

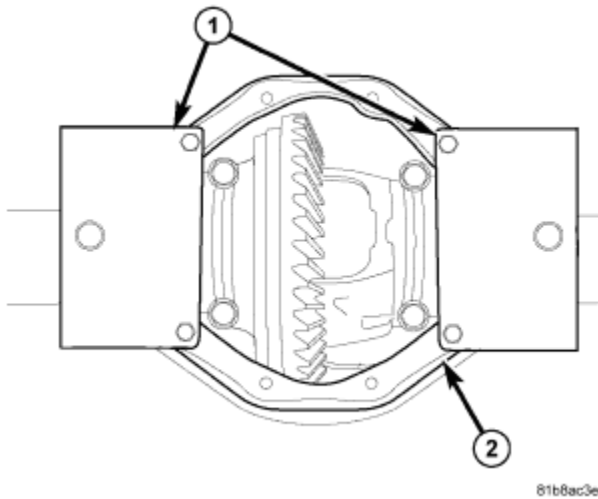
DESCRIPTION

The Vehicle Identification Number (VIN) plate is located on the lower windshield fence next to the left a-pillar. The VIN contains 17 characters that provide data concerning the vehicle. Refer to the [VIN DECODING INFORMATION](#) table to determine the identification of a vehicle.

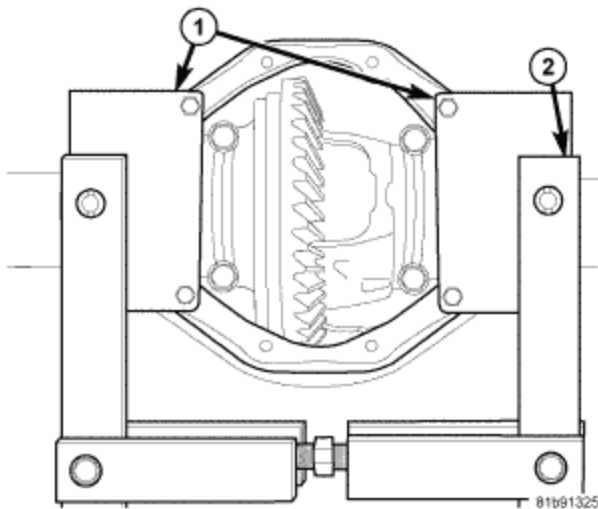
To protect the consumer from theft and possible fraud the manufacturer is required to include a Check Digit at the ninth position of the Vehicle Identification Number. The check digit is used by the manufacturer and government agencies to verify the authenticity of the vehicle and official documentation. The formula to use the check digit is not released to the general public.

VIN DECODING INFORMATION

POSITION	INTERPRETATION	CODE = DESCRIPTION
1, 2 & 3	World Manufacturer Code	WDX = Incomplete vehicle/DodgeWD0 = Truck /DodgeWD8 = Multi-purpose passenger vehicle/DodgeWDW = Bus/DodgeWDP = Incomplete vehicle/FreightlinerWDY = Truck/FreightlinerWDR = Multi-purpose passenger vehicle/FreightlinerWCD = Bus/Freightliner
4	Chassis Configuration	B = All 4x2 vehicle types/CanadaP = All 4x2 vehicle types/USA
5 & 6	Model, Cab, Weight	E7 = C2500/P2500, 3665 mm (144 in.) wheelbase, 8,000 lbs. up to 9,000 lbs. Class GE8 = C2500/P2500, 4325 mm (170 in.) wheelbase, 8,000 lbs. up to 9,000 lbs. Class GF0 = C3500, 3665 mm (144 in.) wheelbase, 9,000 lbs. up to 10,000 lbs. Class HF1 = C3500, 4325 mm (170 in.) wheelbase, 9,000 lbs. up to 10,000 lbs. Class H F3 = C3500/3500C, 3665 mm (144 in.) wheelbase, 10,000 lbs. up to 14,000 lbs. Class 3F4 = C3500/3500C, 4325 mm (170 in.) wheelbase, 10,000 lbs. up to 14,000 lbs. Class 3
7 & 8	Engine	45 = MB OM642 (50-State) Diesel 3.0L/V6, Hydraulic Brakes 46 = MB M272 (50-State) Gasoline 3.5L/V6, Hydraulic Brakes
9	Check Digit	
10	Model Year	7 = 2007
11	Assembly Plant	5 = Düsseldorf, Germany 9 = Ludwigsfelde, Germany



1. Remove differential fill plug.
2. Remove differential cover and drain fluid.
3. Remove axle shafts.
4. Mark bearing caps and housing for installation reference.
5. Remove differential bearing cap bolts.
6. Mount Adapters 10004 (1) on differential housing (2).



7. Position Spreader W-129-B (2) on adapters (1). Mount dial indicator on housing to measure housing spread.

CAUTION: Never spread over 0.3 mm (0.011 in). If the housing is over-spread, it

☐ Tongue weight rating for the trailer hitch utilized (This requirement may limit the ability to always achieve the 10% range of tongue weight as a percentage of total trailer weight).

Towing Requirements - Tires

- ☐ Do not attempt to tow a trailer while using a compact spare tire.
- ☐ Proper tire inflation pressures are essential to the safe and satisfactory operation of your vehicle.
- ☐ Also, check the trailer tires for proper tire inflation pressures before trailer usage.
- ☐ Check for signs of tire wear or visible tire damage before towing a trailer. Refer to the [\(Refer to 22 - TIRES/WHEELS/TIRES - DESCRIPTION\)](#) section of this manual on Tread Wear Indicators for the proper inspection procedure.
- ☐ When replacing tires refer to [\(Refer to 22 - TIRES/WHEELS/TIRES - DESCRIPTION\)](#) section of this manual on Replacement Tires for proper tire replacement procedures. Replacing tires with a higher load carrying capacity will not increase the vehicle's GVWR and GAWR limits.

Towing Requirements - Trailer Brakes

- ☐ Do **not** interconnect the hydraulic brake system or vacuum system of your vehicle with that of the trailer. This could cause inadequate braking and possible personal injury.
- ☐ An electronically actuated trailer brake controller is required when towing a trailer with electronically actuated brakes. When towing a trailer equipped with a hydraulic surge actuated brake system, an electronic brake controller is not required.
- ☐ Trailer brakes are recommended for trailers over 1,000 lbs (454 kg) and required for trailers in excess of 2,000 lbs (907 kg).

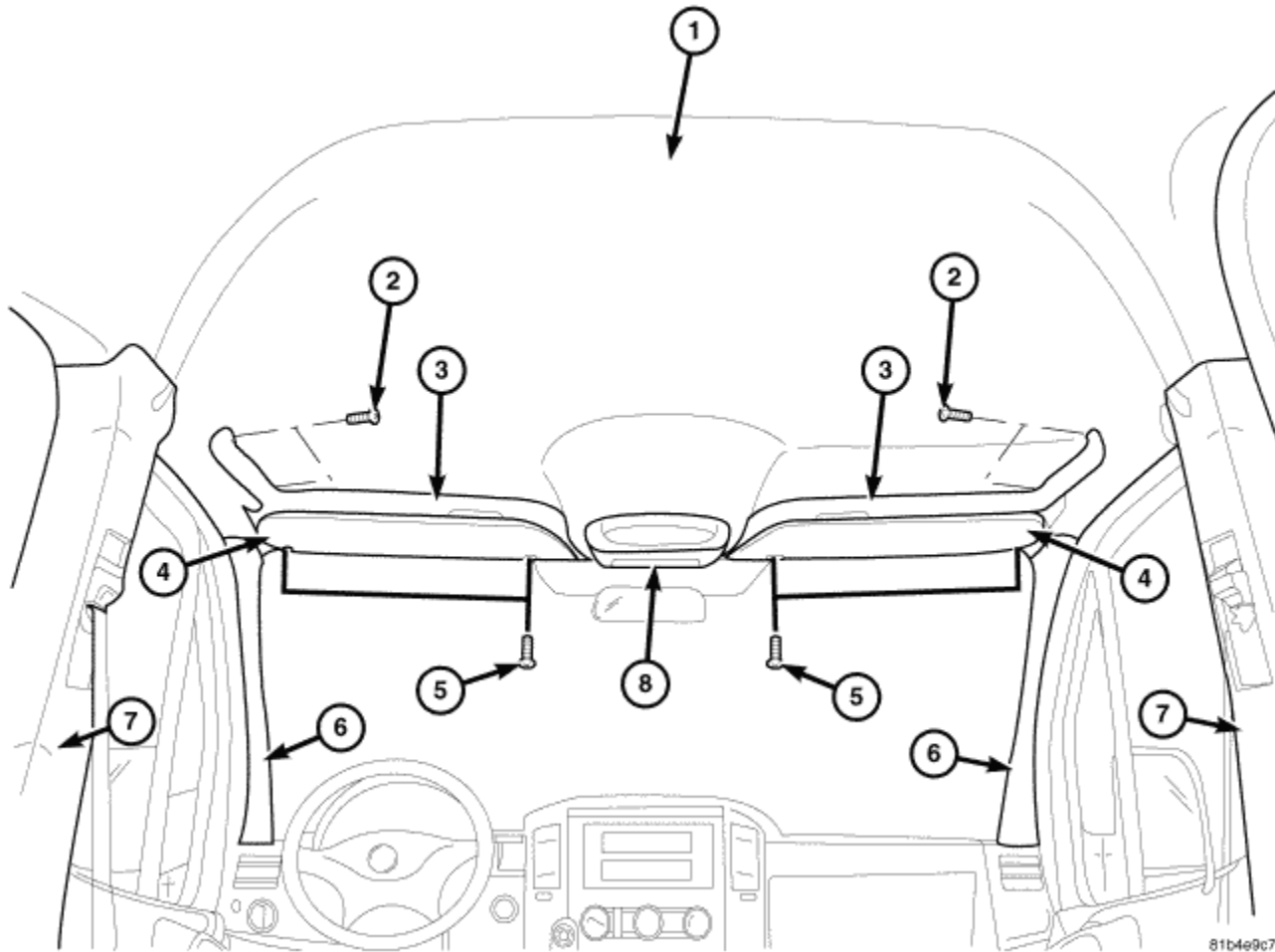
CAUTION:

If the trailer weighs more than 1,000 lbs (454 kg) loaded, it should have its own brakes and they should be of adequate capacity. Failure to do this could lead to accelerated brake lining wear, higher brake pedal effort, and longer stopping distances.

WARNING:

Do not connect trailer brakes to your vehicle's hydraulic brake lines. It can overload your brake system and cause it to fail. You might not have brakes when you need them and could have an accident.

Towing any trailer will increase your stopping distance. When towing you should allow for additional space between your vehicle and the vehicle in front of you. Failure to do so could result in an accident.



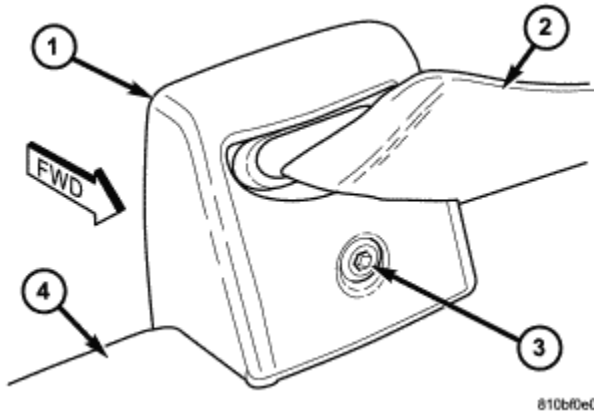
1. Remove the a-pillar trim (6), ([Refer to 23 - BODY/INTERIOR/A-PILLAR TRIM - REMOVAL](#))
2. Remove the sun visors (4) and the storage trays (3).
3. Remove the B-pillar trim. ([Refer to 23 - BODY/INTERIOR/B-PILLAR TRIM - REMOVAL](#))
4. Remove the dome light.
5. Carefully separate the headliner (1) and remove.

Number 2 Section

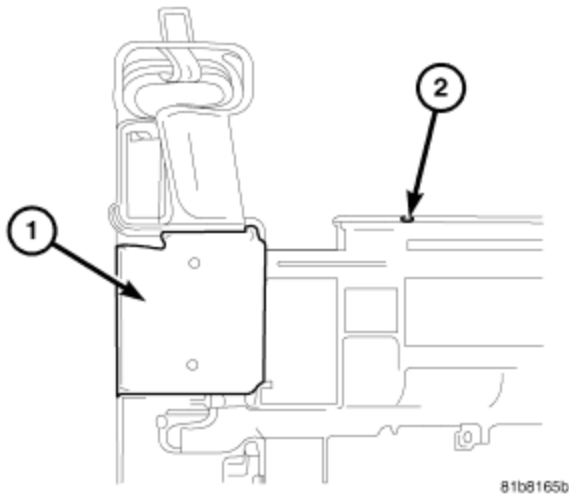
1. Disconnect and isolate battery negative cable.
2. Remove the second and third row seats. ([Refer to 23 - BODY/SEATS/SEAT - REAR - REMOVAL](#))

NOTE: If vehicle is not equipped with rear air conditioning unit, skip to step 8.

3. Remove the push pin fasteners and remove the rear air front duct cover.
4. Disconnect the electrical connector at front of cover.



7. Lift the webbing (2) for each seat belt to access and remove the plastic push pin fastener (3) that secures the rear seat belt turning loop trim cover (1) to the turning loop bracket at the top of the seat back (4).
8. Remove the trim covers from the turning loop brackets and the seat belts.
9. Remove the trim cover and padding from the rear seat back. ([Refer to 23 - BODY/SEATS/SEAT BACK CUSHION / COVER - REAR - REMOVAL](#)) .



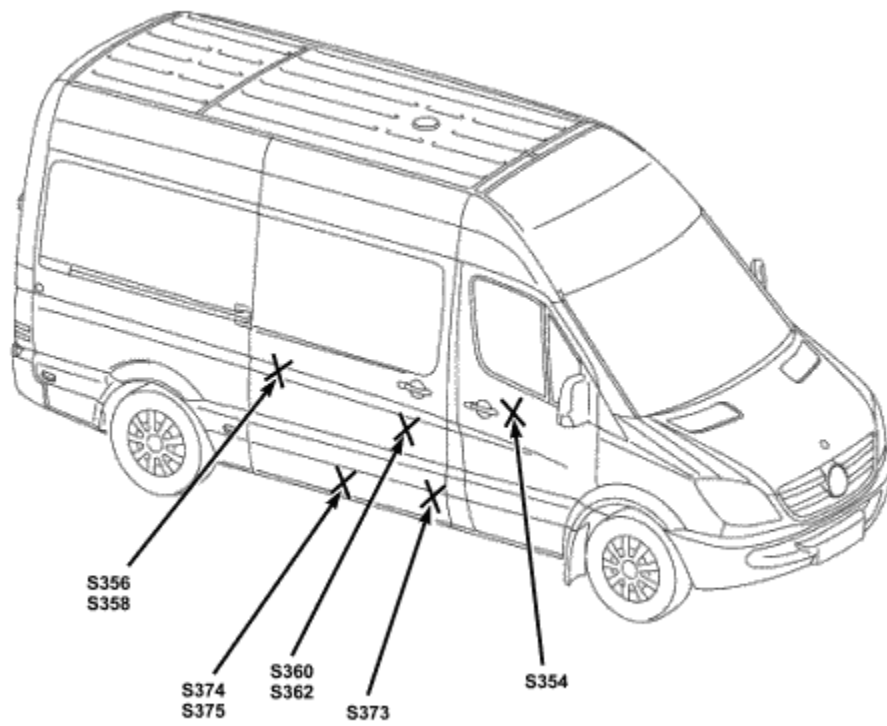
10. Remove the cover (1) from the back of the rear seat back frame (2).

Airbag-Passenger C1	Black	Right Instrument Panel (CLS Harness)	N/S
Airbag-Passenger C2	Black	Right Left Instrument Panel (LU AIRBAG BF Harness)	N/S
Airbag-Side Curtain-Left C1	Black	Left A-Pillar (HLS Harness)	N/S
Airbag-Side Curtain-Left C2	Black	Left A-Pillar (HLS Harness)	N/S
Airbag-Side Curtain-Right C1	Black	Right A-Pillar (HLS Harness)	N/S
Airbag-Side Curtain-Right C2	Black	Right A-Pillar (HLS Harness)	N/S
Airbag-Thorax-Driver C1	Green	Driver Seat (LU SITZ FA Harness)	N/S
Airbag-Thorax-Driver C2	Black	Driver Seat (LU SITZ FA Harness)	N/S
Airbag-Thorax-Passenger C1	Black	Passenger Seat (LU SITZ BF Harness)	N/S
Airbag-Thorax-Passenger C2	Black	Passenger Seat (LU SITZ BF Harness)	N/S
Antenna-FBS-Hatch	Black	Instrument Panel (CLS Harness)	N/S
Antenna-Tire Pressure Monitor	Black	Front Body (HLS Harness)	N/S
Assembly-Antenna Booster C1	Black	Instrument Panel (CLS Harness)	N/S
Assembly-Antenna Booster C2	Black	Instrument Panel (CLS Harness)	N/S
Assembly-Antenna Booster C3	Black	Instrument Panel (CLS Harness)	N/S
Assembly-Antenna Booster C4	Black	Instrument Panel (CLS Harness)	N/S
Assembly-Antenna Booster C5	Black	Instrument Panel (CLS Harness)	N/S
Assembly-Electrohydraulic Control Unit (Nag1)	Black	Front Body (HLS Harness)	N/S

		(CLS Harness)	
Coil-Ignition 1	Black	Gas Engine (M272 Harness)	N/S
Coil-Ignition 2	Black	Gas Engine (M272 Harness)	N/S
Coil-Ignition 3	Black	Gas Engine (M272 Harness)	N/S
Coil-Ignition 4	Black	Gas Engine (M272 Harness)	N/S
Coil-Ignition 5	Black	Gas Engine (M272 Harness)	N/S
Coil-Ignition 6	Black	Gas Engine (M272 Harness)	N/S
Connector-Trailer Tow	Black	Rear Body	N/S
Connector-Upfitters X145/6	Black	Body (HLS Harness)	N/S
Connector-Upfitters X178	Black	Body (DLS Harness)	N/S
Connector-Upfitters X52/10	Black	Front Body (HLS Harness)	N/S
Connector-Upfitters X52/9	Black	Front Body (HLS Harness)	N/S
Control-A/C-Heater C1	Black	HVAC (LU KLIMA Harness)	N/S
Control-A/C-Heater C2	Black	HVAC (LU KLIMA Harness)	N/S
Control-A/C-Heater C3	White	Center of Instrument Panel (CLS Harness)	N/S
Control-A/C-Heater C4	Black	Center of Instrument Panel (CLS Harness)	N/S
Control-A/C-Heater C5	Black	HVAC (LU KLIMA Harness)	N/S
Control-A/C-Heater C6	Black	Center of Instrument Panel (CLS Harness)	N/S
Control-A/C-Heater C7	Black	Center of Instrument Panel (CLS Harness)	N/S
Control-A/C-Heater C8	Black	Center of Instrument Panel (CLS Harness)	N/S
Control-A/C-Heater C9	Black	Center of Instrument Panel (CLS Harness)	N/S
D2192	Black	Front Body (HLS Harness)	N/S
D2223	Black	OM642 engine harness	N/S
D2224	Black	OM642 engine harness	N/S

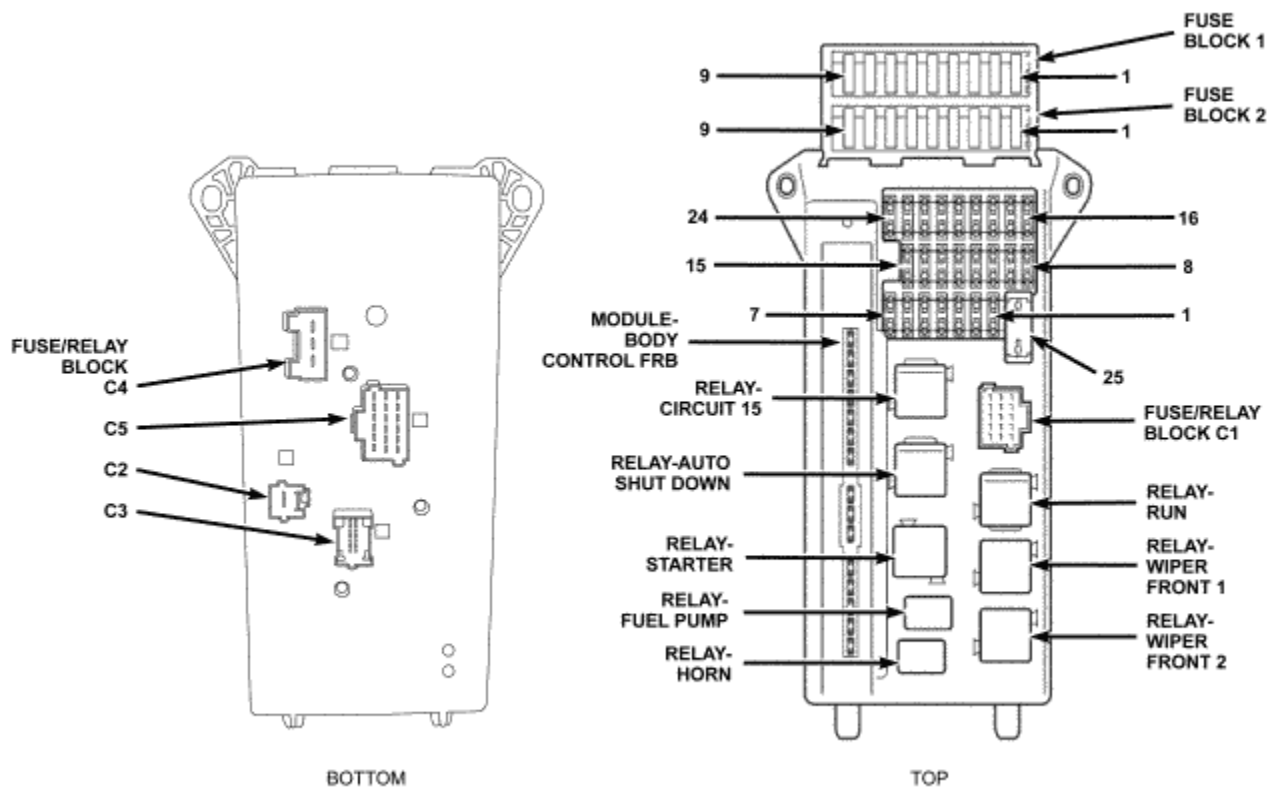
Door C1		Harness)	
Speaker-Left Sliding Door C2	White	Left Sliding Door (LST_LI Harness)	N/S
Speaker-Right Door	Black	Passenger Door (BFT Harness)	N/S
Speaker-Right Rear C1	White	Right Rear Body (DLS Harness)	N/S
Speaker-Right Rear C2	White	Right Rear Body (DLS Harness)	N/S
Speaker-Right Sidewall C1	White	Right Body (DLS Harness)	N/S
Speaker-Right Sidewall C2	White	Right Body (DLS Harness)	N/S
Speaker-Right Sliding Door C1	White	Right Sliding Door (LST_RE Harness)	N/S
Speaker-Right Sliding Door C2	White	Right Sliding Door (LST_RE Harness)	N/S
Speaker-Tweeter-Left Door	Black	Left Instrument Panel (CLS Harness)	N/S
Speaker-Tweeter-Left Sidewall	Black	Left Body (DLS Harness)	N/S
Speaker-Tweeter-Left Sliding Door	Black	Left Sliding Door (LST_LI Harness)	N/S
Speaker-Tweeter-Right Door	Black	Right Instrument Panel (CLS Harness)	N/S
Speaker-Tweeter-Right Rear C1	Black	Right Body (DLS Harness)	N/S
Speaker-Tweeter-Right Rear C2	Black	Right Body (DLS Harness)	N/S
Speaker-Tweeter-Right Sidewall	Black	Right Body (DLS Harness)	N/S
Speaker-Tweeter-Right Sliding Door	Black	Right Sliding Door (LST_RE Harness)	N/S
Starter (LT3)	Black	Engine (LU GENERATOR Harness)	N/S
Starter C1	Black	Engine (LU GENERATOR Harness)	N/S
Starter C2	Black	Engine (LU GENERATOR Harness)	N/S

S335	Left Rear Headliner	SPLICES - ROOF
S336	Left Rear Headliner	SPLICES - ROOF
S337	Left Center Headliner	SPLICES - ROOF
S338	Front Center Headliner	SPLICES - ROOF
S339	Left Front Headliner	SPLICES - ROOF
S340	Left Rear Headliner	SPLICES - ROOF
S341	Left Rear Headliner	SPLICES - ROOF
S342	Left Front Headliner	SPLICES - ROOF
S343	Left Center Headliner	SPLICES - ROOF
S344	Left Rear Headliner	SPLICES - ROOF
S345	On Overhead (DLS) Harness	SPLICES - ROOF
S346	Left Center Headliner	SPLICES - ROOF
S347	Left Rear Headliner	SPLICES - ROOF
S348	Left Rear Headliner	SPLICES - ROOF
S349	On on Main Body (HLS) Harness	N/S
S350	On Overhead (DLS) Harness	N/S
S351	Left Center Headliner	SPLICES - ROOF
S352	Left Center Headliner	SPLICES - ROOF
S353	Driver Door	SPLICES - LEFT BODY
S354	Passenger Door	SPLICES - RIGHT BODY
S355	Left Sliding Door	SPLICES - LEFT BODY
S356	Right Sliding Door	SPLICES - RIGHT BODY
S357	Left Sliding Door	SPLICES - LEFT BODY
S358	Right Sliding Door	SPLICES - RIGHT BODY
S359	Left Sliding Door	SPLICES - LEFT BODY
S360	Right Sliding Door	SPLICES - RIGHT BODY
S361	Left Sliding Door	SPLICES - LEFT BODY
S362	Right Sliding Door	SPLICES - RIGHT BODY
S363	On Left Rear Cargo Door	N/S
S364	Right Rear Cargo Door	BODY - REAR



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Figure. 6 SPLICES - RIGHT BODY

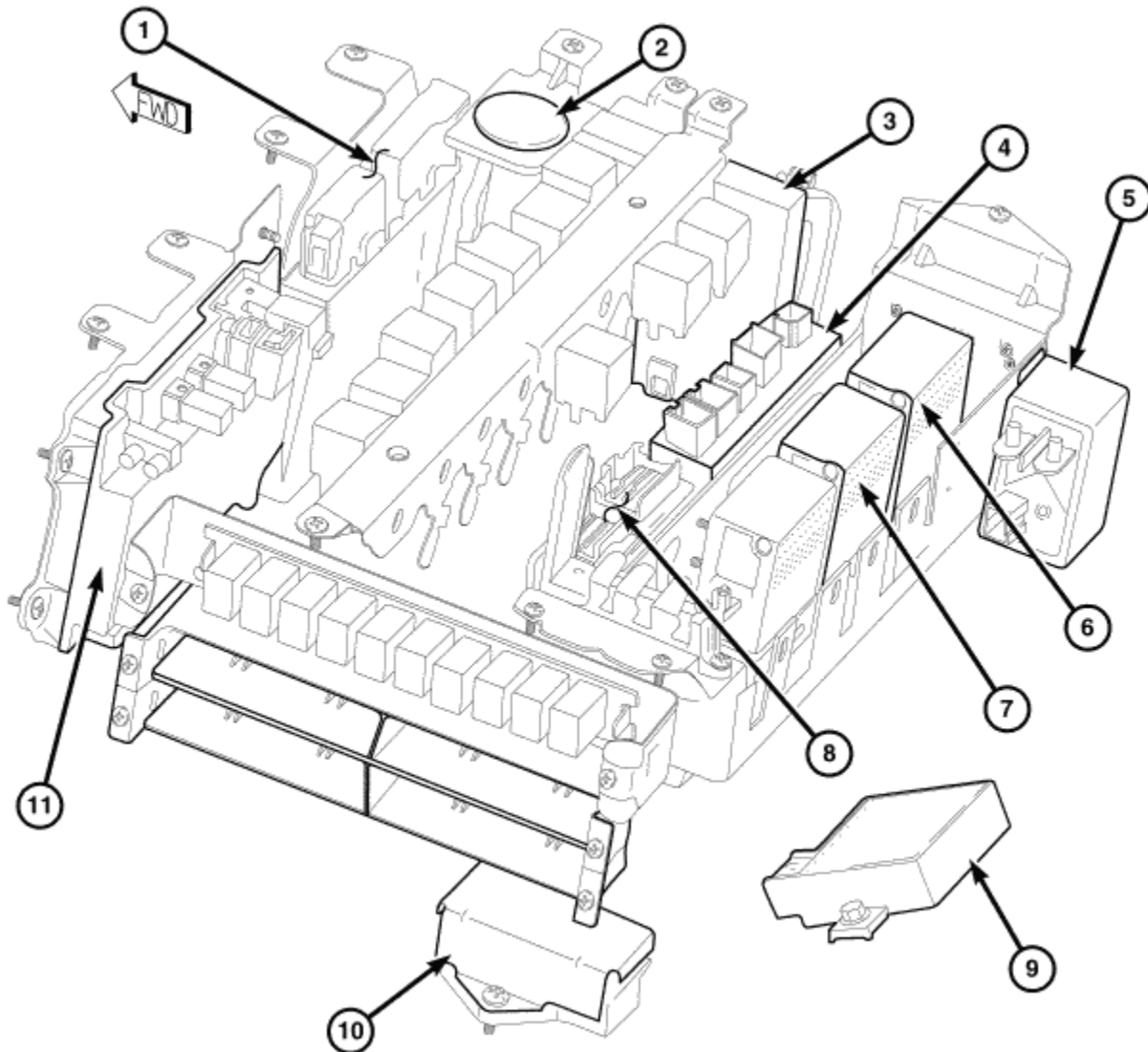


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Figure. 14 FUSE/RELAY BLOCK

Other power distribution components located under the driver seat are the Cube Relays (1) and the High Current Fuses (2) used for add on accessories.

MODULES UNDER DRIVER SEAT



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In addition to the Fuse/Relay Block #2 there are a number of components that can be accessed under the driver front seat. Depending on the vehicle option/accessory content those components are:

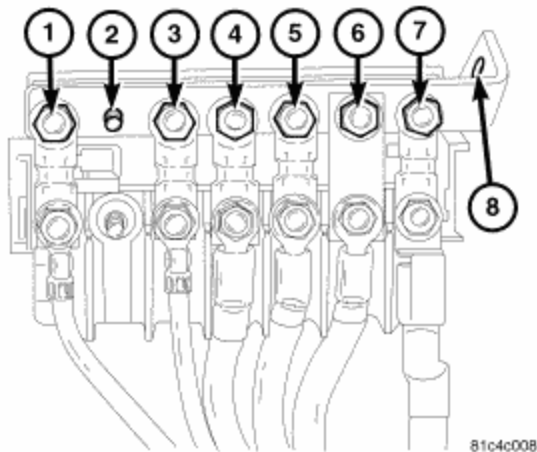
- ☐ Transmission Control Module (1)
- ☐ Rear Park Assist Buzzer (2)
- ☐ Park Assist Module (3)

The 12 volt, 15 amp sockets can be used for accessories with a maximum power consumption of 180 watts. You can connect accessories with a maximum power consumption of 300 watts to the 12 volt, 25 amp socket located at the bottom of the center console.

While the power outlet is very similar to a cigar lighter base unit, it does not include the two small spring-clip retainers inside the bottom of the receptacle shell that are used to secure the cigar lighter heating element to the insulated contact. A plastic protective cap snaps over the power outlet base when the power outlet is not being used.

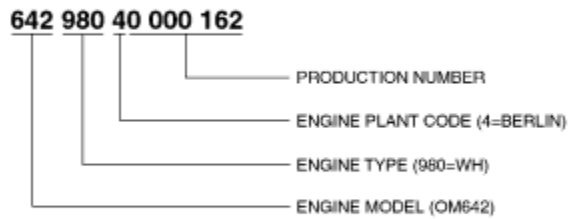
The power outlet receptacle units are available for service. The power outlet receptacle cannot be repaired and, if faulty or damaged, it must be replaced.

POWER DISTRIBUTION CENTER (PDC)



The Power Distribution center (PDC) is attached to a stud (8) on the positive battery clamp of the starter battery. The PDC contains six bolt-on MIDI fuses which protect components such as glow plugs, double auxiliary cooling fans and provide additional protection to the feed circuits that power the fuse/relay boxes. The PDC contains MIDI fuses for the following systems:

- ☐ Glow output stage/secondary air pump (1)
- ☐ Air conditioner additional fan (2)
- ☐ Fuse/Relay Block #1 power feed (3)
- ☐ Auxiliary battery (4)
- ☐ Instrument panel (5)
- ☐ Seat box components power feed bridged jumper (6)



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The engine identification number encompasses the production number, engine plant code, engine type and engine model.

ENGINE COVER



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The insulated engine cover (1) is made of composite material and used cosmetically to cover the top of the engine and greatly reduce engine noise. Three brackets secure the cover to the engine.

- ☐ Mass Airflow (MAF) Sensor (10)
- ☐ Throttle Valve Actuator/Throttle Position Sensor (TPS) (11)
- ☐ Ignition Coils (12)
- ☐ Crankshaft Position Sensor (13)
- ☐ Left Catalytic Converter (14)
- ☐ Left Upstream Oxygen (O₂) Sensor (15)
- ☐ Left Downstream O₂ Sensor (16)
- ☐ Right Upstream O₂ Sensor (17)
- ☐ Right Catalytic Converter (18)
- ☐ Right Downstream O₂ Sensor (19)

Some of the component monitors are checking for proper operation of the part. Electrically operated components now have input (rationality) and output (functionality) checks as well as continuity tests (opens/shorts). The PCM monitors components to ensure they are working within specification. This is done by watching for a Electronic Throttle Control/TPS indication of a greater or lesser throttle opening than Manifold Absolute Pressure (MAP) and engine rpm indicate.

Refer to the appropriate Powertrain Diagnostic Procedure Manual for diagnostic procedures.

The following is a list of the monitored components:

- ☐ Catalyst Monitor
- ☐ Comprehensive Components
- ☐ Air Injection System/Catalyst startup heating
- ☐ Fuel Control (rich/lean)
- ☐ Oxygen Sensor Monitor
- ☐ Oxygen Sensor Heater Monitor
- ☐ Purge
- ☐ Misfire

COMPREHENSIVE COMPONENTS

Along with the major monitors, OBD II requires that the vehicle's on-board diagnostic system monitor any component that could affect emissions levels.

OBD II also requires that inputs from powertrain components to the PCM be tested for **rationality** and that outputs to powertrain components from the PCM be tested for **functionality**. Methods for monitoring the various Comprehensive Component monitoring include:

- ☐ Circuit Continuity
- ☐ Open
- ☐ Shorted to Voltage