Gyroscope High Voltage to Ground Plane Test P0305 Rev. -

Purpose:

To test coated electrodes and ground plane for no continuity

Materials and Supplies:

- High Voltage power supply, calibrated to manufacturer's specifications.
- Keithly Model 617 Electrometer, calibrated to manufacturer's specifications.
- High vacuum test facility conforming to Stanford / NASA guidelines
- Approved qualified personnel performing test battery
- Traveler notebook for Gyro currently in Test.
- Record data in GP-B Database in Gyro Coating and Testing Traveler

Process:

Test Set-Up:

Refer to High Voltage to Ground Plane Set-Up diagram on page 2.

For each electrode:

Ramp power supply to 1500 VDC in 100 V increments with a delay of ~ 30 seconds between voltage increases. Maintain 1500 VDC for > 60 minutes. After
minutes, increase the DC voltage to 2000 VDC in 100 V increments. Hold the voltage at 2000 V for ~ 5 minutes, then ramp voltage down to 0 volts. Current should be < 20pA at 2000VDC for each electrode. Record voltage and current in P0305 Table 1 for each electrode.

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High Voltage to Ground Plane Set-Up

Gyroscope Assembly Serial No.

Electrode	Voltage	Current	High Voltage Duration