

RCI-86-22-001-3: Driver+ Calibration Requirements and Best Practices, R1T and R1S

Rivian Automotive, LLC Position Statement

Document Type	Collision Repair Information Document
Date	February 3, 2023
Affected Region(s)	USA
Affected Model(s)	R1T, R1S
Model Year(s)	2022-Present
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 [Rivian Repair standards](#), repairs should be performed by Rivian Certified Technicians using Rivian approved repair procedures, tools, and Rivian Original Equipment Parts.

Driver+ Overview

Driver+ is Rivian's suite of Advanced Driver-Assistance Systems (ADAS). The system is comprised of cameras, radar sensors, antennas, and ultrasonic sensors that aid with vehicle operation. To meet Rivian Standards, all repairs involving Driver+ components should be performed by a Rivian Certified Technician at either a Rivian Service Center or Rivian Certified Collision Center. After repair, the Driver+ system will need to be calibrated before the vehicle can be returned to the customer. Refer to the appropriate service procedure(s) for detailed and vehicle-specific calibration instructions.

Always refer to the appropriate Rivian Service Manual for information on removal, installation, fault tracing, and calibration.



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



Note: 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 Driver+ components.

Rivian approved Calibration Tools*

- John Bean Tru-Point ADAS calibration system and applicable targets



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

*Rivian strongly recommends that all calibrations be performed by a Rivian Certified Technician using Rivian approved tools.

Calibration best Practices

To help ensure the Driver+ system is repaired to Rivian Standards, the collision industry should adhere to the following:

- Visually inspect the front and rear fascia to make sure it is clean and clear of debris, gashes, or gouges that could cause improper function by obstructing the component's field of view.
- If a Driver+ component is unplugged or removed, the component will need to be re-calibrated when it is re-installed.
-  **Important:** If the forward-facing radar sensor is removed or replaced, or if the front fascia is painted, calibration will need to be performed. Calibration is not necessary if components in front of the radar sensor (such as the fascia) are removed and the sensor is not disturbed.
-  **Note:** Calibration of the forward-facing radar should only be performed after the painted fascia is mounted on the vehicle.
- Cameras require recalibration when the side mirror assemblies, rear fascia, or front fender flares are repositioned, moved, or removed and installed.
- The Driver Monitoring System Camera and the Gear Guard Camera do not require calibration.

Camera Calibration Requirements

Camera Calibration Requirements

Camera	Calibration Style	Calibrate When:
Camera, Long Range, Front	Static	<ul style="list-style-type: none"> • Camera, Long Range, Front is replaced or removed and installed • Windshield is replaced or removed and installed
Camera, Driver Assistance, Front	Static or Dynamic	<ul style="list-style-type: none"> • Camera, Driver Assistance, Front is replaced or removed and installed • Windshield is replaced or removed and installed
Camera, Forward Facing, Mirrors	Static	<ul style="list-style-type: none"> • Camera, Forward Facing, Mirrors is replaced or removed and installed • Side mirror is replaced or removed and installed
Camera, Fender Flares, Front	Static	<ul style="list-style-type: none"> • Fender flare is replaced or removed and installed •  Note: Calibration is not required when the forward portion of the fender flare is partially removed for front fascia removal
Camera, Bumper, Front	Static	<ul style="list-style-type: none"> • Camera, Bumper, Front is replaced or removed and installed • Upper front fascia is replaced or removed and installed
Camera, Bumper, Rear	Static	<ul style="list-style-type: none"> • Camera, Bumper, Rear is replaced or removed and installed • Camera, Bumper, Rear mounting bracket is replaced or removed and installed



Note: Forward Wing and Lane change calibrations only need to be completed for the side that was serviced.



Note: Surround view system calibration to be performed if any surround view camera is removed or replaced.

Radar Calibration Requirements

Radar Calibration Requirements

Camera	Calibration Style	Calibrate When:
Sensor, Radar, Front, Center	Static or Dynamic	<ul style="list-style-type: none"> • Sensor, Radar, Front, Center is replaced or removed and installed • For front upper fascia removal and install, no calibration is necessary if you confirm radar angle is the same before and after the repair is performed
Sensor, Radar, Front	N/A	<ul style="list-style-type: none"> • Calibration runs automatically when radar is powered on and necessary conditions are met. No manual process.
Sensor, Radar, Rear	N/A	<ul style="list-style-type: none"> • Calibration runs automatically when radar is powered on and necessary conditions are met. No manual process.

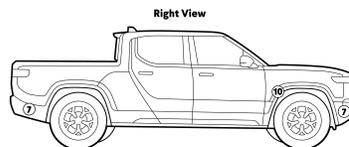
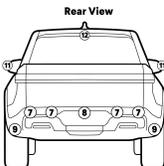
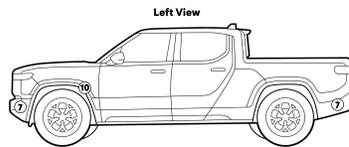
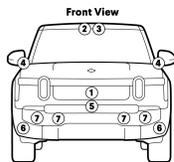


Note: Ultrasonic Sensors do not require calibration.



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

Driver+ Component Locations



Number	Component Type
1	Sensor, Radar, Front, Center
2	Camera, Long Range, Front
3	Camera, Driver Assistance, Front
4	Camera, Forward Facing, Mirrors
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