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| **ECR Title: OMC Invar Shims** | DCC No: E1300288-v1 |
| Date: 19 April 2013 |
| **Requester: J. Lewis** | **Impacted Subsystem(s): ISC** |  |
| **Description of Proposed Change(s):** The D1102211 Diode Mounting Glass Blocks break when the screws are tightened to around 1 in\*lb using the D1201466 PEEK Nut Plates as designed. The proposed change is to bond D1300354 invar shims to the top of the glass blocks for the LLO OMC. The invar shims are threaded, thereby eliminating the clamping, and possible breaking, of the glass blocks.Upon successful implementation of the invar shim for the LLO OMC, it is proposed to use invar blocks in place of the glass blocks for the 2nd and 3rd OMCs. The invar blocks would be threaded, thereby eliminating the PEEK Nut Plates. |
| **Reason for Change(s):** Prevent breakage of the glass blocks |
| **Estimated Cost: $500** |
| **Schedule Impact Estimate: 2 weeks** |
| **Nature of Change (check all that apply):****[ ]** **Safety****[x]  Correct Hardware****[ ]  Correct Documentation** | **[ ]  Improve Hardware****[ ]  Improve/Clarify Documentation****[ ]  Change Interface****[ ]  Change Requirement** |
| **Importance:****[ ]  Desirable for ease of use, maintenance, safety****[ ]  Desirable for improved performance, reliability****[x]  Essential for performance, reliability****[ ]  Essential for function****[ ]  Essential for safety** | **Urgency:****[ ]  No urgency****[ ]  Desirable by date/event: \_\_\_\_\_\_\_\_\_\_\_\_****[ ]  Essential by date/event: \_\_\_\_\_\_\_\_\_\_\_\_****[ ]  Immediately (ASAP)** |
| **Impacted Hardware (select all that apply):****[ ]  Repair/Modify. List part & SNs: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****[x]  Scrap & Replace. List part & SNs: D1201466 – all,****D1102211 – all but the ones glued on the LLO OMC****[ ]  Installed units? List IFO, part & SNs: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****[x]  Future units to be built H1 and the 3rd OMC** | **Impacted Documentation** (list all dwgs, design reports, test reports, specifications, etc.):D1300354, D1300355, E1300287 |
| **Disposition of the proposed change(s):**The disposition of this proposed engineering change request is to be completed by Systems Engineering and indicated in the “Notes and Changes” metadata field in the DCC entry for this ECR. The typical dispositions are as follows:* **Additional Information Required**: in which case the additional information requested is defined. The ECR requester then re-submits the ECR with the new information using the same DCC number for the ECR but with the next version number.
* **Rejected**: in which case the reason(s) for the rejection are to be given
* **Approved**
* **Approved with Caveat(s)**: in which case the caveat(s) are listed
* **TRB**: the ECR is referred to an ad-hoc Technical Review Board for further evaluation and recommendation. It is the System Engineer’s (or designee’s) responsibility to organize the TRB. The System Engineer (or designee) then makes a technical decision based on the TRB’s recommendation. Links to the TRB’s documentation (charge, memos, final report, etc.) are to be added to the “Related Documents” field for this ECR.
* **CCB**: a change request for approval of additional funds or schedule impact is to be submitted to the Configuration Control Board. Links to the CCB’s documentation (CR, etc.) are to be added to the “Related Documents” field for this ECR.

**Concurrence by Project Management:** Acknowledgement/acceptance/approval of the disposition is to be indicated by the electronic “signature” feature in the DCC entry for this ECR, by one the following personnel:* Systems Scientist
* Systems Engineer
* Deputy Systems Engineer
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