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| Traveler Title | LCLS-II Rebuild Cavity Beam Line Extension Downstream Inspection Traveler |
| Traveler Abstract | Traveler defines the inspection process for the LCLS-II Rebuild beam line downstream extension spool |
| Traveler ID | L2RB-INSP-BLXD |
| Traveler Revision  | R1 |
| Traveler Author | Michelle Oast |
| Traveler Date | 23-Jul-25 |
| NCR Informative Emails | georged,mosby,areilly |
| NCR Dispositioners | weinmann,adamg,cheng |
| D3 Emails | weinmann,adamg |
| Approval Names | M. Oast | G. DeKerlegand  | J. Buttles | A. Grabowski |
| Approval Signatures |  |  |  |  |
| Approval Dates |  |  |  |  |
| Approval Title | Author | Reviewer | 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. |
| [F10052775-H (WELDMENT EXTENSION - DS)](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-245703/F10052775_H_DWG1%20Spool.pdf) | [F10009427 (TUBE LONG)](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-245710/F10009427_B_DWG1.pdf) | [F10019991 (FLANGE)](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-245711/F10019991_F_DWG1.pdf) | [F10054235 (FLANGE ROTATABLE)](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-245709/F10054235___DWG1.pdf) | [F10020274 (FLANGE RING BP)](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-245708/F10020274_B_DWG1.pdf) |
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| Revision Note |  |
| R1 | Initial release of this Traveler. |

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| Step No. | Instructions | Data Input |
| **General handling guidelines:** The Weldment Extension-DS end flanges contain sealing surfaces that shall be protected from scratching/gouging. Protective covers shall be installed over these surfaces at all possible times. |
| 1 | **Initial Inspection** |
| Technician NameDate of InspectionSerial Number of part | [[InitTechName]] <<SRF>>[[InitInspDate]] <<TIMESTAMP>>[[BLXDSN]] << BLXDSN>> |
| Is part clean, free from dust, oil, finger prints or other contaminants? | [[PartCleanOK]] <<YESNO>> |
| Visually inspect the assembly for any pitting on internal and external surfaces. (Note shallow pitting in the comments, do not create NCR for shallow pitting.) | [[PittingS]]<<YESNO>> |
| Inspect the flange's sealing surfaces for scratches/gouges. | [[SealingfaceOK]]<<YESNO>> |
| Are welds of good quality? (Smooth ID welds, no undercut, not cold welded/convex, no cracks, no inclusions, no protusions.) | [[WeldsOK]]<<YESNO>> |
| Measure surface finish of seal groove of rotatable flange. Indicate "no" if roughness is equal to or higher than 0.8 um. | [[FinishROk]] <<YESNO>>[[FinishRComment]] <<COMMENT>> |
| Measure surface finish of seal groove of non-rotatable flange. Indicate "no" if roughness is equal to or higher than 0.8 um. | [[FinishNROk]] <<YESNO>>[[FinishNRComment]] <<COMMENT>> |
| Check that the threads of F10019991 are undamaged and of the correct size by threading in a silicon bronze M8 x 1.25 screw into the holes by hand. Do not use stainless steel screws. | [[ThreadsOK]]<<YESNO>> |
| Comments:* Upload photos of the Extension even if no discrepancies are found to show the "as received" state. At a minimum, photos should capture the condition of the exterior and interior, sealing surfaces and weld areas.
* If discrepancies are found, upload photos of the discrepancy.
 | [[InitVisInspComment]] <<COMMENT>>[[InitVisInspPhoto]] <<FILEUPLOAD>> |
| 2 | **Plating Inspection** |
| Comment on, but do not create NCRs for the following issues if found:* Light spots
* Water marks
* Dark spots under 1/8" in diameter
* Darker shading than is typical of the overall copper plating
* Shallow pitting
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| Technician NameDate of Inspection  | [[PlateInspTechName]] <<SRF>>[[PlateInspInspDate]] <<TIMESTAMP>> |
| Does copper plating cover the designated area shown in drawing F10052775? | [[Platingcoverage]]<<YESNO>> |
| **Plating Inspection with Borescope** |
| There should not be any deep(through plating) pitting in the plating. | [[PittingD]]<<YESNO>> |
| Any flaking of the plating? | [[Flaking]]<<YESNO>> |
| Any blistering of the plating? | [[Blistering]]<<YESNO>> |
| Any dark spots over 1/8" diameter? | [[Darkspots]]<<YESNO>> |
| Any areas larger than 1/8" diameter missing plating? | [[Barespots]]<<YESNO>> |
| Comments:* Upload borescope photos of the plating even if no discrepancies are found. Photos should at a minimum capture the weld areas.
* If discrepancies are found, upload photos of the discrepancy.
 | [[PlateVisInspComment]] <<COMMENT>>[[PlateInspPhoto]] <<FILEUPLOAD>> |
| 4 | **Storage:** |
| Each extension assembly shall have protective end covers re-installed. They shall be stored in a nitrogen cabinet. | [[StorageTech]] <<SRF>>[[StorageDate]] <<TIMESTAMP>> |