LHAM3 - D0900520 - Coordinates Definition

DRAWING #	COORDINATES DEFINITION
	Systems defines the location of the HAM3-L1 0,0,0 Local CS at the origin of the Assy.
D0900521 AdvLIGO VE HAM3-L1, Vacuum Equipment Assembly	The position of the Vacuum Equipment is defined by: 1. Positioning the CS in the VE Assy at **300.0 mm** above the Nozzle "A" Centerline (Z = -300.0 mm) as per DCC Doc T010076-v1 Page 29 2. The orientation of the Chamber with respect to the IFO Global CS is defined by DCC Doc G1000125-v8 3. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the VE Assy, to the HAM3-L1 0,0,0 Local CS at the origin of the Assy
D0900522 AdvLIGO SEI HAM3-L1, XYZ Local CS for ISO Table Assembly	The position of the ISO TABLE is defined by: 1. Positioning the CS in the ISO Table Assy at **252.9 mm** above the Table Optical Surface as per DCC Doc E1000403-v2 2. The orientation of the ISO Table with respect to the IFO Global CS is defined by DCC Doc G1000125-v8 3. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the ISO Table Assembly, to the HAM3-L1 0,0,0 Local CS at the origin of the Assy
D0900524 AdvLIGO SUS HAM3-L1, XYZ Local CS for HSTS **(PR2)** Assembly	The position of the HSTS **(PR2)** is defined by: 1. The Coordinates from DCC P/N E1100493-v9. **X = 251.4 mm; Y = -530.4 mm; Z = -93.9 mm; Yaw Angle = 0.5°** 2. With these coordinates systems creates the 3D Sketch to position MC1 on the HAM Table 3. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the MC1 Suspension, to the HAM3-L1 0,0,0 Local CS at the origin of the Assy
D0900526 AdvLIGO SUS HAM3-L1, XYZ Local CS for HSTS **(MC2)** Assembly	The position of the HSTS **(MC2)** is defined by: 1. The Coordinates from DCC P/N E1100493-v9. **X = 2.5 mm; Y = 487.5 mm; Z = -101.9 mm; Yaw Angle = 0.2°** 2. With these coordinates systems creates the 3D Sketch to position MC3 on the HAM Table 3. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the MC3 Suspension, to the HAM3-L1 0,0,0 Local CS at the origin of the Assy
D1002235 AdvLIGO SUS HAM3-L1, XYZ Local CS for **IO Optics Mount Comp.** Assembly	The position of the **IO Optics Mount Comp** is defined by: 1. The Coordinates from DCC P/N E1100493-v9. **(For a detailed coordinates values & Optics, see PDF Drawing D1002235 in DCC)** 2. With these coordinates systems creates the 3D Sketch to position Fixed Mount Optics on the HAM Table 3. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the IO Optics Mount Comp, to the HAM3-L1 0,0,0 Local CS at the origin of the Assy
D1000514 HEPI, HAM, Chamber Level Assembly, aLIGO SEI	The position of the HEPI is defined by: 1. Positioning the CS in the HEPI Assy at **1851.0 mm** above the concrete floor as per DCC Doc E1000659-v2 2. The orientation of the HEPI with respect to the IFO Global CS is defined by DCC Doc G1000125-v8 3. Systems insert the assy mating the AdvLIGO 0,0,0 Local CS from the HEPI, to the HAM3-L1 0,0,0 Local CS at the origin of the Assy
D1101118 AdvLIGO HAM3-L1 ISI Table, XYZ Local CS for Balance Masses Assembly	The position of the Balance Masses Assembly is defined by: 1. Positioning the CS in the Masses Assy at **252.9** mm above the Table Optical Surface as per DCC Doc E1000403-v1 2. Systems creates the 3D Sketch to position the Assy D1101118 on the HAM Table 3. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the Balance Masses Assy, to the HAM3-L1 0,0,0 Local CS at the origin of the Assy
D1101393 AdvLIGO SUS HAM3-L1, XYZ Local CS for **MC2-PR2 Scraper Baffles** Assembly	The position of the **MC2-PR2 Scraper Baffles** is defined by: 1. The Coordinates from DCC P/N E1100492-v11. **i) X = -200.6 mm; Y = -514.9 mm; Z = -93.9 mm; Yaw Angle = 0.5°** **ii) X = -470.5 mm; Y = 487.1 mm; Z = -101.9 mm; Yaw Angle = 0.0°** 2. With these coordinates systems creates the 3D Sketch to position 2X MC Refl Periscopes on the HAM Table 3. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the In-Vacuum Periscope, to the HAM3-L1 0,0,0 Local CS at the origin of the Assy

D1101411 AdvLIGO SUS HAM2-L1, XYZ Local CS for **OptLev DLC** Assembly	The position of the **OptLev DLC** is defined by: 1. The Coordinates from DCC P/N E1000608-v2 **X = 922.4 mm; Y = 75.9 mm; Z = -125.9 mm; Yaw Angle = 0.0°** 2. With these coordinates systems creates the 3D Sketch to position OptLev DLC on the HAM Table 3. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the OptLev DLC, to the HAM3-L1 0,0,0 Local CS at the origin of the Assy
D1002234 AdvLIGO SEI HAM3-L1, XYZ Local CS for ISC Components Assembly	The position of the ISC Components Assembly (ISC) is defined by: 1. ISC provides the assembly (D1000339) with all components already defined on the HAM Table 2. Systems creates the 3D Sketch to position the Assy D1002234 on the HAM Table. 3. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the ISC BlockDiagram Assy, to the HAM3-L1 0,0,0 Local CS at the origin of the Assy
D1101463 Cable Harness Routing Configuration - HAM3	The position of the Cable Harness is defined by 1. Positioning the CS in the Cable Harness Assy at **252.9** mm above the Table Optical Surface as per DCC Doc E1000403-v1 2. Systems creates the 3D Sketch to position the Assy D1000581on the HAM Table 3. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the Cable Harness Assy, to the HAM3-L1 0,0,0 Local CS at the origin of the Assy