

**Table 1. Oblique Test Matrix (VtV to RMDB Comparison)**

Target Vehicle *	Bullet Vehicle *	Target Vehicle DV / Bullet Vehicle Speed (mph)	Angle	Overlap	NHTSA Test Number	NHTSANO /TSTREF	Purpose
<b>Vehicle-to-Vehicle</b>							
2007 Taurus (TH)	2007 Taurus (HIII)	35/70	15 degrees	50 %	6830	091020	Replicate real-world
2007 Ford 500 (TH)	2007 Ford 500 (HIII)	35/70	15 degrees	50 %	6831	091030	Replicate real-world
2007 Ford 500 (HIII)	2007 Ford 500 (TH)	35/70	15 degrees	50 %	6865	R70211	Compare TH and HIII response / Difference in lab vehicle response variability
2010 Yaris	2010 Yaris	35/70	15 degrees	50%	7371	110303	Replicate real-world
<b>214 MDB-to-Vehicle</b>							
2007 Taurus (TH)	214 MDB	35/79	15 degrees	50 %	6852	R70208	Replicate VTV
2007 Ford 500 (TH)	214 MDB	35/≈80	15 degrees	50 %	6937	R70212	Replicate VTV
<b>Research MDB-to-Vehicle</b>							
2007 Taurus (TH)	RMDB	35/70	15 degrees	35%	7366	R70218	Replicate VTV
2007 Ford 500 (TH)	RMDB	35/70	15 degrees	35 %	7429	R70219	Replicate VTV
2010 Yaris (TH)	RMDB	35/70	15 degrees	35 %	7434	RA5135	Replicate VTV

\* TH – Thor NT 50 percentile male in driver seat

HIII – HIII 50 percentile male in driver seat

RMDB: Research Moving Deformable Barrier

**Table 2. Small Overlap Test Matrix (VtV to RMDB Comparison)**

Target Vehicle *	Bullet Vehicle *	Target Vehicle DV / Bullet Vehicle Speed (mph)	Angle	Overlap	NHTSA Test Number	NHTSANO /TSTREF	Purpose
<b>Vehicle-to-Vehicle</b>							
2007 Taurus (TH)	2005 Taurus (HIII)	35/70	7 degrees	Frame-to-Frame	7292	101116	Replicate real-world
2010 Yaris (TH)	2010 Yaris (HIII)	35/70	7 degrees	Frame-to-Frame	7293	101207	Replicate real-world
<b>214 MDB-to-Vehicle</b>							
2007 Taurus (TH)	214 MDB	30/≈70	15 degrees	18 %	6855	R70207	Replicate VTV
<b>Vehicle-to-Pole</b>							
2005 Civic (TH)	Pole	35	Aim for the head	NA	6872	Completed	Replicate real-world / countermeasure evaluation
2009 Civic (TH)	Pole	35	Aim for the head	NA	6873	Completed	Replicate real-world / countermeasure evaluation
2007 Taurus (TH)	Pole	35	7 degrees	NA	7144	Completed	Replicate VTV
2010 Yaris (TH)	Pole	35	7 degrees	NA	7145	Completed	Replicate VTV
<b>Research MDB-to-Vehicle</b>							
2007 Taurus (TH)	RMDB	35/70	7 degrees	Align with outside edge of frame	7368	R70221	Replicate VTV
2010 Yaris (TH)	RMDB	35/70	7 degrees	Align with outside edge of frame	7433	RA5134	Replicate VTV

\* TH – Thor NT 50 percentile male in driver seat

HIII – HIII 50 percentile male in driver seat

RMDB: Research Moving Deformable Barrier

**Table 3. Oblique Test Matrix (RMDB<sub>b</sub> Fleet Study)**

Target Vehicle			Closing Speed (mph)	Angle (degrees)	Overlap (Percent)	NHTSA Test Number	NHTSANO /TSTREF	Purpose
2011	Smart	Fortwo	56	15	35	7458	RB0526	Fleet Study
2011	Toyota	Yaris	56	15	35	7441	RB5136	Fleet Study
2011	Ford	Fiesta	56	15	35	7428	RB0225	Fleet Study
2011	Chevy	Cruze	56	15	35	7431	RB0177	Fleet Study
2011	Buick	Lacrosse	56	15	35	7467	RB0179	Fleet Study
2011	Ford	Explorer	56	15	35	7476	RB0223	Fleet Study
2011	Dodge	RAM1500	56	15	35	7457	RB0331	Fleet Study

**Table 4. Small Overlap Test Matrix (RMDB<sub>b</sub> Fleet Study)**

Target Vehicle			Closing Speed (mph)	Angle (degrees)	Overlap (Percent)	NHTSA Test Number	NHTSAN O/TSTRE F	Purpose
2011	Smart	Smart	56	7	20	7459	RB0527	Fleet Study
2011	Toyota	Yaris	56	7	20	7444	RB5137	Fleet Study
2012	FIAT	500	56	7	20	7862	RB0528	
2011	Ford	Fiesta	56	7	20	7427	RB0224	Fleet Study
2012	Volvo	S60	56	7	20	7861	RC5909	
2011	Chevy	Cruze	56	7	20	7432	RB0178	Fleet Study
2010	Ford	Fusion	56	7	20	7430	RA0220	Fleet Study
2011	Buick	Lacrosse	56	7	20	7468	RB0180	Fleet Study
2011	Ford	Explorer	56	7	20	7426	RB0222	Fleet Study
2011	Dodge	Ram1500	56	7	20	7456	RB0330	Fleet Study

RMDB<sub>b</sub>: Research Moving Deformable Barrier with lowered front end

**Table 5. Chevrolet Cruze Oblique Repeat Test Matrix**

Target Vehicle			Closing Speed (mph)	Angle (degrees)	Overlap (Percent)	NHTSA Test Number	NHTSANO /TSTREF	Purpose
2011	Chevy	Cruze	56	15	35	7431	RB0177	Repeatability
2011	Chevy	Cruze	56	15	35	7852	RB0181	Repeatability
2011	Chevy	Cruze	56	15	35	7851	RB0184	Repeatability

**Table 6. Chevrolet Cruze Small Overlap Repeat Test Matrix**

Target Vehicle			Closing Speed (mph)	Angle (degrees)	Overlap (Percent)	NHTSA Test Number	NHTSANO /TSTREF	Purpose
2011	Chevy	Cruze	56	7	20	7432	RB0178	Repeatability
2011	Chevy	Cruze	56	7	20	7773	RB0182	Repeatability
2011	Chevy	Cruze	56	7	20	7867	RB0183	Repeatability

**Table 7. Left Side Oblique Test Matrix**

Target Vehicle			Closing Speed (mph)	Angle (degrees)	Overlap (Percent)	NHTSA Test Number	NHTSANO /TSTREF	Purpose
2013	Nissan	Versa	56	15	35	8084	RD5226	High sales volume
2012	Hyundai	Elantra	56	15	35	8089	RD4200	High sales volume
2012	Toyota	Camry	56	15	35	8088	RC5141	High sales volume
2012	Ford	Taurus	56	15	35	8087	R20130026	High sales volume
2012	Honda	CRV	56	15	35	8096	RC5369	High sales volume
2012	Chevrolet	Silverado 1500	56	15	35	8099	RC0185	High sales volume
2012	Honda	Odyssey	56	15	35	8097	RC5370	High sales volume

**Table 8. Right Side Oblique Test Matrix**

Target Vehicle			Closing Speed (mph)	Angle (degrees)	Overlap (Percent)	NHTSA Test Number	NHTSANO /TSTREF	Purpose
2012	Nissan	Versa	56	15	35	8086	RD5227	High sales volume
2012	Toyota	Camry	56	15	35	8085	RC5142	High sales volume