BSC ISI Flexure Attachment Design

Kick-off Meeting

Ken Mason

Nick Hunter-Jones

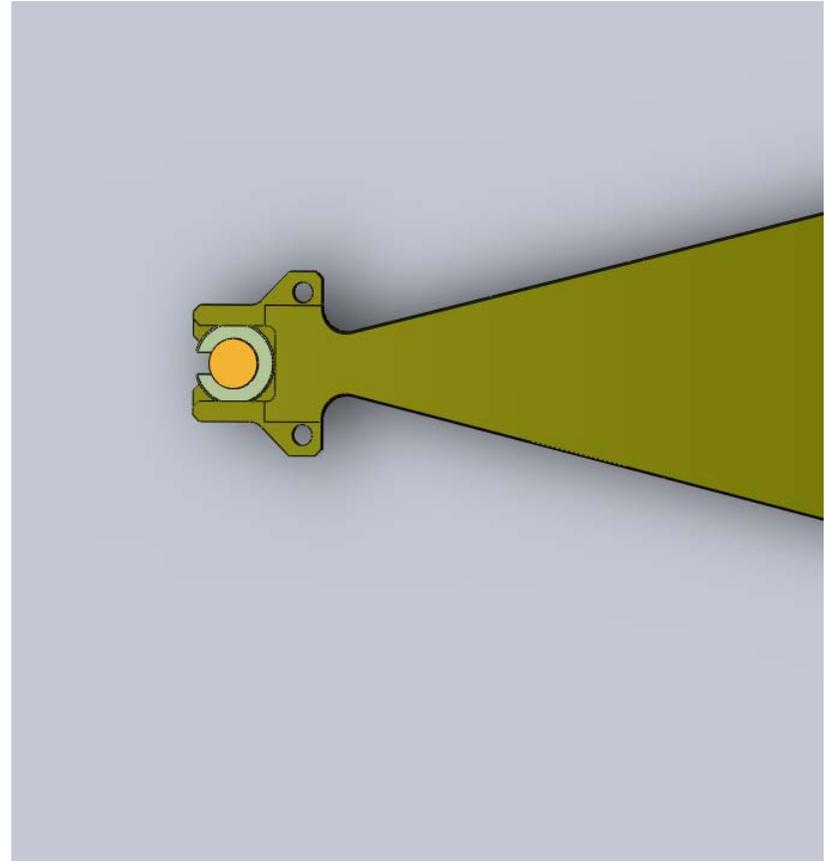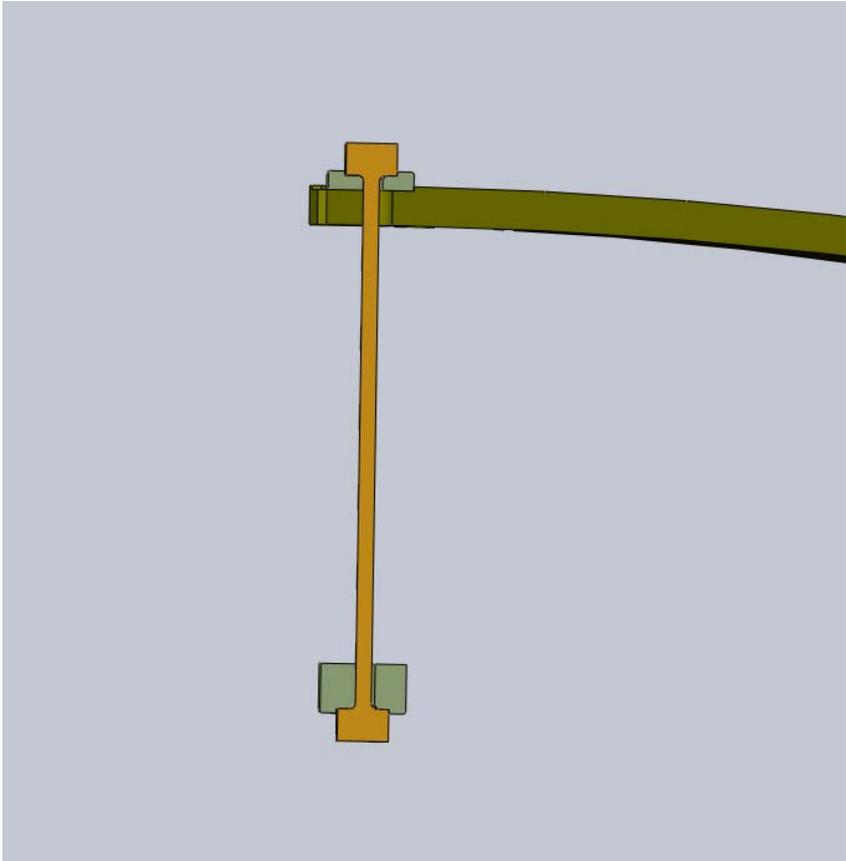03 APR 2009

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BSC ISI Flexure Attachment Design

- Problems with current design

   30   The flexure rod with the shim attached should sit more securely in the spring cut out; the design should avoid mis-placement during installation and shouldn't allow any movement later on-- more than friction should hold these shims in place against the spring

   17 Tooling to hold this rod perpendicular to the top of the bracket to make sure flexure rod is straight as the spring is released onto the flexure rod would be helpful in aligning the flesure rod-- currently using parallels and trying to eyeball whether the flexure rod is straight up and down
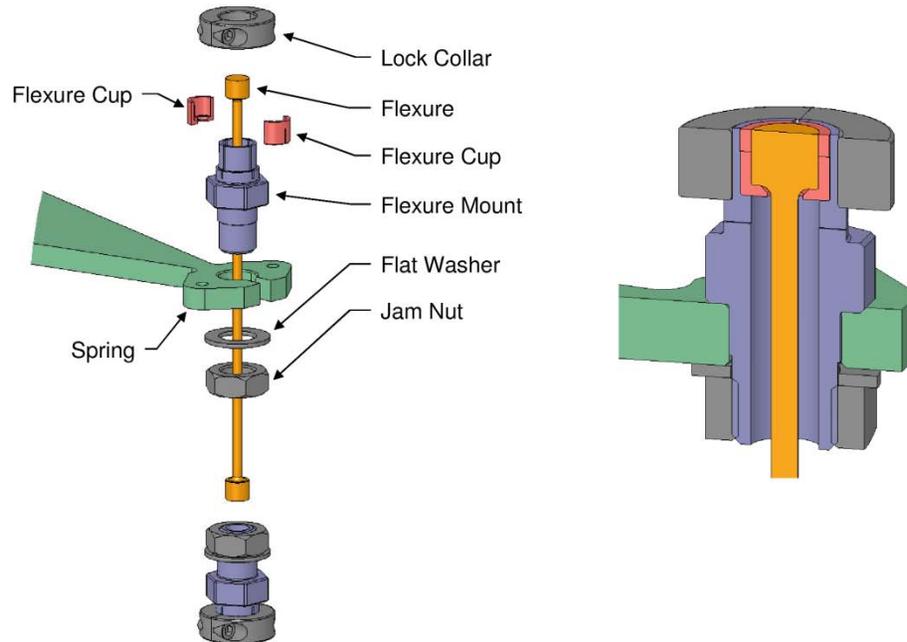
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Current Design

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HAM ISI Design

High Precision Devices, Inc.

Flexure Termination

- Lock Collar
- Flexure
- Flexure Cup
- Flexure Mount
- Flat Washer
- Jam Nut
- Flexure Cup
- Spring
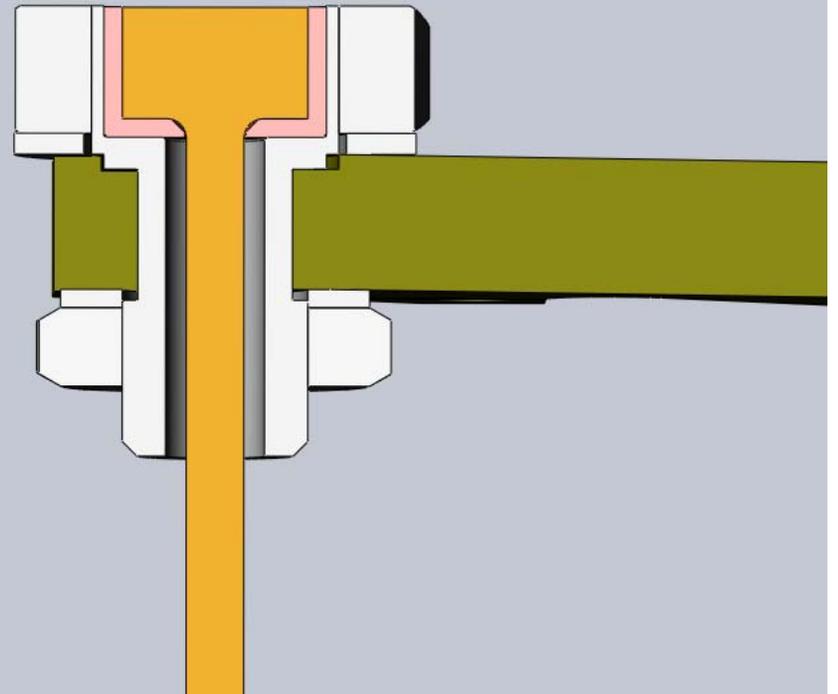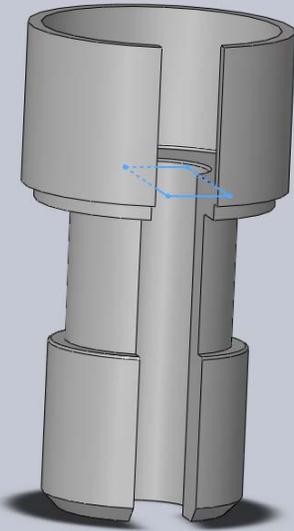
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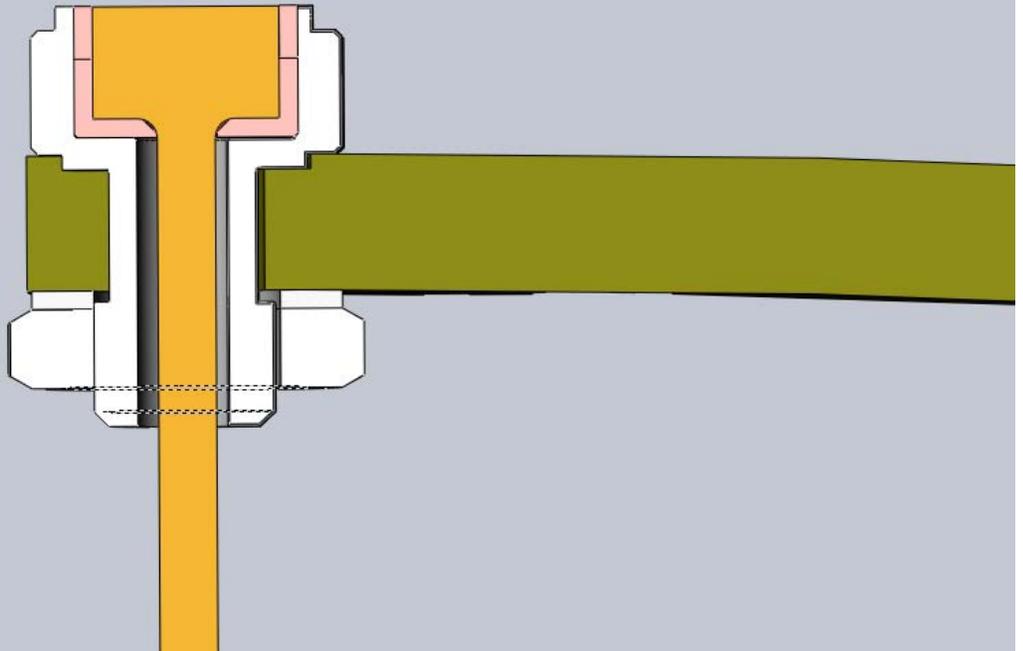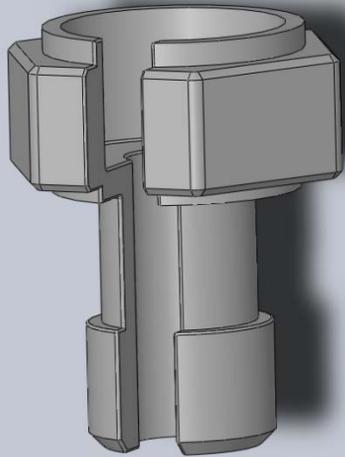
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Goals for Redesign

- Goals

1. Use existing flexure and maintain its location
2. Add round shims or ground spacers to move ZMP?
3. Positive locking
4. Tooling to check perpendicularity of flexure rod

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Nut on Top and Bottom

Solid Flex Mount / Nut on Bottom

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