2. FINDINGS OF PART NUMBER 2524644 SERIAL NUMBER 324947.

NOTE:

All observations reported herein are based on visual examinations with the unaided eye, unless otherwise noted.

2.1. RECEIVING INSPECTION

2.1.1. All Lock wire and seals were in place.
2.1.2. The PLA Shaft was bent but rotated normally.
2.1.3. The Drive Shaft rotated normally.
2.1.4. The Cut-off Lever was bent inboard to the FCU.
2.1.5. PR, PG, PY and PC fittings were found to be unobstructed.

2.2. FUNCTIONAL TESTING

2.2.1. Due to the condition of the unit, Run-As-Received testing was conducted in accordance with Service Test Specification No. 12862.
2.2.2. Prior to RAR testing a low pressure check of the PC system was conducted. See attachment 1 Low Pressure Leak Check data sheet for results.
2.2.3. An external leak check was conducted on the PX Cover, PY fitting and PC fitting and no leakage was found at the 25 and 50 PC (psia) input pressure levels.
2.2.4. Test point 3.010 was recorded as 2.5 Pc-Py inches HG. The required limits are 1.3 to 1.6 inches HG. This test point is affected by the start derichment field adjustment and only affects the engine starting process.
2.2.5. Test point 3.020 was recorded as 2.0 Pc-Py inches HG. The required limits are 0.0 to 0.7 inches HG. This test point is affected by the start derichment field adjustment and only affects the engine starting process.
2.2.6. Test point 5.010 was recorded as 23.0 PPH. The required values are 24.0 to 28.0 PPH. This is not considered a significant difference.
2.2.7. Test point 7.020 was recorded as 278.1 PPH. The required values are 279 to 286 PPH. This is not considered a significant difference.
2.2.8. Test point 10.030. The test point asks for the difference from test point 10.010. The measured value at test point 10.010 was 57 PPH. At test point 10.030, the measured value was 58 PPH, which is the value entered on the sheet at that point. The technician should have entered instead the difference, which was +1.0 PPH.

2.2.9. Test point 12.020 was recorded as 33 PPH. The required values are 36 to 48 PPH. This test point can be affected by the start derichment field adjustment. This is not considered a significant difference.

2.2.10. Test point 12.050. The test point asks for the difference from test point 12.030. The measured value at test point 12.030 was 54 PPH. At test point 12.050, the measured value was 53 PPH, which is the value entered on the sheet at that point. The technician should have entered instead the difference, which was a negative 1.0 PPH.

2.2.11. Test point 13.020. The test point asks for the difference from test point 13.010. The measured value at test point 13.010 was 55 PPH. At test point 13.020, the measured value was 62 PPH, which is the value entered on the sheet at that point. The technician should have entered instead the difference, which was +7.0 PPH.

2.2.12. Test point 13.040. The test point asks for the difference from test point 13.030. The measured value at test point 13.030 was 54 PPH. At test point 13.040, the measured value was 51 PPH, which is the value entered on the sheet at that point. I should have entered instead the difference, which was negative 3.0 PPH.

2.3. DISASSEMBLY INSPECTION

2.3.1. The PR/PG Regulator diaphragm was found to be normal.

2.3.2. The PR/PG Valve translated normally in the reset body bore.

2.3.3. The Pressure Relief Valve was found to translate normally.

2.3.4. The Bypass Valve was found to translate normally in the Bypass Sleeve.

2.3.5. The Bypass Valve Sleeve exterior color was a non-standard color. The lands of the sleeve were normal steel color however, the barrel sections of the sleeve were black in color indicating a possible coating was in place.

2.3.6. No anomalies were found with the Metering Valve and Sleeve Assembly.

2.3.7. No anomalies were found with the Ratio Lever Arms.

2.3.8. The Torque Tube Assembly had no anomalies.

2.3.9. The Acceleration Bellows length was checked and found to be 1.012 and deemed to be acceptable. Manufacturer recorded length was 1.009.

2.3.10. No anomalies were found with the Cut-off Valve Assembly.

2.3.11. The PR/PG Reset Rod was found to translate normally.

2.3.12. The PX and PY bleeds were to found to be clear.

2.3.13. The Main PLA Cam Follower Lever Assembly was found normal.

2.3.14. The Spool Bearing and Cap were found to be in good condition. Based on the appearance and finish of the spool bearing cap it is not a genuine Honeywell part and is considered a PMA part. Reference figure 26.

2.3.15. The Drive Shaft post had a small sliver of Teflon material found at the base of the post. The Teflon material was from the Teflon that is installed on the post of the Drive Shaft. Teflon slivers are typical of units with operating time.

2.3.16. The PX and PY orifices were found to be normal.

2.3.17. The PX and PY lever pads had uniform circular contact witness marks from the corresponding orifices.

2.3.18. The Drive Shaft Assembly flyweights pivoted normally.

2.3.19. The Drive Shaft splines were found in good condition.

2.3.20. The Drive Shaft end play was normal.

2.3.21. The Drive Bearings were found to be in good condition.

3. CONCLUSIONS

Discounting impact damage, no condition was found that would prevent normal operation.

4. LIST OF PHOTOGRAPHS

Figure 1 As Received

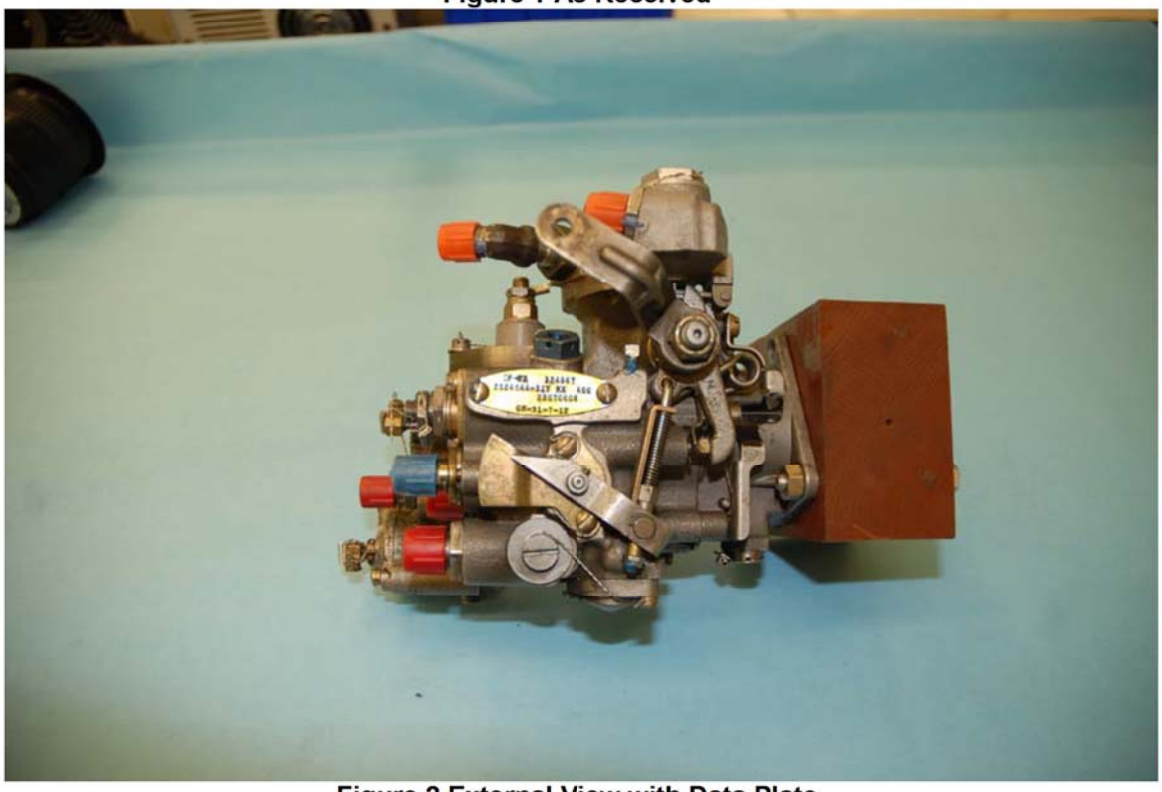

Figure 2 External View with Data Plate

Figure 3 External View Bottom

Figure 4 External View Left Side

Figure 5 External View Top Side

Figure 6 Data Plate

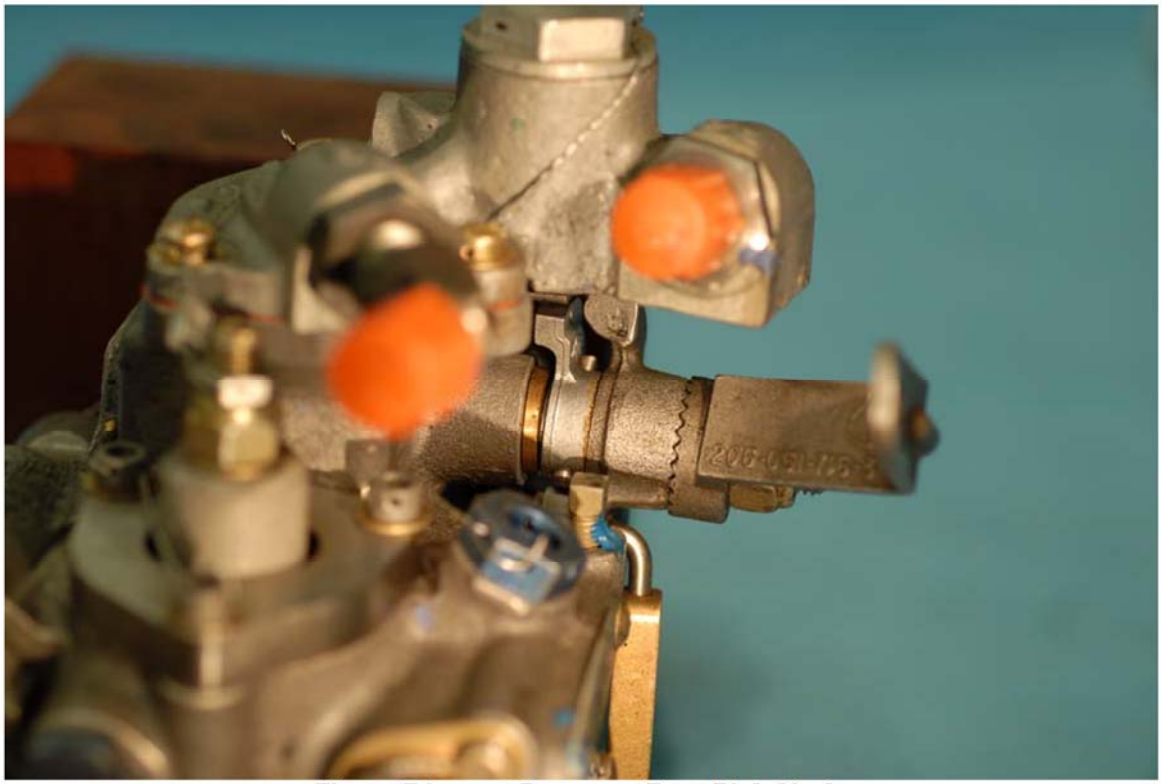

Figure 7 Impact Damage - Bent PLA Shaft

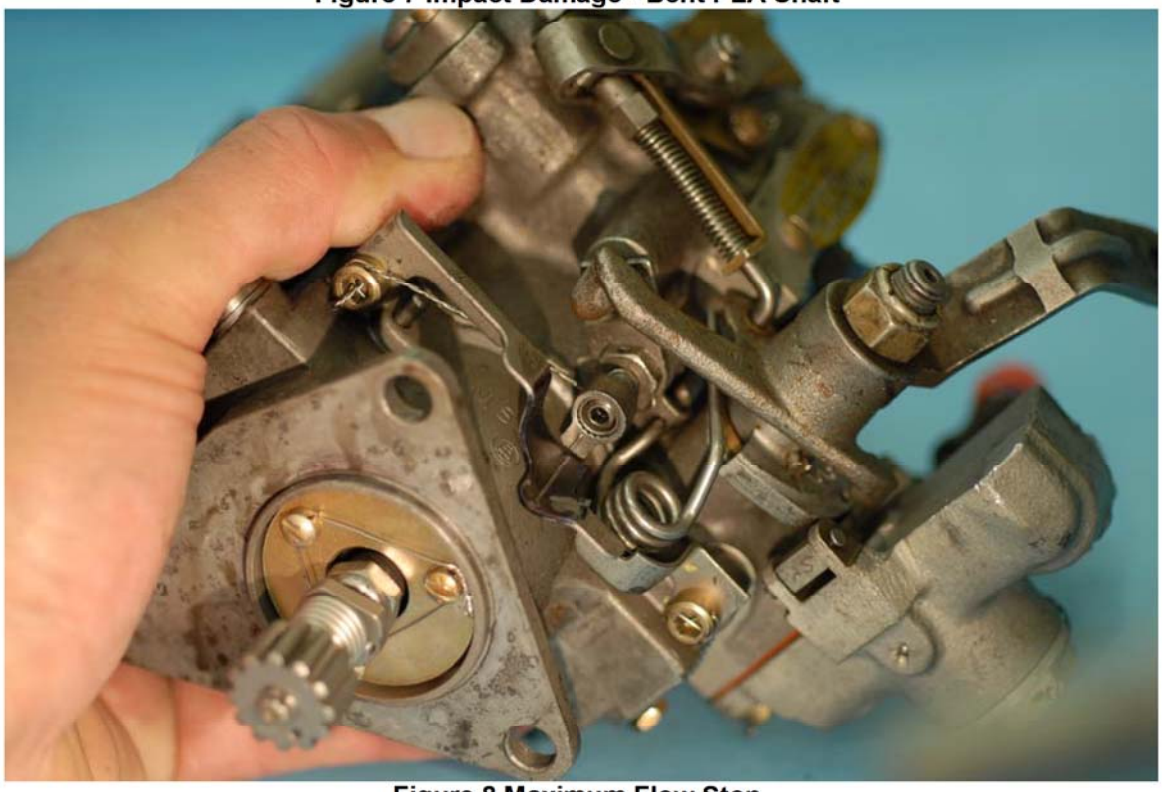

Figure 8 Maximum Flow Stop

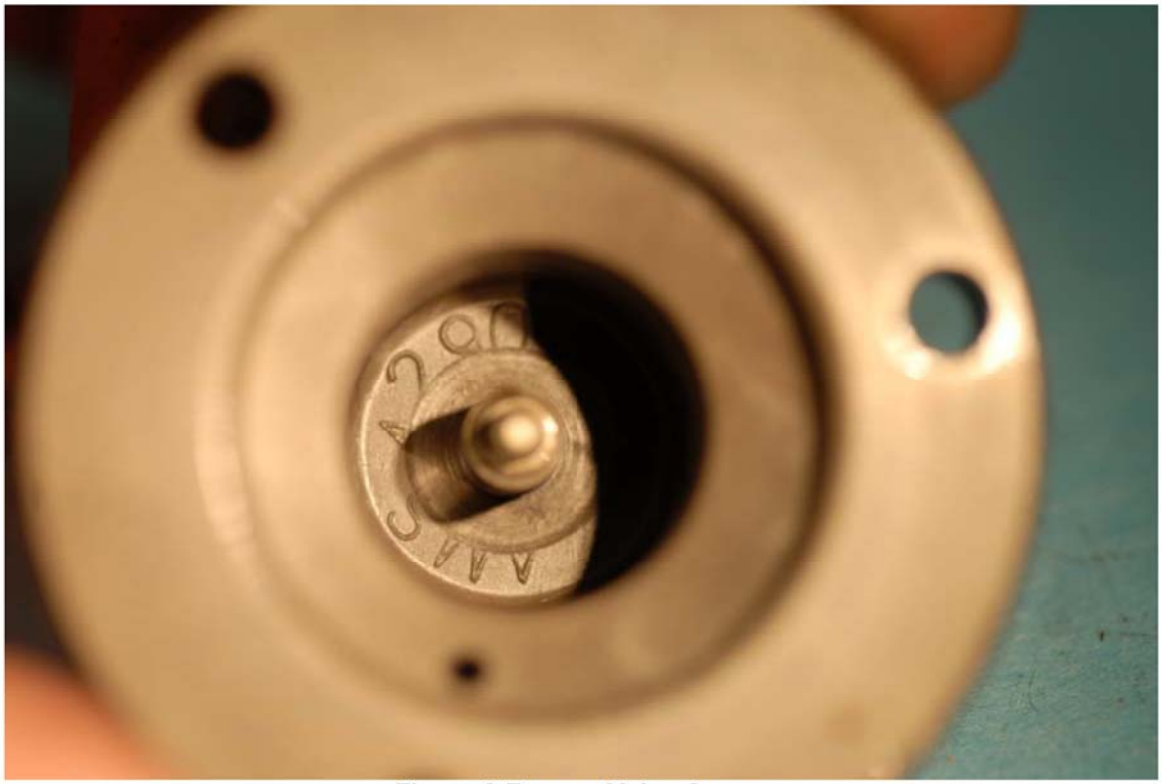

Figure 9 Bypass Valve Cover

Figure 10 Pc Inlet Fitting

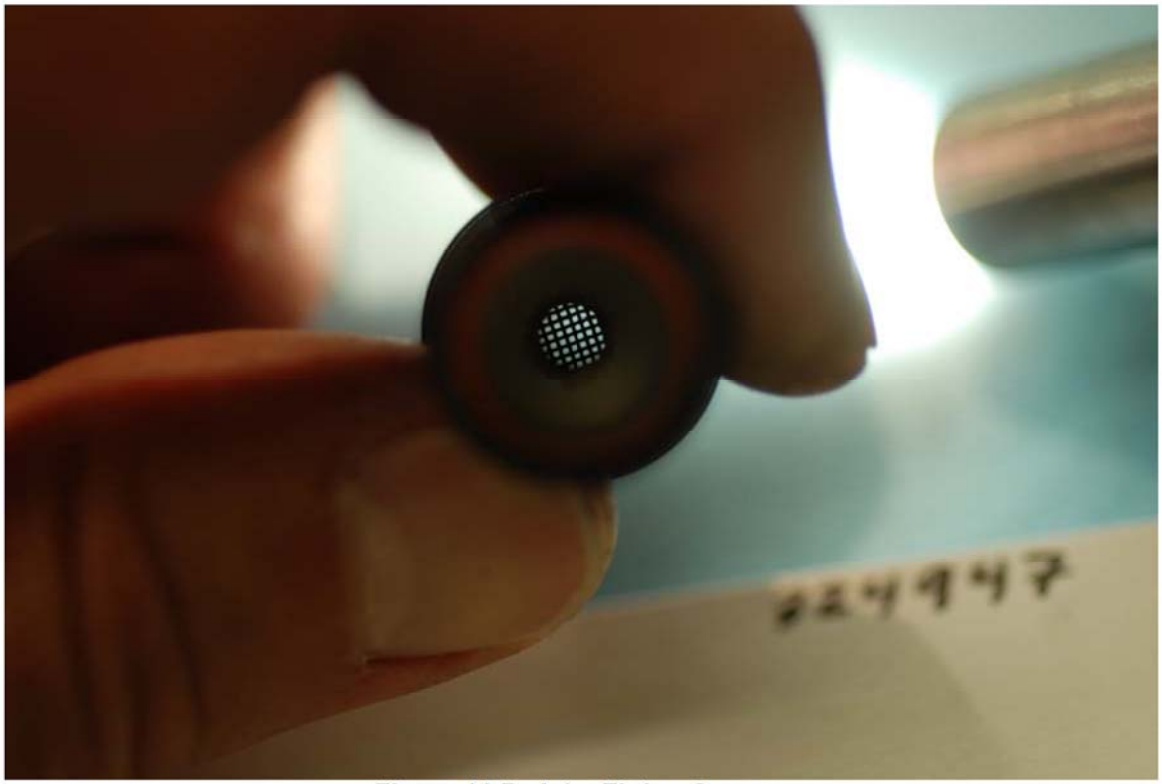

Figure 11 Pc Inlet Fitting Screen

Figure 12 Reset Diaphragm

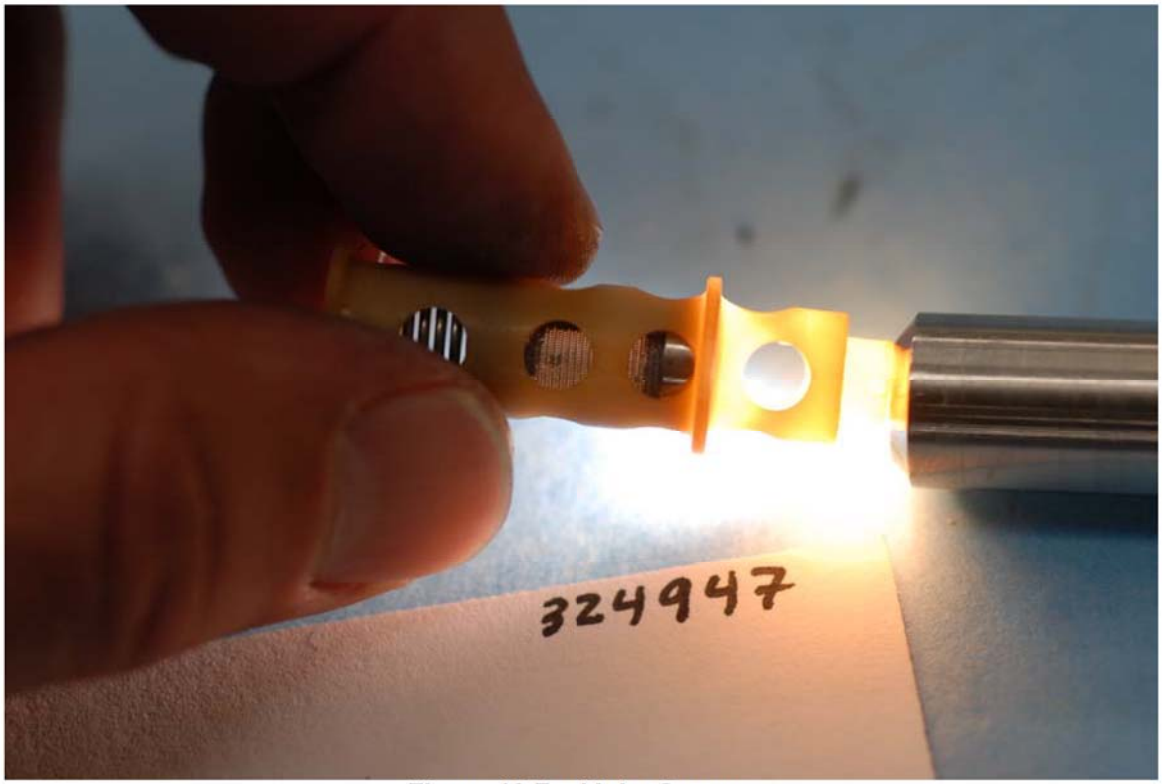

Figure 13 Fuel Inlet Screen

Figure 14 Bypass Valve

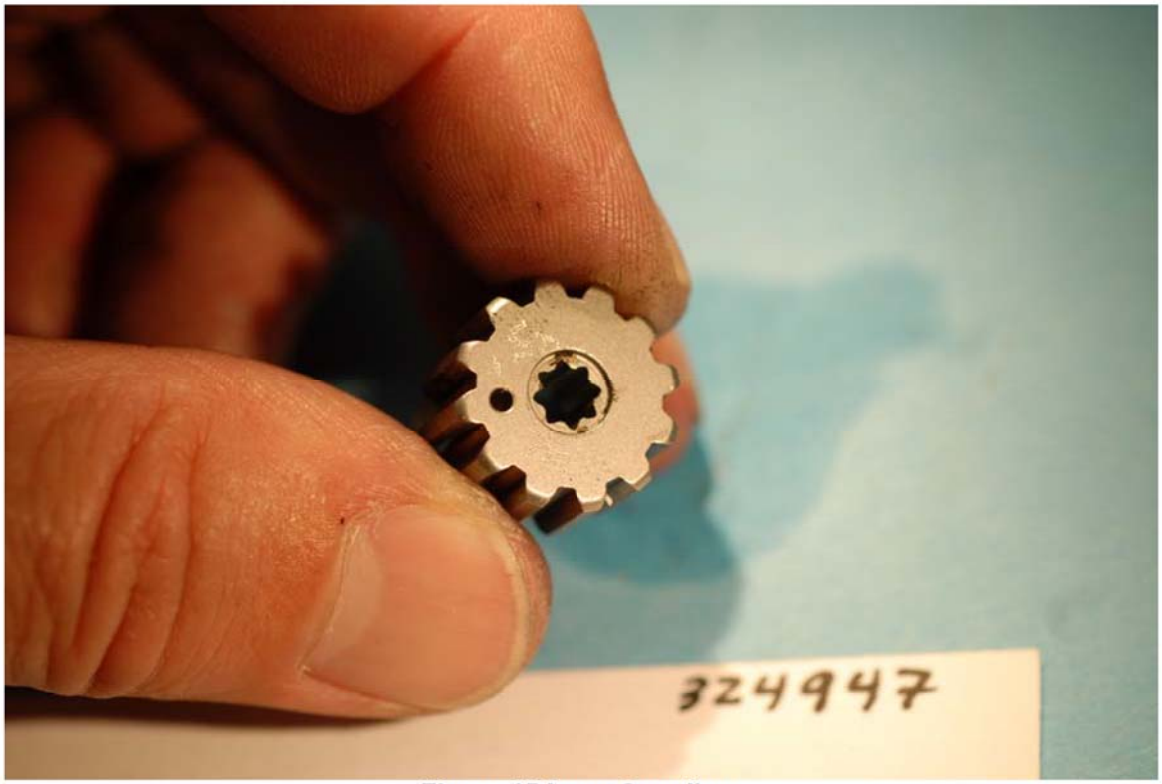

Figure 15 Input Coupling

Figure 16 Metering Valve

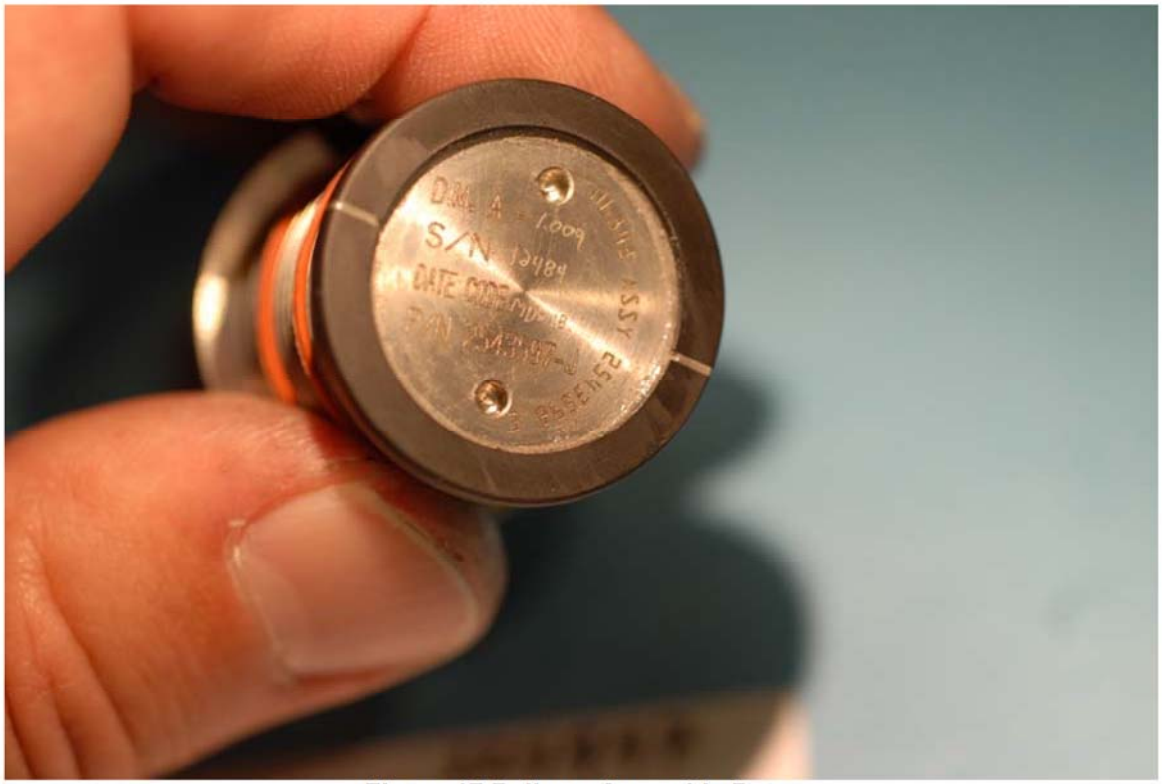

Figure 17 Bellows Assembly Data

Figure 18 Bellows Assembly

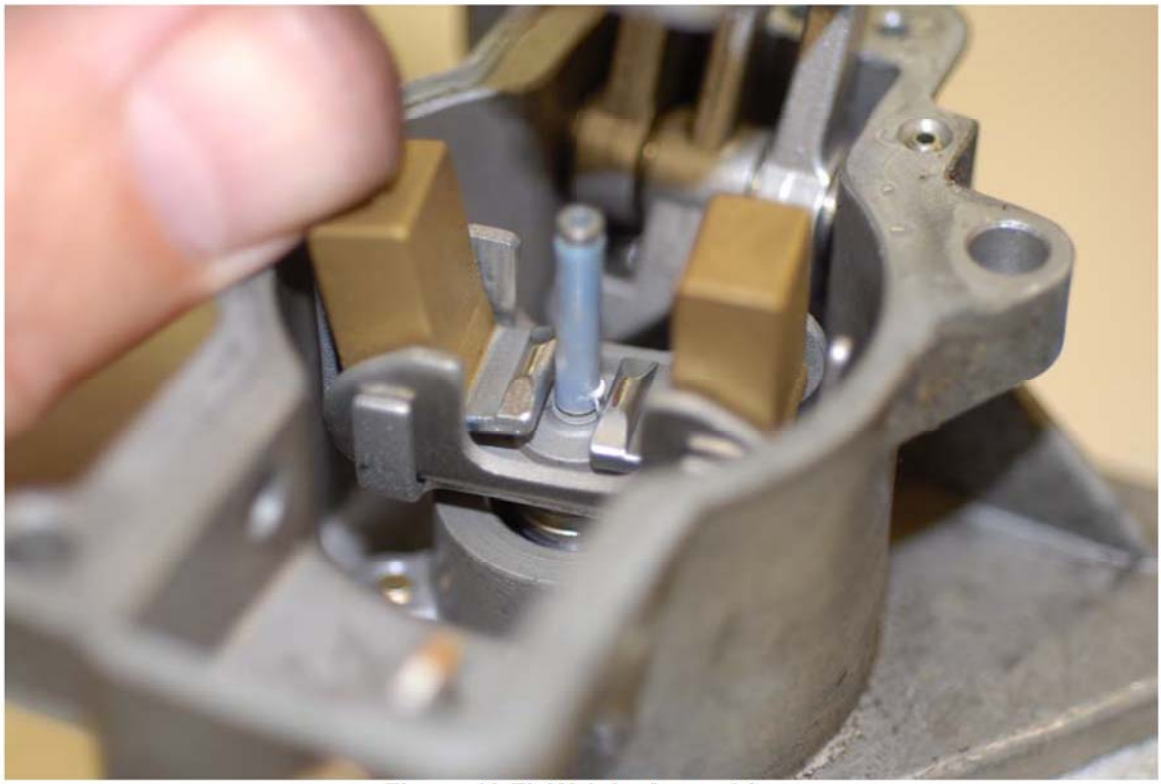

Figure 19 FlyWeight Assembly

Figure 20 Spool Bearing Cap

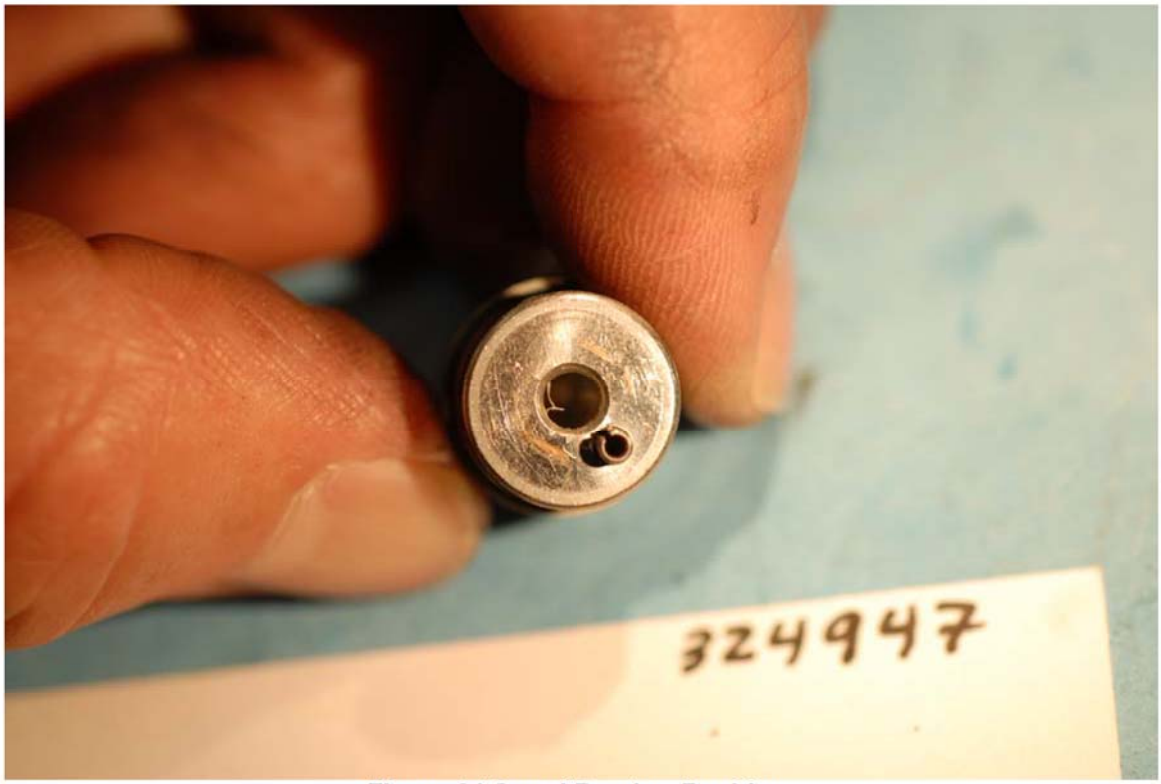

Figure 21 Spool Bearing Bushing

Figure 22 Px Governor Lever

Figure 23 Py Speed Bias Lever

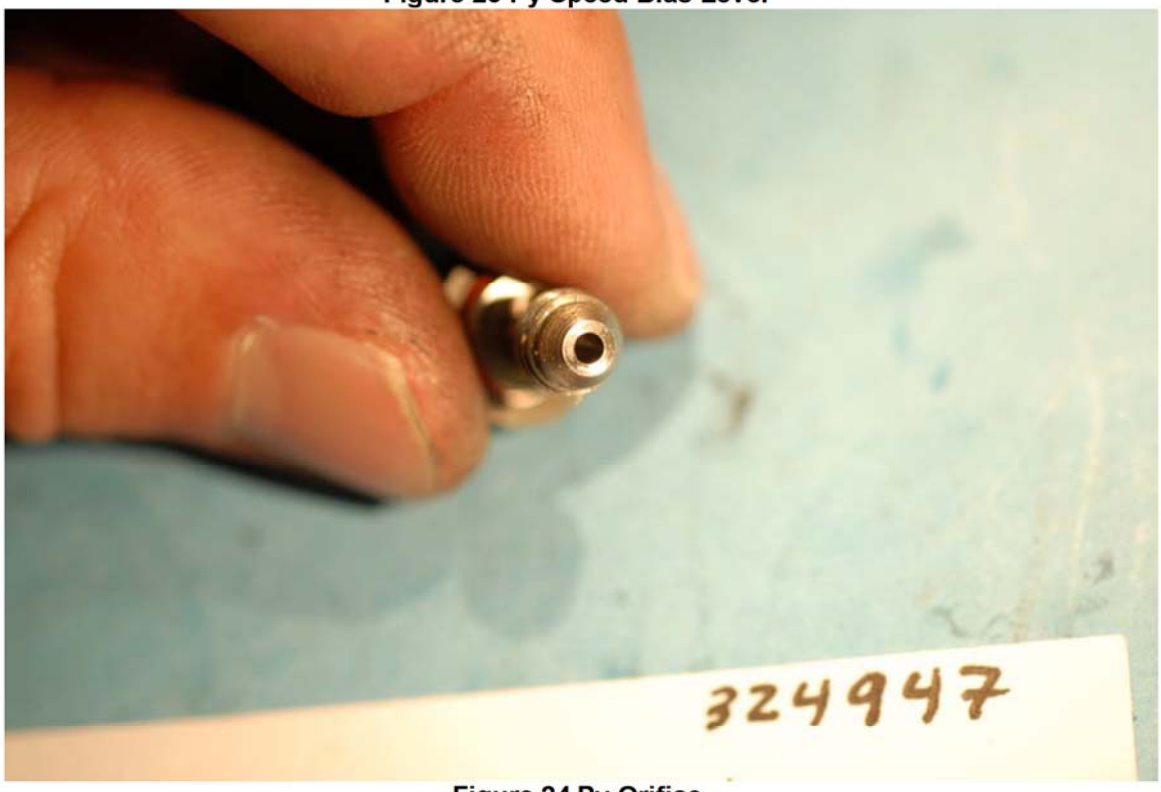

Figure 24 Py Orifice

Figure 25 Px Orifice

Figure 26 PMA Spool Bearing Cap