

DRAFT

Head Restraint GTR – Status of Requirements (December 2006)

Front outboard: mandatory installation

Rear outboard and front centre: optional, but if fitted, they must meet

Dimensional Requirements

Seating Position	Height (5.1.1)	Width (5.1.2)	Gaps within HR (5.1.3)	Gaps between HR and seat back top (5.1.4)	Backset (5.1.5)
Front outboard (static system)	*Minimum of 800 mm in at least 1 position. *Minimum of 750 in any use position. *Exemption if roof contact	Minimum of 170 mm	Gaps > 60 mm must meet max 102 mm rearward displacement. Procedure: 165 mm sphere	*Not adjustable: max 60 mm. *Adjustable: max 25 mm when measured with linear ruler or max 60 mm when measured with 165 mm sphere	*[55-70] mm. Procedure: HRMD -or- *[40-55] mm. Procedure: R point and FARO arm
Front outboard (non-static system) -Same as front outboard static system, except for backset	*Minimum of 800 mm in at least 1 position. *Minimum of 750 in any use position. *Exemption if roof contact	Minimum of 170 mm	Gaps > 60 mm must meet max 102 mm rearward displacement. Procedure: 165 mm sphere	*Not adjustable: max 60 mm. *Adjustable: max 25 mm when measured with linear ruler or max 60 mm when measured with 165 mm sphere	*[80] mm. Procedure: HRMD -or- *[80] mm. Procedure: R point and FARO arm
Front centre	*Minimum of 750 mm in any use position. *Exemption if roof contact	Minimum of 170 mm	Gaps > 60 mm must meet max 102 mm rearward displacement. Procedure: 165 mm sphere	*Not adjustable: max 60 mm. *Adjustable: max 25 mm when measured with linear ruler or max 60 mm when measured with 165 mm sphere	-No requirement
Rear outboard	*Minimum of 750 mm in any use position. *Exemption if roof contact	Minimum of 170 mm	Gaps > 60 mm must meet max 102 mm rearward displacement. Procedure: 165 mm sphere	*Not adjustable: max 60 mm. *Adjustable: max 25 mm when measured with linear ruler or max 60 mm when measured with 165 mm sphere	-No requirement
Rear centre	No height requirement (not regulated as a head restraint if height is less than 700 mm)	Minimum of 170 mm	Gaps > 60 mm must meet max 102 mm rearward displacement. Procedure: 165 mm sphere	*Not adjustable: max 60 mm. *Adjustable: max 25 mm when measured with linear ruler or max 60 mm when measured with 165 mm sphere	-No requirement

Static Requirements

Seating Position	Energy absorption front surface (5.2)	Adjustable height retention (5.2)	Displacement Test & Backset retention (5.2)	HR strength (5.2)	Non-use positions (5.4)	Removability (5.5)
Front outboard (static system)	Max 80g/3ms. Procedure: 165 mm sphere impact	Downward movement max 25 mm. Procedure: cylinder with 500N downward force	Max 102 mm rearward displacement. Procedure: see R17 Adjustable backset: Contracting Party Option to test in rearmost (see above) or in any adjustment (see above procedure with additional displacement evaluation)	Resist load of 890 N	(Front passenger only) -Automatic return	Allowed when accompanied with a distinct action other than upward adjustment.
Front outboard (non-static system)	Max 80g/3ms. Procedure: 165 mm sphere impact	Downward movement max 25 mm. Procedure: cylinder with 500N downward force	Max 102 mm rearward displacement. Procedure: see R17	No requirement	(Front passenger only) -Automatic return	Allowed when accompanied with a distinct action other than upward adjustment.
Front centre	Max 80g/3ms. Procedure: 165 mm sphere impact	Downward movement max 25 mm. Procedure: cylinder with 500N downward force	No requirement	Resist load of 890 N	Contracting Party Option: <u>Either</u> Automatic return, 10° torso angle change, 60° rotation, or discomfort metric <u>Or</u> all of the above or labels	Allowed when accompanied with a distinct action other than upward adjustment.
Rear outboard	Max 80g/3ms. Procedure: 165 mm sphere impact	Downward movement max 25 mm. Procedure: cylinder with 500N downward force	No requirement	Resist load of 890 N	Contracting Party Option: <u>Either</u> Automatic return, 10° torso angle change, 60° rotation, or discomfort metric <u>Or</u> all of the above or labels	Allowed when accompanied with a distinct action other than upward adjustment.
Rear centre	Max 80g/3ms. Procedure: 165 mm sphere impact	Downward movement max 25 mm. Procedure: cylinder with 500N downward force	No requirement	Resist load of 890 N	Contracting Party Option: <u>Either</u> Automatic return, 10° torso angle change, 60° rotation, or discomfort metric <u>Or</u> all of the above or labels	Allowed when accompanied with a distinct action other than upward adjustment.

*Numbers in parenthesis in title row correspond to text in HR-8-2

**Definition required for either “static system” or “non-static system”