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| Traveler Title | C100R Cavity HOM Feedthru Receiving Inspection |
| Traveler Abstract | This traveler covers incoming inspection for the C100R Cavity HOM feedthrus, both re-use and spares from Kyocera |
| Traveler ID | C100-INSP-HMFT |
| Traveler Revision  | R3 |
| Traveler Author | HyeKyoung Park |
| Traveler Date | 24-Mar-21 |
| NCR Informative Emails | Georged,areilly |
| NCR Dispositioners | Hkpark,kdavis |
| D3 Emails | Hkpark,kdavis,areilly |
| Approval Names | HyeKyoung Park | Kirk Davis | Tony Reilly |  |
| Approval Signatures |  |  |  |  |
| Approval Dates |  |  |  |  |
| Approval Title | Author | Reviewer | Project Manager |  |

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| References | List and Hyperlink all documents related to this traveler. This includes, but is not limited to: safety (THAs, SOPs, etc), drawings, procedures, and facility related documents. |
| [CRM-120-7014-0020 rev A](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-46251/crm1207014-0020%5B1%5D%5B1%5D.pdf) | [CRM-120-7014-0022 rev -](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-46252/crm1207014-0022%5B1%5D%5B1%5D.pdf) | [Leak check spec 11141-S-0029](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-46253/JLAB_SPEC_11141S0029_Rev%20A%5B2%5D%5B1%5D.pdf) | [CRM-120-7000-S-1017 rev A](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-46254/crm1207000s1017revA%5B1%5D%5B1%5D.pdf) |  |
| JL0070606 |  |  |  |  |

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| Revision Note |  |
| R1 | Initial release of this Traveler. Modified from C100-CAV-INSP-HMFT-R6 |
| R2 | Modifications by HKPark to apply to C100R |
| R3 | Added inspection steps for the Spare HMFTs from Kyocera |

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| Step No. | Instructions | Data Input |
| **HOM feedthru is an ultra high vacuum component. Wear talc free latex or Nitrile gloves at all times when handling this component.** |
| 1 | Enter part serial number.Serial number may not be in the same format since there were multiple vendors.**Select if this HMFT is a re-use or Kyocera HMFT.** | [[HMFTSN]] <<HMFTSN>>[[HMFT\_type]] {{RE-USE,KYOCERA}} <<RADIO>> |
| 2 | Visual inspection:* Is part clean, free from dust, oil, finger prints, or brazing residue?
* Is the gasket seating surface smooth, free from burrs or nicks?
* Is sapphire insert free from cracks?
* Examine the electrical pin. If the pin is damaged, bent, or showing any irregularity, generate NCR and upload pictures

If the part does not pass visual inspection take pictures and upload the file. | [[INSP1\_TechnicianSRF]] <<SRF>> [[DateTime]] <<TIMESTAMP>>[[VisualClean]] <<YESNO>>[[VisualSurfacePass]] <<YESNO>>[[VisualSapphirePass]] <<YESNO>>[[VisualPinPass]] <<YESNO>>[[VisualPics]] <<FILEUPLOAD>>[[VisualCmnt]] <<COMMENT>> |
| **For C100R Re-Use HMFTs see Page 2 for Inspection Steps** |
| **For Kyocera HMFTs see Page 3 for Inspection Steps** |

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| Step No. | Instructions | Data Input |
| **Inspection Steps for C100R HOM Feedthrus: RE-USE** |
| 3 | Gauge checks * Check thread fit with a standard N type connector.
* Check the pins braze strength with tweezers. There should be no rotation or axial movement but lateral flexibility is acceptable. If the pin is not flexible at all generate NCR because it indicates there is no gap between the pin and the sapphire surface. Provide comments, if any (i.e., the connection too resistant or loose, flimsy pin, etc.)
 | [[ThreadFit]] <<YESNO>>[[ConnCheckComment]] <<COMMENT>>[[BrazePresent]] <<YESNO>>[[TorquePass]] <<YESNO>>[[TorqueComment]] <<COMMENT>> |
| 4 | Perform leak test per 11141-S-0029 rev.A and upload fileMinimum Detectable Leak 1×10^-10 std cc of He/secPart passed leak test? | [[LC1\_TechnicianSRF]] <<SRF>> [[LC1\_Date]] <<TIMESTAMP>>[[LeakTestInitial]] <<YESNO>>[[LeakInitialFile]] <<FILEUPLOAD>> |
| 5 | QC ReviewDetermine production release after reviewing traveler record and NCRs. If all NCRs are closed and the feedthru is accepted store it at the inventory area (contact srfinv@jlab.org).  | [[QCReviewTech]] <<SRF>>[[QCReviewDate]] <<TIMESTAMP>>[[ProductionRelease]] <<YESNO>>[[AdditionalComments]] <<COMMENT>> |

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| **Step No** | **Instructions** | **Data Inputs** |
| **Inspection Steps for HOM Feedthrus: KYOCERA** |

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| 3 | Gauge checks: * Check connector thread fit with a standard N type connector. Select “yes” if the fit is OK.
 | [[Conn\_Fit]] <<YESNO>> |
| 4 | Dimensions (CMM): Unit in inches. Flange seal surface to probe tip (1.459/1.469)Probe angle(**Datum is the sealing surface, should be less than .5 deg**)  | [[Probe\_Length]] <<FLOAT>>[[Probe\_Angle]] <<FLOAT>> |
|  | After visual and dimensional inspection, send the part to cleanroom group to have mounted in the test stand for cold cycle.The part will be back after final leak test.  |  |
| 5 | Final visual inspection:Perform quick visual inspection whether there is no damage during cold cycle and leak test.Provide comments and upload picture if necessary.Is part released for production?Send the part to the storage area (contact srfinv@jlab.org) | [[Final\_Comm]] <<COMMENT>>[[Final\_Pics]] <<FILEUPLOAD>>[[Prod\_Release]] <<YESNO>> |