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| Traveler Title | Flange Brazing Assembly | | | |
| Traveler Abstract | Outlines the assembly of the flange assembly | | | |
| Traveler ID | AUP-ASSY-CMN-FLBRZ | | | |
| Traveler Revision | R1 | | | |
| Traveler Author | Matthew Weaks | | | |
| Traveler Date | 11-Jun-20 | | | |
| NCR Informative Emails | Weaksmc | | | |
| NCR Dispositioners | Huque | | | |
| D3 Emails | Huque | | | |
| 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. | | | |
| [CP-AUP-CAV-CHEM-ACID](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-212637/CP-AUP-CAV-CHEM-ACID-R1.pdf) | [CERN EDMS No. 1389669](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-211730/EDMS%201389669%20-%20Engineering_specification_dressed_cavities.v2.5(1).pdf) | [CP-AUP-CAV-CHEM-DEGR](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-211743/CP-STP-CAV-CHEM-DEGR-R3.pdf) |  |  |
| [JL0089865](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-212500/JL0089865_A_COPPER%20RING.pdf) | [JL0089760](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-212499/JL0089760_A_CUSTOM%20DN40%20FLANGE.pdf) | [JL0092614](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-212505/JL0092614_-_FLANGE%20BRAZING%20ASSY.pdf) | [JL0092614\_CMM](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-224316/JL0092614_-_FLANGE%20BRAZING%20ASSY_CMM.pdf) |  |

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| Revision Note |  |
| R1 | Initial release of this Traveler. |

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| Step No. | Instructions | Data Input |
| 1 | Serial Number of part | [[FLBRZSN]] <<SN>> |
| **Degrease** JL0089865 as per JLab CP-AUP-CAV-CHEM-ACID.  Upload any relevant photos and/or comments. | [[DG1Tech]] <<USERNAME>>  [[DG1Time]] <<TIMESTAMP>>  [[DG1Comm]] <<COMMENT>>  [[DG1Cert]] <<FILEUPLOAD>> |
| **Degrease** JL0089760 as per JLab CP-AUP-CAV-CHEM-DEGR .  Upload any relevant photos and/or comments. | [[DG2Tech]] <<USERNAME>>  [[DG2Time]] <<TIMESTAMP>>  [[DG2Comm]] <<COMMENT>>  [[DG2File]] <<FILEUPLOAD>> |
| 2 | **Stress Relieve** JL0089865 at 900°C for 1 Hour in a vacuum of 10-5 mbar or less. Upload photos of any issues or abnormalities. | [[SR1Tech]] <<USERNAME>>  [[SR1Time]] <<TIMESTAMP>>  [[SR1Comm]] <<COMMENT>>  [[SR1File]] <<FILEUPLOAD>> |
| 3 | **Visually inspect** both JL0089760 and JL0089865 for any cracks, damage, or any other abnormalities that may affect brazing.  Upload any relevant photos and/or comments. | [[Ins1Tech]] <<USERNAME>>  [[Ins1Comm]] <<COMMENT>>  [[Ins1File]] <<FILEUPLOAD>> |
| 4 | Hold to review inspection reports, travelers, NCRs, BPS, and BPQR to verify parts are ready for brazing. | [[HoldPoint]] {{huque}} <<HOLDPOINT>> |

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| Step No. | Instructions | Data Input |
| 5a | **Brazing**. Upload relevant BPS and BPQR.  Upload relevant photos and/or comments | [[BRZTech]] <<USERNAME>>  [[BRZTime]] <<TIMESTAMP>>  [[BRZComm]] <<COMMENT>>  [[BRZFile]] <<FILEUPLOAD>> |
| 5b | **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 | [[Vis1Tech]] <<USERNAME>>  [[Vis1Comm]] <<COMMENT>>  [[Vis1File]] <<FILEUPLOAD>> |
| 5c | **Machine** the assembly to meet specifications as indicated on drawing Jl0092614. Upload any relevant photos and/or comments | [[Mach1Tech]] <<USERNAME>>  [[Mach1Time]] <<TIMESTAMP>>  [[Mach1Comm]] <<COMMENT>>  [[Mach1File]] <<FILEUPLOAD>> |
| 5d | **Inspect** the assembly ultrasonically in accordance EN 12799 as per CERN EDMS No.1389669 – Section 4.2.6.4.  Upload Inspection Report | [[US1Tech]] <<USERNAME>>  [[US1Comm]] <<COMMENT>>  [[US1File]] <<FILEUPLOAD>> |

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| Step No. | Instructions | Data Input |
| 6 | **Thermal shock** the assembly by immersing it into LN2 five times, while allowing the assembly to reach room temperature between immersions. | [[LN2Tech]] <<USERNAME>>  [[LN2Time]] <<TIMESTAMP>>  [[LN2Comm]] <<COMMENT>>  [[LN2File]] <<FILEUPLOAD>> |
| 7 | **Leak check** the assembly in accordance with EN 13185 as defined in CERN EDMS No. 1389669 – Section 4.5  Upload leak check chart. | [[LCTech]] <<USERNAME>>  [[LCTime]] <<TIMESTAMP>>  [[LCComm]] <<COMMENT>>  [[LCFile]] <<FILEUPLOAD>> |
| 8 | **Verify dimensions** marked on JL0092614\_CMM.  Upload inspection report. | [[Ins2Tech]] <<USERNAME>>  [[Ins2Time]] <<TIMESTAMP>>  [[Ins2Comm]] <<COMMENT>>  [[Ins2File]] <<FILEUPLOAD>> |