Applicability Information

Action List Item 1. k)
Evaluation of vehicle countermeasures (assessment of technical feasibility)
### Overview of NHTSA Pedestrian Activities

Sept. 17-18, 2012

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**GTR No. 9 Leg: Applicability**

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Implementation - Pickup Trucks and LTVs

- Similar to passenger cars, the basic idea is to absorb energy around the knee joint by means of the energy absorber (A), and to reduce tibia bending by means of the structure at the lower part of the bumper (B).
- Due to the restriction from the approach angle, the location of the structure at the lower part of the bumper is higher and more backward compared to passenger cars.
- For this reason, a larger stroke of the energy absorber (A) is necessary.

Leg Protection Measures

- A: Energy Absorber
- B: Structure to Reduce Tibia Bending
- Approach Angle

SUV (same for Pickup Trucks and LTVs)
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Upper Legform Test Data

Test Conditions
- Guided ram
- Impact velocity: 11.1±0.2 m/s
- Impactor mass: 9.5±0.1 kg

Test Results
6 vehicles, 23 test points in total

Max. Moment (Nm)
- Injury Limit 510 Nm

Max. Sum of Force (kN)
- Injury Limit 7.5 kN