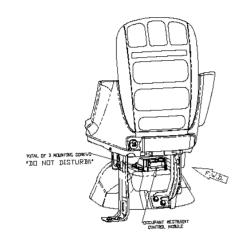
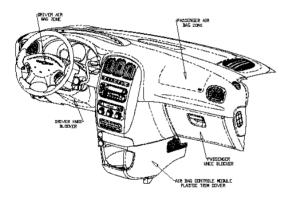
# 2007 OCCUPANT RESTRAINT SYSTEM INFORMATION

# CARAVAN/GRAND CARAVAN

# **NEXT GENERATION MULTI-STAGE DRIVER** AND FRONT PASSENGER AIRBAG\* SYSTEM





The front restraint system is comprised of the following:

- multi-stage driver airbag
- multi-stage front passenger airbag
- driver seat belt pretensioner
- front passenger seat belt pretensioner
- driver seat belt buckle switch
- passenger seat belt buckle switch (if equipped)
- driver constant force seatbelt retractor
- front passenger constant force seatbelt retractor
- occupant restraint controller (ORC)
- front airbag system wiring
- system readiness lamp
- inflatable knee blocker
- passenger seat OCS (Occupant Classification System)

# **OCCUPANT RESTRAINT SYSTEM** VERIFICATION

After modification work is complete, the modifier must con-firm the occupant restraint system readiness, as follows:

- Turn the ignition key on. The airbag lamp in the instrument cluster will illuminate for six to eight seconds, and then turn off. If the airbag lamp fails to illuminate, cycles on and off, or does not turn off, the modifier must have the condition corrected by a DaimlerChrysler Corporation dealership before shipping.

# OCCUPANT RESTRAINT CONTROLLER (ORC)

The front airbag control module is located under the instrument panel on the floor sheet metal and is surrounded by a plastic trim cover. Care must be taken not to disturb this controller for any reason. It is also important that no modifications are made in this area, as this may affect the performance of the front airbag system.

- DO NOT modify, remove, or relocate the ORC or wiring.
- DO NOT disturb the 3 screws used to mount the ORC to the
- DO NOT route wiring or other components in the area surrounding the ORC.
- DO NOT place anything in contact with the ORC.

## FRONT RESTRAINT SYSTEM WIRING

All front restraint system wiring must remain intact and may not be used for any other purpose. This also includes the driver and front passenger seat wiring. Any electrical connector that is yellow is part of the restraint system and should not be modified or used for other purposes.

#### CONSTANT FORCE RETRACTORS

The driver and front passenger constant force retractors incorporate an advanced technology to limit peak force levels to an occupant torso in a severe event. Any modification, removal or relocation to the constant force retractors may be detrimental to the occupant restraint system and is prohibited.

# KNEE BLOCKER/LOWER STEERING COLUMN COVER AND PASSENGER SIDE OF LOWER INSTRUMENT PANEL

The lower steering column cover area and glove box, also known as "knee blockers," are integral parts of the airbag restraint system. These areas include energy-absorbing features and must not be removed or modified in any manner, including the attachment of any auxiliary switches or parts.

\*Certified to the Federal Regulations that allow less forceful front airbags. Always use seat belts. Children 12 and under should always be in a back seat correctly using an infant or child restraint system, or a seatbelt that is right for their age and size

#### STEERING COLUMN

In order for the steering column to perform properly, it must not be modified in any manner. This includes all componentry which is adjacent to or attached to the steering column, such as the steering wheel, the shrouds, and the upper and lower support bracketry. Caution must also be exercised to ensure that nothing is placed in the axial path of the steering column, nor that any of the designed clearance gaps are disturbed.













# 2007 OCCUPANT RESTRAINT SYSTEM INFORMATION

# CARAVAN/GRAND CARAVAN

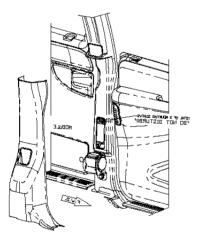
#### FRONT BUMPER SYSTEM

If the front bumper and bumper mounting system are removed temporarily, the front bumper and bumper mounting system must be reinstalled in accordance with the instructions provided in the current minivan service manual. The front bumper and bumper mounting system cannot be replaced with parts other than OEM. The crash sensing of the front airbag systems is tuned, in part, to the front bumper. The original front bumper system (beam, brackets and fascia) must be retained. No modifications, deletions or additions to the bumper (i.e. bumper-mounted bicycle racks, etc) are permitted.

## VEHICLE MODIFICATIONS

It is imperative that all front restraint system components remain in their original location and orientation. Any modification, removal, or relocation of components such as the front airbag control module, or the instrument panel wiring may be detrimental to the front airbag system performance and is prohibited. This includes the front seat belt buckle switches, seat belt pretensioners and seatbelt retractors. Any vehicle modifications that may affect the deployment characteristics of the front or side airbag systems should be verified through calibration/impact testing.

**OPTIONAL SUPPLEMENTAL** SIDE AIRBAG\* SYSTEMS



The supplemental side air bag inflatable curtain (SABIC) are located behind the headliner above the doors following the full length of the roof rail, including a SABIC tether behind the "A" pilars; however the side airbag control modules are located in the right and left B-pillars.

The supplemental side airbag system is comprised of the following:

- side airbag inflatable curtain (SABIC) behind the headliner outboard along the full length of the roof
- side airbag impact sensors
- side airbag wiring
- system readiness lamp

Vehicles equipped with the supplemental side airbag system can be identified by ANY of the following:

- "SRS AIRBAG" (Supplemental Restraint System) embossed on the face of the "B" & C" pillar attachment plugs
- Warning label on the rear face of the front doors above the latch
- The third character in the VIN is "8"
- Monroney label

## OCCUPANT RESTRAINT SYSTEM VERIFICATION

After modification work is complete, the modifier must con-firm the occupant restraint system readiness, as follows:

— Turn the ignition key on. The airbag lamp in the instrument cluster will illuminate for six to eight seconds, and then turn off. If the airbag lamp fails to illuminate, cycles on and off, or does not turn off, the modifier must have the condition corrected by a DaimlerChrysler Corporation dealership before shipping.

\*Always use seat belts. Children 12 and under should always be in a back seat correctly using an infant or child restraint system, or a seatbelt that is right for their age and size.

#### ocs OCCUPANT CLASSIFICATION SYSTEM) FRONT PASSENGER SEAT

The RS seat is equipped with an OCS ( Occupant Classification System ) in the Front Passenger Seat to meet FMVSS 208 requirements. The OCS system automatically suppresses the front passenger airbag if it detects small occupants in the front seat. The OCS system is an extremely sensitive, finely tuned system using a pressure matte, transducer, and a specific program algorithm to meet the regulation. Every front passenger seat is calibrated before installation into the vehicle. No modifications to the front passenger seat are permitted.

The OCS requires extensive development, certification testing, and calibration testing to meet FMVSS 208 requirements. Any and all changes/modifications: to seat profile including trim cover, foam, cushion position, OCS matte, OCS pressure tube, OCS module; and to materials including trim cover, foam, cushion pan, seat riser and to seat position to I.P and door; and to position of OCS matte, OCS pressure tube would require a new calibration and certification of the system. DaimlerChrysler used the patented Delphi Corporation bladder system in this vehicle.













# 2007 Occupant Restraint System Information CARAVAN/GRAND CARAVAN

## SUPPLEMENTAL FRONT / SABIC **SENSORS**

The supplemental front / SABIC sensors are located in the right and left B-pillars and are covered by the lower B-pillar plastic trim. Care must be taken not to disturb these sensors for any reason. It is also important that no modifications are made to the B-pillar sheet metal and that the plastic insert inside the B-pillar remains intact, as this may affect the performance of the supplemental side airbag system.

- DO NOT modify, remove, or relocate the supplemental front / SABIC sensors or wiring
- DO NOT disturb the screws used to mount the supplemental front / side airbag sensors to the vehicle.
- DO NOT route wiring or other components in the areas surrounding the supplemental front / SABIC sensors.
- DO NOT place anything in contact with the supplemental front / SABIC sensors.

### SUPPLEMENTAL FRONT / SABIC WIRING

All supplemental front / side airbag wiring must remain intact and may not be used for any other purpose. This also includes the driver and front passenger seat wiring. Any electrical connector that is yellow is part of the restraint system and should not be modified or used for other purposes.

#### VEHICLE MODIFICATIONS

It is imperative that all supplemental front / SABIC system components remain in their original location and orientation. Any modification, removal, or relocation of components such as the side airbag control module, Bpillar sheet metal, sill area sheet metal, or seat wiring may be detrimental to the supplemental front / SABIC system performance and is prohibited.

The side crash sensing in the supplemental SABIC system is tuned to the factory bodyside configuration. Modification to the side of the vehicle including side lifts / hoists, running boards, swing out steps, or other accessories may be detrimental to the available supplemental side airbag system performance and is prohibited.

Any vehicle modifications that may affect the deployment characteristics of the front or SABIC systems should be verified through vehicle calibration/impact testing.

Any modifications on vehicles with optional SABIC must not allow for dividers, cages, boxes or any rigid structure within a zone of: 10 inches of the headliner to the top of door, front to rear down to the beltline (bottom of door glass) Any objects permanently placed within this zone will compromise the SABIC during deployment.

#### SEATBELT SYSTEMS

The seatbelt system is comprised of the following:

- driver constant force retractor
- front passenger constant force retractor
- driver pretensioner buckle assembly
- front passenger pretensioner buckle assembly
- driver seatbelt buckle switch
- \_\_\_ passenger seatbelt buckle switch (if equipped)
- seatbelt retractor assemblies
- adjustable turning loops
- seatbelt wiring
- system readiness lamp

## OCCUPANT RESTRAINT SYSTEM VERIFICATION

After modification work is complete, the modifier must confirm the occupant restraint system readiness, as follows:

- Turn the ignition key on. The airbag lamp in the instrument cluster will illuminate for six to eight seconds, and then turn off. If the airbag lamp fails to illuminate, cycles on and off, or does not turn off, the modifier must have the condition corrected by a DaimlerChrysler Corporation dealership before shipping.

### SEATBELT WIRING

All seatbelt wiring must remain intact and may not be used for any other purpose. This also includes the driver and front

seat wiring. Any electrical connector that is yellow is part of the restraint system and should not be modified or used for other purposes.

#### VEHICLE MODIFICATIONS

It is imperative that all seat belt components, including pretensioners and constant force retractors, remain in their original location and orientation. Any modification, removal, or relocation of components such as the pretensioners, retractors or the adjustable turning loops, may be detrimental to the occupant restraint system and is prohibited. Any vehicle modifications that may affect the deployment characteristics of the front or side airbag systems should be verified through vehicle calibration/impact testing.









