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Gravity Probe B Program  
Relativity Mission

## LEAD GASKET PROCEDURE

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# Lead Gasket Fabrication Procedure (part #25448-101)

## Document Revision Record

Rev	Date	ECO#	Pages Affected	Description
-	1/15/98	NA	NA	New procedure

## Authorized Personnel

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## Materials & Supplies

1. 0.0025" thick lead foil (99.93% Pb, 0.07% Sn)
2. 5/8" OD brass rolling pin, 8" long
3. Aluminum fixture part A
4. Aluminum fixture part B
5. Aluminum fixture part C
6. Surgical blade scalpels (#371610)
7. Template (.114" thick polystyrene sheet)
8. Isopropyl alcohol #2
9. Baxter latex glove #8857
10. Clean room wipes Durx #670

## Procedure

### 1. Cut Lead Foil

- 1.1 Cut a piece of lead foil about 9"x7".
- 1.2 Use the brass rolling pin to smooth out the foil on both sides.
- 1.3 Wear Baxter latex gloves (#8857) from this point on in the fabrication.
- 1.4 Wipe both sides of the foil with alcohol using clean room wipes Durx #670
- 1.5 Wipe the template with alcohol using clean room wipes. Use the template to cut a piece of lead foil to 4.5" x 1.125".
- 1.6 Lay the template on the foil. Cut around the template using a scalpel (Surgical blade #371610).

### 2. Form Lead Gasket

- 2.1 Wipe out the fixture (part A, B and C) and the scalpels with alcohol using clean room wipes.
- 2.2 Lay the cut foil on top of the part A fixture.
- 2.3 Use fingers to smooth out the foil on the fixture.
- 2.4 Set the part B fixture on top of the foil and push down until it is in place with part A fixture.
- 2.5 Remove part B fixture. Place part C fixture on top of part A. Push it down tightly.
- 2.6 Use a scalpel to cut around the fixture to remove any extra foil hanging over the sides.
- 2.7 Remove part C fixture.
- 2.8 Remove lead foil from part A fixture.
- 2.9 Measure the dimensions of the lead foil. Verify dimensions comply with drawing #25448-101.
- 2.10 Bag and label the parts.