

# SS 1034068 Meritor Wabco OnGuard Radar Service Alignment

---

Applicable Vehicles: WST5700 & FTL Cascadia Trucks equipped with OnGuard ACC

## Concern:

If the radar sensor needs to be aligned, the radar sensor mounting system has become damaged or has loosened, or new radar sensor software has been installed, a Radar Sensor Service Alignment will need to be performed

Solution: Read Below

## Environment-Related Information

### WARNING

The driver should consider the benefit/risk of using OnGuard™ Collision Mitigation System (CMS) under the following conditions.

Weather such as rain, sleet, snow, ice, heavy fog, as well as smoke or dust. These conditions can make roads slippery which can cause a spinout, or block or limit the radar's distance sensing ability.

Construction zones, off road, dirt roads or muddy roads with loose surface. These conditions can cause the wheels to lose traction and limit OnGuard™'s ability to provide appropriate warning and adequate braking. Curvy or winding roads, roads with sharp turns. Curvy roads can make it difficult for the OnGuard™ CMS radar to track vehicles in it's path. While in a sharp turn or if the preceding vehicle is in a sharp turn, OnGuard™ may no longer track a vehicle in front of you. Your vehicle could then unexpectedly accelerate to the previously selected speed.

Heavy or complicated traffic, entry and exit ramps, downhill, cross traffic and intersections. OnGuard™ CMS is not capable of taking into account these complex traffic situations and respond to each scenario. It cannot track traffic and objects traveling perpendicular to it's path. Driving in these conditions with OnGuard™ CMS active can produce false warnings, unexpected braking or no response at all. Serious personal injury or death, and/or severe property damage can result.

## Radar Sensor Service Alignment

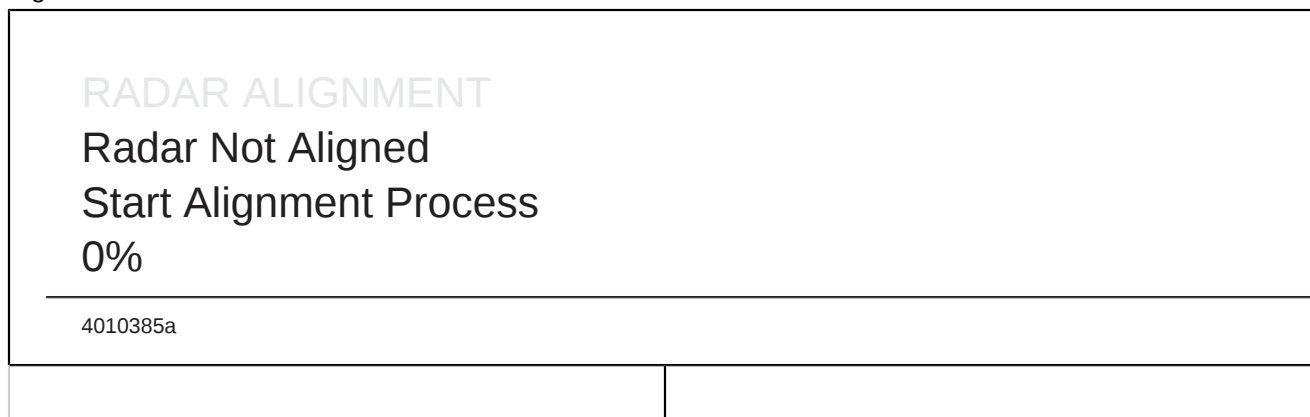
The following, although not all-inclusive, is a list of service, maintenance, and repair operations requiring system Service Alignment:

- Chassis parts replacement
- Steering or suspension parts replacement, adjustment, or alignment
- Tire inflation or size change, and/or tire replacement
- Front body parts replacement or adjustment

NOTE: Use of non-OEM bumpers, hoods, and brush guards not verified to work with the system on a particular vehicle may result in driveability concerns and affect system performance with worst case result in DTCs or disabled CMS.

If the radar sensor needs to be aligned, the radar sensor mounting system has become damaged or has loosened, or new radar sensor software has been installed, a Radar Sensor Service Alignment will need to be performed.

If a Radar Sensor Service Alignment is required, the Radar Not Aligned Screen may be displayed as shown in Figure 2.15.



NOTE: While the system is in Service Alignment mode, the system does not track vehicles or operate until the Service Alignment procedure is completed.

1. Before starting the alignment procedure, verify the radar is mounted securely and the bracket is not bent or damaged. Refer to Radar Inspection and Preventive Maintenance in this section.
2. Using TOOLBOX™ Software, select Options and Perform Service Alignment. When the Start Service Alignment box appears, click Yes. While in this mode, the display will show the progress of the alignment process as shown in Figure 2.16.

## RADAR ALIGNMENT

### Service Alignment In Progress

20%

4010386a

If the Radar Service Alignment will not initiate, perform the following procedure.

1. 1. Turn off the ignition for at least two minutes.
2. Start the vehicle and drive above 10 mph.
3. Pull to the side of the road, come to a complete stop and leave the key on.
4. With the TOOLBOX™ Software connected, initiate the service alignment to begin the alignment process.
2. Drive the vehicle on a straight road above 30 mph (48 kph). The road should have telephone poles, signposts or other non-moving objects along the roadside. **Note: The more non-moving objects there are the better.** There must be other traffic on the road, either oncoming or lead vehicles at distances greater than 150 ft.
3. NOTE: Stopping the vehicle during alignment is acceptable, but alignment will not progress while the vehicle is at low speeds or stopped.
4. Drive until the Radar Aligned screen in Figure 2.17 appears in the display. This typically takes less than 10 miles to complete.

## RADAR ALIGNMENT

### Radar Aligned

100%

4010388a

1. After completing the Service Alignment procedure, the system returns to one of the normal operating screens. NOTE: If the radar alignment fails, a specific radar alignment error appears indicating the direction in which the sensor is incorrectly aimed. NOTE: Before calling WABCO North America Customer Care, please download the system DTC report and the parameter (par) file or Fleet Data Report using TOOLBOX software. Email the files to OnTrac at: [OnTrac@wabco.com](mailto:OnTrac@wabco.com) with the case number (if known) and DTC Report in the subject line.
2. As the vehicle is driven following the Radar Sensor Service Alignment, the system performs continuous adjustments to the radar sensor alignment. Further service alignments are generally not necessary unless the radar sensor mounting assembly is disturbed, becomes loose, or the radar sensor requires replacement.
3. If this occurs, review the radar sensor installation, determine if the radar sensor needs to be repositioned (or in some way serviced) and then repeat the Radar Sensor Service Alignment procedure. Contact WABCO North America Customer Care at 855-228-3203 if the radar service alignment fault cannot be resolved.
4. NOTE: After the Radar Sensor Service Alignment is complete, you may have a system fault screen. If this occurs, cycle the ignition off for at least two minutes.