

INSTALLATION INSTRUCTIONS



Combination Vent/Overfill Alarm

AST Fig. 922

The Fig. 922 Combination Vent/Overfill Alarm is a fully mechanical, high intensity audible alarm for new and existing aboveground storage tanks. The pressure poppet setting is 6 oz./in² or 8 oz./in² with a vacuum relief setting of 1 oz./in². The unit can be set to activate at 90% fill height by adjusting the cable length to the float device. The adjustment tool is provided. The unit attaches to a 2" or 3" N.P.T. pipe mounted on the tank.

Read instruction sheet completely before installation.

Installation Procedure:

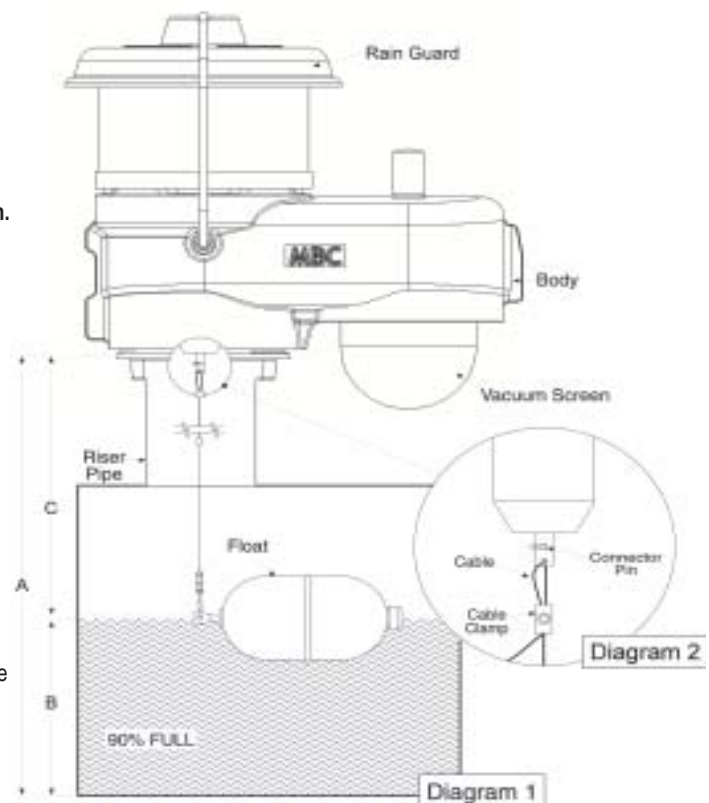
1. Verify contents of box. You should have received: installation instructions; alarm unit; float with cable and wrench; warning tag; cable tie. Inspect the unit for possible damage caused during shipment. Do not use if damaged.
2. **Make sure all emergency vents, fill connections, tank openings, and piping connections are airtight. The whistle may not operate without an airtight system.**
3. See **Diagram 1** to determine length of cable needed (C). Record the following measurements:
(A) = Distance from bottom of tank to bottom of the alarm vent.*
(B) = Distance from bottom of tank to 90% full level.

* Check local codes for proper riser pipe lengths/ height requirements.

CAUTION: Riser pipe and bung opening must be free of burrs. Sharp edges may damage cable.

4. Calculate the length of cable needed (C) by subtracting (B) from (A).
(A) _____ - (B) _____ = (C) _____
5. Loosen cable clamp on free end of cable and then slide free end of cable through the hole in the small pin in bottom of alarm unit and back through cable clamp. See **Diagram 2**.
6. Adjust cable to proper length (C) as determined in Step #3 & #4 above. The total distance (C) should be measured from the eyelet hole in the float to the bottom of the alarm unit.
7. Tighten the cable clamp securely once cable is the correct length.
CAUTION: Failure to tighten the clamp securely could result in the float and cable falling into the tank and the overfill alarm not working.

8. Trim the excess cable no less than one foot from the cable clamp. This will provide extra cable if future adjustment is necessary. The extra cable may hang down in the tank. This will not affect the operation of the unit.
9. Slide the float unit down through the riser pipe.
10. Secure the alarm unit to riser pipe. (Note: When attaching the alarm unit to the riser pipe, a non-hardening, fuel resistant threaded sealant should be applied to the connection.)
11. The unit may be hand tightened onto the riser pipe. A wrench is **not** necessary. If a 2" riser pipe is used the double tapped bushing will need to be wrench tightened on the riser pipe.
12. Install the warning tag around fill pipe so it is visible to the operator when filling the tank.
13. Minimum recommended fill rate for this alarm to function properly is 20 GPM. Alarm will register 105 Db. (6 oz) and 110 Db. (8 oz) when measured at a distance of 1 ft. with a fill rate of 90 GPM.



WARNING

This is a combination pressure vacuum vent and overfill alarm. Proper alarm function will only occur if system is airtight, installed correctly and maintained regularly. All emergency vents, fill connections, tank openings, and piping connections must be airtight.

Emergency vent should be set at least 2 oz./in² higher than the combination vent/overfill alarm.



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Fig. 922

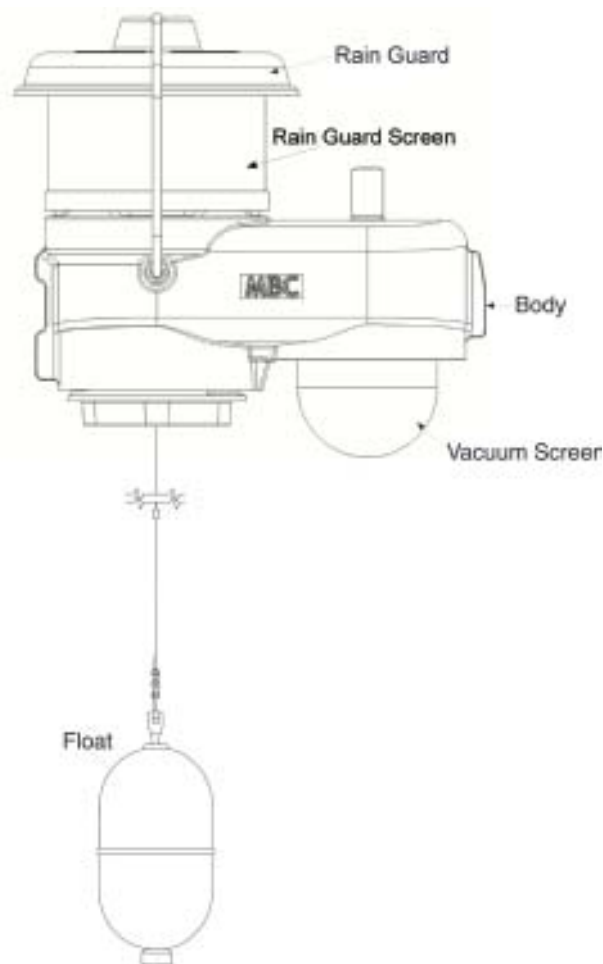
Maintenance

Obstruction of airflow through vents can result in structural deformation of the tank. Atmospheric conditions and below freezing temperatures may cause condensation to occur and freeze. Freezing action can restrict movement of poppets and block screened air passages. Monthly inspection and more frequent inspection in cold weather by someone familiar with the proper operation of this vent is required to help guard against accidental product spill, personal injury, property damage, fire or explosion.

Inspection

1. Carefully remove unit from tank.
2. To ensure that the vacuum poppet is moving freely, turn unit upside down and right side up and listen for poppet movement. Clean or replace vacuum screen if necessary.
3. Push upward on the ball seat making sure cover (pressure poppet) moves freely. Pressure poppet must be able to move freely for vent to operate correctly. Clean or replace rain guard screen if necessary.
4. Inspect the ball seat and ball attached to float, making sure the ball freely moves. Ball must be able to move freely for alarm to work correctly.

Do not attempt to repair the unit or replace parts without first contacting a qualified Morrison representative.



Retain these installation instructions for future reference.

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