

HAZARDOUS

STEREO Boom EMC Deploy GSE Setup Procedure - **HAZARDOUS**

Document # IMP-638-DOC

Revision: A nr

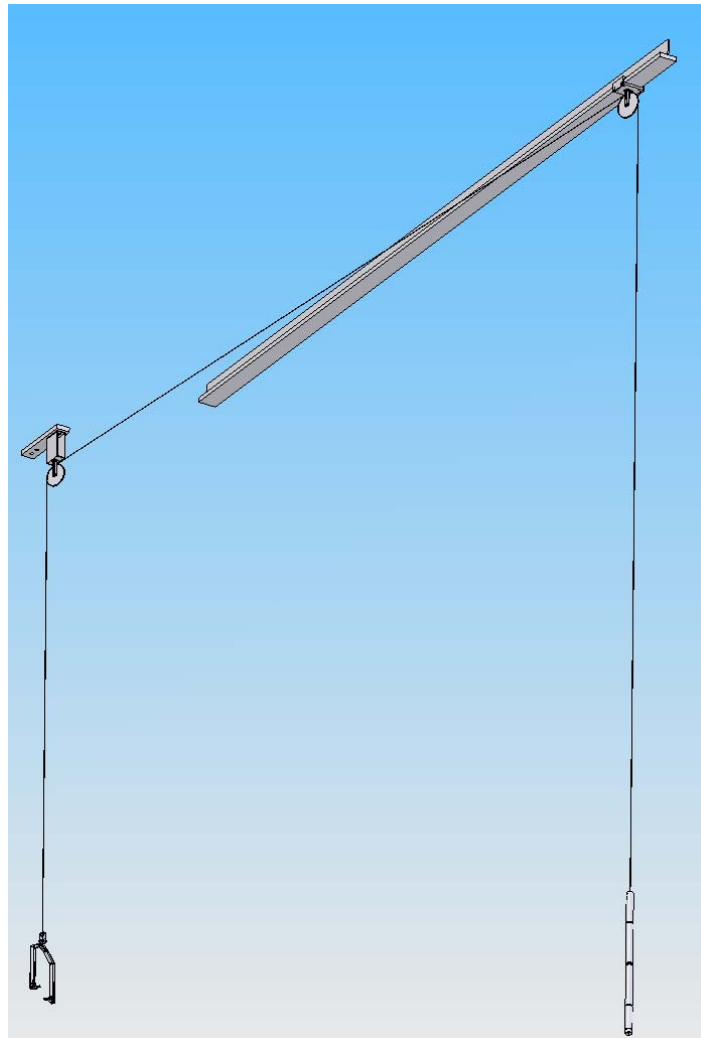
Written By: Jeremy McCauley

Approved By: Dave Curtis

Date: August 18, 2005

Setup of the STEREO IMPACT Boom EMC Deploy GSE requires suspending weights above the ground. Due caution should be taken to assure there are sufficient “keep out” zones below the counterweight and other equipment.

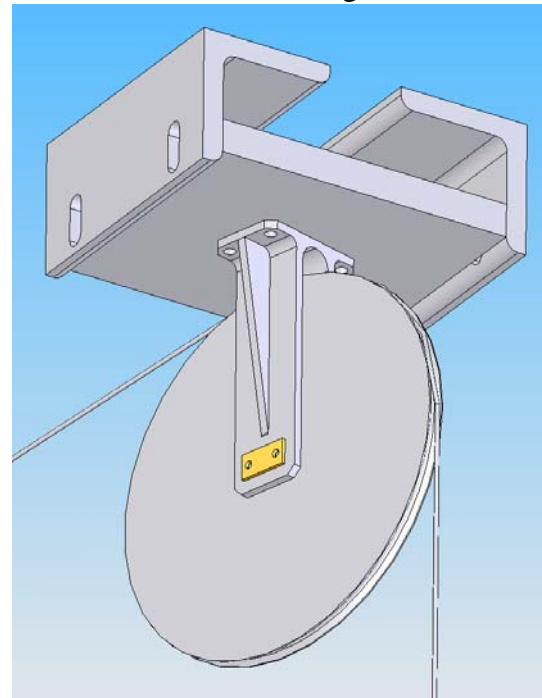
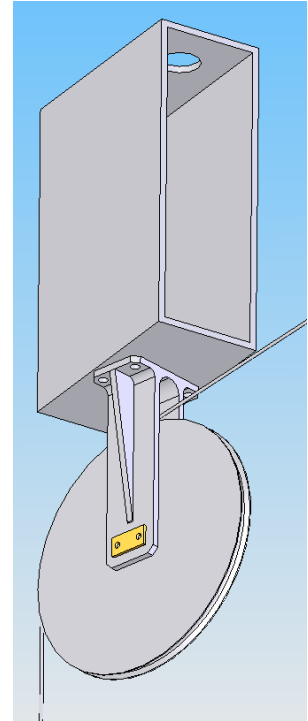
A minimum of two (2) people are necessary to perform this operation.



STEREO BOOM EMC Deploy GSE Setup Procedure

IMP-638-DOC Rev. A

1. Locate the crane trolley in the approximate location necessary for the EMC deployment. See APL Procedure APL-PROC-TBD for the desired location.
2. Lay out the EMC Deploy GSE assembly on the floor.
3. Check the wire rope for kinks, twists and tangles. If any material damage exists, replace the wire rope.
4. Check the wire rope crimps for damage. If any material damage exists, replace the wire rope crimps.
5. Check the pulleys for damage. If any material damage exists, review the possible performance problems with the Cognizant Engineer (Cog-E).
6. Lift the EMC Deploy GSE assembly into close proximity to the crane trolley using available man lift.
 - a. Be aware during lifting of the location of the wire rope – it should be riding in the grooves on the pulleys.
 - b. Do not allow the counterweight or Spring Pin Coupler to rest against the pulleys. Pulley grooves are protected by the depth of the groove. However, this can cause damage that would be an issue if the pulley were used off axis.
7. Attach the first pulley and support assembly (the one furthest from the counterweight stack, shown at top right) through the two holes on the crane furthest from the EMC chamber with the two (2) 5/8-18 cap screws and nuts included with the assembly. Hand tighten with wrenches.
8. Attach the second pulley and support assembly (the one closest to the counterweight stack, shown at bottom right).
 - a. Loosen and remove two (2) 1/4-20 screws and remove one EMC Deploy Adapter 3 (GSE-637).
 - b. Loosen the remaining two (2) 1/4-20 screws.
 - c. Place the EMC Deploy Adapter 2 (GSE-636) plate against the bottom of the crane “T” section approximately 13 feet from the first pulley and slide until the attached EMC Deploy Adapter 3 slides over one side of the “T” section.
 - d. Replace the EMC Deploy Adapter 3 and bolts removed in step 8a.
 - e. Squeeze the EMC Deploy Adapter 2 and one EMC Deploy Adapter 3 parts together and hand tighten the two (2) 1/4-20 bolts that clamp those parts together around the “T” section.
 - f. Squeeze the EMC Deploy Adapter 2 and the other EMC Deploy Adapter 3 parts together and hand tighten the two (2) 1/4-20 bolts that clamp those parts together around the “T” section.



STEREO BOOM EMC Deploy GSE Setup Procedure

IMP-638-DOC Rev. A

9. Attach a tether to the Spring Insertion Pin (position shown at right).
10. Lower self to the ground while holding tether.
11. Tie the tether in a convenient place around the room out of the way of activity or personnel for use later retrieving the Spring Insertion Pin.
12. Position the STEREO Spacecraft for the EMC deployment.
13. Align the crane trolley so that the path from the center of the top of the SWEA to the tangent wire at the first pulley is vertical.

Note: It is recommended that once the spacecraft and crane trolley are in final position that the position of the pulley closest to the Counterweight be verified at a distance of approximately 13 feet from the other pulley.

Spring Insertion Pin
bridges this gap

