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| Traveler Title | Niobium Lid Brazing Assembly |
| Traveler Abstract | Oulines the brazing assembly of the Niobium Lid for the H-HOM Damper |
| Traveler ID | AUP-ASSY-DAMP-NLASSY |
| Traveler Revision  | R2 |
| Traveler Author | Matthew Weaks |
| Traveler Date | 2-Apr-20 |
| NCR Informative Emails | Weaksmc |
| NCR Dispositioners | Huque,scott |
| D3 Emails | Huque,scott,weaksmc |
| Approval Names | Matthew Weaks | Scott Williams | Naeem Huque |  |
| 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. |
| [JL0088328](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-212524/JL0088328_-_NIOBIUM%20LID%20BRAZING%20ASSY.pdf) | [JL0088326](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-212512/JL0088326_-_NIOBIUM%20CAN%20LID%20FINAL%20MACHINIG.pdf) | [CERN EDMS No. 1389669](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-211730/EDMS%201389669%20-%20Engineering_specification_dressed_cavities.v2.5%281%29.pdf) | [CP-STP-CAV-CHEM-DEGR](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-211743/CP-STP-CAV-CHEM-DEGR-R3.pdf) |  |
| [JL0088328\_CMM](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-227559/JL0088328_-_NIOBIUM%20LID%20BRAZING%20ASSY_CMM.pdf) | [JL0088271](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-212511/JL0088271_-_OUTER%20CAN%20LID.pdf) | [CP-STP-CAV-CHEM-ACID](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-211742/CP-STP-CAV-CHEM-ACID-R1.pdf) |  |  |

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| Revision Note |  |
| R1 | Initial release of this Traveler. |
| R2 | Added part SNs. Corrected drawing numbers. Added Etch comments to degrease |

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| Step No. | Instructions | Data Input |
| 1 | Serial Number of AssemblySerial Number of JL0088326Serial Number of JL0088271 | [[NLASSY]] <<NLASSYSN>>[[LDMCH]] <<LDMCHSN>>[[OCLID]] <<OCLIDSN>> |
| Confirm Material Certification documents for both JL0088326 and JL0088271. Upload any relevant photos and/or comments. | [[Ins1Tech]] <<SRF>>[[Ins1Time]] <<TIMESTAMP>>[[Ins1Comm]] <<COMMENT>>[[Ins1File]] <<FILEUPLOAD>> |
| CHEMISTRY |
| 2 | Degrease/Etch JL0088326 as per CP-STP-CAV-CHEM-ACID.Upload any relevant photos and/or comments. | [[DG1Tech]] <<SRF>>[[DG1Time]] <<TIMESTAMP>>[[DG1Comm]] <<COMMENT>>[[DG1File]] <<FILEUPLOAD>> |
| Degrease/Etch JL0088271 as per CP-STP-CAV-CHEM-ACID.Upload any relevant photos and/or comments. | [[DG2Tech]] <<SRF>>[[DG2Time]] <<TIMESTAMP>>[[DG2Comm]] <<COMMENT>>[[DG2File]] <<FILEUPLOAD>> |

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| Step No. | Instructions | Data Input |
| INSPECTION |
| 3 | Visually inspect both JL0088326 and JL0088271 for any cracks, damage, or other abnormalities that may affect brazing. | [[Ins2Tech]] <<SRF>>[[Ins2Comm]] <<COMMENT>>[[Ins2File]] <<FILEUPLOAD>> |
| FURNACE |
| 4 | Braze JL0088326 and JL0088271 together as per drawing JL0088328.Upload relevant BPS and BPQR, along with any relevant photos and/or comments. | [[BrzTech]] <<SRF>>[[BrzTime]] <<TIMESTAMP>>[[BrzComm]] <<COMMENT>>[[BrzFile]] <<FILEUPLOAD>> |
| INSPECTION |
| 4a | Visually inspect the braze in accordance with EN 12799 & EN ISO 18279 as defined in CERN EDMS No. 1389669 - Section 4.2.7. Upload Inspection Report | [[Ins3Tech]] <<SRF>>[[Ins3Time]] <<TIMESTAMP>>[[Ins3Comm]] <<COMMENT>>[[Ins3File]] <<FILEUPLOAD>> |
| 4b | Inspect the assembly ultrasonically in accordance EN 12799 as per CERN EDMS No.1389669 – Section 4.2.6.4.Upload Inspection Report | [[US1Tech]] <<SRF>>[[US1Time]] <<TIMESTAMP>>[[US1Comm]] <<COMMENT>>[[US1File]] <<FILEUPLOAD>> |

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| Step No. | Instructions | Data Input |
| TESTING |
| 5 | Thermal shock the assembly by immersing it into LN2 five times, while allowing the assembly to reach room temperature between immersions. | [[LN2Tech]] <<SRF>>[[LN2Time]] <<TIMESTAMP>>[[LN2Comm]] <<COMMENT>>[[LN2File]] <<FILEUPLOAD>> |
| 6 | Leak check the assembly in accordance with EN 13185 as defined in CERN EDMS No. 1389669 – Section 4.5.Upload leak check chart. | [[LCTech]] <<SRF>>[[LCTime]] <<TIMESTAMP>>[[LCComm]] <<COMMENT>>[[LCFile]] <<FILEUPLOAD>> |
| CHEMISTRY |
| 7 | Degrease the assembly as per CP-STP-CAV-CHEM-DEGR.Upload any relevant photos and/or comments. | [[DG3Tech]] <<SRF>>[[DG3Time]] <<TIMESTAMP>>[[DG3Comm]] <<COMMENT>>[[DG3File]] <<FILEUPLOAD>> |
| INSPECTION |
| 8 | Verify dimensions marked on JL0088328\_CMM.Upload inspection report. | [[Ins4Tech]] <<SRF>>[[Ins4Time]] <<TIMESTAMP>>[[Ins4Comm]] <<COMMENT>>[[Ins4File]] <<FILEUPLOAD>> |