



General Information

Test Agency Texas Transportation Institute
 Test No. 405181-9
 Date 07/25/01

Test Article

Type Bridge Rail
 Name George Washington Memorial Parkway Bridge Rail
 Installation Length (m) 22.86
 Material or Key Elements ... Three Steel Pipe Rail Elements Welded to Flat Steel Plate Posts
 Soil Type and Condition Concrete, Dry

Test Vehicle

Type Production
 Designation 2000P
 Model 1996 Chevrolet 2500 Pickup Truck
 Mass (kg)
 Curb 1917
 Test Inertial 2000
 Dummy 76
 Gross Static 2076

Impact Conditions

Speed (km/h) 98.7
 Angle (deg) 25.5

Exit Conditions

Speed (km/h) 78.6
 Angle (deg) 1.1

Occupant Risk Values

Impact Velocity (m/s)
 x-direction 4.9
 y-direction 7.3
 THIV (km/h) 31.8
 Ridedown Accelerations (g's)
 x-direction -7.7
 y-direction 11.5
 PHD (g's) 13.1
 ASI 1.94
 Max. 0.050-s Average (g's)
 x-direction -8.3
 y-direction 16.3
 z-direction -5.2

Test Article Deflections (m)

Dynamic 0.060
 Permanent N/A
 Working Width 0.183

Vehicle Damage

Exterior
 VDS 11LFQ2
 CDC 11FLEK2 & 11LYEW2
 Maximum Exterior
 Vehicle Crush (mm) 550
 Interior
 OCDI LF1102010
 Max. Occupant Compartment
 Deformation (mm) 100

Post-Impact Behavior

(during 1.0 s after impact)
 Max. Yaw Angle (deg) 36
 Max. Pitch Angle (deg) -4
 Max. Roll Angle (deg) -5

Summary of results for test 405181-9, *NCHRP Report 350* test 3-11.