*LIGO Laboratory / LIGO Scientific Collaboration*

 *LIGO* 23 July 2010

Addendum to aLIGO HAM ISI Assembly Procedure

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LIGO Scientific Collaboration

This is an internal working note

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# Adding Shipping Braces

Four Shipping Braces (D071490) should be installed in the HAM ISI, before the unit is removed from its assembly/test fixture. This document provides visual instructions on how to do this.

# CAD Snapshots



Remove one screw from Small Wiring Breadboards, and twist them out of the way.



On this side, you can install the full Shipping Brace, as shown here.



On the other end of Stage 0, you have to modify the Brace Assembly, to avoid the Vert L4-C pins. This involves shifting one of the D071301 pieces over 1 spot.



Lock Stage 1 **BEFORE** fastening the Shipping Braces. This "centers" the stage.



Release the Lockers **BEFORE** the Shipping Braces' mounting screws are torqued. Check that the Sleeve can move in/out freely.

**IT'S CRITICAL THAT THE LOCKERS ARE NOT FORCED TO THEIR LIMITS BY THE SHIPPING BRACES.**

Use dial indicators to check motion of Stage 1, while tightening all 4 Shipping Braces.