

LHAM5 - D0900456 - Coordinates Definition

DRAWING #	COORDINATES DEFINITION
	Systems defines the location of the HAM5-L1 0,0,0 Local CS at the origin of the Assy.
D0900457 AdvLIGO VE HAM5-L1, Vacuum Equipment Assembly	<p>The position of the Vacuum Equipment is defined by:</p> <ol style="list-style-type: none"> 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 HAM5-L1 0,0,0 Local CS at the origin of the Assy
D0900459 AdvLIGO SEI HAM5-L1, XYZ Local CS for ISO Table Assembly	<p>The position of the ISO TABLE is defined by:</p> <ol style="list-style-type: none"> 1. Positioning the CS in the ISO Table Assy at 325.0 mm above the Table Optical Surface as per DCC DocT010076-v1 Page 29 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 HAM5-L1 0,0,0 Local CS at the origin of the Assy
D0900461 AdvLIGO SUS HAM5-L1, XYZ Local CS for HLTS (SR3) Assembly	<p>The position of the HSTS (SR3) is defined by:</p> <ol style="list-style-type: none"> 1. The Coordinates from DCC P/N D0902216-v8. X = -175.0 mm; Y = 506.1 mm; Z = -94.5 mm; Yaw Angle = 89.2° 2. With these coordinates systems creates the 3D Sketch to position SR3 on the HAM Table 3. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the MC1 Suspension, to the HAM5-L1 0,0,0 Local CS at the origin of the Assy
D0900463 AdvLIGO SUS HAM5-L1, XYZ Local CS for HSTS (SRM) Assembly	<p>The position of the HSTS (SRM) is defined by:</p> <ol style="list-style-type: none"> 1. The Coordinates from DCC P/N D0902216-v8. X = 305.3 mm; Y = 213.5 mm; Z = -94.3 mm; Yaw Angle = 86.6° 2. With these coordinates systems creates the 3D Sketch to position SRM on the HAM Table 3. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the MC1 Suspension, to the HAM5-L1 0,0,0 Local CS at the origin of the Assy
D0900527 AdvLIGO SUS HAM5-L1, XYZ Local CS for AOS Farady Isolator Assembly	<p>The position of the HSTS AOS Farady Isolator is defined by:</p> <ol style="list-style-type: none"> 1. Mike S. (AOS) provides a STEP file created in ZEMAX 2. Systems convert STEP File into a SW Model, adding the required CS 3. From the SW Model, Systems find out the Local Coordinates of the AOS Farady Isolator X = 336.7 mm; Y = -340.7 mm; Z = -97.8 mm; Yaw Angle = 86.6° 4. With these coordinates systems creates the 3D Sketch to position SR2 Scraper Baffle on the HAM Table 5. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the SR2 Scraper Baffle, to the HAM5-L1 0,0,0 Local CS at the origin of the Assy
D1000514 HEPI, HAM, Chamber Level Assembly, aLIGO SEI	<p>The position of the HEPI is defined by:</p> <ol style="list-style-type: none"> 1. Positioning the CS in the HEPI Assy at 1862.0 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 HAM5-L1 0,0,0 Local CS at the origin of the Assy
D1101781 AdvLIGO HAM5-L1 ISI Table, XYZ Local CS for Balance Masses Assembly	<p>The position of the Balance Masses Assembly is defined by:</p> <ol style="list-style-type: none"> 1. Positioning the CS in the Masses Assy at 325.0 mm above the Table Optical Surface as per DCC DocT010076-v1 Page 29 2. Systems creates the 3D Sketch to position the Assy D1101781 on the HAM Table 3. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the Balance Masses Assy, to the HAM5-L1 0,0,0 Local CS at the origin of the Assy

D1101782 AdvLIGO SUS HAM5-L1, XYZ Local CS for SRM AR Baffle Assembly	<p>The position of the HSTS SRM AR Baffle is defined by:</p> <ol style="list-style-type: none"> 1. Mike S. (AOS) provides a STEP file created in ZEMAX 2. Systems convert STEP File into a SW Model, adding the required CS 3. From the SW Model, Systems find out the Local Coordinates of the SRM AR Baffle X = 320.9 mm; Y = -60.9 mm; Z = -94.4 mm; Yaw Angle = 77.0° 4. With these coordinates systems creates the 3D Sketch to position SRM AR Baffle on the HAM Table 5. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the SR2 Scraper Baffle, to the HAM5-L1 0,0,0 Local CS at the origin of the Assy
D1101783 AdvLIGO SUS HAM4-L1, XYZ Local CS for SR3 HR-AR Baffles Assembly	<p>The position of the HSTS SR3 HR-AR Baffles is defined by:</p> <ol style="list-style-type: none"> 1. Mike S. (AOS) provides a STEP file created in ZEMAX 2. Systems convert STEP File into a SW Model, adding the required CS 3. From the SW Model, Systems find out the Local Coordinates of the SR3 HR-AR Baffles i) X = -175.0 mm; Y = 724.8 mm; Z = -84.2 mm; Yaw Angle = 10.0° ii) X = -212.3 mm; Y = 190.0 mm; Z = -84.3 mm; Yaw Angle = 10.0° 4. With these coordinates systems creates the 3D Sketch to position SR3 HR-AR Baffles on the HAM Table 5. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the SR3 HR-AR Baffles, to the HAM5-L1 0,0,0 Local CS at the origin of the Assy
D1101784 AdvLIGO SUS HAM5-L1, XYZ Local CS for OptLev DLC Assembly	<p>The position of the OptLev DLC is defined by:</p> <ol style="list-style-type: none"> 1. The Coordinates from DCC P/N E1000608-v2 X = 75.0 mm; Y = 872.3 mm; Z = -198.0 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 HAM5-L1 0,0,0 Local CS at the origin of the Assy
D1102287 AdvLIGO SEI HAM5-L1, XYZ Local CS for HWS Optics Assembly	<p>The position of the HWS Optics Assembly (TCS) is defined by:</p> <ol style="list-style-type: none"> 1. TCS provides the assembly (D1101849) with all components already defined on the HAM Table 2. Systems creates the 3D Sketch to position the Assy D1102287 on the HAM Table. 3. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the HWS Optics Assy, to the HAM5-L1 0,0,0 Local CS at the origin of the Assy
D1101917 Cable Harness Routing Configuration - HAM5	<p>The position of the Cable Harness is defined by</p> <ol style="list-style-type: none"> 1. Positioning the CS in the Cable Harness Assy at 325.0 mm above the Table Optical Surface as per DCC Doc E1000403-v1 2. Systems creates the 3D Sketch to position the Assy D1101917 on the HAM Table 3. Systems insert the assembly mating the AdvLIGO 0,0,0 Local CS from the Cable Harness Assy, to the HAM5-L1 0,0,0 Local CS at the origin of the Assy