

W. W. Hansen Experimental Physics Laboratory

STANFORD UNIVERSITY STANFORD, CALIFORNIA 94305 - 4085

Gravity Probe B Relativity Mission

# PROCEDURE FOR MODIFICATION OF CONNECTOR

## GP-B P0414 Rev. A

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Prepared by P. Ehrensberger

Approved by: Barry Muhlfelder Manager, SQUID Development

Approved by: B. Taller Quality Assurance

Approved by: S. Buchmann (Acting Hardware Mgr.) Date

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#### **Overview:**

This procedure covers a modification to the connector used in assembly 25671-201 and 202. Both ears of the connector are tapped #4-40.

#### Materials:

Non-magnetic tap #4-40, ethlalcohol and a non-magnetic #4-40 screw.

#### **Qualified Operators:**

Marge Bogen or Howard Demroff

### **Procedure for Adding Threads to Connector:**

Record connector lot number or PO number\_\_\_\_\_ Record number of connectors to process\_\_\_\_\_\_

- 1. Use a miniature drill press, model 101T serial 51422H.
- 2. Insert a #4-40 non-magnetic tap in the drill press and tighten down.
- 3. Use a vice to hole the connector in place.
- 4. Place the vice under the tap and tap both through holes with the #4-40 tap. Use ethyl alcohol (200 Proof) while taping the holes. Use your fingers to turn the drill. Next chamfer the tapped hole to leave a clean edge.
- 5. Remove residual material with Ethyl Alcohol and run a non-magnetic #4-40 screw through each hole to check threads.
- 6. Use clean room gloves and clean the connector with Ethyl Alcohol use Q-tips to clean the holes, wipe the connector with ethyl alcohol and ultrasonic for 10 minutes.
- 7. Package connector for magnetic inspection and cleaning.

Operator \_\_\_\_\_ Date \_\_\_\_\_