

NCAP ASSESSMENT PROTOCOL

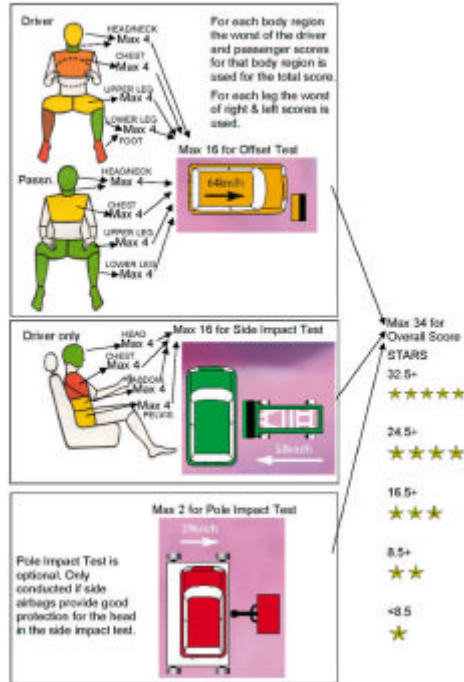


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- “Current” Assessment Protocol Version 3.1.1, Jan 02
- Technical Working Group and sub-groups have been working on further changes.
- This talk describes some of these changes (not always well informed about decisions in Europe)

Star Rating currently based on scores from the Offset, Side Impact and (optional) Pole Impact Tests.



Minimum OS/SI score for star rating

- EuroNCAP have accepted ANCAP's proposal to apply a minimum score to the OS and SI tests to earn stars:
- POSSIBLY
 - 13 pts in each for 5*
 - 9 pts in each for 4*
 - 5 pts in each for 3* and
 - 2 pts in each for 2*
- In addition to overall score breakpts

Minimum OS/SI score for star rating

- Won't be retrospective (following ANCAP lobbying).
- Future brochures may need to indicate "new stars" or similar to distinguish between the rating systems

STATUS: Still under discussion but EuroNCAP plan to introduce it from Phase 12 (mid 2003)

Rearward displacement modifiers for utility type vehicles

- Load tray and chassis deformed (shortened) in impact.
- Steering column, pedal and a-pillar modifiers made worse.
- Rearward displacement therefore measured relative to the back wall of the cabin

STATUS: Being applied by ANCAP. EuroNCAP position unknown.

Measurement of pedal displacement

- ENCAP now requires an extra measurement of pedal displacement. A 200N force is to be applied to the pedal in a forward direction.
- More lenient than no force. Could result in release with a breakaway design.
- Not mentioned in assessment protocol

STATUS: Now being measured by Crashlab. Seeking clarification about scoring.

Seat belt reminder

- One point each for driver, front passenger and rear seat reminder systems. Added to overall score.
- Visual signal and "loud and clear" audible alarm to sound after either 60 seconds, 25km/h reached or 500m travelled if driver/front passenger not wearing seat belt.

Seat belt reminder

- If "loud and clear" in doubt then a complicated sound level test applies
- Rear seat system need only give a visual signal to the driver.

STATUS: Being applied by ENCAP to new and previous assessments (eg Merc C-class >> 5 stars). Will be applied by ANCAP at manufacturer's request (and cost).

Knee impact assessment

- Draft guidelines are available from ANCAP for current assessment procedures.
- ANCAP prepared to reassess vehicles with improved designs (no extra crash test) but must clearly provide energy absorption and protection from concentrated loads.

STATUS: More objective assessment procedures being developed by ENCAP

Collapsible steering columns

- Can cause difficulties in measuring post-crash displacement.
- ANCAP gives benefit of doubt (no penalty if there is any doubt about the measurement).

STATUS: ENCAP position unclear - raised by ANCAP 2 years ago.

Back plate loading in Side Impact

- Protocol indicates that a 2 pt modifier applies to the SI score if F_y exceeds 4kN (sliding scale down to 1kN).
- Some uncertainties last year appear to have been resolved.

STATUS: Being measured by Crashlab. Will be applied by ANCAP for all future ratings.

Child restraints

- ENCAP had proposed to include CRS assessment in star rating score but postponed following concern expressed by ANCAP
- Major changes needed to make the assessment protocol acceptable to ANCAP. This now seems unlikely.

STATUS: Under development in Europe. Unlikely to be applied in Australia.

Vehicle compatibility

- Under consideration by ENCAP
- Monitoring IHRA work.

STATUS: Long term development in Europe. Australia likely to follow.

Footwell intrusion

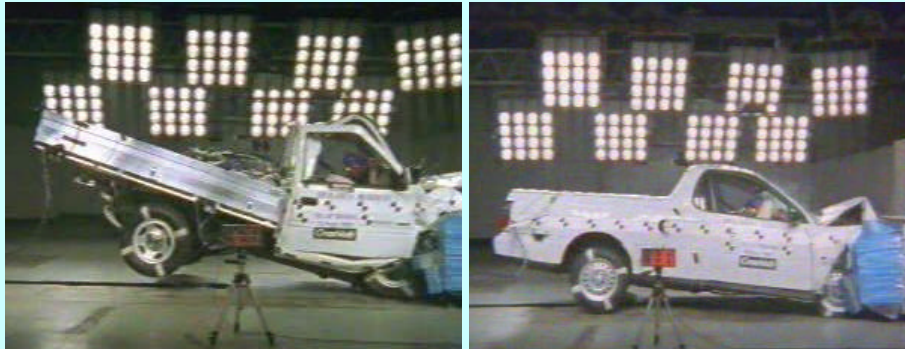
- In test protocol and being measured by labs
- Currently not part of scoring system

STATUS: On hold - Assessment protocol under review by ENCAP.

Other issues raised by ANCAP

- Chest compression limits
- Dash movement
- Foot/leg entrapment
- Fuel leaks
- Restraint failures
- SI test and high seat vehicles

STATUS: Raised with ENCAP. Status unknown



Thank you