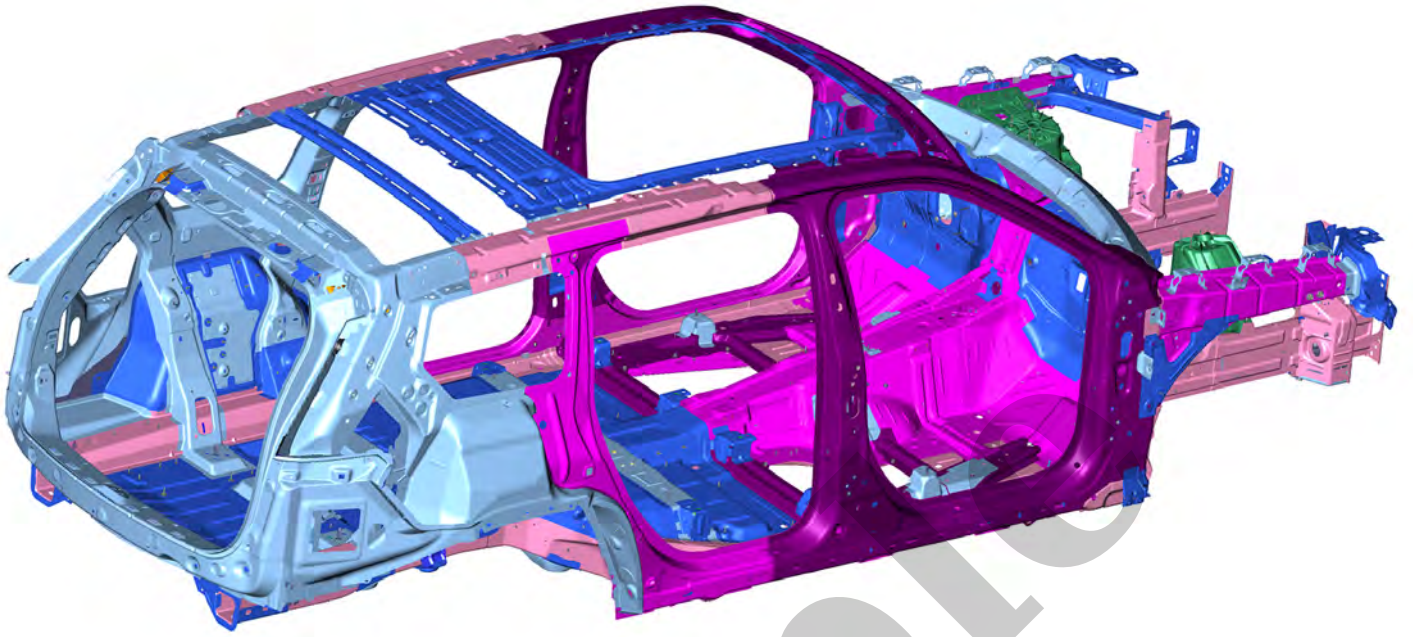


Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

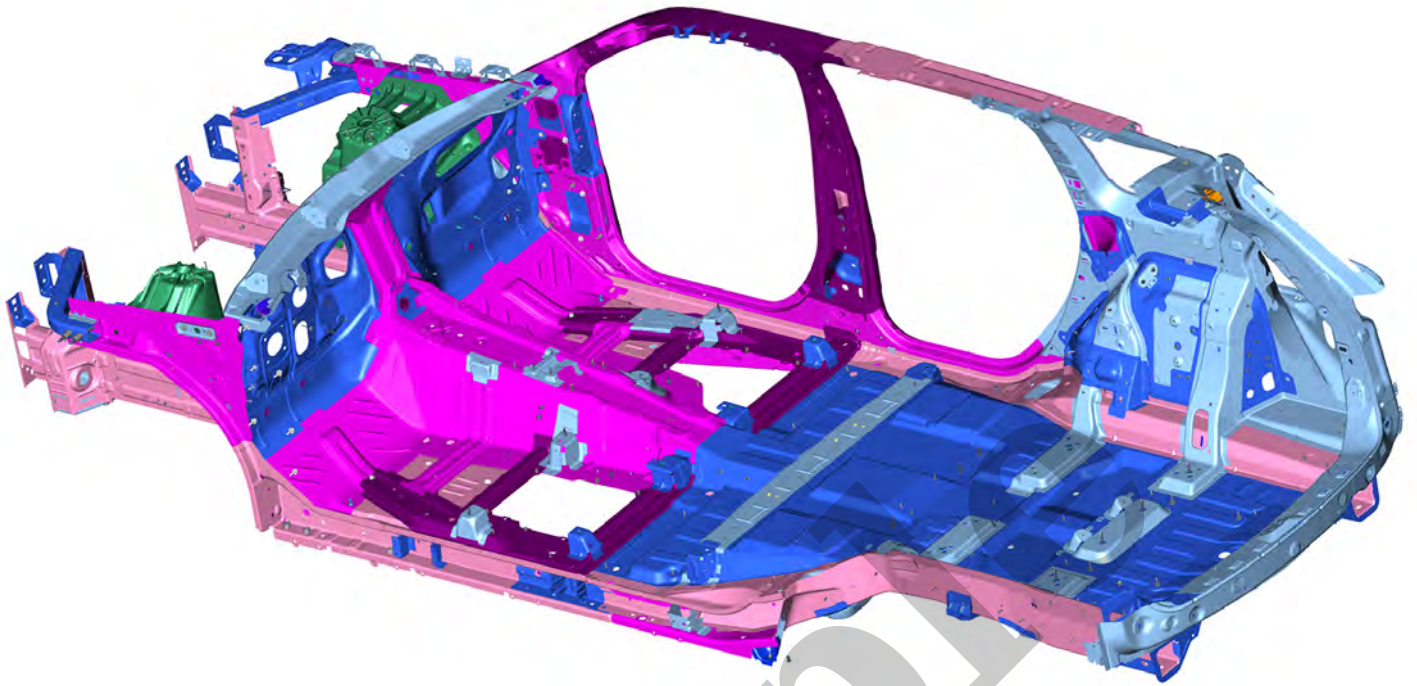
1999 JEEP Cherokee OEM Service and Repair Workshop Manual

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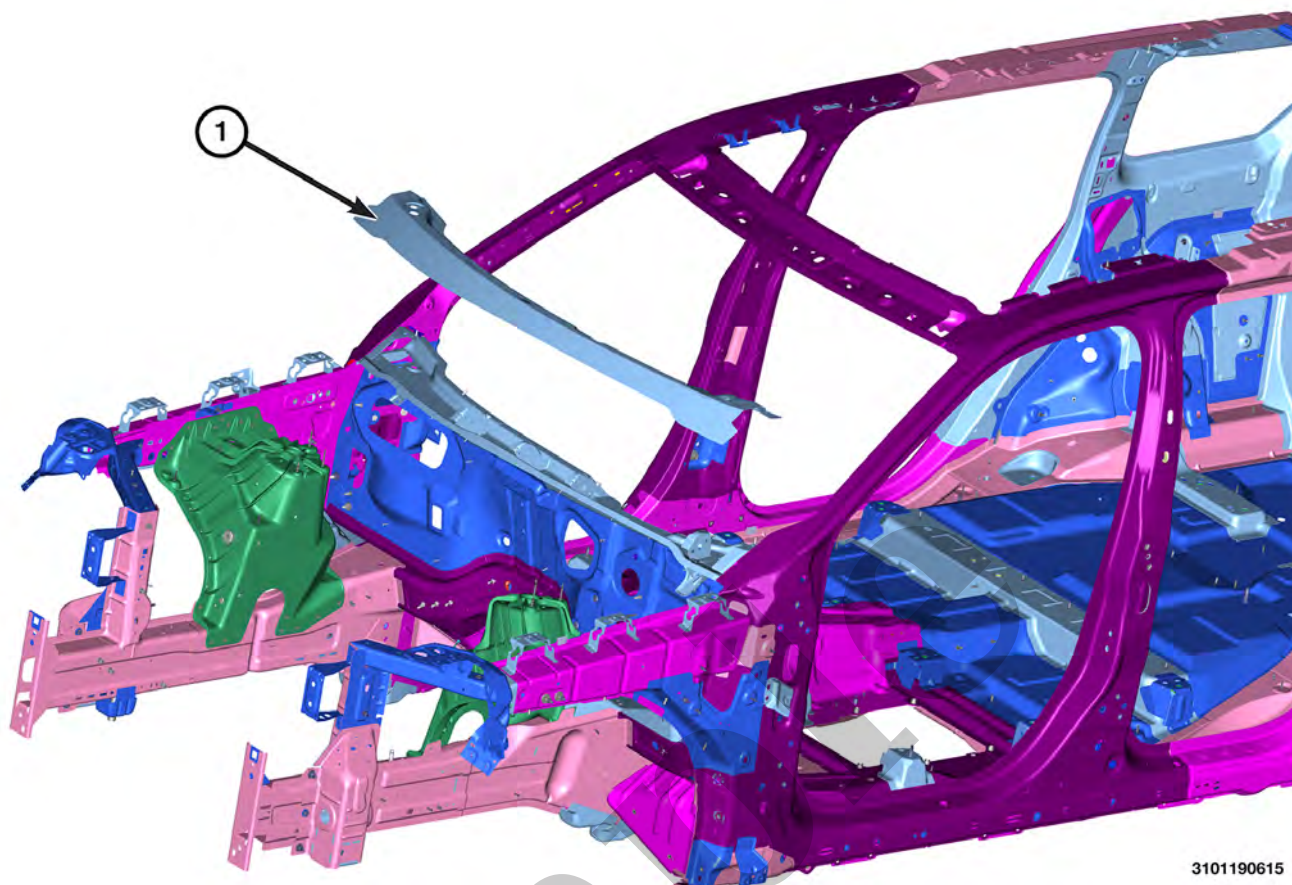
3101190609

Body In White - Bottom view front



3101190612

Body In White - Right side view with components removed (1 of 2)



**The following
parts are removed for clarity of underlying components-**

1- Cowl Top Panel

Body In White - Rear view with components removed

The label is located on the driver-side door shut-face.

Sample

POSITIONS 1 - 3: WORLD MANUFACTURER IDENTIFIER

1	2	3	MANUFACTURER	VEHICLE TYPE
1	C	4	FCA US LLC	MPV

POSITION 4: BRAKE SYSTEM & GVWR

Brake System	GVWR Range		Active Belts, Air Bags	Active Belts, Air Bags, Side Bags-Front Row	Active Belts, Air Bags, Side Bags-All Rows	Active Belts, No Air Bags	Active Belts, GVWR > 10,000 lbs.
	Pounds	Kilograms					
Hydraulic	6001 - 7000	(2722 - 3175 KG)	—	—	R	—	—

POSITIONS 5 - 7: VEHICLE BUILD INFO/TRIM LEVEL

Define the following: Brand, Marketing Name, Drive Wheels, Cab/Body Type, Drive Position, and Price Series.

2WD			4WD			Body Type	Position	Series
J	J	A	J	K	A	4 Door 2 Row Sport Utility 4 Door 3 Row Sport Utility	Left Hand Drive	Laredo
J	J	B	J	K	B			Limited
J	J	D	J	K	D			Overland
J	J	E	J	K	E			Summit

POSITION 8: ENGINE

Engine Code	6	G	T
Displacement	2.0L (PHEV)	3.6L	5.7L
Induction Type	Turbo Charged	Normally Aspirated	Normally Aspirated

differences may result in inferior occupant protection.

WARNING

To avoid serious or fatal injury, the fasteners, screws, and bolts originally used for the Supplemental Restraint System (SRS) components must never be replaced with any substitutes. These fasteners have special coatings and are specifically designed for the SRS. Anytime a new fastener is needed, replace it with the correct fasteners provided in the service package or specified in the Mopar® Parts Catalog.

WARNING

To avoid serious or fatal injury when a steering column has an airbag unit attached, never place the column on the floor or any other surface with the steering wheel or airbag unit face down. Failure to follow these instructions may result in possible serious or fatal injury.

Braking Systems

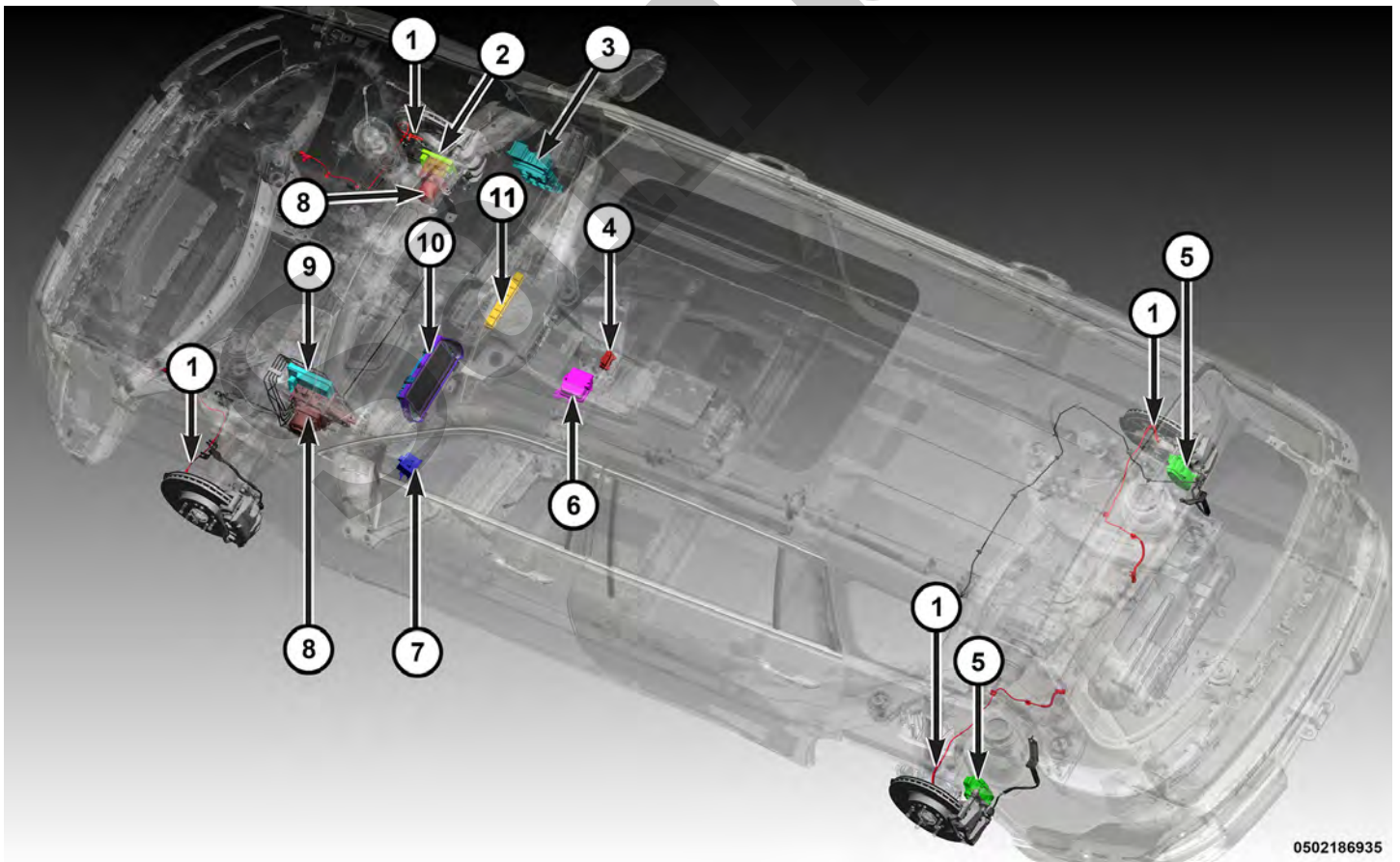
BRAKING SYSTEMS

The brake system is comprised of two subsystems:

- The electronically controlled portion and performance controls.
- The hydraulically controlled portion that applies the braking elements in the normal fashion and also a variable manner that is enabled by the electronically controlled portion.

ANTILOCK BRAKE SYSTEM

DESCRIPTION



The electronically controlled Antilock Brake System (ABS) includes the following components:

The system uses the EPB switch on the left side of the steering column opening cover and two electromechanical actuators, each installed on the rear brake calipers. If either of the actuators ceases to function properly, the actuator that is still working will continue to be used.

Vehicle Movement Operation

If the vehicle is in motion, pull and hold the button to engage the parking brake for any potential situation requiring Dynamic Braking. Doing this will enable one of three sub-functions of the EPB switch during vehicle movement:

Electronic Control Deceleration (ECD) – the BSCM will attempt to apply the hydraulic brakes if available.

NOTE

If ECD is occurring, the BSCM will activate the stop lights. If BSCM activation of the stop lights is not needed, the EPB switch will control the stop light ON condition until the EPB switch is released.

ECD is activated if the following conditions exist:

- ignition state is RUN or START
- BSCM is operational
- the EPB is in normal mode – not Maintenance Mode
- vehicle speed is above 3 km/h (2 mph)
- the EPB switch is pressed and is constantly activated

The ECD inhibits operation if any of the following conditions exists:

- the vehicle is in Static or Limp Mode
- the EPB switch is in a Deactivated State – Neutral or Release
- ESC does not work properly (not able to perform the request)
- ESC does not acknowledge the deceleration request
- there are not enough valid wheel speed signals – both rear WSS signals and at least one front WSS signal are required
- the EPB is in Maintenance Mode
- achieved deceleration is less than the calibrated threshold (fallback to ADBF)
- the function is canceled via accelerator pedal usage

Actuator-Dynamic Braking Function (ADBF) – if the hydraulic brakes are not available, the BSCM will enable the ADBF system, which will operate by increasing the mechanical actuator pressure on the rear caliper pistons and the BSCM will request reduced engine output torque.

NOTE

HDC is a non-latching feature, that is the feature will not remain available or active from one ignition cycle to the next.

HILL START ASSIST (HSA)

NOTE

The HSA system will not operate on an automatic transmission vehicle in the neutral position.

The HSA system is designed to maintain the level of brake pressure for a short period of time after the brake pedal is released so that the vehicle does not roll on a hill between releasing the brake pedal and applying the accelerator pedal. This function can be enabled/disabled through the Customer Selectable Features setup menu in the radio.

While the HSA feature is holding hydraulic pressure in the brake system, the brake lights will be illuminated. Once the HSA feature releases the hydraulic pressure, the brake lights will be turned OFF.

The following must be true for HSA to activate:

- vehicle is stopped with the brakes applied
- vehicle is at an 8% or greater incline
- gear selection matches the incline direction (forward gear for uphill, reverse for backing uphill)
- driver door is closed
- EPB is not applied

OFF-ROAD ABS (ORA) ESC

On deformable surfaces (gravel, sand, and others), a specific Off-Road ABS calibration with higher wheel slip targets may be used to improve the ABS stopping distance. A larger wheel slip will help take advantage of the wedge effect of the deformable surface in front of the tires. Off-Road ABS is automatically enabled if the vehicle has terrain switch setting(s) for deformable surfaces, or it may be enabled if the transfer case is switched to low range. The ORA logic may also be used if the ESC detects a deformable surface based on information from the wheel speed sensors, longitudinal acceleration sensor, and brake torque model. The deeper wheel slip targets used in ORA are dependent on vehicle speed, steering wheel angle, and surface deviation estimation. The ORA logic is not intended to be used on dry or wet asphalt, packed snow, or ice.

The BSCM uses the following signals to help determine if Off-Road ABS is to be activated or not:

- vehicle speed estimation
- wheel speed
- SAS angle
- SAS angle type
- terrain mode selected
- longitudinal acceleration data