Cruise Control Radar Alignment

Adjustment

Vertical Alignment

NOTE: *In order to align the CCM (cruise control module), the CCM (cruise control module) cover must be removed to access the sensor and the vehicle must be in a wheel alignment bay station so that the vehicle is level.*

NOTE: *If there is impact damage to the front of the vehicle, correct the issue prior to installing the CCM (cruise control module) and bracket assembly.*

NOTE: *If the CCM (cruise control module) and bracket are being replaced, the replacement CCM (cruise control module) and bracket will already be pre aligned and should be able to be installed without alignment.*

NOTE: *If there is a alignment issue, verify that the CCM (cruise control module) and bracket are installed correctly and the issue is with the attachment surface.*

NOTE: *Verify that the CCM (cruise control module) is free of ice and snow prior to performing the cruise control radar alignment procedure.*

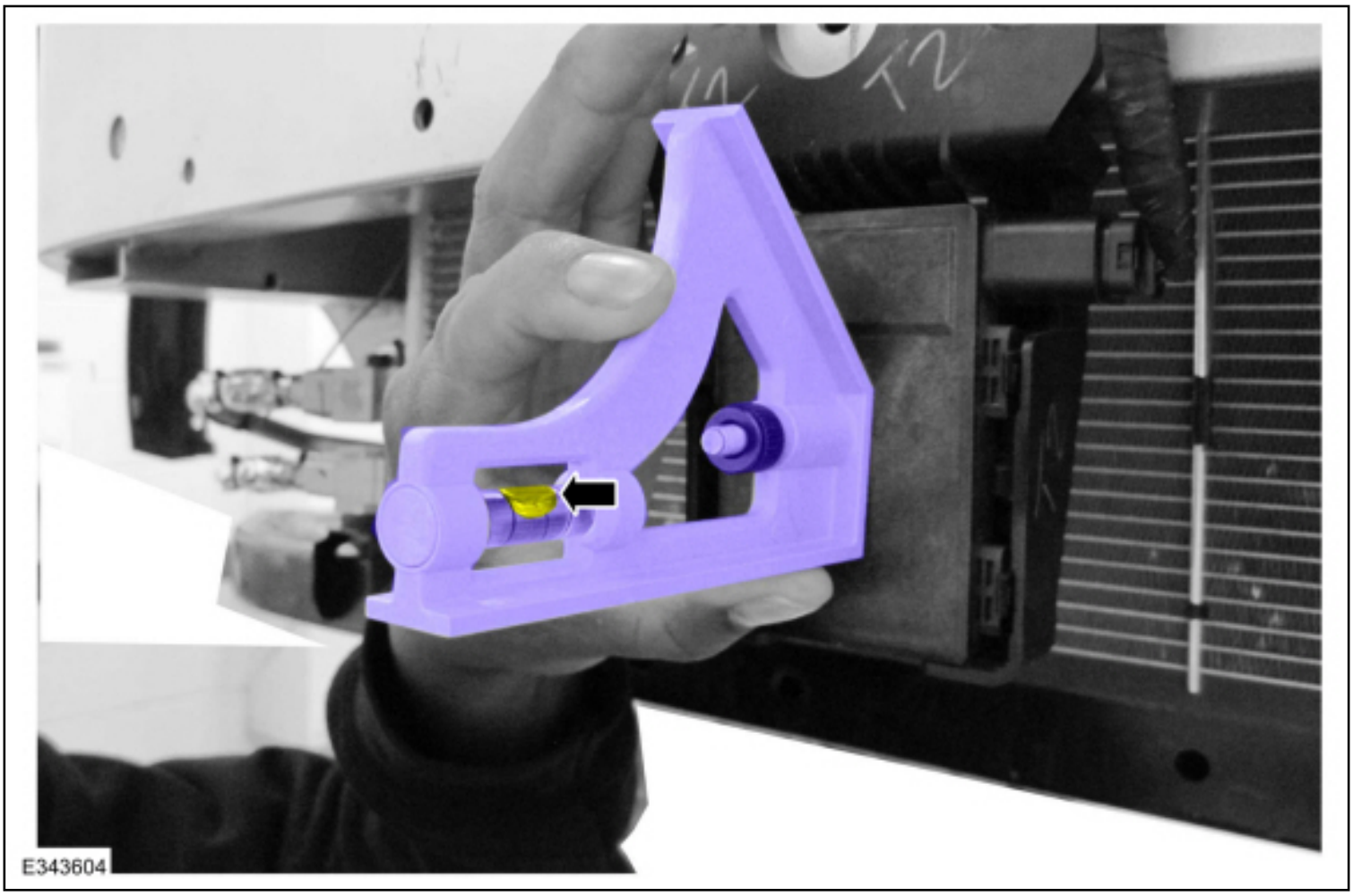
1. Remove the front bumper cover.
   Refer to: Front Bumper Cover (501-19 Bumpers, Removal and Installation) .

2. Place the vehicle on a wheel alignment bay station.

3. **NOTE:** *Measurement must be taken from the non-raised side of the CCM (cruise control module).*

   NOTE: *If the vertical measurement is not level, use a scan tool to check if the CCM (cruise control module) is within specifications. Follow the on-screen instructions for the CCM calibration procedure. If there is a alignment issue, verify that the CCM (cruise control module) and bracket are installed correctly and the issue is with the attachment surface. Repair as necessary.*

Place a combination square level on the face of the CCM and check the alignment.



4. **NOTE:** *Prior to installing the front bumper cover, clean and remove any debris on the front or back of the cover.*

   Install the front bumper cover.
   Refer to: Front Bumper Cover (501-19 Bumpers, Removal and Installation) .

Horizontal Alignment

NOTE: *The horizontal alignment for the CCM (cruise control module) is a software calibration check that is performed by the scan tool to insure the CCM (cruise control module) radar is pointed straight. No manual adjustment is needed for this procedure. The scan tool calibrates the CCM (cruise control module) through the CCM (cruise control module) procedure in programmable parameters. The Alignment Offset specification is +/- 3.0 degrees of offset.*

5. **NOTICE: The vehicle's engine must be running during the horizontal alignment procedure. Failure to leave the engine running throughout the entire procedure results in the cancellation of the alignment procedure and the system remains non-functional.**

Start the engine.

6. Follow the scan tool on-screen instructions to carry-out the CCM calibration procedure.

Cruise Control Module (CCM)

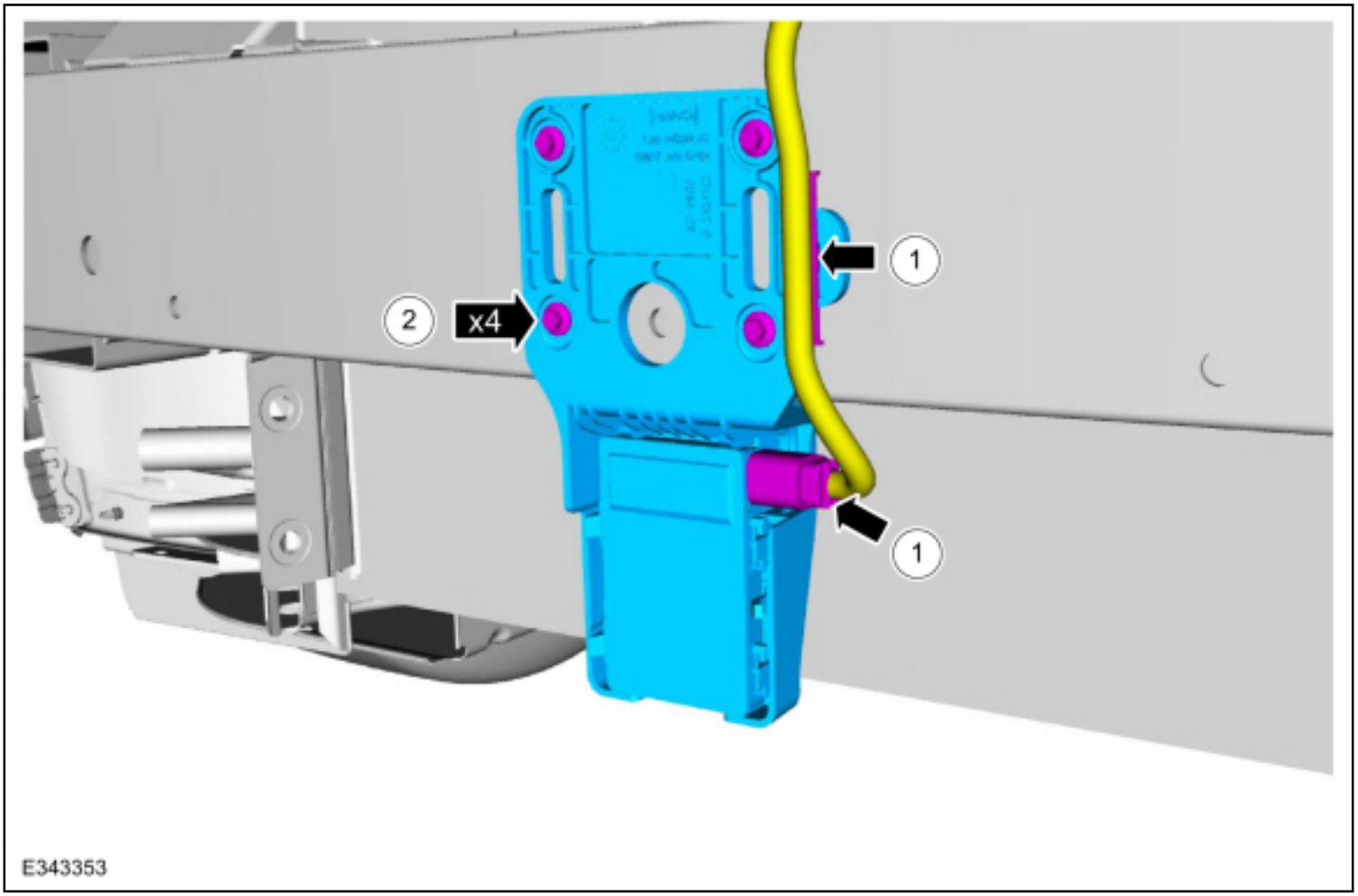
Removal

NOTE: *Removal steps in this procedure may contain installation details.*

1. Remove the front bumper cover.
   Refer to: Front Bumper Cover (501-19 Bumpers, Removal and Installation) .

2. **NOTE:** *Follow the unique instructions or graphics for this step in the installation.*

   Remove the CCM and bracket.
   1. Detach the wire harness retainer and disconnect the CCM wiring connector.
   2. Remove the screws and the CCM and bracket.



Installation

1. To install, reverse the removal procedure.

2. Install and tighten the screws in the following sequence.
    1. Install and tighten the CCM bracket screw.
       Torque : 36 lb.in (4.1 Nm)
    2. Install and tighten the CCM bracket screw.
       Torque : 36 lb.in (4.1 Nm)
    3. Install and tighten the CCM bracket screw.
       Torque : 36 lb.in (4.1 Nm)
    4. Install and tighten the CCM bracket screw.
       Torque : 36 lb.in (4.1 Nm)