



Mercedes-Benz

Safety



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To help avoid personal injury to you or others, and to avoid damage to the vehicle on which you are working, you must always refer to the latest Mercedes-Benz Technical Publication and follow all pertinent instructions when testing, diagnosing or making repair. Illustrations and descriptions in this training reference are based on preliminary information and may not correspond to the final US version vehicles. Refer to the official introduction manual and WIS when available.

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Objectives

- Safety systems
- Body shell of R230
- Locate new SRS components

Safety Systems

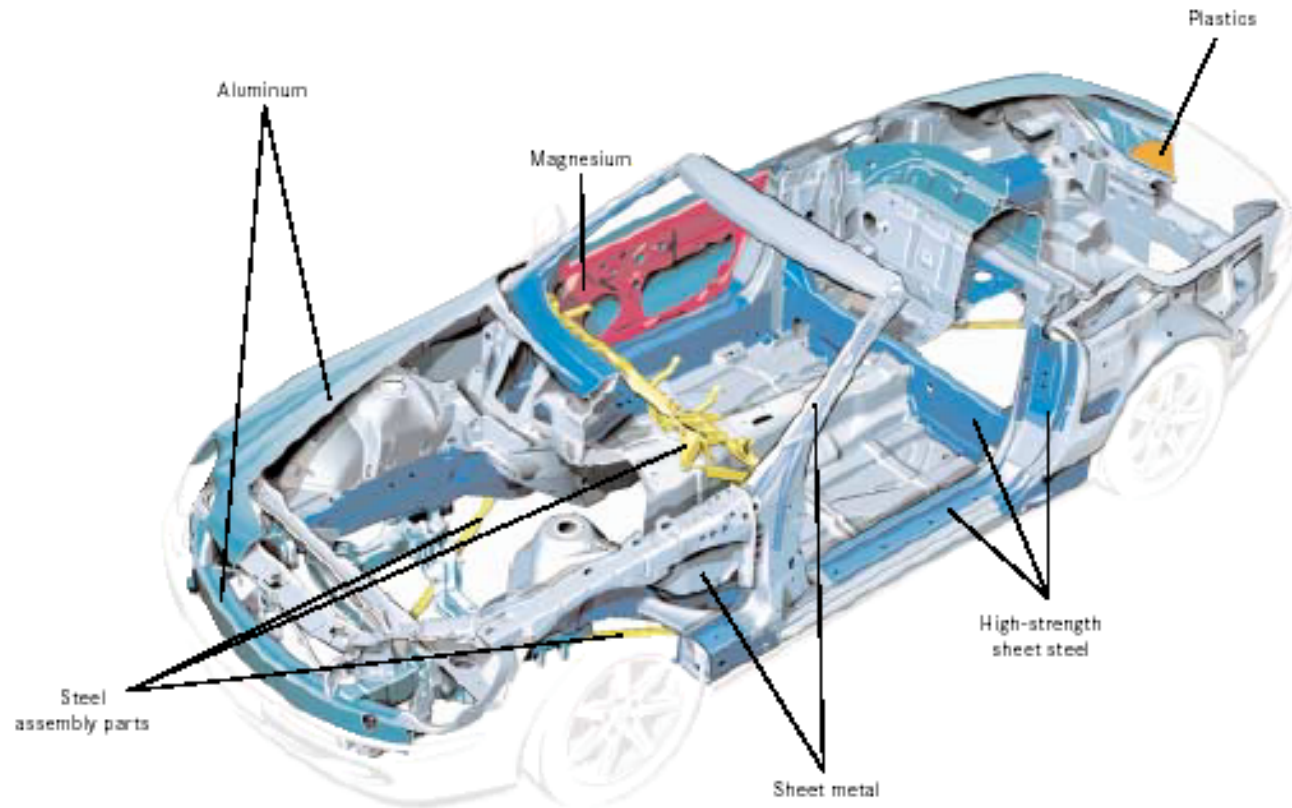
- Airbags -
 - Dual stage, disposable ignition, driver and passenger
 - Knee bag
 - (HTB) Head-Thorax Bags
- Seat belts - vehicle sensitive locking system
- ETR's - Emergency Tensioning Retractors
- ACSR - Automatic Child Seat Recognition
- TELE-AID - emergency call, TeleDiagnosis, roadside assistance
- Roll bar

Other Safety Systems

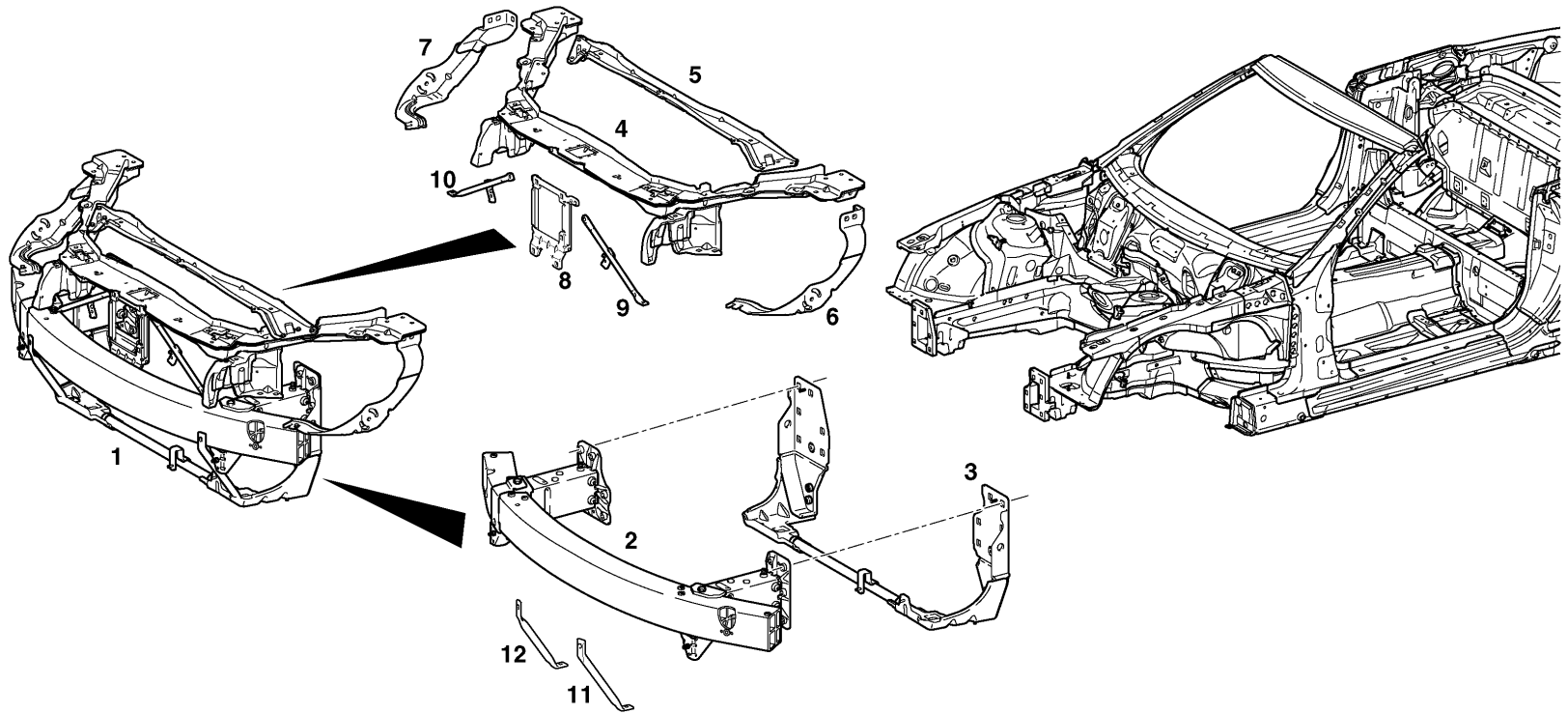
- SBC - Sensotronic Brake Control
- TPM - Tire Pressure Monitoring
- ABC - Active Body Control
- ESP - Electronic Stability Program, ABS, ASR, BAS
- Voice Activation
- Multifunction display/steering wheel controls
- Automatic, xenon headlights
- LED stop lamps, tail, and mirror turn signal lamps
- Crash flashers
- Orthopedic seats

Body Shell Structure

- Torsional rigidity increased 20% over the R129
- Aluminum over steel
- Magnesium door frames



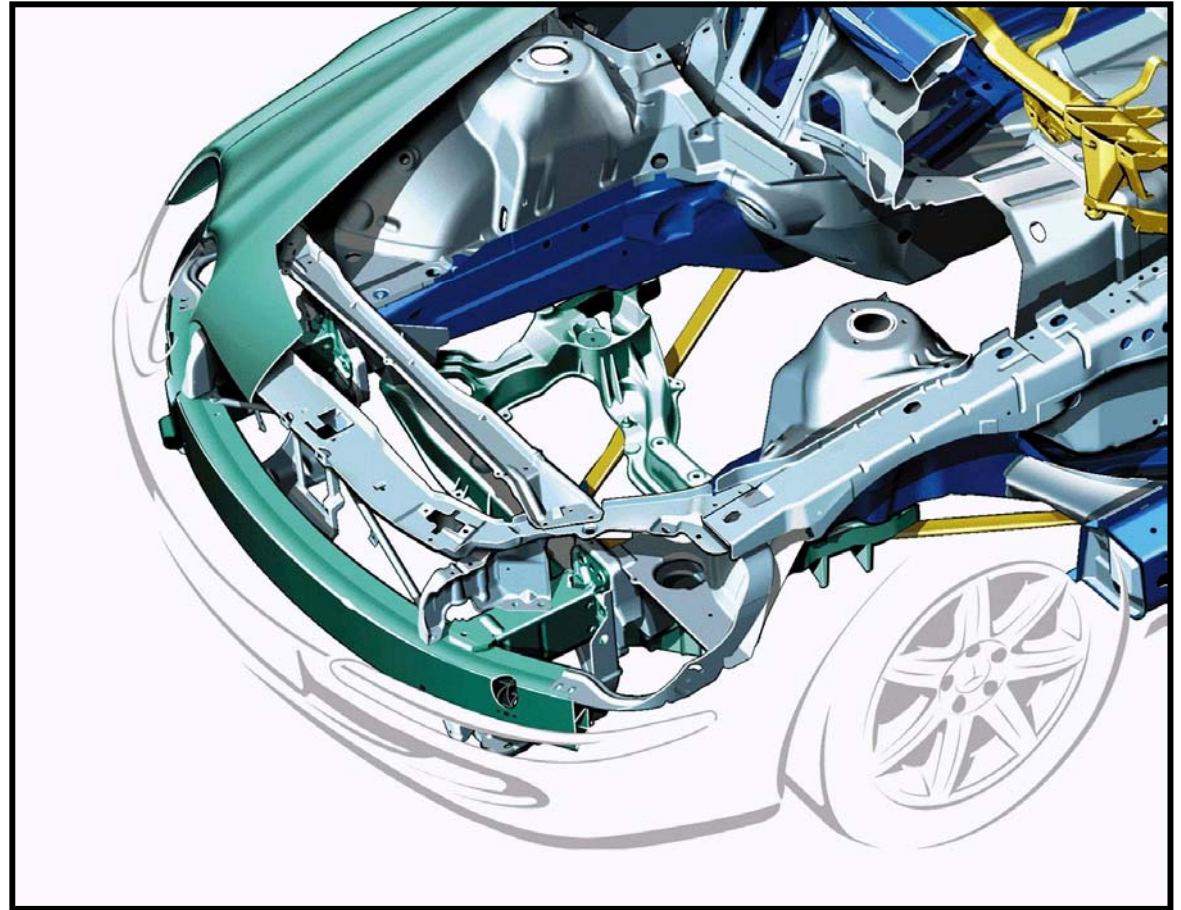
Front Structure



- | | | |
|-----------------------|--|-----------------------------|
| 1 Front end complete | 5 Front middle reinforcement at top | 9 Left front strut top |
| 2 Front cross member | 6 Front reinforcement left wheelhouse | 10 Right front strut top |
| 3 Radiator support | 7 Front reinforcement right wheelhouse | 11 Left front strut bottom |
| 4 Front reinforcement | 8 Support | 12 Right front strut bottom |

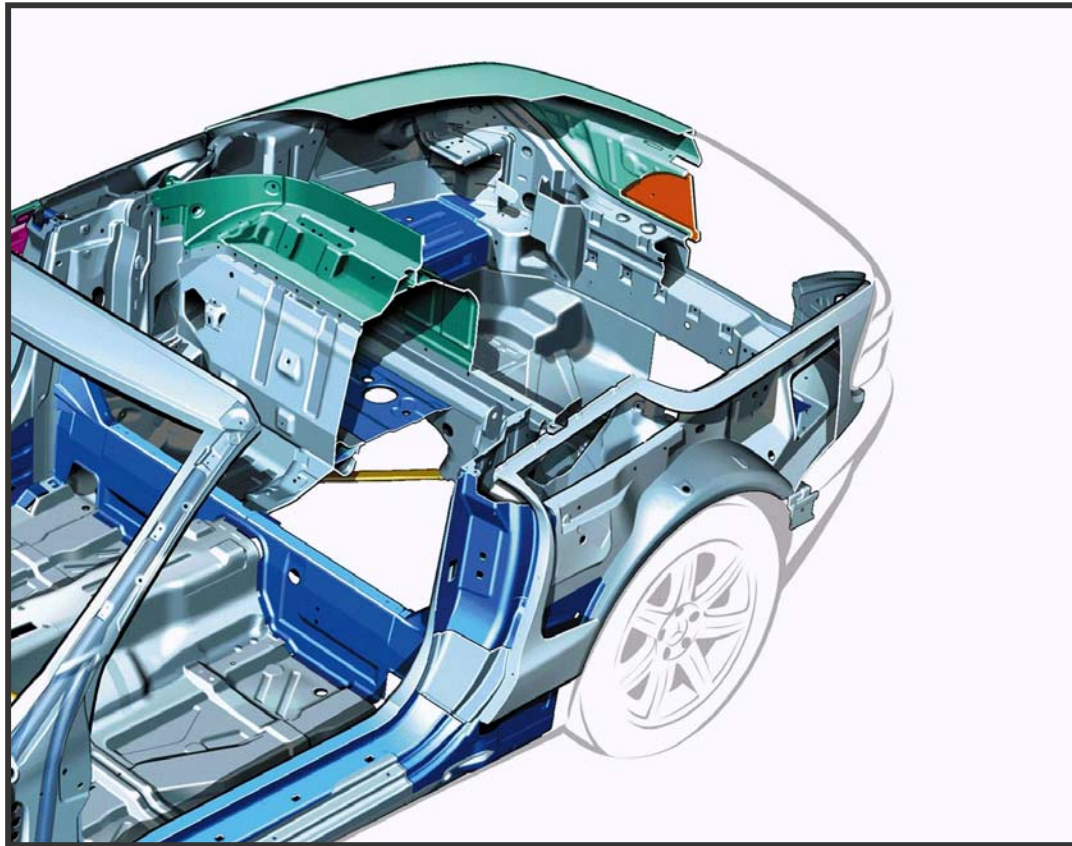
Front Structure

Picture of front structure bolted on



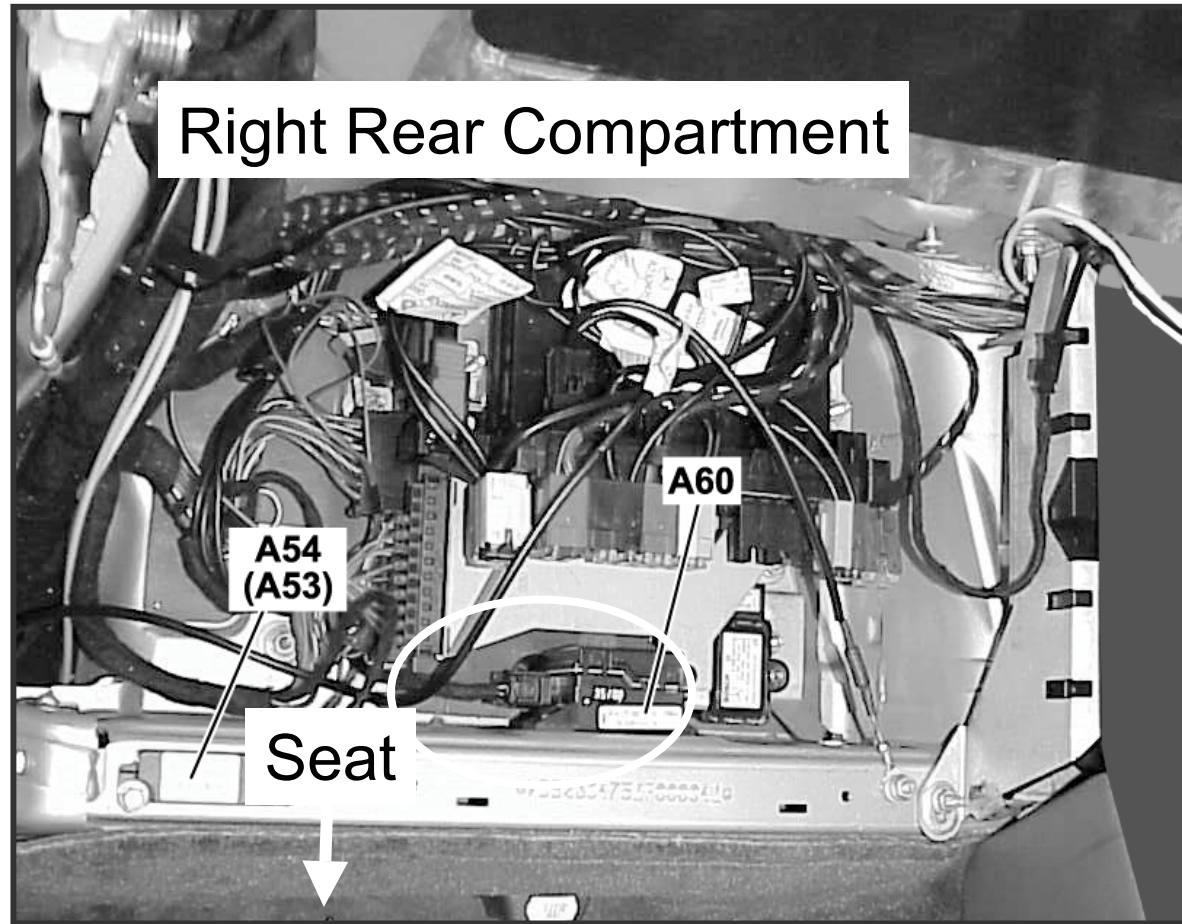
Rear Structure

- Rear module
 - Bolted on
- Aluminum cross member which crumples in a crash similar to the front module



Seat Belt Lock Sensor (A60)

- Attached to rear cross member
- Same operation as in 215
- Measures vehicle attitude and acceleration
- Vehicle acceleration > 0.45g inclination > 27 deg



Knee-bag

- Replaces padded knee bolster
- Single stage, hybrid type inflator
- Driver side only
- Provides protection for an unbelted driver



Head-Thorax Airbag

- Expands to the side and up
- Single stage
- Protects head/upper chest area in side impact
- Located above the arm rests in the doors
- 25 liters - 10% larger than a door air bag



Service Note!

Treat all two stage airbags as if only the first stage is deployed. There is no way to know if both stages deployed or not.