

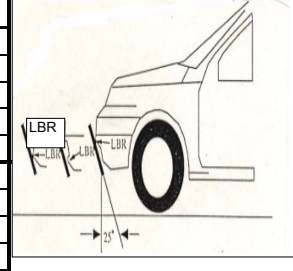
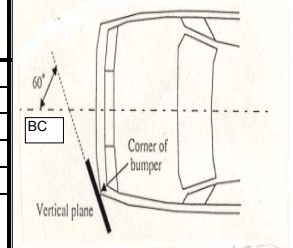
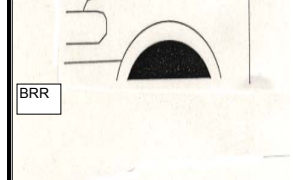
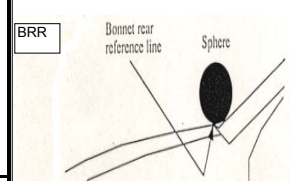
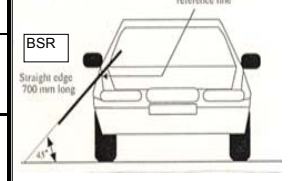
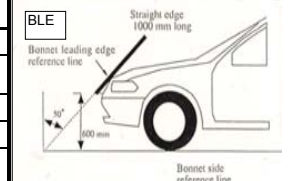
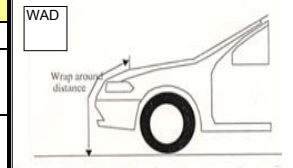
**Pedestrian Safety Comparison Table**

INF GR / PS / 56

Prepared on Aug. 21, 2003

As of May 9, 2003  
Definition of area (reference line)

| Part                    | Item                                      | GTR Japanese Draft<br>Reference from IHRA  | GTR EU Doyle Draft<br>PS-53  | Japanese Regulation<br>(Draft) | European NA<br>First phase   | European NA<br>EEVC - WG17 = Phase2                                 | Euro-NCAP                          | All assumed with a collision speed of 40 km/h |
|-------------------------|---|--|--|--------------------------------|--|---|------------------------------------|---|
| Head                    | Front part of hood (Child head)           |  |  |                                |  |   |                                    |   |
|                         | Impactor weight                           | 3.5kg  | PS166, PS167, PS178, PS230, PS248R, SAE973317  | ?                              | 3.5kg  | 3.5 kg  | 2.5 kg                             | 2.5 kg  |
|                         | Impact speed                              | 32km/h   | PS248R   | 35 km/h                        | 32km/h   | 35 km/h   | 40 km/h                            | 40 km/h                                       |
|                         | Impact angle                              | *(1) 65° (2) 60° (3) 25°   | PS237, PS244, PS248R   | ?                              | *(1) 65° (2) 60° (3) 25°   | 50°   | 50°                                | 50°   |
|                         | Application area                          | WAD=1000 or BLE to 1700 or BRR<br>including A-pillar, Area between BLE and FL, glass | PS186, PS209, PS223, PS224   | Whole area of bonnet test      | WAD=1000 or BLE to 1700 or BRR   | WAD=1000 or BLE to BRR<br><b>(Whole area of hood; Child's head)</b> | WAD=1000 to 1500                   | WAD=1000 to 1500                              |
|                         | Criteria                                  | HIC ≤ 1000   | PS244  | HIC ≤ 1000                     | 2/3 area: HIC ≤ 1000<br>1/3 area: HIC ≤ 2000   | 2/3 area: HIC ≤ 1000<br>1/3 area: HIC ≤ 2000                        | HIC ≤ 1000                         | HIC = 1000 [2points] to 1350 [0points]        |
|                         | Rear part of hood (Adult head)            |  |  |                                |  |   |                                    |   |
|                         | Impactor weight                           | 4.5kg  | PS150 (ISO/N354), PS167, PS178, PS230, PS248R,   |                                | 4.5kg  |   | 4.8 kg                             | 4.8 kg  |
|                         | Impact speed                              | 32km/h   | PS248R   |                                | 32km/h   |   | 40 km/h                            | 40 km/h                                       |
|                         | Impact angle                              | *(1) 65° (2) 90° (3) 50°   | PS237, PS244, PS248R   |                                | *(1) 65° (2) 90° (3) 50°   |   | 65°                                | 65°   |
|                         | Application area                          | WAD=1700 to 2100 or BRR<br>including A-pillar, Area between BLE and FL, glass        | PS186, PS209, PS223, PS224   |                                | WAD=1700 to 2100 or BRR  |   | WAD=1500 to 2100                   | WAD=1500 to 2100                              |
|                         | Criteria                                  | HIC ≤ 1000   | PS244  |                                | 2/3 area: HIC ≤ 1000<br>1/3 area: HIC ≤ 2000   |   | HIC ≤ 1000                         | HIC = 1000 [2points] to 1350 [0points]        |
|                         | Windshield (Child head)                   |  |  |                                |  |   |                                    |   |
|                         | Impactor weight                           | 3.5kg  | * (1)BLE height < 835 (SDN)<br>(2)BLE height ≥ 835 (SUV)<br>(3)Hood angle ≥ 30° (1BOX) |                                | * (1)BLE height < 835 (SDN)<br>(2)BLE height ≥ 835 (SUV)<br>(3)Hood angle ≥ 30° (1BOX) |   |                                    | Ditto   |
|                         | Impact speed                              | 32km/h   |  |                                |  |   |                                    |   |
|                         | Impact angle                              | *(1) 40° (2) 40° (3) 50°   |  |                                |  |   |                                    |   |
|                         | Application area                          | WAD=1000 to 1700 or WRR  |  | PS186, PS223, PS224            |  |   |                                    |   |
|                         | Criteria                                  | HIC ≤ 1000   |  |                                |  |   |                                    |   |
| Windshield (Adult head) |   |  |  |                                |  |   |                                    |   |
| Impactor weight         | 4.5kg                                     |  | ?  |                                | Record only<br>4.8 kg  |   | Ditto                              |   |
| Impact speed            | 32km/h                                    |  | 35 km/h  |                                | 35 km/h  |   |                                    |   |
| Impact angle            | *(1) 40° (2) 40° (3) 50°                  |  | ?  |                                | 35°  |   |                                    |   |
| Application area        | WAD=1700 to 2100 or WRR<br>No test method |  |  |                                |  |   |                                    |   |
| Criteria                | HIC ≤ 1000<br>No test method              |  | HIC ≤ 1000   |                                | HIC ≤ 1000   |   |                                    |   |
| Leg                     | Bumper (Leg)                              |  |  |                                |  |   |                                    |   |
|                         | Impactor                                  | Flexible impactor  | PS119R2  | Rigid impactor                 |  | Rigid impactor  | Rigid impactor                     | Rigid impactor                                |
|                         | Impact speed                              | 40 km/h  | (To include the results of IHRA in October and report at GRSP/PS WG in January )       | 40 km/h                        |  | 40 km/h   | 40 km/h                            | 40 km/h                                       |
|                         | Criteria: Acceleration                    | -  |  | 200 G                          |  | 200 G   | 150 G                              | 150G [2points] to 200G [0points]              |
|                         | : Bending Angle                           | -  |  | 21°                            |  | 21°   | 15°                                | 15° [2points] to 20° [0points]                |
|                         | : Shear displacement                      | -  |  | 6.0 mm                         |  | 6.0 mm  | 6.0mm                              | 6.0mm [2points] to 8.0mm [0points]            |
|                         | : Load: Knee compression                  | [ ] kN   |  | (Injury risk 50%)              |  | (Injury risk 50%)   | (Injury risk 20%)                  |   |
|                         | : Stress distortion: bone fracture        | [ ]  |  |                                |  |   |                                    |   |
|                         | : Displacement: stretched ligament        | [ ] mm   |  |                                |  |   |                                    |   |
|                         | or Bumper (SUV alternative test)          |  |  |                                |  |   |                                    |   |
| Application vehicle     |   |  | or Femur impactor  | Not evaluated                  | or Femur impactor  | or Femur impactor   | or Femur impactor                  |   |
| Impact speed            |   |  | LBR height > 500mm   |                                | LBR height > 500mm   | LBR height > 500mm  | LBR height > 500mm                 |   |
| Criteria: Load          |   |  | 40 km/h  |                                | 40 km/h  | 40 km/h   | 40 km/h                            |   |
| : Bending moment        |   | Not evaluated  | 7.5 kN   |                                | 7.5 kN   | 5.0 kN  | 5.0kN [2points] to 6.0kN [0points] |   |
|                         |   |  | 510 Nm   |                                | 510 Nm   | 300 Nm  | 300Nm [2points] to 380Nm [0points] |   |
| Femur                   | Hood edge (Femur)                         |  |  |                                |  |   |                                    |   |
|                         | Impact speed                              |  |  | □20km/h to □Max.40 km/h        |  | □20km/h to □Max.40 km/h   |                                    | Max.40 km/h                                   |
|                         | Criteria: Load                            |  |  | 5.0 kN                         |  | 5.0 kN  |                                    | 5.0kN [2points] to 6.0kN [0points]            |
|                         | : Bending moment                          |  |  | 300 Nm                         |  | 300 Nm  |                                    | 300Nm [2points] to 380Nm [0points]            |



1st phase  
New model cars: Target July 2005 (October at the latest)  
Continuing cars: 80% by July 2005, 90% by 2011 and 100% by the end of 2011  
2nd phase  
New model cars: 2010  
Continuing cars: Phased in from 2012 on and 100% by the end of 2015

