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Gravity Probe B Relativity Mission

Installation of the Gyroscope Support Hardware for the Gyroscope Commissioning Probe

GP-B P0277 Rev -A

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Installation of the Gyroscope Support Hardware for the Gyroscope Commissioning Probe

This procedure is to be performed only by persons listed as certified operators.

Equipment: Use non-magnetic tools.

Cleanliness precautions: This procedure is to be performed under class 10 clean room conditions.

ESD precautions: Follow accepted ESD precautions.

Preparation: Obtain the following items from the dry box in room 132:

- (9) Bellville washers
- (3) 2 1/2 inches titanium bolts with #8-32 thread
- (3) #8-32 nylon nuts
- (3) Lexan spacers
- (1) SpinUp, Exhaust nozzles assembled on titanium support plate
- (1) Lexan support Tee

Procedure: I. Remove gyroscope from stainless steel pot.

- II. Place (1) Bellville washer on each of the (3) titanium bolts with the concave side toward the head of the bolt.
- III. Insert the (3) titanium bolts through the holes of the readout side of the gyroscope.
- IV. Slide the support legs onto the bolts coming out the spinup side of the gyroscope. Take (2) Bellville washers and with the concave side facing each other slide the two over each of the three bolts. Now place the nozzle assembly over the Bellville washers.
- V. Place a lexan spacer over each of the bolts.
- VI. Thread the nylon nut finger tight onto each of the bolts so that the two Bellville washers are compressed slightly.
- VII. Place assembly in delrin holder and put back in the stainless steel pot. Put poly bag around pot for transportation.