

Freeze Resistant Installation Instructions

(Note: Local, State and/or Federal Codes should be adhered to)

1. Establish location of drinking fountain.
2. Establish dept of frost line in your area. Add 18" (minimum dept to be below frost line) and add 36" (minimum depth for porous gravel bed) to depth. EXAMPLE: Frost line is 36", add 18" plus 36" for a total of 90" below your finish grade. This is the bottom of your gravel bed.
3. Fill excavation with 36" of porous gravel. Recommend 5-10 cubic feet of fill material.
4. Using example of 36" frost line, add 18" (minimum depth frost line), deduct 6" for a total of 48", this is the length of your PVC housing. This will put the top of removable plug, located in valve box, 6" below finish grade. Cut PVC housing accordingly.
5. Connect **minimum** ½" water supply (**30 PSI minimum**) to inlet hose connection, below frost line. Fish hose line assembly thru PVC housing and through wye, to above grade. Attach water supply to inlet and outlet connection on our valve assembly. See drawing. **Note: Water supply line must be thoroughly flushed, before attaching to MDF valve assembly. Recommend an inline filter (by others).** Pressure test for leaks. Lower assembly into housing, taking care not to kink house. Plug PVC housing and carefully backfill, keeping it vertically plum. Place 12" valve box over PVC housing, setting it to finish grade.
6. Note: Direct Bury (DB) fountain will have an attached 12" valve box (see drawing). Keep PVC assembly plum during backfill procedure. After bringing fill to grade, dig out for fountain, set and secure fountain to proper finish grade. Pour concrete.
7. Note: Surface Mount (SM) fountain will not be attached to 12" valve box (see drawing). This will require 1 ½" flexible tubing to be located, minimum 15" c-c of valve box and fountain pedestal, during backfill procedure. After centering valve box over PVC housing, stub 1/12" flexible tubing and drain connection thru concrete slab, using template drawing for bolt setting (bolts by others). Pour concrete. After concrete has cured, anchor your Surface Mount fountain to slab.
8. Make final connection to water and 1/8" activation tube. Leave 1/8" air release tube open to the air. Make final connection to drain line, thru access door. This applies to surface mount and direct bury fountains.
9. Lift complete assembly from PVC housing, turn on water supply, test for leaks. Lower complete assembly back into PVC housing, retest for leaks or malfunctions. The supply hose should be coiled in the bottom of the housing without any kinks. Make sure the water supply line is draining back to the gravel bed. Be sure there are no traps or kinks in the water supply line, above the frost line, which would allow the supply line to freeze.
10. Check **Troubleshooting List**.

Troubleshooting List

LOW WATER FLOW:

- a) Make sure supply valve is **fully** open.
- b) Make sure water supply pressure is a **minimum** 30 PSI.
- c) Check inlet strainer, located in valve body, for trash. Clean thoroughly (see parts drawing).
- d) Check rubber orifice, located in flow control fitting, for trash. Clean thoroughly (see parts drawing).

NO WATER FLOW:

- a) Check air tubing, from push button to the valve, for air leaks.
- b) Make sure air tubing compression nuts are hand tight.
- c) Disconnect the air supply tubing from the push bar, blow into the tubing to verify the valve is operating properly. May require a new repair kit.
- d) Check push button, by holding finger over air outlet to check diaphragm. Make sure screws are tight on diaphragm. May require replacement of push button.

CONTINUOUS WATER STREAM:

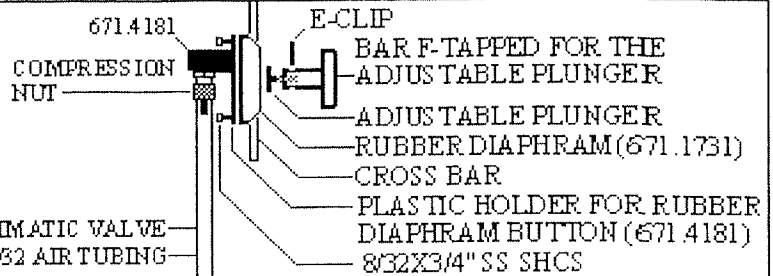
- a) Make sure there are no obstructions to prevent push button from returning back to its proper position.
- b) Make sure air release line, off the air bleed port of the control valve, is not obstructed or kinked. Make sure the bleed port is not obstructed.
- c) Check rubber diaphragm for trash, by removing (4) screws from valve body. Remove rubber diaphragm from body and clean out hole under the lip of plastic part (see parts drawing).
- d) Check rubber button, in the center of the steel disc, for wear. If the button is worn, flip the disc over or replace. It may be necessary to slightly stretch the spring behind the steel disc, for better seating.
- e) Check renewable valve seat for wear. If it is worn, grooved, or pitted, replace it.

VARIED AND INCONSISTENT HEIGHT OF WATER STREAM:

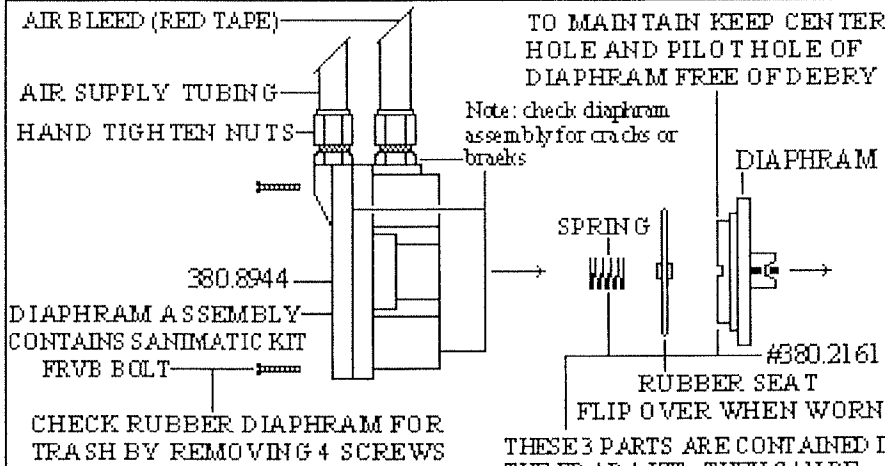
- a) Check for kinked water supply tubing.
- b) Check for trash in flow control. May require the replacement of flow control valve.
- c) Note: push button has an adjustable plunger, to activate the air valve. Make sure the plunger is activating the rubber bellows properly. You may have to adjust it, slightly, forward. Sometimes this occurs in high altitude conditions.

FR IG STANDARD PARTS & MAINTENANCE SHEET

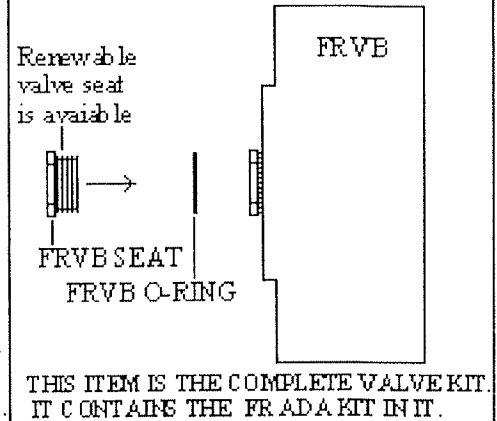
PROBLEM: FOUNTAIN RUNS FOR FEW SECONDS AND QUILTS. DISCONNECT AIR SUPPLY HOSE AND BLOW THRU FOR AS LONG AS YOU CAN. IF THE FOUNTAIN WORKS THE PROBLEM IS IN THIS AREA. CHECK RUBBER DIAPHRAM. MAY NEED TO ADJUST PLUNGER FORWARD. CHECK FOR CRACKED FITTINGS AND MAKE SURE COMPRESSION NUT IS TIGHT. CHECK DIAPHRAM ASSEMBLY FOR CRACKS OR BREAKS.



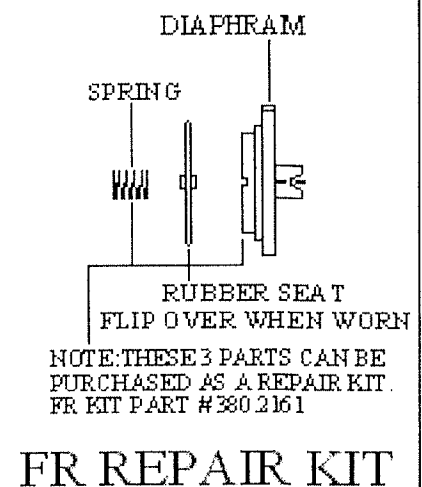
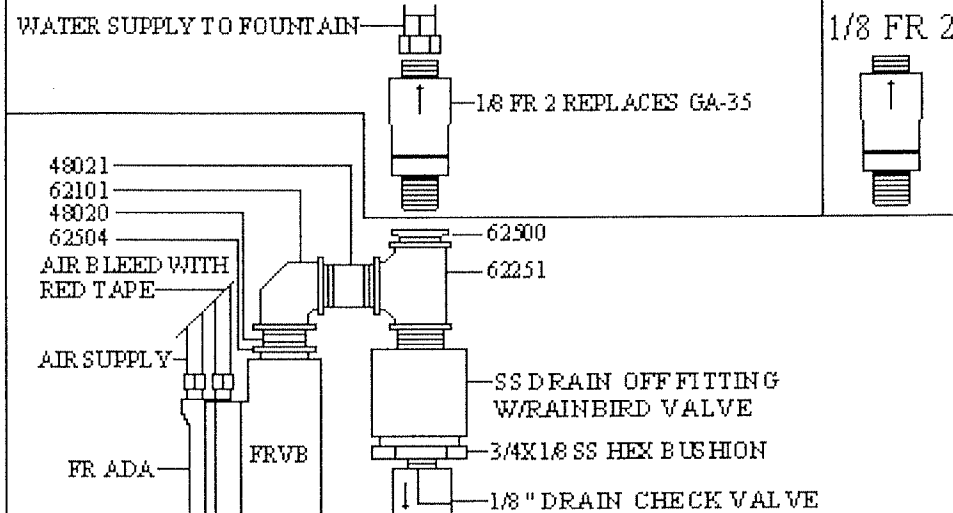
AIR BUTTON



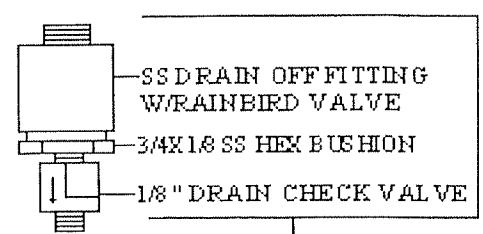
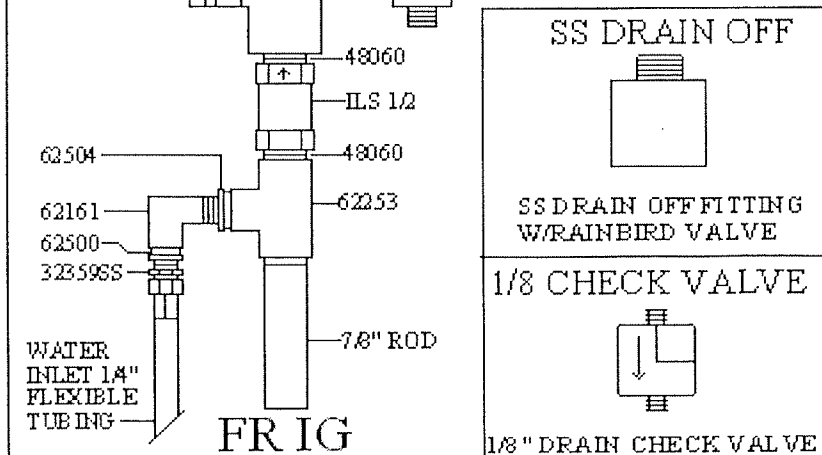
FR ADA



FR VALVE



FR REPAIR KIT



NOTE: THESE ITEMS CAN BE PURCHASED AS A KIT RAINBIRD DRAIN

RAINBIRD DRAIN

FR IG