

Subsystem Component Feature Relation	+/- Tol's		Comments
	X/Y (mm)	Z (mm)	
TKR			
<i>Raw tolerances from drawings and IDD's</i>			
Module tilt/bookshelving wrt Flexure hole datums	0.000		Static deflec outside 372 mm stayclear
<i>Dynamic motion wrt nominal position</i>			
Module dynamic motion wrt nominal position (top of module)	0.755		3-sigma TKR random vibrate for 100 Hz
Module dynamic motion wrt nominal position (bot of module)	0.220		
Grid			
<i>Raw tolerances from drawings and IDD's</i>			
Bay datum pins wrt neighboring bay	0.075		True position to 0.15 from CAL IDD
TKR flexure hole position wrt bay datum pins (all 12 holes)	0.075	0.025	Mach errors in Grid hole machining
Top flange profile tol (one-sided outward) wrt bay datum pins	0.150		
<i>Dynamic motion wrt nominal position</i>			
Max sag of Grid due to MECO launch accel		0.500	
Bay CL motion wrt neighbor due to 5 degC temp diff. at launch	0.019		PPG guarantees +/- 2.5 degC
<i>Derived tolerances for TKR wrt nominal location on the Grid</i>			
TKR module top swing due to tip from 500 micron sag of Grid	0.205		Imparted by Grid sag
TKR module swing at top due to Grid hole angle wrt Grid	0.121		Due to Grid corner datum hole Z-tol
TKR module corner twist due to rotation of Grid holes around Z	0.053		
<i>TKR module centerline position total tolerance</i>			
At top of TKR stay-clear	1.303		Half-gap = 1.250 mm
Near bottom of TKR stay-clear	0.442		Half-gap = 1.250 mm
In thickened bottom region of TKR stay-clear	0.442		Half-gap = .5 mm