

RCI-86-26-002-3: Model Year 2025+ 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	August 10, 2026
Affected Region(s)	USA
Affected Model(s)	R1T, R1S
Model Year(s)	2025+
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

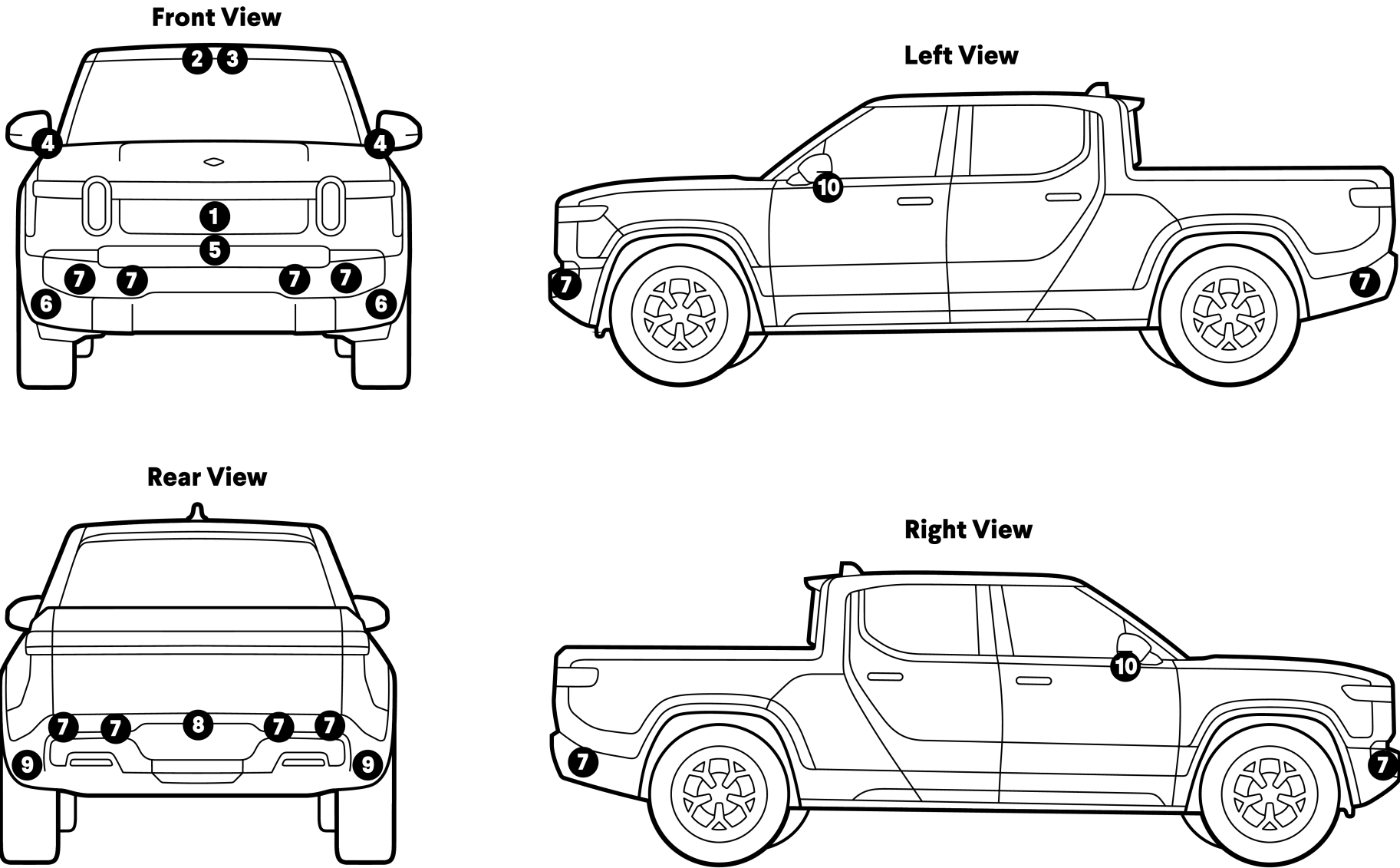
The Rivian suite of Advanced Driver-Assistance Systems (ADAS) are referred to collectively by Rivian as, "Rivian Autonomy Platform(+)," for model year 2025+ vehicles (Gen 2) . The systems are comprised of cameras, radar sensors, antennas, and ultrasonic sensors that aid with vehicle operation. To meet 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:

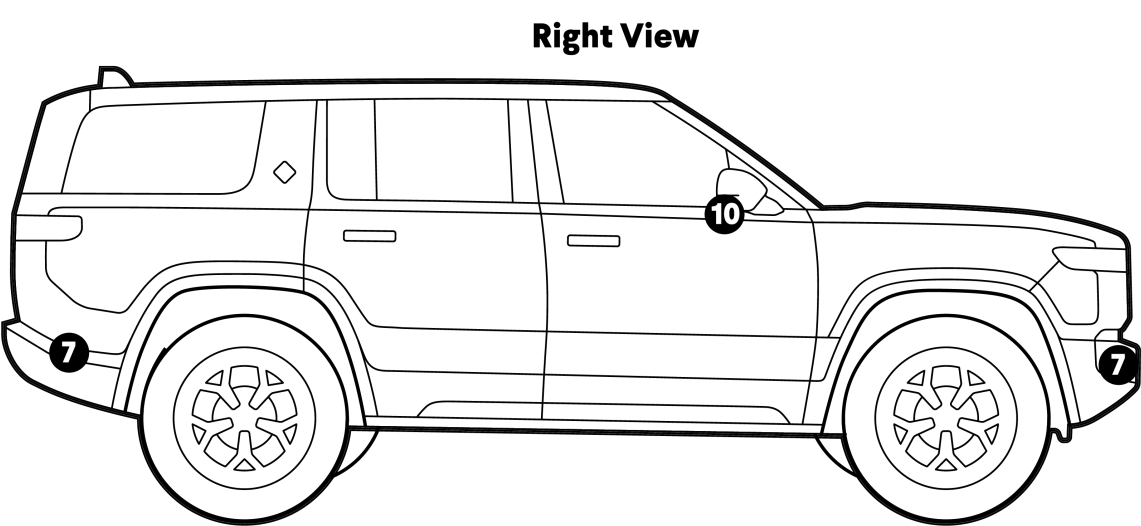
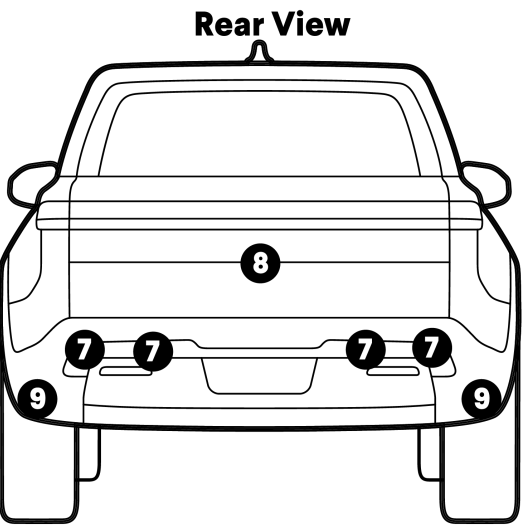
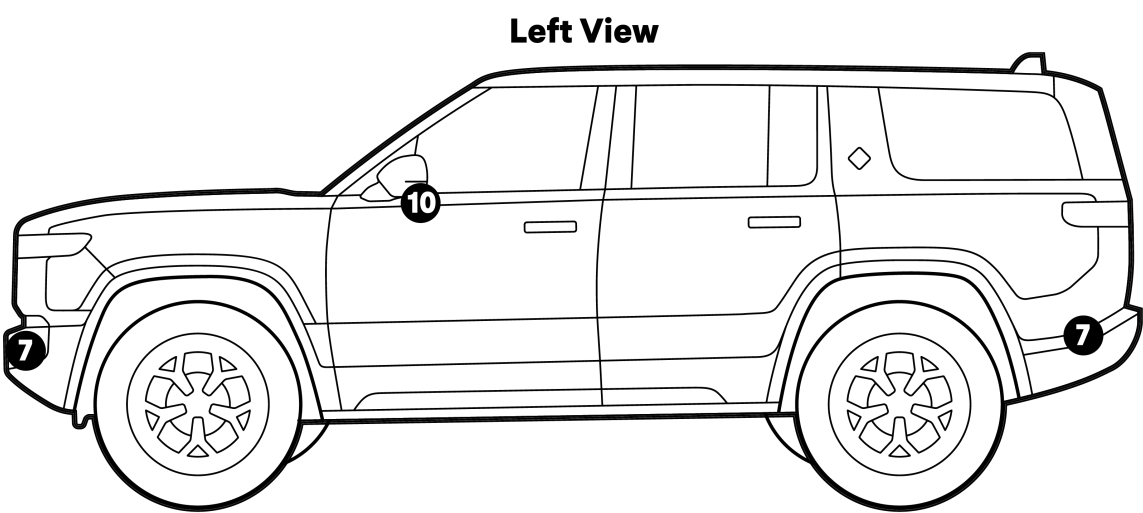
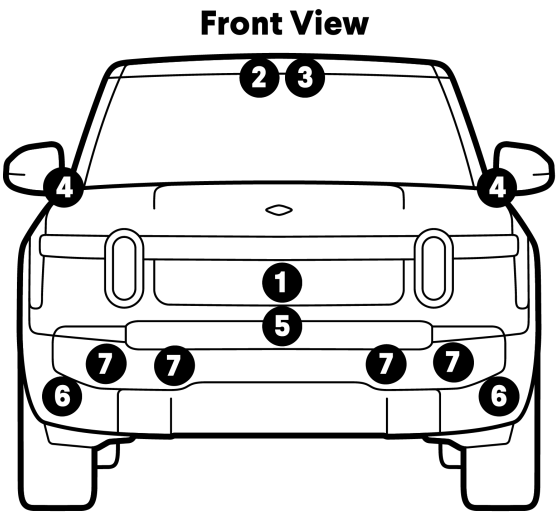
Improper maintenance and calibration of ADAS components may result in catastrophic failure of the system, which can cause severe injury or death.

R1T ADAS Component Locations



Number	Component Type
1	Sensor, Radar, Front, Center
2	Camera, Driver Assistance, Front (Not equipped on vehicles built after December 2025)
3	Camera, Long Range, Front Camera, Wide Angle, 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, Lane Change, Mirror Camera, Surround, Mirror

R1S ADAS Component Locations



Number	Component Type
1	Sensor, Radar, Front, Center
2	Camera, Driver Assistance, Front (Not equipped on vehicles built after September, 2025)
3	Camera, Long Range, Front Camera, Wide Angle, Front
4	Camera, Forward Facing, Mirrors

Number	Component Type
5	Camera, Bumper, Front
6	Sensor, Corner Radar, Front
7	Ultrasonic Sensor(s) (Park Assist)
8	Camera, Liftgate Upper, Rear
9	Sensor, Corner Radar, Rear
10	Camera, Lane Change, Mirror 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, Long Range, Front	Static + Test Drive	Camera or Windshield is replaced or removed and reinstalled
Camera, Wide Angle, Front	Static + Test Drive	Camera or Windshield is replaced or removed and reinstalled
Camera, Forward Facing, Mirror	Static + Test Drive	Mirror assembly is replaced or removed and reinstalled
Camera, Lane Change, Mirror	Static + Test Drive	Camera or mirror assembly is replaced or removed and reinstalled
Camera, Driver Assistance, 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	Calibration Style	Calibrate When:
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:
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	Sensor, Corner Radar, Front/Rear, LH/RH is replaced
Sensor, Radar, Rear, LH/RH		

Note:
Ultrasonic Sensors do not require calibration.

Calibration Guidelines
Vehicle Suspension Alignment

The vehicle suspension alignment must be within specification for successful operation of the ADAS components after calibration(s). Not all Rivian vehicles will require an alignment prior to calibration. If suspension alignment is required, the Rivian approved target placement system will inform the technician during the Driver Assistance Calibration Setup.

Note:
Always test drive the vehicle after suspension alignment to verify no additional ADAS related DTC codes are logged.

Module Calibration

Assistance from Rivian Service is needed for some module coding and/or calibration(s). Refer to RiDE to verify if new procedures are available. If coding or calibration assistance is required, contact Rivian Diagnostic Support at: 3pdiagnosticsupport@rivian.com.

Rivian Approved Target Placement System

To meet Rivian Standards, only use Rivian approved tooling to calibrate ADAS components. Rivian approved calibration tooling can only be purchased by a Rivian Certified Network Location after enrollment is confirmed.

- Important:**
The modification of Rivian approved tools or the resizing of calibration targets is strictly prohibited. Modifications and resizing can result in improper calibrations that may compromise the safe operation of the vehicle.

Test Drives

A test drive should be performed after a suspension alignment or an ADAS component calibration has been performed to make sure no additional ADAS related DTC codes are logged. A test drive of 15 minutes in duration averaging above 20 mph in moderate traffic is recommended. Activation of ADAS features during the drive is not required.

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.

All static calibrations **must** be completed before the **Post Calibration Test Drive**. The test drive is crucial to confirm that each static component is properly calibrated.

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
Sensor, Radar, Front (Calibrate) Sensor, Radar, Rear (Calibrate)	0.5	Required only once when one or more corner radars are replaced and/or the Module, Driver Assistance/Audio/Display is replaced
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, Long Range, Front (Calibrate)	0.6	
Camera, Wide Angle, Front (Calibrate)	0.6	
Camera, Forward Facing, Mirror (Calibrate)	1.0	Time is applicable per camera. 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, Lane Change, Mirror (Calibrate)	0.6	
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

Procedure	Labor Time (hrs)	Notes
Post Calibration Test Drive	0.5	Important: All static calibrations must be completed before the Post Calibration Test Drive. The test drive will validate the accuracy of the static calibration under real-world conditions. The following components are road-verified during this step: - Camera, Long Range, Front - Camera, Wide Angle, Front - Camera, Forward Facing, Mirror - Camera, Lane Change, Mirror

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.

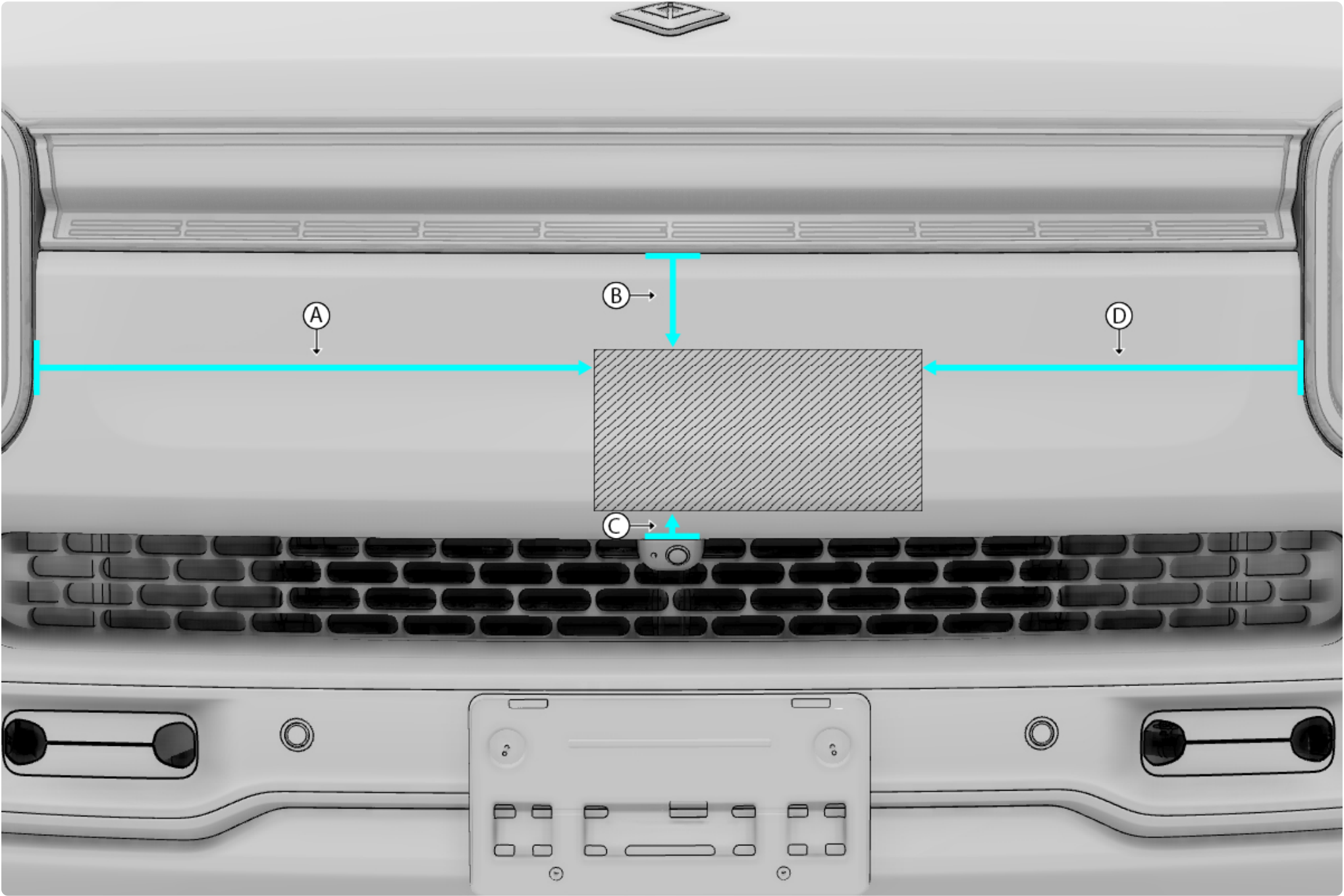
Front Fascia No-Repair Zone

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

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 No Repair Zone, follow the measurements below to create a rectangle; the rectangle represents the No-Repair Zone.

No-Repair Zone:



Callout	Measurement (mm)
A	452
B	82
C	32
D	341

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