GTR-04-10

A Summary of Current Known Sources of Dummy to Dummy Variation



Paul Depinet September 21, 2010

Possible Sources of Dummy to Dummy Variation

Affect	Certif. Tests	Headrest Cert Test	Action Taken	Comments
Jacket Stiffness	Yes	Yes	Tighten Manufacturing Specs Use Dynamic stiffness test d	Draft Jacket impact test to check stiffness
Water amount in Jacket	No	No, Minor affect to rebound	Add Weight spec for water install in jacket	
Head Type (skull cap LC vs std)	No	Minor Affect	Do not include skull cap load cell head in drawing package	
Damper Oil amount	No	No	None	
Pelvis Stiffness	N/A	N/A	Dynamic Stiffness test in development	Need impact test corridors
Lateral tilt adjustment of OC Plate	Yes(?)	Small	Revised Adjustement procedure under development Add Upper My to Cert Test	Problem found later with cert test study - redo
Cervical Pin Fit	TBD	TBD	Measure pin holes	Due Sept 30
Cervical Pins with Rust	TBD	TBD	Pins were changed to stainless in 2003	



Possible Sources of Dummy to Dummy Variation

Affect	Certif. Tests	Headrest Cert Test	Action Taken	Comments
Spine Set up	TBD	TBD		Due Oct. 15
Bumper Stiffness & height (permanent set with time)	TBD	TBD		Due Oct 30
Missing bumpers	N/A	N/A	CHECKLIST TO VERIFY	
Damper cable slipping no drum	N/A	N/A	CHECKLIST TO VERIFY	
Vertebrae fit tolerances	TBD	TBD		
H-III50M skull accidentally used	No	Yes	CHECKLIST, Add error proofing ping	
Head skin creating load path around UN LC	Yes	No	CHECKLIST	
Muscle Spring Stiffness	TBD	TBD		Due Dec 17

