02 - Front Suspension / Wheel Alignment / Standard Procedure

CURB HEIGHT MEASUREMENT

The wheel alignment is to be checked and all alignment adjustments made with the vehicle at its required curb height specification.

Vehicle height is to be checked with the vehicle on a flat, level surface, preferably a vehicle alignment rack. The tires are to be inflated to the recommended pressure. All tires are to be the same size as standard equipment. Vehicle height is checked with the fuel tank full of fuel, and no passenger or luggage compartment load.

Inspect the vehicle for bent or weak suspension components. Compare the parts tag on the suspect coil spring(s) to the parts book and the vehicle sales code, checking for a match. Once removed from the vehicle, compare the coil spring height to a correct new or known good coil spring. The heights should vary if the suspect spring is weak.

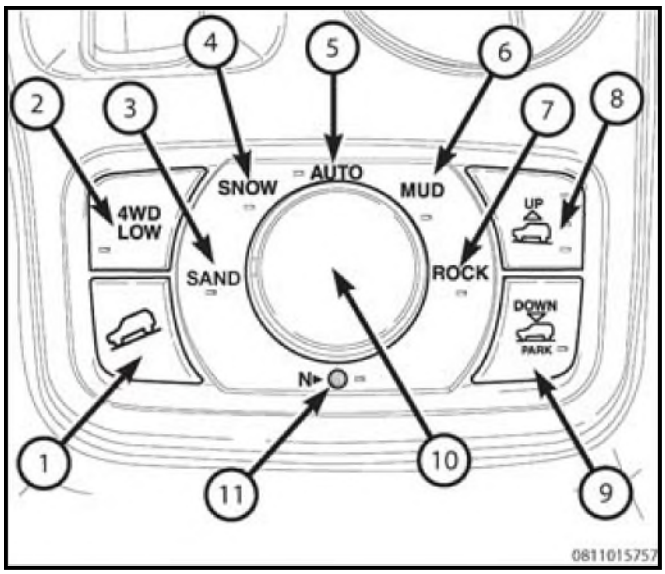
Ride height is measured at each corner of the vehicle by calculating the difference between the cradle bolt and the center of the wheel or axle heights as follows:

AIR SUSPENSION SPECIFIC INFORMATION

NOTE: A different ride height setting is used for measuring curb height.

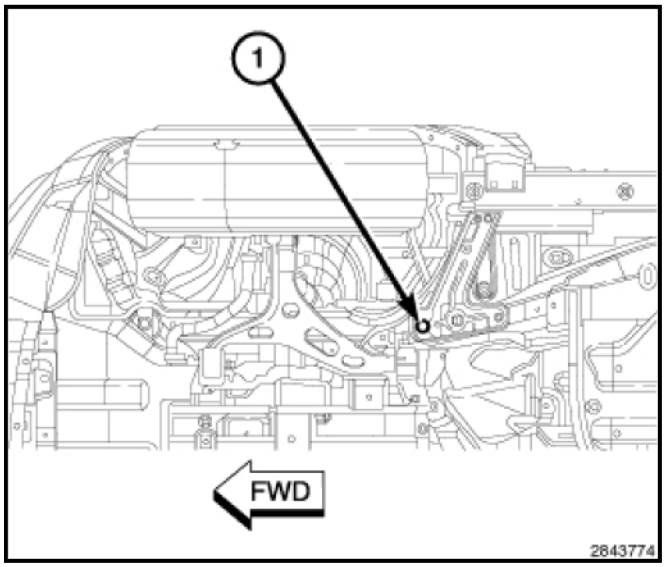
When checking or performing an alignment, vehicles equipped with Air Suspension (SER) must be in the manually selected "Auto" position (5) of the terrain select switch (10), **or** the Aero mode if using a scan tool. To change the ride height using the terrain select switch (10), the vehicle air suspension system must be in normal operating condition as follows:

- Scan tool disconnected
- All doors closed
- Liftgate closed
- Engine running
- Minimum battery voltage greater than 10.5 volts

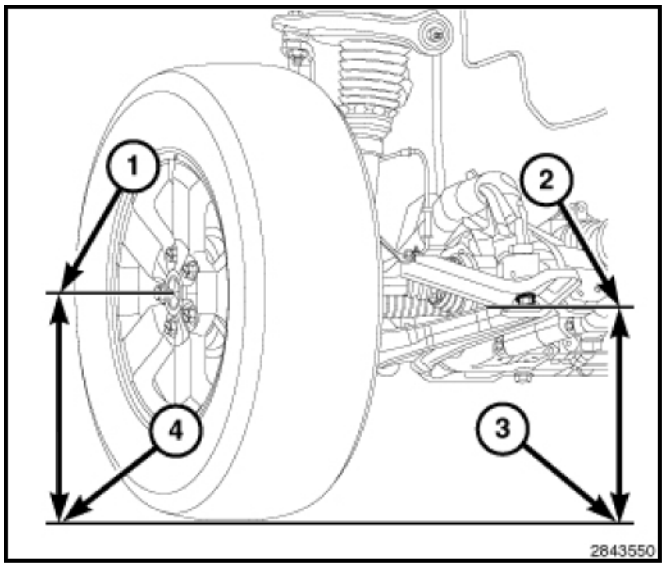


CURB HEIGHT MEASUREMENT - ALL

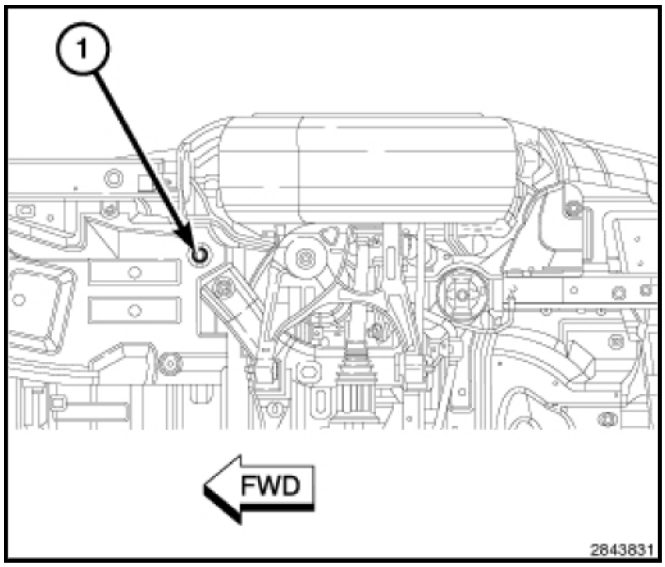
Front: Bottom view of the front cradle bolt (1) to be measured from.



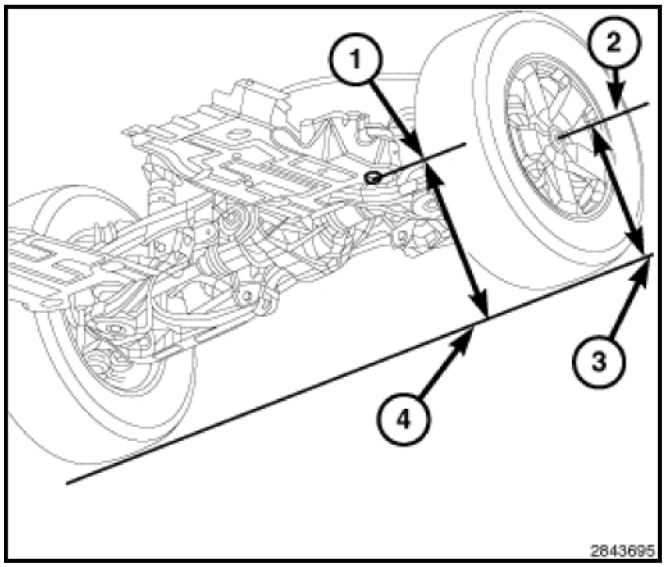
1. Front Wheel Center Height – Measure the vertical distance between the front wheel center (1) and the ground (4), **Record the measurement**.
2. Front Cradle Height – Measure the vertical distance between the center of the cradle bolt (2) to the ground (3), **Record the measurement**.
3. Take the two measurements and subtract them to get the ride height. Refer to the Curb Height Specifications chart below for specifications.



Rear: Bottom view of the rear cradle bolt (1) to be measured from.



NOTE: **For vehicles with Air Suspension (SER), metric measurements must be used for accuracy AND when writing ride height values to the Air Suspension Control Module (ASCM) using a scan tool.**



4. Rear Wheel Center Height – Measure the vertical distance between the front wheel center (2) and the ground (3), **Record the measurement**.
5. Rear Cradle Height – Measure the vertical distance between the center of the cradle bolt (1) to the ground (4), **Record the measurement**.
6. Take the two measurements and subtract them to get the ride height. Refer to the Curb Height Specifications chart below for specifications.

LHD and RHD	FRONT RIDE HEIGHT	REAR RIDE HEIGHT	Cross Ride Height	
	Center of Spindle to Cradle			
Base Suspension	90 mm +/- 12 mm (3.54 in. +/- 0.47 in.)	74 mm +/- 12 mm (2.91 in. +/- 0.47 in.)	+/- 12 mm (+/- 0.47 in)	
Aero Suspension	105 mm +/- 12 mm (4.13 in. +/- 0.47 in.)	89 mm +/- 12 mm (3.50 in. +/- 0.47 in.)		
SRT8	116 mm +/- 10 mm (4.57 in. +/- 0.39 in.)	103 mm +/- 10 mm (4.05 in. +/- 0.39 in.)		
Air Suspension (Aero Mode)	112 mm +/- 10 mm (4.41 in. +/- 0.39 in.)	98 mm +/- 10 mm (3.86 in. +/- 0.39 in.)		
Air Suspension (Normal)	97 mm +/- 10 mm (3.82 in. +/- 0.39 in.)	83 mm +/- 10 mm (3.27 in. +/- 0.39 in.)		