ACURA

# Job Aid

**April 2020** Version 4

# Aiming Driving Support Systems

**Supersedes Job Aid *Aiming Driving Support Systems*, dated April 2019, to revise the information highlighted in yellow**

## APPLIES TO

All models with the millimeter wave radar, FCW/LDW camera, multipurpose camera, multi-view camera, and blind spot information radar.

## REVISION SUMMARY

- Under WHEN AIMING IS REQUIRED, information was added.
- TIPS ON MULTI VIEW CAMERA AIMING information was added.
- Under TROUBLESHOOTING TIPS, the Unable to Aim the Front Multi View Camera section was added.

## INTRODUCTION

Many Acura vehicles have advanced safety and driving support systems to help warn drivers and mitigate hazards. It is very important to be familiar with these systems and how to properly aim the camera or radar units. This job aid covers the function of each driving support system, the tools needed to properly aim the camera or radar unit, general requirements for aiming, and troubleshooting tips.

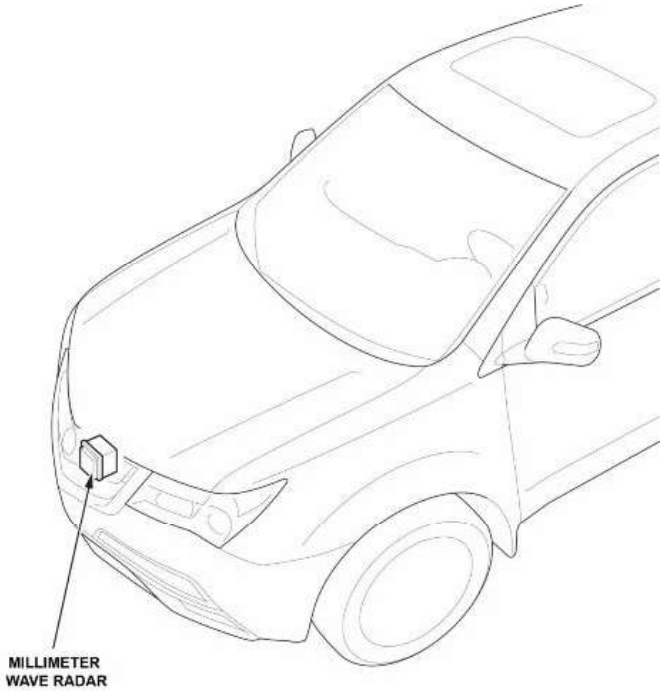
| System | Abbreviation | Description |
|---|---|---|
| Adaptive Cruise Control | ACC | This system helps maintain a constant vehicle speed and a set following interval behind a vehicle detected ahead. For models with the added low speed follow (LSF) feature, if the vehicle ahead slows to a stop, the vehicle with LSF will slow down and come to a stop. |
| Auto High-Beam | AHB | This system can automatically switch the headlights from low beam to high beam using the multipurpose camera, depending on road conditions, oncoming vehicles, and vehicles ahead. |
| Blind Spot Information | BSI | This system can detect vehicles in specified alert zones next to the vehicle, particularly in harder-to-see areas commonly known as blind spots. |
| Collision Mitigation Braking System™ | CMBS™ | This system alerts you when there is a possibility of a frontal collision with a vehicle or pedestrian detected ahead. It also reduces vehicle speed to help minimize collision severity if a collision appears unavoidable. |
| Cross Traffic Monitor | CTM | This system monitors the rear corner areas using the BSI radar units when reversing and alerts you if a vehicle approaching from a rear corner is detected. |
| Forward Collision Warning | FCW | This system alerts you when it determines there is a possibility of a frontal collision with a vehicle detected ahead. |

| System | Abbreviation | Description |
|---|---|---|
| Lane Departure Warning | LDW | This system alerts you when it determines the vehicle maybe unintentionally crossing over detected lane markings. |
| Lane Keeping Assist System | LKAS | This system provides steering input to help keep the vehicle in the middle of a detected lane and provides tactile and visual alerts if the vehicle is detected drifting out of its lane. |
| Multi View Camera System | MVCS | This system displays an image of harder-to-see areas commonly known as blind spots from different angles on the audio or audio-navigation screen using four cameras. |
| Road Departure Mitigation | RDM | This system detects if the vehicle is drifting too close to the side of the road without a turn signal and can provide mild steering input to keep the vehicle on the road or braking to help keep it from leaving the roadway entirely. |
| Traffic Jam Assist | TJA | This system adjusts the speed of the vehicle to maintain a set interval between the vehicle and the one detected ahead. It also applies steering torque to keep the vehicle in the center of the detected lane when driving in heavy traffic. |

## COMPONENT LOCATION

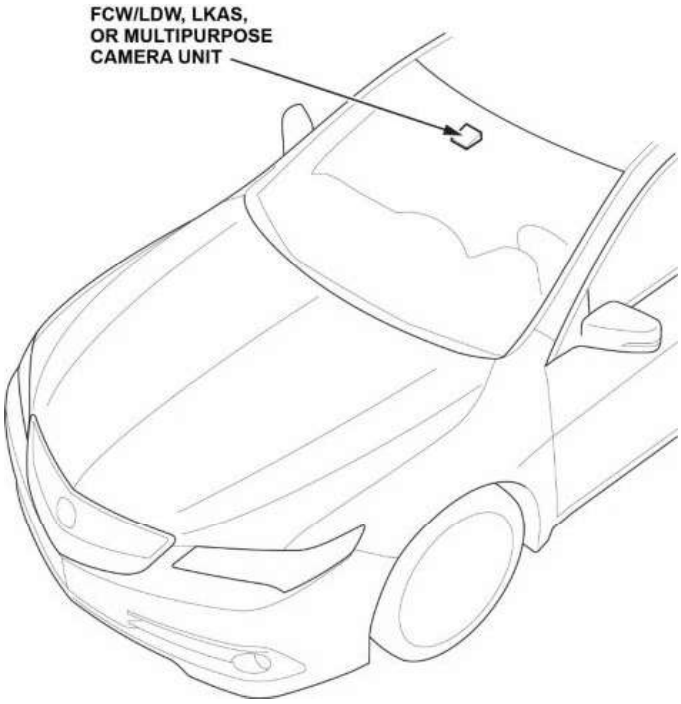
### Millimeter Wave Radar

In general, the millimeter wave radar is mounted directly behind or below the front Acura emblem. On some models such as the MDX and TLX, it is mounted to the side, behind the front grille.



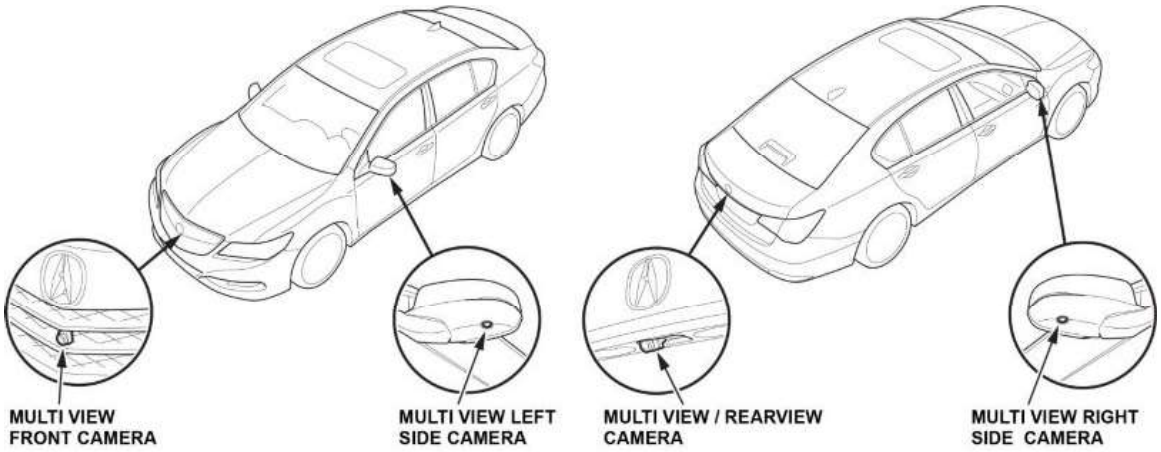
**Multipurpose, FCW/LDW Cameras**

Though different in function and control, the LKAS, multipurpose, or FCW/LDW camera is mounted right above the rearview mirror. Camera types will differ from model and year and may use two cameras (LKAS, FCW/LDW) for older models and one camera (multipurpose) for later models.



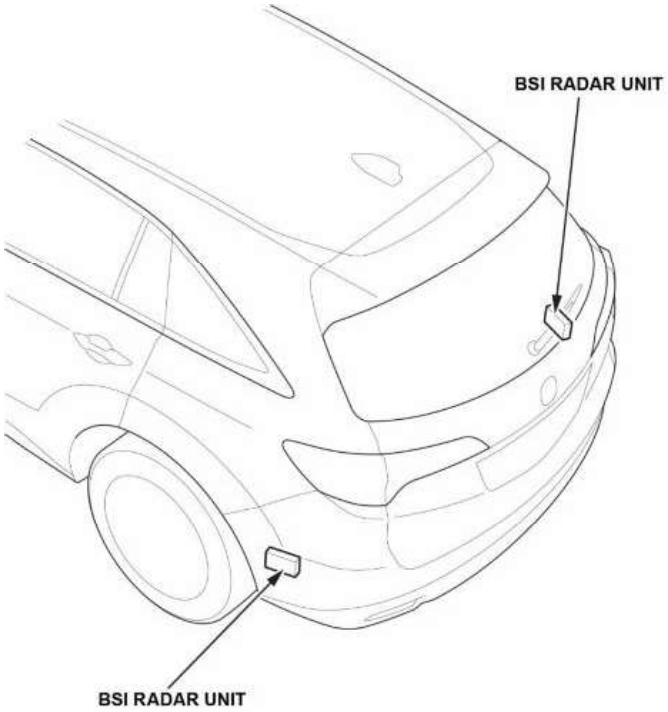

**Multi View Camera System**

The cameras used on this system are mounted on the front grille, left and right mirrors, and uses the rear view camera.



**BSI Radar**

The BSI radar units are installed on the left and right sides of the rear body panel behind the rear bumper. The mounting position of the BSI radar units can vary, depending on the model.



## WHEN AIMING IS REQUIRED

Use the table below to determine when aiming is required.

| System | When to Aim | Notes |
|---|---|---|
| Millimeter Wave Radar | Millimeter wave radar unit was removed and installed. | |
| | Millimeter wave radar unit was replaced. | Always order a new replacement radar unit using the VIN. |
| | After a collision repair that would require at least a front bumper fascia repair within 300 mm of the millimeter wave radar unit. | |
| | After a collision repair that required a structural body repair. | |
| | After a Supplemental Restraint System (SRS) deployment. | |
| | After doing a wheel alignment. | You must do a wheel alignment after a collision or when the alignment was severely out of specification. |
| | If the following DTCs are set:<br>• **P2583-54** (millimeter wave radar aiming incomplete)<br>• **P2583-64** (millimeter wave radar aiming error)<br>• **P2583-97** (dust or dirt on the millimeter wave radar) | • You must follow the DTC troubleshooting procedure first, and only do the aiming procedure when instructed.<br>• Other DTCs indicated must be corrected prior to aiming; otherwise, the aiming may fail. |

| System | When to Aim | Notes |
|---|---|---|
| Blind Spot Information Radar | BSI radar unit was removed and installed. | |
| | BSI radar unit was replaced. | If the BSI radar unit was replaced due to damage, you must do the BSI Radar Unit Mounting Area Check procedure before installing the new BSI radar unit. |
| | After replacing or repairing the body panel(s) where the BSI radar unit is mounted. | You must do the BSI Radar Unit Mounting Area Check procedure after the repair is complete and before installing the BSI unit radar. |
| | After a collision repair requiring a structural body repair at the rear of the vehicle. | You must do the BSI Radar Unit Mounting Area Check procedure after the repair is complete. |
| | If the following DTCs are set:<br>• **B18B8** (left side BSI radar unit azimuth off alignment)<br>• **B1E68** (right side BSI radar unit azimuth off alignment) | You must follow the DTC troubleshooting procedure first and only do the aiming inspection when instructed. |
| | After doing a wheel alignment. | You must do a wheel alignment after a collision or when the alignment is severely out of specification. |

| System | When to Aim | Notes |
|---|---|---|
| Multipurpose Camera or FCW/LDW Camera | Windshield was removed and installed. | |
| | Windshield was replaced. | The replacement windshield must be a Acura genuine replacement windshield. Installing an aftermarket windshield will cause the aiming to fail or abnormal operation of the driving support system. |
| | Multipurpose camera unit or FCW/LDW camera unit was removed and installed. | |
| | Multipurpose camera unit or FCW/LDW camera unit was replaced. | Always order a new replacement camera unit using the VIN. |
| | After a collision repair requiring a structural body repair. | |
| | After a Supplemental Restraint System (SRS) deployment. | |
| | After doing a wheel alignment. | You must do a wheel alignment after a collision or when severely out of specification. |
| | If the following DTCs are set:<br>***Multipurpose Camera Unit***<br>• **B2A60-52** (dynamic camera aiming incomplete)<br>• **B2A60-54** (static camera aiming incomplete)<br>***FCW/LDW Camera Unit***<br>• **B2A60-54** (FCW/LDW camera unit aiming incomplete)<br>• **B2A60-54** (FCW/LDW camera unit aiming incomplete) | • You must follow the DTC troubleshooting procedure first and only do the aiming procedure when instructed.<br>• Other DTCs indicated must be corrected prior to aiming; otherwise, the aiming may fail. |