

Job Aid

December 2021AJA15434-18693 Version 10

Aiming Driving Support Systems

Supersedes version 9, dated June 2021, to revise the information highlighted in yellow.

APPLIES TO

All models with the millimeter wave radar, FCW/LDW camera, multipurpose camera, LaneWatch™ camera, and blind spot information radar.

REVISION SUMMARY

Under TOOL INFORMATION, the model year was updated for Ridgeline.

INTRODUCTION

Many Honda vehicles have advanced safety driving support systems to help warn drivers and mitigate hazards. It is very important to be familiar with these systems and know 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.

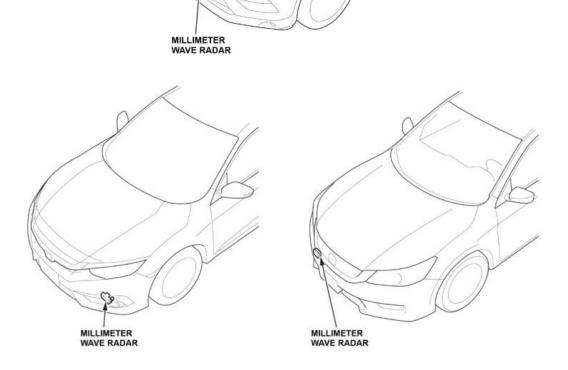
System	Abbreviation	Description
Adaptive Cruise Control	ACC	This system helps maintain a constant vehicle speed and a set following interval behind a vehicle detected ahead. For models with the added low speed follow (LSF) feature, if the vehicle ahead slows to a stop, the vehicle with LSF will slow down and come to a stop.
Auto High-Beam	АНВ	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	СТМ	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.
Lane Departure Warning	LDW	This system alerts you when it determines the vehicle maybe unintentionally crossing over detected lane markings.

System	Abbreviation	Description
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.
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 leaving the roadway entirely.
LaneWatch™	LW	This system lets you check the passenger side rear areas on the audio or audio-navigation screen when the right turn signal is activated.

COMPONENT LOCATION

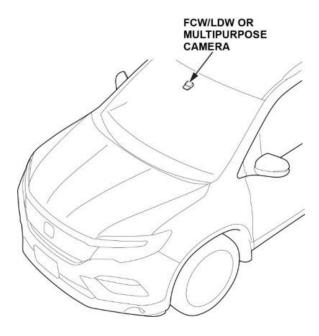
Millimeter Wave Radar

In general, the millimeter wave radar is mounted directly behind or below the front Honda emblem. On some models, it is mounted in the lower center area of the front bumper lower grille or to the side, behind the front bumper side trim. NOTE: The 2022 Civic is not equipped with a millimeter wave radar unit. Driving support system functions are integrated into the multipurpose camera unit.



Multipurpose, FCW/LDW Cameras

Though different in function and control, the multipurpose or FCW/LDW camera is mounted right above the rearview mirror. Camera types will differ by model and year.



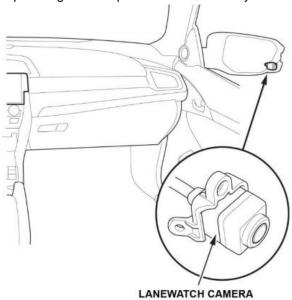
BSI Radar

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



LaneWatch™ Camera

The LaneWatch camera is part of the passenger's side power mirror assembly.



WHEN AIMING IS REQUIRED

Proper wheel alignment, body structural alignment, and camera/radar alignment are critical to the performance of driving support system functions on Honda vehicles.

NOTE:

- Always refer to the model-specific service manual along with the table below to determine when the radar or camera should be aimed. The table below may not list every type of collision repair that would require aiming a radar or camera. The necessity of aiming a radar or camera should be determined by the extent of the damage or repair made to the vehicle.
- If aiming a radar or camera is necessary due to a collision, then a four-wheel alignment check should be performed. If the wheel alignment is not within specifications, it should be corrected prior to aiming any camera or radar.
- Unless instructed by the service manual or available service information, camera and radar systems calibrations are NOT required after a wheel alignment.
- The requirement of a 4-wheel alignment should be a determined by the extent of the damage and repair made to the
 vehicle.

System	When to Aim	Notes
	Millimeter wave radar unit was removed and installed.	
	Millimeter wave radar unit was replaced.	Always order a new replacement radar unit using the VIN.
Millimeter Wave Radar	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 requiring a structural body repair.	Structural damage include any damage beyond minor cosmetic abrasions to the welded, riveted, or bonded parts of the main unibody as well as the bumper reinforcements, door intrusion beams, or bolton front bulkheads.

	After a Supplemental Restraint System (SRS) deployment.	
Millimeter Wave Radar	 If the following DTCs are set: P2583-54 (millimeter wave radar aiming incomplete) P2583-64 (millimeter wave radar aiming error) 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. 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:	
	B18B8 (left side BSI radar unit azimuth off Alignment)	You must follow the DTC troubleshooting procedure first and do the aiming
	B1E68 (right side BSI radar unit azimuth off alignment)	inspection when instructed.

System	When to Aim	Notes
LaneWatch™ Camera	After replacing or removing/installing the following: • LaneWatch™ camera unit • Passenger side power mirror assembly • Front passenger door	
Gamera	After adjusting the front passenger door.	
	After doing any collision repairs to the door assembly.	

System	When to Aim	Notes
	Windshield was removed and installed.	
	Windshield was replaced.	The replacement windshield must be a Honda 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.
Multipurpose Camera or	After a collision repair requiring a structural body repair.	Structural damage include any damage beyond minor cosmetic abrasions to the welded, riveted, or bonded parts of the main unibody as well as the bumper reinforcements, door intrusion beams, or bolt-on front bulkheads.
FCW/LDW Camera	After a Supplemental Restraint System (SRS) deployment.	
	If the following DTCs are set:	
	Multipurpose Camera Unit	
	B2A60-52 (dynamic camera aiming incomplete)	 You must follow the DTC troubleshooting procedure first, and only do the aiming procedure when instructed. Other DTCs indicated must be corrected prior to aiming; otherwise, the aiming
	 B2A60-54 (static camera aiming incomplete) 	
	FCW/LDW Camera Unit	
	B2A60-54 (FCW/LDW camera unit aiming incomplete)	may fail.
	B2A60-54 (FCW/LDW camera unit aiming incomplete)	