

SEMA | I-CAR: ADAS Baseline

Camera Near Rearview Mirror
OEM Name: Multipurpose Camera Unit
Calibration/Initialization Requirement Events:
• If windshield is removed/installed or replaced
• If the multipurpose camera unit is removed/installed or replaced
• If structural repairs are made
• If a supplemental restraint system (SRS) has deployed
• After wheel alignment
• If DTC indicates calibration is required

Camera Near Rearview Mirror	Yes	No	Not Identified
DTC Set	X		
Scan Tool Required	X		
Special Tools Required	X		

Systems Affected:
Adaptive Cruise Control | Collision Warning | Collision Striking | Lane Departure Warning | Lane Keep Assist 1 | Lane Keep Assist 2

Adaptive Cruise Control
Adaptive Cruise Control
Cameras/Sensors:
[Camera Near Rearview Mirror](#)
[Sensor\(s\) Behind Front Bumper Cover/Grille](#)

	Yes	No	Not Identified
DTCs Set	X		
System MIL	X		

SEMA | I-CAR
ADAS Baseline

REPAIRABILITY TECHNICAL SUPPORT

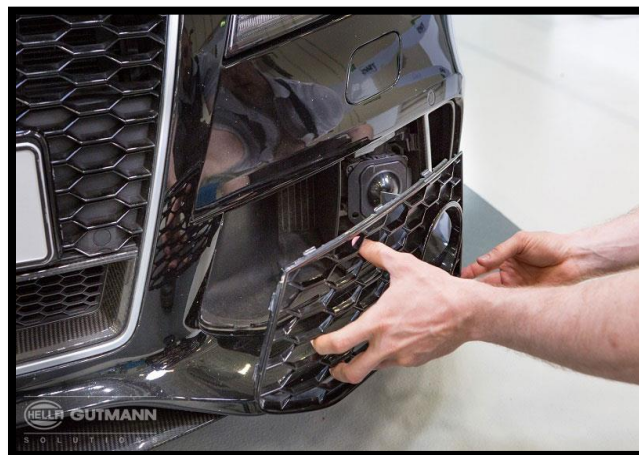
SEMA GARAGE

What is it?

SEMA Garage and I-CAR have collaborated to offer SEMA Tech Transfer Member Companies access to the Repairability Technical Support (RTS) portal. This new resource will allow members to perform vehicle-specific searches and understand the different onboard ADAS options, system locations, calibration requirements, diagnosis, and nomenclature.

Why?

Today, ADAS features are largely adapted and standardized by many OEMs. As these features are integrated into the vehicle, their location and view may be less evident to consumers and aftermarket part manufacturers.



What are the benefits?

Vehicle-specific knowledge of the following –

- On-board ADAS options
- System Locations
- System types (camera or sensor)
- Calibration Requirements
- OEM feature nomenclature
 - Different for all OEMs
- A standardized nomenclature, generated by I-CAR
 - Used for all vehicle results
 - Alleviates confusion due to different OEM nomenclature

Camera Near Rearview Mirror

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Systems Affected:

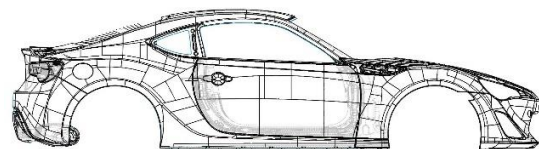
Adaptive Cruise Control Collision Warning Collision Braking Lane Departure Warning Lane Keep Assist 1 Lane Keep Assist 2

Camera Near Rearview Mirror	Yes	No	Not Identified
DTC Set	X		
Scan Tool Required	X		
Special Tools Required	X		

How does it relate to SEMA's Tech Transfer program?

SEMA manufactures who are part of the Tech Transfer program are currently designing direct-fit products, based on OEM CAD data. Granting these members access to the I-CAR RTS database, will make them aware of the different on-board systems, which can be taken into consideration when designing new products. For example, when designing an aftermarket bumper or grille, it would be important to note if that vehicle is equipped with ADAS in that specific region. ADAS can vary from Ultrasonic, Radar, Lidar, and Camera; all which can be affected by object obstruction and material.

Tech
ransfer



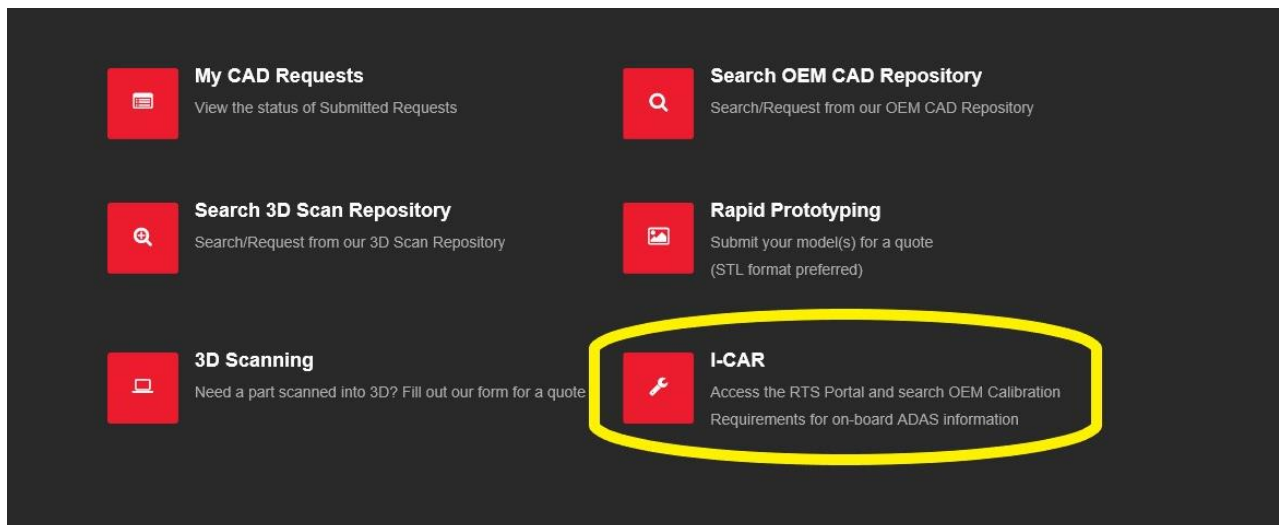
Who is I-CAR and what is the RTS portal?

I-CAR is an international non-profit organization dedicated to providing information, knowledge, and skills required to perform safe, complete and quality repairs. The Repairability Technical Support (RTS) Portal is a hub, containing information on the latest vehicle technology trends, Original Equipment Manufacturer (OEM) information, and Calibration Requirements. Most importantly, RTS provides vehicle specific on-board OEM Advanced Driver Assist Systems (ADAS) information, describing the different systems, general location and diagnosis.



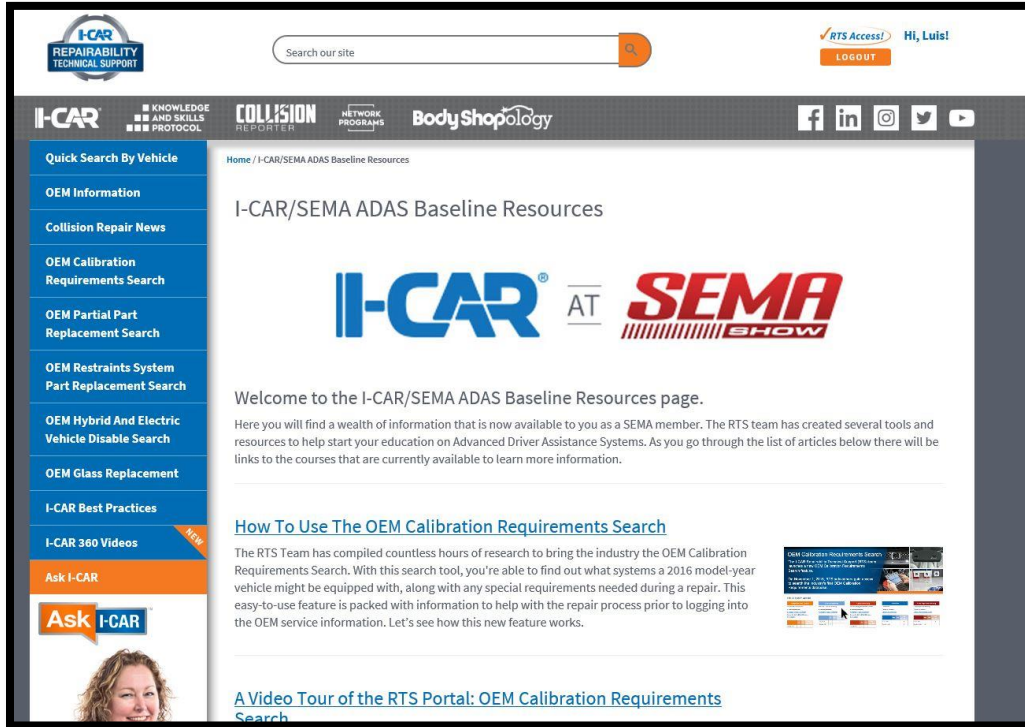
How do I access it?

We have established an SSO that can directly take you from the Tech Transfer homepage into the RTS portal. Once logged into your Tech Transfer account, you will find the I-CAR button in the bottom right.

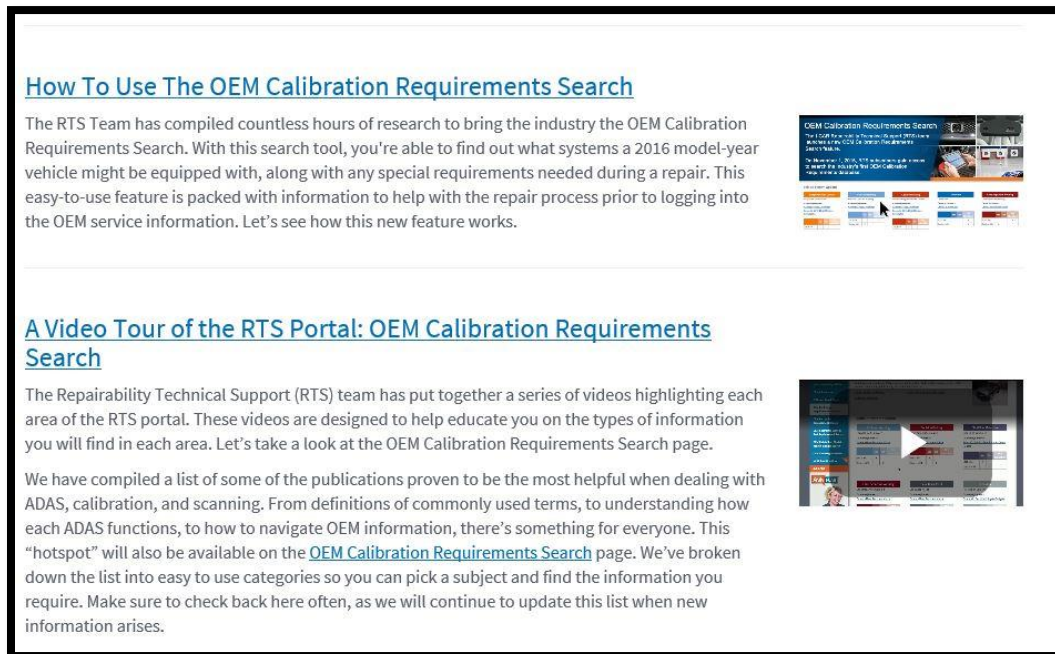


How do I utilize the RTS Portal?

Once redirected, you will find helpful resources in the SEMA | I-CAR ADAS Baseline homepage:

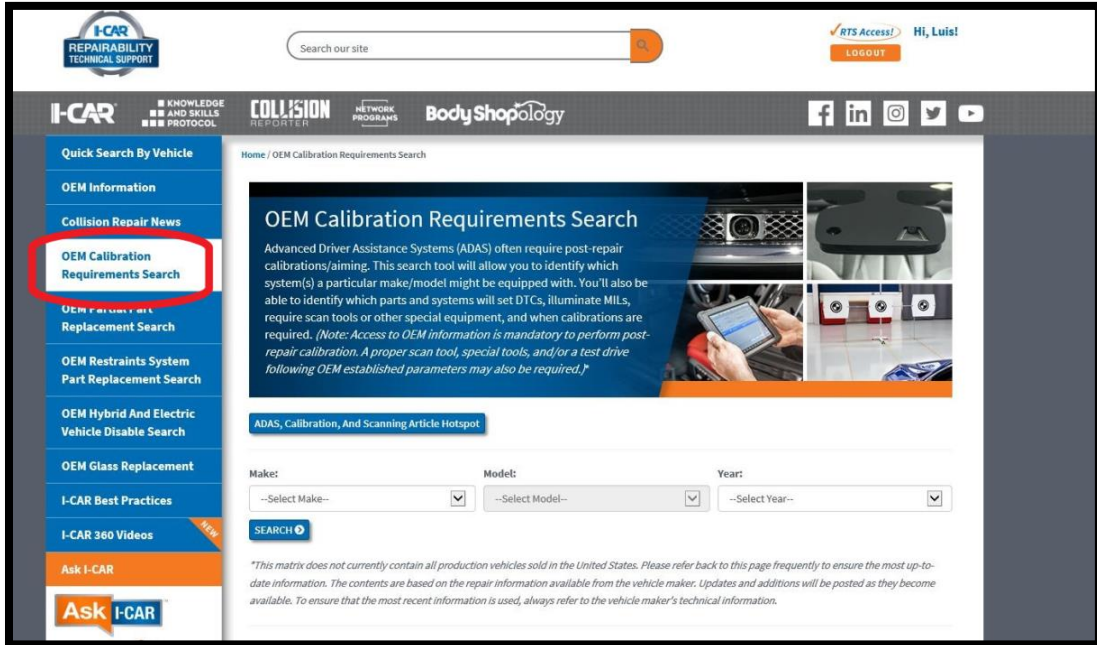


A How-To guide and Video Tour are available in the homepage:



Where is the ADAS information?

The vehicle ADAS information can be found in the 'OEM Calibration Requirements Search' section. Here, you can search by YEAR, MAKE, and MODEL.




OEM Calibration Requirements Search

2019 Honda Accord

[Print](#)

Click the links below for directions; definitions; articles; and additional RTS portal information such as OEM position statements and publications.

[How To Use The OEM Calibration Requirements Search](#) [ADAS, Calibration, And Scanning Article Hotspot](#)
[Vehicle System Definitions](#) [Additional RTS OEM Information](#)



Vehicle System Options

	Yes	No	Not Identified
DTCs Set	X		
System MIL	X		

	Yes	No	Not Identified
DTCs Set	X		
System MIL	X		

	Yes	No	Not Identified
DTCs Set	X		
System MIL	X		

	Yes	No	Not Identified
DTCs Set	X		
System MIL	X		

Adaptive Cruise Control

Adaptive Cruise Control

Cameras/Sensors:

[Camera Near Rearview Mirror](#)

[Sensor\(s\) Behind Front Bumper Cover/Grille](#)

Collision Warning

Forward Collision Warning (Collision Braking)

Cameras/Sensors:

[Camera Near Rearview Mirror](#)

[Sensor\(s\) Behind Front Bumper Cover/Grille](#)

Collision Braking

Collision Mitigation Braking System

Cameras/Sensors:

[Camera Near Rearview Mirror](#)

[Sensor\(s\) Behind Front Bumper Cover/Grille](#)

Blind Spot Detection

Blind Spot Information System

Cameras/Sensors:

Side View

LaneWatch

Cameras/Sensors:

Lane Departure Warning

Lane Departure Warning (Lane Keep Assist 2)

Conclusion

It's important to note that this is an educational tool. On-board ADAS continue to develop and standardize as time progresses. System integration grows complex from a physical to a software point of view. As an industry, we cannot ignore the fact that these systems will be a standard feature in new vehicles. Although there are many unanswered questions at the moment: testing, validation, calibration, etc – the most important step is education. Understanding how these systems function, nomenclature, and vehicle connection, are the first steps that must be taken. We hope that you find this new resource helpful through your product development cycle.

We would like to give special thanks to the I-CAR staff for providing us with access to their RTS portal.

For additional information

Tech Transfer program access, please visit the Tech Transfer section of the SEMA Garage website –

<https://www.semagarage.com/techtransfer/Index>

ADAS information, please visit the Vehicle Technology section of the SEMA Garage website –

<https://www.semagarage.com/services/vehicletechnology>

If you have any additional questions, please contact:

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