Pinch Valve Replacement (Output)

**TDF**

This Service Procedure assists the user and with replacement of the TDF29 & TDF29.1, IDF/SDF Pinch Valve & Waste Pinch Valve Assemblies

1. Locate the Output Pinch Valve that is in need of replacement. Figure 1 shows the TDF29.1 Waste Pinch Valve. Figure 2 shows the TDF29 IDF/SDF Pinch valve for tubes 4-6, while Figure 3 shows the TDF29 IDF/SDF Pinch Valve for tubes 1-3. Note the red tube numbering on each figure. Identify the tubes by marking them if necessary so that upon reassembly the tubes are reconnected correctly. For the Output Pinch Valve Assembly being replaced, disconnect the six silicone tubes from the barbed fittings on the Pinch Valve bracket (marked by the red arrow). Disconnect the six silicone tubes from the barbed fittings on the Gusset Panel (marked by the blue arrow). Remove and discard the 3¼” Pinch Valve Tubes.

![Figure 1](image1.jpg)  ![Figure 2](image2.jpg)  ![Figure 3](image3.jpg)

2. Disconnect the yellow air line(s) from the rear of the air piston(s) by pressing in on the orange connector while simultaneously pulling out the yellow air line. Note that the Waste Pinch Valve has only one air line that needs disconnecting and the others have two air lines each. Figures 4-6 show the location of each air line.

![Figure 4](image4.jpg)  ![Figure 5](image5.jpg)  ![Figure 6](image6.jpg)
3. Using a \( \frac{3}{8} \)" wrench or socket, remove the two nuts securing the Pinch Valve Assembly to the Gusset Panel. See Figure 7. Remove the Output Pinch Valve Assembly and replace with the new one. Secure it with the two nuts to the Gusset Panel. Install six new 3¼” length 8229 Silicone Tubes in the Output Pinch Valve—refer to Service Procedure, SP-207, steps 1-9.

Figure 7

4. Refer again to Figures 1-3. Identify the six tubes removed in step 1 which are pointed out by the red arrows. **IMPORTANT:** Trim \( \frac{1}{4} \)" off of the end of each of the tubes that connect to the barbs on the outside of the Output Pinch Valve bracket. This is important because by removing the tube from the barb, the barb will often cut into the tube and weaken it. Trimming this off insures against a possible tubing tear or rupture. After trimming each tube end reconnect the tube to the correct barb location on the bracket.

5. Reconnect the yellow air lines as shown in Figure 4-6. The TDF Analyzer is now ready to return to service.