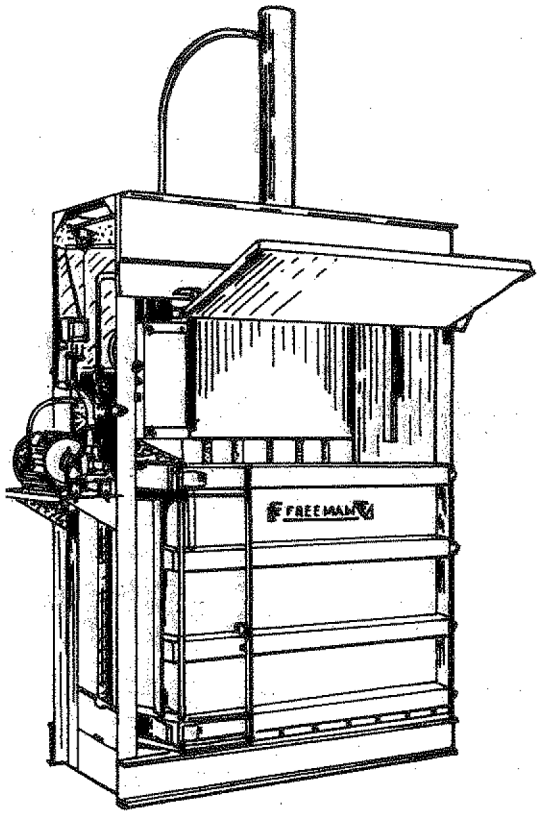
FREEMAN

48" SOLID WASTE BALER (48SDA) OPERATORS MANUAL



manufactured and distributed by

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PORTLAND, OREGON

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CAUTION

Read and understand the following pages completely before attempting anything with the baler. Failure to do so could result in equipment damage and/or personal injury.

GENERAL INFORMATION

THIS BALER IS DESIGNED FOR BALING PLYABLE MATERIAL. IT WILL NOT BALE METAL, WOOD, OR OTHER SOLD MATERIAL.

THE BALER REQUIRES 230/460 V, 3 PHASE CYCLE ELECTRICAL POWER. IT SHOULD BE INSTALLED ON A CONCRETE FLOOR OR OTHER SUBSTANTIAL FOUNDATION. THE ELECTRICAL CONTROLS ARE NOT WEATHERPROOF, AND AS SUCH. THEY MUST BE PROTECTED FROM THE ELEMENTS.

ELECTRICAL CONNECTION

The 3 phase, 60 cycle electrical connection must be done in accordance with applicable codes. A seperate main electrical disconnect device should be located near the baler to facilitate maintenance.

CAUTION - AUTOMATIC OPERATION Once the baler is started it can only be stopped in one of the following ways:

1. Push the "EMERGENCY STOP" button located on the electrical control box.
2. Turn "OFF" the main power supply to the baler.
3. Open the loading door.
4. Wait until it stops automaticall at the end of the operating cycle. DO NOT ALLOW THIS TO HAPPEN UNTIL AFTER THE BALER HAS BEEN COMPLETELY SET UP AND IS READY FOR USE.

The motor must rotate in the direction indicated by the arrow located on the shield over the motor shaft. To check this, close and latch both chamber doors and the loading door, turn the electrical selector switch to the "HAND" position, push the "DOWN" button, then very quickly push the "EMERGENCT STOP" button. Do not allow the baler to operate more one or two seconds as the hydraulic cylinder has not yet been secured and could damage the machine.

SET UP INSTRUCTIONS

1. Read and understand these instructions completely before beginning to set up the baler.

2. Locate the "EMERGENCY STOP" button on the control box. This button provides the best method of stopping the baler and will be used in the set up procedure.

3. Ensure that the oil reservoir is full of oil. See the heading PREVENTATIVE MAINTENANCE for the correct type of oil to add.

4. Ensure that the 3 phase electrical power has been correctly connected by observing the direction the motor rotates. This procedure is outlined under the heading ELECTRICAL CONNECTION.

5. Ensure that the hydraulic hoses will not get pinched as the main cylinder is raised.

6. Close and latch the chamber doors and the loading door. (Baler will not run unless these are closed.)

7. Turn the electrical selector switch to the "HAND" position.

8. Have an assistant stand on a stepladder to observe the location of the main cylinder as it is raised. He should locate the four tapped holes on the underside of the cylinder mount at the top of the baler and he should have the four cylinder mounting bolts at hand.

9. Push and momentarily hold the "DOWN" button, then quickly push the "EMERGENCY STOP" button. This will raise the cylinder a short distance.

10. Continue to "inch" the cylinder upward in this manner until it is about an inch from contacting the underside of the cylinder mount.

11. Insert the four cylinder mounting bolts with lock washers and finger tighten them to align the cylinder.

12. Carefully run the cylinder up until it will just touch the mounts when stopped. (If pressure is allowed to build up, even for a short time, it will crush the wooden shipping supports under the platen.)

13. Securely tighten the four bolts to hold the cylinder in place.

14. Ensure that the hoses are free and that they will not be damaged as the platen is raised.

15. Push and momentairily hold the "UP" button. The baler will raise the platen to the "UP" position and stop.

16. Open the chamber doors and remove the wooden shipping supports and the baler will be ready to operate. (See OPERATING INSTRUCTIONS)

OPERATING INSTRUCTIONS

SAFETY CONTROLS: The "EMERGENCY STOP" button located on the control box can be used to stop the baler at anytime.

A. Loading

1. Before attempting to load ensure that the platen is fully up and that the chamber doors are closed and latched.
2. Open the loading door.
3. To make the best possible bale, place a 24 X 48 piece of cardboard on the bottom of the chamber befor loading and on top of the material before compacting for the final time.
4. Fill the chamber with material. Do not over fill. The chamber should be filled higher than the top of the chamber doors and all material should be pushed completely inside the baler.
5. Close and latch the loading door.

B. COMPACTING

1. AUTOMATIC OPERATION
   a. Turn the electric selector switch to the "AUTO" position.
   b. Push and momentarily hold the "DOWN" button. The baler will compact the material, automaticall return the platen to the "UP" position and stop.
   c. Repeat the loading and compacting cycles until the desired bale size is obtained.

2. MANUAL OPERATION

a. Turn the electric selector switch to the "HAND" position.

b. Push and momentarily hold the "DOWN" button. The baler will compact and then stop and hold the material with the platen down.

c. Push and momentarily hold the "UP" button. The baler will return the platen to the "UP" position nad stop.

d. Repeat the loading and compacting cycle until the desired bale size is obtained.

C. BANDING

a. On the final compacting cycle place a large piece of cardboard on top of the material and turn the electrical selector switch to the "HAND" position. Compact the material, using the MANUAL OPERATION, and leave the plunger down.

b. Open the chamber door.

c. Thread the bands through the (7) slots under the cardboard on the bottom of the chamber, around the bale and through the slots on the underside of the platen. Secure the bands.

d. Close the loading door and you are ready to remove the bale.

D. BALE REMOVAL

a. After banding the bale raise the plunger about 8 in.

b. Reach back and unhook the cable that is hanging at the chamber. On double door models the cable should be laying on the floor at the front of the baler.

c. Secure the hook on the cable to the plunger. There is a place for this located about 2 in. from the edge of the plunger.

d. Raise the plunger and the bale will tip out to an angle of about 40°.

e. Tip the bale the rest of the way out by hand.

f. After removing the bale the hook should be replaced at the back of the chamber. On double door models it will be necessary to place the cable on the floor.

PREVENTIVE MAINTENANCE

The baler requires very little maintenace.

After about forty (40) bales the wear points on the door latches should be greased.

Ensure that the oil reservoir is kept full when the platen is up. It should only require oil if there is a leak in the system. Always fill the reservoir with the platen in the raised position.

The filter need only be changed if the oil flow beocmes restricted (indicated by sluggish operation) or if the oil is dirty looking in the sight glass on the reservoir. When the filter is replaced the oil should also be changed. USE ANTI-WEAR HYDRAULIC OIL 150-120 SSU AT 100^{0} F OR AUTOMATIC TRANSMISSION OIL OR SAE 01-40 ENGINE OIL.

TROUBLE SHOOTING

If the baler fails to start:

1. Ensure that the loading door is closed and latched.

2. Ensure that the main electrical disconnect device is turned "ON" and that the fuses are good.

3. Check the fuses in the baler.

4. Push the "RESET" button on the baler electrical control box.

5. Disconnect the power source and open the control box and check for any loose wires.

6. Check all switches in the control box for proper operation.

7. Follow the wiring diagram and check all safety switches and limit switches for proper operation.

If the motor starts but a screeching noise, it probably means that oil is being forced through the relief valve. Check to be sure that the solenoid directional valve is shifting as it should.

Noise in the pump could mean that the oil reservoir is low. Repair the leak and ensure that no dirt enters the reservoir when adding oil.

A dirty oil filter could cause sluggish operation with the motor laboring to overcome the restricted flow path.

If the baler functions properly except that the cylinder extends and retracts slowly, it could mean that the piston seals in the cylinder are worn.