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General Information

Test Agency..... Texas Transportation Institute
 Test No. 405160-3-2a
 Date 11-15-2007

Test Article

Type..... Pinned Temporary Barrier
 Name Pinned F-Shape CMB
 Installation Length (ft) 100
 Material or Key Elements 12.5 ft long F-shape precast concrete segments with pin-and-loop connection with two 1.875-inch diameter holes drilled into each barrier segment at 40 degrees with 1.75-inch diameter 21.25-inch long ASTM A36 steel drop-pin anchors
 Soil Type and Condition Concrete Pavement, Dry

Test Vehicle

Designation..... 2000P
 Model..... 2000 Chevrolet C2500 Pickup Truck
 Mass (lb)
 Curb..... 4993
 Test Inertial..... 4674
 Dummy No Dummy
 Gross Static..... 4674

Impact Conditions

Speed (mi/h) 62.7
 Angle (deg) 25.4

Exit Conditions

Speed (mi/h) Not
 Angle (deg) Obtainable

Occupant Risk Values

Impact Velocity (ft/s)
 Longitudinal 20.3
 Lateral..... 19.0
 THIV (km/h)..... 28.9
 Ridedown Accelerations (g's)
 Longitudinal -6.4
 Lateral..... 4.7
 PHD (g's) 6.4
 ASI 1.32
 Max. 0.050-s Average (g's)
 Longitudinal -8.7
 Lateral..... 9.7
 Vertical..... -5.6

Test Article Deflections (ft)

Dynamic 0.96
 Permanent 0.48
 Working Width 2.83

Vehicle Damage

Exterior
 VDS..... 01LFQ5
 CDC 01FLEW5
 Max. Exterior
 Vehicle Crush (inches) 21.7
 Interior
 OCDI RF0002000
 Max. Occupant Compartment
 Deformation (inches) 1.1

Post-Impact Behavior

(during 1.0 sec after impact)
 Max. Yaw Angle (deg) 45
 Max. Pitch Angle (deg) -13
 Max. Roll Angle (deg) 41

Figure 5.18. Summary of results for NCHRP Report 350 test 3-11 on the modified pinned F-shape barrier.