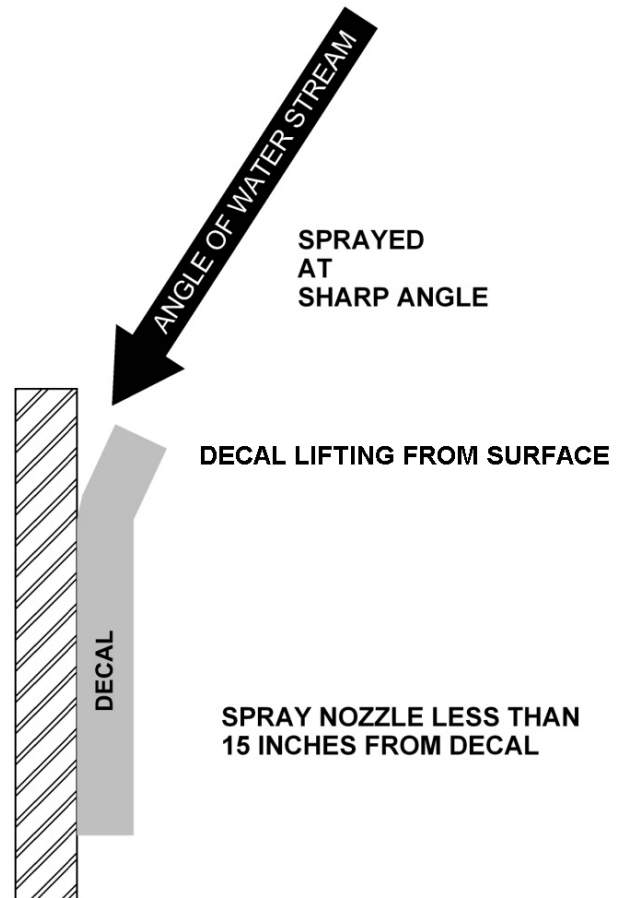
## General Information

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### DECAL CARE (CONTINUED)



RECOMMENDED TECHNIQUE



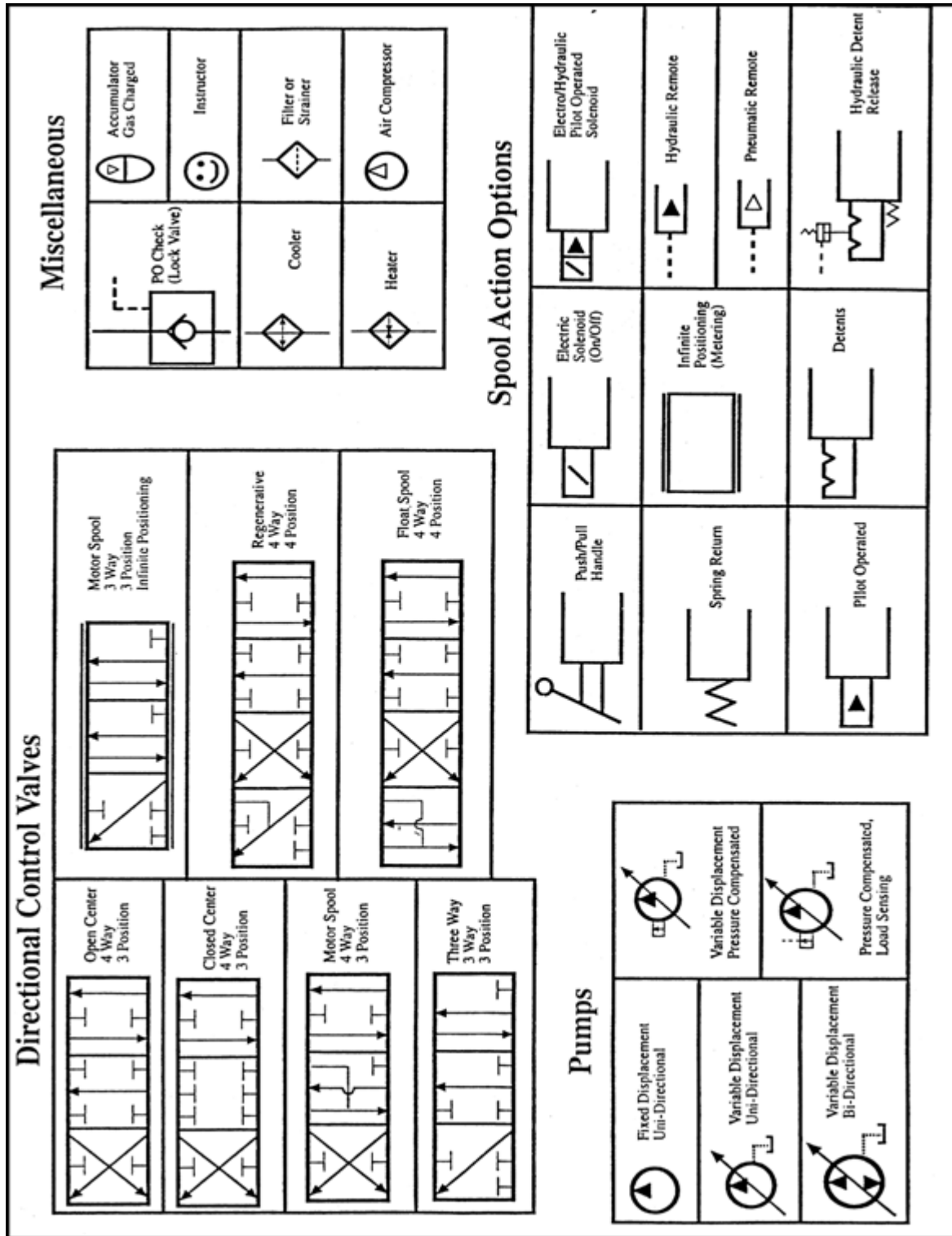
INCORRECT TECHNIQUE

# Heavy Duty Vertical Baler

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### HYDRAULIC SYMBOLS

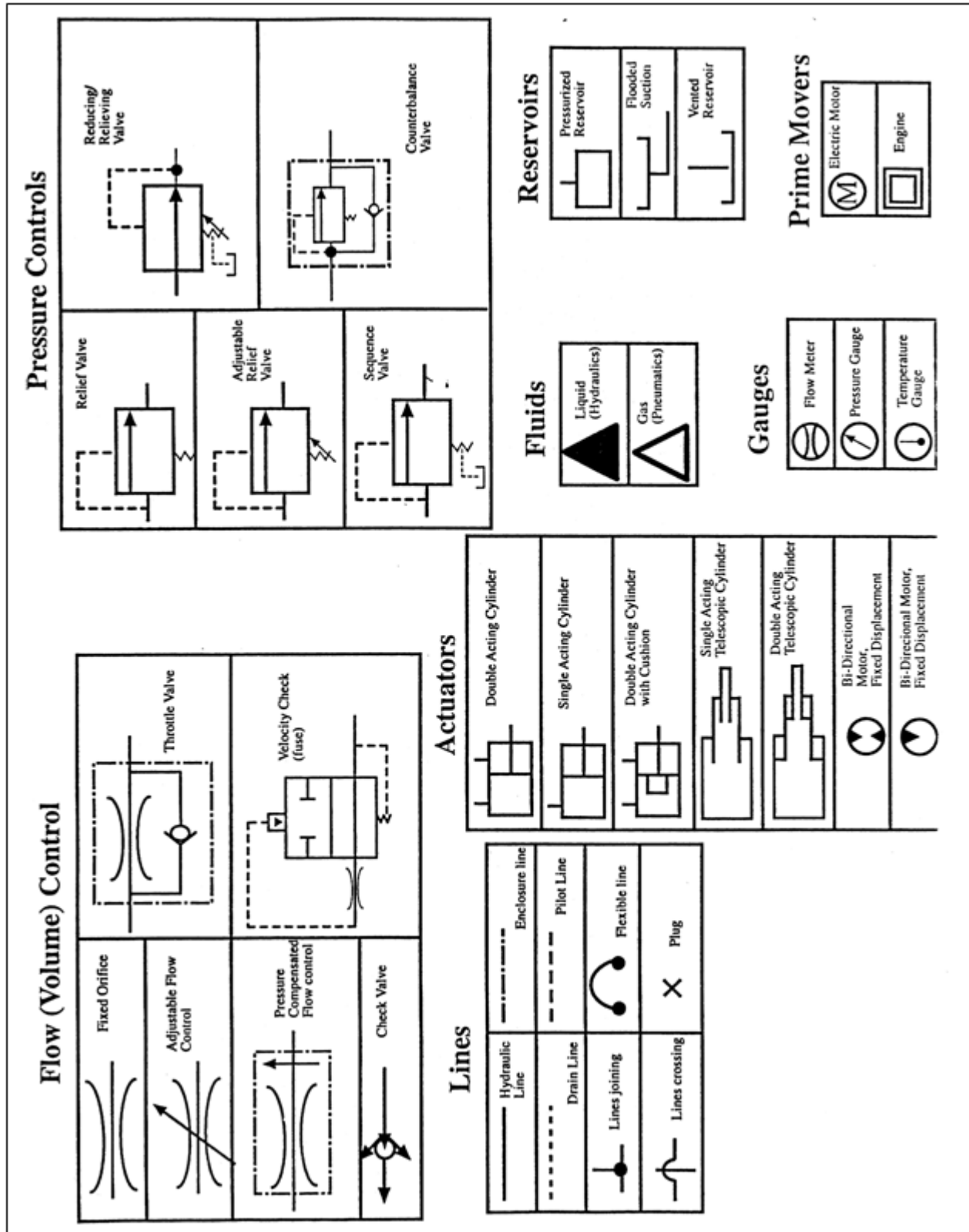


# Heavy Duty Vertical Baler

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### HYDRAULIC SYMBOLS (CONTINUED)





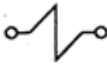




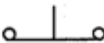

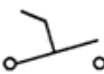

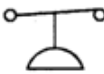



# Heavy Duty Vertical Baler

## General Information

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### ELECTRICAL SYMBOLS

#### SYMBOL DEFINITIONS

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

# **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](http://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)

# Heavy Duty Vertical Baler

## Installation

### GENERAL REQUIREMENTS

This section of the manual covers the assembly and installation of any two-ram baler. The following pages cover general installation, plumbing installation, and electrical installation.

#### **CAUTION**

Review this manual before beginning 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 installation and as a completed system. This baler should be installed in accordance with the most current version of ANSI standard Z245.5 at the time of manufacture.

#### **NOTICE**

Operating instructions in the first section of this manual are not intended as a substitute for training and experience in the proper use and safety procedures in operating this equipment.

#### **NOTICE**

Marathon does not assume responsibility for installation procedures of this equipment. Conformance to applicable local, state, and federal laws concerning installation is the customer responsibility.

#### A. Concrete Pad or Floor

The baler foundation should be a minimum of 6" thick, 3000 psi steel reinforced concrete. It is preferred that the concrete pad be flush with the surrounding ground level.

#### B. Anchoring

1. Anchor the baler using four 3/4" x 6" long anchor bolts (Red Head type recommended).

#### **NOTICE**

Make sure the anchor bolts do NOT torque or twist the baler body when tightened.

2. Allow enough space around the baler for any maintenance or service (including cylinder removal).

#### **DANGER**

Parts of the platen extend above the top of the baler when platen is fully raised.

#### **DANGER**

Do not climb on sides of baler. Use a ladder or platform when working on top of the baler or other areas of the baler that cannot be reached from ground level.

#### C. Decals

Installation of the baler is not complete until an inspection of warning decals has been made. All warning decals must be in place prior to operating the baler. Decals should be clearly visible, legible, securely applied, and in the proper location. Notify your distributor or Marathon Equipment Company if any warning decals are missing or become damaged and need replacing.

# Heavy Duty Vertical Baler

## Installation

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### INSTALLATION START-UP

#### **DANGER**

Do not climb on sides of baler. Use a ladder or platform when working on top of the baler or other areas of the baler that cannot be reached from ground level.

#### **DANGER**

Parts of the platen extend above the top of the baler when platen is fully raised.

#### **CAUTION**

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

1. Check to make sure that all electrical and hydraulic connections have been made.
2. Check the rotation of the motor. This will require TWO people.
  - a. Close the bale chamber door and feed gate.
  - b. Turn the disconnect switch to the ON position.
  - c. Insert the key into the key switch and turn it to the ON position.
  - d. Turn the **Platen** switch to **Manual Lower** and hold for five seconds then release.
  - e. Check motor rotation by watching the fan rotation on end of motor. There is a rotation decal on the motor showing correct rotation. Check the direction of platen movement. If it moves down, direction of motor rotation is correct.

#### **NOTICE**

If platen does not move down, **Lock-out and Tag-out the baler** . Switching any two of the three incoming electric wires to the motor starter will change the motor/pump rotation.

3. Manually operate the platen several times to fill the cylinder and hydraulic lines with oil.
4. With the platen fully raised, check the oil level in the hydraulic reservoir. Make sure the oil level is 3/4 full in the sight gauge.
5. Check the function of all interlock switches and stop switches.

#### **NOTICE**

The baler is equipped with an electrical interlock which prevents the use of the **Auto Cycle**, and **Manual Lower** switches when the feed gate is in the up position or the bale door is in the open position. If either of these buttons start the baler when the feed gate is up, discontinue use of the baler until repairs have been made.

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



# Heavy Duty Vertical Baler

## Installation

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### RAISING THE PLATEN

#### DANGER

Only thoroughly trained and experienced service personnel should perform following procedure. The hydraulic cylinder operates at high pressure and can cause serious injury or death!

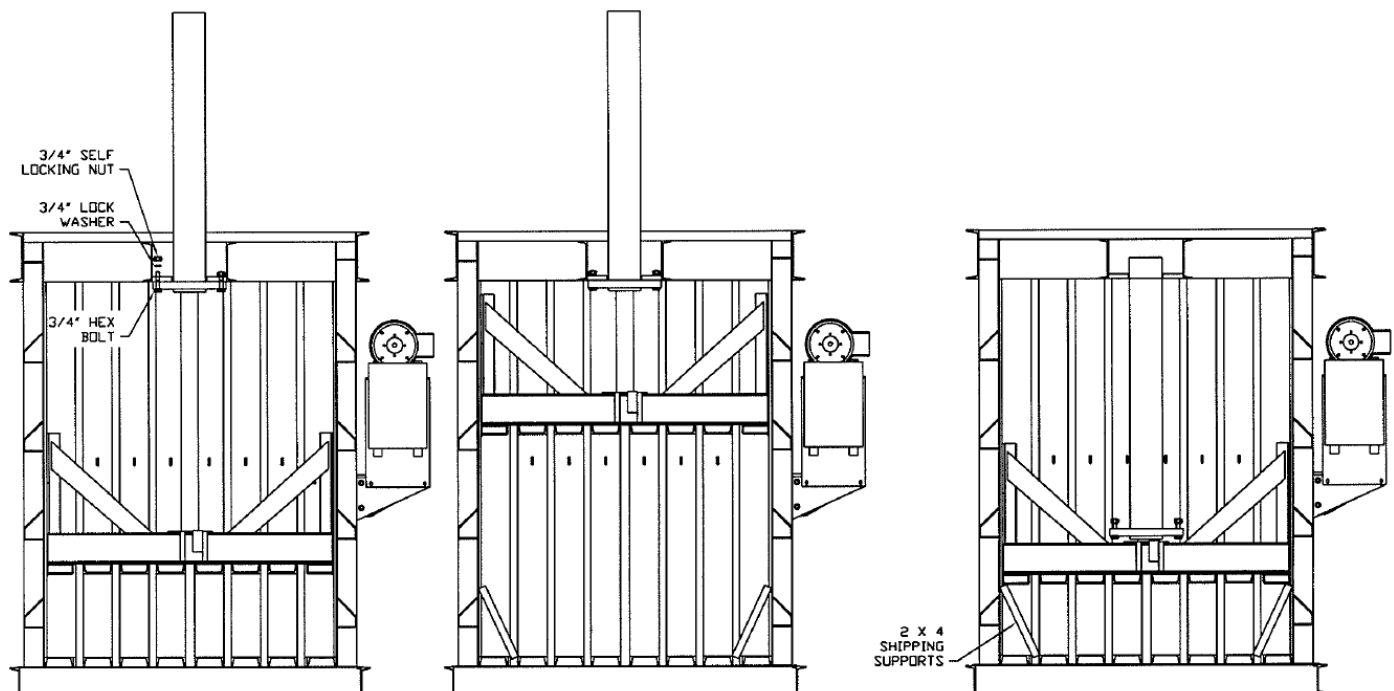
#### NOTICE

Raise the cylinder BEFORE anchoring baler!

When the baler is shipped in a vertical position, the cylinder and platen are lowered and supported as shown in the drawing to the right.

Part of the installation process involves raising and securing the cylinder prior to using the baler.

Follow the procedure below to connect the cylinder to the top of the baler.



1. Connect power to the baler, turn on and lower the platen via the controls, thus raising the cylinder into position.
2. Align holes in cylinder mounting plate with holes in body pinning plate and secure with 3/4" provided hardware (as shown).
3. Once the cylinder is secured, raise the platen then remove and discard the 2" x 4" (50 mm x 100 mm) wood shipping supports.
4. Close the bale door.
5. Secure the bale door latch.
6. Close feed gate.

Note: Feed gate and bale door not shown in these drawings for clarity purposes.

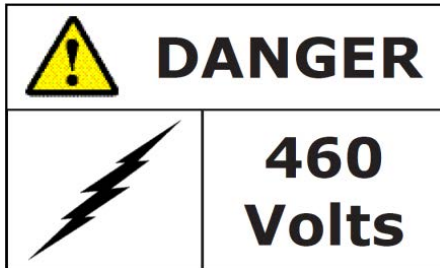
# Heavy Duty Vertical Baler

## Installation

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### 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".



The panel box contains high voltage components. Only authorized service personnel should be allowed inside. See **Lock-Out & Tag-Out Instructions** in the Service section.



#### **DANGER**

Before making any electrical connection, be sure that the disconnect switch has been locked-out and tagged-out.


#### **CAUTION**

All equipment should be grounded per National Electric Code.

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.

#### **NOTICE**

Refer to the FUSE AND CIRCUIT BREAKER chart and WIRE SIZE chart  of this manual during the electrical installation.

1. Before connecting power to the baler, check the incoming line voltage with a voltmeter. Also, check voltage wiring in the baler panel box. If the baler is not wired to proper voltage, make necessary corrections before proceeding.
2. A lockable fused disconnect switch is provided in the panel box. Three phase power should be connected to the top of this switch (a single-phase option is also available).



#### **WARNING**

Be careful not to let incoming wires touch each other.

#### **NOTICE**

A properly sized equipment ground should be connected to the enclosure ground lug.

### Hydraulic Connections

1. Connect all hydraulic hoses. Refer to Hydraulic Schematic – V-6030-HD  (Typical Design) to ensure proper connections.
2. Fill the reservoir with hydraulic oil. See General Information - Recommended Oils . Fill until oil is 3/4 up in the sight gauge. After start-up, it may be necessary to add more oil to the reservoir. Oil level should be checked with platen in fully raised position.

# **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](http://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)

# Heavy Duty Vertical Baler

## Operation

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### PRE-OPERATION INSTRUCTIONS

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

This baler 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.

#### NOTICE

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


#### WARNING

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

#### WARNING

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

#### WARNING

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

#### WARNING

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

#### WARNING

This baler is controlled by photocells and will start automatically when photocells detect ANY OBJECTS in the charge box.

#### WARNING

The compression ram in this baler travels at a very fast speed. Stand clear of the baler when in operation.

#### WARNING

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

#### CAUTION

The baler hydraulic system operates at high pressures and at high temperatures. If you suspect a leak, do not check with your hands and avoid contact with piping, hoses, and cylinders.

# Heavy Duty Vertical Baler

## Operation

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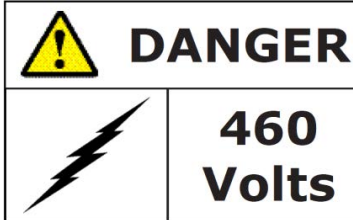
### LOCK-OUT/TAG-OUT INSTRUCTIONS

#### **DANGER**



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


#### **DANGER**

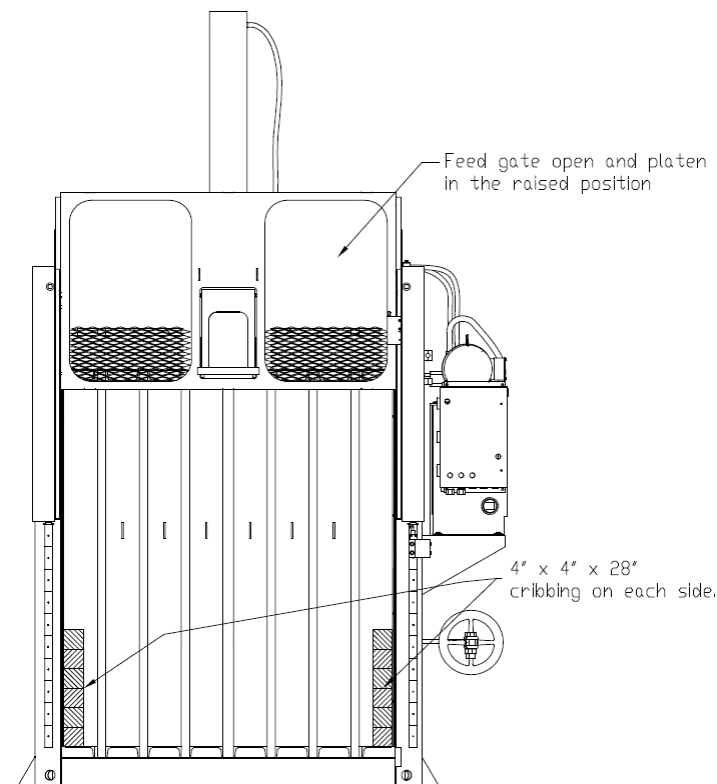


**ELECTRICAL:** The motor control panel contains high voltage components. Only authorized service personnel should be allowed inside the box. Authorized service personnel should be allowed inside the box only after the baler has been locked-out and tagged-out.

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. Remove the bale from the baler. See Bale Tie-off / Bale Eject Instructions . Perform steps 1-9.
2. Install six 4" x 4" x 28" timbers (new condition) horizontally (front to back) on each side of the charge chamber.



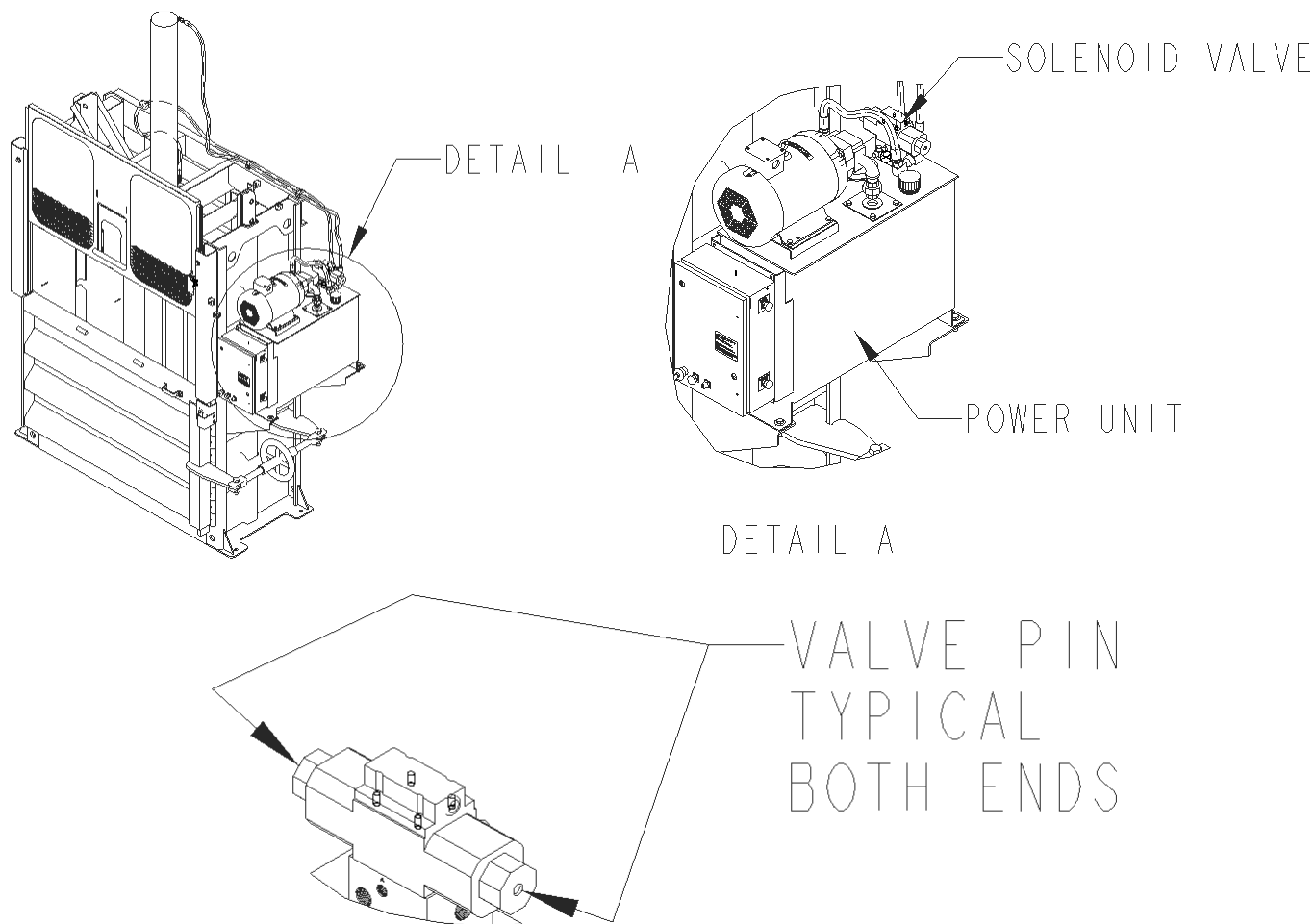
# Heavy Duty Vertical Baler

## Operation

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### LOCK-OUT/TAG-OUT INSTRUCTIONS (CONTINUED)

3. Close and latch the bale chamber door.
4. Lower the feed gate.
5. Lower the Platen by turning the Platen switch to the "Manual Lower" position and hold. Release the Platen switch once the platen is resting on the timber cribbing.
6. Move the main disconnect lever to the OFF position.
7. Padlock the disconnect lever with a keyed padlock and take the key with you.
8. 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. Warning: Do not energize without permission of \_\_\_\_\_."
9. After locking and tagging the baler, try to start and operate the baler (See Operating Instructions <sup>30</sup> Steps 8 & 9) to make sure that the lock-out and tag-out is effective. If so, remove the key from the key switch and take it with you.
10. Release stored hydraulic energy from the system by manually depressing the solenoid valve pin on each side of the valve. The solenoid valve is located on the top of the power unit.



# Heavy Duty Vertical Baler

## Operation

### CONTROL LAYOUT WITH OPERATING INSTRUCTIONS

<div style="display: flex; justify-content: space-between;"> <div style="background-color: red; color: white; padding: 5px;"> <b>⚠ DANGER/PELIGRO</b> </div> <div style="font-size: 2em; font-weight: bold;">VOLTS/VOLTAJE</div> </div>	
 <p>Stay clear of bale chamber when light is illuminated. If light is illuminated when bale door or feed gate is open, discontinue use of this equipment and call qualified service personnel.</p>	<p>Mantenerse alejado de la cámara de fardos cuando la luz está encendida. Si la luz se enciende con la puerta para fardos o la compuerta de entrada abierta, suspender la utilización de este equipo y llamar a un técnico competente.</p> 
<p style="text-align: center;"><b>OPERATING INSTRUCTIONS</b></p> <p>** Read and understand operating instructions before operating. ** Press EMERGENCY STOP button to stop machine. ** Never place any part of body inside bale chamber. ** Stand clear while baler is in operation. ** Federal law prohibits operation of equipment by persons under 18 years of age. ** Turn off and remove key after use. ** Stand clear when bale is ejecting.</p> <ol style="list-style-type: none"> <li>Place a large, flat piece of material flat on floor.</li> <li>Feed material into baler.</li> <li>Close feed gate.</li> <li>Turn key to AUTOCYCLE position to compress material. Repeat steps 2 through 4 until platen shifts when alignment arrows on platen and baler are aligned. <b>NOTE:</b> On balers with Bale Made light, light will illuminate when bale is made. Your bale is now ready to tie.</li> <li>Turn PLATEN-MANUAL RAISE switch to retract platen, then insert a large, flat piece of material across top of bale.</li> <li>Close feed gate.</li> <li>Turn PLATEN-MANUAL LOWER switch until platen stops against bale.</li> <li>With all personnel clear of bale door, release bale door latch from side.</li> <li>Ensure feed gate and bale door are opened and are clear of bale path of ejection.</li> </ol> <p><b>Wear safety glasses and leather gloves during this operation.</b></p> <ol style="list-style-type: none"> <li>Tie-off bale by inserting bale ties through slots in platen, loop end first. Feed wire through until it comes through slots in bottom. Tie-off each wire before inserting the next. Bale ties should be tightened hand tight, allowing for bale expansion.</li> <li>At back of baler, insert chain ejector handles over the two platen hooks protruding from the back of platen. <b>NOTE:</b> On balers with Auto Eject, bale ejector is automatically engaged when bale door is opened.</li> <li>Stand at side, ensure all personnel are clear of front of baler. Turn PLATEN-MANUAL RAISE switch to eject bale.</li> <li>Remove bale after ejection.</li> <li>Close bale door, close feed gate, and turn key to AUTOCYCLE position to cycle and reset the ejector. Bale sequence is ready to be repeated.</li> </ol>	<p style="text-align: center;"><b>INSTRUCCIONES DE USO</b></p> <p>** Leer y comprender las instrucciones de funcionamiento antes de usar. ** Oprimir el botón de PARADA DE EMERGENCIA para parar la máquina. ** Nunca colocar ninguna parte del cuerpo dentro de la cámara de fardos. ** Mantenerse alejado mientras la enfardadora está funcionando. ** Los reglamentos federales prohíben que personas menores de 18 años de edad manejen el equipo. ** Apagar y retirar la llave después del uso. ** Mantenerse alejado mientras se expulsa el fardo.</p> <ol style="list-style-type: none"> <li>Colocar un pedazo grande y liso de material plano en el piso.</li> <li>Introducir el material en la enfardadora.</li> <li>Cerrar la compuerta de entrada.</li> <li>Girar la llave a la posición de CICLO AUTOMÁTICO para comprimir el material. Repetir los pasos 2 al 4 hasta que la platina se desplace cuando las flechas de la platina y de la enfardadora quedan alineadas. <b>NOTA:</b> En las enfardadoras con luz de fardo terminado, la luz se ilumina cuando se termina de formar el fardo.</li> <li>Girar el interruptor de PLATINA-ELEVACION MANUAL para retraer la platina y luego insertar un pedazo largo y plano de material a través de la parte superior del fardo.</li> <li>Cerrar la compuerta de entrada.</li> <li>Girar el interruptor de PLATINA-BAJADA MANUAL hasta que la platina se detenga contra el fardo.</li> <li>Con todo el personal alejado de la puerta para fardos, soltar el pestillo de la puerta desde el costado.</li> <li>Asegurarse de que la compuerta de entrada y la puerta para fardos estén abiertas y alejadas del paso de expulsión del fardo.</li> </ol> <p><b>Usar gafas de seguridad y guantes de cuero durante esta operación.</b></p> <ol style="list-style-type: none"> <li>Atar el fardo insertando amarras a través de las ranuras en la platina, con el extremo de lazo primero. Introducir el alambre hasta que salga por las ranuras en la parte inferior. Atar cada alambre antes de insertar el siguiente. Las amarras de fardos deben apretarse con la mano, para permitir la expansión del fardo.</li> <li>En la parte trasera de la enfardadora, insertar las manijas del eyector de cadena sobre los dos ganchos que sobresalen por la parte trasera de la platina. <b>NOTA:</b> En las enfardadoras con eyección automática, el eyector se activa automáticamente cuando se abre la compuerta de la enfardadora.</li> <li>Pararse a un lado y comprobar que las demás personas estén alejadas del frente de la enfardadora. Girar el interruptor de PLATINA-ELEVACION MANUAL para expulsar el fardo.</li> <li>Retirar el fardo después de la expulsión.</li> <li>Cerrar la puerta para fardos, cerrar la compuerta de entrada y girar la llave a la posición de CICLO AUTOMÁTICO para hacer funcionar y reposicionar el eyector. La secuencia de enfardar está lista para ser repetida.</li> </ol>
<div style="display: flex; justify-content: space-around;"> <div style="background-color: red; color: white; padding: 5px;"> <b>IN CASE OF EMERGENCY: PRESS RED STOP BUTTON</b> </div> <div style="background-color: red; color: white; padding: 5px;"> <b>EN CASO DE EMERGENCIA: PRESIONE EL BOTON ROJO</b> </div> </div>	
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>POWER ALIMENTACION ON/ENC</p> </div> <div style="text-align: center;">  <p>EMERGENCY STOP</p> </div> <div style="text-align: center;">  <p>PLATEN PLATINA</p> </div> <div style="text-align: center;">  <p>Bale Made Light</p> </div> <div style="text-align: center;">  </div> </div>	

\* Non-fused disconnect switch (optional)

\*\* Bale made light (optional)



# Heavy Duty Vertical Baler

## Operation

### CONTROLS

#### 1. **Emergency Stop** — (Red Push Button)

Pressing the Emergency Stop button will stop the machine immediately.

### NOTICE

Pull button OUT to reset.

#### 2. **OFF – ON – AUTO** - (Key Switch)

- Turn **OFF – ON – AUTO** switch to **OFF** position and remove key when not in use.
- Turn **OFF – ON – AUTO** switch to the **ON** position to operate baler with the **PLATEN SWITCH (MANUAL RAISE and MANUAL LOWER)**.
- Turn **OFF – ON – AUTO** switch to **AUTO** cycle position and baler will start; platen will go down and return to the load position (one complete cycle).

#### 3. **Platen (Manual Raise / Manual Lower)** — (Selector Switch)


Turn the switch to Manual Raise and hold to manually raise the platen. This works with the feed gate and bale door opened or closed. It is normally used during bale ejection. It can also be used to interrupt the auto cycle, and raise the platen should it become necessary. The Manual Raise switch is a “hold-to-run” control, meaning that the baler will stop when it is released.

### WARNING

Stay clear of moving parts when using the manual raise switch with the feed gate and/or bale door open.

Turn the switch to Manual Lower and hold to manually lower the platen. The feed gate, and bale door must be closed. It can be used to interrupt the auto cycle, and lower the platen should it become necessary. The Manual Lower switch is a “hold-to-run” control also, meaning that the baler will stop when it is released.

#### 4. **Cycle Ready Light** — (Red Light)

This light will warn the operator of an interlock switch malfunction. If the light is ON and the feed gate is in the UP position, there is a problem. Discontinue use of the baler. Turn off power to the baler, and Lock-out/Tag-out per the instructions . Then contact a qualified service person. The light should be ON when the feed gate is in the down position, indicating the baler is ready for operation.

#### 5. **Bale Made Light** — (Red Light) (Optional)

This light will come ON if enough material has been compacted to make a complete bale.

#### 6. **External Reset** — (Manual Push Button)

Allows the operator to reset overload protection without opening the panel box.

# Heavy Duty Vertical Baler

## Operation

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### OPERATION

#### **WARNING**

Do not operate compactor until operating instructions are thoroughly understood.

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

Prior to start-up of the compactor each day, check the items found in the “**DAILY**” list in Periodic Maintenance .

#### **Manual Mode (Standard and “A” Model)**

1. Check work area and make sure all personnel are clear of compactor.
2. Make sure all Emergency Stop buttons are pulled out.
3. Place the material to be discarded into the compactor.

#### **NOTICE**

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

4. “A” Models **ONLY**: Insert the key into the **MANUAL - OFF- AUTOMATIC SWITCH** and turn to the “**MANUAL**” position.
5. Insert the key into the **KEYED START SWITCH** 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), then stop.
6. If necessary, repeat step 4 after the compactor has stopped.
7. When complete, remove key from the **KEYED START SWITCH**.
8. “A” Models **ONLY**: Remove key from the **MANUAL - OFF- AUTOMATIC SWITCH**.

# Heavy Duty Vertical Baler

## Operation

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### BALE TIE-OFF / BALE EJECT

When the **Bale Made** decals are **aligned**, follow tie off procedure and eject finished bale from bale chamber.

#### CAUTION

Wear safety glasses and leather gloves during the following procedure.

1. Insert the key into the key switch and turn to the **ON** position.
2. Turn **Platen** switch to **Manual Raise** and hold until the feed gate opens.
3. Place a large flat piece of material across the top of the bale.

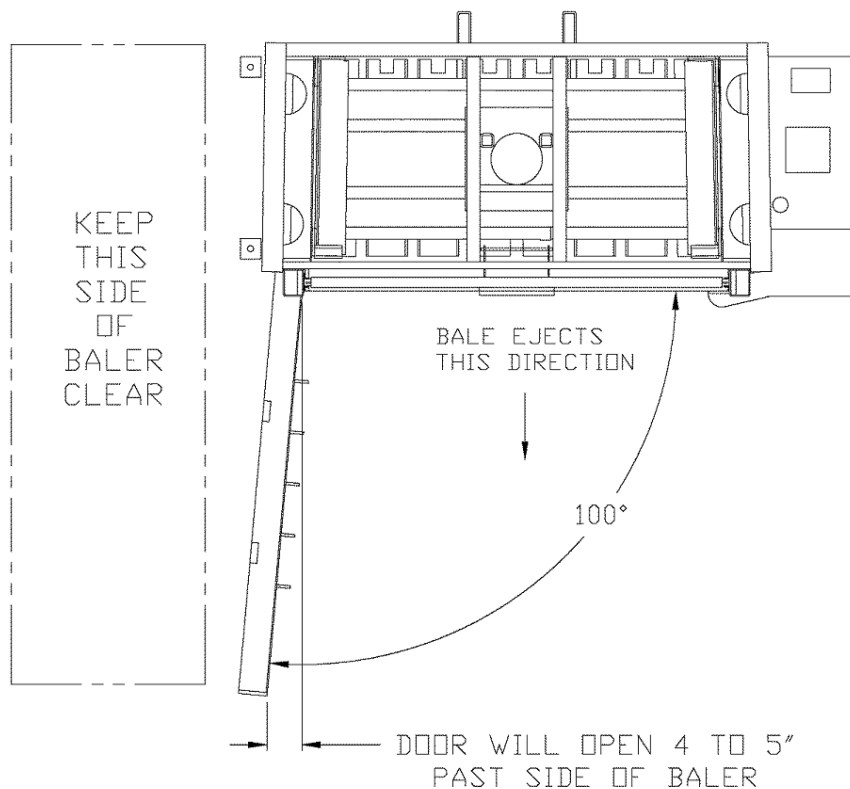
#### CAUTION

Do NOT reach into the baler.

4. Close feed gate, turn **Platen** switch to **Manual Lower** and hold until platen is completely down against the bale.
5. Open the door latch by turning turnbuckle (located under the power unit) until the latch releases the door.
6. Open the door COMPLETELY until the door stops in the open position. The door will be opened approximately 100 degrees or 4"-5" (100 – 125 mm) past the baler side. See diagram below for illustration.

#### NOTICE

Baler damage will occur if this step is not followed properly. Never block the door side of the baler so that the bale door and/or ejector assembly are inhibited in any way.



# Heavy Duty Vertical Baler

## Operation

### BALE TIE-OFF / BALE EJECT (CONTINUED)

7. Tie off bale by inserting bale ties through slots in platen, loop end first. Feed wire all the way through the slots in the platen. Go behind baler and feed wire all the way through the slots in the floor of baler. Tie each wire by first inserting the straight end through the loop end and cinching the slack, then twist the straight end back around itself several times to ensure it will hold.

**With Optional Front Tie-Off** Insert bale ties through slots in platen, loop end first. Continue feeding wire through until wire comes out the slots in bottom of baler. Tie each wire by first inserting the straight end through the loop end and cinching the slack, then twist the straight end back around itself several times to ensure it will hold.

### NOTICE

---

Bale ties should be tightened only hand tight, allowing for bale expansion when pressure is released from the bale.

---

8. Place a pallet in front of the baler for the completed bale to land. Attach the two (2) Ejector Chains to the Chain Eject Hooks located on the platen at the rear of the baler.

**Optional Auto-Eject** - Bale eject mechanism automatically engages when opening chamber door.

### CAUTION

---

Stand to the side of baler, all personnel must be clear of the front of the baler. Turn **Platen** switch to **Manual Raise** and hold until bale ejects, then release.

---

9. Remove bale using pallet jack or forklift.
10. Close and latch the bale chamber door.
11. Close feed gate.
12. Turn keyswitch to **Auto Cycle** position - the baler will start and the ram will travel down then return up to the load position and reset ejector.

Baling sequence is ready to be repeated.
13. When complete, remove key from the **ON - OFF- AUTO** switch.

## **CANADIAN UNIT SPECIFIC INFORMATION**

# Heavy Duty Vertical Baler

## Operation

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### CANADIAN UNIT CONTROL LAYOUT WITH OPERATING INSTRUCTIONS

#### FRONT VIEW

#### SIDE VIEW

**DANGER/PELIGRO**

575 VOLTS/VOLTAJE

**Stay clear of bale chamber when light is illuminated. If light is illuminated when bale door or feed gate is open, discontinue use of this equipment and call qualified service personnel.**

**Manéjase alejado de la cámara de fardos cuando la luz está encendida. Si la luz se enciende con la puerta para fardos o la compuerta de entrada abierta, suspender la utilización de este equipo y llamar a un técnico competente.**

**OPERATING INSTRUCTIONS**

Read and understand operating instructions before operating.

Never place any part of body inside bale chamber.

Stand clear while baler is in operation.

Federal law prohibits operation of equipment by persons under 18 years of age.

Turn off and remove key after use.

Stand clear when bale is ejecting.

- Place a large flat piece of material flat on floor.
- Feed material into baler.
- Close feed gate.
- Turn key to "Auto Cycle" position.

Repeat steps 2 through 4 until platen shifts when alignment arrow on platen and baler are aligned.

**NOTE:** On balers with Bale Made Light, light will illuminate when bale is made.

- Retract platen and insert a large flat piece of material across top of bale.
- Close feed gate.
- Depress "Manual Down" button until platen stops against bale.
- With all personnel clear of bale door, release bale door latch from side.
- Ensure feed gate and bale door are opened and are clear of bale path of ejection.

**Wear safety glasses and leather gloves during this operation.**

- Time off bale by inserting bale ties through slots in platen, loop end first. Feed wire through until it comes through slots in bottom.
- Time off each wire before inserting the next.
- Bale ties should be tightened hand tight, allowing for bale expansion.
- At back of baler, insert chain ejector handles over the two platen hooks protruding from the back of platen.
- NOTE:** On balers with Auto Eject, bale ejector is automatically engaged when bale door is opened.
- Stand at side, ensure all personnel are clear of front of baler. Depress "Manual Up" button to eject bale.
- Remove bale after ejection.
- Close bale door, close feed gate, depress "Auto Cycle" button to cycle and reset ejector.

Bale sequence is ready to be repeated.

**INSTRUCTIONS DE UTILISATION**

Lisez et comprenez les instructions de fonctionnement avant d'utiliser l'équipement.

N'essayez jamais de placer une partie de votre corps à l'intérieur de la chambre à fardage.

Restez à l'écart pendant que la machine fonctionne.

La loi fédérale interdit l'utilisation de l'équipement par des personnes âgées de moins de 18 ans.

Arrêtez et retirez la clé après utilisation.

Restez à l'écart pendant que la machine éjecte le fard.

- Placer un petit objet plat et grand (une planche) sur le sol.
- Introduire le matériau dans la machine à fard.
- Fermer la porte d'entrée.
- Placer la clé sur le bouton "Auto Cycle" (voir schéma).

Répéter les étapes 2 à 4 jusqu'à ce que la platine se déplace contre l'alignement de la platine et de la machine à fard.

**NOTE:** Sur les machines à fard avec la lumière "Bale Made", la lumière s'allume quand un fard est terminé.

- Rétracter la platine et insérer un petit objet plat et grand à l'arrière de la partie supérieure du fard.
- Fermer la porte d'entrée.
- Appuyer sur le bouton "Manual Down" jusqu'à ce que la platine se déplace contre le fard.
- Avec toute la personne à l'écart de la porte pour fard, déverrouiller la porte du fard de l'extérieur.
- S'assurer que la chambre d'entrée et la porte pour fard sont bien alignées et à l'écart du passage de l'éjection du fard.
- Quar-gates de sécurité et gants de cuir pendant cette opération.
- Après le fard insérer les anneaux à travers les rainures dans la platine, avec l'extrémité de l'anneau en premier.
- Insérer le fil dans les trous jusqu'à ce qu'il passe par les rainures en la partie inférieure.
- Après chaque anneau insérer le suivant.
- Les anneaux de fard doivent être serrés à la main, pour permettre l'expansion du fard.
- En la partie arrière de la machine à fard, insérer les manilles de l'éjecteur de chaîne sur les deux gâchettes qui saillent par la partie arrière de la platine.
- NOTE:** Sur les machines à fard avec éjecteur automatique, l'éjecteur se active automatiquement quand on ouvre la chambre de la machine à fard.
- Restez à l'écart et s'assurer que les personnes sont à l'écart de la machine à fard.
- Appuyer sur le bouton "Manual Up" pour éjecter le fard.
- Retirer le fard après de l'éjection.
- Placer la porte pour fard et la chambre d'entrée et appuyer sur le bouton "Auto Cycle" pour faire fonctionner et réinitialiser l'éjecteur.

La séquence de fardage est prête à être répétée.

**IN CASE OF EMERGENCY: PRESS RED STOP BUTTON**

**EN CASO DE EMERGENCIA: PRESIONE EL BOTON ROJO**

**POWER ALIMENTACION**

ON/OFF

STOP

**EMERGENCY STOP**

PARADA DE EMERGENCIA

**PLATEN PLATINA**

MANUAL DOWN

MANUAL UP

**BALE MADE LIGHT** \*\*

**\*NON-FUSED DISCONNECT SWITCH (OPTIONAL)**

**\*\*BALE MADE LIGHT (OPTIONAL)**

**RESET**

**VERRIDE**

The above images are illustrative only and are not drawn to scale.

See **Canadian Unit Controls** <sup>35</sup> for controls descriptions.

See **Canadian Unit Operation** <sup>36</sup> for operating instructions on making a bale.


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Operation

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# Heavy Duty Vertical Baler

## Operation

### CANADIAN UNIT CONTROLS

1. **EMERGENCY STOP** - (Red Push Button)  
Pressing the **Emergency Stop** button will stop the machine immediately.
  2. **OFF – ON – AUTO** - (Key Switch)
    - a. Turn **OFF – ON – AUTO** switch to **OFF** position and remove key when not in use.
    - b. Turn **OFF – ON – AUTO** switch to the **ON** position to operate baler with the **MANUAL RAISE** and **MANUAL LOWER SWITCH**.
    - c. Turn **OFF – ON – AUTO** key switch to **AUTO** position and baler will start; platen will traverse **LOWER** and return to the load position (one complete cycle).
  3. **PLATEN RAISE — PLATEN LOWER** (Selector Switch)  
Turn the switch to **RAISE** and hold to manually raise the platen. Turning the switch to **RAISE** and holding will raise the platen, with the feed gate and bale door opened or closed. This switch is normally used during bale ejection. It can also be used to interrupt the automatic cycle, and raise the platen should it become necessary. The **RAISE** switch is a “hold-to-run” control, meaning that the baler will stop when it is released.
-  **WARNING**
- 
- Stay clear of moving parts when using the manual raise switch with the feed gate open.
- Turn the switch to **LOWER** and hold to manually lower the platen. The feed gate and bale door must be closed. It can be used to interrupt the auto cycle, and lower the platen should it become necessary. The **LOWER** switch is a “hold-to-run” control also, meaning that the baler will stop when it is released.
4. **CYCLE READY LIGHT** — (Red Light)  
This light will warn the operator of an interlock switch malfunction. If the light is **ON** and the feed gate is in the **UP** position, there is a problem. Discontinue use of the baler. Turn off power to the baler, and **Lock-out/Tag-out per the instructions.** <sup>6</sup> Then contact a qualified service person. The light should be **ON** when the feed gate is in the **DOWN** position, indicating the baler is ready for operation.
  5. **BALE MADE LIGHT** — (Red Light) (Optional)  
This light will come **ON** if enough material has been compacted to make a complete bale.
  6. **EXTERNAL RESET** — (Push Button)  
Allows the operator to reset overload protection without opening the panel box.
  7. **OVERRIDE** — (Push Button)  
Override push button is used in conjunction with the manual up selector switch. This is to make sure two hands are used while ejecting a bale.
  8. **RESET** — (Push Button)  
Must be pressed after each time the baler is cycled.

# Heavy Duty Vertical Baler

## Operation

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### CANADIAN UNIT OPERATION

#### **WARNING**

Do not operate baler until operating instructions are thoroughly understood.

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

#### **WARNING**

Safety interlocks and devices are installed on this machine for your protection. **NEVER DISABLE OR BYPASS ANY SAFETY DEVICE. FAILURE** to comply with this warning could result in **SERIOUS INJURY** or **DEATH**.

Prior to start-up of the baler each day, check the items found in the “DAILY” list in **Periodic Maintenance** <sup>46</sup>.

### How to Make a Bale

1. Check work area and make sure all personnel are clear of baler.
2. Open the bale chamber door by turning the turnbuckle on the chamber door latch.
3. Place a large flat piece of cardboard inside bale chamber on baler floor.

#### **CAUTION**

Do NOT reach into the baler.

4. Close the bale chamber door, and secure it with the turnbuckle.
5. Load material into baler through feed opening.

#### **CAUTION**

Do NOT reach into the baler.

### **NOTICE**

**DO NOT OVERFILL BALER!** Overfilling baler will result in serious damage to the feed gate that may prohibit operation of the baler. When loading material through the feed opening, keep material pushed away from the feed gate. This is especially imperative when the bale chamber is full and bale is approaching “**BALE MADE**” status. Overfilling at this stage will damage baler and incur costly repair.



# Heavy Duty Vertical Baler

## Operation

### CANADIAN UNIT OPERATION (CONTINUED)

6. Pull the feed gate down by the handle to close the feed gate.
7. To start the baler, insert the key into the key switch and turn to the **ON** position.
8. Turn switch to **AUTO** position. The platen will go down and return up to the loading position. As the platen returns fully to the up position, the feed gate will automatically open and the motor will stop.
9. Push **RESET** Button on the side of the control panel box. Repeat steps 5 through 8 until the **BALE MADE** arrow decal on the feed gate is aligned with the **BALE MADE** arrow decal on the platen.
10. **OPTIONAL** - If the baler is equipped with the optional **BALE MADE** light, it will illuminate when the bale is made and ready to be tied and ejected.

#### NOTICE

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Do NOT overfill baler!

---

#### NOTICE

---

Follow ALL safety instructions in this manual.

---

# Heavy Duty Vertical Baler

## Operation

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### CANADIAN UNIT BALE TIE-OFF / BALE EJECT

When the **BALE MADE DECALS ARE ALIGNED**, follow tie off procedure and eject finished bale from bale chamber.

#### **CAUTION**

Wear safety glasses and leather gloves during the following procedure.

1. Turn **PLATEN** switch to **RAISE** and hold while simultaneously pushing the **OVERRIDE** until the feed gate opens.
2. Place a large flat piece of material across the top of the bale.

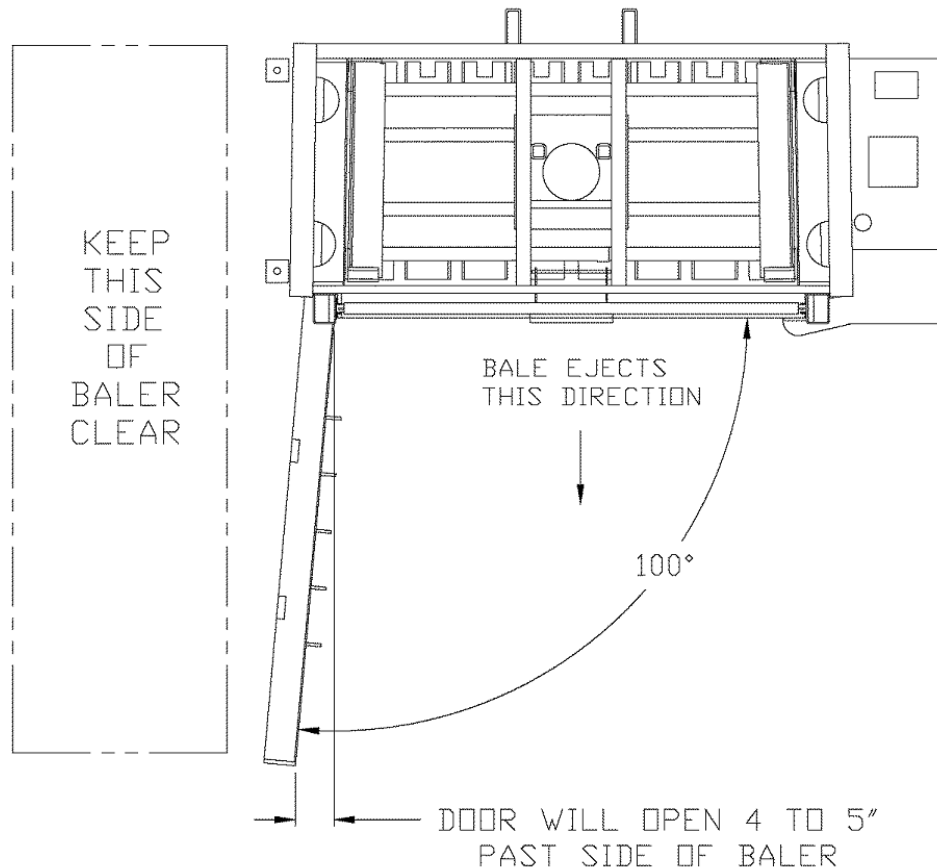
#### **CAUTION**

Do **NOT** reach into the baler.

3. Close feed gate, turn **PLATEN** switch to **LOWER** and hold until platen is completely down.
4. Open the door latch by turning turnbuckle (located under the power unit) until the latch releases the door.
5. Open the door **COMPLETELY** until the door stops in the open position. The door will be opened approximately 100 degrees or 4"-5" (100 – 125 mm) past the baler side. See diagram below for illustration.

#### **NOTICE**

Baler damage will occur if this step is not followed properly. Never block the door side of the baler so that the bale door and/or ejector assembly are inhibited in any way.



# Heavy Duty Vertical Baler

## Operation

### CANADIAN UNIT BALE TIE-OFF / BALE EJECT (CONTINUED)

6. Tie off bale by inserting bale ties through slots in platen, loop end first. Feed wire all the way through the slots in the platen. Go behind baler and feed wire all the way through the slots in the floor of baler. Tie each wire by first inserting the straight end through the loop end and cinching the slack, then twist the straight end back around itself several times to ensure it will hold.

**With Optional Front Tie-Off** - Insert bale ties through slots in platen, loop end first. Continue feeding wire through until wire comes out the slots in bottom of baler. Tie each wire by first inserting the straight end through the loop end and cinching the slack, then twist the straight end back around itself several times to ensure it will hold.

### NOTICE

Bale ties should be tightened only hand tight, allowing for bale expansion when pressure is released from the bale.

7. Place a pallet in front of the baler for the completed bale to land. Attach the two (2) Ejector Chains to the Chain Eject Hooks located on the platen at the rear of the baler.

**With Optional Auto-Eject** - Bale eject mechanism automatically engages when opening chamber door.

### CAUTION

Stand to the side of baler, all personnel must be clear of the front of the baler. Turn **PLATEN** switch to **RAISE** and hold while simultaneously pushing the **OVERRIDE** button until the bale ejects, then release.

8. Remove bale using pallet jack or forklift.
9. Close and latch the bale chamber door.
10. Close feed gate.
11. Turn to **AUTO** position, baler will start, ram will travel down then return up to the load position and reset ejector.
12. Baling sequence is ready to be repeated.

**INTENTIONALLY LEFT BLANK**

# **SECTION 4**

# **SERVICE**

**CONTACT INFORMATION**



Technical Service and Warranty:

**877-258-1105**

Parts:

**800-528-5308**

For parts visit our eCommerce Marketplace at **[www.mecomerchant.com](http://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)**

# Heavy Duty Vertical Baler

## Service

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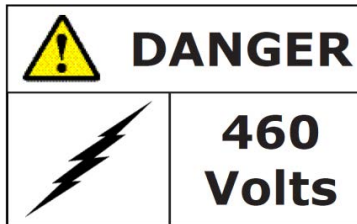
### LOCK-OUT/TAG-OUT INSTRUCTIONS

#### **DANGER**



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


#### **DANGER**

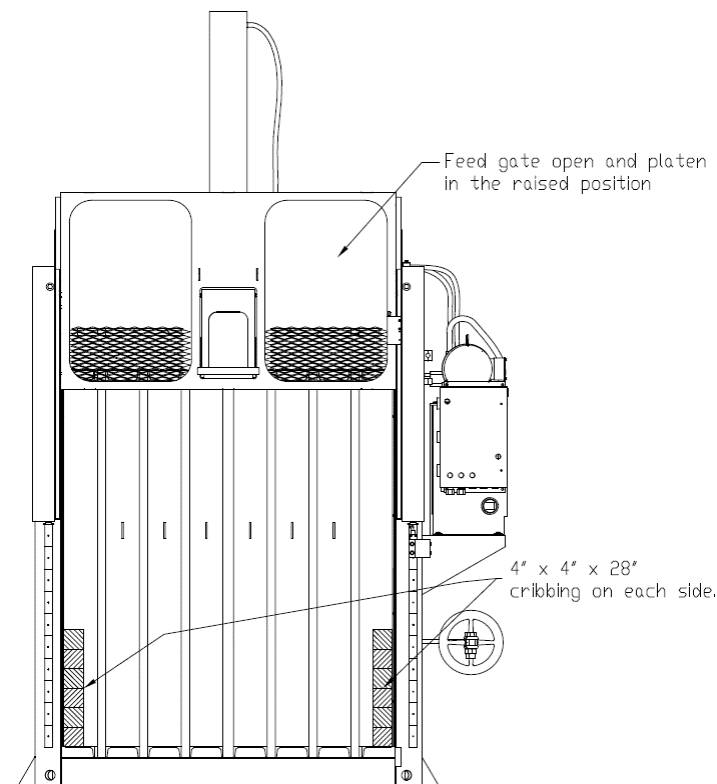


**ELECTRICAL:** The motor control panel contains high voltage components. Only authorized service personnel should be allowed inside the box. Authorized service personnel should be allowed inside the box only after the baler has been locked-out and tagged-out.

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. Remove the bale from the baler. See Bale Tie-off / Bale Eject Instructions . Perform steps 1-9.
2. Install six 4" x 4" x 28" timbers (new condition) horizontally (front to back) on each side of the charge chamber.



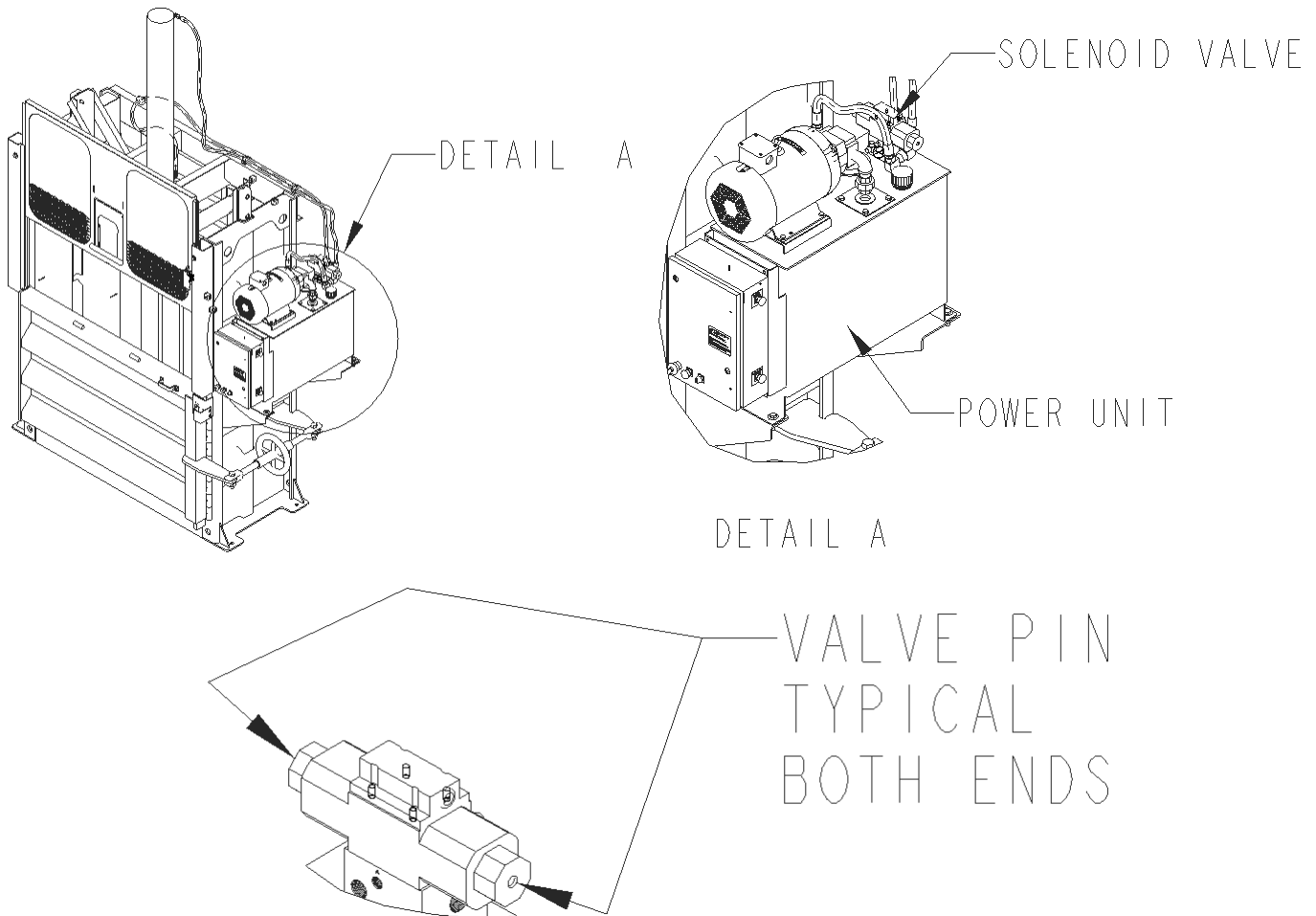
# Heavy Duty Vertical Baler

## Service

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### LOCK-OUT/TAG-OUT INSTRUCTIONS (CONTINUED)

3. Close and latch the bale chamber door.
4. Lower the feed gate.
5. Lower the Platen by turning the Platen switch to the "Manual Lower" position and hold. Release the Platen switch once the platen is resting on the timber cribbing.
6. Move the main disconnect lever to the OFF position.
7. Padlock the disconnect lever with a keyed padlock and take the key with you.
8. 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. Warning: Do not energize without permission of \_\_\_\_\_."
9. After locking and tagging the baler, try to start and operate the baler (See Operating Instructions <sup>30</sup> Steps 8 & 9) to make sure that the lock-out and tag-out is effective. If so, remove the key from the key switch and take it with you.
10. Release stored hydraulic energy from the system by manually depressing the solenoid valve pin on each side of the valve. The solenoid valve is located on the top of the power unit.





### PREVENTIVE MAINTENANCE DESCRIPTIONS

Preventive Maintenance Schedule for Marathon® Vertical Baler.

The following items are part of a preventive maintenance schedule that the factory mandates be used to maintain this baler at factory specifications. If this schedule is not kept, any damage done to the baler or its components will not be covered under warranty. Failure to provide an up to date copy of the maintenance record with each warranty claim will void the warranty. Please contact the Marathon Service Department if you have any questions about these procedures.

The times given to complete the items are an approximation. Items beyond our control could cause these times to be inaccurate, but they will provide a very manageable guideline to use. The Operation, Maintenance, and Installation Manual should also be referred to.

### Safety Notice

During maintenance procedures it is necessary to perform Lock-Out/Tag-Out before completing, unless the maintenance requires the baler to be running. Before entering any part of the baler, all precautions must be taken to ensure that all electrical and hydraulic energy is removed from the baler and that it is locked and tagged out. Different companies vary on their lock out/tag out policies, but at a minimum, ANSI and OSHA standards must be met along with the guidelines presented here.

To begin the Lock-Out/Tag-Out process, make sure that no ram is against a load. Retract them to the rear positions. Then proceed to move the main disconnect lever to OFF position. Padlock the lever with a keyed padlock and take the key with you. Also, provide a tag on the lock with a warning such as: "Danger, do not operate equipment. Person working on equipment." or "Warning, do not energize without permission of (your name)."


After locking out baler, try to start the baler up and operate it. Make sure that the Lock-Out/Tag-Out procedure you completed was effective before continuing.

Hydraulic energy: After removing the electrical energy from the baler, hydraulic energy still exists. This energy must also be removed. Ensure that all personnel are clear from the compaction and ejection areas of the baler. Also check to be sure that the ram is not against a load. Once you have checked these two items, depress the solenoid valve pin located in the center of each solenoid valve on each manifold and hold the pin in for three seconds.

The preceding and following items should be completed by certified mechanics only, and then only after all safety precautions have been taken and baler is locked out and tagged out.

### PERIODIC MAINTENANCE

#### **DANGER**

Only authorized and trained personnel should perform the following procedures. Lock-Out and Tag-Out the baler per as specified in the Lock-Out & Tag-Out Instructions. 

---

#### **Daily (or every 8 hours of operation)**

- Check for any unsafe conditions, such as operator obstructions, in baler area.
- Check for any oil leaks. Keep all hydraulic fittings tight. Check the oil level and temperature in the hydraulic reservoir. Maintain oil level above 3/4 full in the sight gauge. Oil level should be checked with platen in fully raised position. The temperature should be below 160° F.
- Check all remote emergency stop locations. Make sure that each emergency stop button is not obstructed, damaged, or depressed.

#### **Weekly (or every 40 hours of operation)**

- Clean around the machine and remove any operator hazards.
- Check the function of all emergency stop buttons and interlock switches.

#### **Monthly (or every 160 hours of operation)**

- Check the function of all controls (lights, switches, etc.).
- Check all hoses for chaffing, rubbing, or other deterioration and damage.
- Inspect the breather cap on hydraulic reservoir. Clean or replace as necessary.
- Check hydraulic cylinder, cylinder pin and bolts for signs of wear and fatigue.
- Lubricate the door hinge and turnbuckle with oil.
- Check platen guides and shoes for wear.
- Apply a light coating of all purpose grease in the track for the Feed Gate.

#### **Quarterly (or every 500 hours of operation)**

- Inspect the cylinder rod for nicks and abrasions. Check cylinder rod seals for damage. Inspect cylinder pin for movement or missing fittings.

#### **Semi-Annually (or every 1000 hours of operation)**

- Send an oil sample for evaluation.
- Check the baler structure for signs of any problems, such as cracked welds, bending, etc.

# Heavy Duty Vertical Baler

## Service

### PERIODIC MAINTENANCE (CONTINUED)

#### Annually (or every 2000 hours of operation)

- Lubricate the electric motor bearings as recommended by the manufacturer.
- Change the hydraulic fluid in the entire system. If existing oil is reused, it should be tested by a laboratory to ensure it meets necessary specifications. Additives can be added to bring oil back to standards. Before returning oil to the tank, it should be filtered through a minimum 6 micron filter. The hydraulic tank should be cleaned inside with a nonflammable solvent and thoroughly dried before replacing the oil.
- Filter maintenance:
- Hydraulic suction filters should be cleaned at yearly intervals.
  - Filter may be removed from unit through the clean out cover in the top of the reservoir.
  - Care should be exercised in cleaning the filter to ensure that the element is not torn. Clean the filter with a soft brush and standard industrial solvent.
  - Replace the filter after cleaning. Securely tighten the fittings. Pump noise and a “crackle” sound are most often caused by air entering the pump suction line. Tightening the suction fittings will usually eliminate problem. See General Information - Recommended Oils

# Heavy Duty Vertical Baler

## Service

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10 HOUR MAINTENANCE SCHEDULE			
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# Heavy Duty Vertical Baler

## Service

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50 HOUR MAINTENANCE SCHEDULE			
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# Heavy Duty Vertical Baler

## Service

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### 200 HOUR MAINTENANCE SCHEDULE

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# Heavy Duty Vertical Baler

## Service

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### 500 HOUR MAINTENANCE SCHEDULE

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# Heavy Duty Vertical Baler

## Service

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### 1000 HOUR MAINTENANCE SCHEDULE

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# Heavy Duty Vertical Baler

## Service

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
### 2000 HOUR MAINTENANCE SCHEDULE

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## **MAINTENANCE**

### CYLINDER REPLACEMENT

#### **DANGER**


Never enter any part of the baler until the unit has been locked-out and tagged-out per **Lock-Out & Tag-Out Instructions** .

#### **DANGER**

Do not climb on sides of baler. Use a ladder or platform when working on top of the baler or other areas of the baler that cannot be reached from ground level.


#### **DANGER**

Parts of the platen extend above the top of the baler when platen is fully raised.

1. Follow Lock-Out and Tag-Out the baler as specified in the **Lock-Out & Tag-Out Instructions** .
2. Disconnect cylinder from baler body by removing  $\frac{3}{4}$ " cylinder bolts and locknuts from the cylinder mounting plate.

#### **CAUTION**

Stay clear of the underside of the platen.

3. Turn on power and retract cylinder rod by turning the **Platen** switch to **Manual Raise** and hold. This will lower the cylinder body towards the platen.
4. Lock-Out and Tag-Out the baler as specified in the **Lock-Out & Tag-Out Instruction** .
5. Remove hoses from cylinder.

#### **NOTICE**

Disconnect one hydraulic hose at a time, removing hose fittings slowly. Plug ALL ports and hose ends.

#### **WARNING**

Make sure hydraulic cylinder is securely supported before proceeding.

6. Remove bolts, and cotter pin from cylinder pin.
7. Remove cylinder pin. This will disconnect the cylinder from the platen.
8. Remove the cylinder.
9. Before reinstalling cylinder, check cylinder pin, bolts and cylinder rod for signs of fatigue. Do not reuse parts if wear or cracks are present.
10. Install the cylinder; process is the reverse of the above steps.

#### **NOTICE**

Use new mounting hardware – bolts  $\frac{3}{4}$ "-10 x  $3\frac{1}{2}$ " GR5; nuts  $\frac{3}{4}$ " GR5 self-locking.

11. Fill the reservoir with hydraulic oil. See **Recommended Oils**.  
Fill until oil is  $\frac{3}{4}$  up in the sight gauge.

#### **NOTICE**

Oil level should be checked with platen in the fully raised position.

### PRESSURE SETTINGS

#### **DANGER**



Only authorized and trained personnel should perform the following procedures. Lock-Out/Tag-Out the baler per as specified in **Lock-Out/Tag-Out Instructions**.

#### **DANGER**

Do not climb on sides of baler. Use a ladder or platform when working on top of the baler or other areas of the baler that cannot be reached from ground level.

#### **DANGER**

Parts of the platen extend above the top of the baler when platen is fully raised.

1. Turn Platen switch to Manual Lower and hold until platen is in the full down position.
2. Lock-Out and Tag-Out the baler as specified in the **Lock-Out & Tag-Out Instructions**  6.
3. Remove the ¼" plug from the gauge port located on the back of the power unit.
4. Install a 3000-psi liquid-filled pressure gauge in the gauge port.
5. Remove the Lock-out and Tag-Out provisions, and turn on power to the baler.
6. The baler operator must turn Platen switch to Manual Lower position and hold. The hydraulic pump will create pressure.
7. Turn the adjustment screw on the relief valve clockwise to increase the pressure, or counter-clockwise to decrease the pressure. Continue until pressure reaches the desired pressure setting. Refer to the **specifications**  8 for correct relief pressure setting.
8. Tighten locknut on the adjustment screw.
9. Release the Platen switch; baler will stop.
10. Turn off the power and Lock-out and Tag-out the baler.
11. Remove pressure gauge and reinstall the ¼" plug.

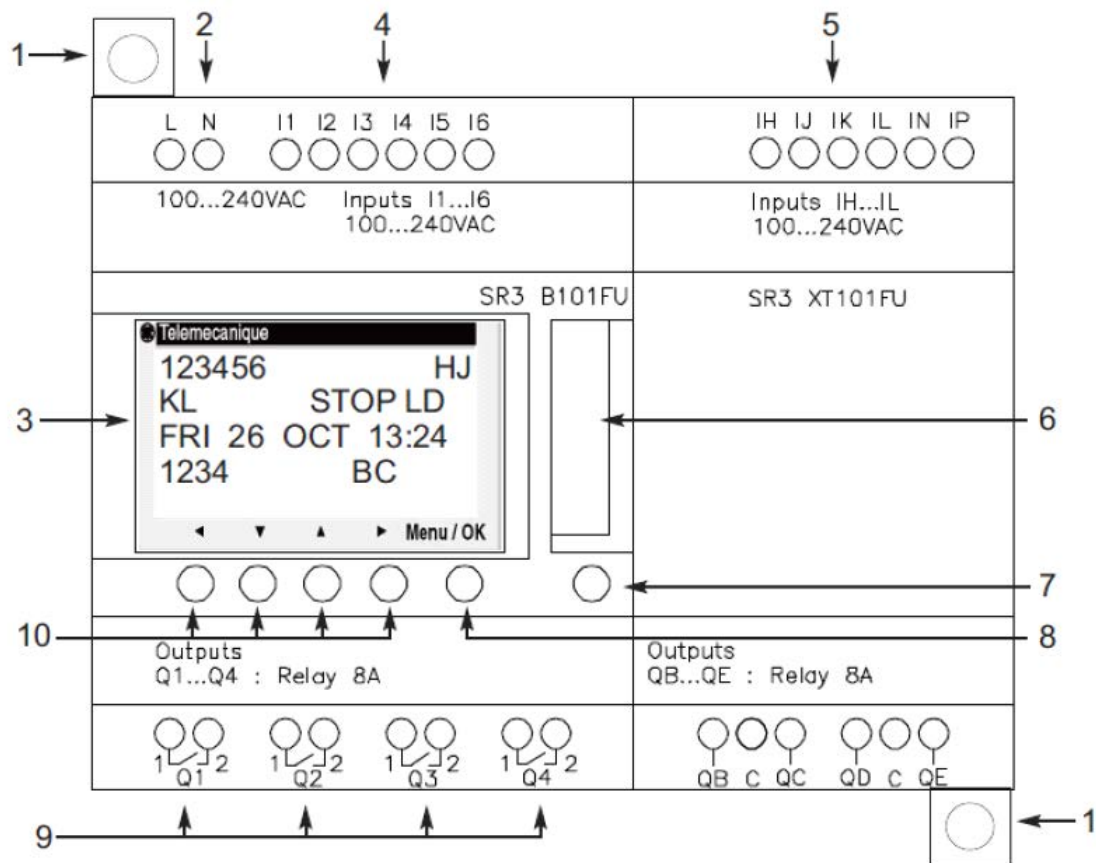
## **PLC MAINTENANCE**

# Heavy Duty Vertical Baler

## Service

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### PLC LAYOUT



Reference numbers given below refer to **PLC Layout** above.

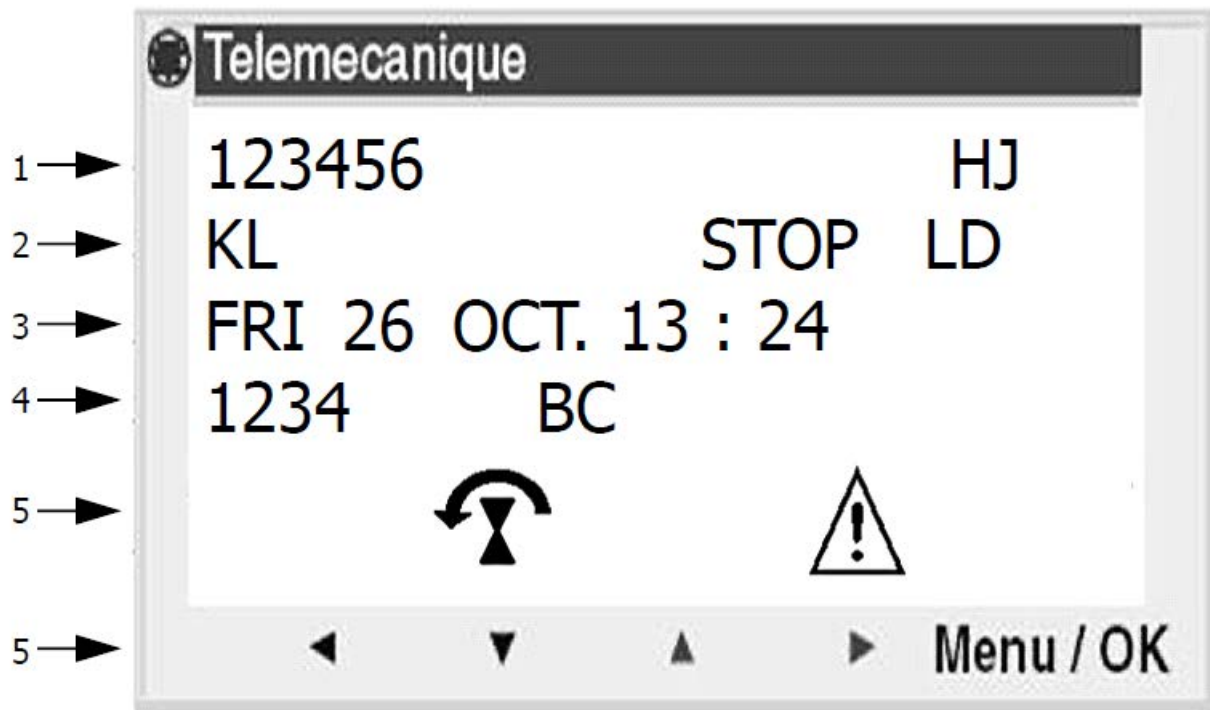
REF #	DESCRIPTION
1	RETRACTABLE MOUNTING FEET
2	SCREW TERMINAL BLOCK FOR POWER SUPPLY
3	LCD, 4 LINES, 18 CHARACTERS
4	SCREW TERMINAL BLOCK FOR INPUTS
5	SCREW TERMINAL BLOCK FOR DISCRETE INPUT
6	CONNECTOR FOR BACKUP MEMORY OR PC CONNECTION CABLE
7	SHIFT KEY
8	SELECTION AND VALIDATION KEY (MENU / OK)
9	RELAY OUTPUT SCREW TERMINAL BLOCK
10	ARROW KEYS

# Heavy Duty Vertical Baler

## Service

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### LCD DESCRIPTION



Reference numbers given below refer to **LCD Description** above.

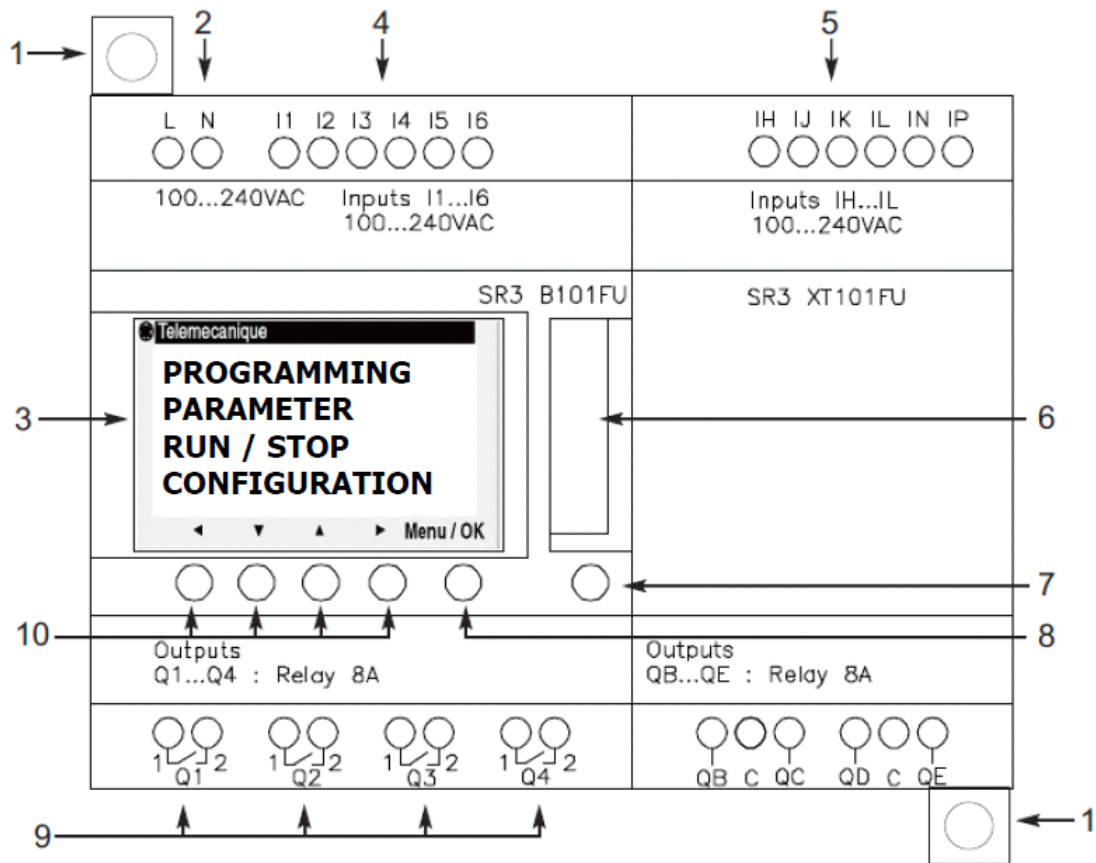
REF #	DESCRIPTION
1	INPUT STATUS
2	OPERATING MODE (RUN/STOP); PROGRAMMING MODE (LD/FBD)
3	DATE (DAY AND TIME FOR PRODUCTS WITH CLOCK)
4	OUTPUT STATUS
5	CONTEXTUAL MENUS / PUSHBUTTONS / ICONS INDICATING THE OPERATING MODE

# Heavy Duty Vertical Baler

## Service

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### PROGRAM RUN/STOP SELECTION

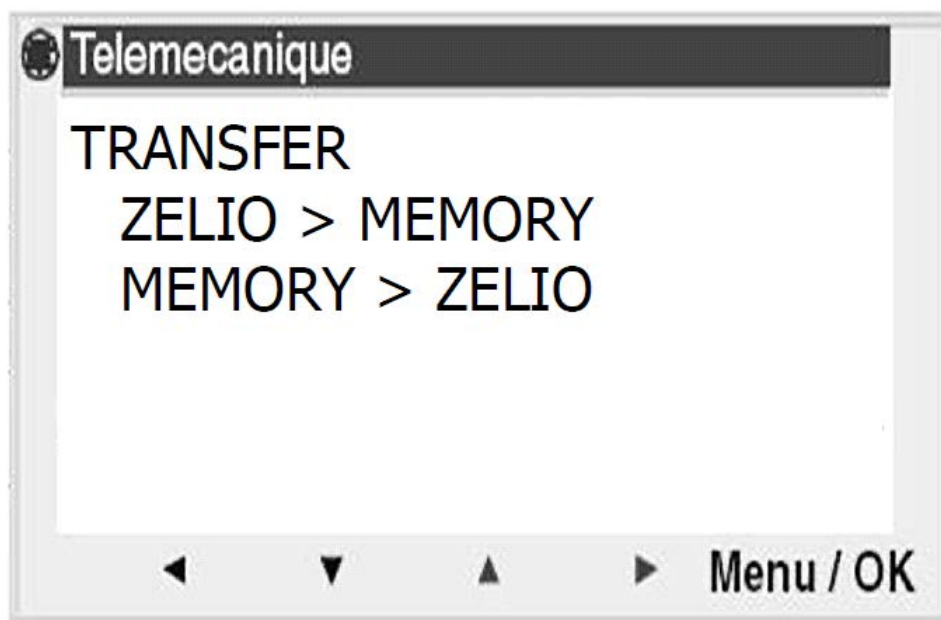


Refer to **PLC Layout**  for control location details.

1. Press MENU/OK button; this switches the screen to the Main Menu.
2. Using the Arrow UP or Arrow DOWN key, scroll to RUN/STOP; flashing indicates current selection.
3. Press MENU/OK button.  
"YES" option is flashing to Run or Stop Program.
4. Press MENU/OK button to complete settings.



### EPROM MEMORY TRANSFER



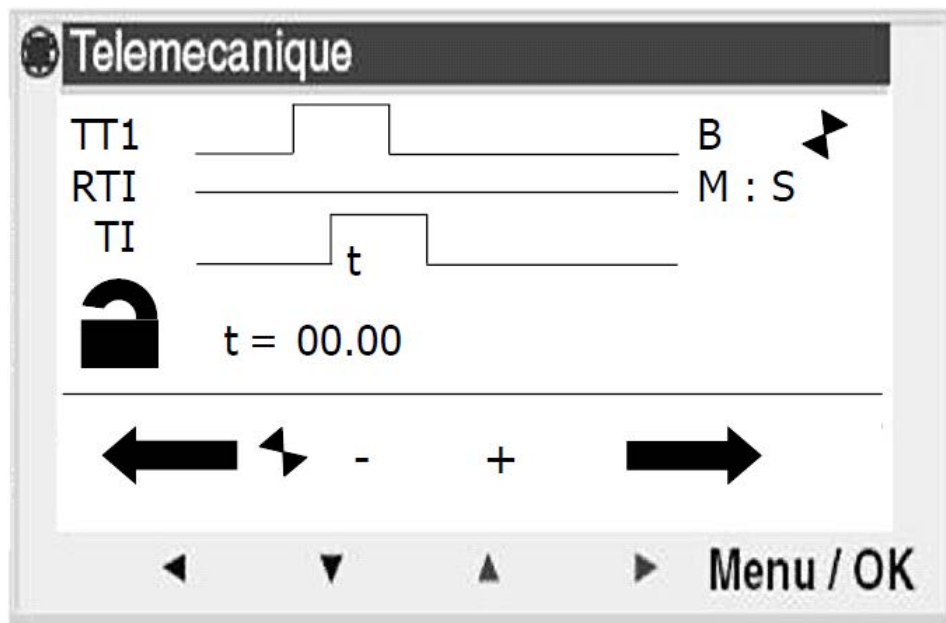
#### NOTICE

Before you can transfer memory or change programs, the current program must be stopped. Refer to **Program Run/Stop Selection** <sup>60</sup> for instructions.

Refer to **PLC Layout** <sup>58</sup> for control location details.

1. Press MENU/OK button.
2. Using the Arrow UP or Arrow DOWN key, scroll to TRANSFER  
Flashing indicates current selection.
3. Using the Arrow UP or Arrow DOWN key, scroll to the required transfer option; ZELIO > MEMORY or MEMORY > ZELIO.  
Flashing indicates current selection.
4. Press MENU/OK button.  
"Transfer OK" will display.
5. Press MENU/OK button.
6. Using the Arrow UP or Arrow DOWN key, scroll to RUN/STOP; flashing indicates current selection.
7. Press MENU/OK button.  
"YES" option is flashing to Run Program.
8. Press MENU/OK button to complete settings.

### SETTING THE TIMER



#### NOTICE

In the event that you need to change these parameters, please call the Marathon Technical Service department and assistance will be given accordingly; refer to **Contact Information** <sup>[18]</sup> for details.

#### NOTICE

Before you can set the timer or change programs, the current program must be stopped. Refer to **Program Run/Stop Selection** <sup>[60]</sup> for instructions.

Refer to **PLC Layout** <sup>[58]</sup> for control location details.

1. Press MENU/OK button.
2. Using the Arrow UP or Arrow DOWN key, scroll to PARAMETERS.  
Flashing indicates current selection.
3. Press MENU/OK button.
4. Using the Arrow UP key, scroll to T T2 (Timer 2)  
Flashing indicates current selection.  
NOTE: This is the watch dog timer.
5. Press the Arrow LEFT key to select; "t=000.0" will flash.
6. Using the Arrow UP or Arrow DOWN key, adjust timer to the required setting.  
NOTE: Factory setting is 65.0 sec).
7. Press MENU/OK button.
8. "YES" option is flashing.
9. Press MENU/OK button to confirm the changes.

### EXTEND / RETRACT TIMER SELECTION

#### NOTICE

In the event that you need to change these parameters, please call the Marathon Technical Service department and assistance will be given accordingly; refer to **Contact Information** [18](#) for details.

#### NOTICE

Before you can set the timer or change programs, the current program must be stopped. Refer to Program Run/Stop Selection [60](#) for instructions.

Refer to **PLC Layout** [58](#) for control location details.

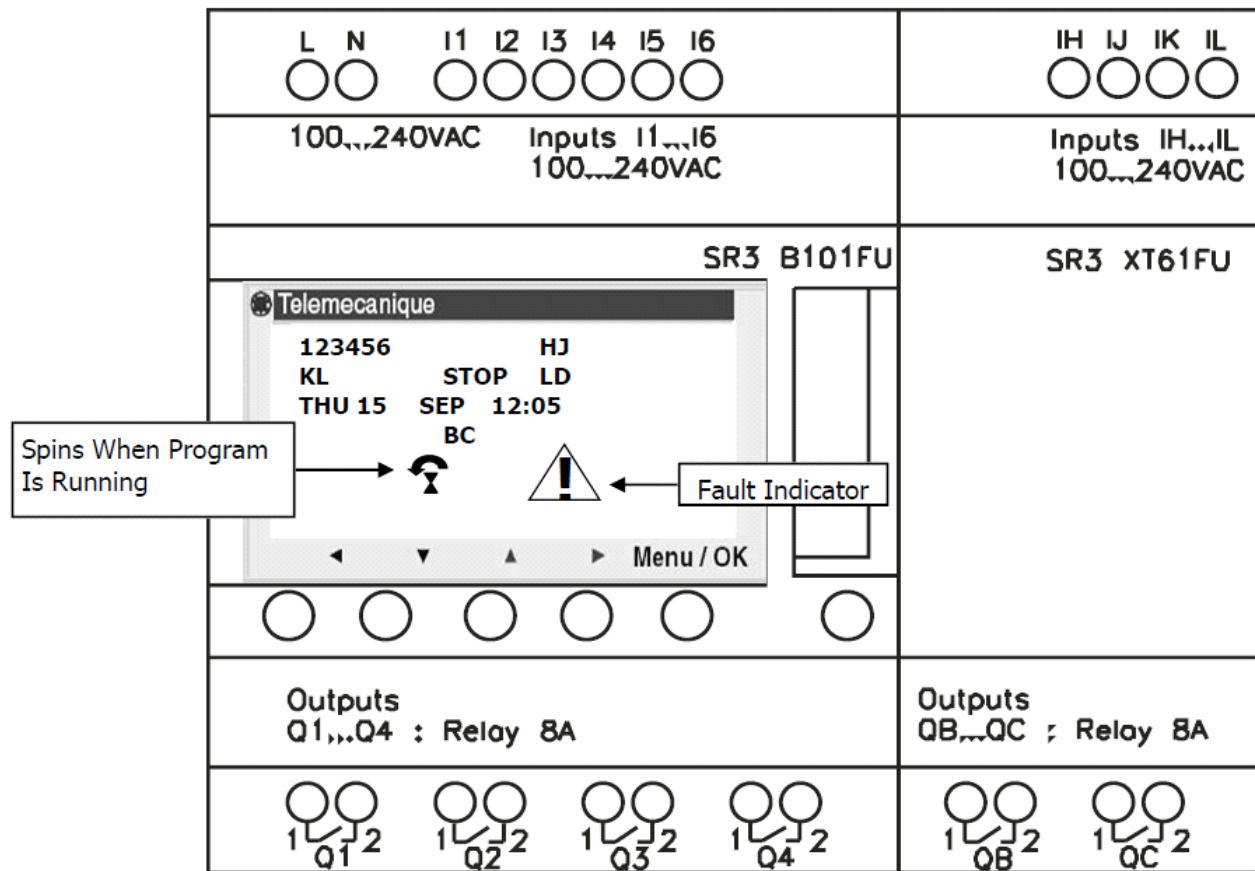
1. Press MENU/OK button.
2. Using the Arrow DOWN key, scroll to PARAMETERS; flashing indicates current selection.
3. Press MENU/OK button.
4. Using the Arrow UP key, scroll to TT1; flashing indicates current selection.  
NOTE: T1 is the EXTEND timer.
5. Press the Arrow RIGHT, scroll to the numerical value for the timer (at the bottom of the screen); flashing indicates current selection.
6. Using the Arrow UP or Arrow DOWN key, adjust timer to the required setting.
  - LOW PRO = 19 seconds
  - 7230 = 32 seconds
  - 6030 = 32 seconds
7. Press MENU/OK button.  
“YES” option is flashing.
8. Press MENU/OK button to confirm the changes.
9. Press MENU/OK button.
10. Press the Arrow LEFT key.
11. Using the Arrow UP, scroll to RUN/STOP; flashing indicates current selection.
12. Press MENU/OK button.  
“YES” option is flashing to Run Program.
13. Press MENU/OK button to complete settings.

# Heavy Duty Vertical Baler

## Service

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### CLEAR FAULT AND START PROGRAM



Refer to **PLC Layout**  for control location details.











1. Press MENU/OK button; this switches the screen to the Main Menu.
2. Using the Arrow UP or Arrow DOWN key, scroll to FAULT; flashing indicates current selection.
3. Press MENU/OK button.  
"YES" option is flashing to Clear the Fault.
4. Press MENU/OK button.
5. Using the Arrow UP key, scroll to RUN/STOP; flashing indicates current selection.
6. Press MENU/OK button.  
"YES" option is flashing to Run Program.
7. Press MENU/OK button to complete settings.

# Heavy Duty Vertical Baler

## Service

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### FAULT LIST

NO.	DESCRIPTION OF FAULT
0	No faults.
1	<b>Fault in writing to EPROM</b> - This fault defines transfer problems between the memory cartridge and the controller. If the fault occurs frequently, contact Technical Service. Refer to <b>Contact Information</b>  .
2	<b>Fault in writing to the clock</b> - If the fault occurs frequently, contact Technical Service. Refer to <b>Contact Information</b>  .
50	<b>Module firmware is damaged</b> - Reload the firmware on the module and the user application. If this problem persists, contact Technical Service. Refer to <b>Contact Information</b>  .
51	<b>Watchdog overflow</b> - Warning or error according to the selection made in the configuration menu (module display) or in the configuration window (Zelio Soft 2 programming workshop). The cycle time in the module is too short compared with the application program execution time programmed in the controller. If the application requires a strict sampling of the module inputs/outputs, lengthen the cycle time in the module. To do this, configure the information either in the CONFIGURATION menu (module display) or in the configuration window (Zelio Soft 2 programming workshop). If the application does not require the cycle time, in CONFIGURATION select: No Action for the WATCHDOG.
52	<b>The controller has executed an unknown operation</b> - If the fault is permanent, reload the firmware on the module and the user application. If this problem persists, contact Technical Service. Refer to <b>Contact Information</b>  .
53	<b>Link between module and bus extension faulty</b> - Check operation of the extension (connection, power supply, or fault).
54	<b>Link between module and bus extension faulty</b> - Check operation of the extension (connection, power supply, or fault).
58	<b>A fault is present in the firmware (software specific to the controller) or on a part of the controller hardware.</b> If the fault is permanent, reload the firmware on the module and the user program. If this problem persists, contact Technical Service. Refer to <b>Contact Information</b>  .
59	<b>At the beginning of RUN on the module application: the application cannot switch to RUN as it is incompatible with the module physically connected to the supply.</b> If this problem occurs, contact Technical Service. Refer to <b>Contact Information</b>  .
60	<b>At the beginning of RUN on the module application: program incompatible with the bus extension physically connected to the supply.</b> If this problem occurs, contact Technical Service. Refer to <b>Contact Information</b>  .
61	<b>At the beginning of RUN on the module application: program incompatible with the Input/Output extension physically connected to the supply.</b> If this problem occurs, contact Technical Service. Refer to <b>Contact Information</b>  .
62	<b>Version (or release number) incompatibility when loading a program from the backup memory.</b> If this problem occurs, contact Technical Service. Refer to <b>Contact Information</b>  .
63	<b>Hardware configuration incompatibility when loading a program from the backup memory.</b> If this problem occurs, contact Technical Service. Refer to <b>Contact Information</b>  .

# Heavy Duty Vertical Baler

## Service

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### ELECTRICAL CHARTS

#### NOTICE

Information provided is for reference only. Always follow all electrical codes for the area to be installed.

#### Fuses and Circuit Breakers

Motor Size	VAC	Full Load Amp	Dual Element Fuse Max	Circuit Breaker Max	Service Disconnect
10 HP	208	27.5	60 Amp	60 Amp	80 Amp
	230	26.4	50 Amp	60 Amp	70 Amp
	460	13.2	25 Amp	30 Amp	35 Amp
	575	11	20 Amp	30 Amp	30 Amp

#### Wire Sizes

THW copper 75°C (165°F)

Motor Size	VAC	Length to 100'	Length to 200'	Length to 300'	Above 300'
10 HP	208	8	8	6	Consult factory
	230	10	8	8	
	460	12	12	12	
	575	12	12	12	


# Heavy Duty Vertical Baler

## Service

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### TROUBLESHOOTING

#### **WARNING**

Only thoroughly trained and experienced service personnel should perform troubleshooting and maintenance on this baler. Do NOT enter the baler for any reason until it has been locked-out and tagged-out per the **Lock-Out & Tag-Out Instructions** .

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#### **NOTICE**

In all events, check output fuses.

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Basic tools required:

- Continuity tester
- Screwdrivers – 1 medium flat head, 1 small Phillips
- Adjustable wrench
- Allen wrenches
- Flashlight
- Voltage and Amp tester
- Electrical schematic

# Heavy Duty Vertical Baler

## Service

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### TROUBLESHOOTING (CONTINUED)

PROBLEM	POSSIBLE CAUSE	SOLUTION
UNIT WILL NOT START	1) No electrical power to unit.	1a) Turn main disconnect switch ON. 1b) Replace fuses or reset breakers.
	2) No electrical power to control circuits.	2a) Check primary and secondary sides of transformer. 2b) Check for correct voltage. 2c) Check fuses in control box. 2d) Check STOP button. Pull to reset. 2e) Check START button to make sure contact closes when depressed. 2f) Check interlocks.
	3) Overload circuit tripped.	3) Check overload resets.
	4) Fuse blown.	4) Replace fuse(s).
UNIT WILL NOT CONTINUE RUNNING WHEN START BUTTON RELEASED	1) Relay or contacts are inoperative.	1) Check relay coil, contacts and wiring.
	2) Motor starter auxiliary contacts are inoperative.	2) Check motor starter contacts and wiring.
	3) Secondary contact on start button is inoperative.	3a) Check contact to make sure it is operating properly. 3b) Check wiring.
MOTOR RUNS BUT PLATEN WILL NOT MOVE NORMALLY	1) Insufficient hydraulic fluid in the reservoir.	1) Fill reservoir with hydraulic fluid.
	2) Low relief pressure.	2a) Check relief 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 or nicks. 3c) Replace cylinder.
	4) Defective pump.	4) Replace pump
	5) Oil leaking from hose fittings.	5) Tighten hose connections.
	6) Low voltage.	6) Check voltage.
	7) Pump rotating in wrong direction.	7) Stop immediately to prevent pump seizure. Check direction of drive rotation (proper rotation direction is indicated by arrow on motor). Reverse any two incoming power leads.
	8) Pump shaft broken, or shaft key sheared.	8) Disconnect hose and suction line from pump. Remove bolts connecting pump to motor. Visually inspect motor and pump shaft for damage. Replace if necessary.
	9) Intake pipe from reservoir blocked, or oil viscosity too heavy to prime.	9) Drain system. Add clean fluid of proper viscosity/specifications. Filter as recommended. Check system filter for cleanliness.



# Heavy Duty Vertical Baler

## Service

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PROBLEM	POSSIBLE CAUSE	SOLUTION
	10) Intake air leaks (foam in oil or sounds like gravel in pump).	10) Check intake connections. Tighten securely. Flush system if required.
RAM WILL NOT REVERSE	1) Solenoid valve inoperative.	1) Check coil in solenoid valve.
	2) Reverse button inoperative.	2) Check reverse button contacts.
	3) Pressure switch inoperative.	3) Check pressure switch.
PUMP MAKES NOISE, SOUNDS LIKE GRAVEL	1) Partially clogged intake strainer or restricted intake pipe.	1) Pump must receive intake fluid freely or cavitation results. Drain system, clean intake pipe and clean or replace suction strainer. Add clean fluid.
	2) Defective bearing.	2) Replace pump.
	3) Air leak at pump intake pipe joints.	3) Tighten joints as required.
PUMP SHAFT SEAL LEAKING	1) Seal worn or damaged.	1) Replace seals or pump.
EXCESSIVE HEAT	1) Continuous running.	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. 1b) Install oil cooler (air or water type). 1c) Install oil temperature shut down switch.
	2) Excessive system leakage.	2) Check system for bypassing or leaks.
RAPID HYDRAULIC COMPONENT WEAR	1) Abrasive matter in the hydraulic oil being circulated through pump.	1a) Install adequate filter or clean. 1b) Replace oil more often and clean tank.
	2) Viscosity of oil too low at working conditions.	2) Replace oil with factory recommended viscosity.
	3) Pressure too high.	3) Reduce pump pressures to factory specifications.
	4) Air recirculation causing pump noise.	4) Tighten all fittings
ERRATIC OPERATION	1) Valve sticking or binding.	1) Disassemble & clean as necessary.
	2) Viscosity of oil too high.	2) Change oil to factory recommended viscosity.
	3) Air in system.	3) Check for leaks, tighten fittings.
	4) Low oil.	4) Fill reservoir with oil.
	5) Low voltage.	5) Check primary & secondary sides of transformer for correct voltage.
UNIT DOES NOT SHUT DOWN WHEN FEED GATE OPENS	1) Interlock switch malfunction.	1) Adjust or replace interlock switch.
OVERLOADS TRIP FREQUENTLY	1) Heat caused from high amperage or low voltage.	1a) Check for correct voltage (incoming power). 1b) Check fuses or breaker at disconnect. 1c) Check heater elements to make sure they are tight.

# Heavy Duty Vertical Baler

## Service

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PROBLEM	POSSIBLE CAUSE	SOLUTION
		<p>1d) Check wiring from starter to motor to make sure all connections are tight.</p> <p>1e) Check motor leads to make sure all connections are tight.</p> <p>1f) Check system pressure, could be set too high.</p> <p><b>NOTE:</b> Excessive overload tripping and/or motor or coil failures may occur if voltage surges or voltage drops are frequent in your area. This circumstance can be remedied by the installation of phase protectors which drop power to the motor if surges are present.</p>
GUIDE SHOES WEARING EXCESSIVELY ONLY ON ONE SIDE	1) Material being loaded unevenly to one side.	<p>1a) Distribute material evenly when loading the machine.</p> <p>1b) Shim the cylinder up to the opposite side from the wear.</p>

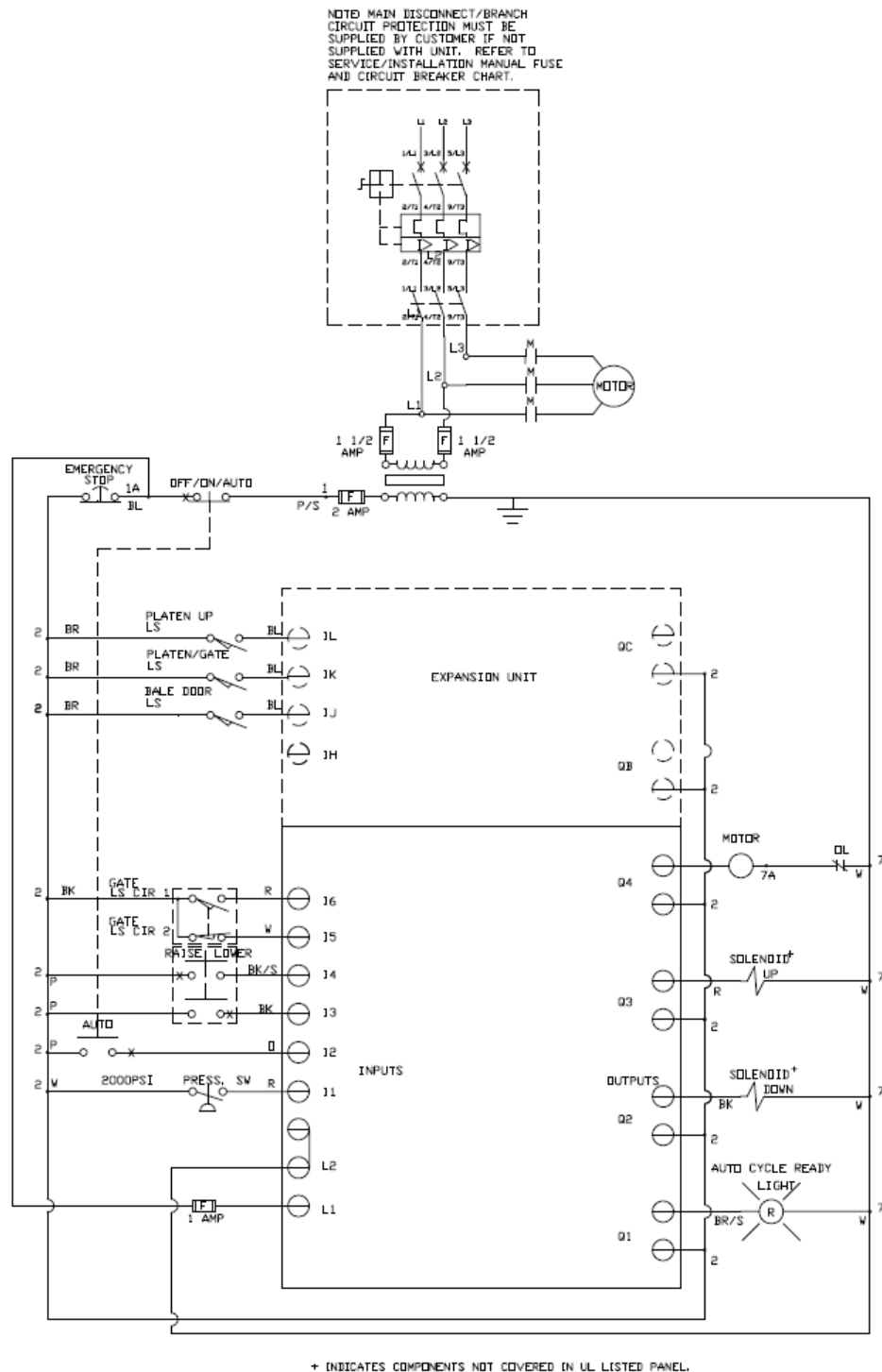
## SCHEMATICS

# Heavy Duty Vertical Baler

## Service

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### ELECTRICAL SCHEMATIC – V-6030 HD (TYPICAL DESIGN)



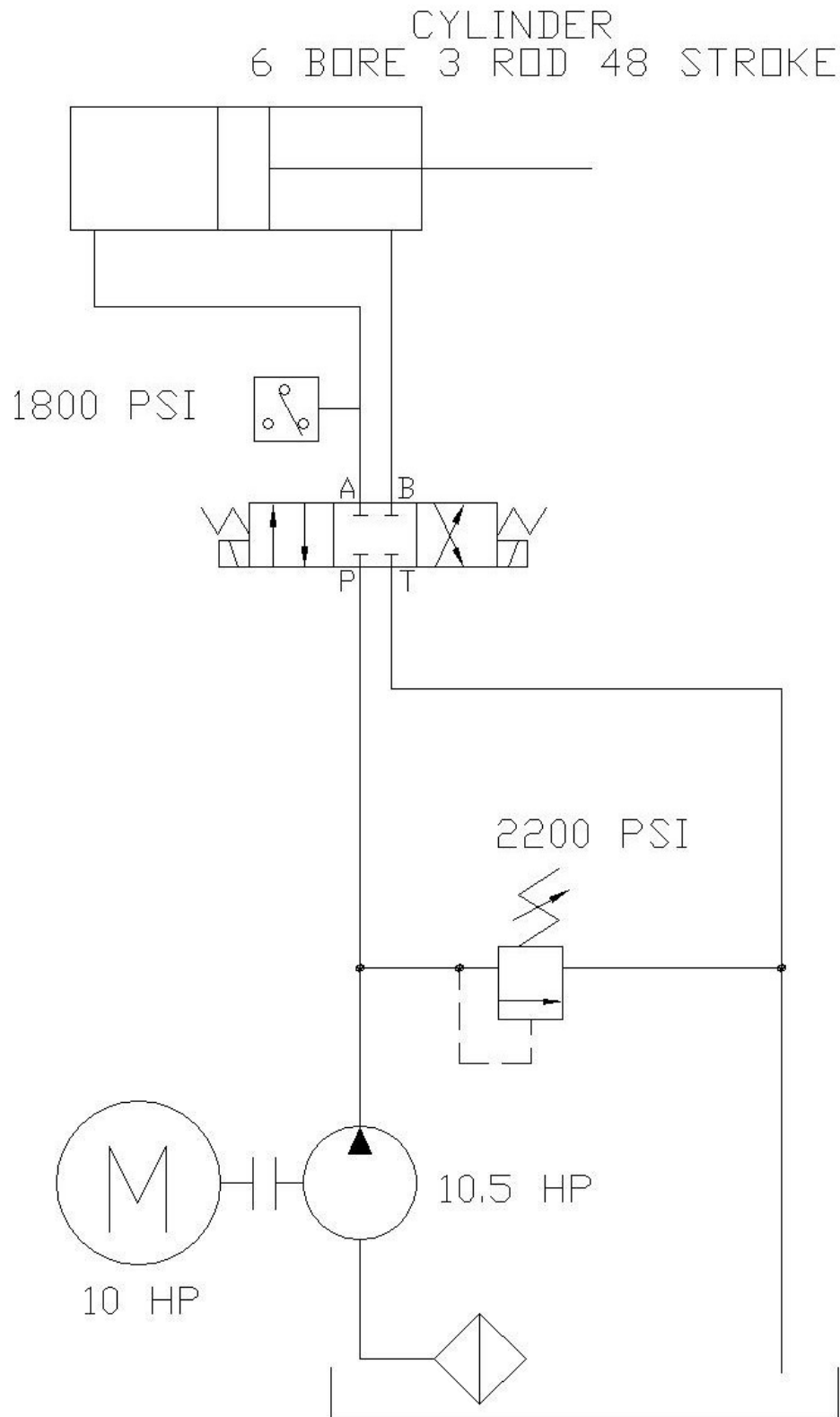


# Heavy Duty Vertical Baler

## Service

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### HYDRAULIC SCHEMATIC – V-6030 HD (TYPICAL DESIGN)



# **SECTION 5**

# **REPLACEMENT PARTS**

# Heavy Duty Vertical Baler

## Replacement Parts

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### CONTACT INFORMATION



Technical Service and Warranty:

**877-258-1105**

Parts:

**800-528-5308**

For parts visit our eCommerce Marketplace at **[www.mecomerchant.com](http://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)

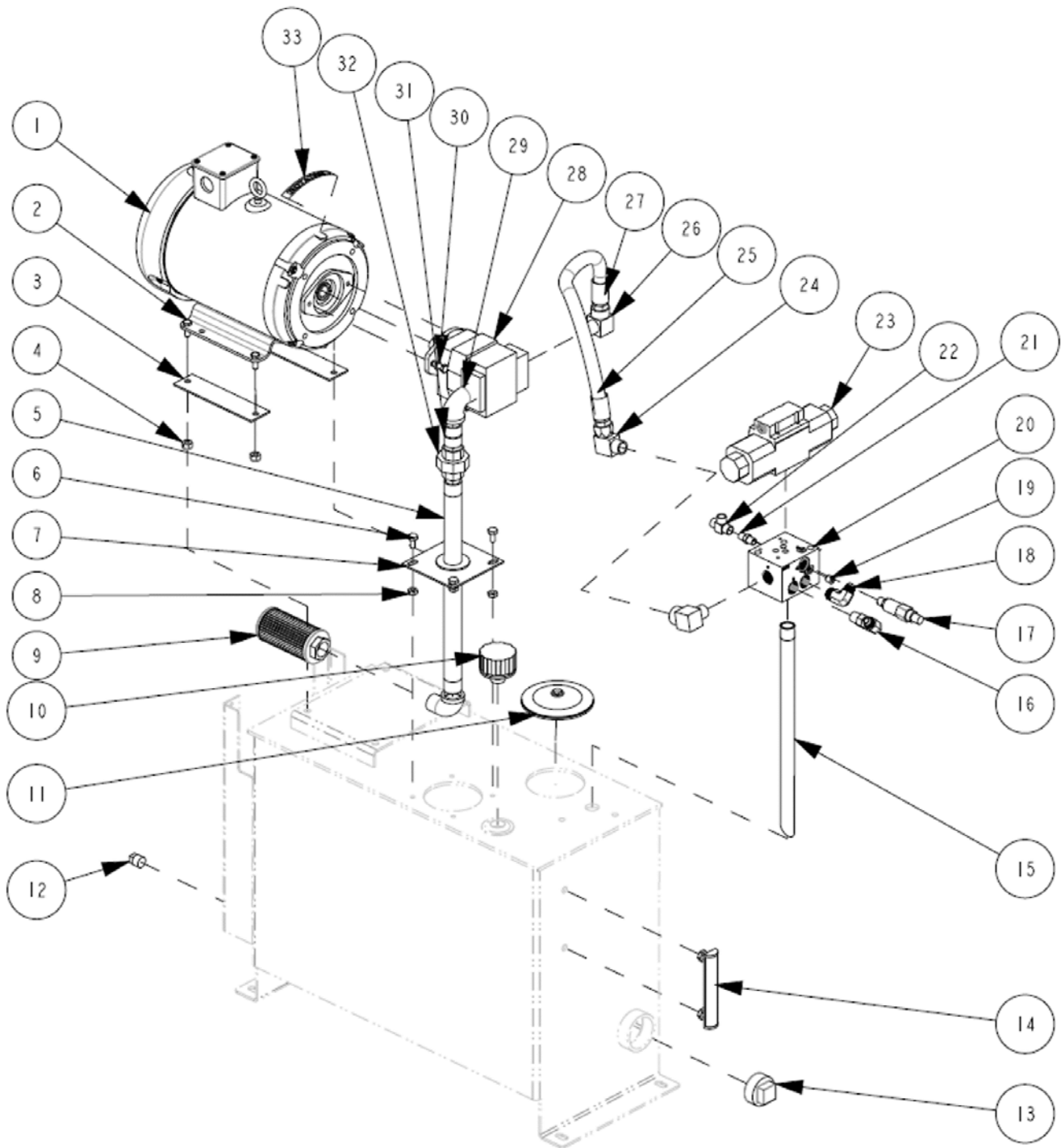


# Heavy Duty Vertical Baler

## Replacement Parts

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### Power Unit Drawing




# Heavy Duty Vertical Baler

## Replacement Parts

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### POWER UNIT PARTS LIST

Part numbers given below refer to locations on the **illustration** .

POWER PACK V-6030 HD AND V-6030 HD DHO			
REF	QTY	PART NO.	DESCRIPTION
1	1	03-7030	MOTOR 10P 208/230/460V 60HZ 3PH 1750 CCM
		03-7032	MOTOR 10 HP 1750 575V
2	6	05-0096	MOTOR MOUNTING BOLT
3	2	06-3630	GASKET
4	4	05-0015	MOTOR MOUNTING NUT
5	1	32-9654	SUCTION PIPE
6	4	05-0104	INLET FLANGE BOLT
7	1	02-0218	SUCTION PIPE
8	4	05-0105	INLET FLANGE NUT
9	1	02-0050	FILTER SUCTION 1-1/4 NPT 100 MESH 20
10	1	02-0197	FILLER BREATHER 3/4
11	1	02-0219	CLEAN OUT COVER
12	1	02-0179	HEATER PLUG
13	1	02-0254	DRAIN PLUG
14	1	02-0215	GAUGE SITE LEVEL 5 INCH
15	1	32-9655	OUTLET PIPE
16	1	02-6381	ELBOW EXTENDED
17	1	02-0214	RELIEF VALVE
18	1	02-2178	ELBOW EXTENDED
19	2	02-0065	PLUG
20	1	02-6243	SUB PLATE
21	1	02-0063	NIPPLE
22	1	02-0062	TEE
23	1	02-5274	SOLENOID VALVE
24	1	02-0041	HOSE END ELBOW 1
25	2	02-0326	HOSE END 1
26	2	02-0044	HOSE END ELBOW 2
27	1	02-5365	HOSE KIT
28	1	02-0267	PUMP 9 GPM GEAR
29	2	02-0238	INLET ELBOW
30	2	05-0159	PUMP MOUNTING WASHER
31	1	02-0240	INLET NIPPLE
32	1	02-0239	UNION
33	1	06-0011	DECAL MOTOR ROTATION

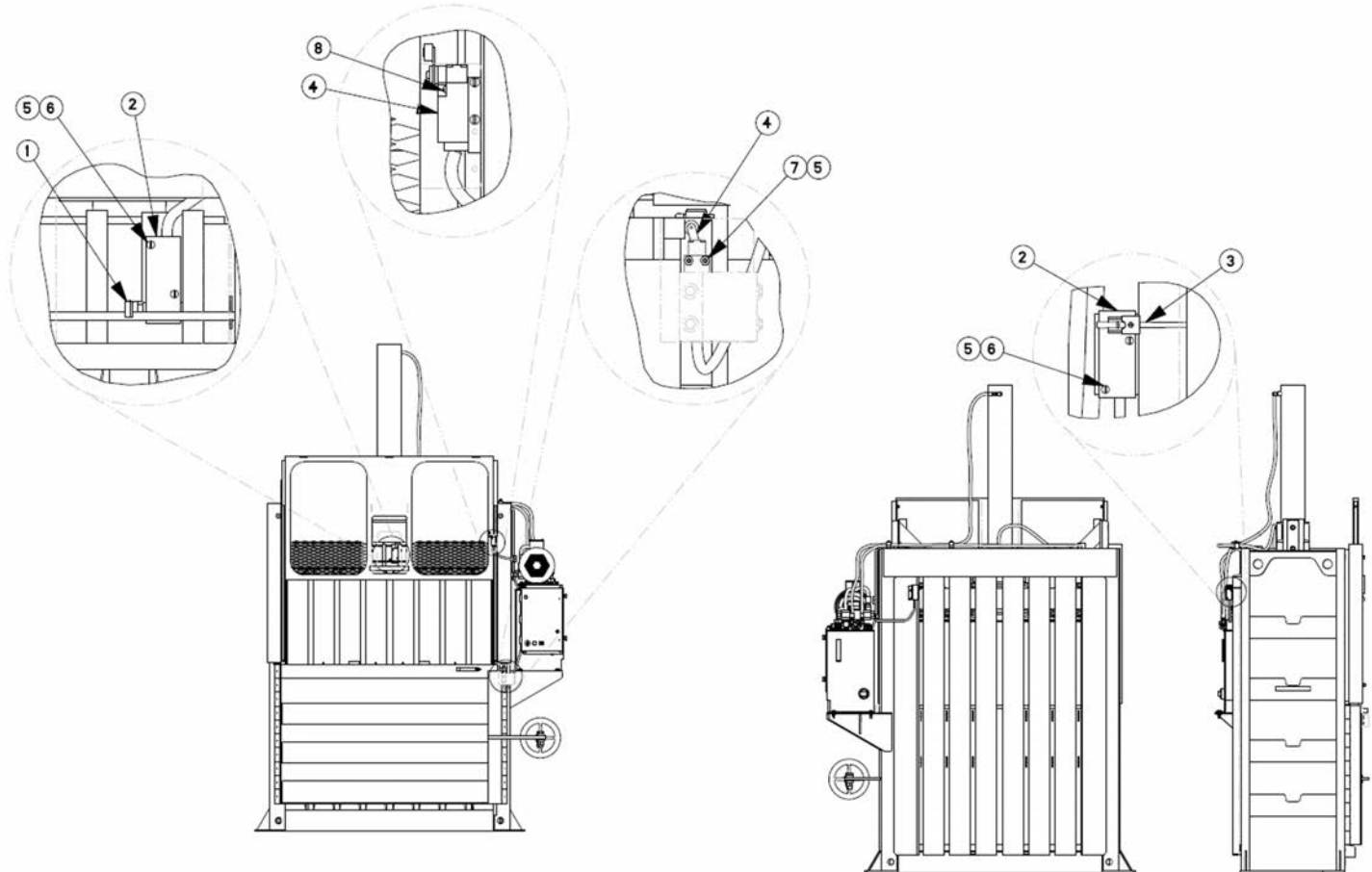
# Heavy Duty Vertical Baler

## Replacement Parts

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### LIMIT SWITCHES

The diagram below shows the locations and part numbers for the limit switches on the vertical baler. These switches must be maintained for safe operation of baler. Refer to **Parts List** <sup>(80)</sup> to identify components. To order replacement parts, please call the Parts & Warranty department. Refer to **Contact Information** for details.



LIMIT SWITCH KIT FOR V-6030 HD & V-6030 HD DHO			
REF	QTY	PART NO.	DESCRIPTION
1	1	03-0010	LIMIT SWITCH ARM W/ROLLER
2	2	03-0012	LIMIT SWITCH 5 DEG PRE-TRAVEL
3	1	03-0225	LIMIT SWITCH ROD
4	2	03-5563	INTERLOCK SW W/FIXED ROLLER
5	6	05-0010	SELF LOCKING NUT
6	4	05-0045	MACHINE ROUND SCREW
7	2	05-4697	ROUND HEAD PHILLIPS SCREW
8	2	055442	ROUND HEAD PHILLIPS SCREW

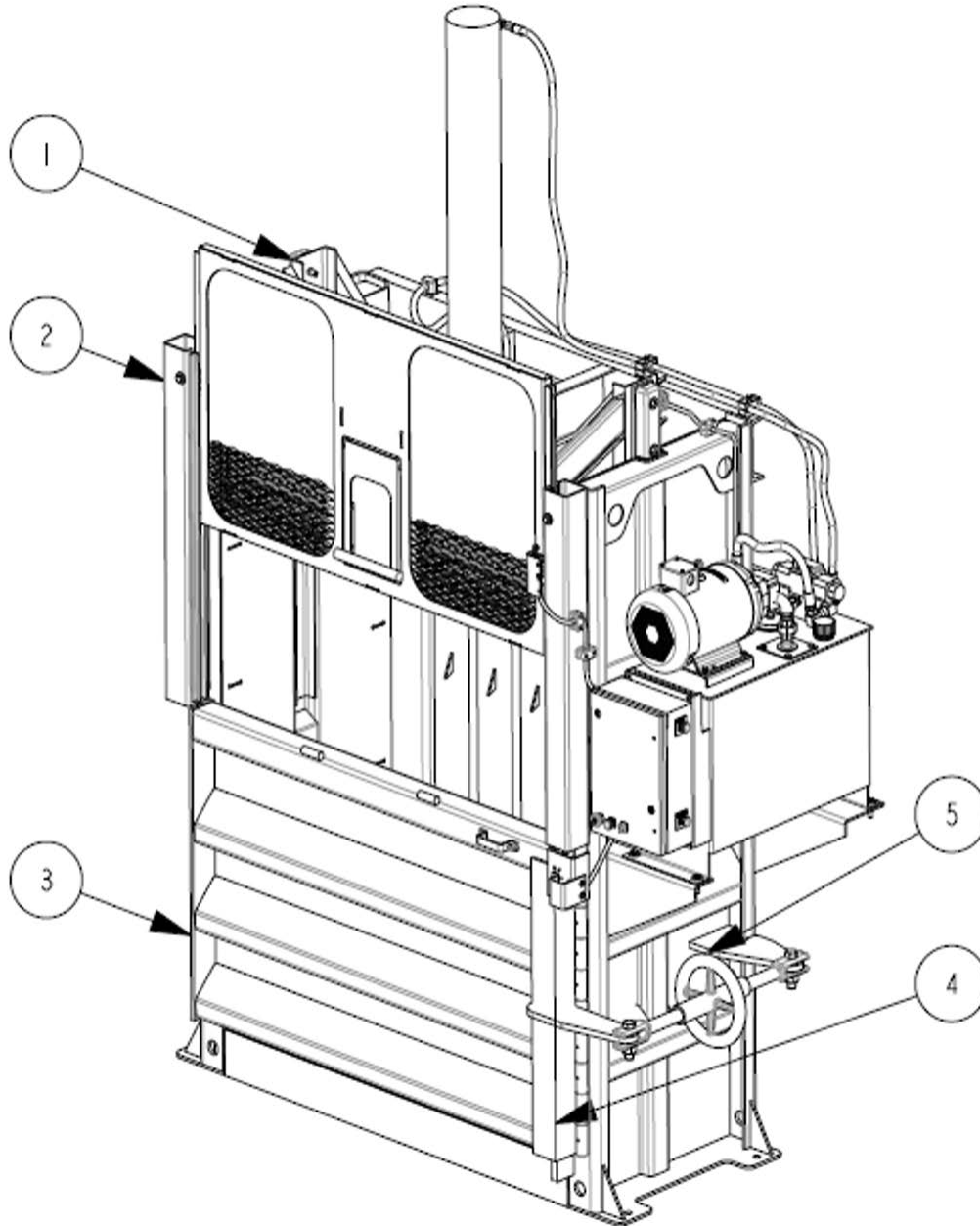
# Heavy Duty Vertical Baler

## Replacement Parts

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### PARTS ILLUSTRATION AND PARTS LIST

Part numbers given below refer to locations on the illustration <sup>79</sup>.



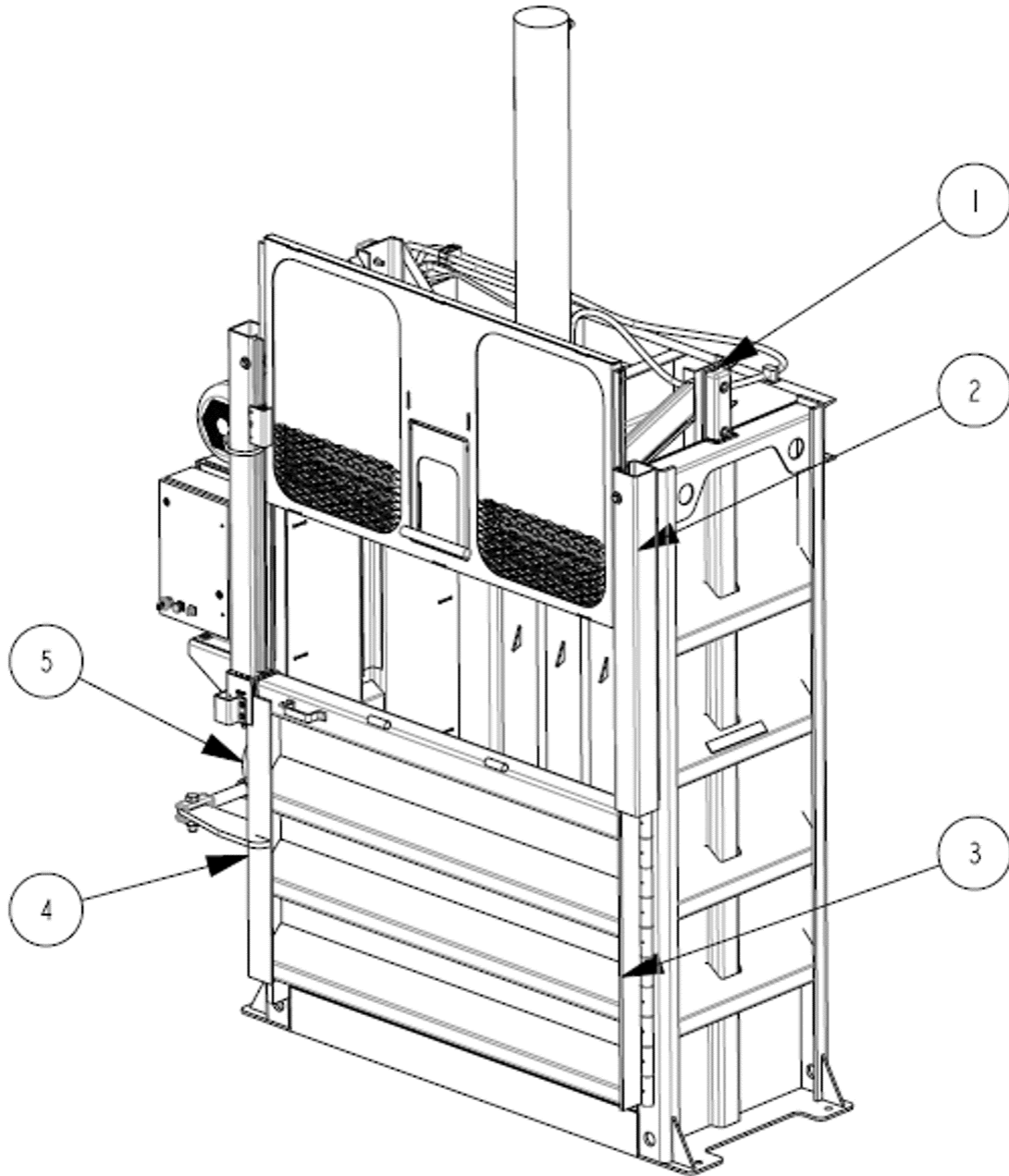
V-6030 HD KITS 604102			
REF	QTY	PART NO.	DESCRIPTION
1	1	461518	PLATEN ASSEMBLY
2	1	461938	FDGT FIT UP ASSEMBLY
3	1	461939	BALE DOOR ASSEMBLY
4	1	461526	LATCH ASSEMBLY
5	1	447968	TURNBUCKLE ASSEMBLY W/10" HW

# Heavy Duty Vertical Baler

## Replacement Parts

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### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)



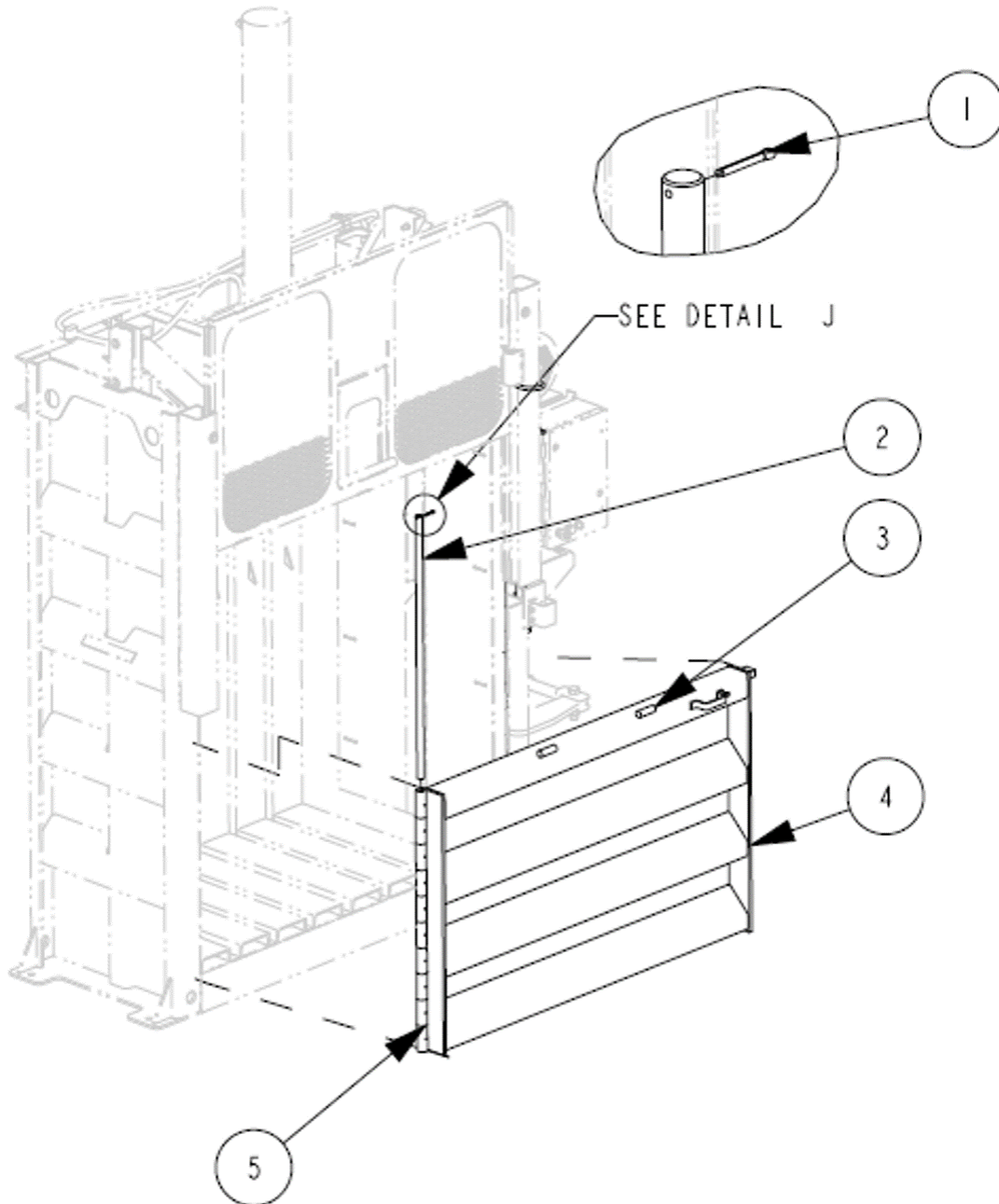
V-6030 HD DHO KITS 604267			
REF	QTY	PART NO.	DESCRIPTION
1	1	461518	PLATEN ASSEMBLY
2	1	462283	FDGT FIT UP ASSEMBLY
3	1	462284	BALE DOOR ASSEMBLY
4	1	462285	LATCH ASSEMBLY
5	1	447968	TURNBUCKLE ASSEMBLY W/10" HW

# Heavy Duty Vertical Baler

## Replacement Parts

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### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)



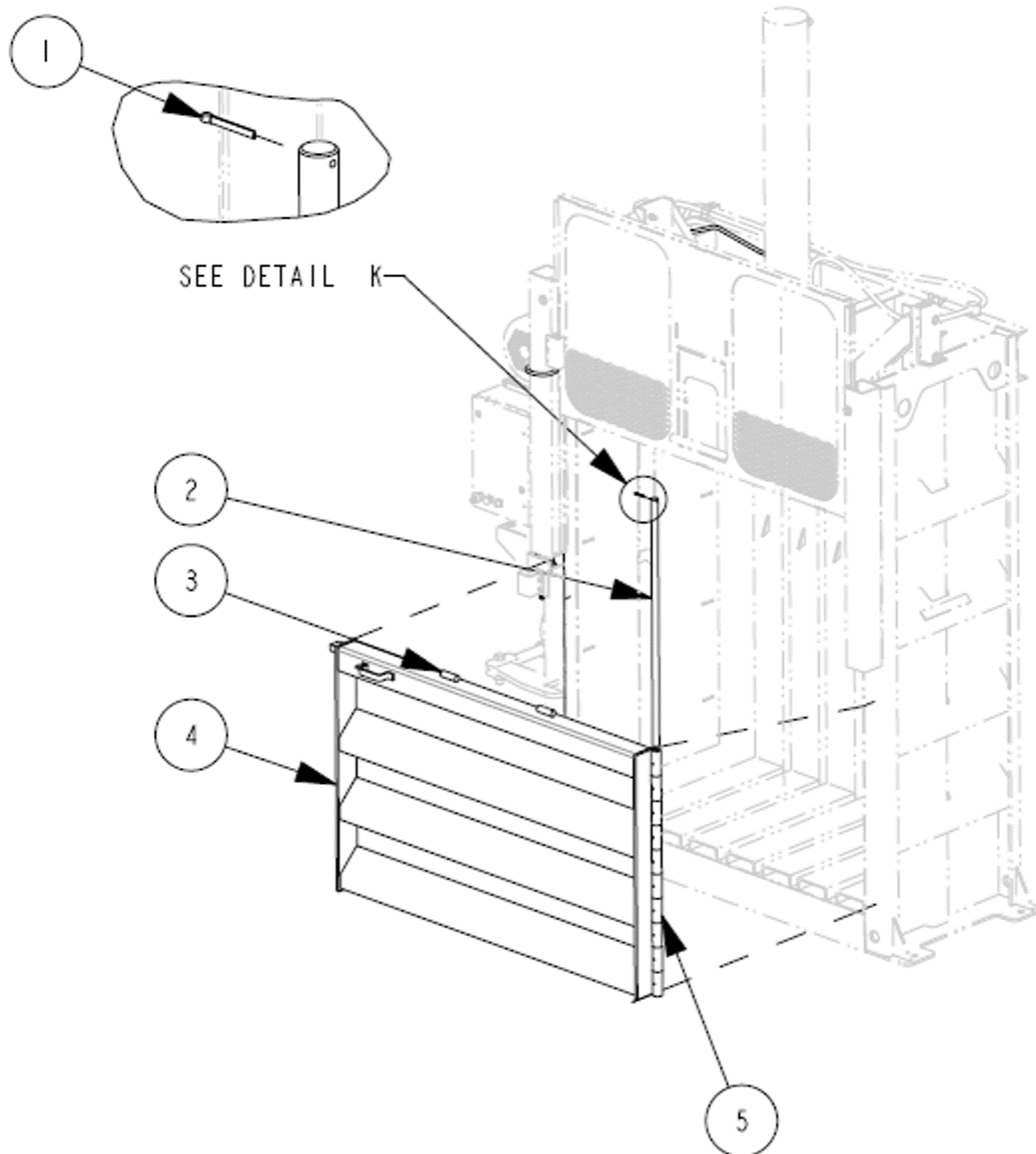
V-6030 HD BALE DOOR KIT			
REF	QTY	PART NO.	DESCRIPTION
1	1	05-0567	PIVOT ROD COTTER PIN
2	1	36-1348	PIVOT ROD
3	2	31-2386	FEEDGATE GUIDE ROD
4	1	462285	BALE DOOR
5	10	31-7069	BALE DOOR HINGE TUBE

# Heavy Duty Vertical Baler

## Replacement Parts

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### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)



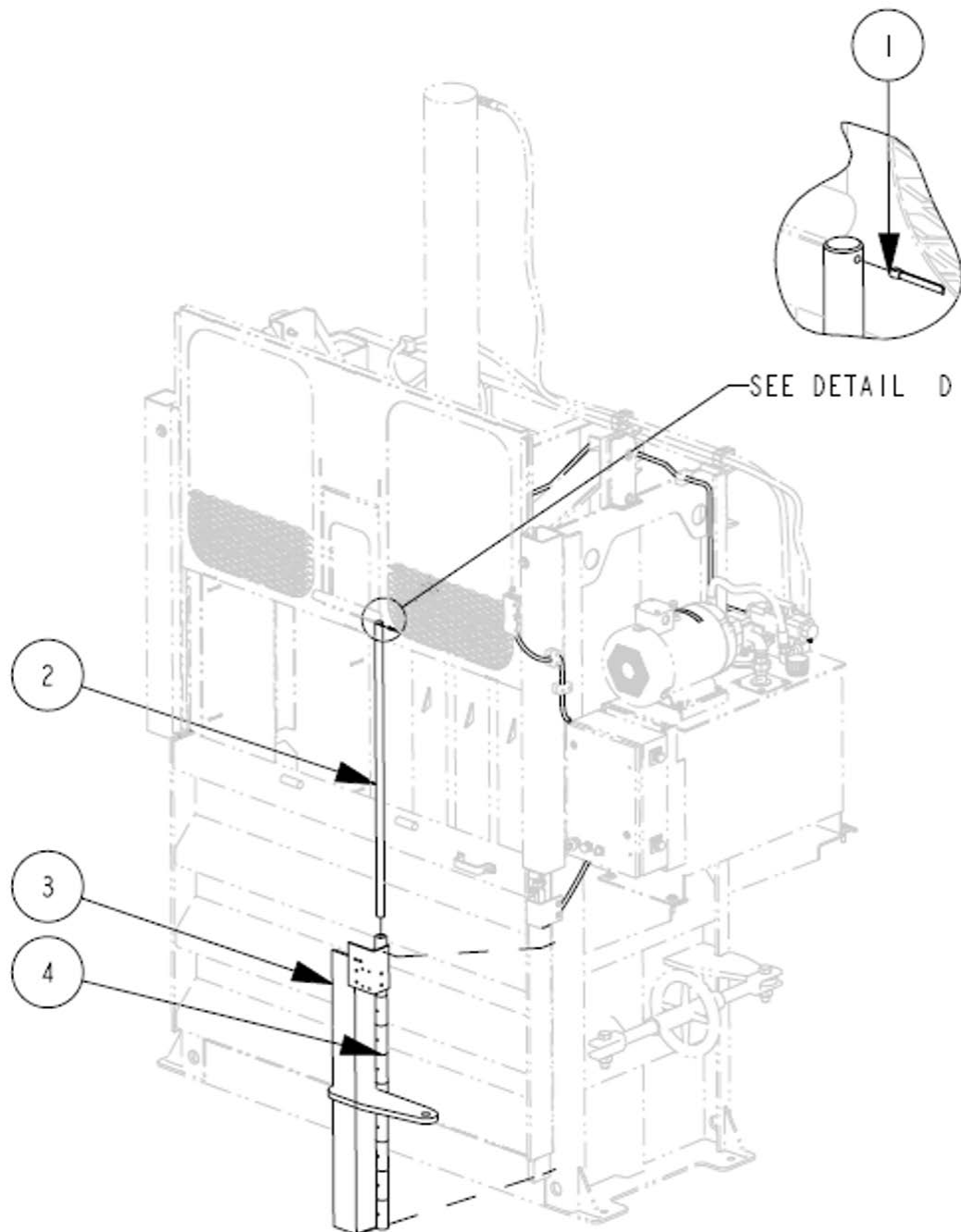
V-6030 HD DHO BALE DOOR KIT			
REF	QTY	PART NO.	DESCRIPTION
1	1	05-0567	PIVOT ROD COTTER PIN
2	1	36-1348	PIVOT ROD
3	2	31-2386	FEEDGATE GUIDE ROD
4	1	462284	BALE DOOR
5	10	31-7069	BALE DOOR HINGE TUBE

# Heavy Duty Vertical Baler

## Replacement Parts

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### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)



V-6030 HD LATCH KIT			
REF	QTY	PART NO.	DESCRIPTION
1	1	05-0567	PIVOT ROD COTTER PIN
2	1	36-1348	PIVOT ROD
3	1	461526	LATCH ASSEMBLY
4	10	31-7069	BALE DOOR HINGE TUBE

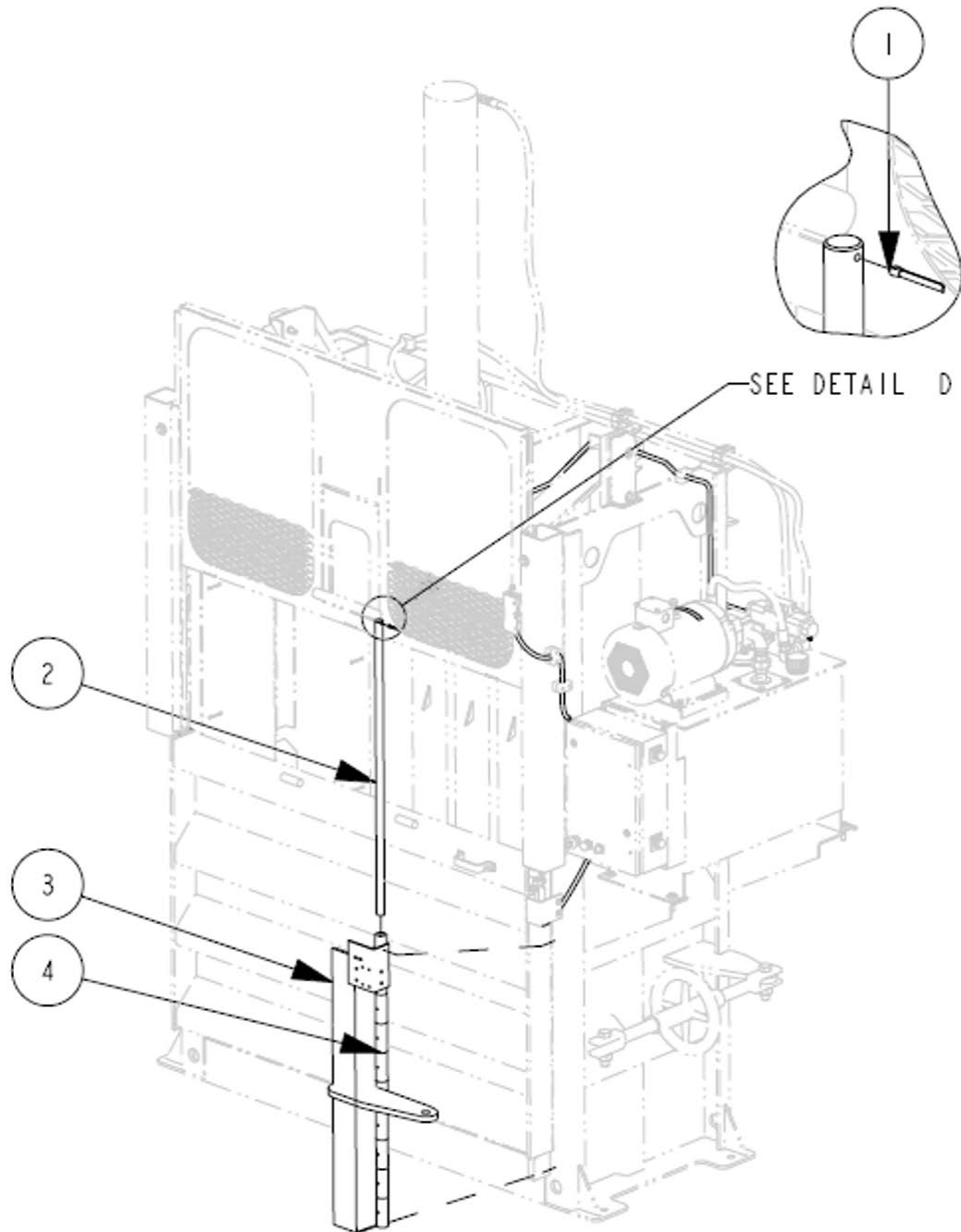


# Heavy Duty Vertical Baler

## Replacement Parts

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### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)



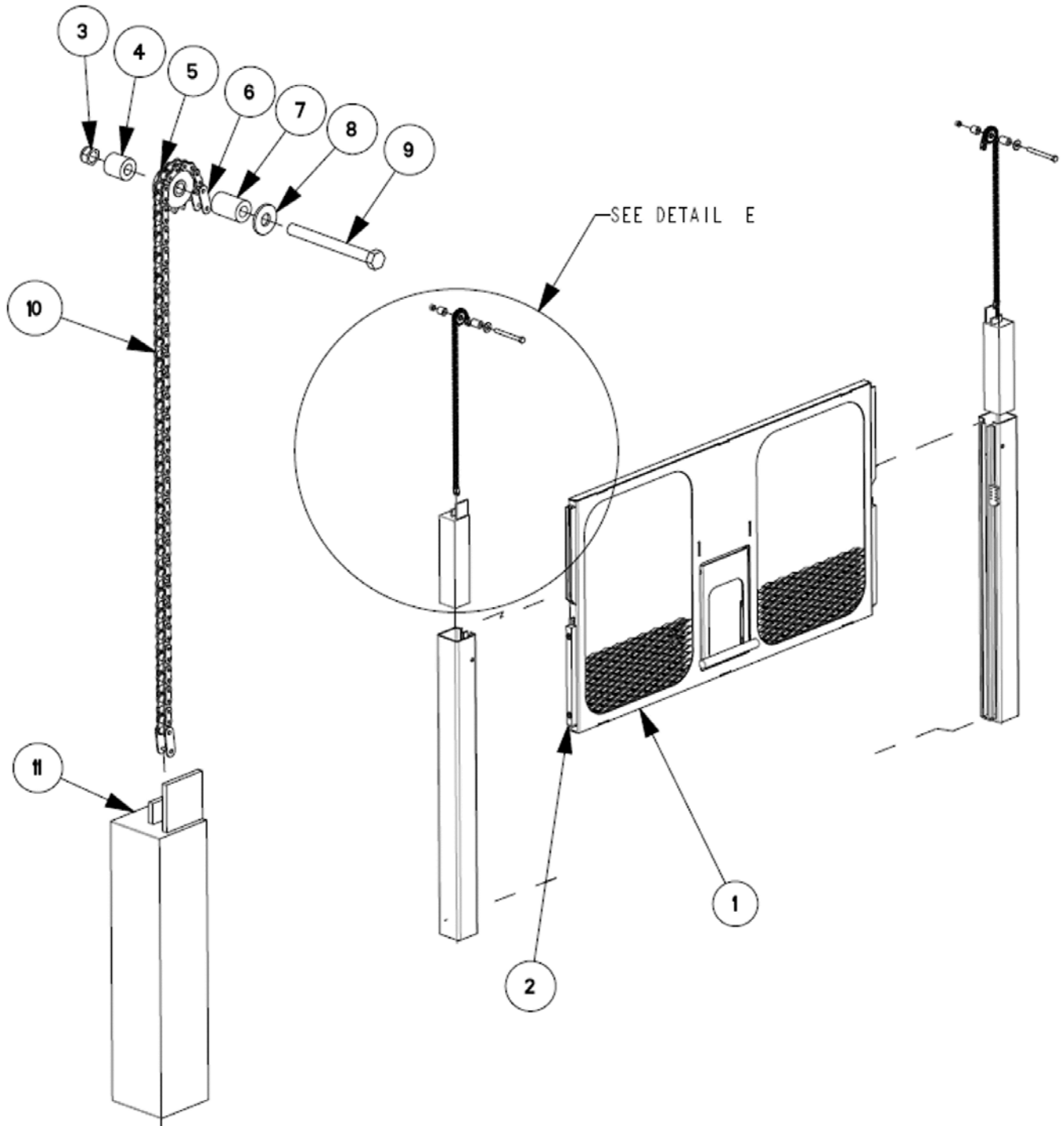
V-6030 HD DHO LATCH KIT			
REF	QTY	PART NO.	DESCRIPTION
1	1	05-0567	PIVOT ROD COTTER PIN
2	1	36-1348	PIVOT ROD
3	1	462285	LATCH ASSEMBLY
4	10	31-7069	BALE DOOR HINGE TUBE

# Heavy Duty Vertical Baler

## Replacement Parts

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### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)



# Heavy Duty Vertical Baler

## Replacement Parts

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### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)

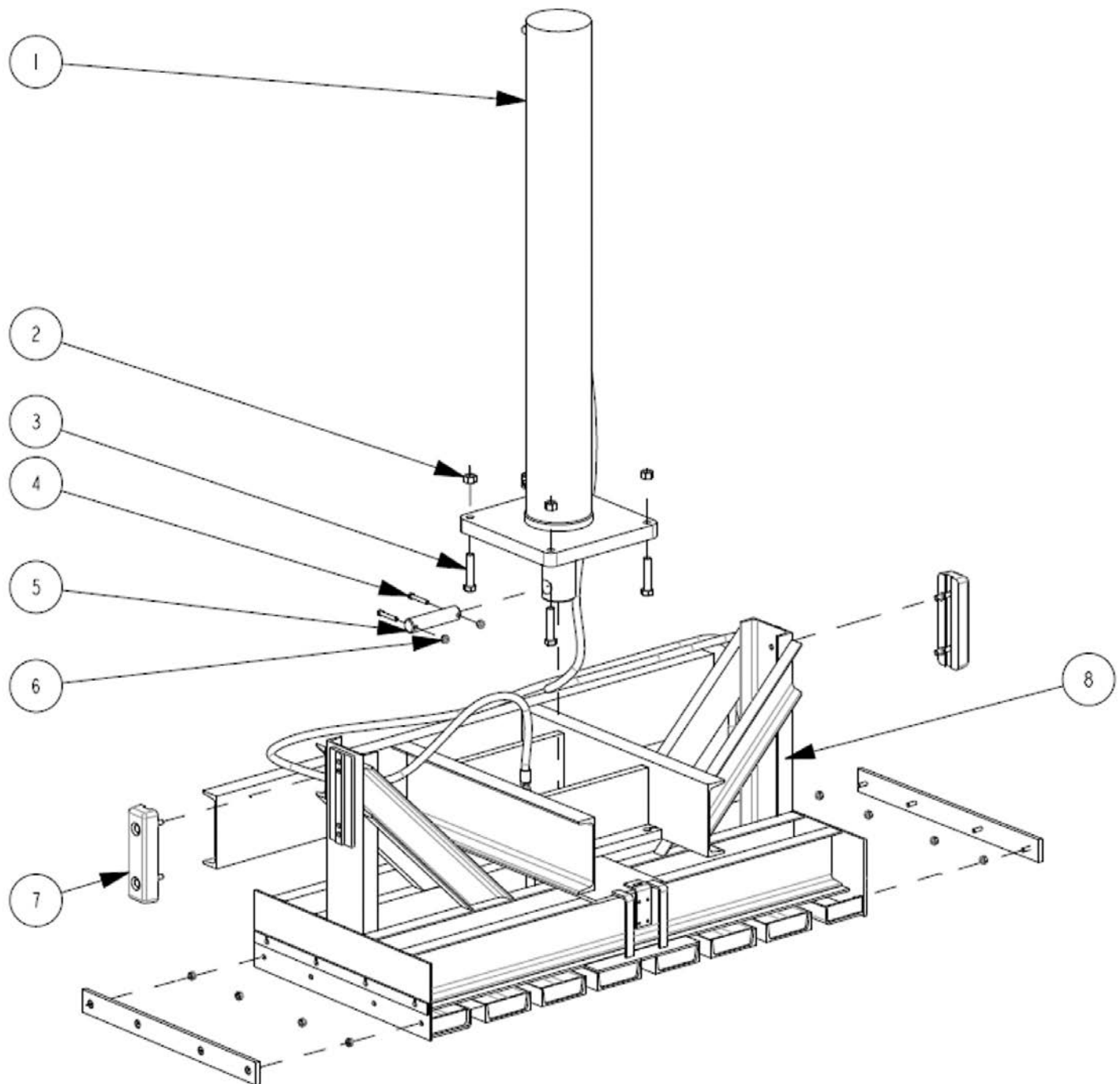
V-6030 HD AND V6030 DHO FEED GATE KIT			
REF	QTY	PART NO.	DESCRIPTION
1	1	462201	FEED GATE
2	1	441053	FEED GATE WEAR ITEMS
3	2	05-0018	NUT
4	2	05-5674	SPROCKET BUSHING 1
5	2	05-4827	SPROCKET
6	4	05-0664	MASTER LINK FOR ROLLER CHAIN
7	2	05-5675	SPROCKET BUSHING 2
8	2	05-0052	WASHER
9	2	05-0471	BOLT
10	2	05-4899	ROLLER CHAIN 2.45FT
11	2	461522	COUNTER WEIGHTS

# Heavy Duty Vertical Baler

## Replacement Parts

88

### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)



# Heavy Duty Vertical Baler

## Replacement Parts

89

### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)

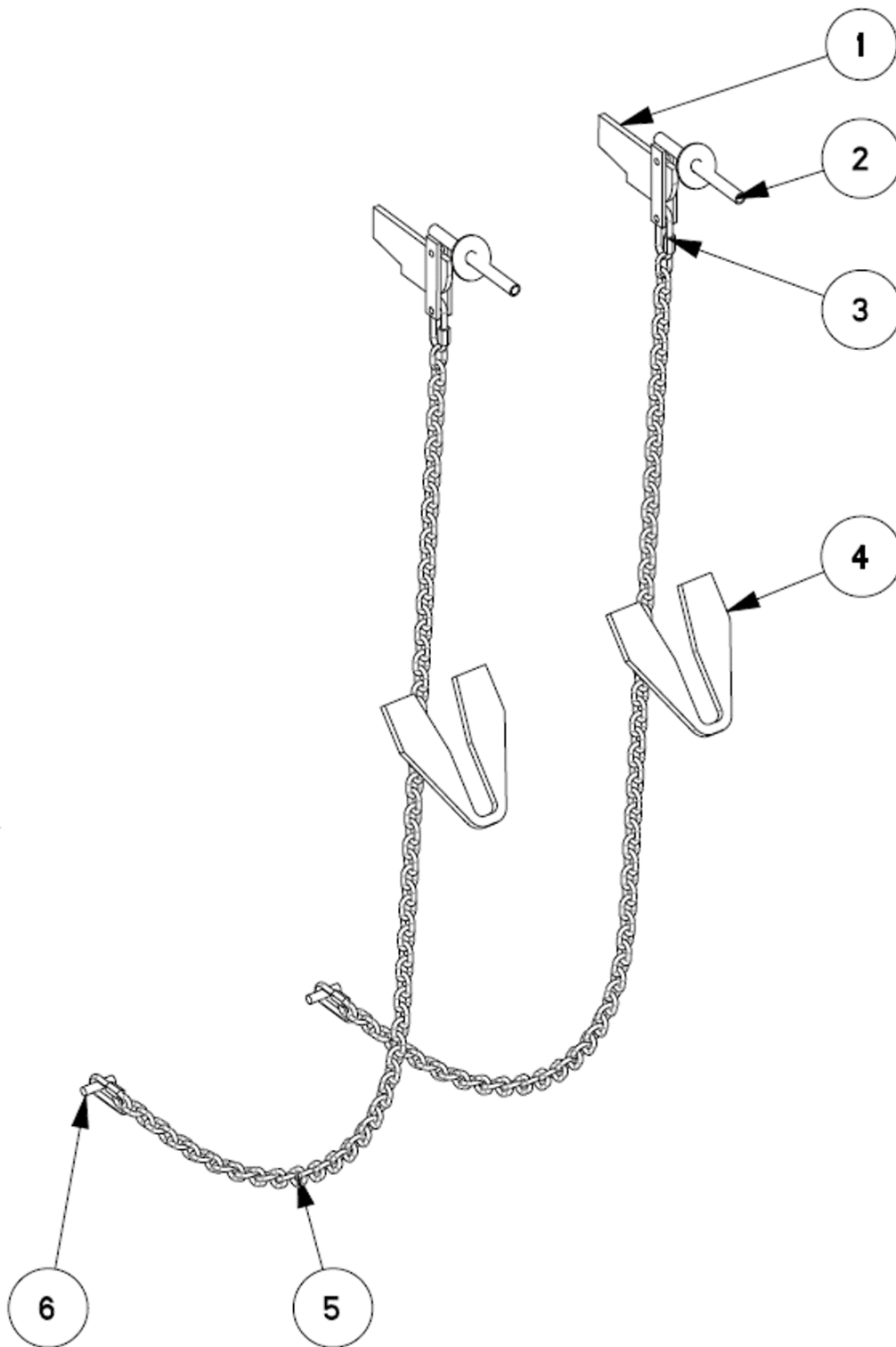
V-6030 HD AND V6030 DHO PLATEN KIT			
REF	QTY	PART NO.	DESCRIPTION
1	1	04-3399	CYLINDER
2	4	05-0287	CYLINDER HARDWARE NUT
3	4	05-0286	CYLINDER HARDWARE BOLT
4	2	05-0146	CYLINDER PIN HARDWARE BOLT
5	1	36-2165	CYLINDER PIN
6	2	05-0015	CYLINDER PIN HARDWARE NUT
7	2	444759	PLATEN WEAR ITEMS
8	1	461518	PLATEN ASSEMBLY
9	1	05-4824	PLATEN CATCH CABLE 9FT (NOT SHOWN)
10	2	05-4825	CLAMP (NOT SHOWN)

# Heavy Duty Vertical Baler

## Replacement Parts

90

### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)



# Heavy Duty Vertical Baler

## Replacement Parts

91

### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)

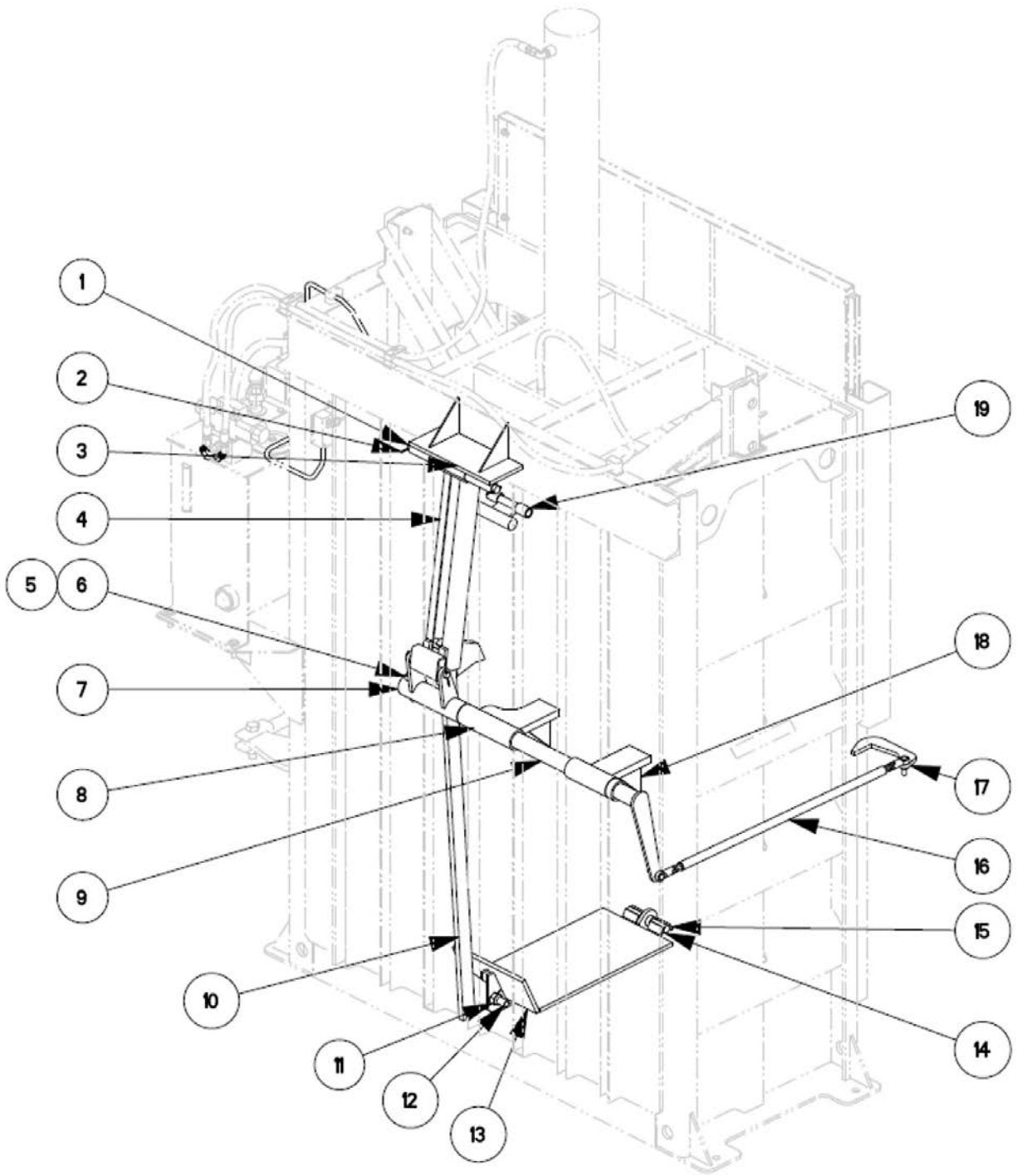
V-6030 HD AND V6030 DHO CHAIN EJECT KIT 461747			
REF	QTY	PART NO.	DESCRIPTION
1	2	35-3514	CHAIN HOOK
2	2	458186	CHAIN EJECT HANDLE
3	4	05-5393	MASTERLINK
4	2	35-3512	CHAIN HANDLE HOLDER
5	2	05-0047	CHAIN FOR CHAIN EJECT 6.1FT
6	2	09-3458	CHAIN HOLDER PIN

# Heavy Duty Vertical Baler

## Replacement Parts

92

### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)





# Heavy Duty Vertical Baler

## Replacement Parts

93

### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)

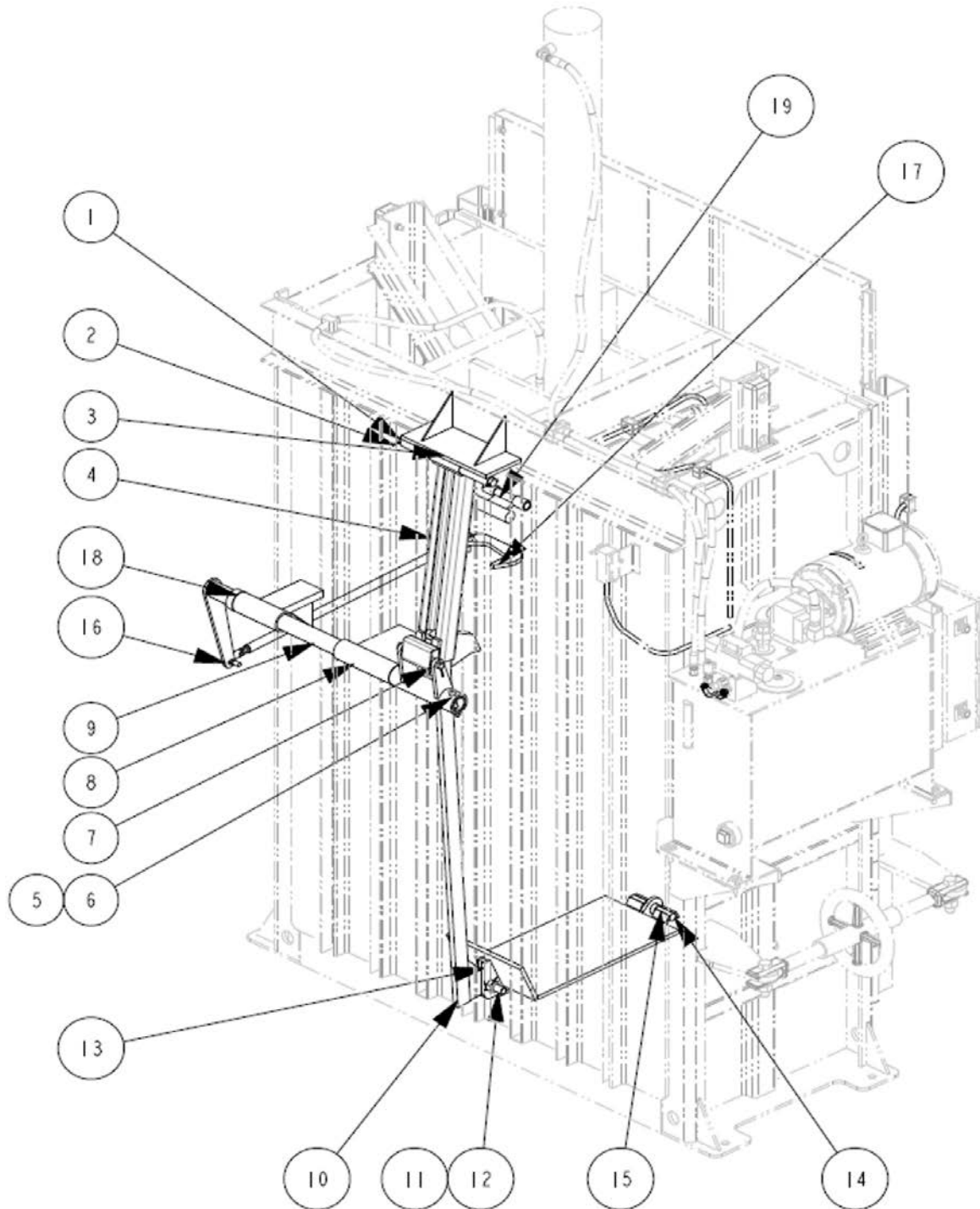
V-6030 HD CHAIN EJECT KIT 462107			
REF	QTY	PART NO.	DESCRIPTION
1	1	09-4603	LINKAGE ROD
2	2	05-0097	COTTER PINS
3	1	461955	HINGE GUIDES
4	1	461954	EJECTOR GUIDE
5	1	05-0018	EJECTOR ROD NUT
6	1	05-3199	EJECTOR ROD BOLT
7	1	461960	EJECTOR ENGAGER
8	1	462108	PIVOT ROD SUPPORT 2
9	1	461959	PIVOT ROD AND HARDWARE
10	1	455026	EJECTOR BAR ASSEMBLY
11	1	05-0084	KICK PLATE NUT
12	1	05-0038	KICK PLATE BOLT
13	1	461953	KICK PLATE ASSEMBLY
14	1	09-3593	EJECTOR PIVOT ROD
15	4	09-3594	EJECTOR PIVOT SUPPORT BAR
16	1	461970	LINKAGE ROD
17	1	36-2794	LINKAGE LUG
18	1	461957	PIVOT ROD SUPPORT 1
19	1	461956	EJECTOR CATCHER ASSEMBLY

# Heavy Duty Vertical Baler

## Replacement Parts

94

### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)



# Heavy Duty Vertical Baler

## Replacement Parts

95

### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)

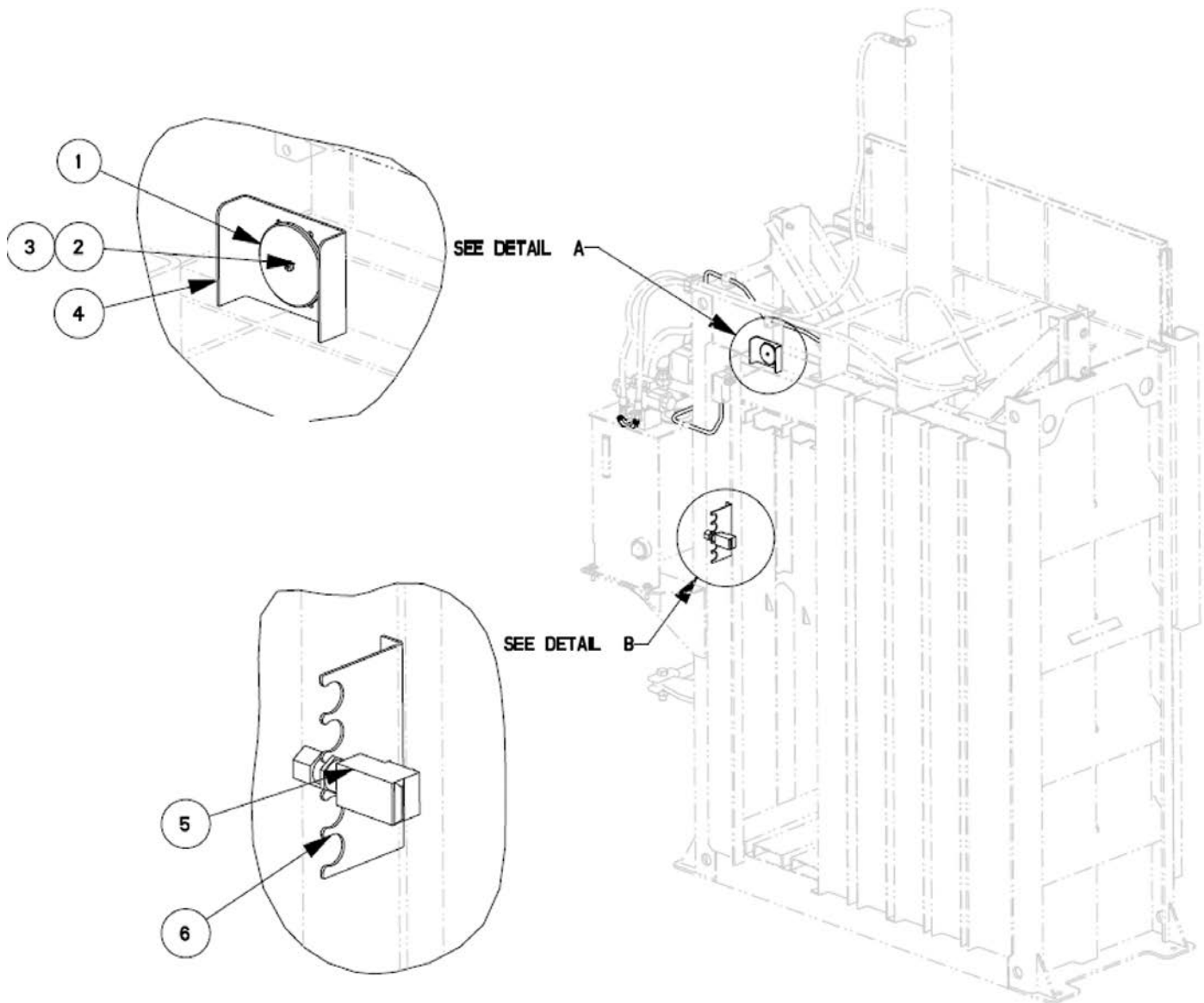
V-6030 HD DHO CHAIN EJECT KIT 462349			
REF	QTY	PART NO.	DESCRIPTION
1	1	09-4603	LINKAGE ROD
2	2	05-0097	COTTER PINS
3	1	461955	HINGE GUIDES
4	1	461954	EJECTOR GUIDE
5	1	05-0018	EJECTOR ROD NUT
6	1	05-3199	EJECTOR ROD BOLT
7	1	461960	EJECTOR ENGAGER
8	1	462350	PIVOT ROD SUPPORT 2
9	1	461959	PIVOT ROD AND HARDWARE
10	1	455026	EJECTOR BAR ASSEMBLY
11	1	05-0084	KICK PLATE NUT
12	1	05-0038	KICK PLATE BOLT
13	1	461953	KICK PLATE ASSEMBLY
14	1	09-3593	EJECTOR PIVOT ROD
15	4	09-3594	EJECTOR PIVOT SUPPORT BAR
16	1	461970	LINKAGE ROD
17	1	36-2794	LINKAGE LUG
18	1	461957	PIVOT ROD SUPPORT 1
19	1	461956	EJECTOR CATCHER ASSEMBLY

# Heavy Duty Vertical Baler

## Replacement Parts

96

### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)



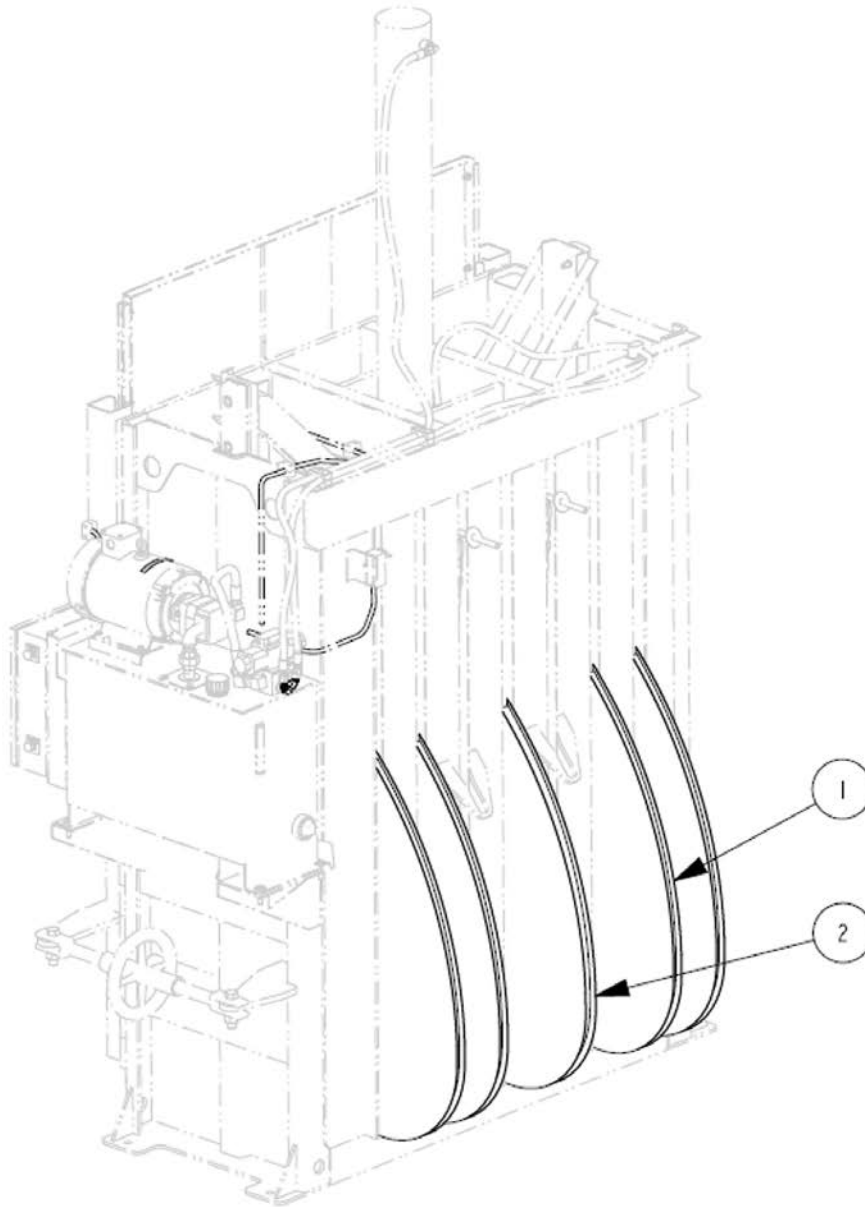
V-6030 HD AND V6030 DHO BALE MADE KIT 580360			
REF	QTY	PART NO.	DESCRIPTION
1	1	03-0131	BALE MADE REFLECTOR
2	1	05-0010	BALE MADE REFLECTOR HARDWARE NUT
3	1	05-4407	BALE MADE REFLECTOR HARDWARE BOLT
4	1	36-1275	BALE MADE REFLECTOR BRACKET
5	1	03-5020	BALE MADE PHOTOEYE
6	1	36-3226	BALE MADE PHOTOEYE BRACKET

# Heavy Duty Vertical Baler

## Replacement Parts

97

### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)



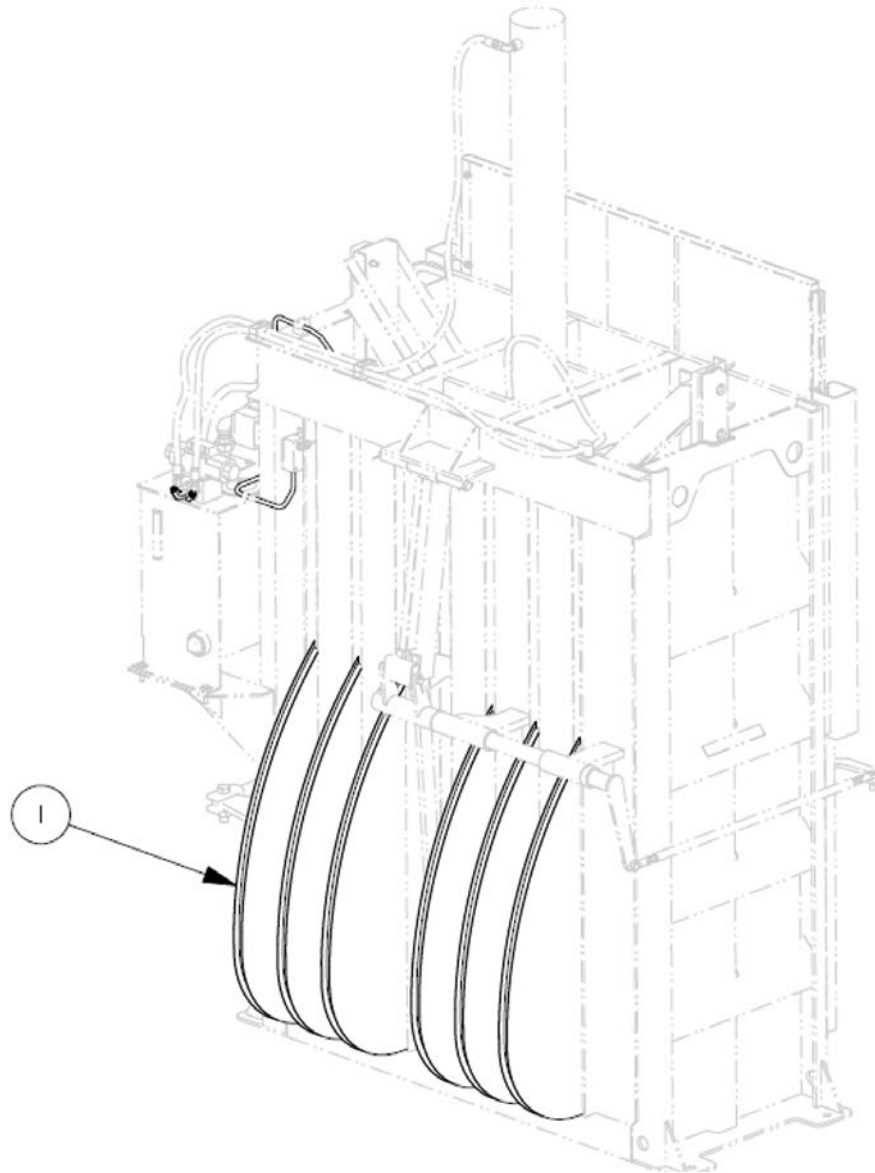
V-6030 HD AND V6030 DHO WIRE GUIDE 461737			
REF	QTY	PART NO.	DESCRIPTION
1	4	461735	WIRE GUIDE ASSEMBLY 1
2	1	461736	WIRE GUIDE ASSEMBLY 2

# Heavy Duty Vertical Baler

## Replacement Parts

98

### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)



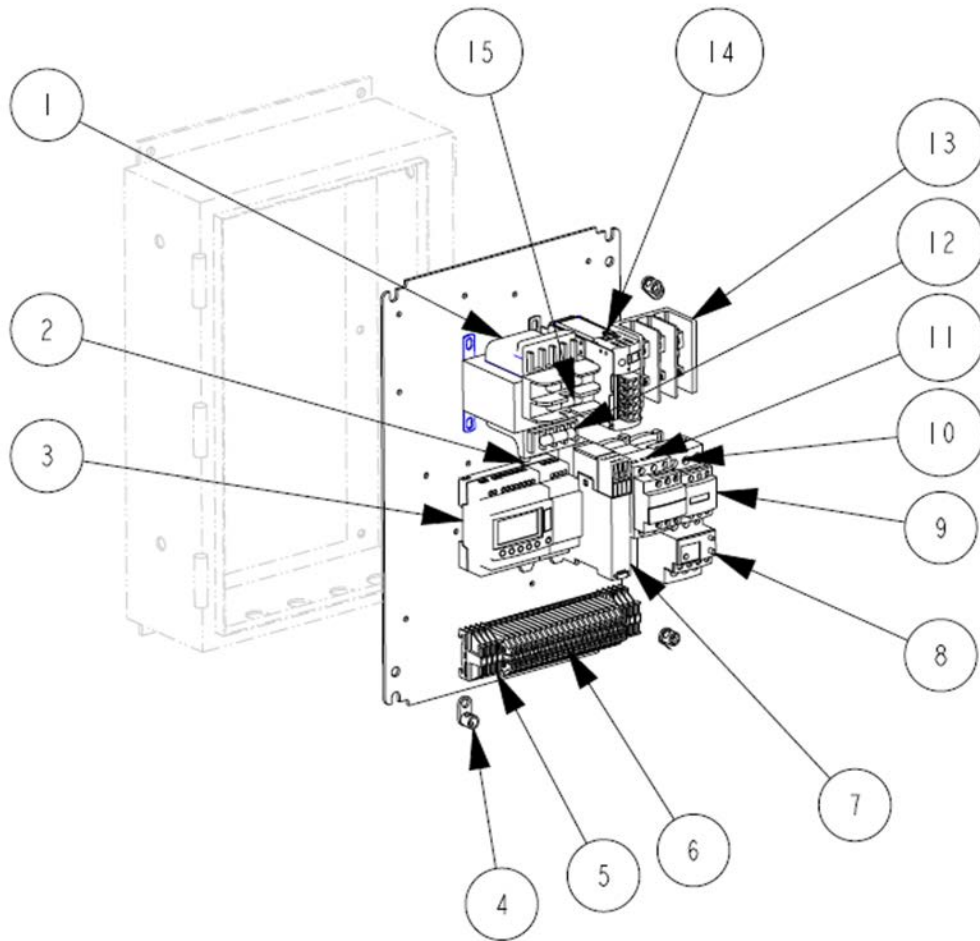
V-6030 HD AND V6030 DHO WIRE GUIDE 462106			
REF	QTY	PART NO.	DESCRIPTION
1	6	461735	WIRE GUIDE ASSEMBLY

# Heavy Duty Vertical Baler

## Replacement Parts

99

### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)



# Heavy Duty Vertical Baler

## Replacement Parts

100

### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)

V-6030 HD AND V-6030 HD DHO CSA PANEL BOX		
REF	PART NO.	DESCRIPTION
1	03-0288	TRANSFOMER 150VA 208/230/460-120 SEC VAC
	03-0237	TRANSFORMER 200 VA 575 PRI 120 SEC
2	03-5445	PLC TELEMECANIQUE EXP.MOD 24V
3	03-5444	PLC TELEMECANIQUE ZELIO 24 6I
4	03-0551	TERMINAL GROUND
5	03-4441	TERMINAL BLOCK END STOP
6	03-4437	TERMINAL BLOCK #22-10 35MM DIN
7	03-5148	RELAY GATE MONITORING
8	03-4763	MOTOR STARTER IEC OVERLOAD 23-32 AMPS
	03-4797	MOTOR STARTER IEC OVERLOAD 9-13 AMPS
9	03-4748	MOTOR STARTER IEC 32A 3P CONTA
10	03-4753	MOTOR STARTER IEC OVERLOAD 12-18 AMPS TELE
11	03-5468	RELAY 24VDC 5 POLE 3 NO CAD32BD
12	03-0191	FUSE 2 AMP CONTROL
13	03-0959	DIST BLK 1-#2/0-14 LD 4- #4-14
14	03-4732	POWER SUPPLY 24 VDC 60W 85-64
15	03-0488	FUSE 1.5 AMP 500V
	03-5499	FUSE 1 AMP 600V

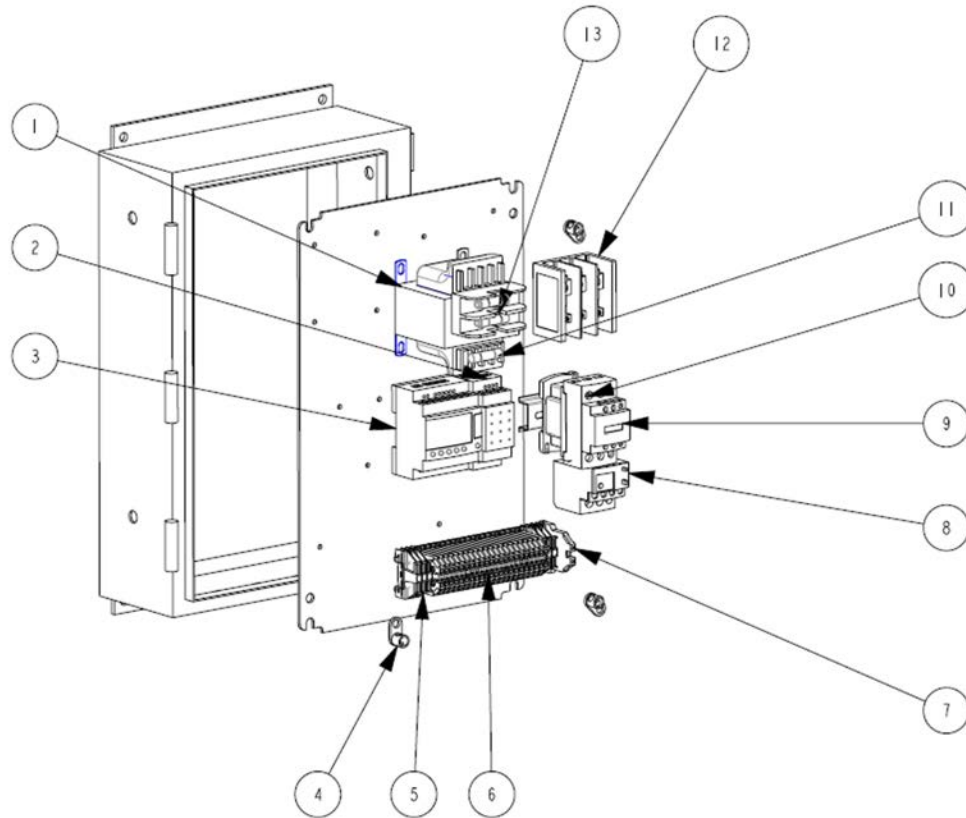


# Heavy Duty Vertical Baler

## Replacement Parts

101

### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)



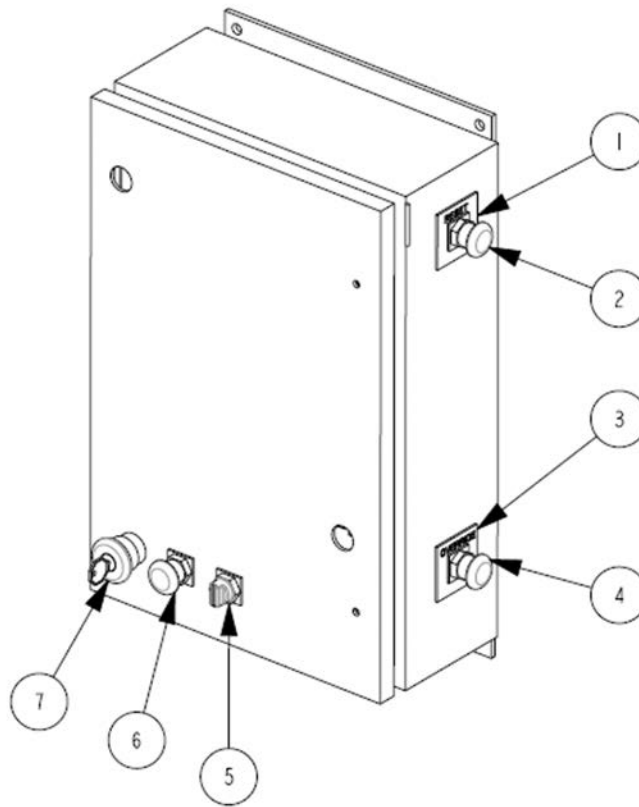
V-6030 HD AND V-6030 HD DHO STD PANEL BOX		
REF	PART NO.	DESCRIPTION
1	03-0288	TRANSFOMER 150VA 208/230/460-120 SEC VAC
2	03-4730	PLC TELEMECANIQUE EXP MOD 4 IN 2 OUT
3	03-4729	PLC TELEMECANIQUE 6 IN 4 OUT
4	03-0551	TERMINAL GROUND
5	03-4441	TERMINAL BLOCK END STOP
6	03-4437	TERMINAL BLOCK #22-10 35MM DIN
7	03-4172	TERMINAL BLOCK #24-10 35MM DIN
8	03-4763	MOTOR STARTER IEC OVERLOAD 23-32 AMPS
9	03-4748	MOTOR STARTER IEC 32A 3P CONTA
10	03-4753	MOTOR STARTER IEC OVERLOAD 12-18 AMPS TELE
11	03-0191	FUSE 2 AMP CONTROL
12	03-0959	DIST BLK 1-#2/0-14 LD 4- #4-14
13	03-0488	FUSE TIME DELAY 1.5 AMP 500V

# Heavy Duty Vertical Baler

## Replacement Parts

102

### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)



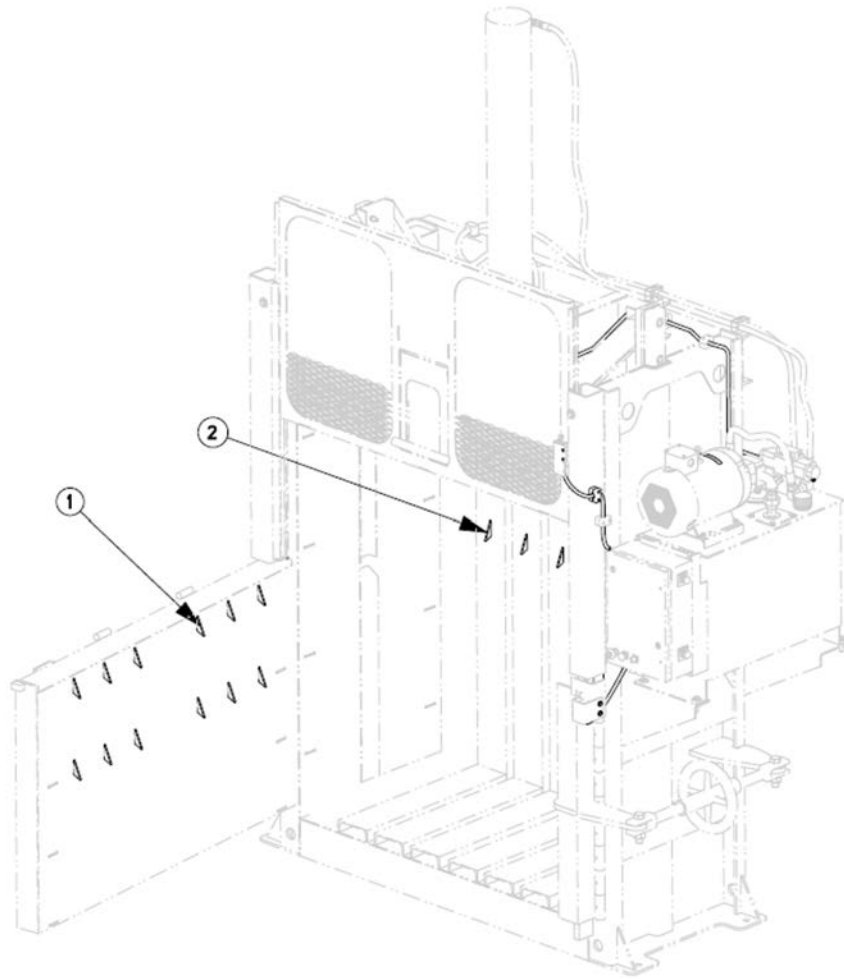
V-6030 HD AND V6030 DHO PANEL BOX SWITCH			
REF	QTY	PART NO.	DESCRIPTION
1	1	03-4803	LEGEND 22 RESET
2	1	03-2093	OPERATOR 22 PUSH BUTTON BLUE FLUSH
3	1	03-4805	LEGEND 22 OVERRIDE
4	1	03-0928	OPERATOR 22 BLACK FLUSH PUSHBUTTON
5	2	03-0933	OPERATOR 22 SELECTOR 3 POS RSTO CENTER
6	1	03-0939	OPERATOR 22 PUSH/PULL MSHRM HD RED
7	2	03-2689	OPERATOR 22 KEY SW 3 POS MAIN T SPRG TO CTR

# Heavy Duty Vertical Baler

## Replacement Parts

103

### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)



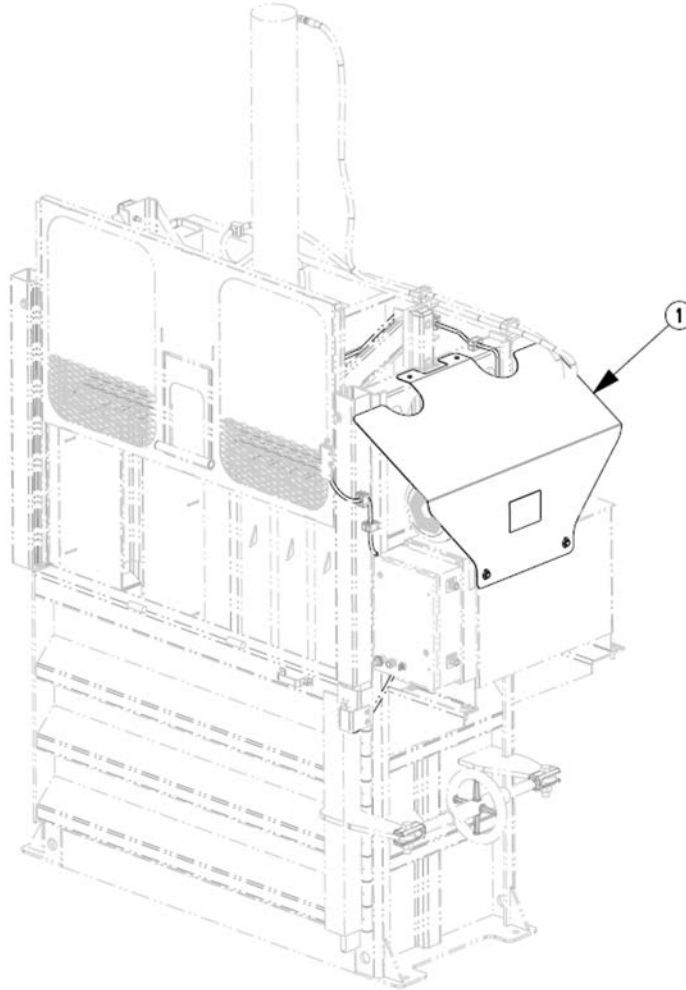
V-6030 HD AND V6030 RETAINER TEETH			
REF	QTY	PART NO.	DESCRIPTION
1	12	36-2474	RETAINER TEETH BALE DOOR
2	6	36-1210	RETAINER TEETH BODY

# Heavy Duty Vertical Baler

## Replacement Parts

104

### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)



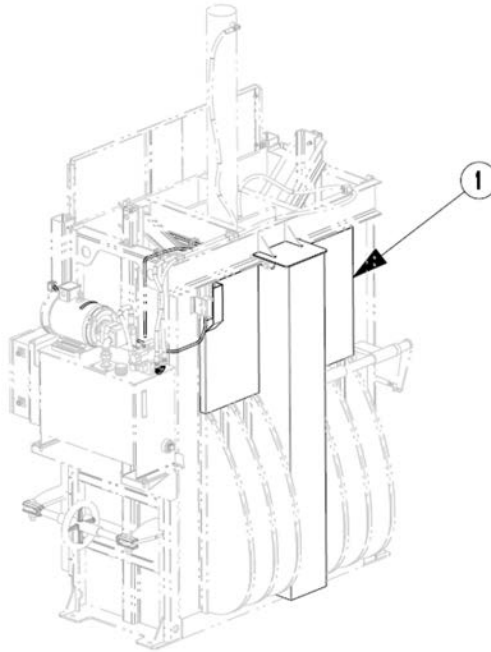
V-6030 HD AND V6030 DHO WEATHER COVER KIT			
REF	QTY	PART NO.	DESCRIPTION
1	1	462119	WEATHER COVER ASSEMBLY

# Heavy Duty Vertical Baler

## Replacement Parts

105

### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)



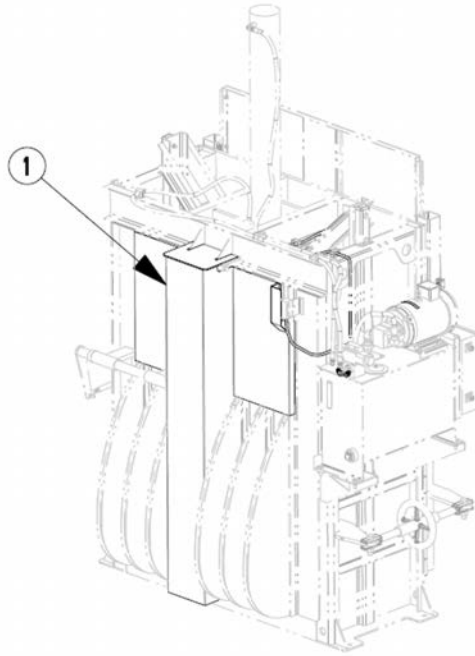
V-6030 HD CSA COVER KIT AUTO EJECT			
REF	QTY	PART NO.	DESCRIPTION
1	1	462116	CSA COVER FOR AUTO EJECT V-6030 HD

# Heavy Duty Vertical Baler

## Replacement Parts

106

### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)



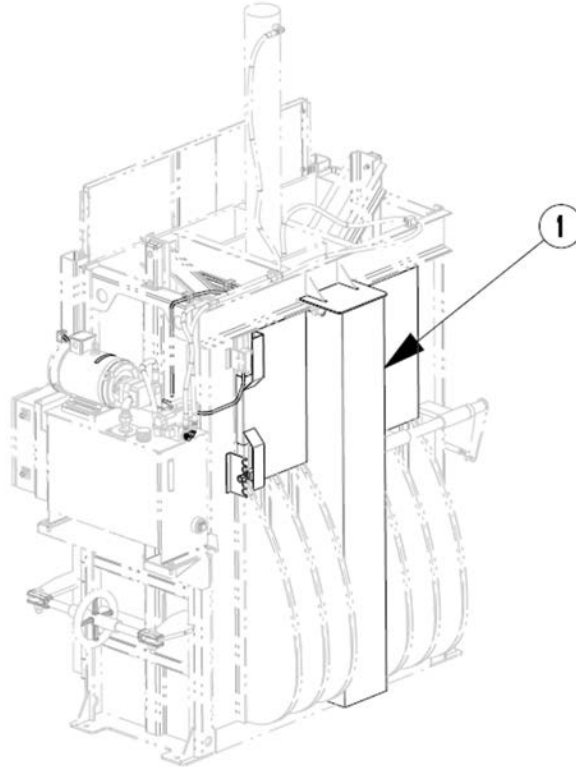
V6030 HD DHO CSA COVER KIT AUTO EJECT			
REF	QTY	PART NO.	DESCRIPTION
1	1	462289	CSA COVER FOR AUTO EJECT V-6030 HD DHO

# Heavy Duty Vertical Baler

## Replacement Parts

107

### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)



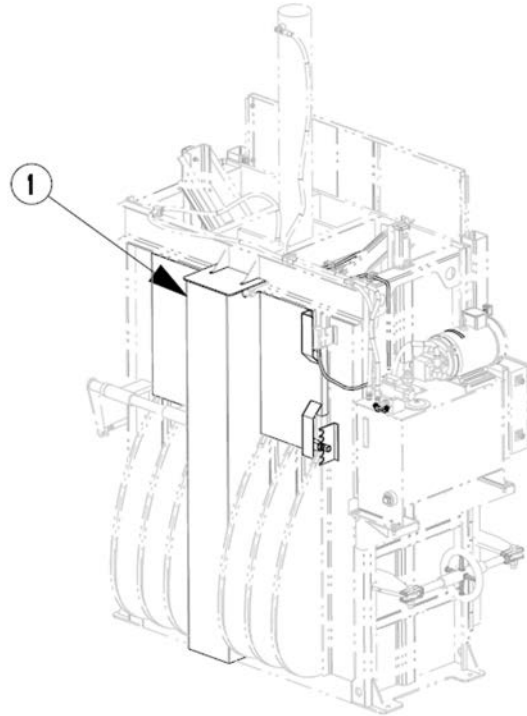
V-6030 HD CSA COVER KIT (BALE MADE) AUTO EJECT			
REF	QTY	PART NO.	DESCRIPTION
1	1	462118	CSA COVER FOR AUTO EJECT V-6030 HD

# Heavy Duty Vertical Baler

## Replacement Parts

108

### PARTS ILLUSTRATION AND PARTS LIST (CONTINUED)



V-6030 HD DHO PANEL BOX SWITCH			
REF	QTY	PART NO.	DESCRIPTION
1	1	462290	CSA COVER FOR AUTO EJECT V-6030 HD DHO



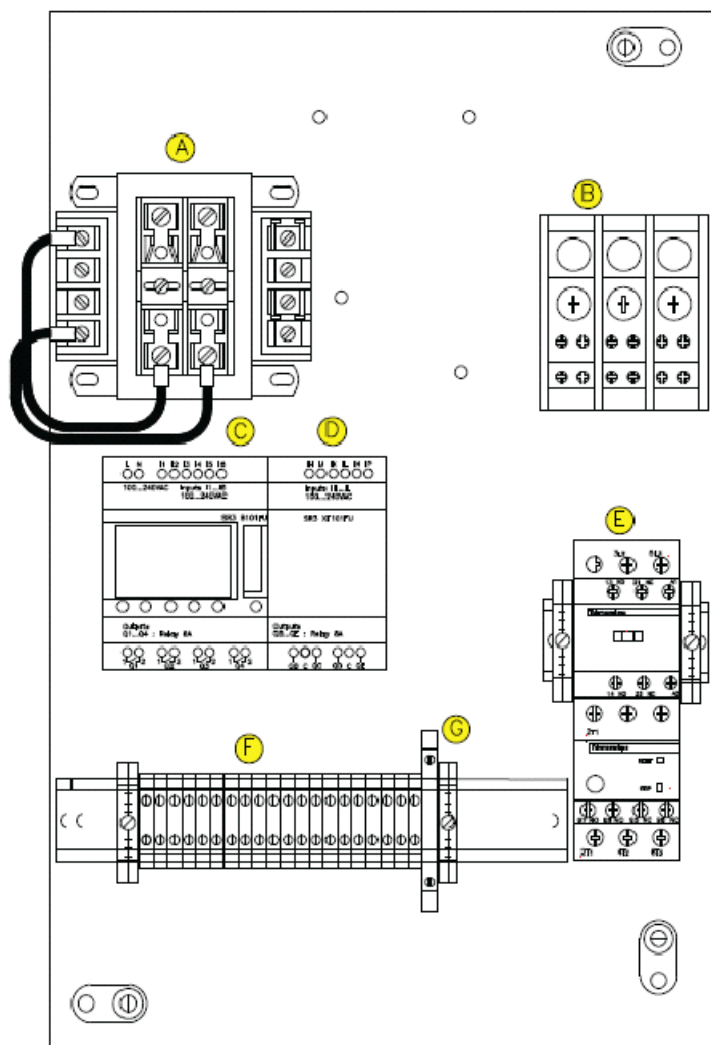
# Heavy Duty Vertical Baler

## Replacement Parts

109

### STANDARD PANEL BOX CONFIGURATION (TYPICAL)

The diagram below represents a typical panel box configuration for our balers. The panel box on your baler may differ depending on the model and optional equipment controls.



The diagram to the left represents a typical panel box configuration for our balers. The panel box on your baler may differ depending on the model and optional equipment controls.

Refer to the table below to identify components. To order replacement parts, please call the Parts & Warranty department. Refer to **Contact Information** for details.

For information on programming the PLC, refer to **PLC Maintenance** 57.

REF	PART NO.	DESCRIPTION
A	03-0288	CONTROL TRANSFORMER-MICRON 150VA, 208/230/460-120 VAC
B	03-0959	DISTRIBUTION BLOCK
C	03-4729	ZELIO SMART RELAY – PLC
D	03-4852	ZELIO EXPANSION MODULE – 6 INPUTS, 4 OUTPUTS OR
D	03-4853	ZELIO EXPANSION MODULE – 8 INPUTS, 6 OUTPUTS
E	03-4748	IEC MOTOR STARTER
E	03-4753	OVERLOAD FOR 460V OR
E	03-4763	OVERLOAD FOR 230V
F	03-4437	IEC FINGER-SAFE TERMINAL BLOCKS
G	CALL W/SN	FUSE

# Heavy Duty Vertical Baler

## Replacement Parts

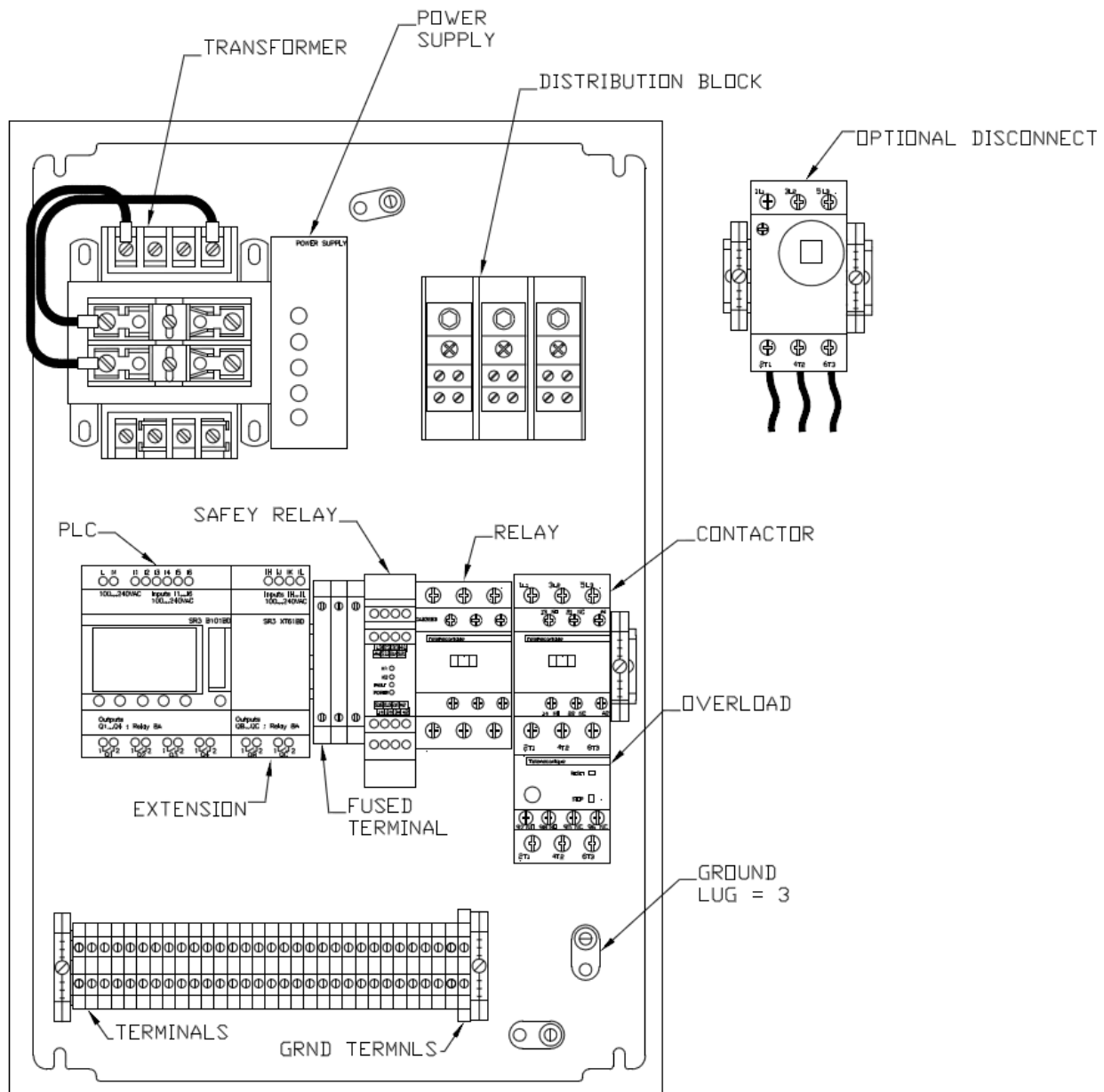
110

### CANADIAN UNITS PANEL BOX CONFIGURATION

The diagram below represents a Canadian unit panel box configuration for our balers. The panel box on your baler may differ depending on the model and optional equipment controls.

Refer to the table below to identify components. To order replacement parts, please call the Parts & Warranty department. Refer to **Contact Information** [18](#) for details.

For information on programming the PLC, refer to the **PLC Maintenance** [57](#).




# Heavy Duty Vertical Baler

## Replacement Parts

111

### CANADIAN UNITS PANEL BOX CONFIGURATION (CONT.)

Canadian unit part numbers given below refer to locations on the **illustration** .

PART NO.	DESCRIPTION
03-5444	PLC TELEMECANIQUE 6 IN 4 OUT
03-5445	PLC TELEMECANIQUE EXP. MOD. 4 IN 2 OUT
03-0288	TRANSFORMER 150VA 208/230/460PRI 120SEC
03-0237	TRANSFORMER 200VA 575PRI 120SEC
03-4748	MOTOR STARTER IEC 32A 3P CONTACTOR
03-4753	MOTOR STARTER IEC OVERLOAD 12-18 AMPS (460 Volts)
03-4763	MOTOR STARTER IEC OVERLOAD 23-32 AMPS (208-230 Volts)
03-4797	MOTOR STARTER IEC OVERLOAD 9-13 AMPS (575 Volts)
03-4437	TERMINAL BLOCK #22-10 35MM DIN GREY
03-4172	TERMINAL BLOCK #24-10 35MM DIN GRD GREEN
03-4169	TERMINAL BLOCK END BARRIER F/03-4168
03-4173	TERMINAL BLOCK END BARRIER F/03-4172
03-4441	TERMINAL BLOCK END STOP 35MM DIN
03-4438	TERMINAL BLOCK JUMPER 3 POLE INSULATED
03-4782	MOTOR STARTER IEC 24-32A MOTOR PROTECTOR (OPTIONAL)
03-4732	POWER SUPPLY 120VAC/24VDC 2.8AMP
03-5148	RELAY GATE MONITORING 2 POLE

# Heavy Duty Vertical Baler

## Replacement Parts

112

### DECAL PARTS LIST AND PLACEMENT

#### Warning Decal Requirements

When your baler leaves the factory, several WARNING DECALS are installed for your protection. These labels are subject to wear and abuse due to the nature of the baling operation.

**The following decals must be maintained.** Additional decals may be purchased through your distributor or from Marathon Equipment Company by calling the service department at 877-258-1105.

The “BALE MADE” arrow on the feed gate (#3, decal 06-0651) **MUST** be placed where the vertical center of the arrow is exactly 4 7/8” (123.8 mm) from the top of the bale door.

The “BALE MADE” arrow on the platen (#4, decal 06-0652) **MUST** be placed where the vertical center of the arrow is exactly 2 3/8” (60.3 mm) from the top of the front channel on the platen.

Note: LOCATIONS OF DECALS 3 & 4 ARE CRITICAL!

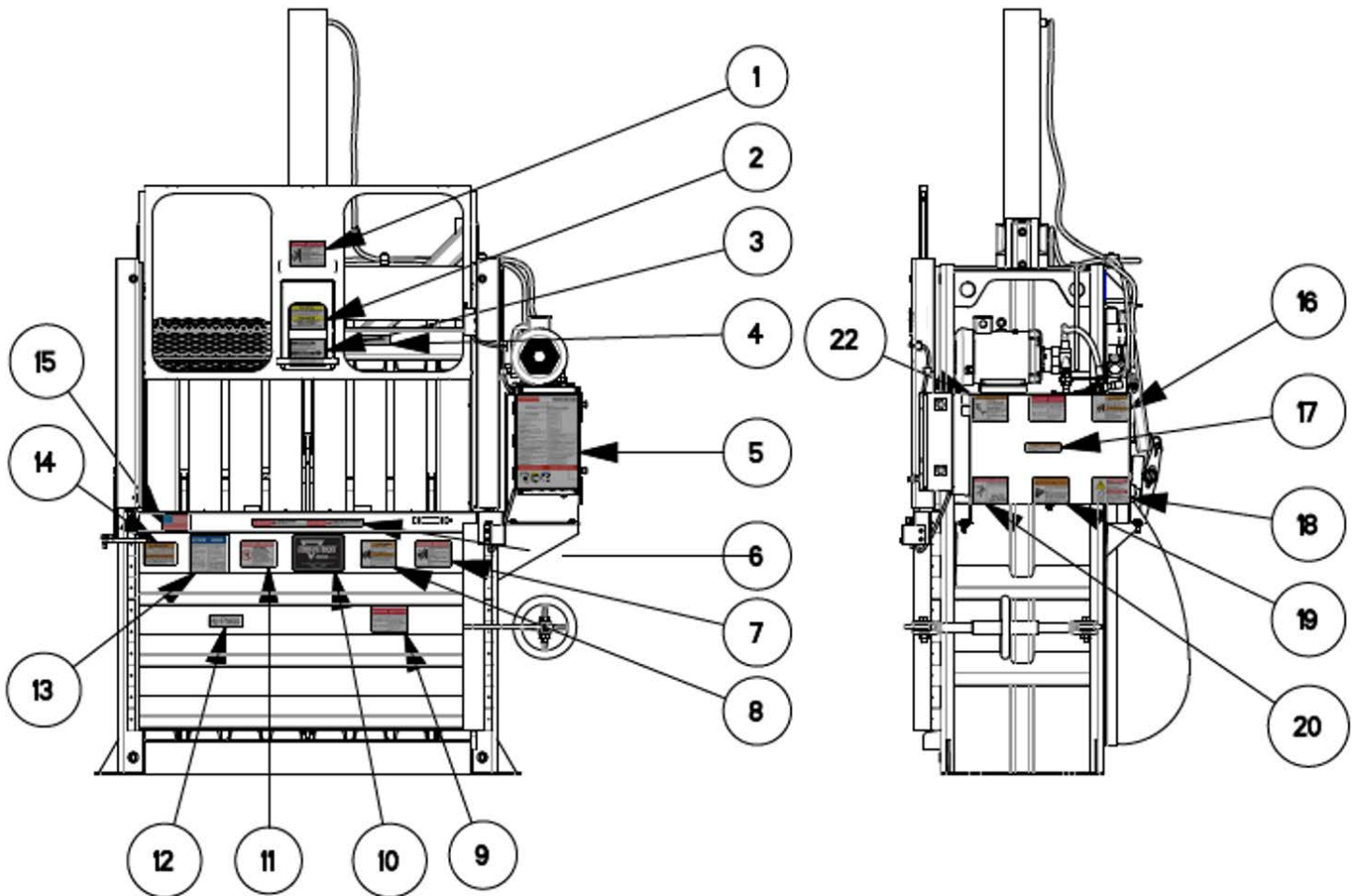
# Heavy Duty Vertical Baler

## Replacement Parts

113

### DECAL PARTS LIST AND PLACEMENT (Continued)

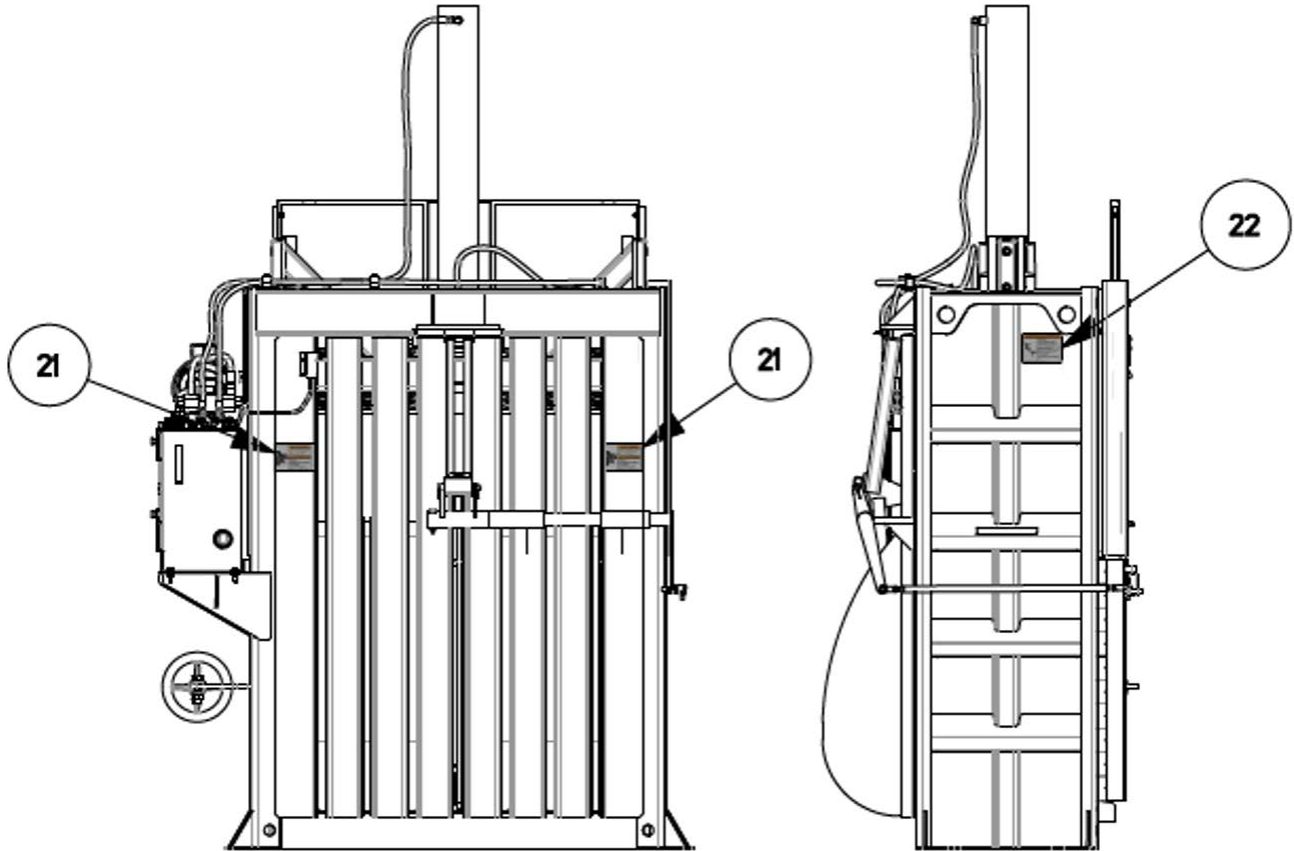
Auto Eject Decal kit for V-6030 HD & V-6030 HD DHO Eng/Span- 441960 Decal Placement



# Heavy Duty Vertical Baler

## Replacement Parts

114



# Heavy Duty Vertical Baler

## Replacement Parts

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### DECAL PARTS LIST AND PLACEMENT (CONTINUED)

Auto Eject Decal kit for V-6030 HD & V-6030 HD DHO Eng/Span- 441960 Decal List

AUTO EJECT DECAL KIT FOR V-6030 HD & V-6030 HD DHO ENG/SPAN- 441960			
REF	PART NO.	DESCRIPTION	QTY
1	06-0039	DECAL DANGER DO NOT ENTER E/S	1
2	06-3170	DO NOT SLAM FEED GATE E/S	1
3	06-0651	DECAL NOTICE BALE MADE IF	1
4	06-0652	DECAL ARROW W/1" HEAD 6" X 1 1/2 SP	1
5	06-3391	DECAL OP INST VERT CHAIN E/S	1
6	06-0116	DECAL DANGER KEEP HANDS OUT E/S	1
7	06-0052	DECAL DANGER GATE MUST BE CLOSED E/S	1
8	06-0118	DECAL WARNING STAND CLEAR	1
9	06-3978	DECAL DANGER D NOT OVERRIDE OR TAMPER E/S	2
10	06-0126	DECAL MARATHON EQUIPMENT COMPANY	1
11	06-3123	DECAL DANGER CONFINED SPACE E/S	1
12	06-0147	DECAL HY/PRESS	1
13	06-0121	DECAL NOTICE FEDERAL REGULATIONS	1
14	06-3626	DECAL WARNING OPN BL DR BEFORE	1
15	06-1839	DECAL AMERICAN FLAG	1
16	06-0117	DECAL WARNING STAND CLEAR	1
17	06-3976	DECAL WARNING SHOCK ARC FLASH HAZARD E/S	1
18	06-0120	DECAL DANGER DISCONNECT	1
19	06-3977	DECAL WARNING DO NOT OPERATE SERVICE E/S	1
20	06-3044	DECAL DANGER VOLTS W/BLANKSPACE E/S	1
21	06-0475	DECAL CAUTION STAY CLEAR WHILE IN	2
22	06-0133	DECAL WARNING STAY OFF	2

# Heavy Duty Vertical Baler

## Replacement Parts

116

### DECAL PARTS LIST AND PLACEMENT (CONTINUED)

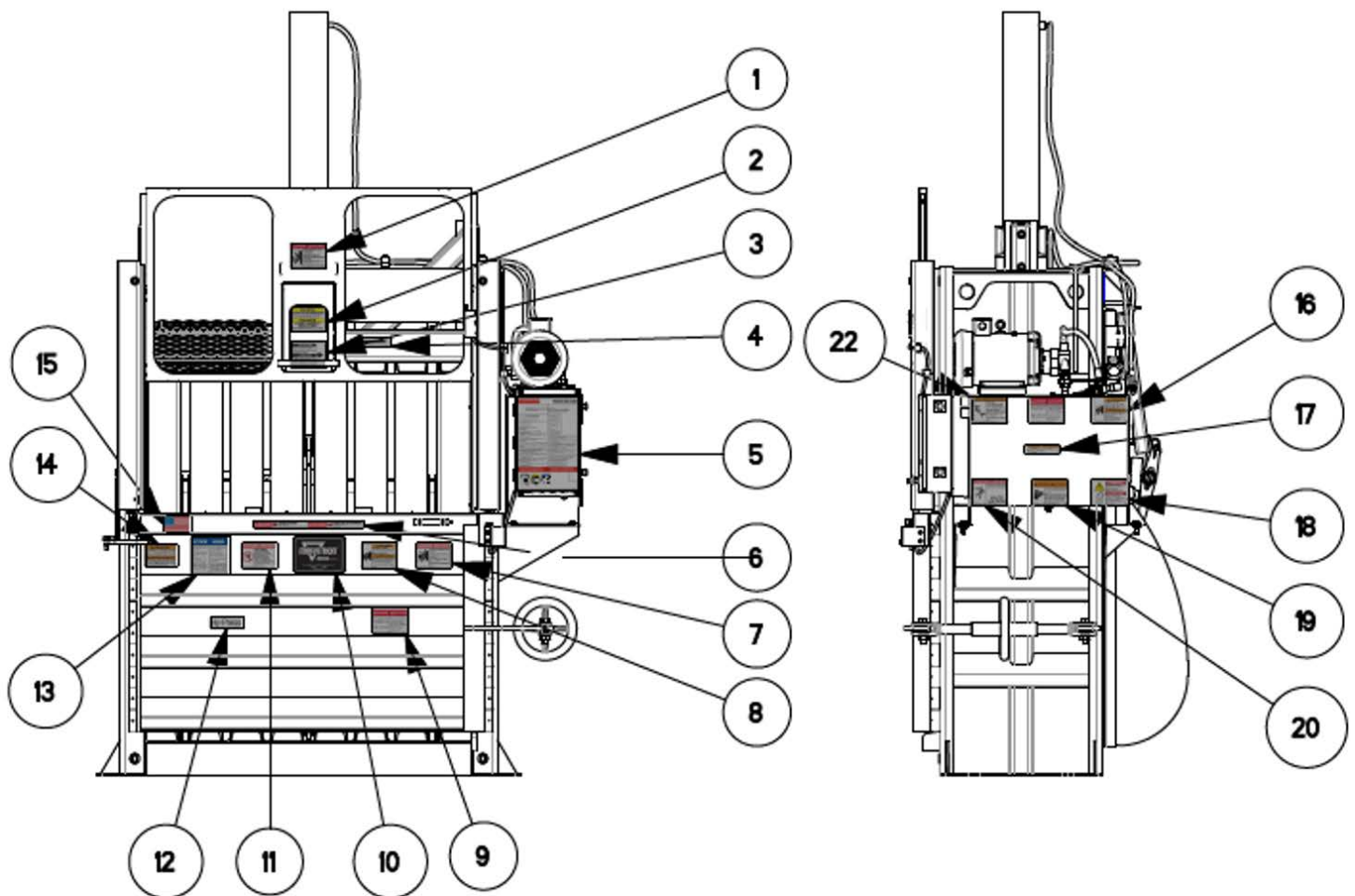
Auto Eject Decal kit for V-6030 HD & V-6030 HD DHO Eng/French- 443718 Decal Placement



# Heavy Duty Vertical Baler

## Replacement Parts

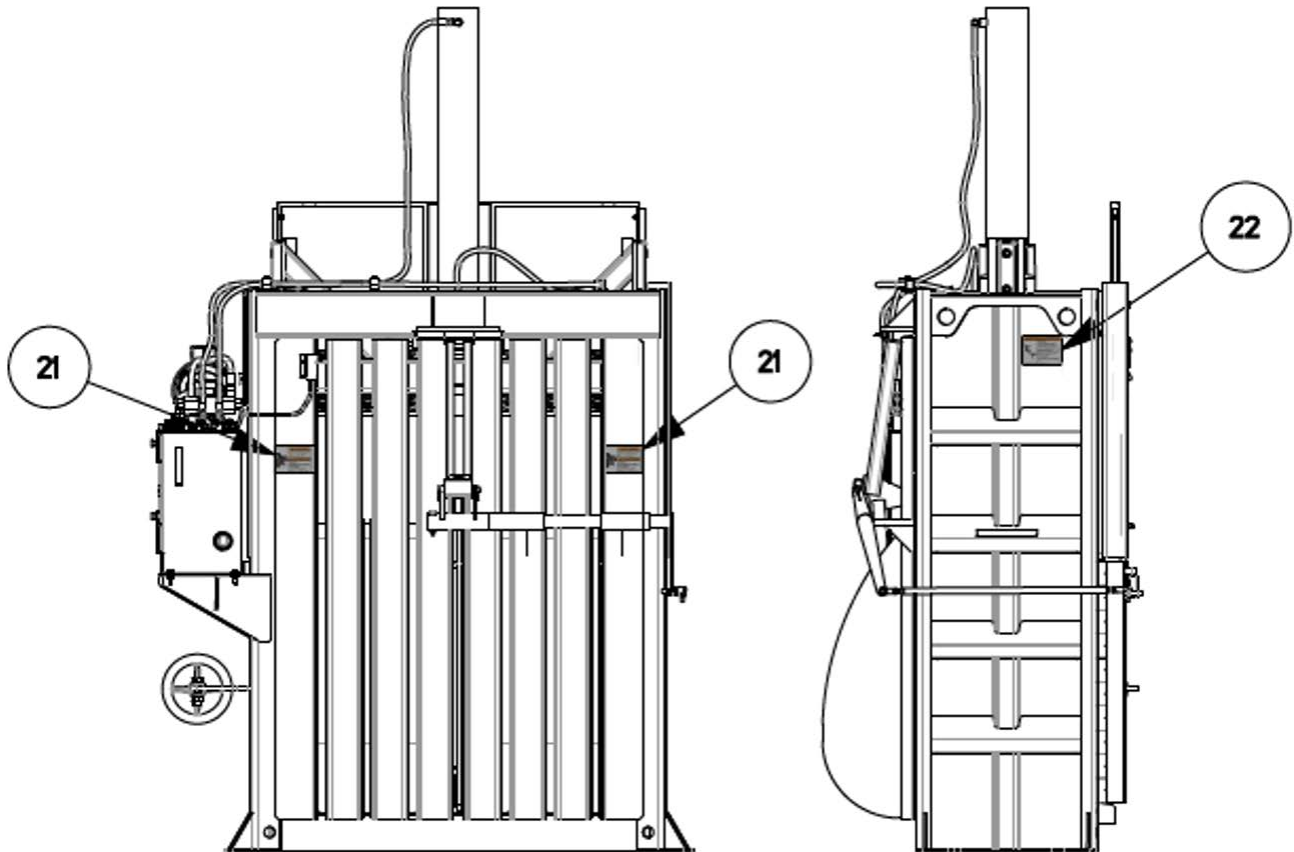
117



# Heavy Duty Vertical Baler

## Replacement Parts

118



# Heavy Duty Vertical Baler

## Replacement Parts

119

### DECAL PARTS LIST AND PLACEMENT (CONTINUED)

Auto Eject Decal kit for V-6030 HD & V-6030 HD DHO Eng/French- 443718 Decal List

AUTO EJECT DECAL KIT FOR V-6030 HD & V-6030 HD DHO ENG/FRENCH- 443718			
REF	PART NO.	DESCRIPTION	QTY
1	06-0505	DECAL DANGER DO NOT ENTER E/F (06-0039)	1
2	06-3190	DO NOT SLAM FEED GATE E/F (06-3170)	1
3	06-3415	DECAL NOTICE BALE MADE IF ARROW	1
4	06-0652	DECAL ARROW W/1" HEAD 6" X 1 1/2 SP	1
5	06-3413	DECAL OP INST VERT CHAIN E/F (06-3391)	1
6	06-0510	DECAL DANGER KEEP HANDS OUT E/FM(06-0116)	1
7	06-0509	DECAL DANGER GATE MUST BE CLOSED E/F (06-0052)	1
8	06-0512	DECAL WARNING STAND CLEAR	1
9	06-3989	DECAL DANGER D NOT OVERRIDE OR TAMPER E/SF (06-3978)	2
10	06-0126	DECAL MARATHON EQUIPMENT COMPANY	1
11	06-3189	DECAL DANGER CONFINED SPACE E/F (06-3123)	1
12	06-0147	DECAL HY/PRESS	1
13	06-0696	DECAL NOTICE FEDERAL REGULATIONS	1
14	06-3628	DECAL WARNING OPN BL DR BEFORE	1
15	06-1839	DECAL AMERICAN FLAG	1
16	06-0511	DECAL WARNING STAND CLEAR	1
17	06-3987	DECAL WARNING SHOCK ARC FLASH HAZARD E/F (06-3976)	1
18	06-0513	DECAL DANGER DISCONNECT	1
19	06-3988	DECAL WARNING DO NOT OPERATE SERVICE E/F (6-3977)	1
20	06-3414	DECAL DANGER VOLTS W/BLANKSPACE E/F (06-3044)	1
21	06-3187	DECAL CAUTION STAY CLEAR WHILE IN	2
22	06-0520	DECAL WARNING STAY OFF	2

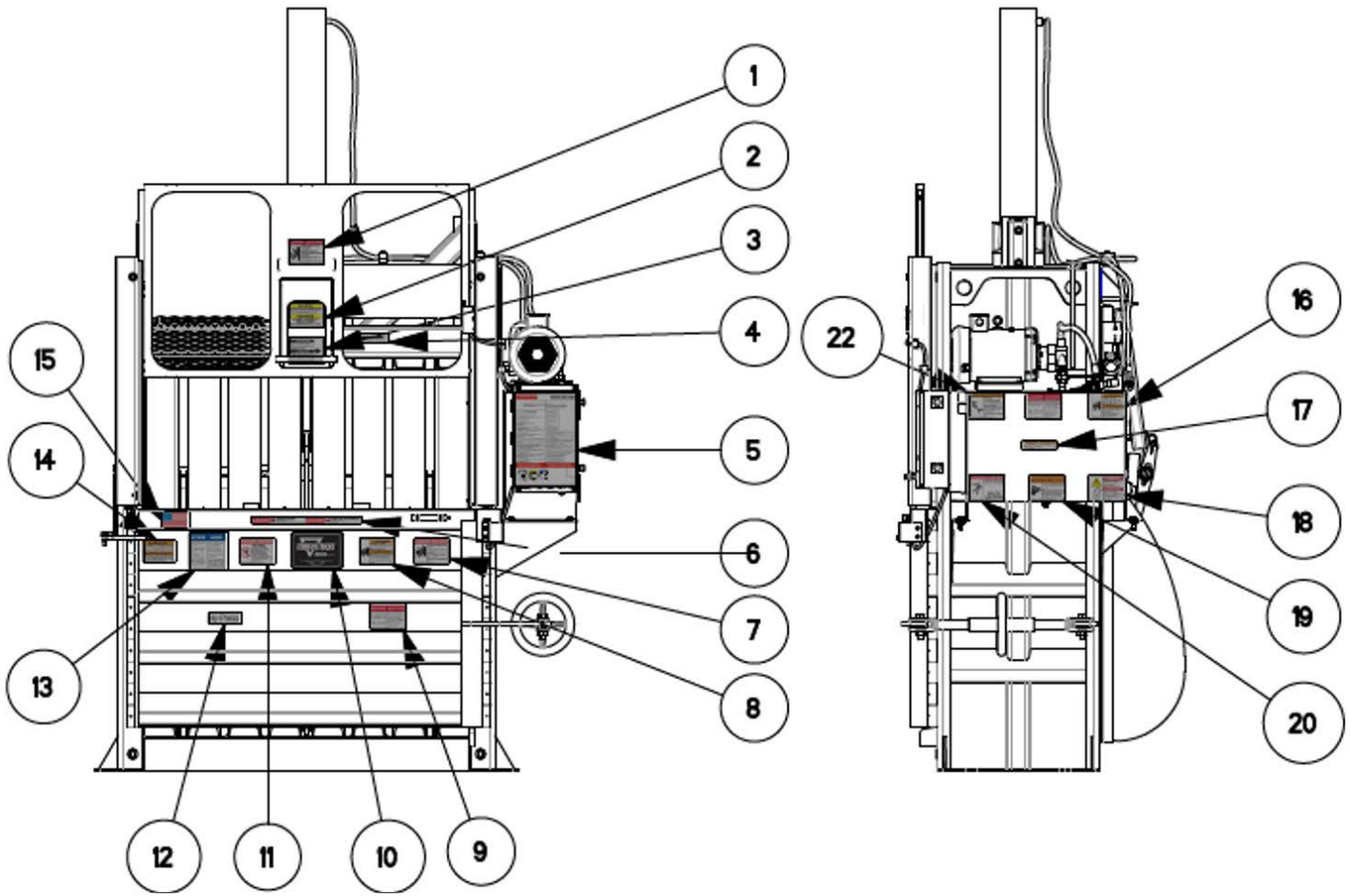
# Heavy Duty Vertical Baler

## Replacement Parts

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### DECAL PARTS LIST AND PLACEMENT (CONTINUED)

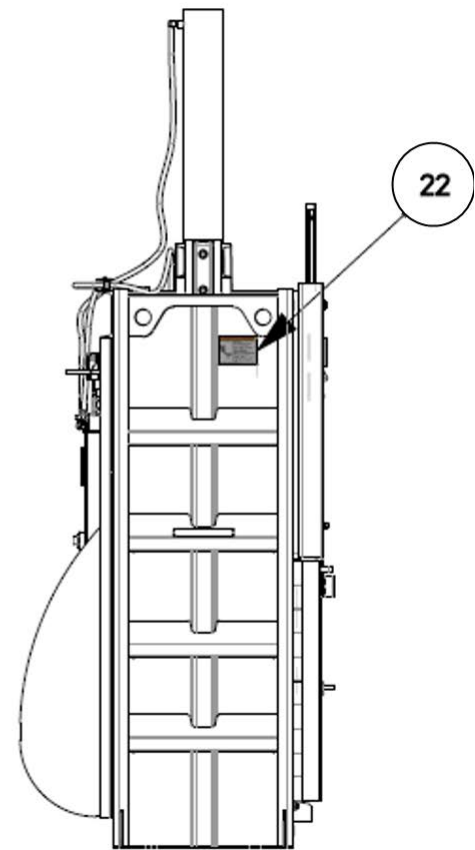
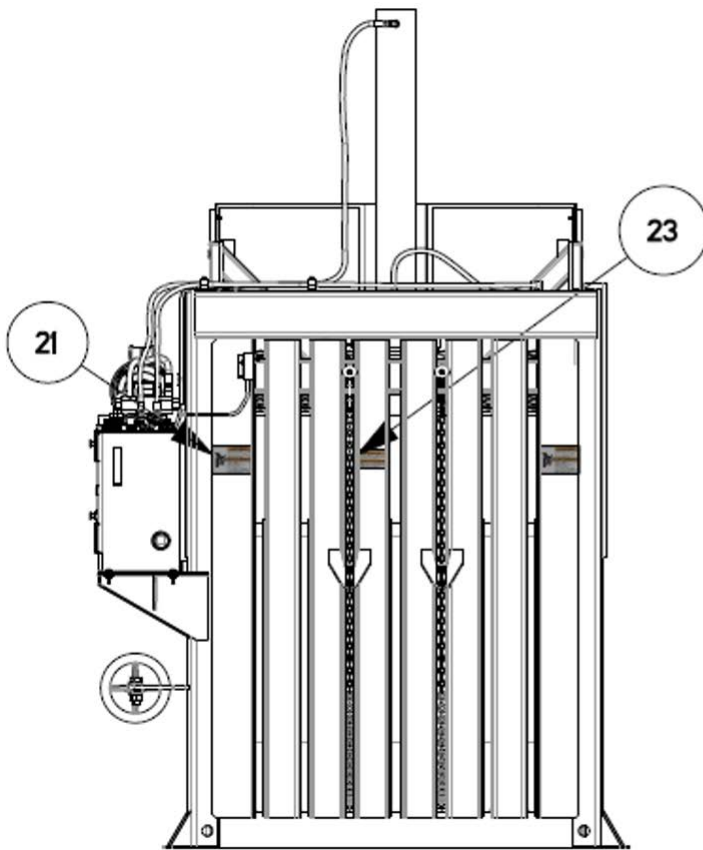
Chain Eject Decal kit for V-6030 HD & V-6030 HD DHO Eng/Span- 456520 Decal Placement



# Heavy Duty Vertical Baler

## Replacement Parts

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# Heavy Duty Vertical Baler

## Replacement Parts

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### DECAL PARTS LIST AND PLACEMENT (CONTINUED)

Chain Eject Decal kit for V-6030 HD & V-6030 HD DHO Eng/Span- 456520 Decal List

CHAIN EJECT DECAL KIT FOR V-6030 HD & V-6030 HD DHO ENG/SPAN- 456520			
REF	PART NO.	DESCRIPTION	QTY
1	06-0039	DECAL DANGER DO NOT ENTER E/S	1
2	06-3170	DO NOT SLAM FEED GATE E/S	1
3	06-0651	DECAL NOTICE BALE MADE IF	1
4	06-0652	DECAL ARROW W/1" HEAD 6" X 1 1/2 SP	1
5	06-3391	DECAL OP INST VERT CHAIN E/S	1
6	06-0116	DECAL DANGER KEEP HANDS OUT E/S	1
7	06-0052	DECAL DANGER GATE MUST BE CLOSED E/S	1
8	06-0118	DECAL WARNING STAND CLEAR	1
9	06-3978	DECAL DANGER D NOT OVERRIDE OR TAMPER E/S	2
10	06-0126	DECAL MARATHON EQUIPMENT COMPANY	1
11	06-3123	DECAL DANGER CONFINED SPACE E/S	1
12	06-0147	DECAL HY/PRESS	1
13	06-0121	DECAL NOTICE FEDERAL REGULATIONS	1
14	06-3626	DECAL WARNING OPN BL DR BEFORE	1
15	06-1839	DECAL AMERICAN FLAG	1
16	06-0117	DECAL WARNING STAND CLEAR	1
17	06-3976	DECAL WARNING SHOCK ARC FLASH HAZARD E/S	1
18	06-0120	DECAL DANGER DISCONNECT	1
19	06-3977	DECAL WARNING DO NOT OPERATE SERVICE E/S	1
20	06-3044	DECAL DANGER VOLTS W/BLANKSPACE E/S	1
21	06-0475	DECAL CAUTION STAY CLEAR WHILE IN	2
22	06-0133	DECAL WARNING STAY OFF	2
23	06-3627	DECAL WARNING CONNECT BOTH CHAINS BEFORE EJECTING BALE	1

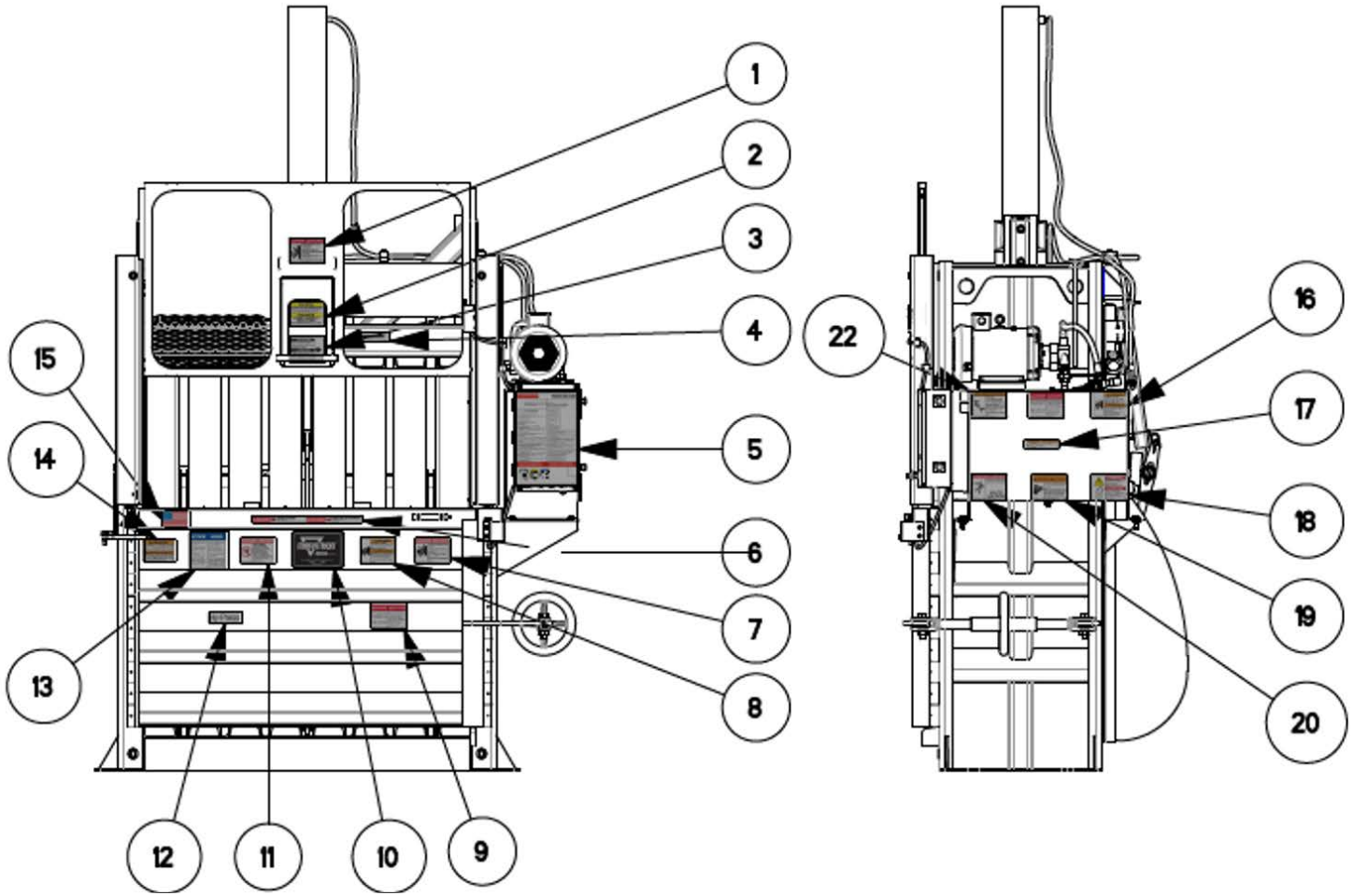
# Heavy Duty Vertical Baler

## Replacement Parts

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### DECAL PARTS LIST AND PLACEMENT (CONTINUED)

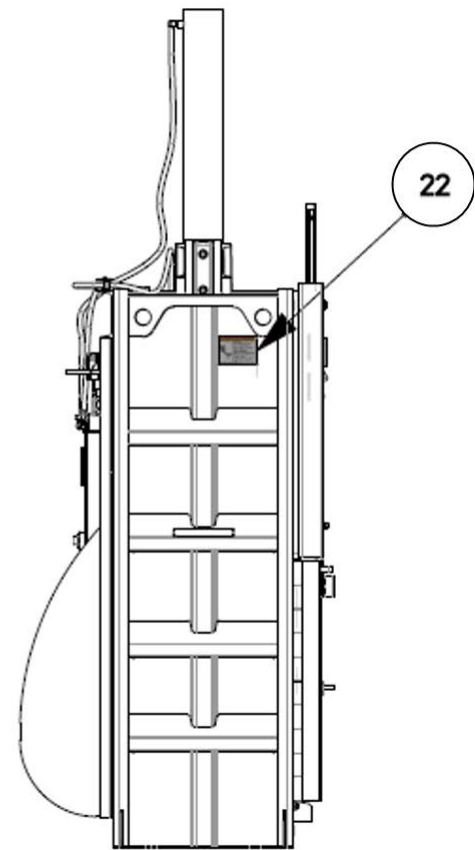
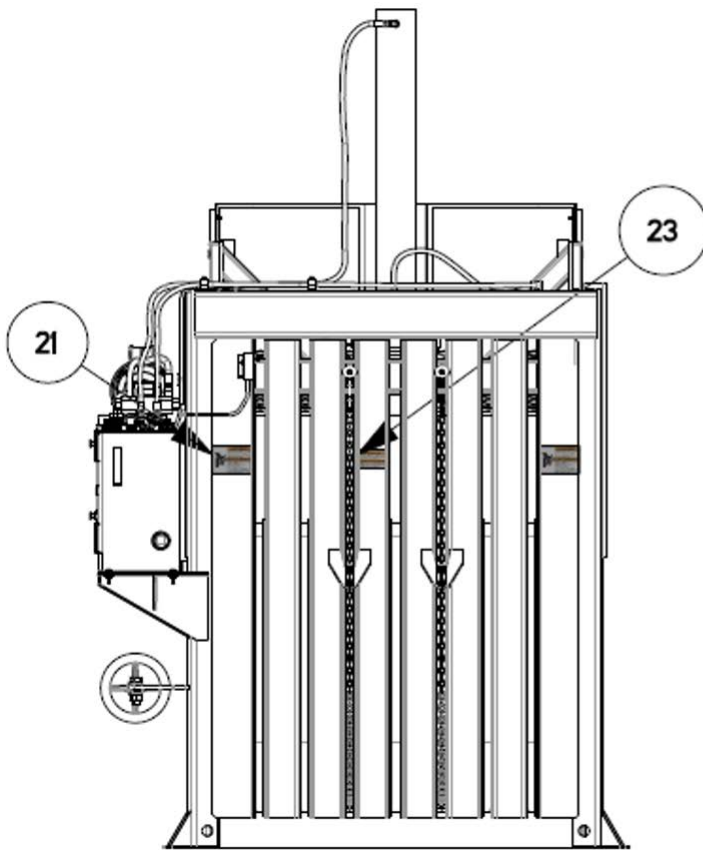
Chain Eject Decal kit for V-6030 HD & V-6030 HD DHO Eng/French- 456521 Decal Placement



# Heavy Duty Vertical Baler

## Replacement Parts

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# Heavy Duty Vertical Baler

## Replacement Parts

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### DECAL PARTS LIST AND PLACEMENT (CONTINUED)

Chain Eject Decal kit for V-6030 HD & V-6030 HD DHO Eng/French- 456521 Decal List

AUTO EJECT DECAL KIT FOR V-6030 HD & V-6030 HD DHO ENG/FRENCH- 4456521			
REF	PART NO.	DESCRIPTION	QTY
1	06-0505	DECAL DANGER DO NOT ENTER E/F (06-0039)	1
2	06-3190	DO NOT SLAM FEED GATE E/F (06-3170)	1
3	06-3415	DECAL NOTICE BALE MADE IF ARROW	1
4	06-0652	DECAL ARROW W/1" HEAD 6" X 1 1/2 SP	1
5	06-3413	DECAL OP INST VERT CHAIN E/F (06-3391)	1
6	06-0510	DECAL DANGER KEEP HANDS OUT E/FM(06-0116)	1
7	06-0509	DECAL DANGER GATE MUST BE CLOSED E/F (06-0052)	1
8	06-0512	DECAL WARNING STAND CLEAR	1
9	06-3989	DECAL DANGER D NOT OVERRIDE OR TAMPER E/SF (06-3978)	2
10	06-0126	DECAL MARATHON EQUIPMENT COMPANY	1
11	06-3189	DECAL DANGER CONFINED SPACE E/F (06-3123)	1
12	06-0147	DECAL HY/PRESS	1
13	06-0696	DECAL NOTICE FEDERAL REGULATIONS	1
14	06-3628	DECAL WARNING OPN BL DR BEFORE	1
15	06-1839	DECAL AMERICAN FLAG	1
16	06-0511	DECAL WARNING STAND CLEAR	1
17	06-3987	DECAL WARNING SHOCK ARC FLASH HAZARD E/F (06-3976)	1
18	06-0513	DECAL DANGER DISCONNECT	1
19	06-3988	DECAL WARNING DO NOT OPERATE SERVICE E/F (6-3977)	1
20	06-3414	DECAL DANGER VOLTS W/BLANKSPACE E/F (06-3044)	1
21	06-3187	DECAL CAUTION STAY CLEAR WHILE IN	2
22	06-0520	DECAL WARNING STAY OFF	2
23	06-3629	DECAL ENG/FRN WARNING CONNECT BOTH CHAINS BEFORE EJECTING BALE	1

For more instruction and visual aid see also **Decal Images**  and **Decal Placement**.

# Heavy Duty Vertical Baler

## Replacement Parts

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### DECAL IMAGES

06-0116



06-0510



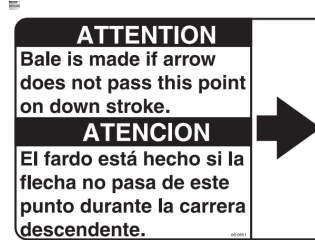
06-0118



06-0039



06-0651



06-0052



06-0117



06-0120



06-0133



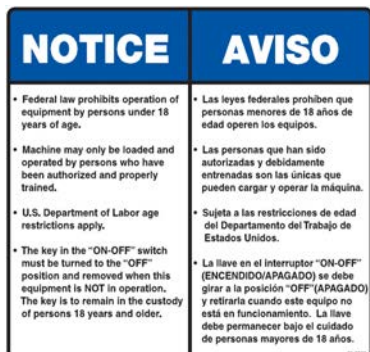
06-0126



06-3044



06-0121



06-3170



06-3123



# Heavy Duty Vertical Baler

## Replacement Parts

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### DECAL IMAGES

06-3391



06-0505

06-3413



06-0475



06-0652



06-0147



06-0509



06-0511



06-0512



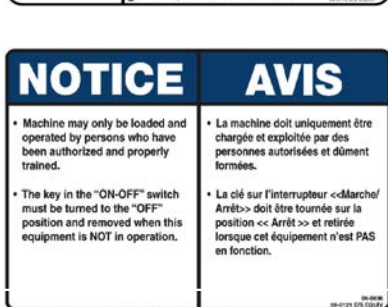
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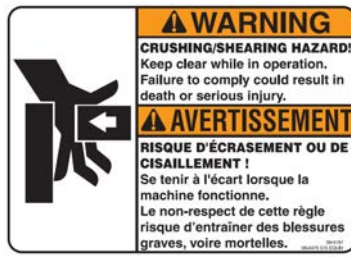
06-0520



06-0696



06-3187



06-3189





# Heavy Duty Vertical Baler

## Replacement Parts

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### DECAL IMAGES

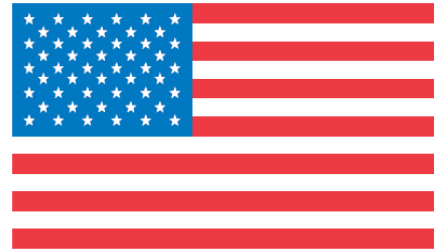
06-3190



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06-1839



06-3415



06-3626



06-3627



06-3628



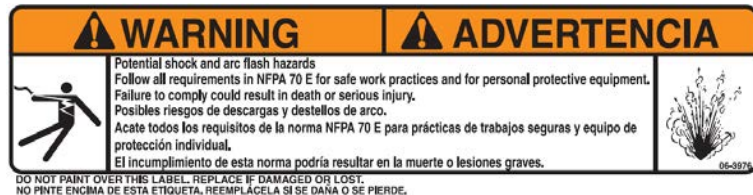
06-3629



06-3977



06-3976



06-3978



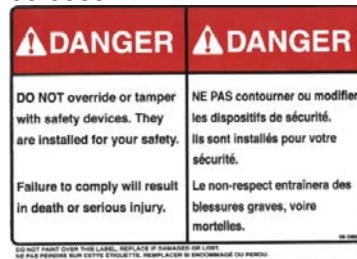
06-3987



06-3988



06-3989



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