Seal Kit Replacement Instructions Series RVDT300, RVDT400

NOTE: If the spring housing has to be removed for any reason, the diaphragms must be replaced. Do not reinstall used diaphragms. If the valve is plumbed into vertical piping, it will be necessary to remove it from the system and replace the seals on a work table or the diaphragms will not be centered properly.

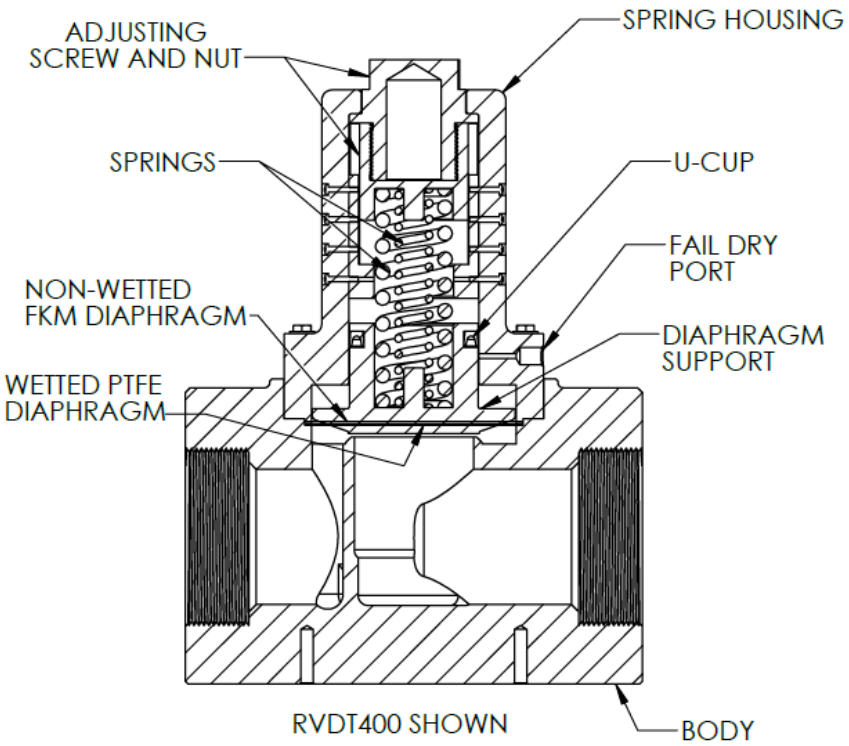
- Before disassembly, relieve pressure and drain fluid from the valve and piping to be opened. Take proper precautions to protect people and equipment from any residual liquid.
- Disassemble the valve in a clean environment. Prevent any dirt, grit, or fiber from getting onto the sealing surfaces or into the moving parts.
- A non-scratching probe such as an orangewood stick or ball end dental pick (burnisher) should be used to remove and install o-rings, u-cups and seat gaskets.
- Pipe wrenches and vises are not recommended for plastic valves. Strap wrenches can be used in most cases.

DISASSEMBLE THE VALVE

1. Back off the adjusting screw to relieve all pressure from the springs.
2. Loosen all the screws on the spring housing at least one half turn first, then remove all the spring housing screws.
3. Remove the spring housing and springs.
4. Remove the u-cup from the diaphragm support. Remove the diaphragms. Clean any chips or debris with a soft rag.

REPLACE SEALS & REASSEMBLE

1. Lubricate the u-cup and inside of the spring housing with appropriate lubricant. Plast-O-Matic recommends silicone.
2. Install the u-cup on the diaphragm support with the open end of the u-cup pointing down towards the largest diameter on the diaphragm support.
3. Inspect the seal lip on the body where the diaphragms sit. Any dents or scratches will cause the valve to leak.
4. Place the ptfe diaphragm in the nest in the body where it belongs. Place the FKM diaphragm on top of the ptfe diaphragm.
5. Carefully place the diaphragm support, centered on top of the diaphragms. Place the springs inside the diaphragm support. Check that the diaphragms are centered and have not been jarred off center.
6. Line up the spring housing so the Fail-Dry® port on the spring housing is on the downstream side of the body. Place the spring housing over the springs and diaphragm support.
7. Screw in the four shortest hold down screws above the ports but do not fully tighten -- just "snug" to hold the assembly from shifting while the other screws are being installed.
8. Put the longest hold down screws through the assembly and thread the nuts on the ends. Before tightening any screws, check that the diaphragms are centered and not sticking out on any side. On the 4" RVDT, the diaphragms can be seen on the sides under the spring housing.
9. Tighten the long screws with the nuts first. Torque the nuts in a star pattern (the nut farthest from the last one torqued). Torque the screws in increments snugging up the shorter screws that thread into the plastic as you go. On the long screws, torque is measured on the nut, not the head.
10. Torque all the spring housing hold down screws to 60 inch-pounds, doing the shortest screws that thread into the plastic last. Always tighten in a star pattern and do not completely tighten any screw while the other screws are loose.



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