

# 2009 - 2013 Corvette ZR1: GM TechLink: Lifting the Corvette ZR1

**IMPORTANT:** Some of the ZR1 carbon fiber trim is not installed to the vehicle at the assembly plant, to avoid shipping damage. The rocker moldings, front valance panels and rear wheel flare moldings must be installed at the dealership during new vehicle preparation. Once the rocker moldings and valance are installed, the vehicle's ground clearance can be as little as 4 3/4 inches (12 cm). And clearance between the top of the lift arm and the bottom of the car may be as little as 1/8 inch (0.3 cm) (fig. 19) .

Brake cooling air deflectors, which are shipped with the rotor protectors, are installed to the front lower control arms during new vehicle preparation. Once installed, these items and the air deflector below the radiator also affect ground clearance.

Due to the low ground clearance, it's necessary to be extra careful when driving the vehicle onto a ramp (such as an alignment rack) or when using a hydraulic lift. Carbon fiber is brittle and easily damaged. It bends very little before breaking. And replacement parts are extremely costly.

Lifts are not all alike. Heights, adjustability, dimensions, and floor contour can vary, so specific instructions are not possible. Here are some useful guidelines.

## **ZR1 Dimensions**

Refer to figure 20 . The ground clearances under the front valance and rocker panel moldings are very low. And due to the front overhang, the approach angle is shallow.

A Ground clearance below rocker

B Approach angle

**TIP:** Allow the suspension to settle before taking measurements. Compare the vehicle's dimensions with your lift or alignment rack to determine what accommodations are needed to lift the vehicle without damage.

### **Lifting Tips**

It may be necessary to drive all four of the ZR1's tires onto low ramps (fig. 21) to allow the lift arms to fit under the vehicle, and provide the necessary clearance for the rocker moldings.

On a lift with telescoping lift arms, check the height of the outer (larger) portion -- it may contact the rocker panel even if the smaller (inner) portion clears (fig. 22) .

A Outer arm clearance

B Inner arm clearance

It may be necessary to thread the lift pads down to the lowest position for clearance before swinging the lift arms under the car (fig. 23) . Then thread the pads up to place them closer to the lift points on the vehicle before raising the lift. Reverse the procedure when lowering.

## Alignment Rack Tips

Due to the shallow approach angle below the front valance, the valance may contact the ramp on the alignment rack.

To prevent this, it may be necessary to extend the ramps to reduce the angle. A ratio of at least 8.5 inches of length to each 1 inch of height is recommended (fig 24) . This means that if the surface of the alignment rack is 10 inches from the floor, the approach ramp must be at least 85 inches long.

A Height

B Length

**TIP:** Even with the ramp extended, be careful. A floor with a center drain or other irregularities may affect the relationship of the vehicle to the ramp.

- Thanks to *Will Godfrey, Art Spong, Randy Stewart and Terry Goll*  
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