

*Optional Pole Impact  
Test Procedure  
FMVSS No. 201  
Occupant Protection  
in Interior Impacts*

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# *Background*



- **FMVSS No. 201 permits Dynamically Deploying Systems**
- **Rule Issued in August 1998**
- **Added Performance Requirements**
- **Evaluation of Protective Capability through a combination of in-vehicle tests and a Full Scale Crash Test**

# *Definition of Dynamically Deploying Systems*



- **Protective Devices for interior head protection**
- **Systems Integrated into Vehicles**
- **Activated upon Impact**
- **Requires no Action From Occupants**
- **Protects Head in Impacts Against Upper Interior Components**

# *Specifications*



- **Pole Diameter 254 mm  $\pm$  3mm**
- **No More than 102 mm Above Lowest Point of Tires on Struck Side**
- **Extends Above Vehicle Roof**
- **50<sup>th</sup> percentile Sid/H3 Dummy**
- **Modified Seating Procedure in FMVSS No. 214**
- **Back of the Head 50 mm forward of B-Pillar/door Window Frame**
- **Impact Angle 90 degrees  $\pm$  3 degrees**

# *Test Procedure*



- **Test Vehicle propelled sideways**
- **Line of Forward Motion Forms an Angle of 90 degrees**
- **Initial Vehicle to Pole Contact Must Occur within  $\pm 38$  mm of impact Ref.Line**

# *Additional Impact Conditions*



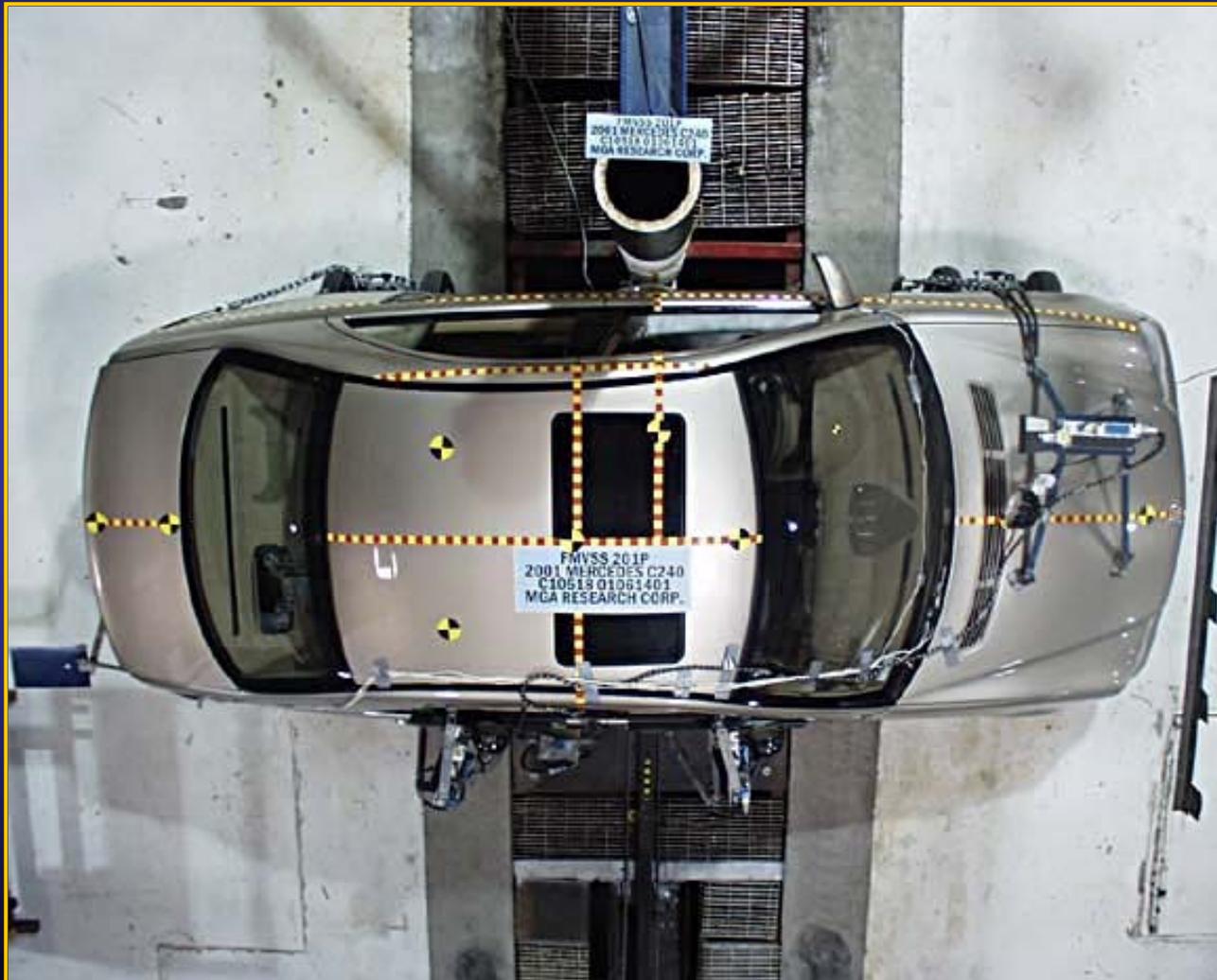
- **Unloaded Vehicle Weight + 136 kg or Rated Cargo Capacity whichever is Less + Test dummy**
- **Test attitude – Same As or Between As Delivered or Fully Loaded**
- **Windows Fully Open, Sunroof/Moon roof/Convertible Top Closed**
- **Temperature 20.6 – 22.2 deg.C**

# *Performance Criteria*



- **HIC 1000**

# Over Head View



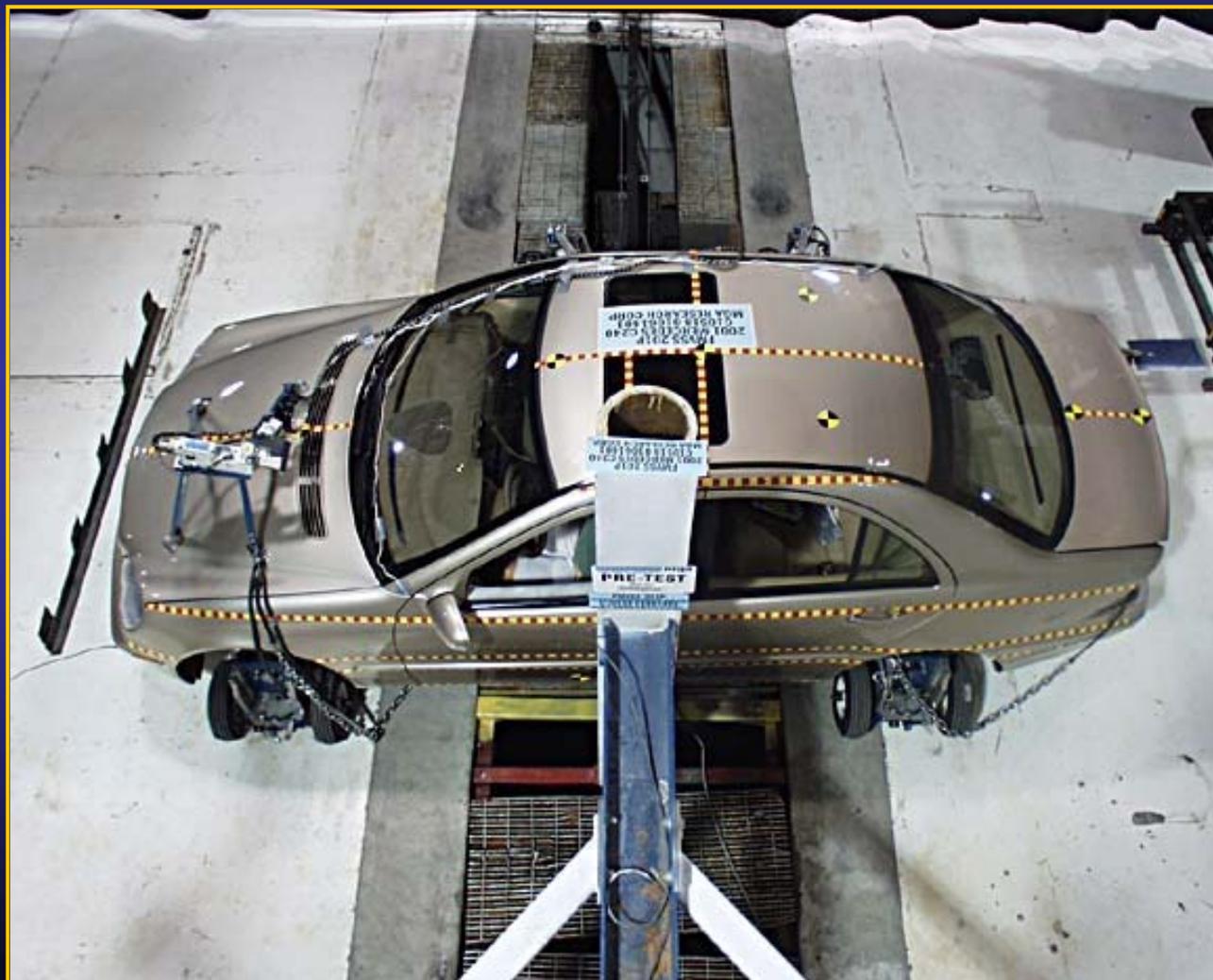
# Over Head View



# Rear View



# Side View



# Side View



# *Pole Impact AVI*



# *Web Address*



Our compliance test procedures  
are available on the web site at.....

[www.nhtsa.dot.gov/cars/testing/procedures.](http://www.nhtsa.dot.gov/cars/testing/procedures)