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| **Traveler Title** | C100R Cavity Assembly |
| **Traveler Abstract** | The following traveler documents the steps for the first of two clean room cavity assemblies for VTA qualification of C100 cavities for the 12GeV project. |
| **Traveler ID** | C100R-CAV-ASSY |
| **Traveler Revision**  | R2 |
| **Traveler Author** | Alex Wildeson |
| **Traveler Date** | 6-Nov-18 |
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| **Approval Names** | A. Wildeson | Kirk Davis | Anthony Reilly |  |
| **Approval Signatures** |  |  |  |  |
| **Approval Date** |  |  |  |  |
| **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. |
| [Ionized nitrogen parts cleaning procedure](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-43205/Ionized%20nitrogen%20cleaning%5B1%5D.pdf) | [Radial wedge flange installation procedure](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-43206/Radial%20wedge%20flange%20clamp%20installation%5B1%5D.pdf) | Cavity tooling VTA Assembly drawing[CRM1207015-0100](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-43207/CRM1207015-0100%5B1%5D.pdf) | [C100 1st assembly procedure for VTA qualification](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-43208/CP-C100-CAV-ASSY-R3.docx-1%5B1%5D%5B1%5D.pdf) |  |
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| **Revision Note** |  |
| R1 | Initial release of this Traveler. (Taken from C100-CAV-ASSY-R3) |
| R2 | Made changes to Steps 1, 3 and 4 |

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| **Step No.** | **Instructions** | **Data Input** |
| 1 | Record Cavity Serial NumberOperators loginRecord dateUse the D3 button at the top of the page to record a discrepancy or deviation that occurred before, during, or after the assembly. | [[CAVSN]] <<CAVSN>>[[CavCouponNo]] <<FLOAT>>[[AssemblyTech1]] <<SRFCVP>>[[AssemblyTech2]] <<SRFCVP>>[[AssemblyTech3]] <<SRFCVP>>[[RecordDate]] <<TIMESTAMP>> |
| 2 | Inspect the FPC flange. The flange must be free of visible scratches and other surface imperfections in the seal path area. Verify that the flange has been lapped and there are no visible traces of gasket material from a previous assembly. Record any visual inspection notes in the comment box to the right.Inspect the tophat flange. The flange must be free of visible scratches and other surface imperfections in the seal path area. Verify that the flange has been lapped and there are no visible traces of gasket material from a previous assembly. Record any visual inspection notes in the comment box to the right. | [[FPCFlangeLapped]] <<YESNO>>[[TophatFlangeLapped]] <<YESNO>>[[FlangeInspTech]] <<SRFCVP>>[[Comments1]] <<COMMENT>> |
| 3 | Perform first cavity assembly as per the [C100 1st assembly procedure for VTA qualification](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-43026/CP-C100-CAV-ASSY-R3.docx-1%5B1%5D.pdf).Record length of field probe antenna as installed to cavity.Use the comment box to the right to record notes, etc. regarding this assembly. | [[FieldProbeLength]] <<FLOAT>>[[Comments2]] <<COMMENT>>[[CavAssemblyTech]] <<SRFCVP>> |
| 4 | Record serial numbers:Use the diagram below for HOM identification. C:\Documents and Settings\castagno\Desktop\Nomenclature_C100.jpg  | [[VTATHSN]] <<VTATHSN>>[[FPFTSN]] <<FPFTSN>>[[FPCouponNo]] <<FLOAT>>[[PositionA\_HMFTSN]] <<HMFTSN>> [[HOMACouponNo]] <<FLOAT>>[[PositionB\_HMFTSN]] <<HMFTSN>> [[HOMBCouponNo]] <<FLOAT>>[[Comments3]] <<COMMENT>>[[AssemblyTech]] <<SRFCVP>> |