	Station 6 (Final Machine Assembly)	See last page for Rev changes
Step	**Assembly Step**	**Comments**
1.00	**Component preparations**	
1.01	Assemble three field period support stands (see Fig 1a)	Drawing:
1.02	Assemble three spool piece support stands (see Fig 1b)	Drawing:
1.03	Assemble machine base structure (see Fig 2a)	Drawing:
1.04	Assemble three FPA installation carts (see Fig 1c)	Drawing:
1.05	Assemble spool support stand platforms	Drawing:
1.06	Assemble 3 laser support polls	Drawing:

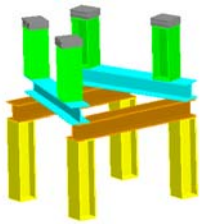


Fig 1a) Period

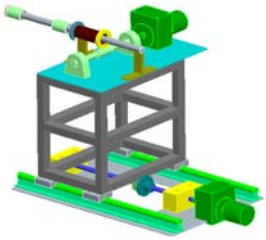


Fig 1b) Spool support stand

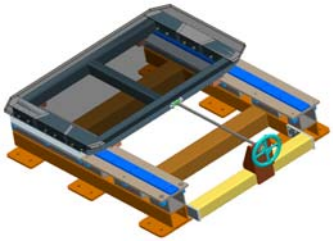


Fig 1c) FPA assembly cart

2.00	**Test cell metrology set-up and floor deflection test**	**Reference drawing:**
2.01	Install test cell metrology site monuments and perform initial metrology checks as defined the Station 6 Metrology procedure.	Metrology procedure covering Station 6:
2.02	Install the laser support base plate outside of each Period position. Install concrete filled laser support pole just outside of the Period 1.	
2.03	Laser tracker support pole bases also needs to be installed outside of each flange of the Type-C MC's at the Period 1 location only.	This is needed to install a laser support pole and laser to measure the VV and Type-C end flanges. Flanges on Period 2 and 3 are measured differently.
2.04	Install laser support pole on each Period base and add lateral supports (not shown).	
2.05	Establish the cell global coordinate system based on the test cell monuments.	
2.06	Qualify laser accuracy when laser is installed at Station 1 and then repeat 2.04 and 2.06 at Stations 2 and 3.	
2.07	Establish the test cell stability by measuring floor deflections using metrology measurements of installed site monuments with a concrete block placed at the different Period support positions.	
3.00	**Pre-Installation set-up and test**	**Reference drawing:**
3.01	Install the machine base support structure on the test cell floor (see Fig 2a).	
3.02	Install each of three FPA carts and drive systems (see Fig 2b). Exercise the cart drive system to make initial position and control qualifications.	Unlike the figure below shows, a mechanized screw system will be incorporated.
3.03	Install each of three support stands on the FPA carts. Add monuments to FPA support stands. Exercise the cart drive system to make initial position and control qualifications. Move carts to their final position to allow installation of lower PF coils.	See Fig. 2c below. The period support stands is sequenced here before the lower PF's are positioned in their temporary locations.
3.04	Remove lower PF access plate from cart rails. Position the lower PF 5 and 6 coils into the cart rail PF access groves and secure them in their temporary positions.	If PF 5 and 6 have not been fabricated yet their installation can wait until after step 3.

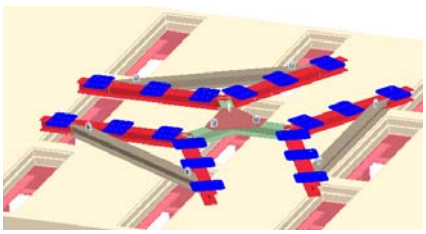


Fig. 2a) Machine base support

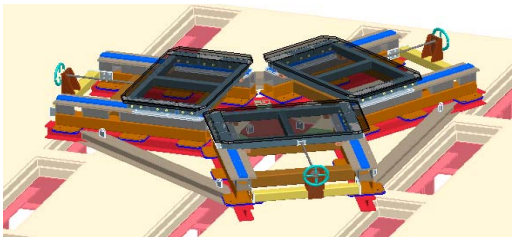
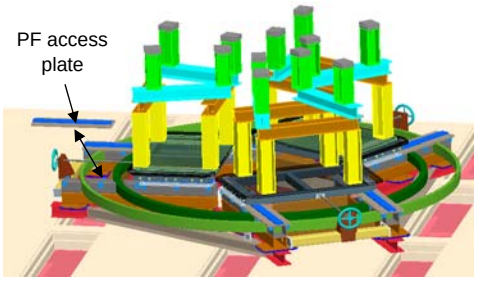
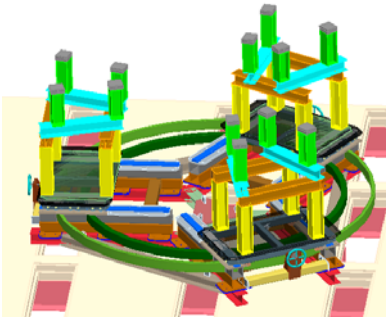
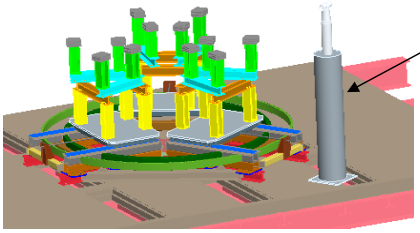


Fig. 2b) FPA assembly carts

Station 6 (Final Machine Assembly)		See last page for Rev changes
Step	**Assembly Step**	**Comments**
	 Fig. 2c) Lower PF 5 and 6 positioned within the cart rail groves.	 Fig. 2d) FPA cart moved to retracted position.
	 Fig. 3a) Laser support base and pole installed.	
4.00	**FPA-1 installation and assembly test**	**Reference drawing:**
4.01	Obtain a set of Period 1 alignment fiducial positions to use in locating the period.	
4.02	Move FPA 1 support fixture to the assembly position and lock in place. Prepare corner position adjustors located on the period platform to accept the period.	See Fig 4a and 4b below for arrangement of Periods within the test cell.
4.03	Using laser at Period 1 support pole, establish a global coordinate system based on monuments on the walls and on the FPA support fixture.	
4.04	Position Period 1 on the period support stand and engage the corner positioning device, retaining the load on the crane.	
4.05	Use the corner positioning device to position Period 1, bringing the three primary fiducials into alignment. The maximum deviation should be .015	I'M SETTING THE ALIGNMENT TO BE WITHIN .015" AT THIS POINT OF THE ASSEMBLY. COMMENTS?
4.06	While held by the crane bring the AirLoc Wedgemount leveler on the FPA support stand up to take the load. After FPA support fixture is supporting the load, re-measure all fiducials.	The laser will need to be moved around the perimeter of the part. The final set of measurements must overlap the initial set of measurements. The difference between repeated measurements of the same tooling balls must be .020" or less. Repeat the step until the desired tolerance is met.
4.07	Return the FPA support fixture with Period 1 to the extracted position, and then move it back to the installed position. Lock the cart in place then re-measure and record monument positions.	The purpose of the test is to see if the Period 1 can be moved and returned to the FPA installed position with the measured fiducials remaining within the allowed 0.020" tolerance.
4.08	Verify that the VV is in its proper position, using the laser tracker to align to VV tooling balls, locking into a minimum of 8 of them. If not in alignment, realign vessel to within .050".	
4.09	Install a personnel lift platform on the right side of the Period 1 (see Fig. 4c)	
4.10	Measure the VV and the Type-C MC end flanges on the right side of Period 1. Record the results and compare the data with values taken at Station 5.	
4.11	Repeat steps 4.10 and 4.11 to measure the Period 1 left side VV and Type-C flanges.	The project can decide if the measured VV end flange metrology data is sufficiently accurate and reliable enough to initiate the machining of the spool piece flanges based on the measured data. Step 4.13 below provides a check on this approach using one spool piece.

Station 6 (Final Machine Assembly)		See last page for Rev changes
Step	**Assembly Step**	**Comments**
4.12	Machine the Period 1 C side spool flange only and test the fit-up in Step 5.0.	

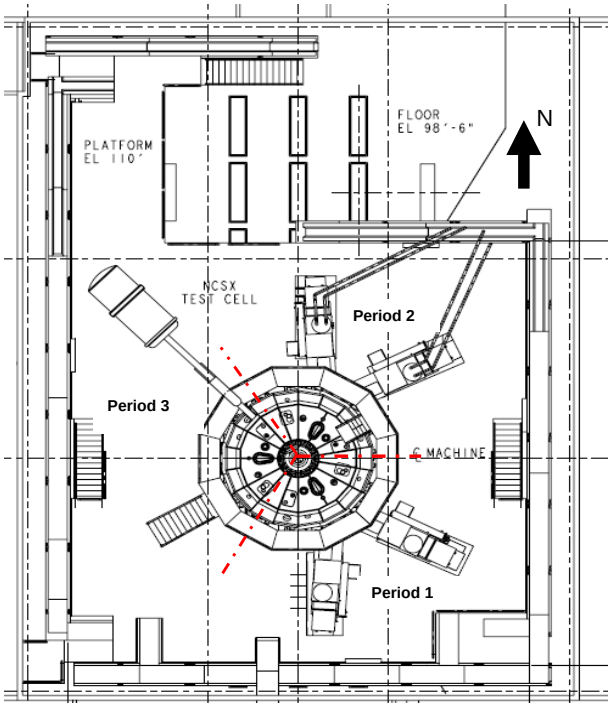


Fig. 4a) Test Cell Arrangement

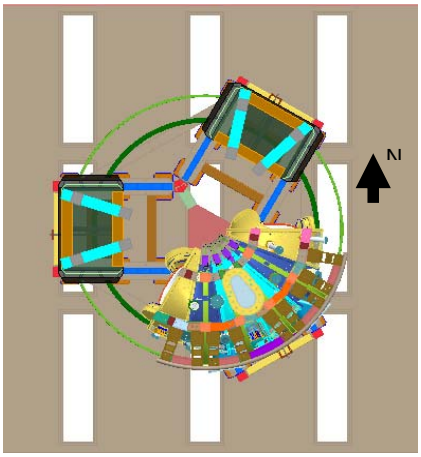


Fig. 4b) Period 1 Installation.

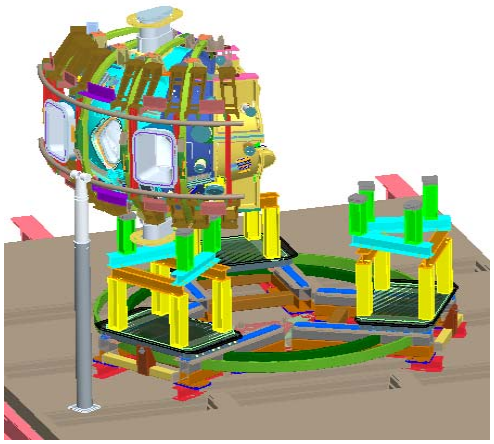
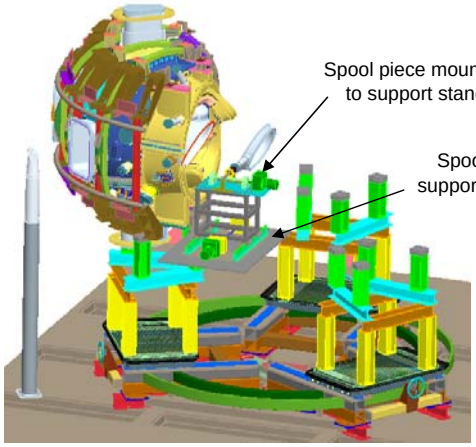
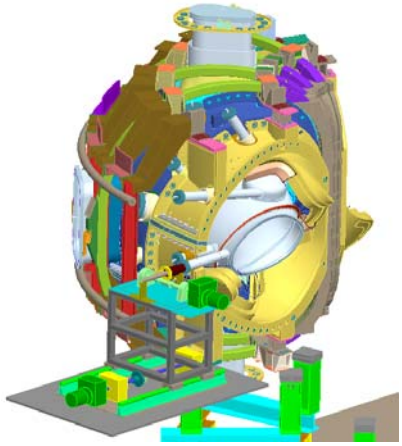
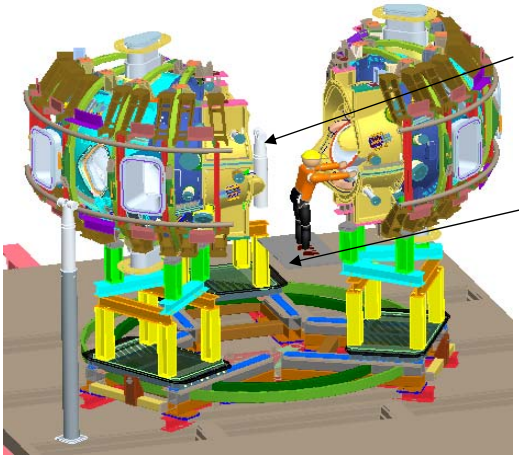
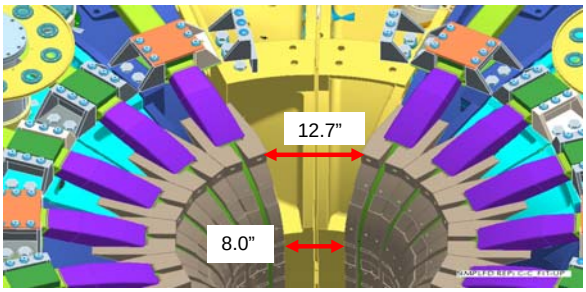
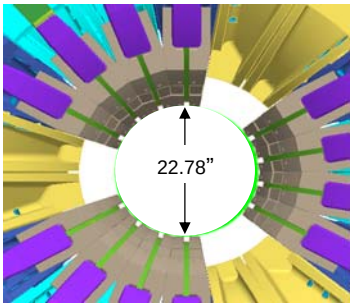


Fig. 4c) Period 1 with laser set up

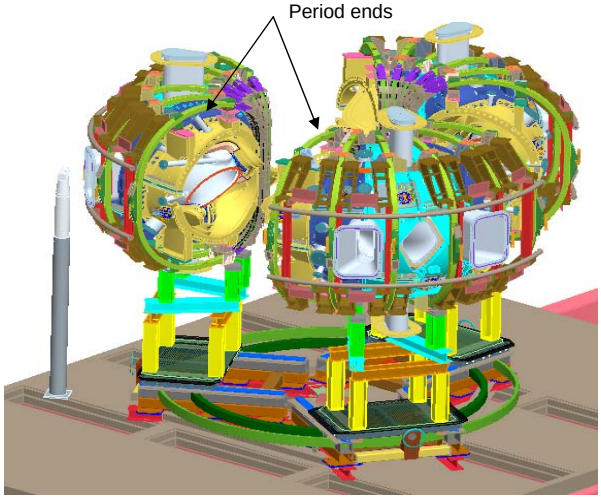
5.00	**Spool piece installation test**	**Reference drawing:**
5.01	Remove the tracker and tracker platforms and return the FPA support fixture with Period 1 to the extracted position.	
5.02	Install the local platform that supports the spool support stand on one side of Period 1.	
5.03	Reposition metrology lasers to accommodate platform presence. Check to see if a global coordinate system can be established based on the test cell monuments.	
5.04	Install the Period 1 spool support stand on the Period 1 platform.	
5.05	Perform an operational check of bringing the spool piece and Period 1 together, replicating final machine installation.	This test should qualify the basic spool / VV assembly technique.
5.06	If step 5.05 is successful then all spool flanges can be machined based on the metrology data coming out of Station 5.	
5.07	Loosen the Period 1 VV supports and pull VV outboard to its maximum extent using a temporary fixture attached at the NB port. Secure in place.	
5.08	Remove the spool, spool support stand and platform.	We may not need to remove the spool piece platform if it can be designed to also accommodate C-C flange measurements. The design of the Station 6 platforms that are needed for the machine installation will be developed to best meet the needs of the various installation activities.

Station 6 (Final Machine Assembly)		See last page for Rev changes
Step	**Assembly Step**	**Comments**
	 Fig. 5a) Period 1 retracted with spool and support stand installed	 Fig. 5b) Period 1 and spool shown at installed
6.00	**With the success of Step 5.06, initiate the spool flange machine from metrology data generated in Station 5.**	**Reference drawing:**
7.00	**FPA-2 installation**	**Reference drawing:**
7.01	Obtain a set of Period 2 alignment fiducial positions to use in locating the period.	
7.02	Move FPA 2 support fixture to the assembly position and lock in place. Prepare corner position adjustors located on the period platform to accept the period.	See Fig 4a and 4b above for arrangement of Periods within the test cell.
7.03	Place laser support pole and laser at Period 2 and establish a global coordinate system based on monuments on the walls and on the FPA support fixture.	
7.04	Position Period 2 on the period support stand and engage the corner positioning device, retaining the load on the crane.	
7.05	Use the corner positioning device to position Period 2, bringing the three primary fiducials into alignment. The maximum deviation should be .015	I'M SETTING THE ALIGNMENT TO BE WITHIN .015" AT THIS POINT OF THE ASSEMBLY. COMMENTS?
7.06	While held by the crane bring the AirLoc Wedgemount leveler on the FPA support stand up to take the load. After FPA support fixture is supporting the load, re-measure all fiducials.	The laser will need to be moved around the perimeter of the part. The final set of measurements must overlap the initial set of measurements. The difference between repeated measurements of the same tooling balls must be .020” or less. Repeat the above step until the desired tolerance is met.
7.07	Return the FPA support fixture with Period 2 to the extracted position, and then move it back to the installed position. Lock the cart in place then re-measure and record monument positions.	
7.08	Verify that the VV is in its proper position, using the laser tracker to align to VV tooling balls, locking into a minimum of 8 of them. If not in alignment, realign vessel to within .050".	THE MODEL NEEDS TO BE CHECKED TO VERIFY THAT TRACKER ACCESS SPACE IS AVAILABLE TO MEASURE THE FLANGES.
7.09	Install a personnel lift platform between Periods 1 and Period 2. Using the platform mount a laser head support bracket and laser head to the Period 1 Type-C flange.	
7.10	Measure the VV and the Type-C MC left end flanges of Period 2. Record the results and compare the data with values taken at Station 5.	A back office review is needed here to see if we are still within expected tolerances.
7.11	Loosen the VV supports and pull VV outboard to its maximum extent using a temporary fixture attached at the NB port. Secure in place.	This process will assure that at final fit-up the MC Type-C flanges will be interfaced instead of the VV.
7.12	Return the FPA 2 support fixture with Period 2 to the extracted position. Lock the cart in place.	

Station 6 (Final Machine Assembly)		See last page for Rev changes
Step	**Assembly Step**	**Comments**
	 Fig. 6a) Type-C flange measurement	
8.00	**FPA-3 installation**	**Reference drawing:**
8.01	Obtain a set of Period 3 alignment fiducial positions to use in locating the period.	
8.02	Move FPA 3 support fixture to the assembly position and lock in place. Prepare corner position adjustors located on the period platform to accept the period.	See Fig 4a and 4b below for arrangement of Periods within the test cell.
8.03	Place laser support pole and laser at Period 3 and establish a global coordinate system based on monuments on the walls and on the FPA support fixture.	
8.04	Position Period 3 on the period support stand and engage the corner positioning device, retaining the load on the crane.	
8.05	Use the corner positioning device to position Period 3, bringing the three primary fiducials into alignment. The maximum deviation should be .015	I'M SETTING THE ALIGNMENT TO BE WITHIN .015" AT THIS POINT OF THE ASSEMBLY. COMMENTS?
8.06	While held by the crane bring the AirLoc Wedgemount leveler on the FPA support stand up to take the load. After FPA support fixture is supporting the load, re-measure all fiducials.	The laser will need to be moved around the perimeter of the part. The final set of measurements must overlap the initial set of measurements. The difference between repeated measurements of the same tooling balls must be .020" or less. Repeat the above step until the desired tolerance is met.
8.07	Return the FPA support fixture with Period 3 to the extracted position, and then move it back to the installed position. Lock the cart in place then re-measure and record monument positions.	
8.08	Verify that the VV is in its proper position, using the laser tracker to align to VV tooling balls, locking into a minimum of 8 of them. If not in alignment, realign vessel to within .050".	THE MODEL NEEDS TO BE CHECKED TO VERIFY THAT TRACKER ACCESS SPACE IS AVAILABLE TO MEASURE THE FLANGES.
	Install a personnel lift platform between Periods 1 and Period 3. Using the platform mount a laser head support bracket and laser head to the Type-C flange of Period 1.	
8.09	Measure the VV and the Type-C MC right end flanges of Period 3. Record the results and compare the data with values taken at Station 5.	A back office review is needed here to see if we are still within expected tolerances.
8.10	Loosen the VV supports and pull VV outboard to its maximum extent using a temporary fixture attached at the NB port. Secure in place.	This process will assure that at final fit-up the MC Type-C flanges will be interfaced instead of the VV.
8.11	Return the FPA 3 support fixture with Period 3 to the extracted position. Lock the cart in place.	
9.00	**Measure remaining Type-C MC flanges**	
9.01	Using the platform located between Period 2 and 3 mount a laser head support bracket and laser head on Period 2	
9.02	Measure the VV and the Type-C MC left end flanges of Period 3. Record the results and compare the data with values taken at Station 5.	

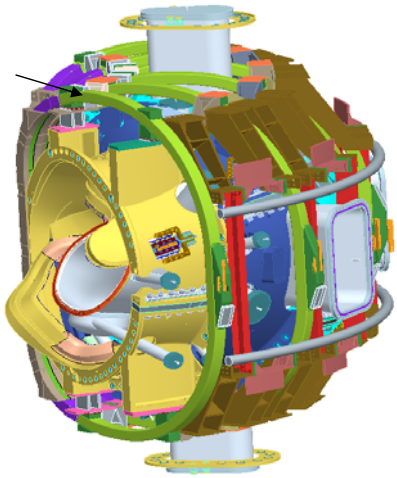
Station 6 (Final Machine Assembly)		See last page for Rev changes
Step	**Assembly Step**	**Comments**
9.03	Move the laser head and support bracket from Period 2 "C" flange to Period 3 "C" flange and then measure Period 2 right side VV and Type-C end flanges.	
10.00	**Type-C shim sizing / preparations**	**Metrology procedure covering Station 2:**
10.01	Using flange measurement of the coils, define the C/C shim thickness.	This is a back office calculation where shim thickness is predetermined based on the scanned flange surface data.
10.02	Compress alumina coated shims and sort by thickness the shim set that will be installed on the MCHP.	
11.00	**Type-C inboard shim installation check**	**Reference drawing:**
11.01	Temporarily attach a set of outboard shims (top / bottom) and all inboard shims on one Type-C flange of each of the three Periods.	See document XXXX for shim size and location.
11.02	Some type of inspection capability is needed at the C-C inboard shim interface (camera or manned access). The space is tight (see figures below).	A point of interest….you need 22.5" for a man hole cover in order to pass through. Any volunteers'?
11.03	Remove all personnel platforms used for installing shims.	
11.04	Slowly return all three FPA support fixtures to their installed position. View "C" interface engagement from camera feed. Lock the cart in place.	
11.05	Install studs and supernuts at the shimmed locations; torque to 50% of final value.	
11.06	Make a hand "wiggle" test (rotate on bolt) on all shims to make sure that they are tight. If a loose shim is found back off on sufficient adjacent bolts to allow a replacement shim to be inserted. Tighten bolt and recheck.	
11.07	Measure a minimum of eight tooling balls on each Period. The maximum deviation should be .020" or less.	This step should be done twice to assure the accuracy of the measurement.
	 	
11.08	If the metrology measurement is greater than .020" a back office input is needed to provide guidance in resizing shim thickness. Loosen hardware, install new shims and re-measure.	
11.09	With a successful metrology measurement at the above step completed, remove all hardware and return each Period to their retracted position	
11.10	Permanently secure in place all inboard shims. Retain in place all initial alignment outboard shims.	If inboard shims can be attached with a semi-permanent countersunk hardware connection then maybe this task could be done in Step 10.01.
12.00	**Install remaining TF coils**	**Reference drawing:** **Metrology procedure covering Station 6:**
12.01	On **Period 1** Install TF coils at the end of the Period with full TF support brackets on the outboard end and partial brackets on the inboard end. Temporary supports may be need to take the place of the final inboard supports.	The final TF plate bracket on the inboard end will be installed after all Periods are at their final position.
12.02	Using the laser tracker, align to fiducials on the MC locking into a minimum of 8 of them.	A RMS deviation of .005" or better is required.
12.03	Position each of the 6 TF coils so they are properly aligned, meeting the requirements set forth in the metrology procedure.	
12.04	Secure the coils in place to inspect and measurement of the outer surfaces of Period parting plan.	
12.05	Set up the laser (pole mounted or off the adjoining Type-C coil) and measure the interfacing Period TF surfaces.	
12.06	After successfully completing the above steps retract each TF coil outward as far as possible and lock in place.	This will assure that when assembling the Periods that the interfacing surfaces will be the MC Type-C flanges.
12.07	Follow steps 11.01 - 11.06 to install TF coils on **Period 2**.	

Station 6 (Final Machine Assembly)		See last page for Rev changes
Step	**Assembly Step**	**Comments**
12.08	Follow steps 11.01 - 11.06 to install TF coils on **Period 3**.	



TF coils installed at both ends on each Period

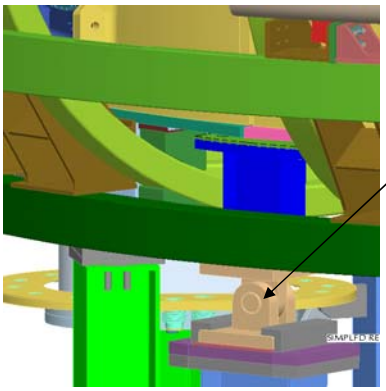
TF coils at the Period ends



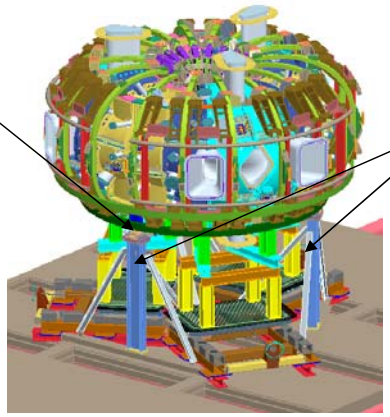
13.00	**Install PF4- lower and solenoid support column**	**Reference drawing:**
13.01	Place PF-4 lower in a temporary position blocked off the machine base by about 1 foot.	
13.02	Temporarily place the lower TF centering disks on top of PF-4.	
14.00	**Move all Periods to installed position**	**Reference drawing: XXXXXXXXX** **Period and Spool path sequence steps: Document No.**
14.01	Remove the tracker and tracker platforms and install the local platforms between each Period, to be used for the spool support stands.	
14.02	Install the spool support stand and spool (spacer) on the spool installation platforms and perform operations checks.	Run spool installation platform through their cycle to verify that the spool instillation path is tracking properly.
14.03	Install a camera (or some type of viewing system) that will allow viewing the VV / spool interfacing surfaces as they come together.	
14.04	Using lasers placed on the laser stand lock into at least 8 governing Period monuments and verify that each Period is in the proper orientation in their retracted position. Also perform a metrology check on each spool piece (space) to confirm that they also are in the proper retracted position and orientation.	
14.05	Slowly bring together the three Periods and three spacers (spool pieces) together taking time to view the VV / spool interfacing surfaces.	
14.06	Install local platforms as needed to gain access to the areas where the C-C interface hardware will be installed.	
14.07	Install studs and supernuts at the shimmed locations; torque to 50% of final value.	Temporarily attached outboard shims (top / bottom) and all inboard shims on one of the Type-C flange of each of the three Periods were already attached in the pre-installation check (Step 10) .
14.08	Make a hand "wiggle" test (rotate on bolt) on all shims to make sure that they are tight. If a loose shim is found back off on sufficient adjacent bolts to allow a replacement shim to be inserted. Tighten bolt and recheck.	
14.09	Measure a minimum of eight tooling balls on each Period and record the Periods' positions. The maximum deviation from the "CAD" reference position should be .020" or less. Make shim adjustments if needed.	This step should be done twice to assure the accuracy of the measurement.
14.10	Install a local personnel support platform in the solenoid region at the top, attaching it to the TF side plates (see Fig. 13.XX below).	

Station 6 (Final Machine Assembly)		See last page for Rev changes
Step	**Assembly Step**	**Comments**
14.11	Loosen the bolts locally and Install all remaining shims, studs and supernuts and torque to 50%	
14.12	Make a final hand "wiggle" test (rotate on bolt) on all shims to make sure that they are tight. If a loose shim is found back off on sufficient adjacent bolts to allow a replacement shim to be inserted. Tighten bolt and recheck.	
14.13	Install inboard TF support structure at each Period that spans interfacing Type-C MC shells (top and bottom). The structure and attachment bolts will be insulated to maintain electrical isolation at the "C" interfaces.	
14.14	One hole at a time, remove the supernut. Using the eccentric gage slid onto the stud define the hole eccentricity. Select bushing and machine to match required eccentricity. Install bushing. Replace nut and tighten back to 50% and recheck alignment.	This operation can be done concurrently at different locations if in so doing the part does not move.
14.15	With the successful completion of the above step, complete tightening of C-C flange bolts to 100% **AND** seal between all shims.	
14.16	Measure the tooling balls on all Periods. The maximum deviation from the “CAD" reference position should be .020” or less. Record the machine positional data for future use.	If the deviation is greater that .020", Project input is needed to determine how to proceed.
14.17	Using the above data back office calculations will be made to determine the proper leveling sequence for lowering of the machine or the final supports.	The machine load will ultimately be transferred from the Wedgemount leveling pads located on the temporary support stands to the final machine supports. The effort will be to place the machine "Z" axis vertical.
15.00	**Move each VV Period to their final installed position**	**Reference drawing:**
15.01	One Period at a time loosen the VV supports on the fixture located at the NB port, allowing the VV to move into its final installed position. Use metrology measurements of monuments on the VV to aid in positioning the vessel. Secure each vessel in place.	
15.02	With all VV secured, enter each of the three NB ports and properly position each spool pieces in preparation to weld the spool / VV flanges together. Place internal clips between spool and VV end flanges.	Each spool piece will need to be disengaged from the spool support stand to allow internal connection to each VV period.
15.03	Remove each spool support stand.	
15.04	Following a prescribed weld sequence, weld all spool pieces to the VV and perform the final welding of all port 4's.	
15.05	Remove all temporary vertical VV support rods	
15.06	Place boots on all three spool ports	
15.07	Secure VV horizontal supports at each NB port.	
16.00	**Move TF coils to their final installed position**	**Reference drawing:**
16.01	With crane access through the machine center raise the TF centering disk previously placed on PF-4 lower and loosely secure it to the MC. Also loosely securing a TF centering disks to the upper region of the MC shells.	A local platform may be needed to work over the PF-4 coil sitting blocked off the floor.
16.02	Align the TF centering disks to the Period defined coordinate system and secure them to the MC shells.	The alignment details here need to be developed.
16.03	Pull / push 180° facing TF coil into the centering disks (top and bottom) engaging stops on the disks. Continue this process until all eighteen TF coils are in their wedged position.	This should be a radial process at this time as shim plates which defined the coil planer position would have been set in Step 11. Further details here need to be developed.
16.04	Using the laser tracker mounted on the Period stands, align to fiducials on the MCs (locking into a minimum of 8); measure the alignment of each TF coil.	The TF coils should be positioned so they are properly aligned, meeting the requirements set forth in the metrology procedure.
17.00	**Install lower PF coils**	**Reference drawing:**
17.01	Remove the PF access plates from the carts	
17.02	Raise PF5 and PF6 off the floor and install them off the lower PF support structure.	Final PF coil alignment will be done later.
18.00	**Transfer weight to final machine support structure**	**Reference drawing:**
18.01	Install the final machine structures located at each of "C-C" joints.	
18.02	Install local machine support fittings at each of the machine supports.	
18.03	Obtain the Wedgemount leveling sequence developed in Step 13.17.	
18.04	Following the leveling sequence slowly transfer the machine weight from the temporary supports to the three final support posts.	

Station 6 (Final Machine Assembly)		See last page for Rev changes
Step	**Assembly Step**	**Comments**
18.05	Retract the three FPA carts and remove the FPA support stands and carts from beneath the machine.	
18.06	Install the inboard machine supports at the "A-A" interface at each Period and engage the machine, loading as defined in specification XXXXXX.	

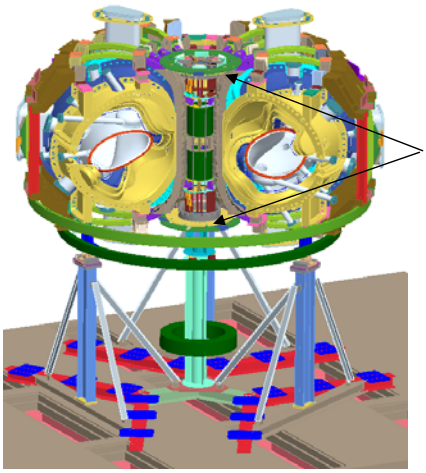


Type-C support interface fitting



Permanent machine supports

Fig. 16a) Final machine supports installed



TF centering disk

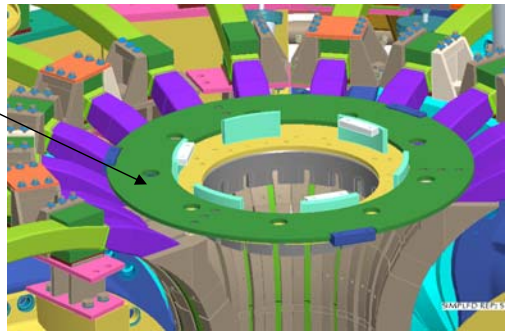
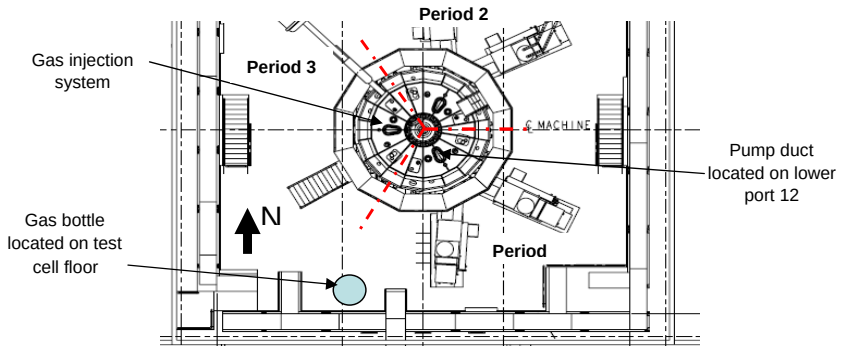


Fig. 16b) Machine support structure with support carts removed

19.00	**Install vacuum pumping system**	**Reference drawing:**
19.01	Install a single pump duct, vacuum valve and turbo pump on the lower port 12 of Period 1.	
19.02	Install pumping rack in Period 1 area near the pump duct. Position the portable pumping cart in the same area.	
19.03	Perform all A/C power connections and pump system RGA / IG hook-ups.	
19.04	Install gas injection system on the upper port 12 on Period 3. Install a gas bottle supply on the floor near the south wall.	
19.05	Install E-Beam mapping and diagnostic equipment	
19.06	Perform a vacuum pump system operations test	

Station 6 (Final Machine Assembly)		See last page for Rev changes
Step	**Assembly Step**	**Comments**
	 Fig. 17) Vacuum pumping system	
20.00	**VV pump down test**	
20.01	Pump down VV and perform vessel operations test.	
21.00	**Insulation fill**	
21.01	Recheck all VV penetrations to assure seals are in place. Seal any gaps uncovered.	
21.02	Fill MC/VVSA annulus with pourable aerogel insulation	
22.00	**Install solenoid and remaining PF coils**	**Reference drawing:**
22.01	Locate a laser tracker system on the floor and lock into fiducials on the Periods to establish the machine coordinate system.	
22.02	Assemble solenoid and attach solenoid lead lower section to overall solenoid assembly.	This activity can be done at an earlier time.
22.03	Install the solenoid central support column through the center of the machine and secure it to the machine base.	
22.04	Lower the **solenoid** assembly and temporarily secure it in place on the pre-installed support column. A lateral load connection is made to the upper TF coil centering ring assembly. Align the solenoid and secure in place, adjusting spring compression in solenoid support structure.	Use the floor mounted laser tracker to properly align the coil.
22.05	Install **PF-4 lower**, raising it off the floor. Use the floor mounted laser tracker to properly align the coil.	
22.06	Install **PF-5 upper**. Use the pole mounted laser tracker to properly align the coil.	
22.07	Install **PF-6 upper**. Use the pole mounted laser tracker to properly align the coil.	
22.08	Align **PF-5 lower** and secure in place. Use the pole mounted laser tracker to properly align the coil.	
22.09	Align **PF-6 lower** and secure in place. Use the pole mounted laser tracker to properly align the coil.	
22.10	Install laser tracker to align PF-4 upper	
22.11	Install **PF-4 upper; align and secure in place.**	
23.00	**Install Rogowski services**	Assume none of the flux loops will be hooked up for first plasma
24.00	**Install electrical services**	
25.00	**Install all I&C systems**	
26.00	**Install nitrogen services**	
27.00	**Perform a systems operations warm test**	
28.00	**Install 150 C bakeout system**	
29.00	**Install the cryostat**	
30.00	**Install all test cell platforms**	

Change in Rev 9.2:

1 Increased the size of the laser pole in Figure 3a only. Time didn't permit to resizing poll in other figures.

Change in Rev 7:

1 Moved the concrete block to the test cell metrology set-up in Step 2 and reworked Step 3 to involve the test cell support structure set-up only.
2 Added Step 6 to define the initiation of machining spool piece flanges
3 Added the installation of shim gap filler in Step 14.15 in the addition of the final bolt tightening.
4 Added boots on spool pieces in 15.06
5 Moved VV/MC insulation fill up to Step 21, before the PF coils are installed.
6 Added I&C hook-up (Step 25)
7 Added 150C bakeout installation (Step 28)

	Station 6 (Final Machine Assembly)	See last page for Rev changes
Step	**Assembly Step**	**Comments**

Change from earlier Rev 5 release:

1 Added Steps 14.05 and 14.06 involving the removal of temporary VV supports and the final installment of the lateral supports
2 Added Step 12.03 temporarily placing TF centering disk on PF-4 lower. Also added 15.01 and 15.02 reworking the disk installation and alignment.
3 Moved solenoid support column installation from 12.01 to Step 19. Column interferes with lower access if installed in Step 12.
4 Added a solenoid assembly item in Step 19
5 I had an error in the Step numbers with two Step 17's.