

MODULE PROGRAMMING

ADAPTIVE SPEED CONTROL MODULE - ALIGNMENT

The Adaptive Cruise Control (ACC) module requires alignment when the:

- ACC module is removed and reinstalled
- Front end structural repairs are performed
- A Diagnostic Trouble Code (DTC) indicates ACC adjustment is required
- Any suspension or vehicle alignment changes

ACC module alignment consists of performing the mechanical vertical alignment described in the following procedure, followed by the electronic horizontal alignment that is performed with a diagnostic scan tool and the appropriate diagnostic information.

VEHICLE PREPARATION FOR MODULE ALIGNMENT

NOTE: The ACC module lens could be obstructed by snow/ice, dirt, mud, and other environmental debris. A message will appear on dash to clean the lens when needed. The module lens is equipped with a heating element that can melt snow/ice. Otherwise the lens must be cleaned manually. Also note that the assembly could be misaligned or damaged from impact or water intrusion.

1. Repair or replace any ineffective, worn or damaged body components. Repair any loose or cracked fascia components that might interfere with the sensor field of view. The lens dome of the module should be roughly centered in the opening of the fascia.
2. Verify proper tire inflation pressures.
3. Remove any accumulations of mud, snow or ice from the vehicle underbody.
4. Verify that there is no load in the vehicle (cargo or passengers), except for the driver.

NOTE: The vehicle MUST be placed upon a wheel alignment or frame rack to achieve the proper module vertical alignment results. If a wheel alignment or frame rack is not available, then a verified level surface can be used. When using the wheel alignment rack, the fore - after specifications must be within 0 (+/- 0.2) degrees.

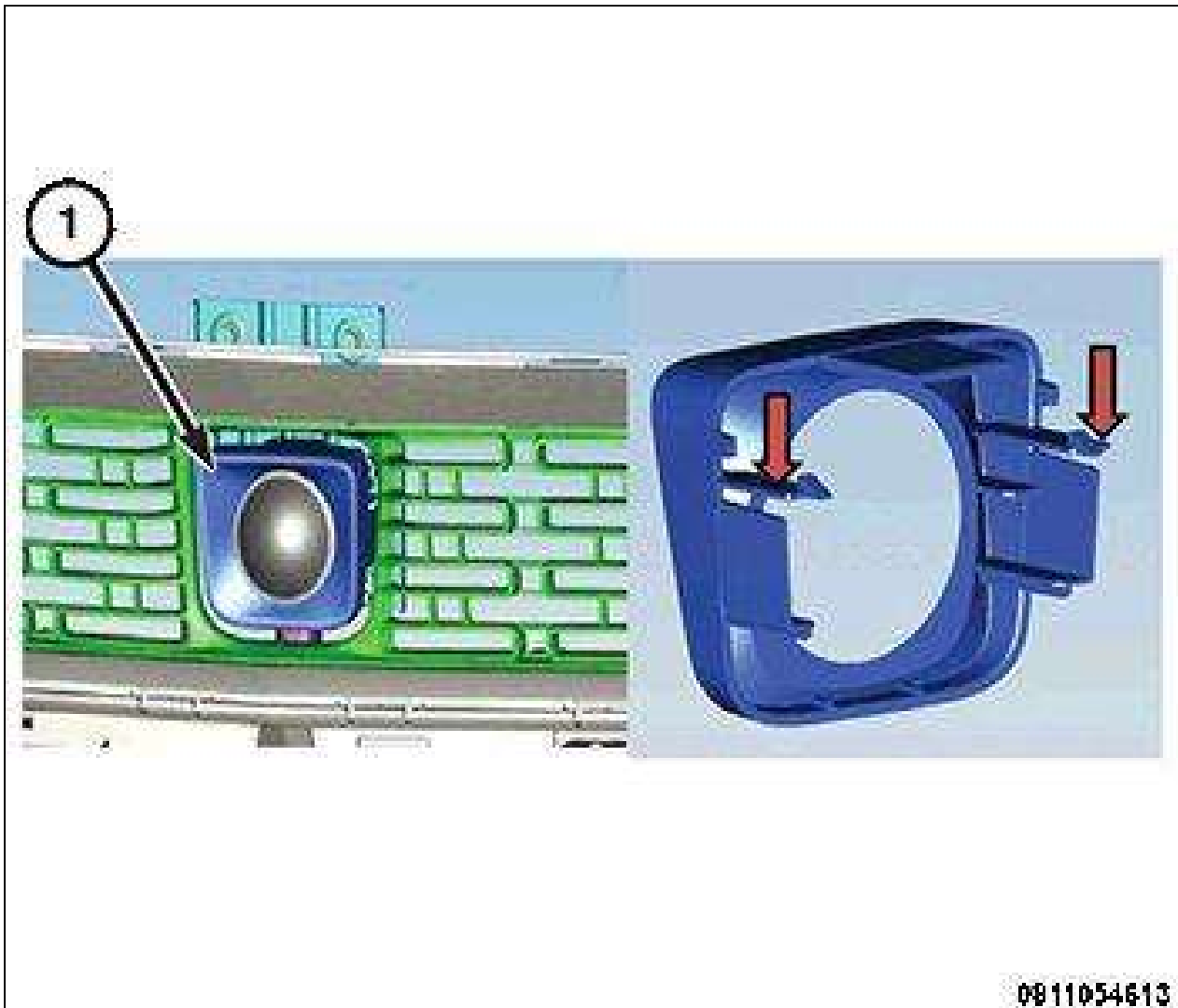
5. Rock the vehicle side-to-side three times to allow the suspension to stabilize.

6. Bounce the front and rear suspension three times by pushing downward on the front and rear bumpers and releasing.
7. Verify correct vehicle suspension height.

MODULE ALIGNMENT

1. The Adaptive Cruise Control (ACC) module is located on a bracket secured near the center of the underside of the front bumper support member of the Front End Module (FEM) behind the front fascia.

Fig 1: Adaptive Cruise Control Mirror Cover



Courtesy of CHRYSLER GROUP, LLC

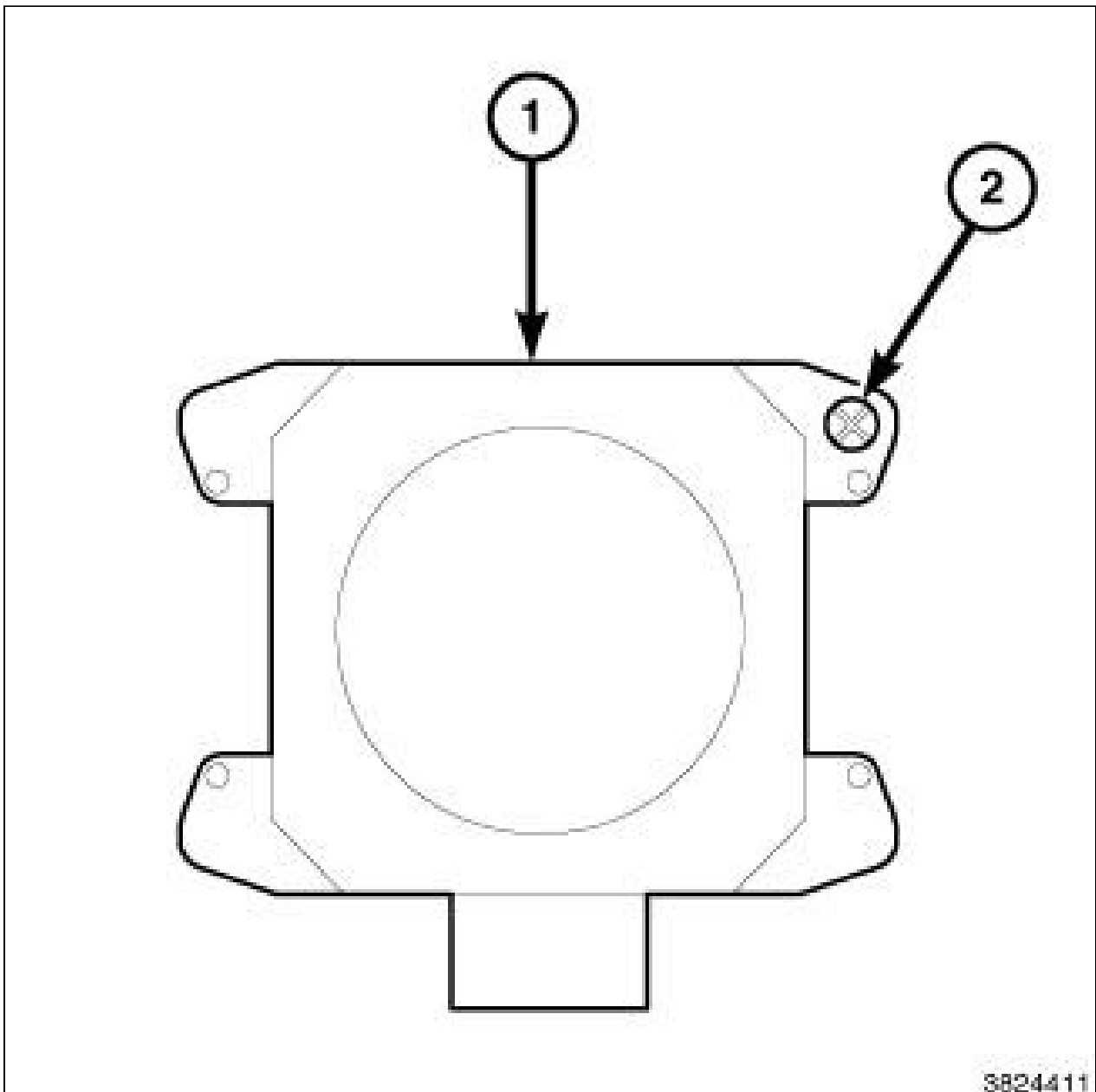
2. Remove the ACC mirror cover (1). Remove the mirror cover by pushing down on the two attachment levers shown in the illustration and then pulling outward on the cover. This is done without removal of the fascia.
3. Using standard glass cleaner and a clean soft towel, remove any dirt or road salt from the convex molded dark plastic lens dome on the face of the ACC module as well as from the suction cup of the vertical alignment tool.

- Carefully slide the vertical alignment tool over the sensor housing until the suction cup rests against the lens of the ACC module.

NOTE: *It may take several attempts to get the suction cup of the special tool to fasten securely to the ACC module. If necessary, lightly wet the suction cup with clean water to help improve adhesion.*

- Depress the plunger of the vertical alignment tool to engage the suction cup and attach the special tool securely to the lens of the ACC module.

Fig 2: Sensor & Ball Stud



Courtesy of CHRYSLER GROUP, LLC

6. Use the 3.5 millimeter hex nut driver (Special Tool No. (special tool #10243-2, Driver, Nut)) to rotate the vertical adjustment ball stud (2) that secures the sensor (1) to the mounting bracket as necessary to center the bubble of the spirit level between the two center marks on the vial of the level located on the top of the vertical alignment tool.
7. Depress the center release button of the special tool to release the suction cup from the sensor lens and remove the special tool from the ACC module.
8. Perform service drive alignment.
9. Perform the "ACC aim mode auto alignment". This is the ACC sensors horizontal alignment procedure. Perform this routine using a diagnostic scan tool and follow the directions on the screen. The use of the 3.5 mm hex nut driver (Special Tool No. 10243-2) may be needed for the procedure.
10. Install the mirror cover onto the front of the module. Press down around the outside edges of the mirror cover to ensure the cover is fully engaged to the module housing