

Installation Instructions

Flush Mount Flush Valve



Serving the Dairy Industry for Over 25 Years

800-811-9462 559-685-0340

Installation Instructions—USFS Flush Mount Flush Valve Rubber Hinge Or Pop Up Model

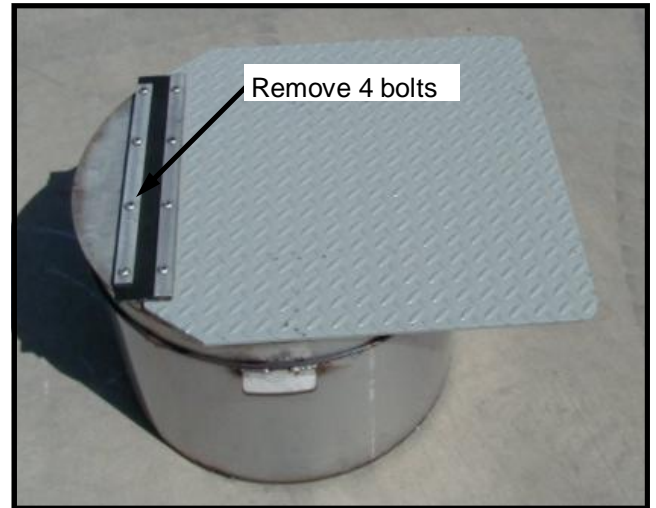
Unpacking and Disassembly

Flush valves are shipped assembled. They must be disassembled for positioning prior to pouring concrete.

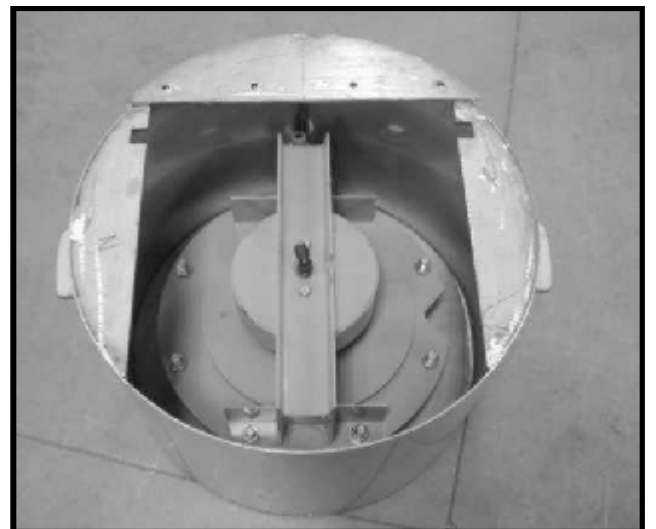
Proceed as follows;

1. Remove the four allen head bolts that attach the rubber hinge to the back of the valve housing
2. The cover can now be removed by lifting up and sliding back. The cover side plates will slide through the notches provided.
3. Now remove the 8 nuts that retain the valve body. Remove the large round seal included in shipping.
4. Remove the valve body from the valve housing.
5. The four bolts, 8 nuts and the cover should be set aside, together, for future reinstallation.
6. The valve body can now be placed in position prior to pouring concrete.

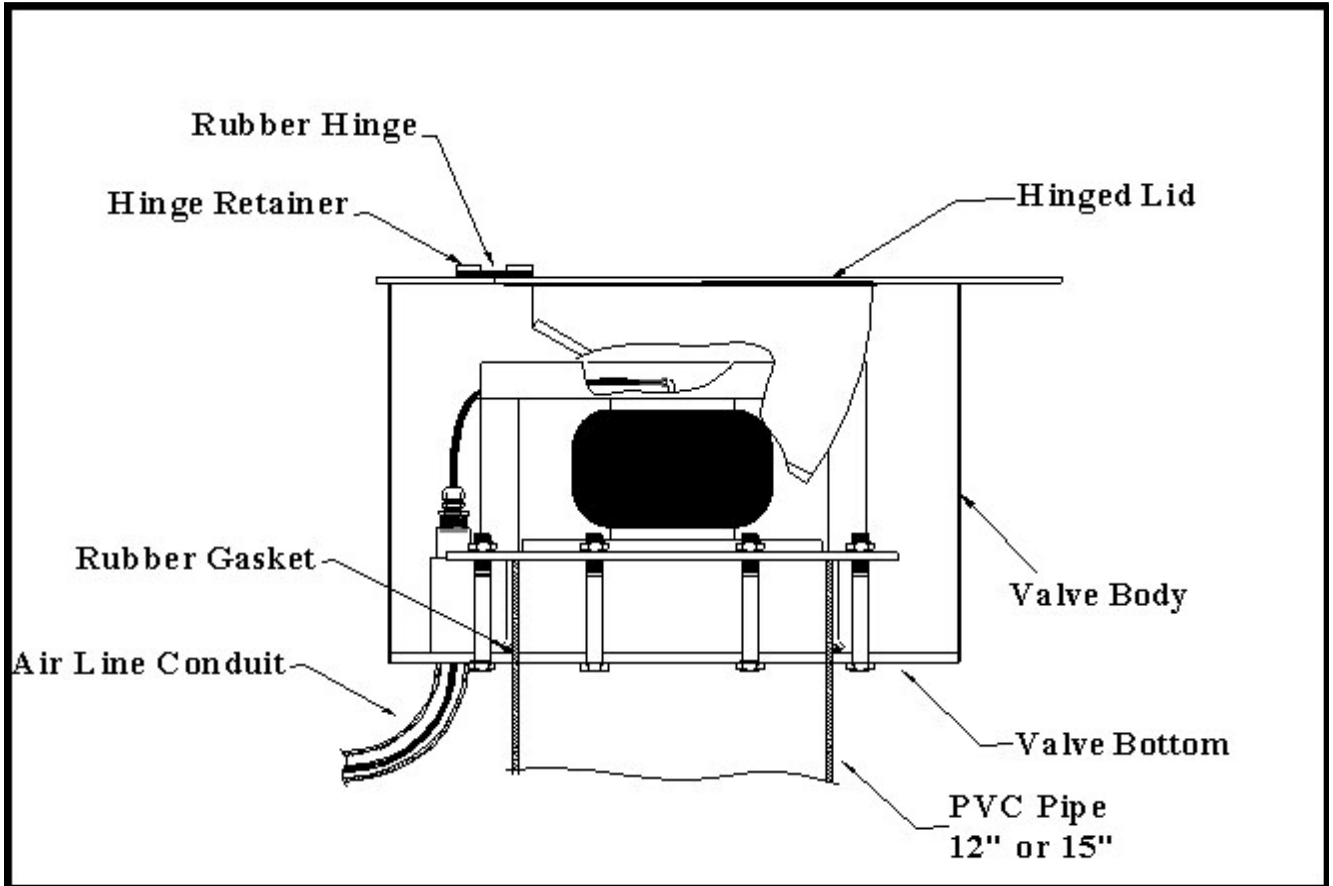
See next page for Valve Body Installation instructions.



Cover Removed



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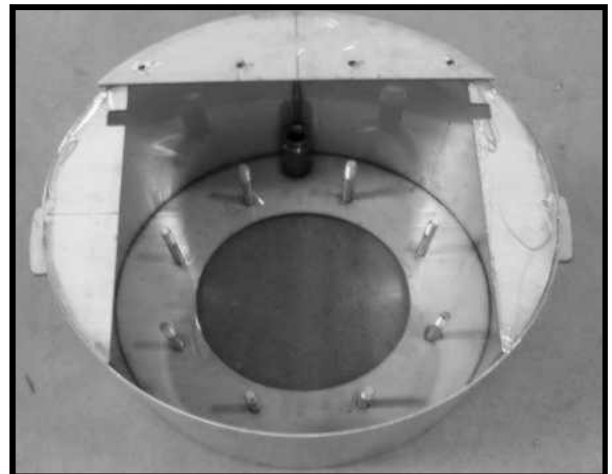


The **US Farm Systems Flush Mount Flush Valve** should be in place prior to pouring concrete. If this is not possible leave an open square approximately 3' x 3' for installation at a later time. The valve uses half of a dresser coupler to attach to the feed pipe. It is important that there is a good seal between the feed pipe and valve. Water leaking under a slab can cause severe damage.

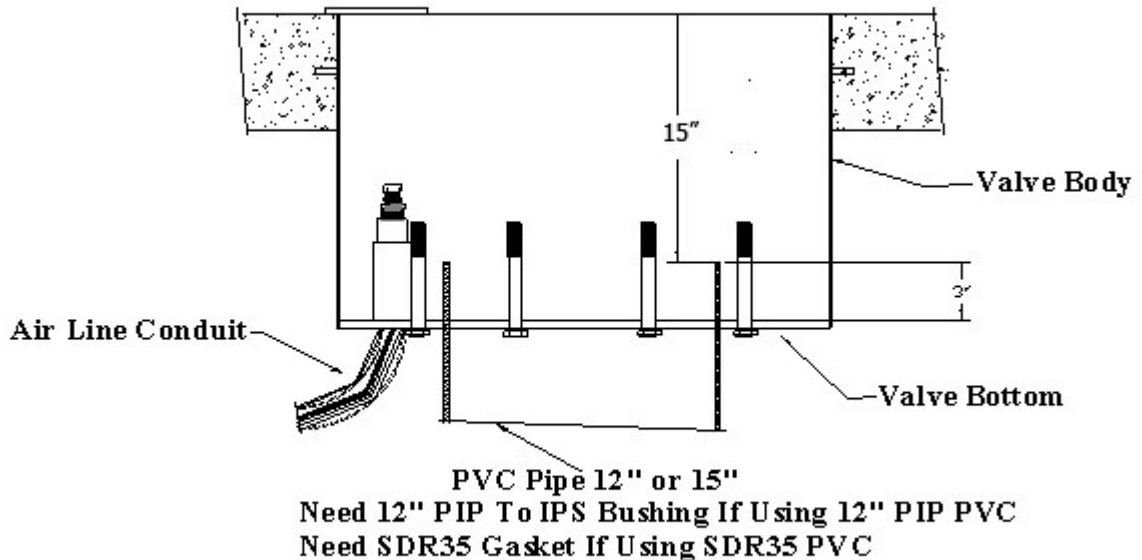
Flush valves are supplied with air from a remote junction box, using a 1/4" or 3/8" airline, in a PVC conduit. This conduit is routed to the Flush Control J-Box and is normally placed in the trench with the flush feed line. Use smooth elbows to make "pulling" the airline easier.

1) Prior to Concrete

- a) Trench and lay all pipes, including 1" conduit for the flush valve airline. Use smooth elbows in the airline conduit. Note, the airline conduit will need to be trimmed, so it slides in the fitting, at the base of the housing.
- b) Determine the height of the concrete when poured. During "rough plumbing" the top of the pipe risers for valve installation should be minimum of 13" or a maximum of 14" from the top of the concrete.



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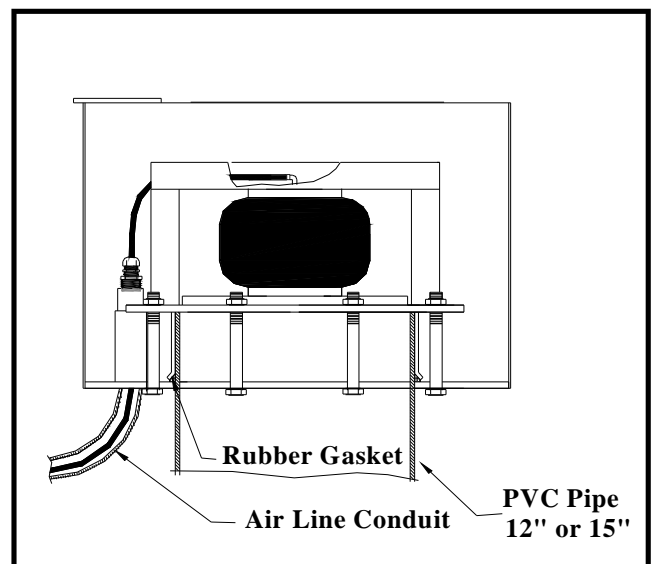
- c) All valve housings should be permanently positioned and airline conduit installed prior to pouring concrete.
- d) Exact placement of the valve housing and length of the riser can be adjusted by placing soil around the riser to set the housing on. Place the housing over the riser to make sure it will be flush with the top of the concrete.
- e) Once the housing is in position measure the height of the riser from the bottom of the flush valve housing. Distance should be a minimum of 2" and a maximum of 3" for the 12" valve and 2 1/2" for the 15" valve. ***It is easier to remove the housing, and trim the riser now, than wait until the concrete is poured.***

2) Air Lines

- a) Airlines can be pulled through the PVC conduit and attached to the valve after the valve is installed. Leave about 2 feet of extra airline protruding out of the conduit.
- b) Push the 1" conduit into the 1 1/4" pipe at the back of the valve. The airline passes through the sealing connector and is connected to the fitting on the air bag.
- c) Maximum air pressure should be set for 40PSI.

3) Valve Installation

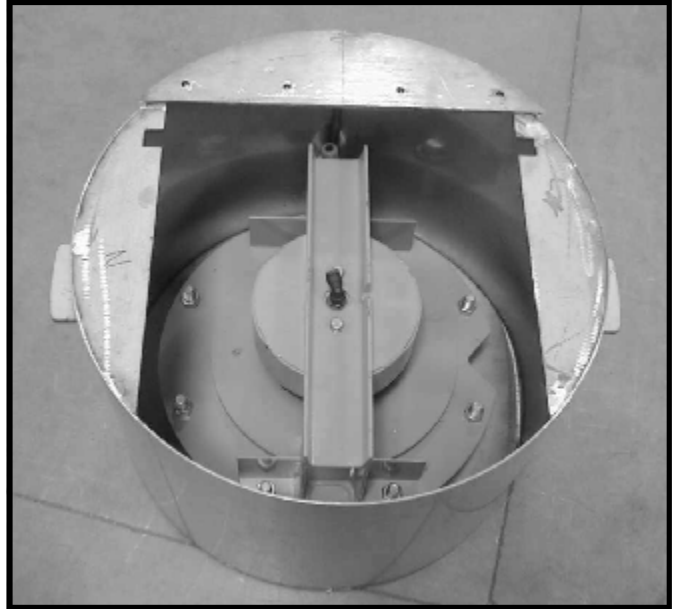
- a) Prior to permanently installing the valve make sure the distance from the bottom of the housing to the top of the riser is a minimum of 2" and a maximum of 3".
- b) If you are going to pull the airline through the conduit at this point, remove the plastic compression fitting from the pipe at the back of the



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valve. This will allow the airline to easily pass through the conduit and into the valve.

- c) Once the airline is exposed slide the compression fitting over the line until it can be screwed into the pipe. Leave enough airline protruding to attach to the elbow on the air-bag.
- d) Slide the rubber seal over the riser, tapered side up, until it contacts the bottom of the housing. **DO NOT** grease the rubber seal.
- e) Slide the valve onto the riser while lining up the 8 bolt holes. Push down hard enough so you can start the 8 nuts on the bolts.
- f) Tighten the 8 retaining nuts in a criss-cross pattern, several turns at a time. Continue the tightening sequence until all nuts are snug. Check to make sure the valve is securely attached to the riser.
- g) Slide the airline into the self-locking elbow.
- h) Install the valve lid by sliding down and forward through the slots provided.
- i) Once in place install the stainless retainer and 4 bolts.



4) Testing

- a) Once all valves are in place, and airlines installed, test as follows;
- b) Set the air pressure regulator to 40PSI. If you are flushing from a large tank, it may be necessary to raise the air pressure to hold the valve cover shut against the “head pressure” of the tank. **DO NOT EXCEED 80PSI.**
- c) Pressurize the airline and wait to 2-3 minutes for all valves to close. Air bags should fill and the covers seat against the valve body.
- d) Pressurize the flush system. Check each valve for leaks. Construction debris under the valve seal can cause small leaks. If a valve leaks, actuate the valve and run flush water through it to clear any obstructions.
- e) **NOTE-** The distance from the air control valves to each flush valve effects the amount of time required to open and close the valve. Delays of 30 to 45 seconds are not unusual. Allow for these delays when programming the timer.



DAIRY WASTE EQUIPMENT

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