PTR

800-523-3654

BALER & COMPACTOR

www.ptrco.com

2207 EAST ONTARIO STREET, PHILADELPHIA, PA. 19134

VERTICAL BALERS

FOR DEPENDABLE, COST-SAVING RECYCLING

ENGINEERED FOR SUPERIOR DURABILITY & MAXIMUM SAFETY

MODEL #_____

SERIAL #_____

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Revised 10/2016

Congratulations on your purchase of a PTR Baler.

- PTR is known for producing balers with the highest safety and quality standards in the industry.

- All PTR Balers are factory tested and receive a vigorous quality assurance inspection to insure top performance and safety in the field.

- Many of the advanced design features on our balers make operation easy without sacrificing safety.

- At PTR Baler and Compactor, operator safety is our number one priority. We ask that all operators read and fully understand this manual and view the provided safety/operational video. All baler operators must be at least 18 years old.

- UL Approved and CUL Approved.

*****IMPORTANT*****

A. The operating keys are located inside of the control panel. A tool is required to open the control box and only trained and authorized service personnel should enter following proper lockout/tagout procedures.

B. When power has been properly connected, press the Down/Up button and observe the direction of the rotation of the motor. Look at the motor fan, proper rotation is clockwise. (As indicated by arrow on motor). If fan rotation is not clockwise, follow lock out/tag out procedures and interchange any two of the three power conductors, re-check for proper rotation. This should correct the problem.

GENERAL

- PTR's vertical downstroke baler is designed with the operator's safety in mind. However, as with most industrial equipment, the ultimate responsibility for safety rests with the operator.

- It is the operator's duty to be thoroughly familiar with this manual and video before operating the baler.

- Additional operator responsibilities are to insure that the units' operation is in accordance with safety requirements and codes, especially all applicable **Occupational Safety and Health Administration (O.S.H.A)** standards and **American National Standard Institute (A.N.S.I)** Regulations.

- PTR strongly recommends that current, completed, applicable **ANSI** and **OSHA** standards are available to operators at all times.

- PTR Baler and Compactor Company strongly recommends: Keep the baler clean and free of contaminant. Failure may cause illness or death. Bale clean Cardboard only.

Note:
The information contained herein is subject to change without notice.

We reserve the right to make changes, and alterations to the equipment and information contained herein at anytime.

WARRANTY

PTR BALER AND COMPACTOR COMPANY warrants all equipment when operated, maintained and installed, and used in normal service for a period of three hundred sixty-five (365) days after the date of installation to be free from defects in material and workmanship.

The responsibility of PTR BALER AND COMPACTOR COMPANY, under this warranty to the purchaser, except as to title, shall not in any case exceed the cost of correcting defects in the equipment. Warranty repair or replacements shall not extend the initial warranty period.

PTR BALER AND COMPACTOR COMPANY shall under no circumstances be responsible for any loss of business or profit to the purchaser or any other consequential damages in connection with the sale of such equipment or any obligation under this warranty. The foregoing shall constitute the sole remedy of the purchaser, and the responsibility of PTR BALER AND COMPACTOR COMPANY.
Warranty repairs and/or replacements (at our option), will be made for both parts and labor. The authorized service center must use PTR BALER AND COMPACTOR COMPANY authorized parts. Labor will be allowed at a maximum of ($40) hourly rate. Premium rates will be at the customer's accountability. All warranty calls must be called into PTR BALER AND COMPACTOR COMPANY for dispatch. 1-800-523-3645

All parts, components or accessories requiring repair or replacement, within the warranty period, shall be returned PREPAID, to the PTR BALER AND COMPACTOR COMPANY at the expense of the buyer, lessee, or consignee. The PTR BALER AND COMPACTOR COMPANY will return at its expense replacement parts, components or accessories found to be defective. Shipment of parts under warranty shall be made via United Parcel Service or Parcel Post. Cost of any other means or transportation shall be paid by the equipment user.

PTR BALER AND COMPACTOR COMPANY does not assume any responsibility of liability for improper use of the equipment or improper installation of any unit, part or accessory which may cause damage to the unit. The installation of parts or accessories manufactured or sold by any other supplier shall be deemed to void all warranties.
Warranty claims for equipment will not be proceeded unless a properly completed and signed warranty card (attached to the installation checklist) has been received.

NON-WARRANTABLE REPAIRS

1. Routine adjustments; limit switches, pressure switch, or relief valve.
2. Tightening of hydraulic fittings and terminal connections.
3. Electrical fuses, tripped over loads or breakers.
4. Power to the unit, phase change, motor rotation change, facility electrical problems, or damage by customer from improper electrical hook up to unit.
5. Addition of hydraulic oil.
6. Ejector system parts such as chains, t-hooks, and shackles.
7. Repairs necessitated by improper use such as failure to follow instructions and abuse of equipment.
8. Operator error (example: chamber door not closed tight enough or gate not pulled down flush to top of chamber door)
9. Damage or install errors from customer supplied installer.

NOTE: Always have Serial and Model Number of unit ready when calling for service.

Baler Safety and Training Outline

I. Scope - Employers should designate a Safety/Risk Manager or equivalent person that has qualifications necessary to evaluate and manage safety and operational training issues related to the operation of baling equipment as part of their operator safety and training program. Each individual baler owner should develop their own training program specific to their equipment, personnel, processes, environment, and unique site application.

A. Your company safety official should conducted a hazard assessment of the various baling equipment utilized at your facility and use the information from the hazard assessment to develop a company specific baler safety training program. The hazard assessment should include at a minimum the following:
    1) Identification of material being baled. (clean cardboard only)
    2) Hazards associated with the baling equipment and material baled.
    3) An initial and then periodic review of the capabilities, qualifications, and training of any person who may potentially encounter the identified hazards.

B. Your company safety official should evaluated the means and methods of controlling the hazards identified in the hazard assessment; including information such as industry and regulatory requirements, instructions for the operation, inspection and maintenance of balers, and other information appropriate to the identified hazards.
    1) Your company safety official should ensure compliance with applicable OSHA Code of Federal Regulations under 29 CFR 1910 and applicable ANSI baling equipment standards under ANSI Z245.5 and Z245.51.
    2) Your company safety official should ensure that all employees (including supervisors) engaged in the operation, cleaning, maintenance, service, or repair of the baling equipment are properly trained according to their assigned jobs or tasks. The Baler Safety Video supplied by PTR should be shown to all potential operators and the manual should be read thoroughly.
    3) Contractors should not be permitted to operate in-house baling equipment unless they have been properly trained and authorized.

C. As a leading baler manufacture we recommend that your company utilizes the following baler safety training outline and baler safety video which cover the following:
    1) Pre-start up
    2) Operation – (operation procedures are also posted on front of control box)
    3) Safe bale ejection
    4) Inspection / maintenance (see baler safety inspection checklist included in this manual)
    5) Operator Safety / Prohibited practices
    6) Training requirements (necessary training as identified from hazard assessment and use of baler safety video.
    7) Record keeping – (see Attachment A)

D. Your company safety official should periodically review their company specific program to ensure the effectiveness of your safety program and make revisions as necessary.

Heed & Obey Warning Signs

Signs such as Danger, Caution, Warning, and Attention are on the machine for your protection. Warning signs must remain in place and be kept in readable condition. Report and replace all damaged or missing warning signs.

Operational carelessness and safety shortcuts can cause serious injury or death! Follow safety Guidelines and be safety conscious.

Every operator should read operators manual and the operating instructions posted on the front of the control box.

The operating key should not be left in the machine when the machine is left unattended.

Prior to Start Up

1. Wear proper safety equipment as recommended by your company safety official.

2. **Never** allow yourself or anyone involved with the baling system to be under the influence intoxicants or narcotics while the baler is operating.

3. Walk around the baling system to check for proper equipment condition. Open hopper door and check inside the baler.

4. Be positive no one is working on the baler or adjoining equipment. With ram in up position, lift gate and look inside main chamber area to be sure no one is inside.

5. The following operational check should be conducted prior to each shift:
   - With the gate raised, press all buttons in any order or combination. No motion should occur.
   - Close gate and start machine, open gate during downward motion. Machine should immediately stop.
   - Close gate and start machine. Gate will automatically open with upward ram travel. During this time, raise the gate off the ram. Machine should immediately stop.
   - Demonstrate that the machine will not operate in "automatic" if the main bale door is open. Operator should do this by having the ram in the up position and with the gate closed set the selector switch to down and push. Release the button and the ram should stop.

6. It is imperative that proper housekeeping is performed in the area behind and around the baler.
   - The areas behind the baler must be kept clean and free of debris, pallets and any other material.
   - PTR recommends that this area be inspected daily to maintain the safe operation of vertical balers.
   - Bale wire stored in the area of the baler must be stored in an approved horizontal storage system.

7. **If anything does not function as indicated, immediately report problems to supervisor, remove key, lockout machine, and call for service.**

Operator Safety

Always Use Lockout/Tagout

Power must always be disconnected and locked out before working within or performing maintenance on the baler or associated equipment. Standard Lockout/Tagout procedures should be followed in accordance with the OSHA standard 1910.147 "The control of hazardous energy".

A group safety lock should be used when multiple employees are working on the machine at one time so that all locks need to be removed in order to be able to re-energize the baler. Every employee who works on or with the baler should have his own lock and key. **Never assume you are protected by another employee's safety lock.**

Keep Safety Guards in Place

Safety guards must be kept in place and secure at all times. Keep the guards in good repair with periodic maintenance. Keep limit switches free of debris or obstructions. **Do not override of bypass safety switches or features.**

If feed gate becomes difficult to open or close, maintenance should be informed.

Operators should be instructed on how to conduct a brief visual safety inspection that includes areas door hinges and latch. Also how to conduct a visual inspection of the ejector chains, t-hooks, and shackles. Operator should know that maintenance should be called if there is any evidence of damage or if anything looks "different" as opposed to prior inspections.

Practice Fire Prevention

- Keep fire extinguishers accessible at all times. Use the extinguisher recommended for the material being baled. It should be rated safe for use of electrical fires.
- Never smoke close to combustible material.
- Clean the area before welding or other repair activities that produce sparks or source of ignition.
- Keep tank and motor areas free of oil, dust, or paper accumulations.

Keep a Clean Machine

1. Bale only clean cardboard.
2. Clean motor area monthly.
3. Remove any wedged cardboard from sides and back of ram. Remove any cardboard on the top of the ram daily.
4. Remove any cardboard stuck on retainer dogs and limit switches.
5. Keep baler clean and free of dirt and other contaminants. Failure to do so may cause illness or death.
6. The areas behind the baler must be kept clean and free of debris, pallets and any other material.
7. PTR recommends that the area behind the baler be inspected daily to maintain the safe operation of vertical balers.

Remember! All possible Dangers cannot be predicted. Your own safety attitude and habits are your best protection.

Additional Safety Guidelines for Baler Operation

1. Only authorized personnel 18 years of age or older, who are trained in baler operation are permitted to operate the baler.

2. The owner and operator are responsible for the safety of the employees and should be familiar with applicable OSHA and ANSI standards.

3. Operate in accordance with the owner's manual supplied with your baler.

4. Do not set the hydraulic pressure above factory specs. Specified pressures are listed inside the control box. Severe baler damage and/or personal injury could result.

5. Bale only the specified material for which the baler was built. And also for which the hazard assessment was conducted for.

6. Never overload the baler chamber.

7. Never enter the main chamber area unless the power is disconnected and locked out.

8. If work on or in the baler is required, disconnect the power to the baler, and lockout. Never assume that you are protected by another employee's safety lock. Before restarting, repeat the "Prior to Start Up" procedures.

9. Anytime the baler is shut down, the "Prior to Start up" procedures should be repeated.

10. Never bale aerosol cans or containers filled with liquid.

11. Use of safety glasses and forearm length leather gloves are strongly recommended when handling baling wire.

12. The areas behind the baler must be kept clean and free of debris, pallets and any other material.

13. PTR recommends that the area behind the baler be inspected daily to maintain the safe operation of vertical balers.

14. Bale wire stored in the area behind of the baler must be stored in an approved horizontal storage system.

Attachment A

TRAINING RECORD

Employee Name	Description of Training and other Notes	Date of Training	Seen Video Yes/No	Employee Signature

Store name and location: _____

Store #: _____

Store Manager Name: _____
Signature and Date: _____

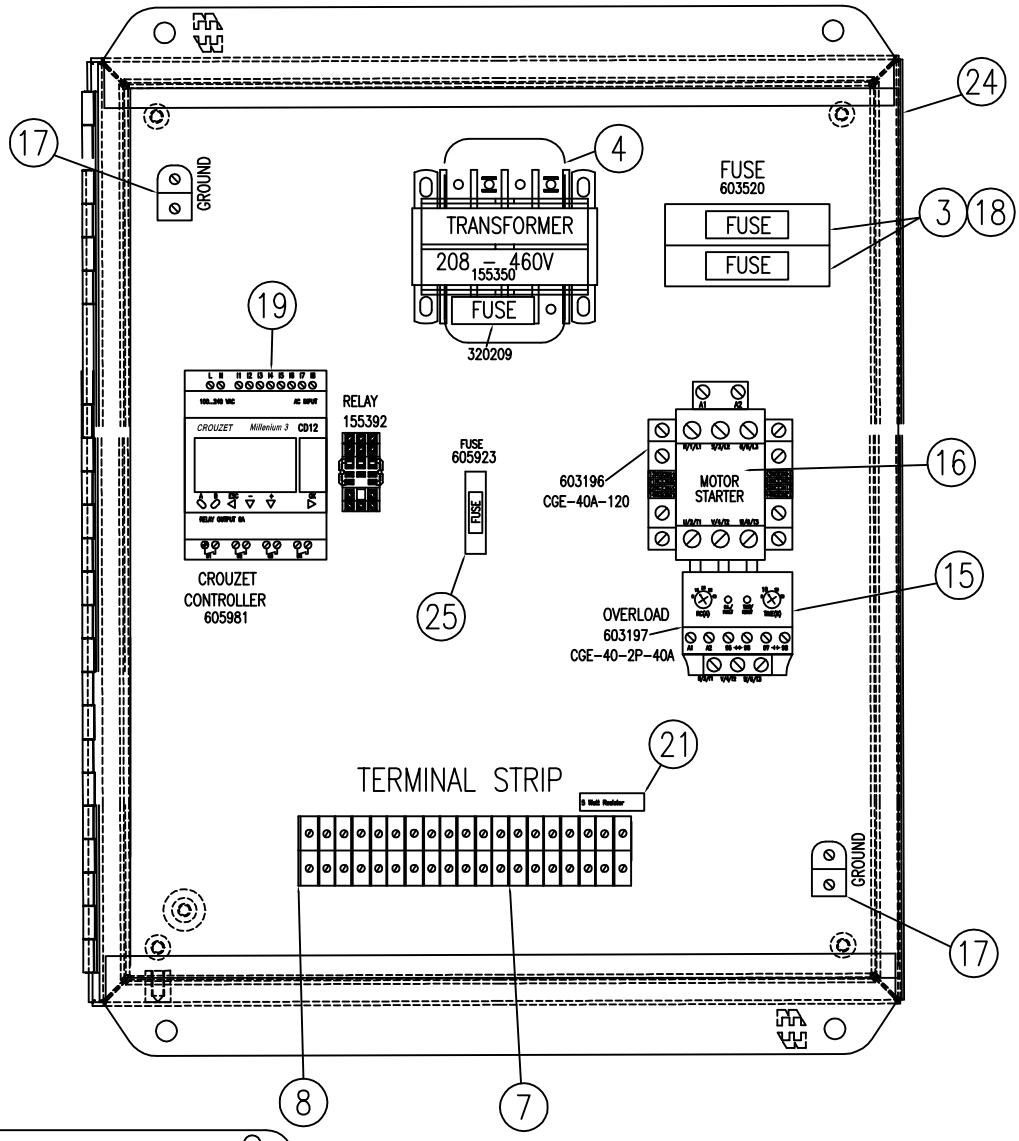
Training Video Present at Store: _____
Manual present at Store: _____

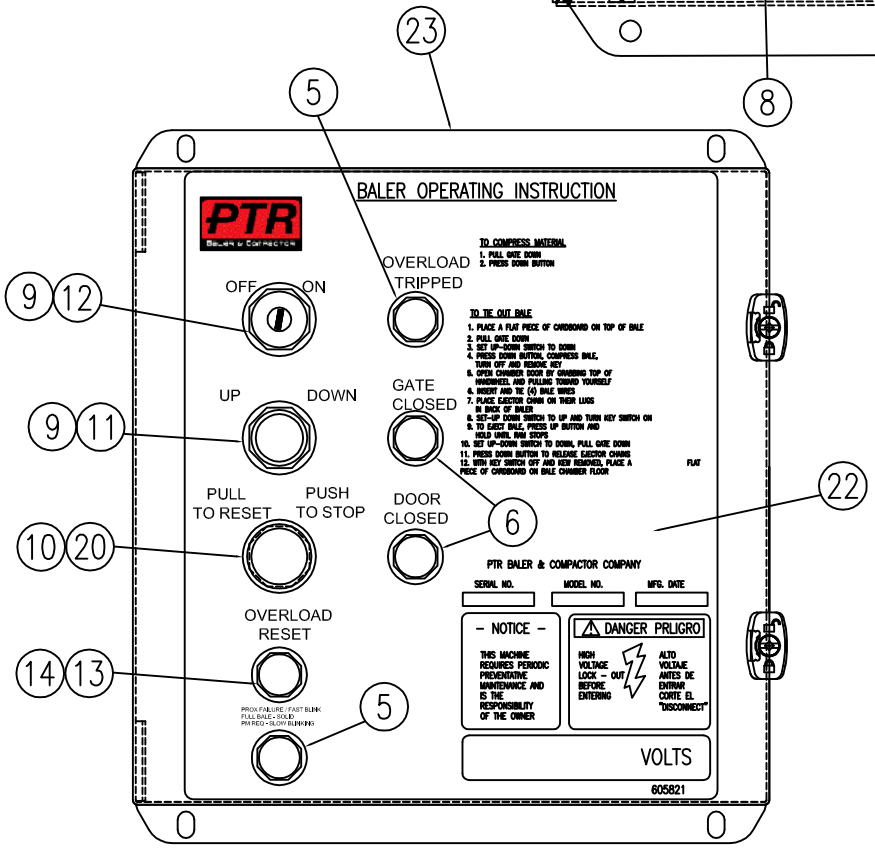
Name or Trainer: _____
Signature of Trainer: _____

PTR BALER & COMPACTOR CO.
SINCE 1907 2207 EAST ONTARIO STREET . PHILADELPHIA, PA. 19134

SIZE	APPROVALS	DATE
A	DRAWN BP	4-28-14
	CHECKED	

No.	Quantity	Description	Part Number
1	1	FUSE HOLDER	603993
2	1	PROX SWITCH FUSE	603992
3	2	FUSE	603520
4	1	100V TRANSFORMER	155350
5	2	RED LIGHT	603870
6	2	GREEN LIGHT	603871
7	20	TERMINAL BLOCKS	155441
8	1	END SECTIONS	155442
9	3	KA2 BLOCK	155400
10	1	KA1 BLOCK	155399
11	1	UP/DOWN BUTTON	155397
12	1	KEY SWITCH	155408
13	1	RESET BUTTON	603208
14	1	COLLAR & CONTACT	603209
15	1	40A OVERLOAD	603197
16	1	40A CONTACTOR	603196
17	2	BRASS LUG	605972
18	1	FUSE BLOCK	500529
19	1	PLC	605981
20	1	PUSH/PULL BUTTON	605423
21	1	5 WATT RESISTOR	605606
22	1	BOX DECAL	605821
23	1	SNAP-IN PLUG	604439
24	1	14 X 12" BOX	605375
25	1	1 AMP FUSE	605923





TITLE: BALER CONTROL BOX

DWG. NO: AB400298R3

BALER MODES

There are three basic modes of operation a downstroke vertical baler will perform – loading, compression, and ejection.

LOADING

Material is evenly loaded into the baler chamber while the safety charging gate and ram are in the UP position. The baler chamber door is closed and locked.

COMPRESSION

With the safety gate down, the ram pushes the material down into the bottom of the baler chamber area. Retainer Dogs located on baler chamber door help hold the compressed material down while the ram travels up to the loading position, opening the baler safety charging gate as it travels up.

EJECTION

When full bale indicator arrows on the ram face and baler frame match, the bale is the proper size. Lift gate, unlatch and open chamber door at least 110 degrees, slide baling wire through slots and tie off all wires.
Close feed gate by pulling it down completely.
Attach the ejector "T" hooks at back of baler to ram ejector lugs, set the UP/DOWN switch located on baler electrical box to the UP position, press and hold button in until the bale ejects. Keep clear of ejecting bale.

Revised 10-8-12

PLC Baler
Control Description and
Operating Instructions

This unit is to be operated by authorized and trained personnel only. By law, no one under 18 years of age is permitted to operate this machine. Baler manual and safety video must be reviewed as part of operator and maintenance training.

CONTROLS AND INDICATORS:

The PTR Baler controls with PLC are nearly identical to the standard baler operator controls.

Keyed ON/OFF Switch – The switch is an access control device that limits use to authorized and trained operators in position of the key. Also allows the baler operation to be turned off for routine production such as tying off a bale. Key Switch is NOT a lock out tag out device as required for service or entry into the machine.

E-Stop – Allows the machine to be stopped at any time in case of emergency. Will illuminate when pressed and must be manually pulled back out before machine can be restarted.

Up/Down Selectable Start – This is the button used to start the machine. The outer ring can be turned to select between start up and start down. The machine will operate in automatic mode when the main bale door is shut, the gate is closed, and there is less than a full bale in the chamber. **Note: Pressing the start button while the ram is not in the fully raised position will result in the ram retracting to the fully raised position and stopping. Pressing the button again will result in a normal cycle.**

This button will operate as a sustained manual pressure control to allow for bale ejection when the main bale door is open or when the full bale light is illuminated. The ram must be run up before it can be run down when in manual operation if the pressure switch was actuated during the previous down stroke.

Reset – This button is not normally used. When pressed it will reset the overload in the unlikely event that the overload has tripped and the overload tripped light is illuminated. Please call PTR service if the overload has tripped more than three times in any given one month time period as this can be indicative of an improper machine power connection or other electrical fault.

Full / PM Required / Gate Fault Light – This light will illuminate and remain illuminated if a full bale is detected in the baling chamber. Automatic operation will be disabled and this light will remain illuminated until the bale is tied off, ejected from the machine, and the main bale door closed. The machine is still operable in manual mode with the full bale light illuminated. The full bale arrows will line up when the maximum size bale is in the bale chamber. Do not make bales beyond the point where the arrows line up.

The machine has both an internal cycle counter and hour counter to track machine usage. The PM light will repetitively slow blink one second on followed by one second off when the cycle count or hour count exceeds the pre-set value that indicates preventative maintenance is required. Call PTR parts and service to schedule preventative maintenance. The machine will continue to operate normally.

This indicator light will also repetitively fast blink one half second on followed by one half second off if the internal program detects that the gate proximity switch has been bypassed or is inoperative. Opening and re-shutting the gate will usually clear the blinking light and return the machine to normal operation. Please contact PTR parts and service if the light continues to blink and the machine remains inoperable after opening and closing the feed gate.

Gate Shut Light – This light indicates that the feed gate is completely and properly closed. The normal automatic cycle cannot be started if the gate is not fully closed.

Door Shut Light – This light indicates that the main bale eject door is tightly closed as is required for normal automatic operation. With the door open the machine will only run in manual mode with sustained manual pressure control operation as necessary to eject the bale. If this light is not illuminated first try tightening the locking hand wheel to ensure a complete and tight door closure.

Overload Tripped Light – This light indicates that the internal motor overload has tripped. See above description of the Reset pushbutton.

Revised 10-8-12

BALER OPERATING INSTRUCTIONS

A. Preparing the baler to make a new bale of cardboard;

1. Insure power key switch is in the OFF position.
2. Insure baler ram is in the UP position.
3. With gate in the UP position, open bale chamber door.
4. Lay a flat piece of cardboard on the bottom of the bale chamber over top of the ejector chains.
5. Close and latch the bale chamber door.

B. To make a bale;

1. Fill the chamber with cardboard, boxes need not be broken down, the material to be baled should be loaded evenly in the chamber.
2. Pull the gate down to the top of the chamber door.
3. Turn power key switch to the ON Position.
4. Set the UP/DOWN switch to the DOWN position, which is also the AUTO setting.
5. Press the DOWN button and release, the ram will travel down and automatically reverse when reaching full down stroke.
6. Repeat above steps until the full bale light illuminates or until the arrows on the frame and ram are aligned.

NOTE: If the gate is opened at anytime during the cycle prior to automatically opening or if lifted off the ram switch during automatic gate opening – the ram will immediately stop. **Ram will retract to the full up position on restart regardless of setting on Up/Down selector.**

C. To tie off and eject a bale: Note: Steps 1 thru 7 are optional to allow the addition of a top flat sheet for easier tying of the bale.

1. Turn the UP/DOWN switch to the UP position.
2. Press and hold the UP button to raise the ram.
3. Turn the key switch to the OFF position.
4. Lay a flat piece of cardboard on top of the bale to provide a flat surface for easier tying of the bale. – DO NOT reach into the chamber.
5. Lower the gate and turn the key switch to the ON position.
6. Turn the UP/DOWN switch to the DOWN position.
7. Press and hold the DOWN button till the ram stops against the full bale.
8. Turn the key switch off and remove the key.
9. Lift gate, unlatch and open chamber door at least 110 degrees. Do not stand in front of the door.
10. Slide baling wire through slots in floor and back through slots in ram. The “poker rod” or cardboard clearing tool can be used if necessary to clear a passage for the bailing wire.
11. Tie off all wires.
12. Position a pallet, hand truck, forklift in front of baler opening to receive the bale when it’s ejecting.

13. Place ejector hooks onto the ejector ram lugs in the back of the baler.
14. Insert the key and turn the switch ON, Set the UP/DOWN switch to the UP position.
15. Pull gate down until it is on the ram gate switch if the ram is stopped higher than the door or closed completely if the ram is below the door.
16. Keeping the area in front of the machine clear of all personnel, Press and hold the UP switch until the bale ejects.
17. Pull gate down completely.
18. Turn the UP/DOWN switch to the DOWN position.
19. Press the DOWN button and hold, ejector chains and hooks will automatically disengage during downward travel.
20. Turn the UP/DOWN switch to the UP position.
21. Press the UP/DOWN button and hold down until the ram is in the UP position.
22. Turn the key switch OFF; Lay a flat piece of cardboard on the bottom of the bale chamber over top of the ejector chains.
23. Close and latch the bale chamber door.

D. Ready for a new bale of cardboard

1. Follow steps A, B, & C.

- **NOTE:**

a. Occasionally cardboard will be wedged in the ram area.
   1. Turn off the power at the disconnect box and remove any excess cardboard; if left to build up, it could affect the operation of the baler.

b. If an operator will trys to run the baler and it does not operate.
   1. Be sure the power key switch is ON.
   2. Be sure gate is pulled down completely and gate closed light is illuminated.
   3. Be sure chamber door is completely closed and door closed light is illuminated.
   4. Be sure not to lift the gate while ram is moving, baler will shut down and not start until gate is pulled down to the top of the chamber door.

Safe Bale Ejection

Recommended Bale Tie-Off and Eject Procedure for PTR Baler and Compactor Company's standard built 2300HD baler producing bales of ordinary corrugated cardboard. Please consult PTR Baler and Compactor Company for recommendations specific to your model and application.

Show how to tie off a bale. Include adding a piece of flat cardboard over the top of the finished bale prior to the last compression cycle. Use only properly sized baling wire.

Visibly inspect wire for damage, nicks, sharp kinks, etc. immediately before use. Do not use damaged baling wire. Baling wire should not be re-used.

Use the maximum number baling wires allowed by the number of available slots on the back of the machine. This will be five wires on standard 2300HD machines and will never be less than four.

Care should be taken when handling any potentially sharp objects such as baling wire. Follow appropriate procedures and precautions.

Removal of the bale from the area in front of the machine after it is ejected is not covered in this procedure due to the wide variety of methods and procedures in use. A bale cart, pallet, etc. may be placed in front of the baler before the bale is ejected to catch the bale and to better facilitate bale removal and transportation.

This procedure starts once a full bale is determined to be in the baling chamber and assumes the machine stops the previous cycle in the normal way with the ram fully raised and the feed gate open.

1. Turn the machine off and remove key from control panel On/Off switch.

2. Place a large piece of flat cardboard over the completed bale.

3. Turn the machine back on and run the ram down.

4. Stop machine with ram at lowest point of travel against completed bale by hitting the e-stop immediately after the ram reversed direction.

5. Turn the machine off and remove key from control panel On/Off switch.

6. Open bale eject door beyond 90 degrees. (Break plane of side of baler with door). **Warning:** if door is not open beyond 90 degrees while ejecting bale, eject chains may break and bale may not properly eject.

7. Use "poker rod" as necessary to clear a path for the baling wire both under and over the bale.

***Attention**: The remainder of the following steps involve handling baling wire. Before proceeding any further, it is recommended that you consult your supervisor or company safety professional for required personal protective equipment when handling baling wire. It is strongly recommended that safety glasses and forearm length leather gloves be worn when handling baling wire at any time.

8. From the front of the machine, manually feed the first baling wire "loop-end" first <u>under the bale</u> through the available wire slots on the bale chamber floor until the wire protrudes slightly through the rear of the machine. (The wire can actually be fed either end first either over or under the bale. The loop end first was chosen only because customer feedback indicated it is generally easier to feed the wire this way as opposed to the alternatives).

9. Repeat with a wire in each of the available wire slots feeding each one “loop-end” first. Do not cross the wires, each wire should pass though corresponding wire slots on the chamber floor and on the ram face. Do not put baling wire through the two slots occupied by the bale eject chains. Do not allow baling wire to tangle with bale eject chains or other baling wire.

10. From behind the baler, take each wire and pass the “loop-end” over the bale through the available wire slots in the ram face until the “loop-end” of wire protrudes slightly beyond the ram toward the front of the machine. Pull additional wire from under the bale as required to continue feeding wire over the bale.

11. Walk back to the front of the machine.

12. Pull each “loop-end” of the wire until there is sufficient slack to pull loop end down to the bottom corner of the bale where the wire was originally fed under the bale.

13. Carefully pass the “non-loop-end” of the wire through the baling wire loop.

14. Manually pull the wire snuggly around the bale.

15. Carefully wrap the section of wire that protrudes through the loop around the rest of the wire several times to “tie-off” the bale.

16. Move behind the baler and engage the ejector chain “tee-hooks” onto the ram ejector brackets.

17. Turn the machine back on.

18. It is important to allow the machine to automatically lift the gate during bale ejection. Verify that the loading gate is fully lowered to the top of the ram. Do not lower the gate below the ram. **Warning:** Ejecting a bale with the feed gate below the ram will cause gate damage.

19. Ensure that the area in front of the baler is clear of all personnel and that baler door is still open beyond 90 degrees of the side of baler.

20. Raise the ram and eject the bale.

21. Remove the bale from in front of the machine.

22. Close the main bale dump door and lower the feed gate.

23. Run the ram down to automatically disengage the ejector chain “tee-hooks” from the ejector brackets.

24. Turn the key back off and remove it from the control panel.

25. Place a large piece of flat cardboard on the floor of the baler before starting new bale. Cardboard should be long and wide enough to cover all slots on bale chamber floor.

PTR Baler & Compactor Co.

2207 E. Ontario St Philadelphia, PA 19134
PHONE: 215-533-5100 * FAX 215-533-8907

Quality * History * Service* Value

Baling wire recommendation for PTR Baler and Compactor Company's standard built balers producing bales of ordinary cardboard. Consult PTR Baler and Compactor for wire recommendations for non-cardboard applications.

MODELS: 1800HD, 2318, 2300HD, 3400HD, 3600HD, 7230
Minimum of 14 Ga galvanized steel wire approximately 14' long with one end looped for bale tie off.
Wire is to have a tensile strength of approximately 70,000 to 85,000 psi or more and a break strength of approximately 380 to 420 pounds or more.

MODELS: 360, 420
Minimum of 15 Ga galvanized steel wire approximately 9' long with one end looped for bale tie off.
Wire is to have a tensile strength of approximately 75,000 to 80,952 psi or more and a break strength of approximately 300 to 340 pounds or more.

MODELS: 5000HD, 7200HD
Minimum of 12 Ga galvanized steel wire approximately 16' long with one end looped for bale tie off.
Wire is to have a tensile strength of approximately 70,588 to 76,136 psi or more and a break strength of approximately 600 to 670 pounds or more.

Additional Information:

At least four baling wires must be used per bale. Slots are available for five or more bailing wires to be used.

Care should be exercised when handling any potentially sharp objects such as bailing wire. Follow appropriate precautions and procedures.

Always stand clear of ejecting bale.

Baling wire recommendation is based on industry standard and past history of success with this wire in a wide variety of customer environments and usages of balers and other vertical balers with comparable compression yielding bales of comparable size and weight.

Revised 10-8-12

Manager and Store Maintenance Instructions

This unit is to be operated and maintained by authorized and trained personnel only. No one under 18 years of age is permitted to operate or service this machine. Standard baler manual and safety video must be reviewed as part of operator and maintenance training. Only qualified, trained, and authorized personnel can perform these actions as the control panel must be opened to access the PLC. Safe work practices in accordance with NFPA 70E must be followed when accessing a live electrical panel.

TROUBLESHOOTING – Basic - Authorized personnel only!

Machine will not run and E-stop pressed light is illuminated: Pull out e-stop.

Machine will not run and overload tripped light is illuminated: Press the reset button and call PTR service.

Machine will not run and full / PM required / gate fault light is blinking: open and re-shut the feed gate. If this still does not resolve the issue, call for service or follow the trouble shooting guide for authorized personnel only – See next section.

Machine will only run with sustained manual pressure controls and full bale light is illuminated: Open main door, tie-off bale, eject bale, and re-close main door.

Machine will only run with sustained manual pressure controls and door shut light is not illuminated: Shut main bale door and tighten side wheel lock.

Machine is operational but full / PM required / gate fault light is blinking: Machine is due for preventative maintenance. Call service for PM. Machine can continue to be operated normally.

Revised 10-8-12

PLC informational screens and adjustable settings

Use the "A" or "B" button to scroll through the available display screens

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Reverse Timer Screen: Not for use by end user – Only to be adjusted by factory authorized service personnel. Original timer setting is recorded on the sticker affixed to the inside of the control panel door.

Full Bale Timer Screen: This screen allows the full bale timer to be adjusted in order to change the size of the bale in the baling chamber when the full bale light illuminates. Lower timer settings result in larger bales while higher timer settings result in smaller bales. The original factory setting will vary by model and power unit option. Standard 2300HD's 3400HD's would have a default setting of 21 seconds adjustable in $1/10^{th}$ second increments from 20 seconds to 31 seconds. To adjust the preset timer setting, press the "OK" button until the background of the pre-set value stops blinking and the pre-set value begins blinking, then use the up (+) and down (-) buttons to adjust the pre-set value, and finally press the "OK" button once again to enter the new value and return to the background blinking. The adjustment range is limited and values outside this range cannot be entered. Do not make bales larger than allowed by the physical constraints of the baler as indicated when the arrows on the frame and ram are aligned.

Full Bale Light Counter Screen: Displays both the total number of times the full bale light has illuminated over the life time of the machine and the number of times the full bale light has illuminated since the current counter was last reset. To reset the current counter simultaneously press and hold the UP (+) and DOWN (-) buttons for 7 seconds while viewing this screen. This screen counts the number of full sized bales made by the machine. It will not count undersized bales that were tied off and ejected prior to the full bale light illuminating.

Door Open/Close Cycle Counter Screen: Displays both the total number of times the main bale door has cycled from closed to open to closed over the life time of the machine and the number of times the door has cycled since the current counter was last reset. To reset the current counter simultaneously press and hold the UP (+) and DOWN (-) buttons for 7 seconds while viewing this screen. This screen will count every door open/close cycle where the door has been open for at least 15 seconds followed by the door being closed by at least 15 seconds. Under normal usage there is no reason to open the main bale door except to eject a bale. The difference between this count and the full bale light counter will be very close to the number of undersized bales made by the machine that were tied off and ejected prior to the full bale light illuminating.

Cycle Counter Screen: Not for use by end user – Only to be reset by factory authorized service personnel. Displays both the total number of machine cycles over the life time of the machine and the number of machine cycles since the current counter was last reset. To reset the current counter simultaneously press and hold the UP (+) and DOWN (-) buttons for 7 seconds while viewing this screen. The PM required light is triggered when the current count exceeds 60,000 cycles and is reset when the current counter is reset. The total cycle count cannot be reset. Resetting the current cycle count also resets the current hour count.

Hour Counter Screen: Not for use by end user – Only to be reset by factory authorized service personnel. Displays both the total number of motor usage hours over the life time of the machine and the number of motor usage hours since the current counter was last reset. To reset the current counter simultaneously press and hold the UP (+) and DOWN (-) buttons for 7 seconds while viewing this screen. The PM required light is triggered when the current count exceeds 1,000 hours and is reset when the current counter is reset. The total cycle count cannot be reset. Resetting the current hour count also resets the current cycle count.

Error Screen: The error screen cannot be displayed using the “A” and “B” buttons. It will display automatically if an error is detected with one of the following error messages; Pressure held for more than 3 seconds, Up and no limit more than one minute, Up and pressure, Down and no pressure more than 1 minute, Prox peddle and motor more than half second, Three cycles and no gate opening. See the advanced trouble shooting section for more detail.

Option Screens: Custom programs for special order machines may have additional screens.

TROUBLESHOOTING – Advanced - Authorized personnel only!

This unit is to be operated and maintained by authorized and trained personnel only. No one under 18 years of age is permitted to operate or service this machine. Standard baler manual and safety video must be reviewed as part of operator and maintenance training. Only qualified, trained, and authorized personnel can perform these actions as the control panel must be opened to access the PLC. Safe work practices in accordance with NFPA 70E must be followed when accessing a live electrical panel.

General Notes: The default PLC screen will show the status of all inputs and outputs. An inactive input or output will show as a dark number on a light background. An active input or output will show as a highlighted number with a dark square highlighting the light number (often described as looking like a postage stamp). The wiring diagram can be consulted to show which device is connected to which input or output. This will allow simple determination of device states without requiring the use of an electrical meter. For example, the gate proximity switch is connected to input number eight. This input should be inactive with the gate open and active with the gate shut.

Full bale light is illuminated and door cannot be opened: Alternative reset for full bale light is to simultaneously press and hold the UP (+) and DOWN (-) buttons on the PLC face for ten seconds while the full baler timer screen is displayed on the PLC screen. Alternatively the door switch wire may be disconnected, the ram retracted, and the wire re-connected to simulate the ejection of the bale.

To reset bale count: PLC information screens are viewable by pressing "A" or "B" the buttons on the controller face to scroll forward or backward through the available screens. Two screens keep a tally of the bales made. One by counting full light illuminations and the other by counting door open/close cycles. The current value can be reset by pressing simultaneously pressing the UP (+) and DOWN (-) keys on the PLC face for seven seconds while in the screen displaying the full bale count to be reset. The total count cannot be reset by the user.

Full / PM / Gate Fault light is slow blinking, the machine is operational, and PM has been performed: PM light can be reset by pressing the UP (+) and DOWN (-) buttons on the PLC face simultaneously for seven seconds while in the screen displaying the cycle count or hour count. The PM light is set to come on after 60,000 machine cycles or 1,000 hours of motor operation. The total machine cycles and motor hours since the last PM can be viewed on the PLC information screens. The screens are viewable by pressing the "A" or "B" buttons on the controller face to scroll forward or backward through the available screens. The total number of cycles or hours cannot be reset. Resetting either of the resettable hour or cycle counters will reset both.

Full / PM / Gate Fault light is fast blinking: The PLC has detected an attempt to bypass the gate safety devices or safety device failure. This is detected in one of two ways. A) The gate proximity switch and the ram peddle switch are both actuated for more than 5 seconds with the motor running. Normally the peddle switch is depressed and then the proximity switch immediately opens. This error can be caused by a deliberate attempt to foil the gate prox switch or the ram peddle switch. This can also be caused by a failure of the ram peddle switch, gate proximity switch, or associated wiring. B) The machine has run more than two consecutive cycles without seeing the proximity switch transition to open. Normally the ram auto-opens the gate at the end of every cycle and the proximity switch transitions to open. This error can be caused by a deliberate attempt to bypass the gate proximity switch, a failure of the gate proximity switch, or associated wiring. This error can also be caused by the unauthorized machine modification to disable the auto-open gate feature. This error can be reset by opening and closing the feed gate and returning any unauthorized modifications to the original factory configuration. If issue re-occurs, consult PTR service.

PM light is blinking and machine will not operate: An error in machine operation has been detected by the PLC. The PLC screen will display an error message to identify the specific error detected. First resolve the machine issue leading to the error and then reset the error through the PLC by pressing and holding the UP(+) and DOWN(-) buttons on the PLC simultaneously for 10s while the error screen is displayed.

- Pressure held for more than 3 seconds - Detects that the pressure switch has been actuated for more than three seconds and shuts down machine to prevent overheating of oil and motor. Possible causes include pressure switch failure, improperly adjusted pressure switch, directional valve failure, or failure of wiring associated with directional valve or pressure switch. Must be reset to resume machine operation.

- Up and no limit more than one minute - Detects that the machine has been trying to raise the ram for more than one minute and has not actuated the up limit switch. Possible causes include improper motor rotation, limit switch failure, directional valve failure, inability to build pressure due to hydraulic failure, or wiring associated with limit switch and directional valve. Must be reset to resume machine operation.

- Up and Pressure - Detects that the pressure switch has actuated during upward ram travel. Possible causes include reversed hoses, reversed directional valve wires, up limit switch failure, pressure switch failure, improper pressure switch adjustment, physical jamming of the ram, or issue with wiring associated with pressure switch or up limit switch. Must be reset to resume machine operation.

- Down and no pressure more than 1 minute - Detects that the pressure switch has not actuated after one minute of downward ram travel. Possible causes include improper motor rotation, pressure switch failure, directional valve failure, improperly adjusted pressure switch, hydraulic failure causing inability to build pressure, fault in wiring associated with pressure switch or directional valve. Must be reset to resume machine operation.

- Prox, peddle, and motor more than half second - Detects that the gate peddle switch and gate proximity switch have both been active at the same time for more than ½ second while the motor is in operation. This will typically indicate an attempt to bypass the gate proximity switch or a hardware failure associated with the peddle switch, proximity switch or associated wiring. This alarm does not require acknowledgement to be reset. If all components are working correctly, simply raising the gate to clear the proximity switch and peddle switch will clear the alarm and allow the machine to operate.

- Three cycles and no gate opening - Detects that the machine has run three consecutive cycles without seeing the proximity switch open. This will typically indicate an attempt to bypass the gate proximity switch, operator error, or a hardware failure of the proximity switch or associated wiring. This alarm does not require acknowledgement to be reset. If all components are working correctly, simply raising the gate to clear the proximity switch will clear the alarm and allow the machine to operate.

TROUBLE SHOOTING GUIDE
BALER WILL NOT OPERATE

	POSSIBLE CAUSE	POSSIBLE REMEDY
A)	No Power	1. Check main power source 1. Check if power key switch is on 2. Reset Overloads 3. Check motor starter contacts for extreme wear 4. Check if gate is down 5. Check bale chamber door is closed
B)	Limit Switch (Ram)	1. Upper Limit Switch malfunction 1. Upper Limit Switch needs adjustment
C)	Motor Overload Tripped	1. Reset overload on motor starter 2. Check current Load (Amps)
D)	Blown Fuses	1. Replace fuses – Turn power off at wall disconnect switch
E)	Electrical Malfunction	1. Perform electrical system continuity check

BALER WILL NOT OPERATE IN AUTO

(All the above can be applied to the Auto Mode)

	POSSIBLE CAUSE	POSSIBLE REMEDY
A)	Door Switch	1. Main door may not be closed properly against switch 2. Door Switch loose 3. Door Switch malfunction
B)	Pressure Switch	1. Improper pressure setting 2. Bad electrical contact

TROUBLE SHOOTING GUIDE
RAM WILL NOT TRAVEL DOWN

POSSIBLE CAUSE	POSSIBLE REMEDY
A) Directional Valve Malfunction	1. Check valve solenoid 2. Push in manual override, pins are on each end of solenoid
B) Electrical Malfunction	1. Perform electrical system continuity check
C) Material Jamming Ram	1. Remove all jamming material from ram
D) Ram Switch	1. Ram Switch not in proper position 2. Limit Switch malfunction. 3. Adjust Limit Switch 4. Pedal Switch jammed in down position.
E) Pressure Switch	1. Improper pressure setting 2. Bad electrical contact
F) Solenoid	1. Check for shifting of solenoid (check light)
G) Proximity Switch	1. Proximity switch must detect plate mounted on gate counter weight 2. Proximity switch malfunction

TROUBLE SHOOTING GUIDE
RAM WILL NOT TRAVEL UP

	POSSIBLE CAUSE	POSSIBLE REMEDY
A)	Hydraulic Fluid Level Low	1. Check hydraulic fluid level gauge on reservoir, add hydraulic fluid.
B)	Pump Taking Air	1. Check fittings to see if they are tight
C)	Directional Valve Malfunction	1. Check valve solenoid 2. Push in manual override, pins are on each end of solenoid
D)	Electrical Malfunction	1. Perform electrical continuity check
E)	Material Jamming Ram	1. Remove all jamming material from ram
F)	Incorrect Pump Rotation	1. Check fan rotation on motor (fan should turn clockwise)
G)	Relief Valve	1. Check setting 2. Replace valve
H)	Pump Not Building Pressure	1. Replace pump
I)	Hydraulic System Pressure Is Low	1. Check pressure setting 2. Check relief valve for malfunction 3. Worn pump
J)	Pressure Switch	1. Improper pressure setting 2. Bad electrical contact
K)	Cylinder	1. Check for internal/external cylinder leakage
L)	Up Stop Limit Switch	1. Check arm is free and not activated
M)	Gate	1. Make sure gate is down 2. Check switch

TROUBLE SHOOTING GUIDE
RAM DRIFTS DOWN

	POSSIBLE CAUSE		POSSIBLE REMEDY
A)	Directional Valve	1.	Spool may be jammed
B)	Cylinder	1.	Seals may be damaged (Replace seals or replace cylinder)
C)	(optional) Regenerative Hydraulic Valve	1.	Hoses may be reversed. Verify "A" to extend and "B" to retract.
D)	Hydraulic Leak	1.	Check all connections for leaks.

MOTOR DOES NOT STOP WHEN RAM RETURNS TO THE UP POSITION

	POSSIBLE CAUSE		POSSIBLE REMEDY
A)	Limit Switch	1.	Check for broken limit switch arm
		2.	Improper switch adjustment
		3.	Bad contacts in motor starter.

HYDRAULIC PRESSURE NOT OBTAINABLE

A) Worn Pump
B) Cylinder bypass
C) Relief valve malfunction
D) Improper pressure setup
E) Loose fitting

TROUBLE SHOOTING GUIDE
BALER IS NOISY

	POSSIBLE CAUSE	POSSIBLE REMEDY
A)	Ram Rubbing	1. Cylinder and ram may not be centered in chamber 2. Cylinder rod may be bent
B)	Noise at Directional Valve	1. Directional valve worn 2. Check for broken springs inside valve

PUMP NOISE

	POSSIBLE CAUSE	POSSIBLE REMEDY
A)	Oil Reservoir Level Low	1. Check oil level gauge on reservoir (add oil if necessary)
B)	Worn Pump	1. Check hydraulic system pressure
C)	Restricted Inlet Strainer	1. Replace strainer
D)	Air Leakage in Oil	1. Check for foamy hydraulic fluid in reservoir oil level gauge

Baler Operational And Repair Safety Instructions

WARNING: DO NOT OPERATE BALER WITHOUT THOROUGH UNDERSTANDING OF INSTRUCTIONS.

DAILY: PERFORM SAFETY CHECK TO ENSURE PROPER INTERLOCK FUNCTION

ONLY AUTHORIZED PERSONNEL SHOULD BE ALLOWED TO OPERATE THIS BALER

Keys to this machine should be removed between uses to prevent unauthorized operation. Federal regulation prohibits use of this machine by people under the age of 18.

DO NOT ATTEMPT TO DEFEAT THE PURPOSE OF ANY SAFETY SWITCH!

Immediately replace any switches that are found not to be in proper working condition

DO NOT OPERATE BALER UNLESS GATE IS FULLY CLOSED

KEEP CLEAR OF THE BALER WHILE EJECTING A BALE

THE BALER SHOULD NEVER BE ENTERED OR SERVICED WITHOUT FOLLOWING THE LOCK-OUT TAG-OUT PROCEDURE

The baler should not be restarted until all workers have exited the baler and moved out of the way of all moving components.

Lock-out procedure is listed on the following page.

ONLY AUTHORIZED PERSONNEL SHOULD BE ALLOWED TO OPEN THE PANEL BOX

Baler operates with high voltage, and should not be serviced by people who are not certified to do so.

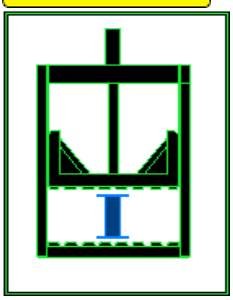
Lock-out procedure must be used before opening panel box.

BEWARE OF MOVING COMPONENTS

The gate and door should not be opened at anytime while the ram is advancing under pressure. The user should stand away from baler while in operation, and should never reach into the machine in any way.

DO NOT CLIMB THE BALER UNDER ANY CIRCUMSTANCE

User should also be familiar with applicable safety codes, including those issued by ANSI, OSHA, UL, NFPA, etc.



NOTICE: WHEN CHANGING CYLINDER, PERFORMING HYDRAULIC SERVICE, OR PERFORMING STRUCTURAL REPAIRS Be absolutely sure to fully support the ram. Suggested method shown on drawing AB340367 in the user manual

DANGER: THE AREAS BEHIND THE BALER MUST BE KEPT CLEAN AND FREE OF ANY DEBRIS, PALLETS, AND ANY OTHER MATERIAL

Balers that are found not to be operating safely, must be **IMMIEDIATELY** reported to **PTR Baler and Compactor AT:** (800) 523-3654

LOCKOUT/TAGOUT PROCEDURE DEVELOPMENT INFORMATION

Warning! Before performing maintenance or service work on the baler, the OSHA (Occupational Safety and Health Administration) 29 CFR (Code of Federal Regulations) 1910.147 requires that each company develop, maintain, and follow a lock-out / tag-out procedure for employees and equipment.(standard should be referenced for definitions to various terms such as isolation, affected, and authorized.) This procedure must be followed prior to performing maintenance or service work or entering any hazard area that may exist. The following is merely a guideline for creating a company/equipment specific lock-out / tag-out procedure and is not intended to supplant either the specific company procedure or OSHA standard 29 CFR 1910.147 and 29 CFR 1910.147 appendix A.

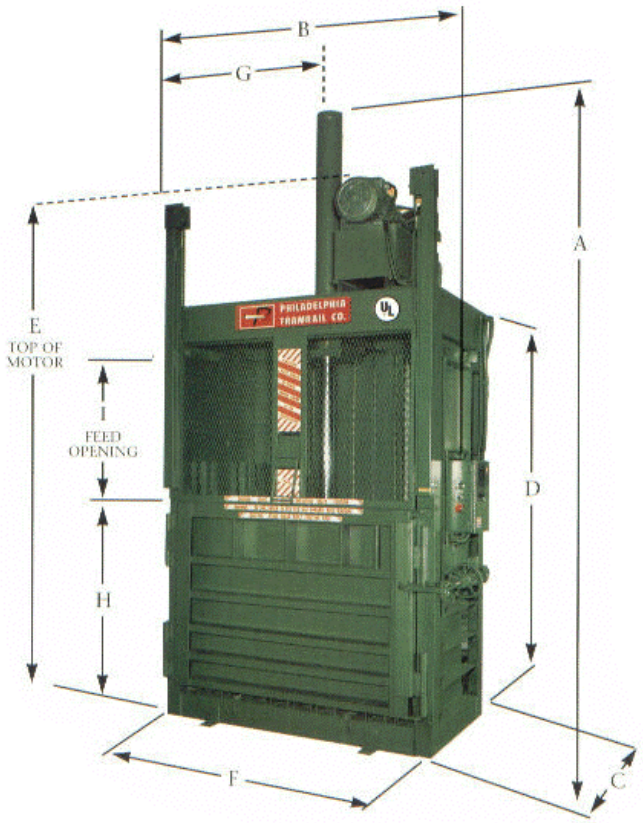
1. All "affected" employees shall be notified that equipment is being shut down and locked out prior to performing service or maintenance.
2. The equipment, if operating, shall be shut down by normal means and the energy-isolating device shall be de-activated to isolate the equipment from the energy source by an "authorized" employee. Isolation shall include:

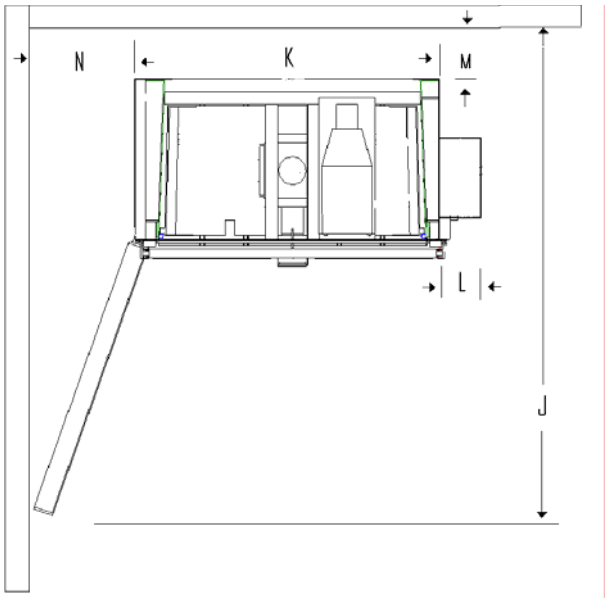
   a) Removing the key from the key-lock ON-OFF switch on the baler control box
   b) turning off disconnect and affixing a lock, securing disconnect in the off position
   c) Affixing a tag to the lock, clearly identifying the individual who locked out the machine, warn against hazardous conditions, and actions required to avoid hazardous conditions, such as, "Do not operate"
   d) Placing operating equipment in such a position as not to be subject to possible free fall and/or installing additional blocking devices to prevent freefall. See drawing number AB340367 in user manual
   e) Relieving stored hydraulic or pneumatic pressure, after blocking devices are installed

3. Equipment isolation shall be verified by activating the normal operating controls, ensuring first that no personnel are exposed (insure operating controls are returned to the neutral or "off" position after verifying the isolation of the equipment).
4. When the servicing or maintenance is completed, only after checking that the equipment is ready to operate, ensuring that the surrounding area is clear, that employees are safely positioned or removed from the area, and verifying that controls are in neutral, shall the lockout devices be removed and the equipment be re-energized. Tags and locks must be removed by the same person who attached them.
5. Affected employees shall be notified that the servicing or maintenance has been completed and the equipment is ready for use.

PTR Baler & Compactor strongly recommends that current and applicable ANSI and OSHA standards be made available to operators at all times. At the time of printing the applicable OSHA Standard 29 CFR1910.147 / 1910.147 Appendix A applied. Also reference ANSI Z245.5, others may also apply.

DIMENSIONS AND MINIMUM CLEARANCES OF INSTALLED BALERS:





	MODEL	360	420	1800HD	2300HD	3400HD	3600HDLP	5000HD	7200HD
Dimension	A	7' -11 1/2"	7' -11 1/2"	11' -6"	12' - 8"	12' - 7"	7' - 11.5"	12' - 6"	12' - 6"
	B	4' - 2"	4' - 10"	5' - 7"	6' - 3"	6' - 5"	6' - 9"	6" - 5"	7' - 3"
	C	2 '- 10"	2 '- 10"	3 '- 7"	3- ' 9"	3' - 10.5"	4' - 5"	3' - 11"	4' - 10"
	D	5' - 3"	5' - 4"	7' - 4.5"	8' 8"	8' - 7"	6' - 2"	8' - 7"	8' - 7"
	E	6' - 8"	7' - 2"	9' - 7.5"	10' - 9.5"	10' - 8"	7' - 12"	10' - 11"	10' - 11"
	F	3' - 11"	4' - 6"	5' - 1"	5' - 8.5"	5' - 10"	5' - 11"	5' - 11"	6' - 9"
	G	1' - 10 1/2"	2' - 2"	2' - 16.5"	3' - 5"	3' - 5"	3' - 5"	3' - 5"	3' - 5"
	H	2' - 8"	2' - 8"	3' - 7"	4' - 8.5	4' - 6"	2' - 9"	1' - 5"	4' - 5"
	I	1' - 7"	1' - 7"	2' - 1"	2' - 3"	2' - 4	1' - 7"	2' - 2"	2' - 2"
Clearance	J	5' - 6"	6' - 2"	7' - 2"	8' - 5"	8' - 9"	9' - 4"	9' - 1"	10' - 8"
	K	3' - 2"	3' - 8"	4' - 11"	5' - 10"	5' - 10"	5' - 10"	5' - 10"	6' - 6"
	L	0' - 5"	0' - 5"	0' - 5"	0' - 7"	0' - 7"	0' - 7"	0' - 7"	0' - 7"
	M	1' - 6"	1' - 6"	1' - 6"	1' - 6"	1' - 6"	1' - 6"	1' - 6"	1' - 6"
	N	1' - 6"	1' - 6"	1' - 6"	1' - 6"	1' - 6"	1' - 6"	1' - 6"	1' - 6"

BALER INSTALLATION GUIDE

1. Place the Baler in the location desired by the customer. While doing so, be sure to maintain the minimum clearances, listed in dimension table, otherwise, the baler will not be able to function properly.

2. After the baler has been placed, it must then be anchored to the floor using the 4 supplied anchors through the mounting holes on the bottom of the baler.

3. Run power to the control panel from the customer supplied wall disconnect.

   NOTE: The disconnect must adhere to local, state, and federal electrical and safety codes and must be located within line of sight of the Baler start controls. The manual electrical section can be referred to for minimum wire size, amperage requirements and fuse specifications. Wire sizes given are for runs of under 25 ft, longer runs require heavier wire. Line must be fused with time delay fuses.

4. Once the power has been properly connected, press the Down/Up button and observe the
   direction of the rotation of the motor. Look at the motor fan, proper rotation is clockwise. (As indicated by the arrow on the motor) If the fan rotation is not clockwise, follow the lock-out / tag-out procedures and interchange, any two, and only two of the three power connecters and re-check for proper rotation. This should correct the problem.

5. Affix the provided seal across the control box opening. This sticker must then be ripped to access the control box after the initial install. The sticker reads “Danger – High Voltage – Danger, Do Not Open This Control Box, Can Only Be Serviced By Authorized Personnel.”

6. Any scrap material should be picked up and discarded after the completion of the installation. All scratches and exposed metal on the baler must be touched up.

7. Fill out the Operating and Safety Checklist, the Preventative Maintenance Checklist, and the Baler Installation Information sheet.

8. Supply the customer with the operation manual and video. Also, get them to sign them the two checklists and the Baler Installation Information sheet which must be completed and mailed or faxed to PTR.

TO BE COMPLETED BY INSTALLER

Please complete and mail/fax this form along with the completed Baler Safety Checklist, immediately after installation

2207 E Ontario St.
Philadelphia, PA, 10134
Fax: (215) 533 - 8907

PTR Baler and Compactor Company
Baler Installation: Information / Check List

Baler Information:

Model No: _____ Serial No: _____

Installed By: _____ Date: _____

Signature of Installer: _____

Customer Information:

Customer and Store No: _____

Address _____

Phone No: _____

Operation and Maintenance Manual Received By:

Name & Signature:_____

Individuals Instructed In Safety Procedures And Operation Of Machine:

Names & Signatures:_____

Keys Received By:

Name & Signature:_____

Operation Video Tape Received By:

Name & Signature:_____

Verify The Following:

ELECTRICAL

1. All connections made ( )
2. All terminals tight ( )
3. Fuse clips tight ( )
4. Limit switches tight (door and gate) ( )
5. Proximity switch tight ( )
6. All switch buttons (selectors) tight and properly aligned ( )
7. Seal the control box with the High Voltage Sticker ( )
8. Push relay tight to relay base ( )

HYDRAULIC

1. Oil Level ( )
2. All (4) hose fittings re-tightened after unit was set in place ( )
3. Motor/pump coupling tight ( )
4. Directional valve shifting smoothly and quietly ( )
5. Pressure settings ( )

PHYSICAL

1. Anchored to floor ( )
2. Ejector chain assys. In place properly aligned ( )
3. Cylinder bolts tight ( )
4. All gate hardware tight ( )
5. Touch up paint if required ( )
6. All safety signs in place ( )
7. Gate moves up/down easily ( )
   See sticker location drawing in manual

OPERATIONAL

1. Power to machine ( )
2. Run to check proper operation ( )
3. Demonstrate proper operation to customer –See baler safety checklist in manual ( )

INSTALLER'S CHECKLIST

PRIOR TO INSTALLATION: A main electrical disconnect, providing over current protection, must be furnished by the user of this equipment.
Refer to electrical section for setup information. (See Table of Contents)
Determine if the available electrical current agrees with the voltage marked on the front of the panel door and the wiring of the motor starter.

AFTER INSTALLATION

The unit is shipped with oil in the hydraulic system and reservoir.
IMPORTANT: Before operating baler, remove the pipe plug at the fill opening in the reservoir and install the breather cap located in the blue box in the zip lock bag in the control panel.

OIL LEVEL

With the ram in the full UP position, oil in the sight glass on the reservoir should be at the high mark on the gauge.

DOOR

Open and close the door to make sure that it is "free" and easy to move.

ELECTRICAL

If an electrician is available, advise them about proper motor fan rotation. If the rotation is not correct, follow lock-out tag-out procedures and interchange any two of the three power conductors.

IMPORTANT: If an electrician is not available, advise the store manager about the motor fan rotation.

GATE

Pull gate up and down to make sure that it is 'free' and easy to move. If the gate is hard to move, check the roller chains to make sure that they are on the sprockets. Counter balance tubes are bolted on for ease of adjustment. Not on all models.

PRESSURES

Start machine and check to see if pressure switch setting and the relief valve setting are at the recommended settings. If either is incorrect, **see pressure-setting procedures. (See Table of Contents)**

MAINTENANCE INSTRUCTIONS
INCLUDING PERIODIC MAINTENANCE ITEMS

FLUID: Check the level of hydraulic oil in the reservoir. The oil level should be mid-way between high and low marks on the gauge when cylinder is in the maximum UP position. The oil level should be approximately at the low mark when the cylinder is all the way down. This check should be made every six months. If oil must be added or replaced, it should be transferred through a 100 mesh strainer. If oil replacement is required, clean the reservoir and suction strainer before refilling. We recommend Dryden ISO 46 or equal.

FLUID CLEANLINESS: We recommend that oil be changed every two (2) years. If for any reason dirt or water gets into the fluid, or if the baler is operating in an extremely dirty or dusty area, then the fluid should changed more frequently.

OPERATING TEMPERATURE: Fluid temperature should not exceed 180 degrees F. – high temperatures may cause fluid and seal deterioration. Use sight temperature gauge located on back of tank to check the temperature.

ELECTRICAL SYSTEM MAINTENANCE

For electrical system to function properly, components must be clean and dry, limit switches must be clean of foreign material and properly adjusted. All maintenance service to the electrical system must be performed only by trained, authorized personnel.

WEAR PADS – The nylatron wear pads attached to the ram should be checked every six months for wear, and should be replaced if they are worn 1/8" or more.

YEARLY INSPECTIONS

Perform a full safety inspection at least once per year as per the "Baler Safety Checklist". At this time also perform the necessary preventative maintenance as per the "Preventative Maintenance Checklist". Both checklists are contained in this manual.

* PTR Baler and Compactor Company strongly recommends that current and applicable ANSI and OSHA standards be available to operators at all times.

MAINTENANCE INSTRUCTIONS (Continued)

-

"CAUTION"

DO NOT UNLOCK OR OPEN chamber door while ram is advancing under pressure. Even though safety switches are incorporated, keep clear of moving parts at all times.

This baler is equipped with safety switches to prevent operation when protective gate is open. **IMMEDIATELY** replace switches that are not in proper working order.

"DO NOT ATTEMPT TO DEFEAT THE PURPOSE OF ANY SAFETY SWITCH!!!

In case of emergency:

1. Push Emergency Stop button.
2. Pull wall safety disconnect switch handle to end all electrical power.

HYDRAULICS: Hydraulic fluid operates at high temperatures and high pressures. Avoid contact with hoses, cylinder and hydraulic fluid leaks to prevent the possibility of burns and severe injury. In event of such injury, seek medical attention immediately.

WARNING DECALS AND INSTRUCTION PLATES

Read and follow the warning instructions of each decal, it is for the operator safety that each decal is in place. Make certain that each decal is obeyed at all times. Notify proper authority of any missing decal. Replacements can be ordered from:

PTR Baler and Compactor Company
2207 E. Ontario Street
Philadelphia, PA 19134
(800) 523-3654, (800) 523-1155, or (215) 533-5100
(215) 537-8536 (FAX)

PTR Baler and Compactor
2207 E. Ontario Street Philadelphia, PA 19134
1-800-523-1155 • 215-533-5100 • Fax: 215-533-8907

Branch Office Locations: Baltimore, MD • Bayshore, LI • Harrisburg, PA • Paterson, NJ • Philadelphia, PA

BALER SAFETY CHECKLIST

The following is a SAFETY CHECKLIST for the purpose of keeping the Baler in a Safe Operating Condition.

A. Check that all signs and warnings are in place and in good condition:

____ Name Plates and all Decals installed

____ Signs missing:

A. ____ WARNING: No one under 18 is permitted to operate this machine.
B. ____ CAUTION: Stand clear while bale is ejecting
C. ____ OPERATING INSTRUCTIONS
D. ____ DANGER – HIGH VOLTAGE
E. ____ CAUTION: CLOSE GATE
F. ____ CAUTION: KEEP CLEAR
G. ____ WATCH FINGERS
H. ____ DO NOT CLIMB

B. Check the following control functions:

____ On/Off Keyswitch
____ Man/Auto Selector Switch
____ Up/Down Pushbutton Selector Switch
____ Start Button
____ Emergency Stop Button
____ Full Light

Others: _____

Check Door Safety - with main door open machine should not operate in auto ____

Check all wiring for frayed or loose connections ____

Check condition of expanded metal on gate ____

Check entire structural, including ram - for welding and structural failure ____

Check ejector chains or cables for bent or broken parts ____

Hinge Side _____ Cylinder Size _____

Voltage _____ PIN Size _____

Serial No.: _____

Model No.: _____

Manuf.: _____

C. Check Operation of Baler

Manual Pull Down Gates & Auto Gates

____ Press all buttons with gate up (no motion should occur)

____ Pull Gate down and check the following:

____ Set Auto/Man Switch at Man/Main door open

____ Set Up/Down Switch at Down

____ Press Down Button

____ Ram Travels down

____ Hold Down Button until Cylinder "bottoms". Continue to press down button until motor and pump stop. _____

____ Run unit up and down several times. Note any unusual occurrences.

____ During down time travel lift gate up while continuing to hold the down button. Ram and motor should stop.

____ Run Ram to Up position. Ram and Pump should stop at the top.

____ Set Auto/Man Switch at Auto/Main door closed.

____ Press Start Button/or Down Selector.

____ Ram lowers automatically, reverses at bottom of stroke, then rises and automatically stops at the top of the stroke unless equipped with interlock boxes.

____ Check gate safety. Start Machine and during down travel lift gate. Ram should stop.

____ Check Push/Pull Gate Up & Down to check for gate movement.

Serviceman's Signature _____

Customer's Signature _____

Date: _____

WHITE - SERVICE DEPT. • YELLOW - INVOICE • PINK - CUSTOMER • GOLDENROD - QUOTE

PTR Baler and Compactor

2207 E. Ontario Street Philadelphia, PA 19134
(215) 533-5100 Fax No. (215) 537-8536

Branch Office Locations: Baltimore, MD • Bayshore, LI • Harrisburg, PA • Paterson, NJ • Philadelphia, PA

PREVENTATIVE MAINTENANCE CHECKLIST
BALER AND COMPACTORS

MFG. _____ DATE _____ JOB NO. _____

MOD. NO. _____ STORE NO. _____ LOC. _____

SER. NO. _____ CUSTOMER _____

ELECTRICAL

	Comp.	Baler
1. Control Box		
A. Fuse Clips tight	( )	( )
B. All term. tight	( )	( )
C. Magnetic starter contacts for pitting & wear	( )	( )
D. Breakers not sticking	( )	( )
2. All wire and cable free from breaks & wear on insul. & properly secured	( )	( )
3. Check all relays for proper position and continuity	( )	( )
4. All switch buttons/selectors tight and properly aligned	( )	( )
5. Check & Inspect		
A. Reset button on starter	( )	( )
B. Up–stop Limit	( )	( )
C. Main door limit	( )	( )
D. Safety door limit	( )	( )
E. Pressure switch	( )	( )
F. Check auto size timer	( )	( )
G. Security door switch	( )	( )
H. Gate interlock box	( )	( )
I. Ram safety limit switch	( )	( )

HYDRAULIC & MECHANICAL

	Comp.	Baler
1. Oil Level	( )	( )
2. Condition of Oil	( )	( )
3. Cylinder Connections	( )	( )
A. Directional Valve	( )	( )
B. Top Valve	( )	( )
C. Valve Connections	( )	( )
4. Pressure Setting	( )	( )
A. Pressure settings	( )	( )
B. Relief settings	( )	( )
5. Line or hose clamps	( )	( )
6. Motor/pump coupling	( )	( )
7. Cylinder Seals		
A. Gland - Leaky	( )	( )
B. Gland - Loose	( )	( )
8. Hose Connections	( )	( )
9. Grease Fittings	( )	( )
10. Main Door Hinge	( )	( )
11. Cylinder/Crown Bolts	( )	( )
12. Pressure Gauge Condition	( )	( )

STRUCTURAL

	Comp.	Baler
1. Physical Appearance		
A. Paint	( )	( )
B. Rubber Filler around chute	( )	( )
C. Area clear of foreign material	( )	( )
2. Frictional Parts		
A. Excessive wear		
1. Bailing Chamber	( )	( )
2. Ram Guides	( )	( )
3. Lift Gate Tracks	( )	( )
4. Slide Cover	( )	( )
B. Lubricate		
1. Gate Track	( )	( )
2. Inner walls	( )	( )
3. Ram	( )	( )
4. Door Hinges	( )	( )
5. Security Hinges	( )	( )
6. Safety gate	( )	( )
7. Container wheels	( )	( )
8. Cylinder pins	( )	( )
3. Bale Ejector		
A. Hooks	( )	( )
B. Cables	( )	( )
C. Welded eye	( )	( )
D. Retainers	( )	( )
E. Chains	( )	( )
4. Loose Parts		
A. Lock-nuts on gate arms	( )	( )
B. Safety on door handle	( )	( )
5. Door Linkage		
A. Pin bracket engagement	( )	( )
B. Tighten if necessary	( )	( )
6. Ratchet Binders	( )	( )
7. Hooks	( )	( )

COMMENTS: _____

_____

_____

_____

_____

_____

Serviceman's Signature _____

Store Manager's Signature _____

Date _____

A	Adjusted
✓	O.K.
O	Replacement Required
X	Replaced
(—)	Does not apply

WHITE COPY - SERVICE DEPT. ORIGINAL CANARY COPY - INVOICE COPY PINK COPY - CUSTOMER COPY

ELECTRICAL INFORMATION

The unit "as shipped" is pre-wired to a specific voltage, as shown on the cover of its control panel. The standard baler is intended for indoor installations only. Please contact PTR Baler and Compactor Co. if a baler is required for an outdoor application.

CAUTION

If your power supply voltage does not agree with the voltage stated on the Compactor control panel cover, **DO NOT CONNECT THEM;** damage may occur. Have an authorized electrician reset the unit to match your power supply voltage. By "code", the control panel wire harness must be connected to a properly sized fused disconnect switch. The disconnect switch should be "time delay fuse type" and must be located less than 15 feet and adjacent to the compactor while always within clear view of its operator.

MINIMUM SIZING REQUIRED

* "Wire size" denotes wire to be used from power supply to disconnect switch, use heavier wire if distance is more than 25 feet.

CONVERSION VOLTAGE: In order to convert the compactor from high to low voltage, or vise versa, the following components must be changed: ***Motor*** connection as indicated by diagram on motor. ***Transformer*** connection as indicated by diagram on transformer. Overload size as indicated by voltage requirements.

IMPORTANT MOTOR ROTATION

When power has been properly connected, press the START button momentarily and observe the direction of the rotation of the motor. Look at the motor fan, proper rotation is clockwise. (If fan rotation is not clockwise, interchange any two of the three power conductors). This should correct the rotation.

CHECK OPERATION

Check by following the operating instructions listed on the cover plate of the unit's control panel.

ELECTRICAL INFORMATION

GROUNDING INSTRUCTIONS

The baler 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 baler. A qualified electrician should be consulted if there is any doubt as to whether an outlet box or the machine is properly grounded.

3 HP MOTOR, 3 PHASE, 60 CYCLE				
Voltage	**F.L.A.**	**Type Fuse**	**Wire Size**	**Disconnect Switch**
200V-208V	10 amp	Time Delay	14	30 amp
220V-230V	9 amp	Time Delay	14	30 amp
440V-460V	5 amp	Time Delay	14	20 amp
550V-575V	4 amp	Time Delay	14	20 amp
5 HP MOTOR, 3 PHASE, 60 CYCLE				
200V-208V	16 amp	Time Delay	12	30 amp
220V-230V	14 amp	Time Delay	12	30 amp
440V-460V	7 amp	Time Delay	14	30 amp
550V-575V	6 amp	Time Delay	14	30 amp
10 HP MOTOR, 3 PHASE, 60 CYCLE				
200V-208V	29 amp	Time Delay	8	60 amp
220V-230V	26 amp	Time Delay	8	60 amp
440V-460V	14 amp	Time Delay	12	30 amp
550V-575V	11 amp	Time Delay	12	30 amp
15 HP MOTOR, 3 PHASE, 60 CYCLE				
200V-208V	43 amp	Time Delay	6	60 amp
220V-230V	39 amp	Time Delay	6	60 amp
440V-460V	20 amp	Time Delay	8	60 amp
550V-575V	16 amp	Time Delay	10	30 amp
20 HP MOTOR, 3 PHASE, 60 CYCLE				
200V-208V	57 amp	Time Delay	4	100 amp
220V-230V	51 amp	Time Delay	4	100 amp
440V-460V	30 amp	Time Delay	8	60 amp
550V-575V	21 amp	Time Delay	8	60 amp

PTR BALER AND COMPACTOR CO.

FOR SERVICE
1-215-533-5100

PTR BALER AND COMPACTOR CO.
2207 E.ONTARIO AVE.
PHILA., PA 19134

FOR SERVICE
1-800-523-3554

MODEL	HP	F.L.A. @ VOLTAGE 3-ϕ 60Hz				STARTER	OVERLOAD	OVERLOAD SETTING			
		208	230	460	575			208	230	460	575
	20	56	50			CGC-75A-120	CGE-80-2S-80	56	50		
				25	20	CGC-40A-120	CGE-40-2P-40A			25	20
	15	42	38			CGC-75A-120	CGE-80-2S-80	42	38		
				18	15	CGC-40A-120	CGE-40-2P-40A			18	15
	10	28	25			CGC-40A-120	CGE-40-2P-40A	28	25		
				13	10	CGC-40A-120	CGE-40-2P-40A			13	12
	5	15	13			CGC-40A-120	CGE-40-2P-40A	16	14		
				6.5	5.3	CGC-22A-120	CGE-40-2P-20A			7.5	6.5
	3	9	8			CGC-22A-120	CGE-40-2P-20A	9	8		
				4	3.3	CGC-22A-120	CGE-40-2P-20A			4	3.3

MODEL	HP	VOLTAGE	PHASE	FREQUENCY	F.L.A.	STARTER	OVERLOAD	O.L. SETTING
		V	ϕ	Hz				

ELECTRICAL CONNECTION REQUIREMENTS

ADDITIONAL CURRENT DRAW (MAXIMUM) DUE TO HEATER OPTION IF PRESENT:
LOW VOLTAGE HEATER OPTION – 2.08 AMPS AT 240VAC.
HIGH VOLTAGE HEATER OPTION – 1.04 AMPS AT 480VAC.

CONNECT TO CIRCUIT WITH DUAL ELEMENT TIME DELAY FUSES RATED TO AT LEAST 125% OF THE MOTOR F.L.A. PLUS THE OPTIONAL HEATER LOAD AND NO MORE THAN 175% OF THE MOTOR F.L.A. PLUS THE OPTIONAL HEATER LOAD IF PRESENT.

SUPPLY WIRE AMPACITY FROM THE FUSES TO THE MACHINE CONNECTION POINT MUST BE AT LEAST THAT OF THE DUAL ELEMENT TIME DELAY FUSES PROTECTING THE WIRES.

MOTOR: _____ HP VOLTAGE: _____ VAC _____ ϕ HEATER: YES / NO

CONNECT TO CIRCUIT WITH DUAL ELEMENT TIME DELAY FUSES RATED: _____ AMP MAX.

USE SUPPLY WIRE WITH A MINIMUM AMPACITY OF AT LEAST: _____ AMP

SETTINGS

COMPACTOR

70% _____ PSI
80% _____ PSI
90% _____ PSI
FULL _____ PSI
RELIEF _____ PSI
REV. TIMER _____ SEC
MULTI. _____ CYCLES

BALER

SHIFT _____ PSI
RELIEF _____ PSI

SCHEMATIC NUMBER:

REV	DESCRIPTION	DATE
6	ADD 3/4HP, 1 1/2HP, 2HP MOTORS, ADD NOTE ABOUT MULTIPLE MOTORS, CHANGE TO "B" SIZE	9-12-12
7	INCREASE RECOMMENDED FUSE SIZES OF 20HP MOTORS. 75A TO 80A, 70A TO 75A, 35A TO 40A	
8	ADDED 30HP MOTOR FOR 550-757 SYSTEMS	06-09-14

SINGLE MOTOR LOAD ELECTRICAL INFORMATION**

Motor Hp	Voltage 3-Phase VAC	Motor F.L.A. NEC 430.250	Heater Yes/No	* Use Time Delay Dual Element Fuses Recommened Size (amps)	Minimum Circuit Ampacity NEC 430(II)	Minimum ǂ Supply Wire Gage Copper Wire Only NEC 310.15 (B16) & 240.4(D)	Minimum Ground Wire Gage Copper Wire Only NEC 250.122
3/4 HP	200-208	3.5	No	4 1/2	4 1/2	18	18
3/4 HP	220-240	3.2	No	4	4	18	18
3/4 HP	440-480	1.6	No	2	2	18	18
3/4 HP	550-575	1.3	No	1 8/10	1 8/10	18	18
1 1/2 Hp	200-208	6.6	No	9	9	16	16
1 1/2 Hp	220-240	6.0	No	8	8	16	16
1 1/2 Hp	440-480	3.0	No	4	4	18	18
1 1/2 Hp	550-575	2.4	No	3	3	18	18
2 Hp	200-208	7.5	No	10	10	16	16
2 Hp	220-240	6.8	No	9	9	16	16
2 Hp	440-480	3.4	No	4 1/2	4 1/2	18	18
2 Hp	550-575	2.7	No	3 1/2	3 1/2	18	18
3 Hp	200-208	10.6	No	15	15	14	14
3 Hp	200-208	10.6	Yes	15	15	14	14
3 Hp	220-240	9.6	No	12	12	14	14
3 Hp	220-240	9.6	Yes	15	15	14	14
3 Hp	440-480	4.8	No	6	6	14	14
3 Hp	440-480	4.8	Yes	7	7	14	14
3 Hp	550-575	3.9	No	5	5	14	14
5 Hp	200-208	16.7	No	25	25	10	10
5 Hp	200-208	16.7	Yes	25	25	10	10
5 Hp	220-240	15.2	No	20	20	12	12
5 Hp	220-240	15.2	Yes	25	25	10	10
5 Hp	440-480	7.6	No	10	10	14	14
5 Hp	440-480	7.6	Yes	12	12	14	14
5 Hp	550-575	6.1	No	8	8	14	14
10 Hp	200-208	30.8	No	40	40	8	10
10 Hp	200-208	30.8	Yes	40	40	8	10
10 Hp	220-240	28	No	35	35	8	10
10 Hp	220-240	28	Yes	40	40	8	10
10 Hp	440-480	14	No	17.5	17.5	12	12
10 Hp	440-480	14	Yes	20	20	12	12
10 Hp	550-575	11	No	15	15	14	14
15 Hp	200-208	46.2	No	60	60	6	10
15 Hp	200-208	46.2	Yes	60	60	6	10
15 Hp	220-240	42	No	60	60	6	10
15 Hp	220-240	42	Yes	60	60	6	10
15 Hp	440-480	21	No	30	30	10	10
15 Hp	440-480	21	Yes	30	30	10	10
15 Hp	550-575	17	No	25	25	10	10
20 Hp	200-208	59.4	No	80	75	4	8
20 Hp	200-208	59.4	Yes	80	80	4	8
20 Hp	220-240	54	No	75	70	4	8
20 Hp	220-240	54	Yes	75	70	4	8
20 Hp	440-480	27	No	40	35	8	10
20 Hp	440-480	27	Yes	40	35	8	10
20 Hp	550-575	22	No	30	30	10	10
30 Hp	200-208	88	No	125	110	2	6
30 Hp	220-240	80	No	110	100	3	8
30 Hp	440-480	40	No	60	50	8	10
30 Hp	550-575	32	No	45	40	8	10

125% Motor F.L.A. plus optional heater current - minimum fuse size
175% Motor F.L.A. plus optional heater current - maximum fuse size

Standard 500W heater used in tanks less than 40 gallons draws 1.80 amps at 208V, 2.08 amps at 240V, and 1.04 amps at 480V

Please see the machine wiring diagram or contact PTR for current draw of larger heaters.

ǂ Ampacities assume 75°C insulation and 75°C termination ratings.

* Recommend dual element time delay current-limiting class "J" fuses. Class "RK1" fuses or other solutions may also be acceptable. Final fuse size and class to be determined by qualified electrician in light of overall electrical design of the facility in which the machine is to be installed.

** All electrical work should be done by a qualified electrician. All values listed in the table should be reviewed in the context of the specific installation and any applicaple national, state and local codes or regulations. Final material selections are the responsibility of the electrician. All work and materials are subject to approval by the local Juristiction Having Authority. Please contact PTR and/or a qualified electrician for electrical requirements of machines utilizing multiple motors.

GROUNDING INSTRUCTIONS

The baler/compactor 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 baler/compactor. A qualified electrician should be consulted if there is any doubt as to whether an outlet box or the machine is properly grounded.

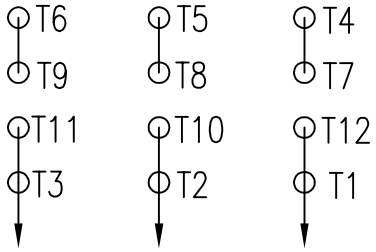
TITLE: ELECTRICAL INFORMATION AND FUSING REQUIREMENTS DWG. NO.: BC403147R8

PTR BALER AND COMPACTOR CO.

MOTOR WIRING GUIDE

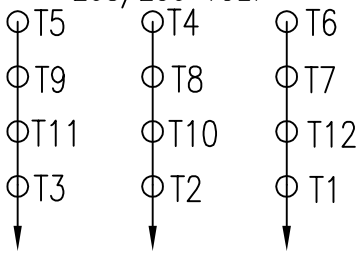
12 WIRE DELTA THREE PHASE

460 VOLT



TO MOTOR STARTER

208/230 VOLT

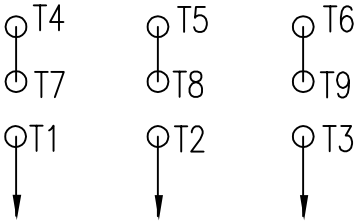


TO MOTOR STARTER

HYDROLEC MOTORS (WEG)

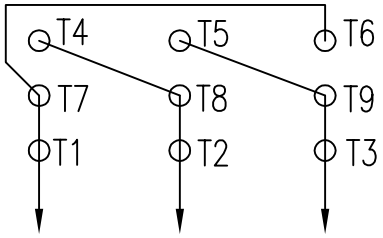
9 WIRE STAR THREE PHASE

460 VOLT



TO MOTOR STARTER

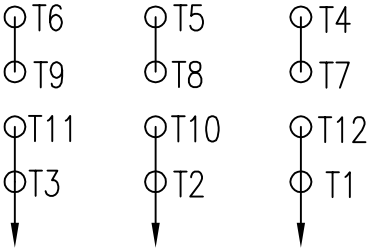
208/230 VOLT



TO MOTOR STARTER

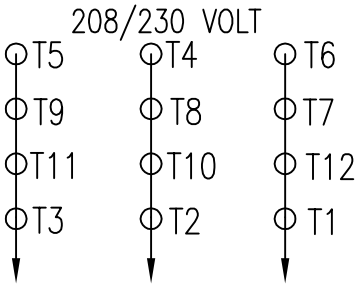
12 WIRE DELTA THREE PHASE

460 VOLT



TO MOTOR STARTER

208/230 VOLT

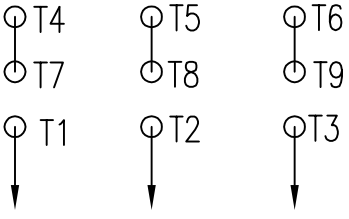


TO MOTOR STARTER

WARFEL MOTORS & HYDROLEC MOTORS (BALDOR)

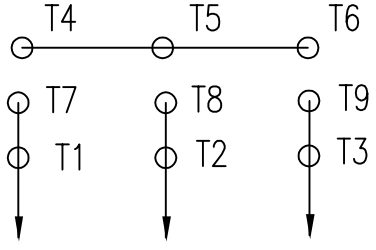
9 WIRE STAR THREE PHASE

460 VOLT



TO MOTOR STARTER

208/230 VOLT



TO MOTOR STARTER

NOTE: VERIFY AGAINST MOTOR NAME-PLATE WHEN POSSIBLE

4/15/98

MJM REV. 2 9-7-06
REV. 1 7-10-02

TITLE: MOTOR WIRING GUIDE

DWG. NO: AB3405482

PTR BALER AND COMPACTOR CO.

SINGLE PHASE ELECTRICAL INFORMATION**

STARTING INRUSH FOR SINGLE PHASE MOTORS CAN EXCEED 200% OF RUNNING FULL LOAD AMP DRAW (F.L.A.) DO NOT USE INSTANTANEOUS TRIP BREAKER.

ǂAmpacities assume 75°C insulation and 75°C termination ratings.

Motor Hp	Voltage Single Phase VAC	Heater Yes/No	Motor F.L.A. NEC 430.250	Use Time Delay Dual Element Fuses Recommened Size (amps)	Minimum Circuit Ampacity	Minimumǂ Supply Wire Gage Copper Wire Only NEC 310.16 & 240.4(D)	Minimum Ground Wire Gage Copper Wire Only NEC 250.122
1 1/2 Hp	115	No	20.0	25	25	10	10
3 Hp	220	No	17.0	25	25	10	10
3 Hp	220	Yes	17.0	25	25	10	10
5 Hp	220	No	28.0	35	35	8	10
5 Hp	220	Yes	28.0	40	40	8	10
10 Hp	220	No	50.0	70	70	4	8
10 Hp	220	Yes	50.0	70	70	4	8

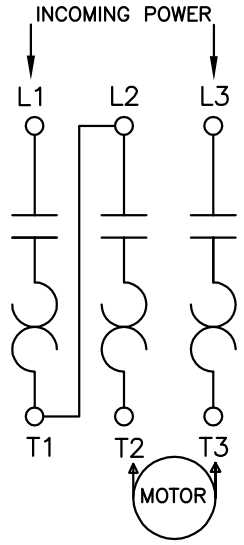
Minimum fuse size: 125% Motor F.L.A. plus optional heater current
Maximum fuse size: 175% Motor F.L.A. plus optional heater current
Heater at 220V draws 1.91 amps

** NOTE: All electrical work should be done by a qualified electrician. All values listed in the table should be reviewed in the context of the specific installation and any applicaple national, state and local codes or regulations. Final material selections are the responsibility of the electrician . All work and materials are subject to approval by the local Juristiction Having Authority.

GROUNDING INSTRUCTIONS

The compactor must be connected to a grounded, metal, permanent wiring system; or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment-grounding terminal or lead on the compactor. A qualified electrician should be consulted if there is any doubt as to whether an outlet box or the machine is properly grounded.

HP	F.L.A. @ VOLTAGE		STARTER	OVERLOAD	OVERLOAD SETTING	
	115	220			115	220
10		50	CGC-75A-120	CGE-80-2S-80		50
5		28	CGC-40A-120	CGE-40-2P-40A		28
3		17	CGC-22A-120	CGE-40-2P-20A		17
1.5	20		CGC-22A-120	CGE-40-2P-20A	20	



DRAWN: MJM DATE: 8-15-06

TITLE: SINGLE PHASE ELECTRICAL INFORMATION DWG. NO: AC4032434

Electrical Information
For 50Hz power

GROUNDING INSTRUCTIONS

The compactor must be connected to a grounded, metal, permanent wiring system; or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment-grounding terminal or lead on the compactor. A qualified electrician should be consulted if there is any doubt as to whether an outlet box or the machine is properly grounded.

3 HP MOTOR – 3 PHASE – 50 CYCLE				
Voltage	**F.L.A.**	**Type Fuse**	**Wire Size***	**Disconnect Switch**
380V	5.4 amp	Time Delay	14	30 amp
415V	5.2 amp	Time Delay	14	30 amp
440V	5.0 amp	Time Delay	14	30 amp
5 HP MOTOR – 3 PHASE – 50 CYCLE				
380V	8.7 amp	Time Delay	12	30 amp
415V	8.0 amp	Time Delay	12	30 amp
440V	7.8 amp	Time Delay	14	30 amp
10 HP MOTOR – 3 PHASE – 50 CYCLE				
380V	17 amp	Time Delay	8	30 amp
415V	16.1 amp	Time Delay	8	30 amp
440V	15 amp	Time Delay	12	30 amp
15 HP MOTOR – 3 PHASE – 50 CYCLE				
380V	23.1 amp	Time Delay	8	60 amp
415V	22 amp	Time Delay	8	60 amp
440V	21.5 amp	Time Delay	8	60 amp
20 HP MOTOR – 3 PHASE – 50 CYCLE				
380V	29.2 amp	Time Delay	8	60 amp
415V	28 amp	Time Delay	8	60 amp
440V	27.5 amp	Time Delay	8	60 amp

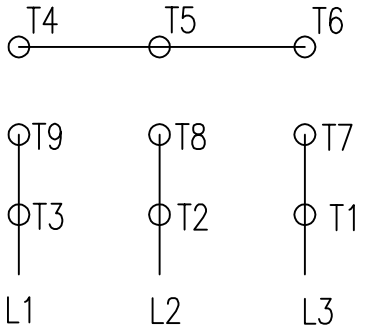
* - “Wire Size” denotes minimum wire size required to be used from power supply to disconnect switch. Use a heavier wire if distance is more than 25 feet.

PTR BALER AND COMPACTOR CO.

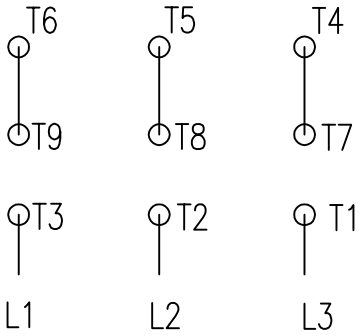
MOTOR WIRING GUIDE

9 WIRE DELTA THREE PHASE (FOR 3HP, 5HP)

208 / 230 VOLT

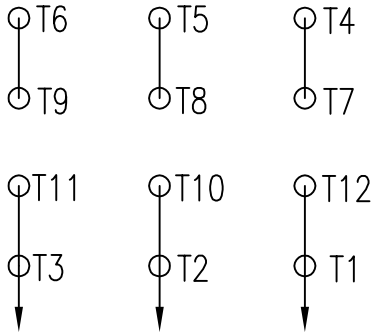


380 / 460 VOLT

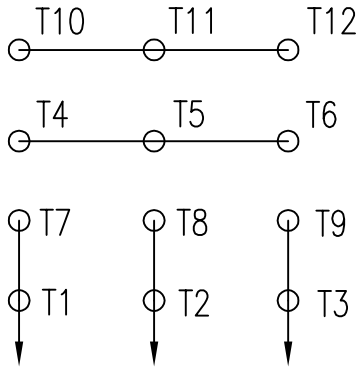


12 WIRE DELTA THREE PHASE (FOR 10HP, 15HP, 20HP)

415 / 440 VOLT



380 VOLT



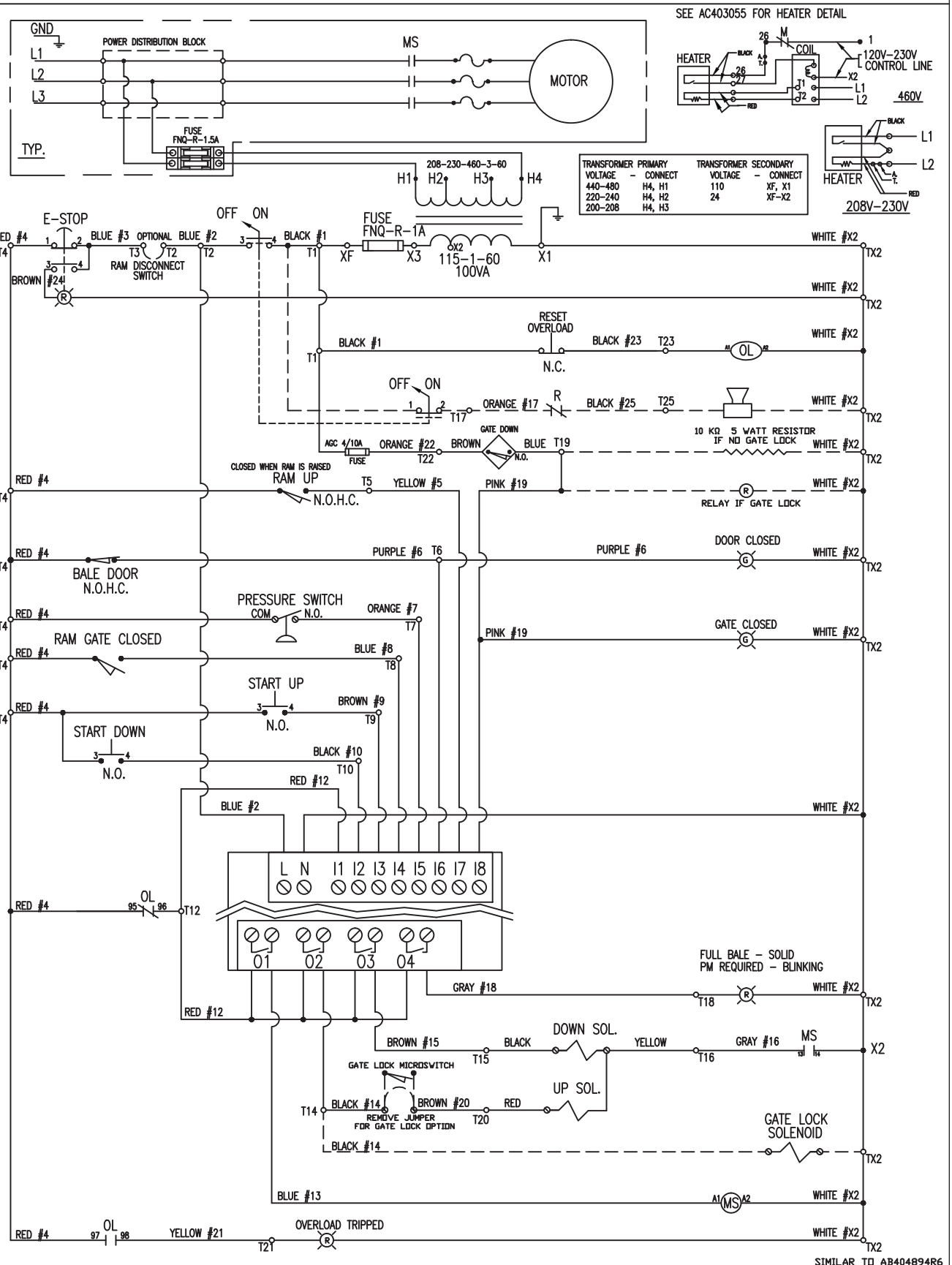
TO MOTOR STARTER — HYDROLEC MOTORS — TO MOTOR STARTER

NOTE: VERIFY AGAINST MOTOR NAME-PLATE WHEN POSSIBLE

7/17/00

TITLE: MOTOR WIRING GUIDE FOR INTERNATIONAL VOLTAGES DWG. NO: AB401376

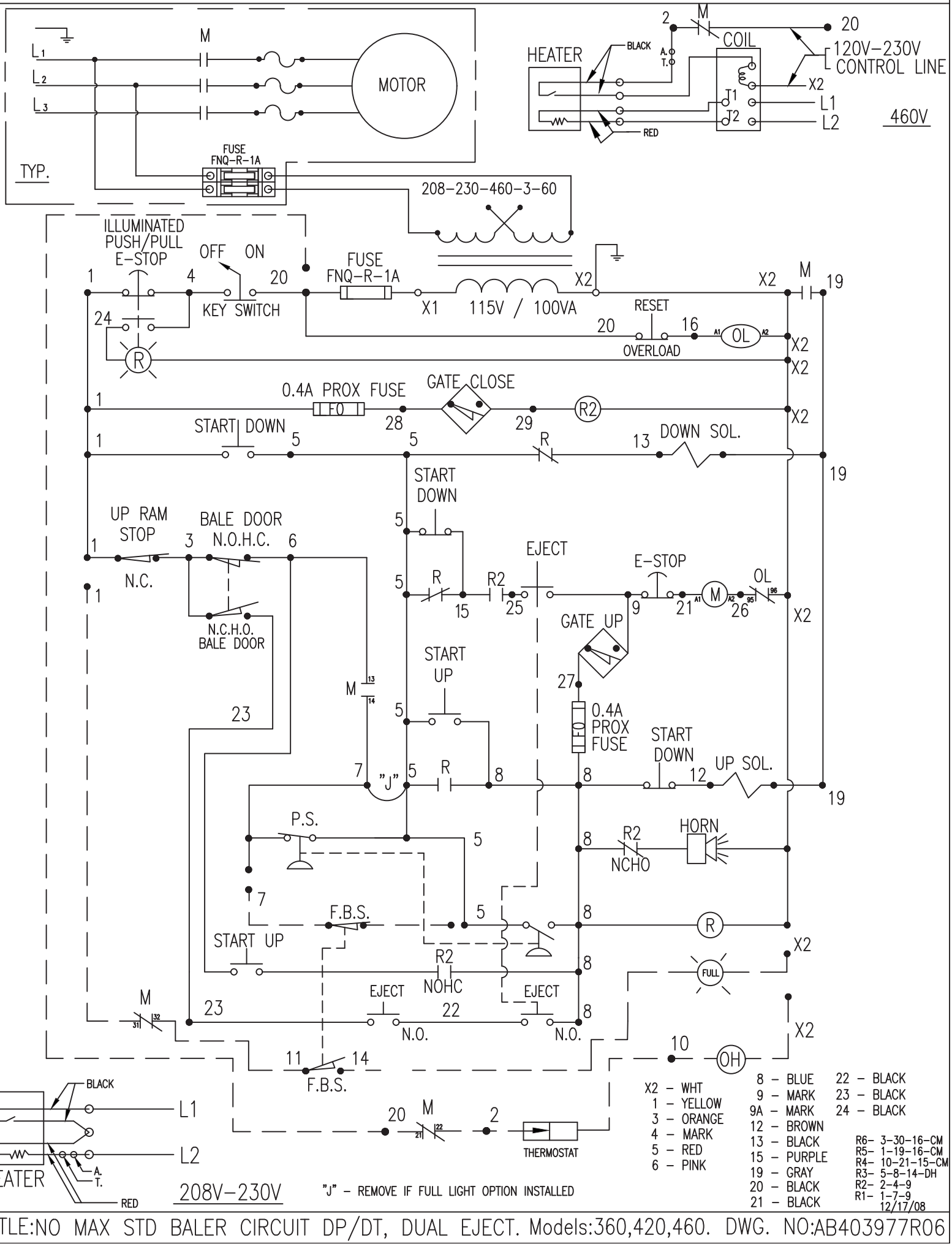
PTR BALER AND COMPACTOR CO.



SIMILAR TO AB404894R6

TITLE: STANDARD PLC BALER CONTROL W / PUSH BUTTON DOOR DWG. NO:AB404894R11

PTR BALER AND COMPACTOR CO.

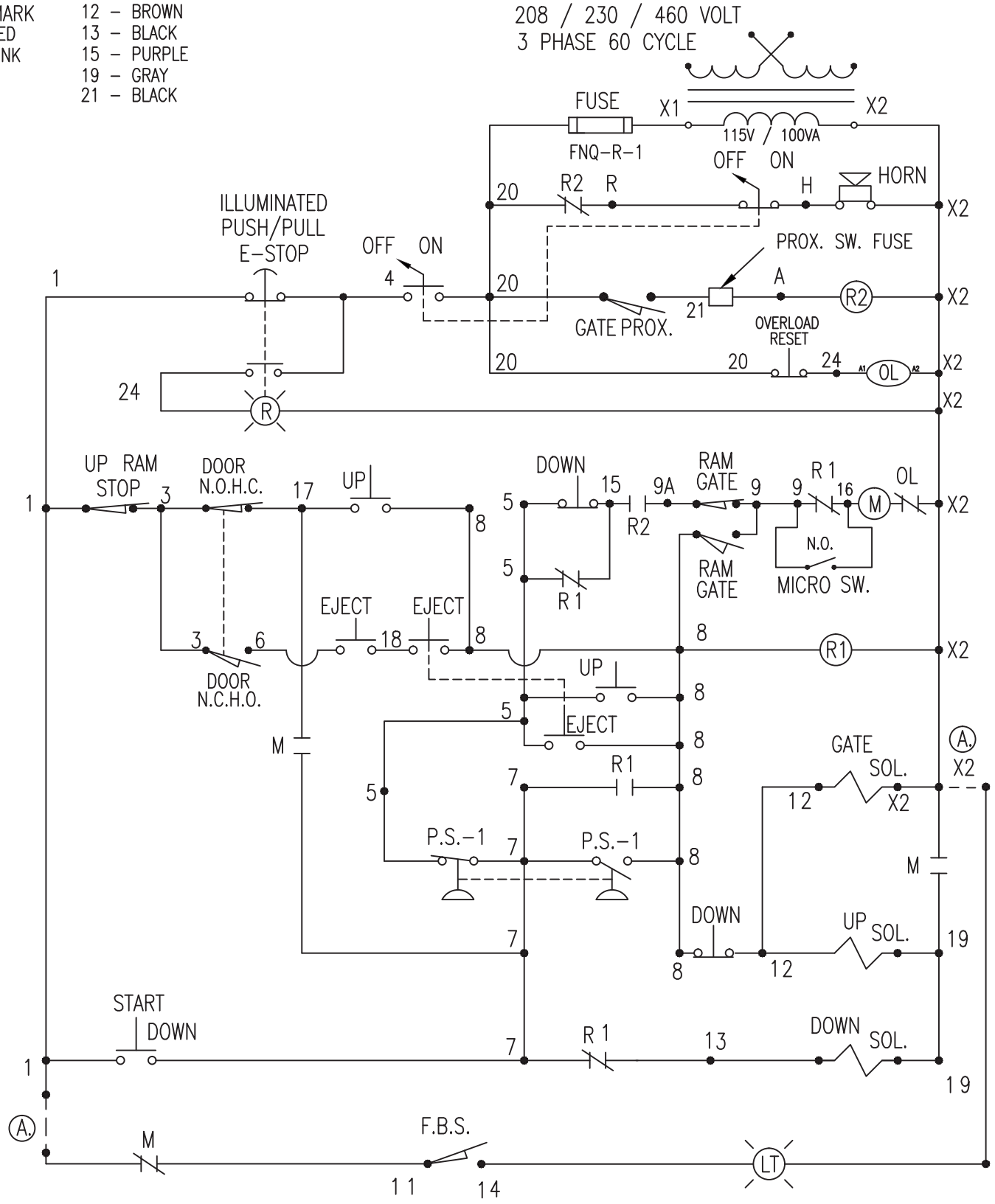


TITLE:NO MAX STD BALER CIRCUIT DP/DT, DUAL EJECT. Models:360,420,460. DWG. NO:AB403977R06

PTR BALER AND COMPACTOR CO.

X2 – WHT
1 – YELLOW
3 – ORANGE
4 – MARK
5 – RED
6 – PINK
8 – BLUE
9 – MARK
9A – MARK
12 – BROWN
13 – BLACK
15 – PURPLE
19 – GRAY
21 – BLACK

NOTE: GATE LOCK OPTION IS ETL APPROVED
IT IS NOT UL APPROVED

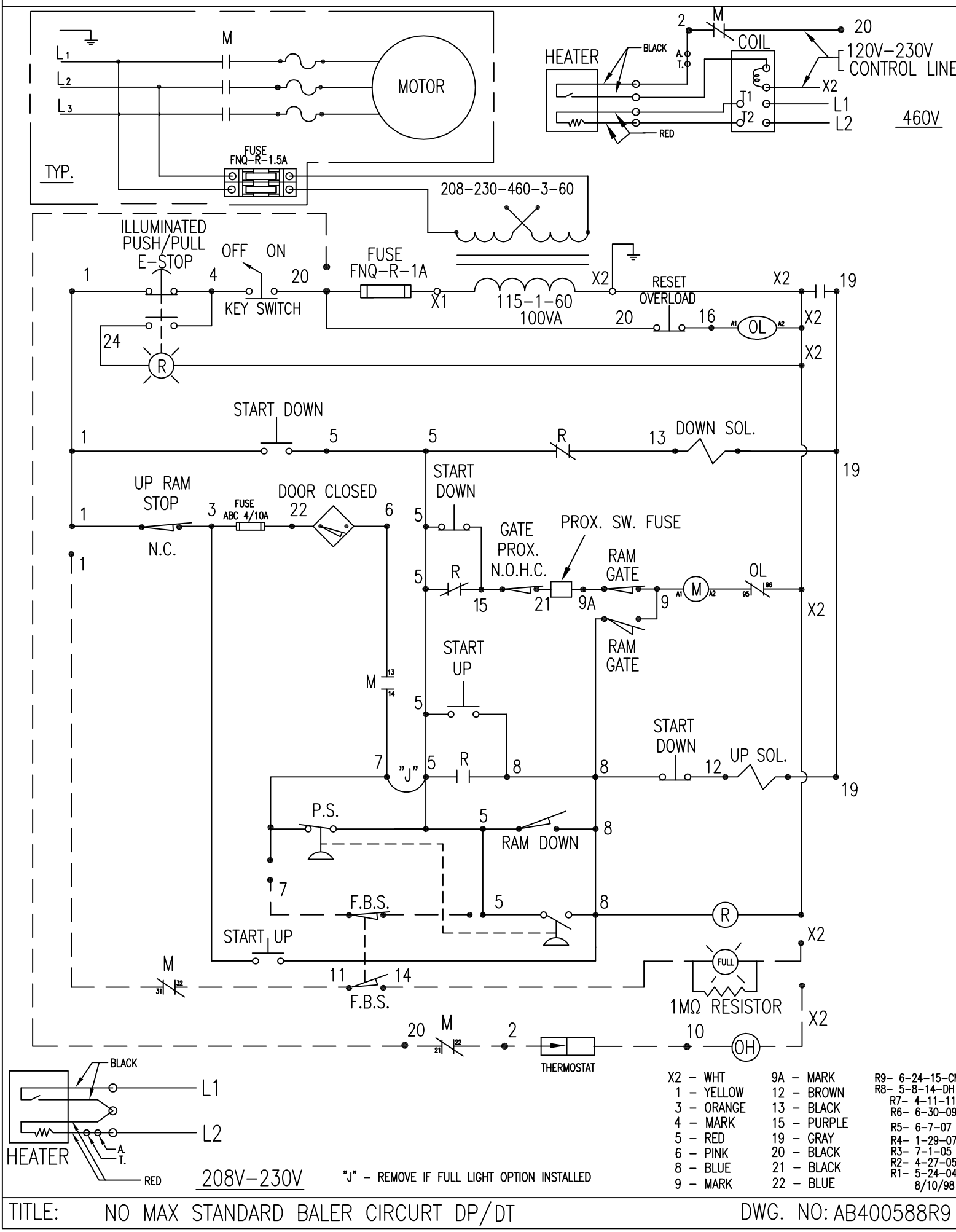


Ⓐ OPTIONAL CIRCURT — —

TITLE: GATE LOCK WITH DUAL EJECT BUTTONS

DWG. NO: AB404973R3

PTR BALER AND COMPACTOR CO.



X2 – WHT	9A – MARK	R9- 6-24-15-CN
1 – YELLOW	12 – BROWN	R8- 5-8-14-DH
3 – ORANGE	13 – BLACK	R7- 4-11-11
4 – MARK	15 – PURPLE	R6- 6-30-09
5 – RED	19 – GRAY	R5- 6-7-07
6 – PINK	20 – BLACK	R4- 1-29-07
8 – BLUE	21 – BLACK	R3- 7-1-05
9 – MARK	22 – BLUE	R2- 4-27-05
		R1- 5-24-04
		8/10/98

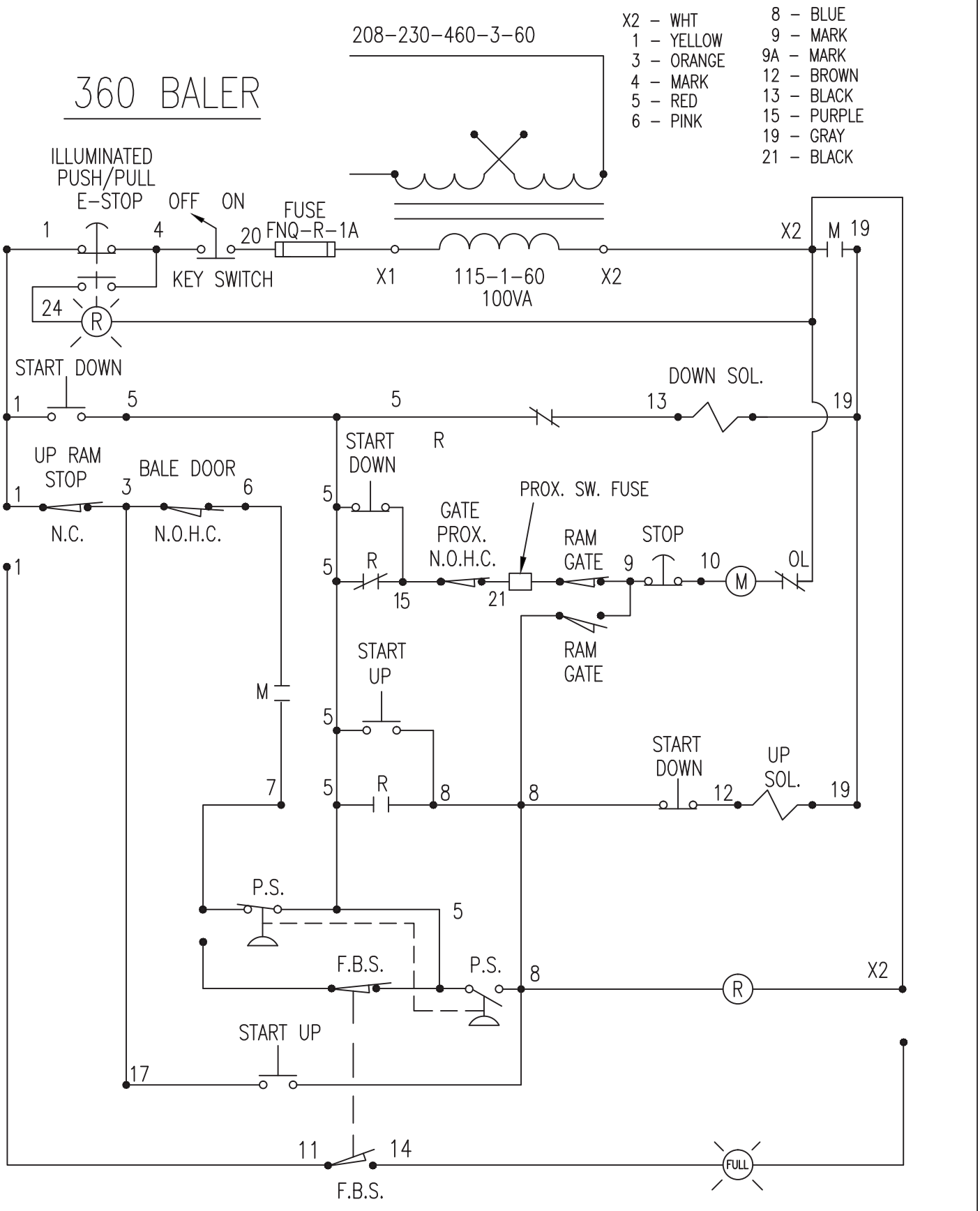
208V-230V

"J" – REMOVE IF FULL LIGHT OPTION INSTALLED

TITLE: NO MAX STANDARD BALER CIRCURT DP/DT

DWG. NO: AB400588R9

PTR BALER AND COMPACTOR



R2- 5-8-14-DH
R1- 6/13/07
9/4/97

TITLE: NO MAX STANDARD CIRCUIT WITH DP/DT SWITCH

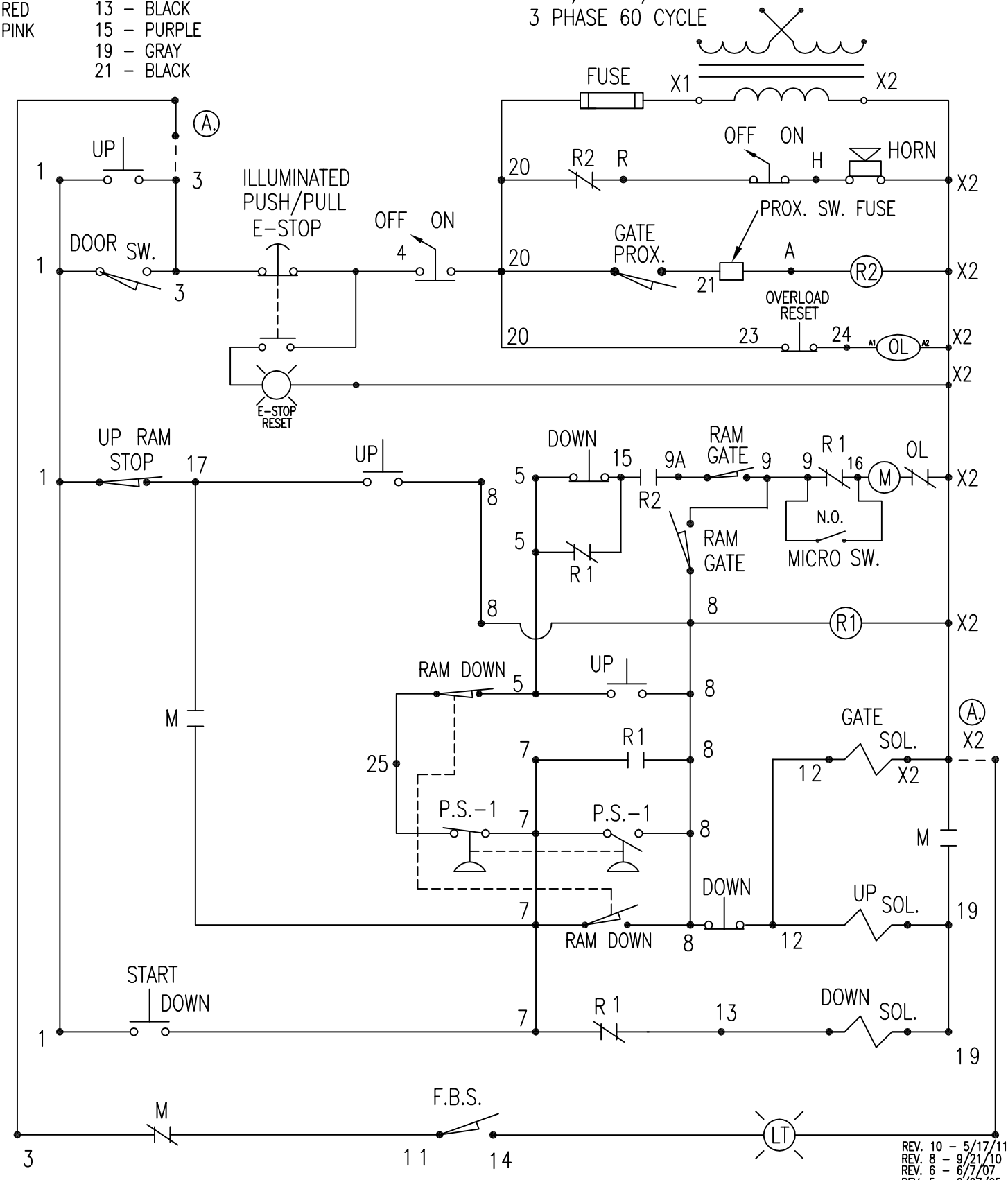
DWG. NO: AB400680R2

PTR BALER AND COMPACTOR CO.

X2 – WHT
1 – YELLOW
3 – ORANGE
4 – MARK
5 – RED
6 – PINK
8 – BLUE
9 – MARK
9A – MARK
12 – BROWN
13 – BLACK
15 – PURPLE
19 – GRAY
21 – BLACK

NOTE: GATE LOCK OPTION IS ETL APPROVED
IT IS NOT UL APPROVED

208 / 230 / 460 VOLT
3 PHASE 60 CYCLE



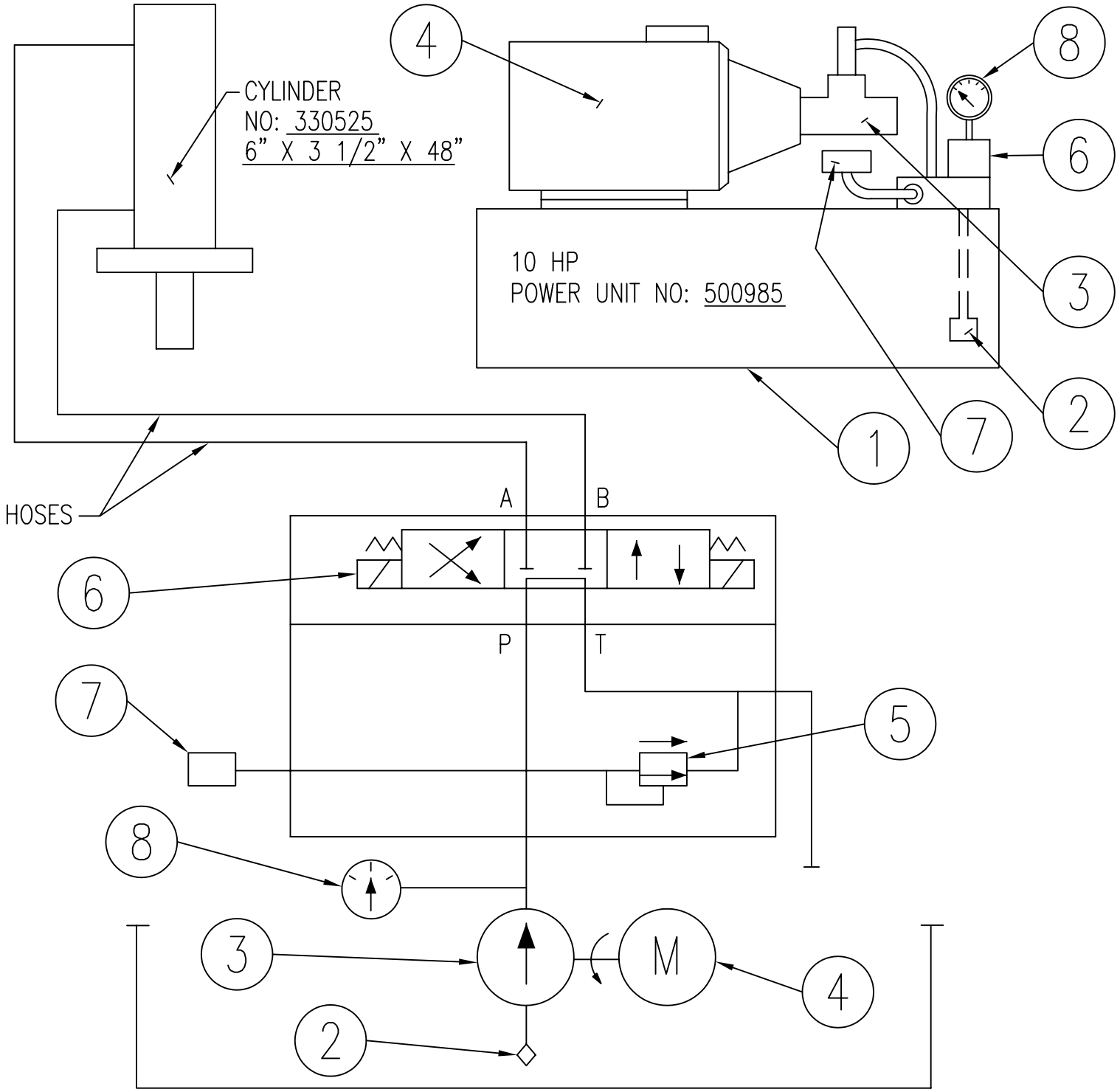
REV. 10 – 5/17/11
REV. 8 – 9/21/10
REV. 6 – 6/7/07
REV. 5 – 8/27/05
REV. 3 – 5/30/05
REV. 2 – 1/2/03
REV. 1 – 12/12/02
9/4/97

A. OPTIONAL CIRCURT — —

TITLE: GATE LOCK (LOCKED GATE, HORN)

DWG. NO:AB400824–10

PTR BALER AND COMPACTOR CO.



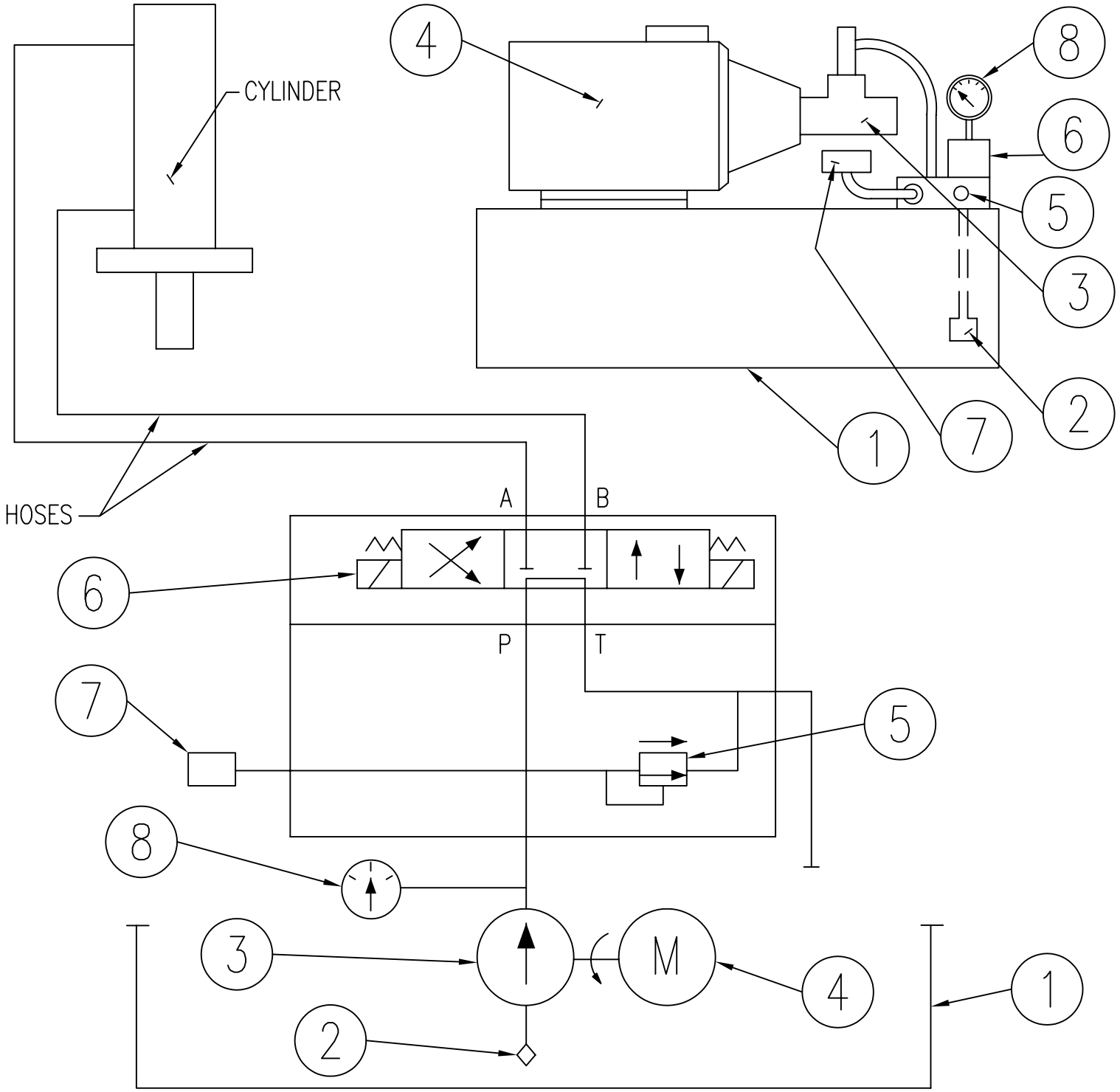
1. RESERVOIR 23 GAL.
2. INLET STRAINER: 311642
3. PUMP: 10.5 G.P.M. 500126
4. MOTOR: 602001
5. RELIEF VALVE: 330465
6. DIRECTIONAL VALVE (4 WAY) 500196
7. PRESSURE SWITCH: 312300
8. PRESSURE GAUGE: 320068
9. COUPLER, HOLLOW SHAFT, DIRECT TO MOTOR:

SYSTEM IS DESIGNED FOR USE WITH DRYDEN ISO GRADE 46 HYDRAULIC FLUID OR EQUAL.
APPROX: 10.5 G.P.M.

PLOT: 1"=1"

TITLE:10HP HYDRAULIC DWG.–1800HD, 2300HD, 2318, 3400HD, 7230, etc. DWG. NO: AB4002961

PTR BALER AND COMPACTOR CO.



1. RESERVOIR
2. INLET STRAINER
3. PUMP
4. MOTOR
5. RELIEF VALVE
6. DIRECTIONAL VALVE
7. PRESSURE SWITCH
8. PRESSURE GAUGE

SYSTEM IS DESIGNED FOR USE WITH DRYDEN ISO GRADE 46 HYDRAULIC FLUID OR EQUAL.

TITLE: BALER HYDRAULIC SCHEMATIC – GENERIC–FOR ALL BALERS DWG. NO: AB401756

PRESSURE SETTING PROCEDURE

1. Locate relief valve & loosen locking nut
2. Turn adjustment screw counter-clockwise to lower pressure setting
3. Locate the set screw on the pressure switch & loosen it
4. Turn the adjustment ring on the pressure switch clockwise to raise pressure switch setting
5. Note reverse timer setting in PLC, and adjust the reverse timer setting to the maximum allowable value
6. Press ram down button until ram bottoms out
7. After the ram bottoms out, turn the relief valve adjustment clockwise until desired working pressure setting is displayed on gauge
8. Adjust pressure switch counter-clockwise until ram stops and reverses
9. Run ram again to verify the ram reverses due to maximum pressure and not the reverse timer
10. Remove wire #7 on terminal strip
11. Start baler and run ram down
12. After ram bottoms out, adjust relief valve until the pressure gauge reads desired relief pressure
13. Lock relief valve at that point & lock the pressure switch
14. Reconnect wire #7
15. Reset the reverse timer to the original value

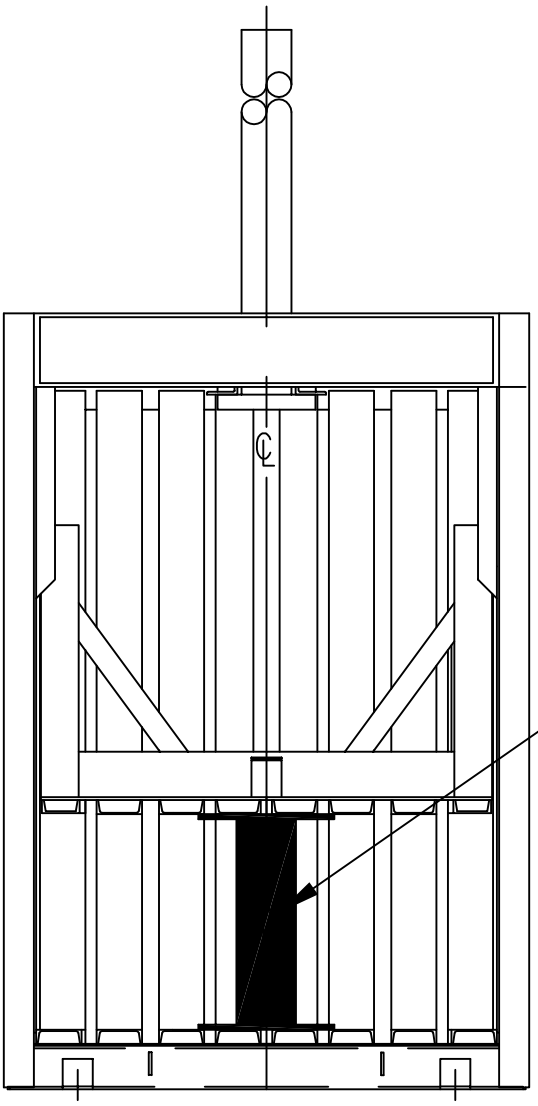
Note: If baler door is open, baler controls are fully manual – machine will not cycle automatically

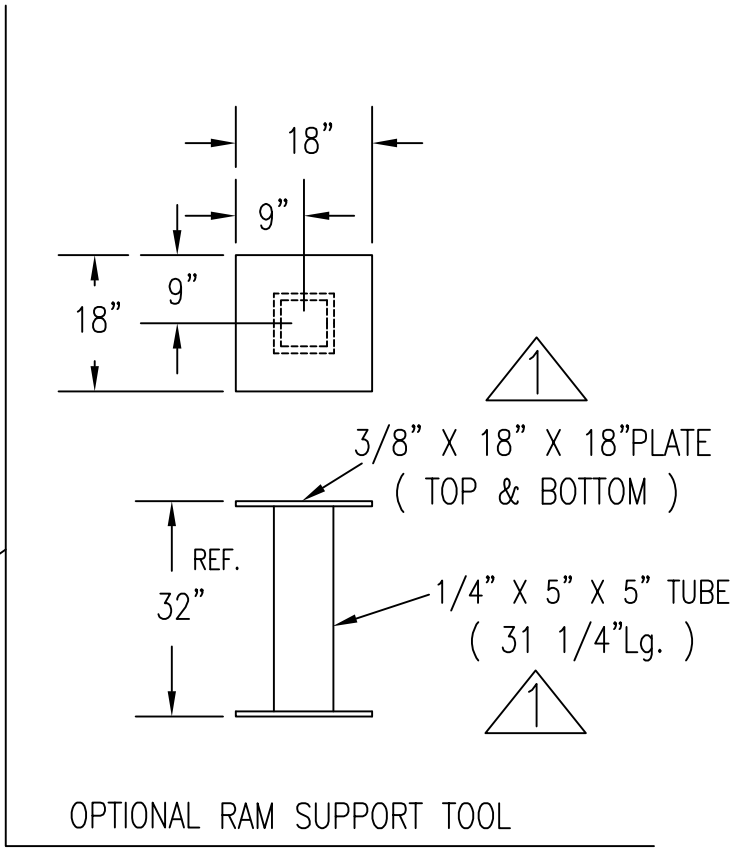
PRESSURE CHECKING PROCEDURE

1. Note reverse timer setting in PLC, and adjust the reverse timer setting to the maximum allowable value
2. Run the machine & watch the pressure gauge as the cylinder reaches maximum pressure (ram fully extended)
3. The pressure on the pressure gauge should spike towards an area around the labeled working pressure
4. Disconnect wire #7 on the terminal strip
5. Start baler & run ram down
6. Watch the pressure gauge as the cylinder reaches maximum pressure (ram fully extended)
7. The pressure on the pressure gauge should settle at an area around the labeled relief pressure
8. Reconnect wire #7
9. Reset the reverse timer to the original value

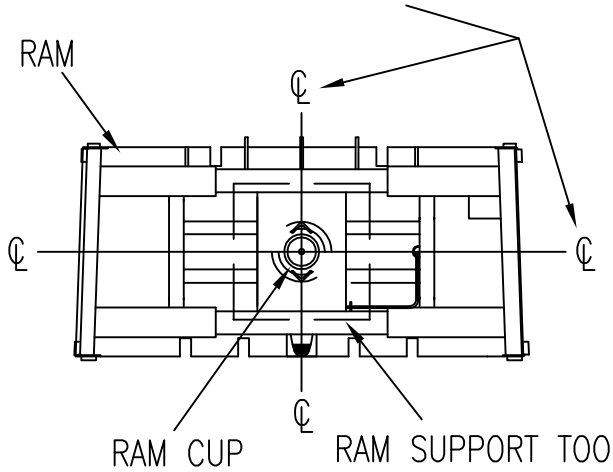
Note: In either case, if the needle did not spike around the desired working and relief pressures, refer to the pressure setting procedure to set the correct pressures.

PTR BALER & COMPACTOR CO.





LOCATE CENTER LINE OF TOOL
TO CENTER LINE OF RAM CUP



BALER CYLINDER CHANGING PROCEDURE

1. APPLY THE LOCKOUT PROCEDURES DESCRIBED IN THE MANUAL TO DE-ENERGIZE THE BALER WHILE THE RAM IS IN IT'S UP-POSITION. (SEE LOCKOUT PROCEDURES IN TABLE OF CONTENTS)
2. OPEN THE CHAMBER DOOR AND POSITION THE RAM SUPPORT ALIGNED WITH THE CENTERLINE OF CYLINDER AS SHOWN IN THIS DRAWING.
3. AT THE POWER UNIT, RELIEVE PRESSURE OF THE SOLENOID VALVE BY PUSHING THE SPOOL END BUTTONS IN. THIS WILL ALLOW THE RAM TO DRIFT SLOWLY DOWN UNTIL IT SITS ON TOP OF THE RAM SUPPORT.
4. PROCEED WITH THE CYLINDER MAINTENANCE AS REQUIRED.

NOTE:
WHEN CHANGING CYLINDERS, NEW LOCKNUTS MUST BE USED.

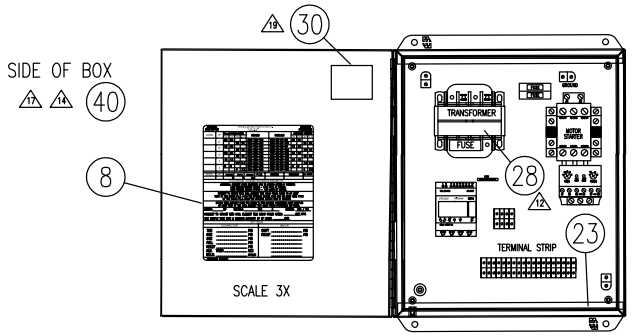
TITLE: SUPPORT FOR CHANGING BALER CYLINDER DWG. NO: AB3403671

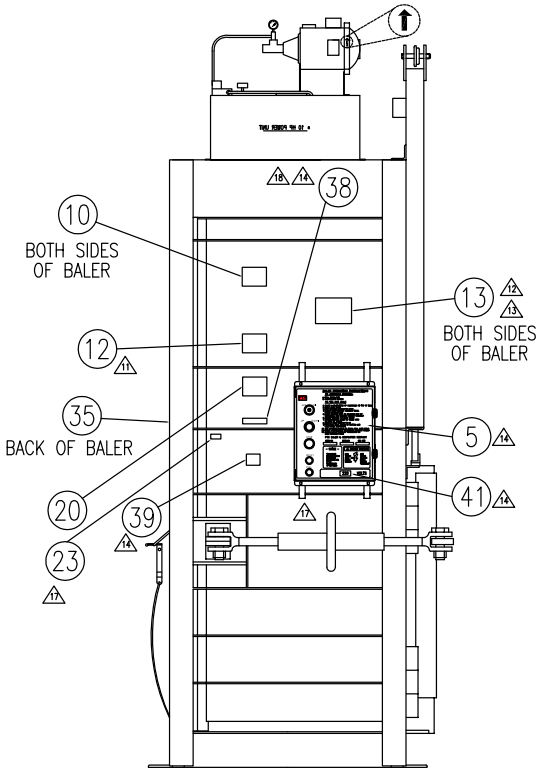
REV. NO.	DESCRIPTION	DATE
0	NO INFORMATION AVAILABLE	9/4/02
1	NO INFORMATION AVAILABLE	3/13/02
2	NO INFORMATION AVAILABLE	1/8/03
3	NO INFORMATION AVAILABLE	3/10/03
4	NO INFORMATION AVAILABLE	9/30/03
5	NO INFORMATION AVAILABLE	3/24/08
6	NO INFORMATION AVAILABLE	9/29/09
7	NO INFORMATION AVAILABLE	11/9/09
8	NO INFORMATION AVAILABLE	5/3/10
9	NO INFORMATION AVAILABLE	7/12/10
10	NO INFORMATION AVAILABLE	10/15/10
11	ADDED START BUTTON CAUTION DECAL	UNKNOWN
12	SERVICE AND FUSE/COPPER WIRE DECAL DESIGN CHANGES CM	2/10/15
13	CHANGED SIZE OF SERVICE DECAL (606867) TO 10" X 8" CM	3/2/15
14	DECAL OVERHAUL, CHANGE FROM A TO B SIZE - ECN 2015-03-31 CM	3/24/15
15	SWAPED ITEM 15 & 26 LOCATION, ADDED ITEM 22	5-8-15 BP
16	DECAL REPLACEMENTS PER SHOP CM	6/15/15
17	CHANGED POSITIONS OF DECALS 23, 30, 40 CM	8/19/15
18	CHANGED POSITIONS OF DECALS 22 AND 38, MARK 17 AND 21 AS OPTION CM	8/24/15
19	MOVED POSITION OF DECAL 30 CM	10/7/15

* SHIP LOOSE, USED BY INSTALLER TO SEAL CONTROL BOX AFTER INSTALLATION

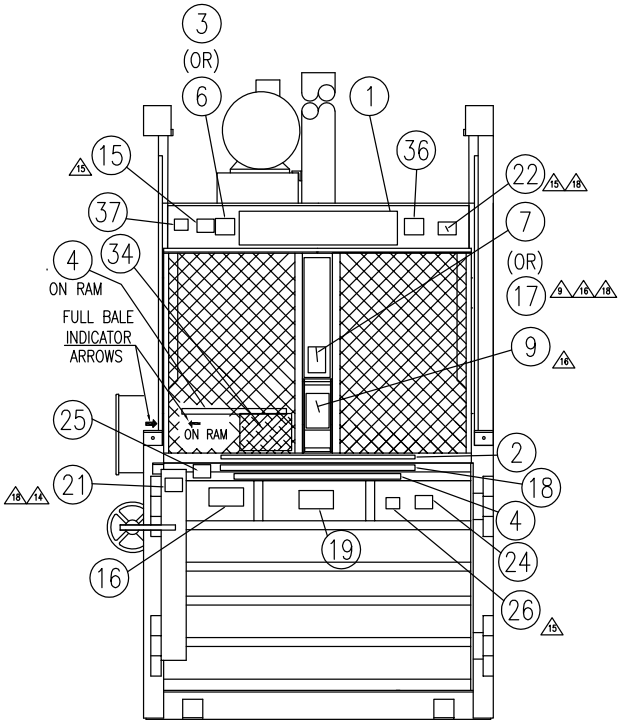
** MORE MAY BE REQUIRED, MARK EVERY ELECTRICAL GROUND

*** GATE LOCK OPTION ONLY





SIDE VIEW



FRONT VIEW

NO.	QTY.	DESCRIPTION	PART NO.
1	1	PTR BALER AND COMPACTOR SMALL LOGO	301315
2	1	DANGER- CLOSE GATE BEFORE OPERATING BALER	330229
3	1	UL - CUL (CONTROLLED)	500534
4	2	DANGER- STAND CLEAR WHILE EJECTING BALE	330219
5	1	DECAL, BALER CONTROL BOX	605821
6	1	CE (CONTROLLED)	401378
7	1	DANGER- KEEP CLEAR OF GATE WHILE BALER IN OPERATION	605238
8	1	DECAL OVERLOAD DATA	154377
9	1	DANGER- DO NOT PUT HANDS IN MACHINE WHILE IN OPERATION (ENG.& SPAN)	320064
10	2	WARNING- DO NOT CLIMB	500137
11			
12	1	CAUTION - PRESSING START BUTTON WHILE RAM IS NOT	405191
13	2	PTR BALER AND COMPACTOR AUTHORIZED SERVICE (800) 523-1155 SERVICE@PTRCO.COM	606867
14			
15	1	THIS BALER MEETS ALL ANSI Z 245.51-20XX SAFETY AND PERFORMANCE STANDARDS.	500270
16	1	CAUTION BALE DOOR MUST BE OPEN BEYOND 90° FOR PROPER EJECTION	500272
17	1***	DANGER- KEEP CLEAR OF GATE WHILE BALER IS IN OPERATION	605501
18	1	CAUTION- LOAD BALE CHAMBER AS EVENLY AS POSSIBLE	500505
19	1	NOTICE- NO ONE UNDER 18 IS ALLOWED TO OPERATE THIS BALER! "WARNING" (ENG.& SPAN)	500639
20	1	"DANGER" BEFORE AND DURING ANY MAINTENANCE, TESTING, AND/OR ELECTRICAL CONNECTING-MOVE DISCONNECT SWITCH TO OFF POSITION AND PADLOCK.-PLACE A WARNING TAG ON THE DISCONNECT SWITCH AS FOLLOWS: WARNING-DO NOT ENERGIZE WITH THE PERMISSION OF-	500576
21	1***	CAUTION-SAFETY GATE LOCK IN USE ON THIS BALER-DO NOT FORCE GATE OPEN OR OVERRIDE SYSTEM	500553
22	1	DECAL, AUTHORIZED SERVICE, 5" X 7"	606868
23	2	PTR BALER AND COMP. SERIAL TAG, MTG INSIDE CONTROL BOX	605508
24	1	FOR BALING WIRE CALL ---	601690
25	1	DANGER- CONFINED SPACE- USE LOCKOUT/TAG OUT	401740
26	1	WARNING- KEEP BALER CLEAN & FREE OF DIRT ---	402168
27	1*	DANGER-HIGH VOLTAGE-AUTHORIZED PERSON-CONTROL BOX ETC.	500448
28	1	USE COPPER WIRE ONLY	320063
29			
30	1	TYPE 1 ENCLOSURE	500532
31	6**	YELLOW GROUND DECAL	500610
32			
33			
34	1	BEFORE EACH SHIFT, CHECK THE FOLLOWING	402549
35	2	NOTICE VERIFY CHAIN IS NOT TWISTED OR KINKED	604266
36	1	ETL (CONTROLLED)	605321
37	1	PTR BALER & COMPACTOR - MADE WITH PRIDE IN THE USA	605350
38	1	WARNING- ARC FLASH AND SHOCK HAZARD, PPE REQUIRED	606952
39	1	WARNING- FEDERAL LAW PROHIBITS TAMPERING WITH SAFETY DEVICES	606953
40	1	WARNING- DO NOT OPERATE OR SERVICE UNTIL TRAINED	606954
41	1	DECAL, 208V (220V SHOWN AS EXAMPLE)	330909
41	1	DECAL, 230V	330907
41	1	DECAL, 460V	330908
41	1	DECAL, 380V	330912
41	1	DECAL, 415V	330913
41	1	DECAL, 440V	330914
41	1	DECAL, 575V	330910

CONTRACT NO.

APPROVALS	DATE
DRAWN UNKNOWN	12/13/91
REDRAWN (FOR REV 14) CM	3/24/15
CHECKED	

PTR BALER & COMPACTOR

SINCE 1907 2207 EAST ONTARIO STREET - PHILADELPHIA, PA 19134

VERTICAL BALER

LOT WARNING DECALS & INSTRUCTION PLATES

SIZE	DRAWING NO.
B	BB400455R19

SCALE

SHEET 1 OF 1

PARTS AND SERVICE

PTR Baler and Compactor Company has carefully chosen the components in your vertical downstroke baler to be the best available for you particular model. We strongly recommend that all replacement parts be identical to the original components.

PTR Baler and Compactor Company will not be responsible for equipment failures resulting from use of incorrect replacement parts or unauthorized modification to the baler.

PTR Baler and Compactor will gladly supply replacement parts for your vertical downstroke baler. Main components are identified in Parts Description Section. **(See Table of Contents for page numbers)**

When ordering, please include the Model and serial Number of the unit. This is located on the baler electrical panel box door shown in Control Cover Layout. **(See Table of Contents for page numbers)**

When ordering parts for a cylinder, please include the Cylinder Number, which is shown in Parts Description Section. **(See Table of Contents for page numbers)**

To order replacement parts, please call the parts and service department.

PTR BALER AND COMPACTOR COMPANY
2207 E. Ontario Street
Philadelphia, PA 19134
(800) 523-3654
(800) 523-1155
(215) 533-5100

THANKS AGAIN FOR YOUR PATRONAGE OF PTR BALER AND COMPACTOR COMPANY!

PTR BALER & COMPACTOR CO.

WALL BRACKET KIT

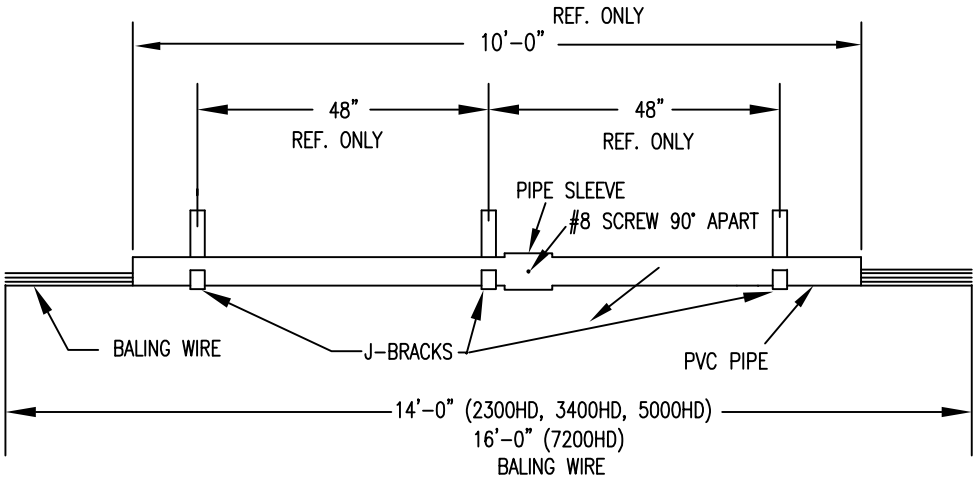
MATERIAL LIST

1. (3) WALL BRACKETS (SEE DRAWING AB403158)
2. (9) WALL TOGGLE BOLTS (3/8" X 6" Lg)
3. (1) 6" I.D. PVC PIPE 5'-0" LG WITH PIPE SLEEVE &
   (1) 6" I.D. PVC PIPE 5'-0" LG WITHOUT PIPE SLEEVE.
4. (3) #8 X 3/4" SELF DRILLING SCREWS

INSTALLATION GUIDE

1. MARK A LEVEL LINE ON WALL
2. MARK LENGTH OF WIRE ON LEVEL LINE
3. SPACE BRACKETS EQUAL DISTANCE INSIDE WIRE LENGTH (TO BALANCE WIRE)
4. MARK BRACKET HOLES ON WALL USING EACH BRACKET AS ITS OWN TEMPLET
5. USING A 1" MASIONARY DRILL , DRILL EACH HOLE
6. INSERT TOGGLE BOLT INTO EACH HOLE
7. MOUNT THE WALL BRACKETS TO THE BOLTS
8. TIGHTEN ALL BOLTS IN PLACE
9. ASSEMBLE PIPE TOGETHER, AND SECURE BOTH HALF'S AT THE PIPE'S SLEEVE. (SEE BELOW)
10. INSTALL THE THREE #8 X 3/4" SELF TAPPING SCREWS INTO THE PIPE SLEEVE, 90° APART. (SEE BELOW)
11. MOUNT PVC PIPE ONTO "J" WALL BRACKETS (SEE BELOW)

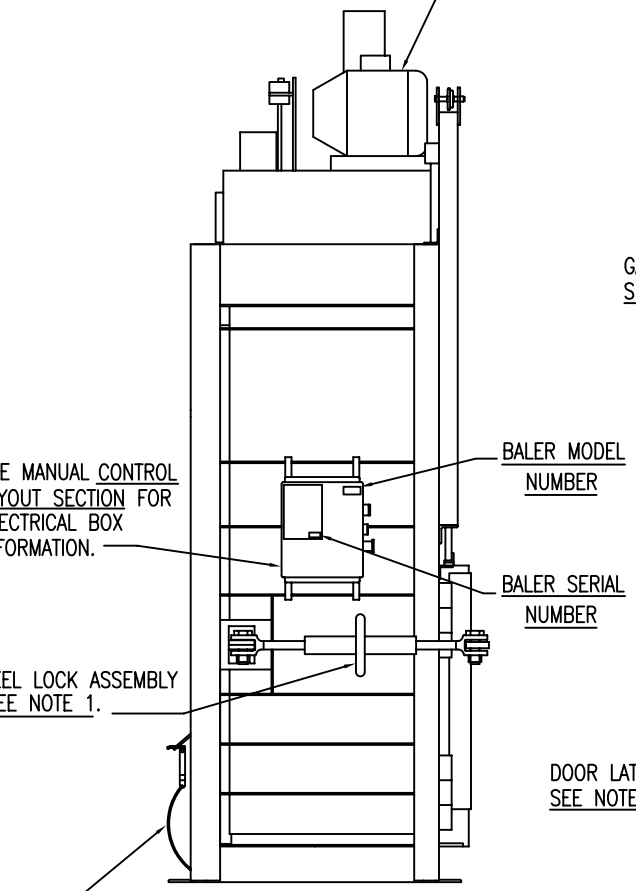
EXAMPLE (3.)
REF. ONLY



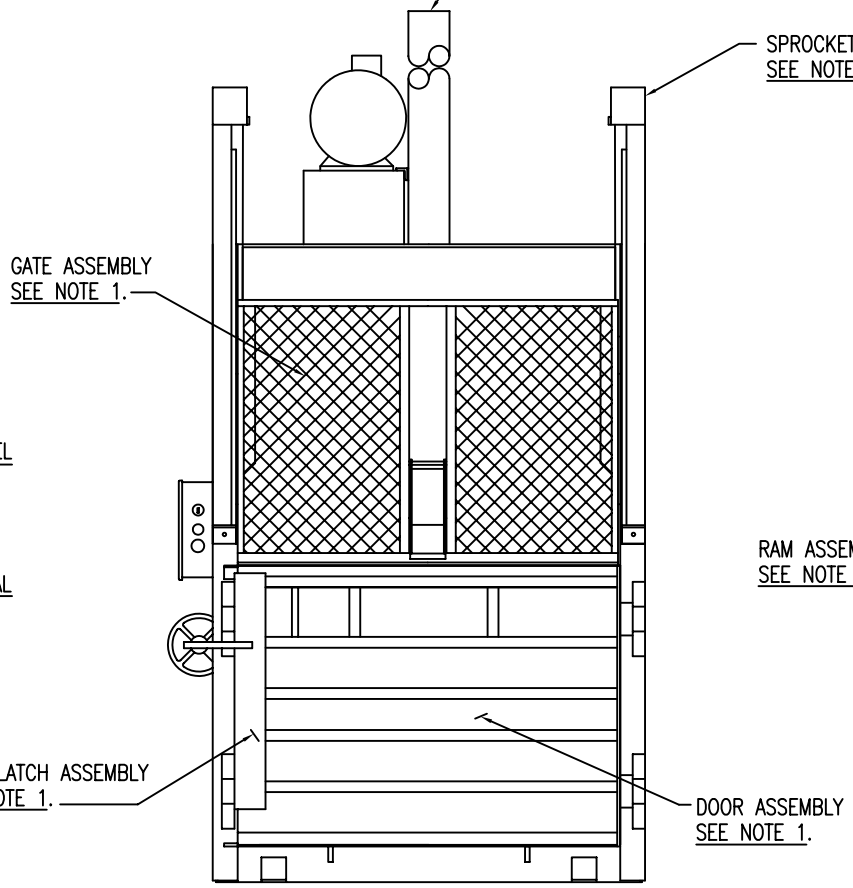
5/12/06

TITLE: WALL BRACKET KIT DWG. NO: AB4006371

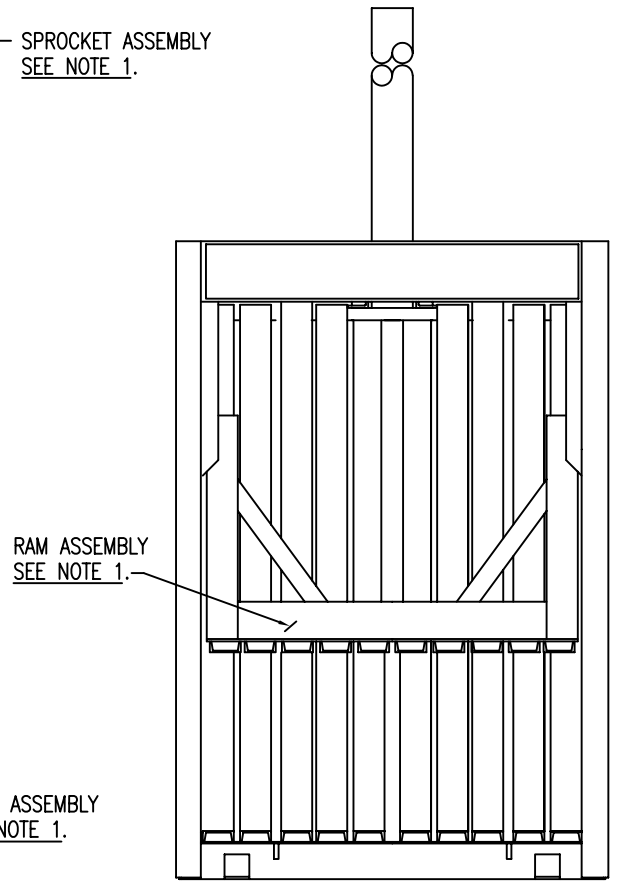
BALER MODELS	360	420	1800	1800HD	2300HD	2300HDLP	3400KP	3400HD	3600HDLP	4000HD	5000IHD	7200IHD		



SIDE VIEW



FRONT VIEW OF BALER



FRONT VIEW OF BALER

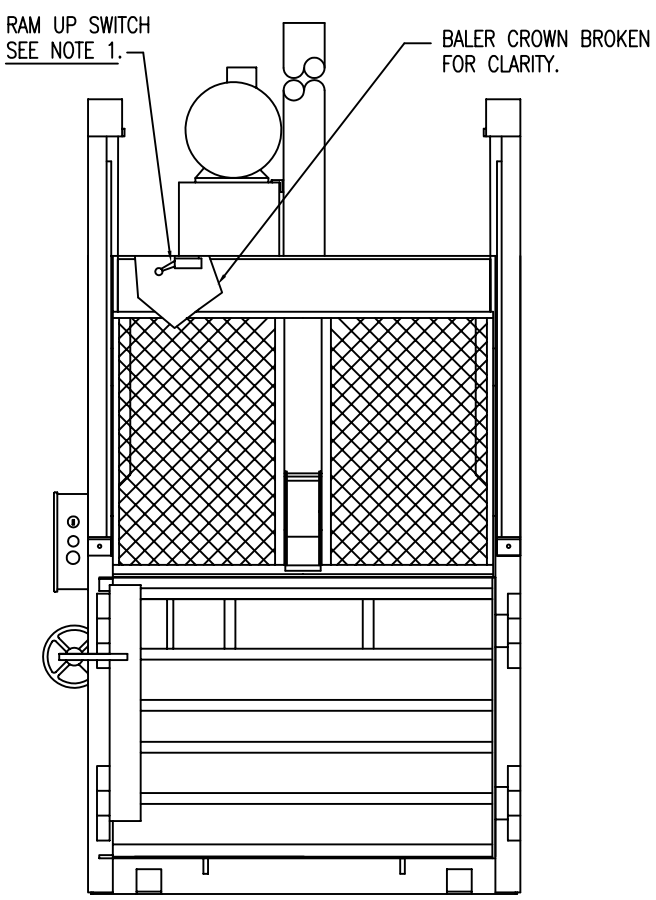
DOOR, POWER UNIT, & GATE WITH SPROCKET ASSEMBLY HAS BEEN REMOVED FOR CLARITY.

NOTE:

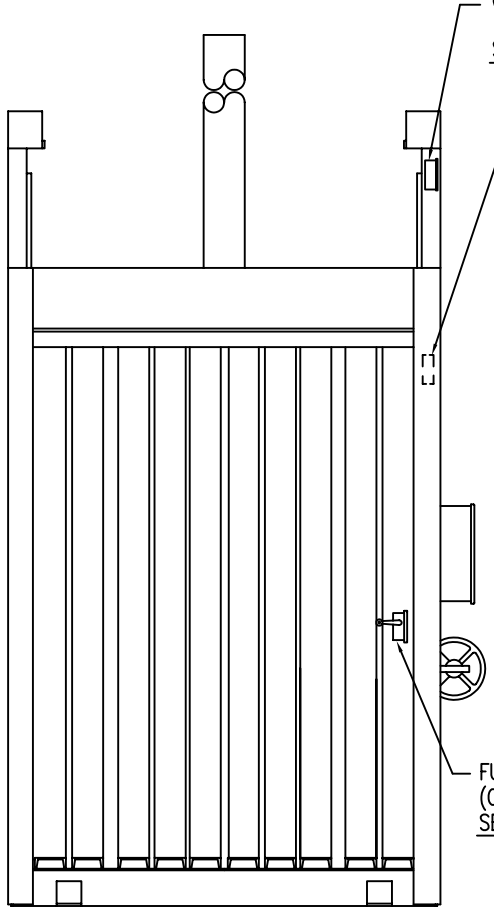
1. ALL PARTS TO BE ORDERED FROM PTR BALER & COMPACTOR CO. FOR PROMPT SERVICE IT IS IMPORTANT FOR CUSTOMER TO GIVE BALER MODEL NUMBER & SERIAL NUMBER LISTED ON MANUAL COVER SHEET OR ON ELECTRICAL BOX DOOR AS SHOWN ON DWG.

MECHANICAL PARTS INFORMATION

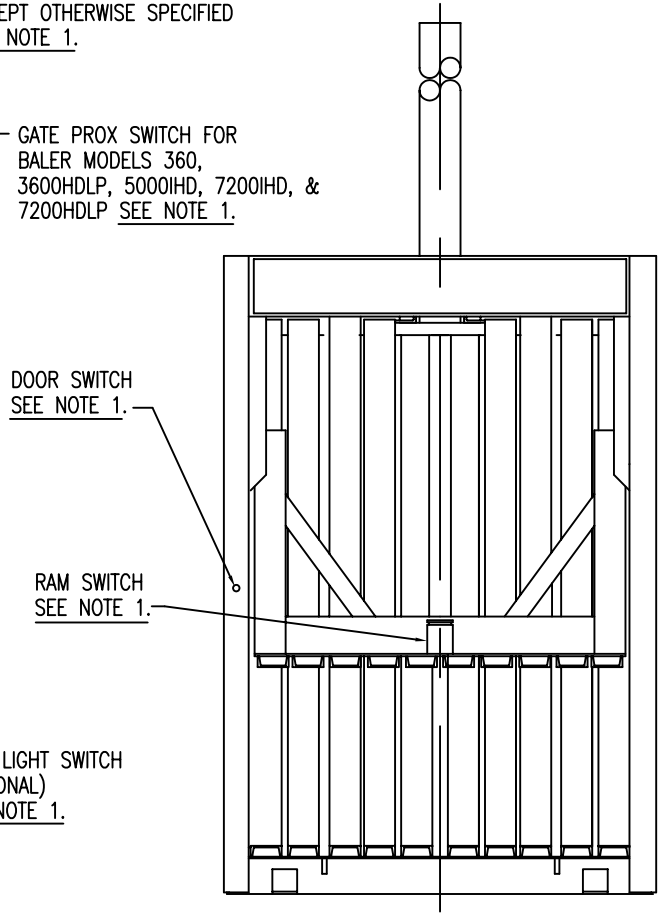
BALER MODELS	360	420	1800	1800HD	2300HD	2300HDLP	3400KP	3400HDLP	3600HDLP	4000HD	5000IHD	7200IHD		



FRONT VIEW OF BALER



BACK VIEW OF BALER



FRONT VIEW OF BALER

DOOR, POWER UNIT, & GATE WITH SPROCKET ASSEMBLY HAS BEEN REMOVED FOR CLARITY.

NOTE:

1. ALL PARTS TO BE ORDERED FROM PTR BALER & COMPACTOR CO. FOR PROMPT SERVICE IT IS IMPORTANT FOR CUSTOMER TO GIVE BALER MODEL NUMBER & SERIAL NUMBER LISTED ON MANUAL COVER SHEET OR ON ELECTRICAL BOX DOOR AS SHOWN ON THE BALER PARTS DESCRIPTION & NUMBERS SECTION

LIMIT SWITCH INFORMATION

EFFECTIVE 10/2016

PART NO.	DESCRIPTION	324	324 HD	360	360 HD	420	420 HD	460	1800	1800 HD	2300 HD	2300 HDLP	3400 HD	3600 HDLP	3400 KP	5000 IHD	7230	7200 IHD
500459	PUMP 1.3 G.P.M.	X	X	X	X	X	X											
500460	PUMP 3.7 G.P.M.	X	X	X	X	X	X											
605746	PUMP 10.5 G.P.M.								X	X	X	X	X	X	X		X	
500127	PUMP 15.1 G.P.M.															X		X
500063	4 WAY VALVE: SS-G01-C7Y-FR-E115	X	X	X	X	X	X											
155529	5 WAY VALVE: SS-G03-C7Y-FR-E115								X	X	X	X	X	X	X	X	X	X
330766.1	PRESSURE GAUGE 0 TO 4000 P.S.I.	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
500515	PRESSURE SWITCH (UE)	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
311606	OIL TANK GAUGE (TEMPERATURE/LEVEL)	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
311640	BREATHER CAP #UC10500	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
330465	RELIEF VALVE RPEC-FAN-SUN	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
500461	SUMP SCREEN #CU20500	X	X	X	X	X	X											
500461	SUMP SCREEN #LH50950								X	X	X	X	X	X	X		X	
500462	SUMP SCREEN #CU20502															X		X
330547A	CYLINDER 3" X 1 3/4" X 32"	X		X		X												
330525	CYLINDER 6" X 3 1/2" X 48"								X		X							
330534	CYLINDER 6" X 3 1/2" X 38"									X		X	X		X		X	
500162	CYLINDER 6" X 3 1/2" X 27"													X				
330533	CYLINDER 7" X 4" X 48"															X		X
500870	CYLINDER 4" X 2 1/2" X 32"		X		X		X											
330174	HYDRAULIC HOSE (BALER) 52" (1/2")								X	X	X	X	X	X	X	X	X	X
500591	HYDRAULIC HOSE (BALER) 32" (1/2")										X	X						
500592	HYDRAULIC HOSE (BALER) 40" (1/2")								X	X			X	X	X	X	X	X
500146-A	HYDRAULIC HOSE (BALER) 32" (3/8")	X	X	X	X	X	X											
500146-B	HYDRAULIC HOSE (BALER) 41" (3/8")	X	X	X	X	X	X											
500295	MOTOR 3H.P. 208-230-460	X	X	X	X	X	X											
602823	MOTOR 5H.P. 220 (SINGLE PHASE)	X	X	X	X	X	X											
602001	MOTOR 10H.P. 208-230-462								X	X	X	X	X	X			X	
602002	MOTOR 15H.P. 208-230-463																	
602003	MOTOR 20H.P. 208-230-464															X		X
155491	PROXIMITY SWITCH	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
155420	UP/STOP LIMIT SWITCH (W/ARM)	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
500266	RAM SWITCH (CAST METAL)	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
155419	DOOR LIMIT SWITCH (BUTTON HEAD)	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
155418	FULL BALE LIMIT SWITCH (W/ARM)	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
155350	TRANSFORMER 100VA	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
320209	TRANSFORMER FUSE	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
155408	POWER ON/OFF KEY SWITCH	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X

EFFECTIVE 10/2016

PART NO.	DESCRIPTION	324	324 HD	360	360 HD	420	420 HD	460	1800	1800 HD	2300 HD	2300 HDLP	3400 HD	3600 HDLP	3400 KP	5000 IHD	7230	7200 IHD
155397	UP/DOWN PUSH BUTTON	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
155398	EMERGENCY STOP BUTTON	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
155399	CONTACT BLOCKS KA-1	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
155400	CONTACT BLOCKS KA-2	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
155401	CONTACT BLOCKS KA-3	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
155392	RELAY (11 PIN)	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
155393	RELAY BASE (11 PIN)	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
311604	COIL CORD	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
600175	#80 CONNECTING LINK															X		X
500720	PROX SWITCH (NEW STYLE)	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
603200	STARTER: 75A															X	X	X
603196	STARTER: 40A								X	X	X	X	X	X	X	X	X	X
603198	STARTER: 22A	X	X	X	X	X	X											
603197	OVERLOAD: 40A								X	X	X	X	X	X	X	X	X	X
603201	OVERLOAD: 80A																	
603199	OVERLOAD: 20A	X	X	X	X	X	X											
500088.73	LEAF EJECTON CHAIN BL534 BEFORE 7/96															X		
500645	LEAF EJECTON CHAIN HD BL634																	X
330387	LINK EJECTOR CHAIN #40													X				
320086	ANCHOR CHAIN	X	X	X	X	X	X		X	X	X	X	X	X	X			
500740	ANCHOR CHAIN HD								X	X	X	X	X	X	X		X	
330388	GATE CONNECTION LINK #40								X	X	X	X	X	X	X		X	
500113	EJECTOR CONNECTING LINK # 60 BEFORE 7/96																	X
330235	SHACKLE 1/4"	X	X	X	X	X	X		X	X	X	X	X	X	X		X	
400018	EJECT 'T' HOOK															X		X
330120-1-2	EJECT RECESSED 'T' HOOK	X	X	X	X	X	X		X	X	X	X	X		X		X	
401412	EJECT SPROCKET 'T' HOOOK													X				
500056	SIDE WHEEL TURN BUCKLE 8"	X	X	X	X	X	X											
330506	SIDE WHEEL TURN BUCKLE 10"								X	X	X	X	X	X	X	X	X	X
500273	NYLON GUIDE 1/2" X 2" X 36" LG																	X
500012	NYLON GUIDE 1/2" X 2" X 42" LG								X	X	X	X	X	X	X	X	X	
500602	NYLON GUIDE 1/2" X 2" X 23" LG										X	X		X				
600042	NYLON GUIDE 3/8" X 2" X 42" LG																	X
500011	NYLON GUIDE 3/8" X 2" X 36" LG								X	X	X	X	X	X	X	X	X	
320085-4	NYLON GUIDE 3/4" X 1" X 4" LG	X	X															
320085-23	NYLON GUIDE 3/4" X 1" X 23" LG			X	X	X	X				X	X						
320085-24	NYLON GUIDE 3/4" X 1" X 24" LG	X	X	X	X	X	X											
320085-33	NYLON GUIDE 3/4" X 1" X 33" LG			X	X	X	X											

EFFECTIVE 10/2016

PART NO.	DESCRIPTION	324	324 HD	360	360 HD	420	420 HD	460	1800	1800 HD	2300 HD	2300 HDLP	3400 HD	3600 HDLP	3400 KP	5000 IHD	7230	7200 IHD
500042	POWER UNIT 3 H.P.	X	X	X	X	X	X											
500077	POWER UNIT 5 H.P. (220V/1PH.)			X	X	X	X											
500985	POWER UNIT 10 H.P.								X	X	X	X			X			
500985	POWER UNIT 10 H.P.-H.T.												X	X			X	
500986	POWER UNIT 15 H.P.																	
500995	POWER UNIT 20 H.P.															X		X
500977	POWER UNIT INCLUDES:							X										
	-5 H.P. SUBMERSIBLE MOTOR							X										
	-6 GPM SUBMERSIBLE PUMP							X										
	-DIRECTIONAL VAVLE							X										
	-RELIEF VALVE							X										
	-PRESSURE GAUGE							X										
	-SUMP SCREEN							X										
	-TANK GUAGE							X										
	-PRESSURE SWITCH							X										
500979	CYLINDER 4 1/2" BORE X 3" ROD X 36" STROKE							X										
401485-6	NYLON GUIDE 1/2" X 2" X 21 1/2" LG.							X										
401484-20	NYLON GUIDE 3/8" X 2" X 27 1/2" LG.							X										
DB401485	EJECTOR ASSEMBLY PARTS:							X										
AB401565	-HOOK							X										
401485-31	-HANDLE							X										
401485-14	-ROD (BENT)							X										
401485-35	-ROD SUPPORT CLAMPS							X										
401485-37	-SPRING							X										
401485-36	-SPRING COLLAR							X										
401485-26	-HOOK PIN							X										
401485-20	-CLEVIS PIN							X										
401485-38	-ROLL LOCK PIN							X										