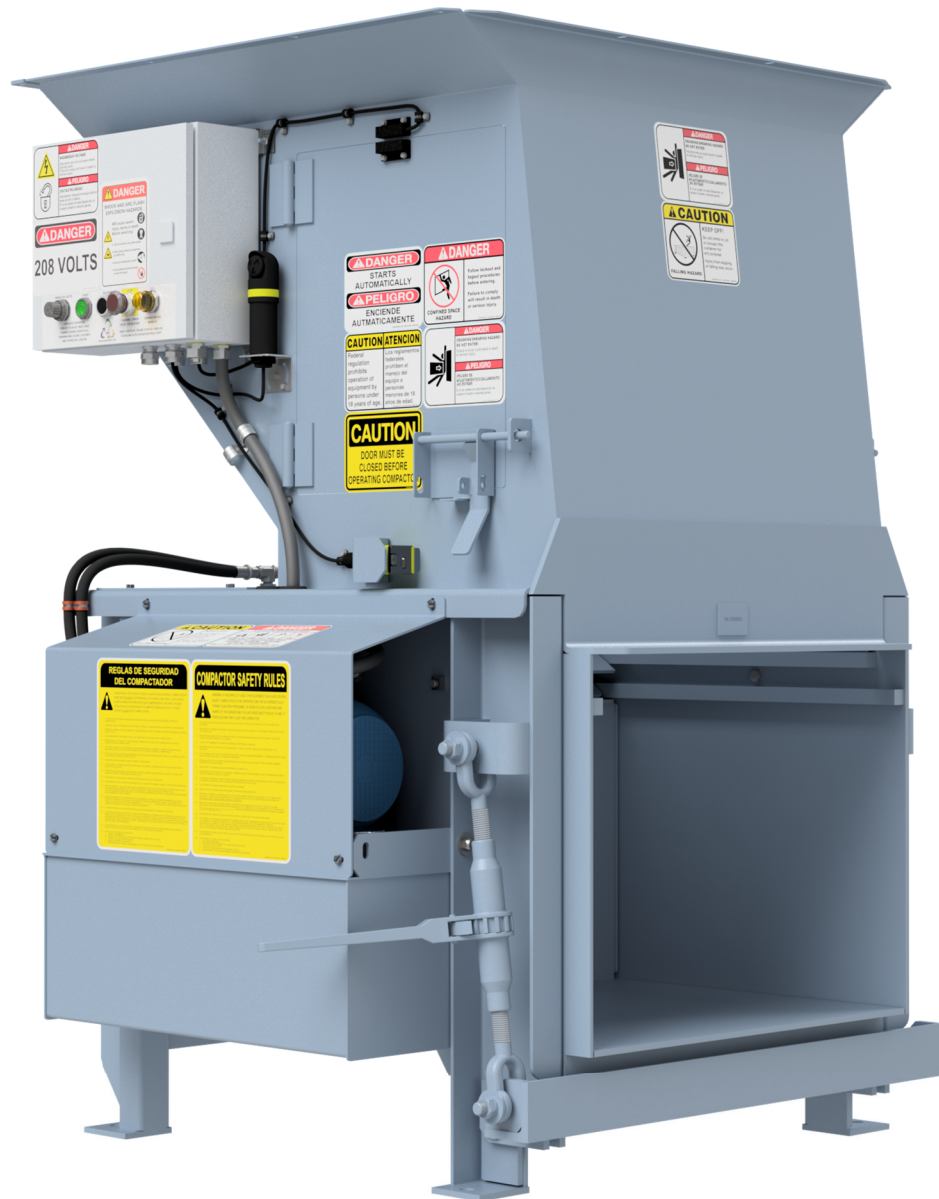


# PX50 Apartment Compactor

3/19/2024

v. PX50EA

## Safety, Operation, and Installation Manual



MANUFACTURED BY:



PSI Waste Equipment Services, Inc.

CONTROLLED BY:



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## Introduction

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Thank you for choosing the PX50 from PSI Waste Equipment Services, Inc. The PX50 is built on a foundation of 30 years of experience building, selling, installing and repairing waste equipment. PSI Waste has installed, repaired and rebuilt thousands of compactors. We know what works and what doesn't. We know what lasts and what doesn't. We took the best ideas, made them better, and built the best twin cylinder apartment style compactor on the market.

### About this manual

This manual provides the installer, owner and operator with information needed to install, maintain and operate the PX50 compactor. You must also comply with local, state and federal codes. A Repair Manual is available at [www.psiwaste.com/px50.html](http://www.psiwaste.com/px50.html)

### Compliance

The PX50 apartment style compactor is built to meet all ANSI Z245.2(1) safety standards. Please install, maintain and operate this compactor in accordance with this manual, applicable local, state, and federal codes and regulations. If you have any questions about the PX50, please call us at 352-742-4774 Opt. 2.

**Please read this entire manual before installing, operating, or maintaining the compactor!**

## Initial Set Up and Navigation

Notes:

- Press and release the navigation buttons slowly and deliberately. If you try to navigate quickly you won't get very far. Release the arrow for about 1 second before pressing it again.
- If you get stuck on the ESC+C screen with arrows just press the ► button.

### Set Clock

Clock must be set for Automatic Operation. ▼ | ESC | Setup | OK | Clock | OK | Set Clock | OK. Clock is 24hour so you would add 12 hours to afternoon times. Set each digit then press ►. Press ► to get to date. Date format is YYYY-MM-DD. Press OK when done. Then set S/W time. If the location of the install follows Daylight Savings Time, set S/W Time for US2. If the location does not follow Daylight Savings Time, leave this setting OFF. Press ESC once to Setup menu and go down to Switch to OP and click OK. This locks others out of the sensitive areas of the PLC and prevents deletion of the program. See password below to get back into ADMIN if needed. ESC back to date screen and program messages will appear in a few seconds or you can press ▲ to get back quicker.

### Set Clock from Operate Mode (if you don't see "Clock" in Setup screen)

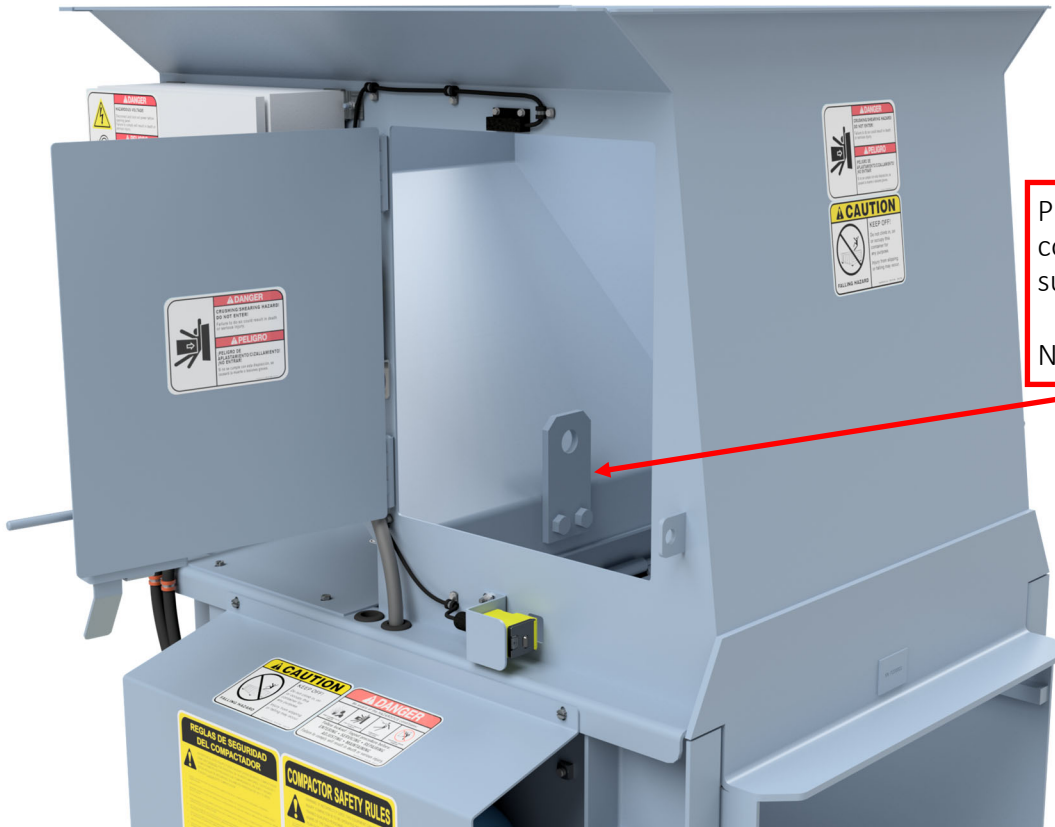
Switch to ADMIN | OK | LOGO (use ▲ and ► to enter password) | OK | Setup | OK | Clock | OK  
Continue using instructions in Set Clock.

## Safety Decals

### List of Safety Decals

Part #	Description	Location	Qty
300004	Caution Door Closed	Doors– inside and outside	4
300005	Caution Federal Law	Feed areas and controls	2
300007	Caution Keep Off/ Do Not Play	All sides of compactor	5
300008	Compactor Safety Rules - English	Feed areas and controls	2
300009	Compactor Safety Rules - Español	Feed areas and controls	2
300010	Danger 208 Volt	Control panel face (Power Unit)	1
300011	Danger 220-240 Volt		
300012	Danger 460 Volt		
300013	Danger Confined Space Lock Out	Hopper– all sides	4
300014	Danger Crushing/ Shearing Hazard	Hopper– all sides, inside doors, access panel	6
300015	Danger Hazards Compactor	Access panels and adjacent surfaces.	3
300017	Danger Lock Out Power Unit	Control panel face (Power Unit)	1
300018	Danger Shock/ Arc Flash	Control panel face (Power Unit)	1
300019	Danger Starts Automatically	Areas of access and feed	2

Replacement decals are available upon request.



Pick up hook used to safely move compactor using crane or other suitable lifting equipment.

Note: Remove after install.



# Safety Decals

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## Safety and Responsibilities

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### Installer and Service Personnel

**Danger:** Only qualified and authorized personnel should attempt to install or service this compactor! High voltage may be present. Shock and arc flash explosion hazards! Wear proper PPE. See NFPA 70E. Use safe work practices.

- Read and understand this manual
- Install compactor in conformance with local, state, and federal codes
- Ensure the compactor is left in a safe condition
- Ensure this manual and keys are given to the owner

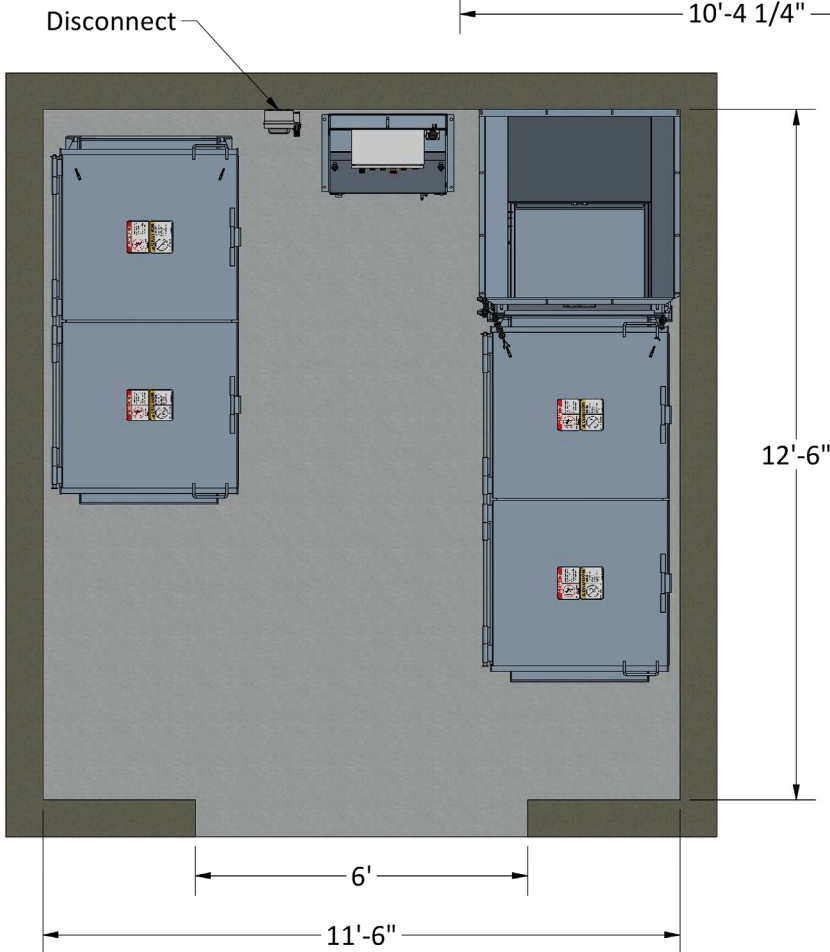
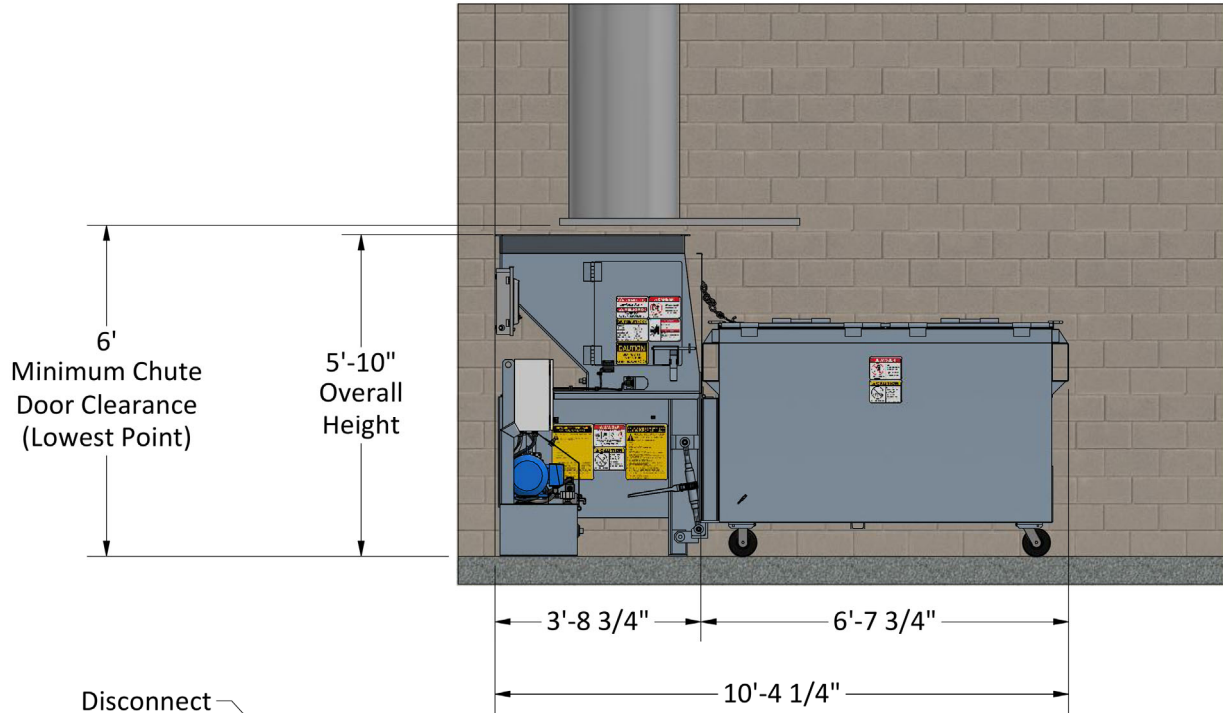
### Owner

- Ensure the compactor installation conforms with all local, state, and federal codes.
- Ensure the use and maintenance of the compactor conforms with all local, state, and federal codes and regulations.
- Provide proper instruction and training to employees.
- Ensure employees understand and follow Operator Responsibilities and safety decals.
- Ensure only authorized and qualified employees have access to the compactor.
- Properly maintain compactor and surrounding areas providing adequate space for use and maintenance.
- Ensure the containers used with the compactor are adequately rated and fit properly.
- See ANSI Z245.2 for detailed Owner and Operator Responsibilities.

### Operator/ Employee

- You must be 18yrs old or older to operate this compactor.
- Do not use the compactor until properly trained and authorized.
- Read, understand and follow all safety decals and this manual.
- Make sure all safety switches and safeguards are in place and working.
- Ensure all persons are clear of hopper, charge-box areas and end of container.
- Use the compactor carefully maintaining awareness of potential safety issues.
- Report any damage or malfunction immediately.
- If compactor is unsafe to operate use lockout/tagout procedures to shut it down (if possible) and report situation immediately.

# Site Space Requirements

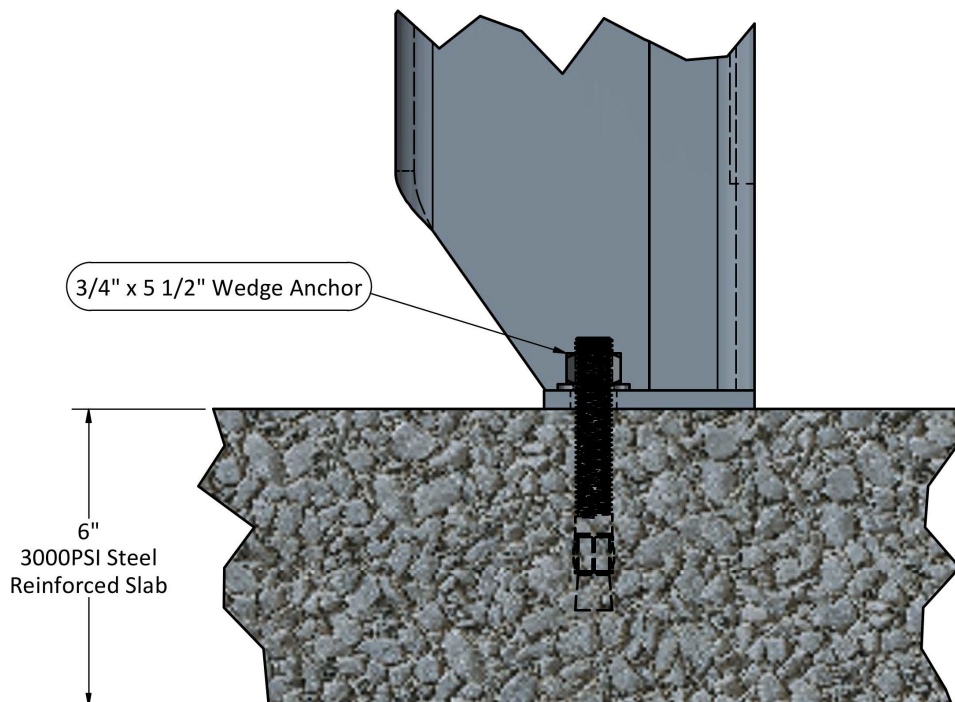


## Electrical Requirements

The UL Listed PX50 control panel is NEMA 3R for indoor or outdoor use. See charts below for branch circuit information.

3Ph Power					
Motor Size	VAC Phase	NEC FLA	Dual Element Fuse Max	Circuit Breaker Max	Minimum Wire Size (60 deg C)
5HP	208/3Ph	16.7	30	40	10
5HP	230/3Ph	15.2	30	40	10
5HP	460/3Ph	7.6	15	20	12
1Ph Power. Inverter converts 1Ph power to 3Ph power to drive 3Ph motor.					
Motor Size	VAC Phase	Inverter FLA (Input)	Max Fuse Size (Use Class J Fuse)	Minimum Wire Size (75 deg C)	
				Incoming Power	
5HP/3Ph	208-240/1Ph	42.7	75	8	

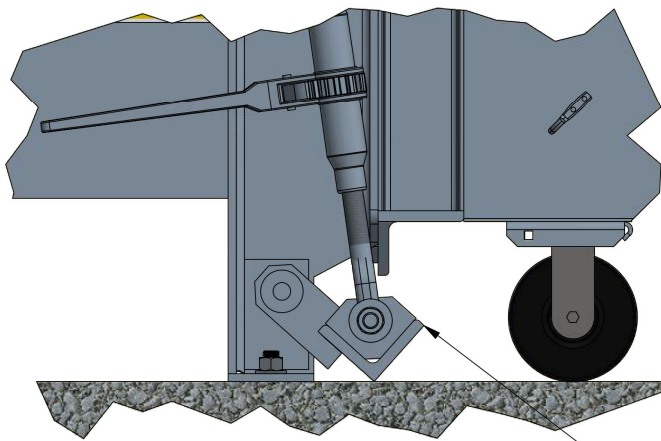
## Slab Requirements



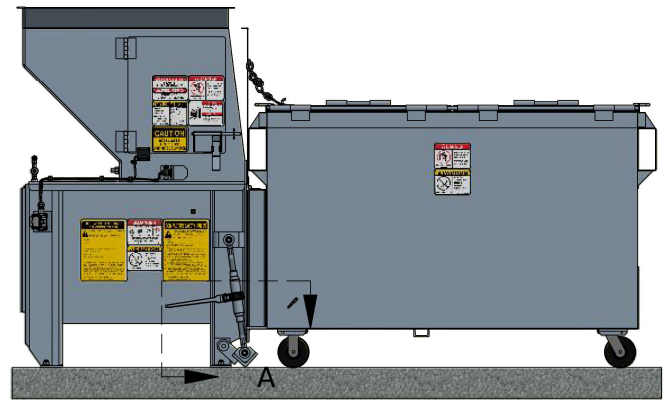
## Changing Containers

Before unhooking container, make sure ram is in rear position. Press the E-Stop button and turn the key switch to the Off position.

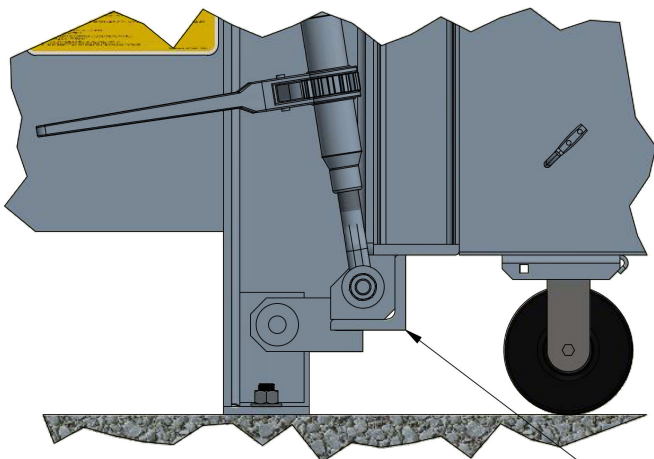
- Unlatch container as shown. Remove container and place in staging area.
- Roll new container up to compactor. Latch as shown.
- Follow instructions on the next pages to operate compactor.



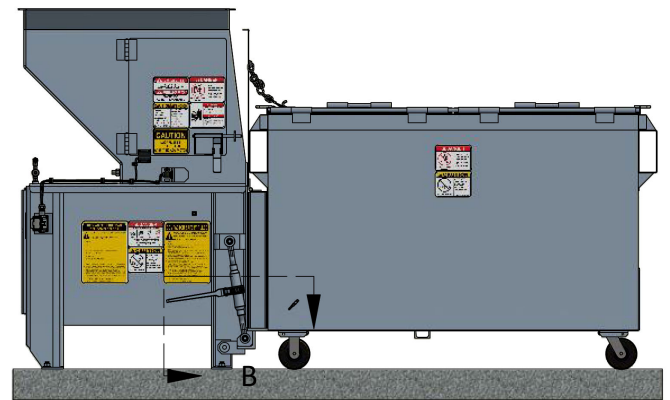
DETAIL A  
OPEN



Ratchet open to allow removal or mating of container.

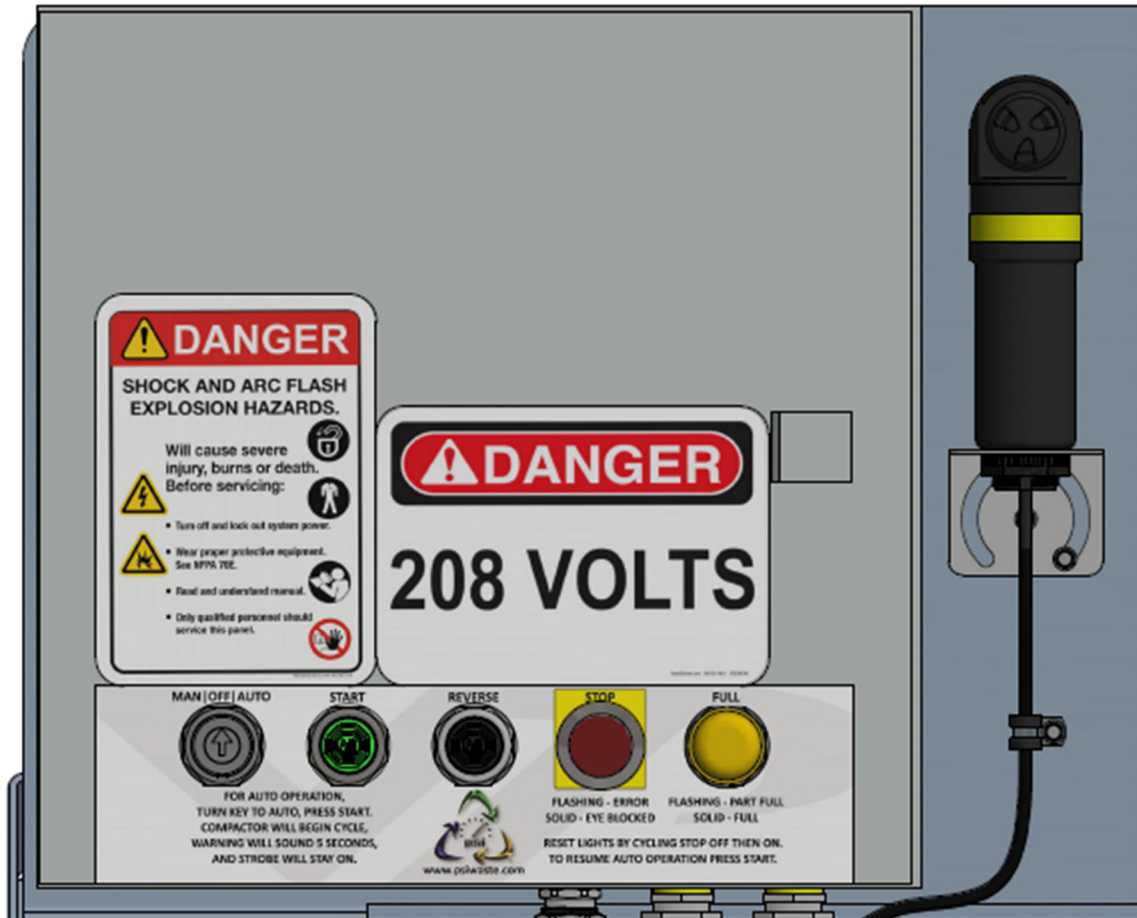


DETAIL B  
CLOSED



Ratchet closed until compactor and container are fully mated.  
DO NOT OVERTIGHTEN

## Control Panel



## Normal Operational Characteristics (Manual)

### Operating the compactor

Before running your compactor, make sure the container is properly secured. Make sure the area is clear and the compactor is safe to run. Follow instructions below.

### Manual

With the KEY SWITCH in MANUAL position, press START to start the cycle. The motor will immediately turn on. After 3 seconds, the ram will move forward and continue forward until either the forward timer times out or the pressure switch turns on for 1.25 seconds. The ram will then shift to reverse and continue in reverse until the reverse timer times out or the pressure switch turns on for 1 second. If the multi cycle counter has reached cycle count setting the motor will stop and the process is over. If the multi cycle counter has not reached cycle count setting the ram will pause for 3 seconds and then move forward to begin another cycle.



## Normal Operational Characteristics (Manual) (continued)

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If the E-STOP is pressed, a door is opened, or the KEY SWITCH is turned off, the cycle will stop and the motor will shut off. When the START button is pressed again, the motor will start and the compactor will move forward after 3 seconds.

If the REVERSE button is pressed and held the motor will start and the ram will shift into reverse or continue in reverse. Once the REVERSE button is released the cycle will stop and the motor will turn off.

If the START button is pressed during a normal cycle there will be no effect.

If the pressure switch is actuated for 1/2 sec when going forward, the full light will flash. The container should be changed out soon. NOTE: Reset by pressing and releasing the E-STOP button.

If the pressure switch is actuated for 1 sec on the forward stroke the FULL light will stay on and the compactor will shut down. NOTE: Reset by pressing and releasing the E-STOP button.

## Normal Operational Characteristics (Auto)

### Auto

With the KEY SWITCH in the AUTO position, press START to cycle the machine and initiate AUTO mode. The audible warning will sound for 5 seconds, the warning light will flash, and the compactor will complete a cycle. Warning light will continue to flash as long as the compactor remains in AUTO mode. If the light turns off, the compactor is no longer in AUTO mode and the START button will have to be pressed to return to AUTO mode.

If the photo eye “sees” something at the end of the cycle the motor will continue to run but the ram will pause for 3 seconds to allow trash in the hopper to fall into the charge box. After the 3 second pause the ram will continue forward and complete another cycle.

At the end of the cycle, if the eye does not “see” any more trash the motor will stop and the process is over. The eye will continue to “look” for more trash.

Momentary blocking of the eye (falling trash) will have no effect. When the eye is blocked for 5 full seconds the warning horn will sound. If the eye continues to stay blocked for the next 5 seconds the warning horn stops and the light stays on. If the eye continues to be blocked for 15 more seconds the compactor will start. If the eye is cleared before the compactor starts the compactor will not start and the process is reset.

## Normal Operational Characteristics (Auto) (continued)

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### Sleep Mode

If compactor is in Sleep Mode it will not run automatically but will run if you press START. Also, if compactor is set to Auto Operate but the compactor is in Sleep Mode the warning light should be flashing. If in Sleep Mode, a message can be seen on the screen. Please note that the compactor can not be put into Auto during sleep mode.

```
Compactor is  
Ready to Start.  
Start Input OFF  
Eye Input is OFF  
Auto Operate OFF  
Until 06:00.
```

## Fault Conditions

### Solid Light on E-STOP

The photo eye is blocked. Clean the photo eye and make sure it is properly aligned. Press E-STOP and pull it back out. Press START. Versa-Pak V8.4 and later: If eye is blocked, compactor will continue to operate in Auto Mode but with a timer. It will cycle every hour. Eye resets itself when unblocked.

### Flashing light on E-STOP - (requires authorized maintenance personnel)

Check Error Message on PLC screen. Resolve issues. Once resolved press E-STOP and pull it back out. Press START. If no luck, call qualified compactor repair technician.

### Flashing AMBER LIGHT

The compactor is almost full. Change out the container soon.

### Fast Flashing AMBER LIGHT (1/3 Sec on, 1/3 Sec off) Versa-Pak V8.4 and later

Check PLC Screen for info. Compactor is due to be PM'd. Call for service.

### Solid AMBER LIGHT

The compactor is full. Make sure the ram is in the fully back position. Change out the container. Reset the Full Light with E-Stop. Press START.

### KEY SWITCH is in AUTO, warning light is not off, compactor is not running with eye

The cycle was interrupted. Make sure all doors are closed and E-STOP is pulled out. Press START.

### KEY SWITCH is in AUTO, warning light is on, compactor is not running with eye but will run manually - (requires authorized maintenance personnel)

Compactor may be in Sleep Mode. Check PLC screen messages. Versa-Pak V8.4 and later: Eye may have been blocked for too long. Clean and adjust eye.

## Changing Parameters

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### Compactor will not run at all- (requires authorized maintenance personnel)

Check PLC Screen for info. Resolve issues. If no luck, call qualified compactor repair technician.

The PX50 parameters are set at the factory. Some parameters can be changed to customize the operation.

### Navigate to Status Screens

To adjust the parameters scroll up to Status Screens using ESC + ▲. While scrolling, be sure to fully release the ▲ button for 1 second. To change a parameter on the screen, hold the ESC button down a couple of seconds. Navigate to the parameter you want to change, press OK, change the parameter, then press OK to save changes. To exit the screen, press ESC after saving.

### Setting Auto Operate Times

When the compactor is in Auto, it will run automatically all day if the eye is blocked. Some may prefer to prevent the compactor from running late at night and very early in the morning. To set run times, navigate to Auto Eye Status Screen. Enter Edit Mode by holding down the ESC button. Change ON time to the time you want the compactor to start running in Auto. Change OFF time to the time you want the compactor to stop running in Auto. The times are in 24 hour format. So 6am to 10 pm would be ON 06:00 OFF 22:00. Be sure the time of day in the upper right corner of the screen is correct. If not you'll want to set the clock.

```
Auto EyeMo 09:12
  Auto Operate
ON00:01-OFF00:00
Eye Delay 05:00s
EyeTooLong10:00m
ANSI Delay20:00s
```

```
Auto EyeMo 09:12
  Auto Operate
ON06:00-OFF22:00
Eye Delay 05:00s
EyeTooLong10:00m
ANSI Delay20:00s
```

### Set Clock

Clock must be set for Automatic Operation. From the main screen:

▼ | ESC | Setup | OK | Clock | OK | Set Clock | OK (if you don't see "Clock" in this screen go to next section) Set time (24hr format so 1pm is 13:00) then press ► to scroll to date. YY-MM-DD. Day of week is corrected. Press OK. Set S/W time. If the location of the install follows Daylight Savings Time, set S/W Time for US2. Otherwise, don't set. To get back to main screen, press ESC repeatedly until you get to a white screen, then wait or press ▲.

### Set Clock from Operate Mode (if you don't see "Clock" in Setup screen)

Select Switch to ADMIN | OK | LOGO (use ▲, ►, and ► to enter password) | OK  
Continue to set clock using above instructions.

### Versa-Pak V8XAP

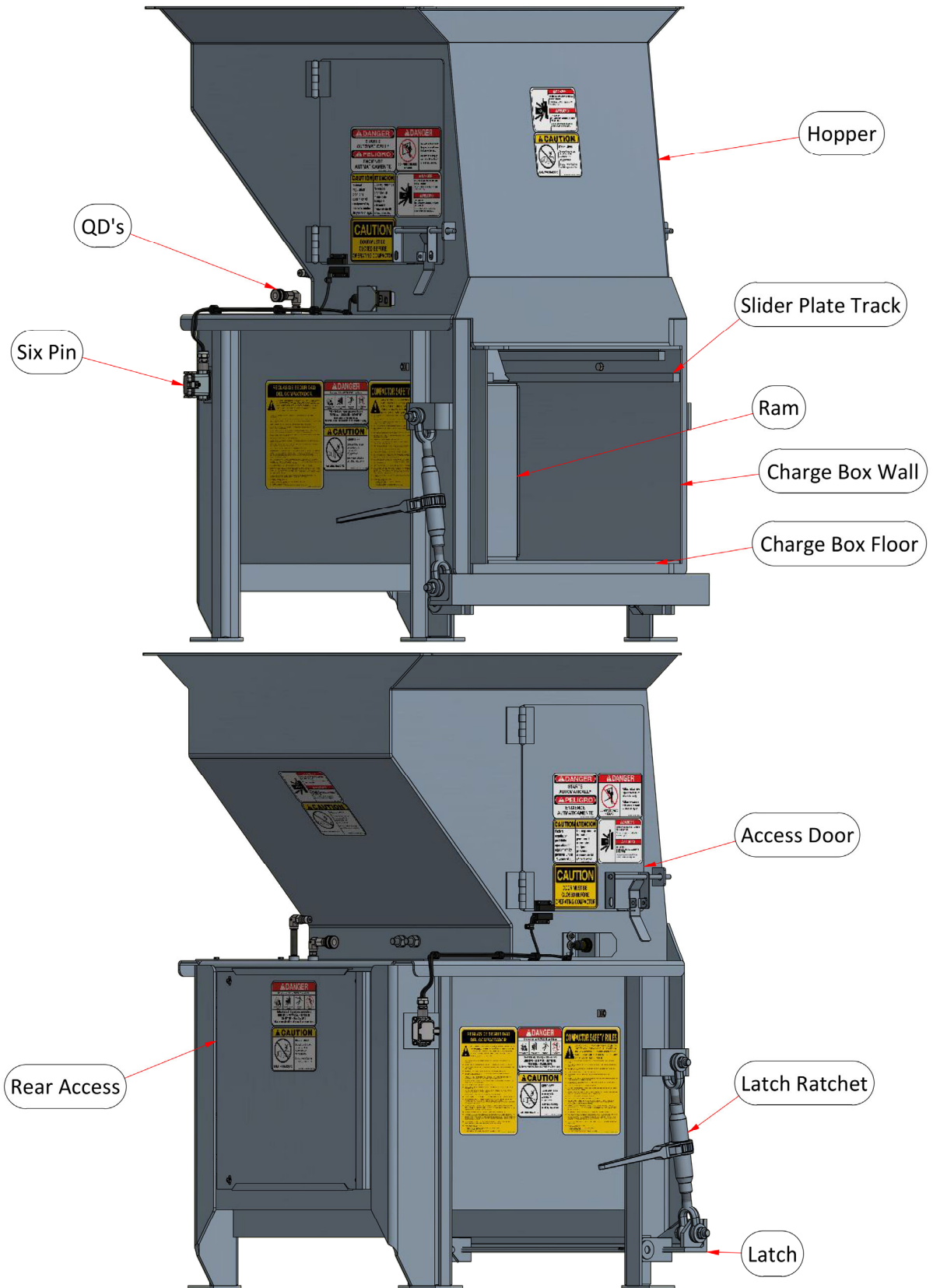
For more information on the Versa-Pak V8XAP control system used to control the PX50 compactor, go to [www.versa-pak.net/versapak-v8xap](http://www.versa-pak.net/versapak-v8xap)

## Specifications

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<b><i>PX50 Specifications:</i></b>	<b>5HP</b>
<b><i>Charge box</i></b>	
Manufacturer Rating (cy)	0.43
Standard Industry Rating (cy)	0.29
Clear Top Opening (in)	22.62L x 28W
Capacity Per Hour (cy)	52
<b><i>Performance</i></b>	
Cycle Time (secs)	20
Normal Force (lbs.)	14,778
Pack-Out Force (lbs.)	17,143
Normal Ram Face Force (psi)	25.5
Pack-Out Ram Face Force (psi)	29.6
Ram Penetration (in)	4
Weight (lbs.)	1,776
<b><i>Electrical</i></b>	
Tri-Volt Motor 208/230/460	5HP
Electric Control Voltage	120 VAC
<b><i>Hydraulic</i></b>	
Hydraulic Pump Capacity (gpm)	6
Normal System Pressure (psi)	1250
Maximum System Pressure (psi)	1450
Oil Capacity (gal)	12
Hydraulic Cylinders (2)	3" bore
	1.5" rod
<b><i>Structural</i></b>	
Charge box Sides	1/4" Plate
Charge box Floor	3/8" Plate
Ram Sides	1/4" Plate
Ram Floor	3/8" Plate
Ram Top and Slider Plate	1/4" Plate
Ram Face	3/8" Plate
Hopper Flare	3/8" Plate
Hopper Sides	10GA Sheet

# Parts



## Lockout / Tagout

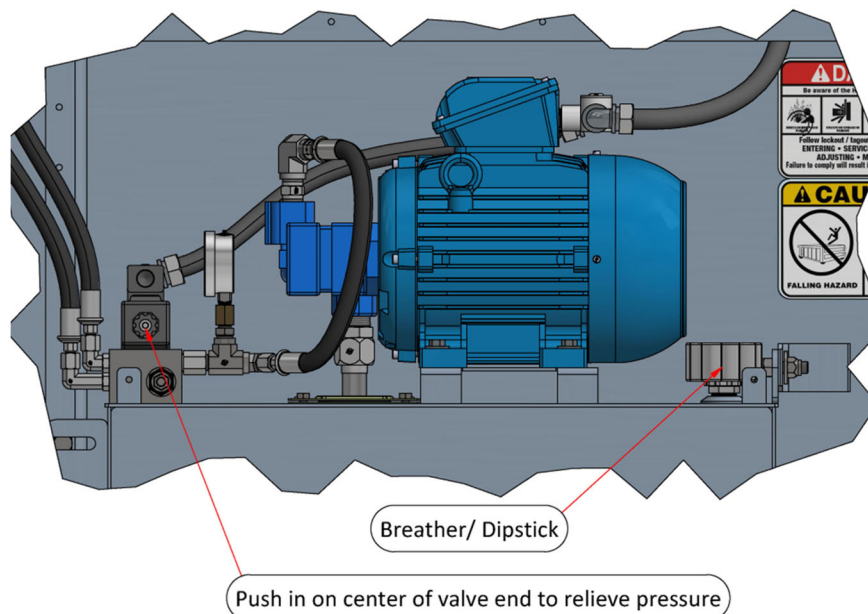
Before entering any portion of the compactor, be sure that all sources of energy are removed. The following instructions are provided as a minimum procedure. Other steps may be necessary! If you are not a qualified person **STOP!** Wear the proper PPE and follow safe work practices.

### Lockout

- 1) Notify all affected personnel of compactor being shut down and locked out.
- 2) If the ram is pushing against the trash, press the REVERSE button to bring it back to the retracted position. Press the E-Stop button and turn key switch to the OFF position. Keep the key with you.
- 3) Turn the main power disconnect off. Ensure the power was disconnected.
- 4) Place a padlock and a properly completed and approved lockout tag on the disconnect. Make sure the padlock prevents the disconnect from being turned on. Keep the key with you.
- 5) Now make sure you can not start the compactor.
- 6) Relieve pressure from hydraulic system by pushing in on each side of directional valve for 3 full seconds. (see illustration below)
- 7) If compactor is chute fed, close off the chute.
- 8) Be sure to complete any other steps that may be necessary to remove all energy from the compactor.
- 9) Before starting electrical work, check for incoming voltage with a meter.
- 10) Only qualified and authorized personnel should perform maintenance and repair tasks.

### Return to Service

- 1) Double check the work area for tools and personnel. Check to so that all connections are made and tight and that covers are in place and all safety switches are in place.
- 2) Remove Lockout devices
- 3) Reenergize compactor and follow operating instructions in this manual.
- 4) Test all safety devices and check for leaks and proper operation of all controls and compactor.
- 5) Notify all affected personnel that compactor is operational.





## Preventative Maintenance

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**Warning:** Lockout/Tagout before entering any portion of compactor!  
Only qualified and authorized personnel should work on the machine!

Your PX50 is designed to last many years with little maintenance. With that said, it is prudent to keep your compactor clean and dry. Though the electrical components are sealed and can get wet, you should NOT pressure wash the panel, photo eye or other electrical components. Make sure the exterior of the compactor has a good coat of paint on it and follow the maintenance schedule below.

### Each Container Change

- Make sure all control buttons, door interlocks, and warning light and alarm work properly.
- Listen to compactor. It should run quietly and smoothly.
- Make sure container ratchet and latch operate smoothly.
- Look for obvious oil leaks or unsafe conditions.
- Correct deviations before putting the compactor back in service.

### Monthly Or More Frequently As Needed

- Grease charge box floor, walls, and slider plate track to prevent premature wear and to keep unit running smooth and quiet.
- Wipe photo eye clean with a damp paper towel. Use soap and water if needed. Do not use solvents or abrasive materials!
- Check oil level using the dip stick on the breather/dipstick. With the ram in the back position, oil level should be within 1-1/2" of top of stick. If oil level is lower, call a qualified compactor repair company and have them check the cylinders and hoses for leaks.
- Clean trash from under and around compactor.

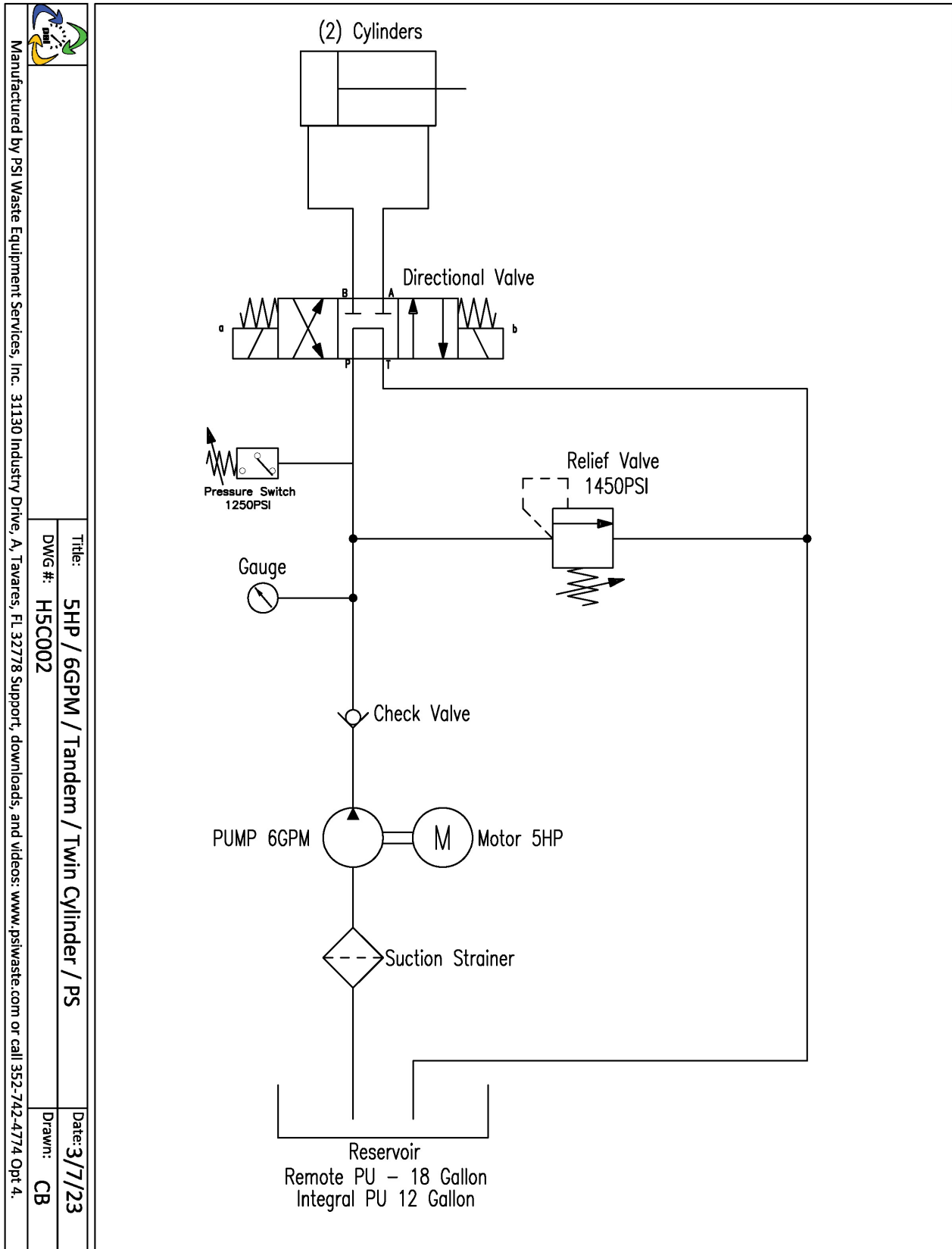
### Every 5 Years

- Change oil, clean reservoir, clean or replace suction screen (inside tank). Make sure suction tube is tight. Use a quality AW46 hydraulic oil. Remote power units take 18 gallons, side mount power units take 12 gallons. This service should be performed by qualified technician.

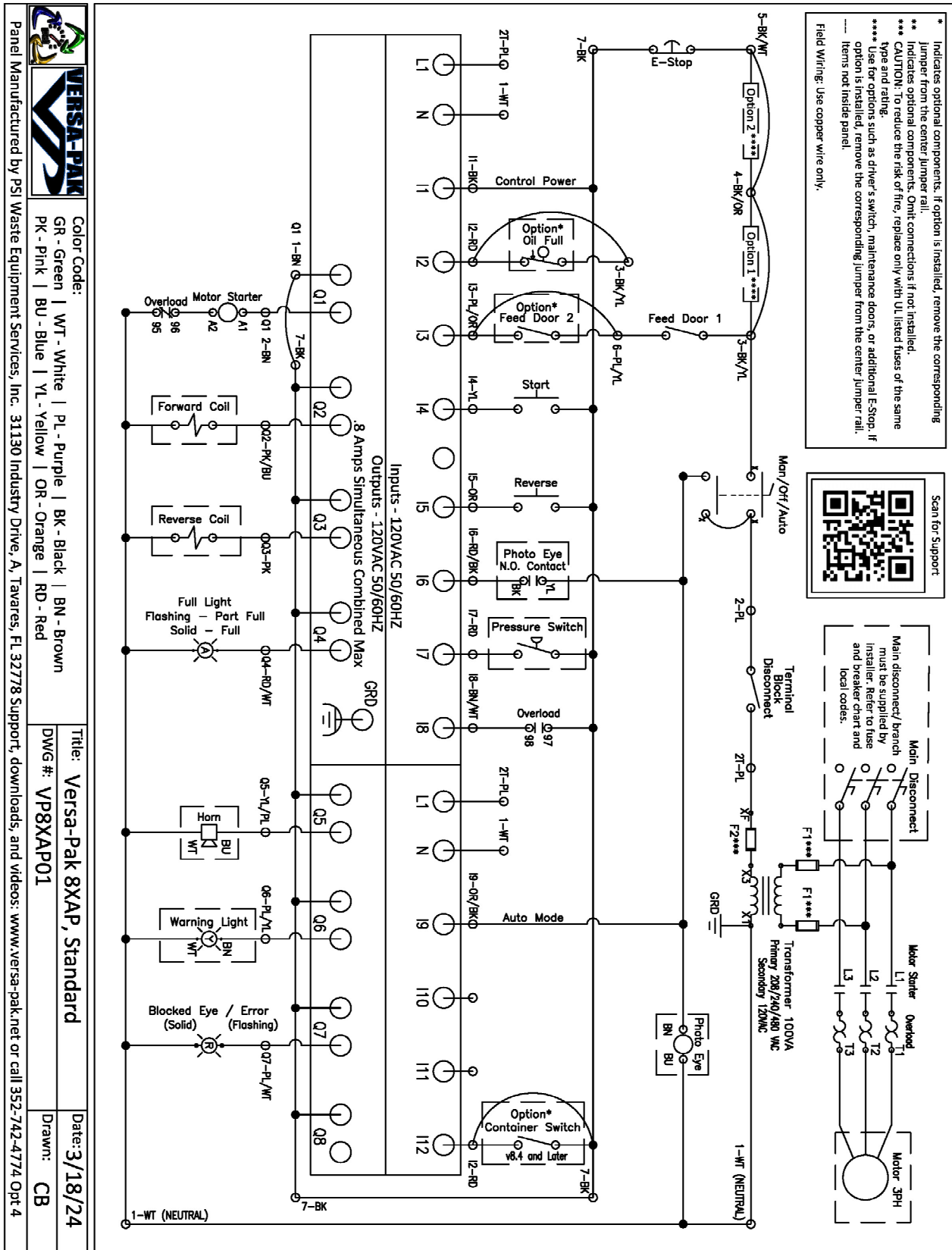
For more information on repairs, refer to our repair manual at [www.psiwaste.com/px50.html](http://www.psiwaste.com/px50.html)



# Hydraulic Schematic



# Electrical Schematic



# Warranty

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## Term:

The PX50 comes with a 3-years structural, 2-years parts, and 1-year labor limited warranty. The Term begins on the day of shipment unless notification is made of the day of install. The term will begin no later than three months from the day of the invoice.

## Limited Warranty- What's Covered:

1 Year– Parts, labor, and up to 2 hours travel to repair actual defects in materials or workmanship.

2 Years– Parts to repair actual defects in materials or workmanship.

3 Years- Parts and labor to repair actual structural failures proven to be caused by defects in materials or workmanship.

Warranty "VOID" if covered equipment is not paid for in full.

Warranty limited to the price paid to PSI Waste for covered equipment.

## What's NOT Covered:

- Modifications, options, or equipment not provided by PSI Waste.
- Damage, wear and tear, misuse, negligence, or other losses not caused by defects in manufacturing. This includes damage to container latch by not fully latching container and ratchet due to over tightening.
- Normal maintenance, cleaning.
- Abrasion or damage to exterior hoses.
- Loss of use, temporary service, consequential or incidental damages.
- Overtime and travel over 2 hours.
- Casters, ratchets, twisted latches, anchors, fuses, and keys.
- Repair or replacement of property other than the covered equipment.
- Work done without the authorization of PSI Waste or by an unauthorized company.
- Parts not provided by PSI Waste unless otherwise authorized.

## Making a Claim:

- Claims must be made within ten days of a suspected defect and must include a serial number.
- Notify PSI Waste by email or phone of a claim as soon as a defect is suspected.
- Upon approval of the claim, PSI Waste will authorize repairs to be made. Conditions may apply.
- Conditions must be met for a claim to be paid. (E.g. pictures of repairs, returned parts, etc.)

For more information about our PX50 compactor visit [www.psiwaste.com/px50](http://www.psiwaste.com/px50)  
Repair Manual | Downloads | Instructional Videos | Parts List | Gallery  
You can also call 352-742-4774 for Tech Support (Opt-4) or Sales (Opt-2).

# PSI Waste Equipment Services, Inc.



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