

RCI-86-26-001-3: Model Year 2022-2024 Advanced Driver Assistance System (ADAS) Calibration Requirements and Best Practices, R1T and R1S

Rivian Automotive, LLC Position Statement

Document Type	Collision Repair Information Document
Date	April 28, 2026
Affected Region(s)	USA
Affected Model(s)	R1T, R1S
Model Year(s)	2022-2024
Vehicle System	86 - Driver Assistance

Rivian has established important guidelines regarding collision repair and interaction with parts on Rivian vehicles to help ensure the vehicle is repaired to Rivian standards. Certified Collision Centers and the collision industry must follow these guidelines to uphold Rivian’s standards of safety and quality.

Repair guidelines, position statements, and repair procedures published by Rivian are engineered and tested to help ensure Rivian vehicles are repaired to provide quality, performance, safety, and durability. To meet [RCI-98-22-003-2: Rivian Repair Standards](#), repairs should be performed by Rivian Certified Technicians using Rivian approved repair procedures, tools, and Rivian Original Equipment Parts.

Overview

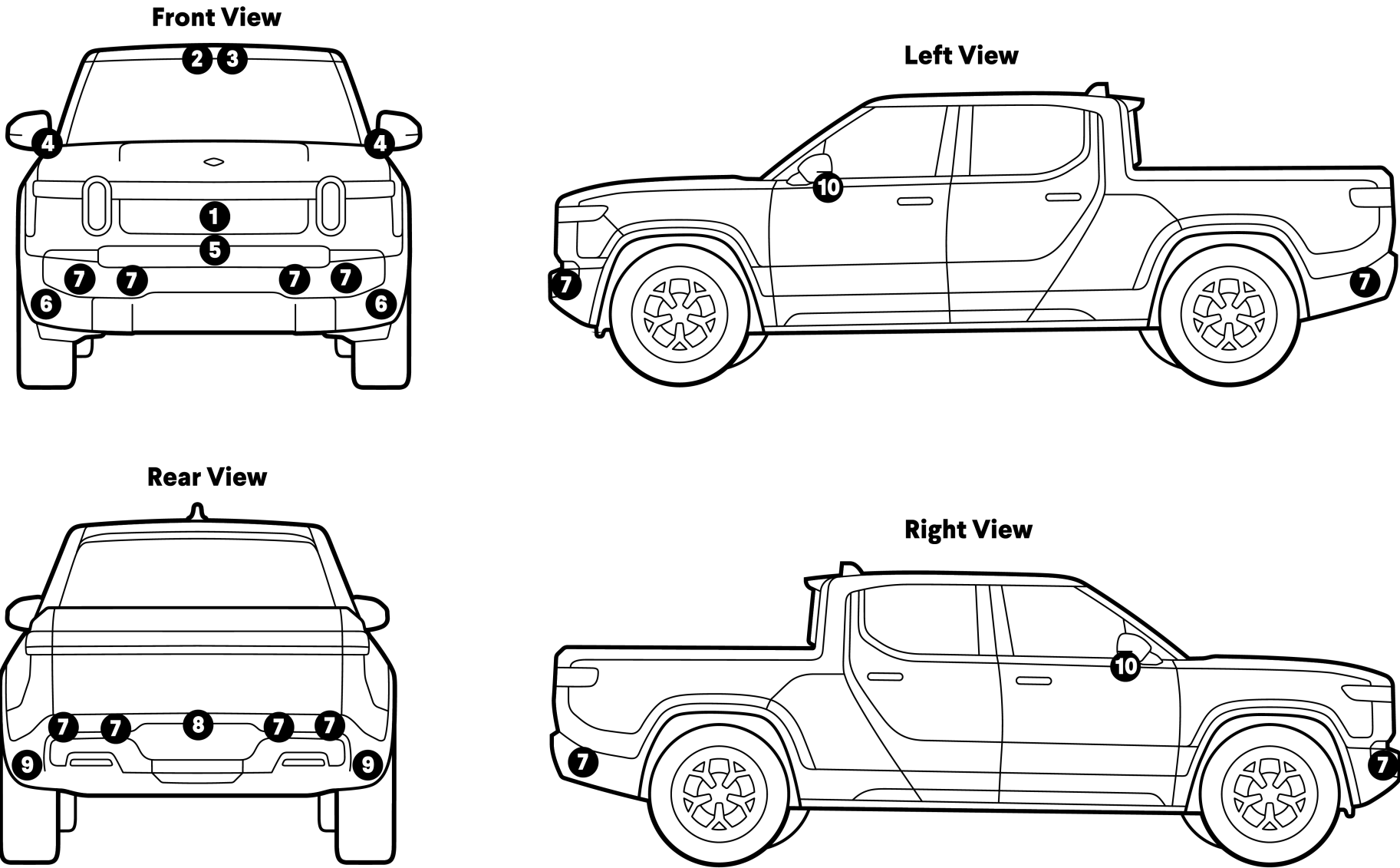
The Rivian suite of Advanced Driver-Assistance Systems (ADAS) are referred to collectively by Rivian as, "Driver+" for model year 2022-2024 vehicles (Gen 1). The systems are comprised of cameras, radar sensors, antennas, and ultrasonic sensors that aid with vehicle operation. To meet Rivian Standards, all repairs and calibrations involving ADAS components should be performed by a Rivian Certified Technician at either a Rivian Service Center or Rivian Certified Network Location (i.e. Rivian Certified Collision Centers, Rivian Calibration and Diagnostic Centers, etc.). After a repair, the ADAS components may need to be calibrated before the vehicle can be returned to the customer, however, not all components will require calibration. Refer to the appropriate service procedure(s) for the latest detailed and vehicle-specific calibration instructions.

Always refer to the Rivian Service Manual Procedure(s) for information on removal, installation, fault tracing, and component calibration.

Warning:

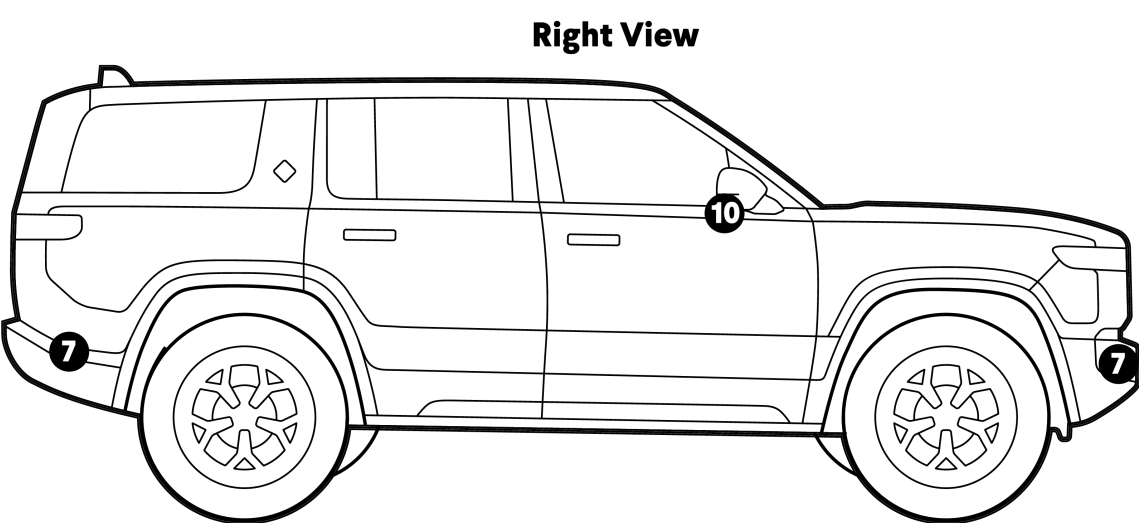
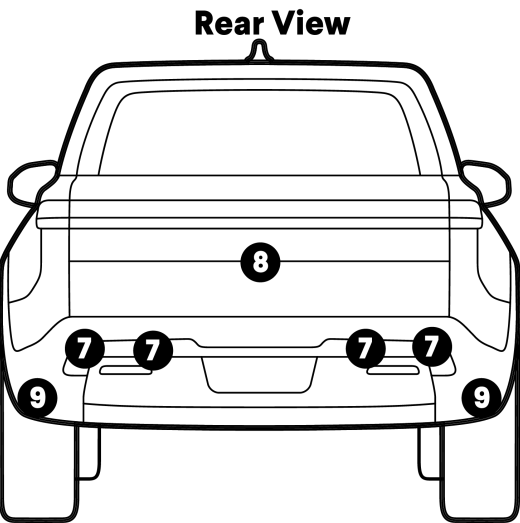
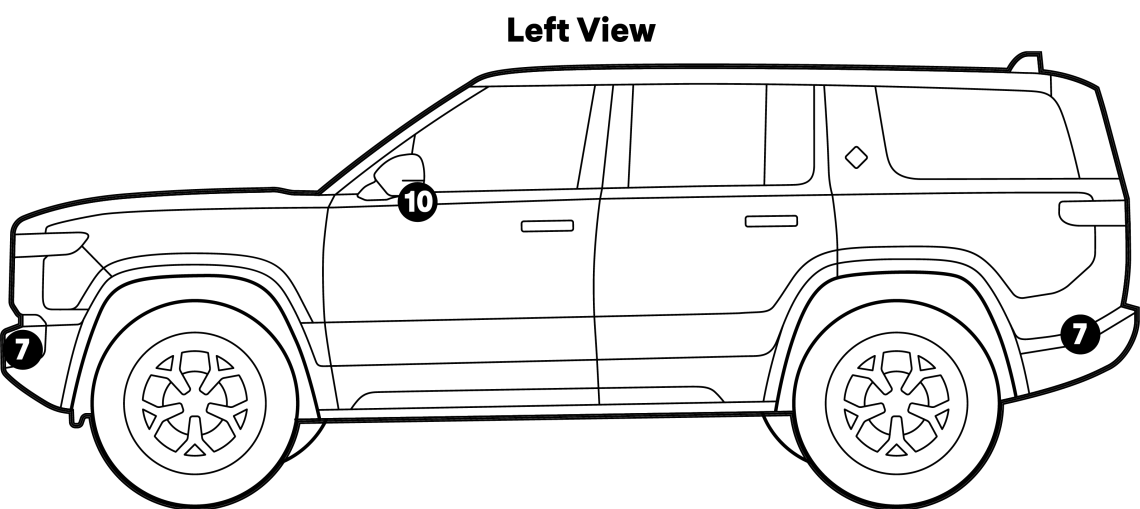
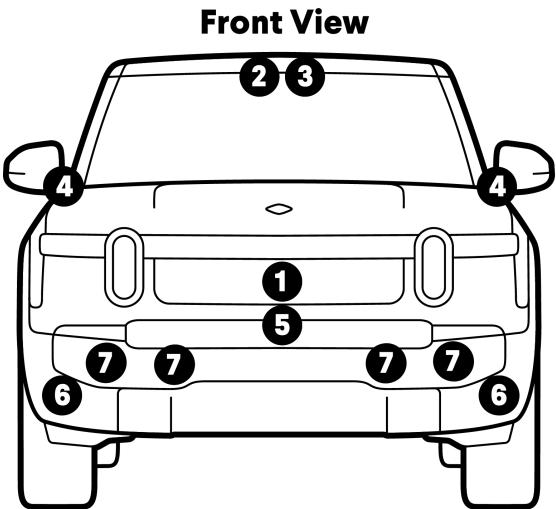
Improper maintenance and calibration of ADAS components may result in catastrophic failure of the system, which can cause severe injury or death.

R1T ADAS Component Locations



Number	Component Type
1	Sensor, Radar, Front, Center
2	Camera, Driver Assistance, Front
3	Camera, Long Range, Front
4	Camera, Forward Facing, Mirror
5	Camera, Bumper, Front
6	Sensor, Corner Radar, Front
7	Ultrasonic Sensor(s) (Park Assist)
8	Camera, Bumper, Rear
9	Sensor, Corner Radar, Rear
10	Camera, Fender Flares, Front
11	Camera, Surround, Mirror

R1S ADAS Component Locations



Number	Component Type
1	Sensor, Radar, Front, Center
2	Camera, Driver Assistance, Front
3	Camera, Long Range, Front
4	Camera, Forward Facing, Mirrors
5	Camera, Bumper, Front
6	Sensor, Corner Radar, Front
7	Ultrasonic Sensor(s) (Park Assist)

Number	Component Type
8	Camera, Liftgate Upper, Rear
9	Sensor, Corner Radar, Rear
10	Camera, Fender Flares, Front
11	Camera, Surround, Mirror

Component Calibration Requirements

Important:

Always refer to the Service Manual procedures for the latest calibration requirements. Calibration requirements in the Service Manual supersede any calibration requirements listed in this document.

Driver Assistance Cameras

Camera	Calibration Style	Calibrate When:
Camera, Driver Assistance, Front	Static or Dynamic	Camera or Windshield is replaced or removed and reinstalled
Camera, Long Range, Front	N/A	Calibration is not required, sensor unused
Camera, Forward Facing, Mirror	N/A	Calibration is not required, sensor unused
Camera, Fender Flares, Front	N/A	Calibration is not required, sensor unused

Surround View Cameras

Camera	Calibration Style	Calibrate When:
Camera, Bumper, Front	Static	Camera, Bumper, Front is replaced or removed and reinstalled Note: Calibration is not required when only removing and reinstalling the Front Fascia Assembly
Camera, Bumper, Rear (R1T Only)	Static	Camera, Bumper, Rear is replaced or removed and reinstalled Rear Fascia Assembly is replaced or removed and reinstalled
Camera, Surround, Mirror	Static	Camera or Mirror Assembly is replaced or removed and reinstalled
Camera, Liftgate, Upper, Rear (R1S Only)	Static	Camera, Liftgate, Upper, Rear is replaced or removed and reinstalled Upper Liftgate Assembly or Upper Liftgate Bezel are removed and reinstalled

Radar Calibration Requirements

Camera	Calibration Style	Calibrate When:
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Camera	Calibration Style	Calibrate When:
Sensor, Radar, Front, Center	Static or Dynamic	• Sensor, Radar, Front, Center is replaced or removed and installed • Front fascia is replaced or refinished ◦ For front upper fascia removal and install, no calibration is necessary if the radar angle is the same before and after the repair is performed
Sensor, Radar, Front, LH/RH	Dynamic	Sensors calibrate automatically when the vehicle is driven
Sensor, Radar, Rear, LH/RH		

Note:
Ultrasonic Sensors do not require calibration.

Important:
All new radar components must be variant coded when installed on Model Year 2022-2024 Vehicles. Variant coding is not needed if the radar is removed and re-installed. Refer to the appropriate RiDE procedure.

Calibration Labor Time Guide

The following times are based on internal time studies performed by Rivian and factor in the unique differences found in third-party repair environments that are not present in Rivian Service Centers.

Calibration Set-Up

Procedure	Labor Time (hrs)	Notes
Important: Complete the following procedures prior to any vehicle calibrations. This setup is performed only once per calibration session, unless repairs require the vehicle to be removed from the calibration area.		
Pre ADAS-Calibration Vehicle Inspection	0.5	Includes checking tire pressure, firmware check and update launch as required, estimate review, and required calibration repair planning.
RiDE Set-Up	0.3	One time procedure – Includes connection and initial software setup prior to performing calibration process.
Driver Assistance Calibration Setup	1.0	Includes setup of the approved target placement system and the alignment checks with the vehicle during the initial calibration process, as well as time to store the equipment after use.

Calibration Procedures

Procedure	Labor Time (hrs)	Notes
Corner Radar Variant Coding	0.2	Performed in RiDE for corner radar replacements. Run once per replaced radar.

Procedure	Labor Time (hrs)	Notes
Sensor, Radar, Front, Center (Calibrate)	0.8	Includes time for the following: - Calibrating position of vehicle relative to calibration equipment - Positioning of component calibration targets - Activation of RiDE calibration routine - Retrieving and putting away calibration targets
Camera, Driver Assistance, Front (Calibrate)	0.8	
Surround View System (Calibrate)	1.0	Required only once when one or more of the following cameras are replaced or removed and installed: - Camera, Surround, Mirror - Camera, Bumper, Rear (R1T only) - Camera, Liftgate Upper, Rear (R1S only) - Camera, Bumper, Front Includes time for the following: - Calibrating position of vehicle relative to calibration equipment - Positioning of component calibration targets - Activation of RiDE calibration routine - Retrieving and putting away calibration targets
Post Calibration Test Drive	0.5	Only required when a thrust angle adjustment was performed during any part of a required suspension alignment.

Repair Restrictions

Vehicle Wraps

Third-party external vehicle films such as vinyl wrap or Paint Protection Film (PPF) that are not manufactured by XPEL may affect the performance of ADAS components. Refer to [RCI-52-24-004-2: Paint Protection Film \(PPF\)](#) for more information.

Important:

Other physical modifications that include but are not limited to: bolt-on accessories, suspension modifications that alter the vehicle ride height, or other modifications not explicitly approved by Rivian, may affect the performance of driver assistance components.

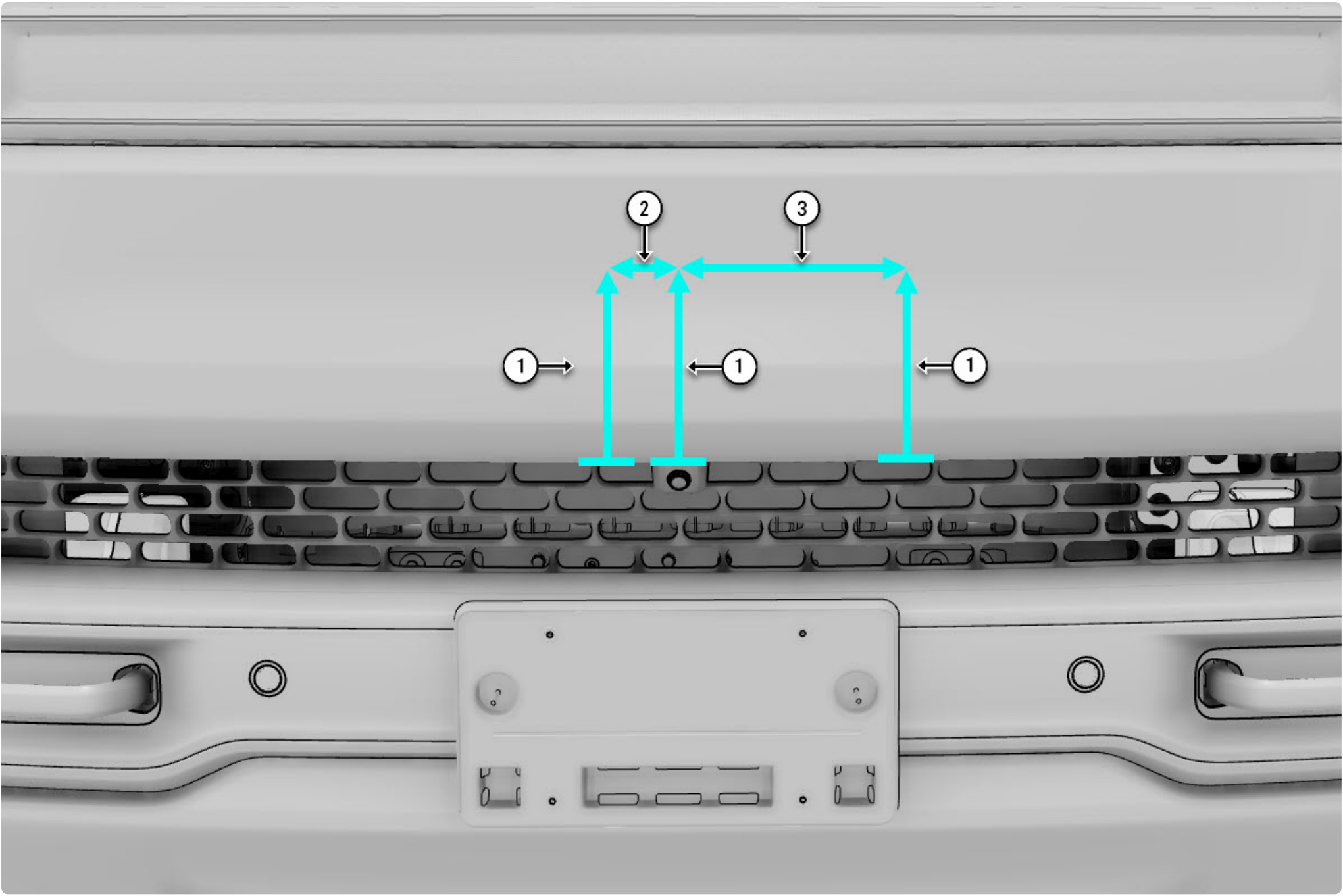
Front Fascia No-Repair Zone

To avoid interference with the Sensor, Radar, Front, Center and the integrated safety systems, repair is not allowed to the Fascia, Front, Upper in front of the component.

In addition to repairs, repainting (primers, sealers, and base coats) is not allowed in the No-Repair Zone. Only clearcoat can be applied in the No-Repair Zone. If any repair beyond clearcoat application is required in the radar transmission area, the bumper must be replaced. Repairs outside the No-Repair Zone area are allowed.

To locate the Sensor, Radar, Front, Center under the Fascia, Front, Upper, measure up from the Camera, Bumper, Front. Then, measure left and right to create a rectangle; the rectangle represents the radar transmission area and No-Repair Zone.

No-Repair Zone:



Callout	Measurement (mm)
1	110
2	40
3	140

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