

Subject:

# **7TH GENERATION i-ACTIVSENSE FAQ**

Service Alert No.: SA-024/19

Last Issued: 06/12/2019

# APPLICABLE MODEL(S)/VINS

2019 Mazda3

# DESCRIPTION

The 7th generation i-ACTIVSENSE introduced on the 2019 Mazda3 (BP) has been equipped with updates/new functions. The following FAQs will help to understand the changes from the 6th gen i-ACTIVSENSE in order to provide the customer with correct and detailed information.

These FAQs cover the following content:

- System function, purpose and operating conditions.
- Operations that customers might not understand as a vehicle failure.
- Function limitations and vehicle reaction time.

About these systems:

- Driver Attention Alert (DAA)
- Rear Cross Traffic Alert (RCTA)
- Human Machine Interface (HMI)
- 360 Degree View Monitor System
- Sensors General
- Accident avoidance support system General

# RCTA

Question	Answer
Are the warning messages displayed on the multi-information display switched automatically to display a warning on the MAZDA CONNECT screen?	The view does not switch automatically. They are displayed only when the customer turns the view on.
Is it possible that radar interference from another vehicle using 24 Ghz radar could cause a problem with operation?	There is the possibility, however, the frequency of occurrence should be extremely low, and there are no problems with operation.

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How can the customer be made aware that a radar unit is damaged?	If a radar unit has been damaged, the i-ACTIVSENSE warning light turns on, a part of the i-ACTIVSENSE does not operate, and a message indicating the damaged radar unit is displayed.
Is there a recording function for the operation history? Additionally, can verification of the operation history at a dealer be done using a diagnostic tester?	The operation log/history is not stored. A means of storing the conditions at the time of a malfunction is being investigated.

### HMI

Question	Answer
Is there a recording function for the operation history? Additionally, can verification of the operation history at a dealer be done using a diagnostic tester?	The operation log/history is not stored. A means of storing the conditions at the time of a malfunction is being investigated. A message indicating the reason for canceling the operation is displayed in the instrument cluster. The message displays the non- operation status and the cause mutually at intervals of 5 seconds.
Because the operation history recorded in the vehicle cannot be verified at a dealer, what questions should the customer be asked for a diagnosis?	The message that is displayed in the instrument cluster, where it occurred, and when it occurred are important questions to ask the customer.
With the 6th generation, a DTC is stored when the FSC is temporarily stopped. Is this function available on the 7th generation?	The function is not available.
For the systems related to hazard avoidance, are they restored after switching the ignition ON/OFF?	The systems related to hazard avoidance are restored after the ignition is switched ON, even if the ignition was switched OFF, however, the related warning message remains the same as before the ignition was switched OFF.

# DM/DAA

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Question		Answer	
	Driver Attention Alert (DAA) & Driver Monitoring (DM) Operation/Non- operation Conditions		
		DAA	DM
	Operation conditions	Operates when <u>all of</u> the following conditions are met: - Vehicle speed is about 65 to 140 km/h or less - White (yellow) lane lines are detected - Driver's driving data learning is completed - 1 hour has passed since drive was started	Operates when <u>all of</u> the following conditions are met: - 20 minutes since drive was started - Vehicle speed is about 5 km/h or more - After having stopped once, 6 or more minutes have passed since drive was resumed
What are the operation/non- operation conditions for	Non- operation conditions	Does not operate when any of the following conditions is met: - Vehicle speed is less than about 65 km/h - White (yellow) lane lines are not detected - Driving on sharp curve - Changing lanes	Does not operate when any of the following conditions is met: - Less than 20 minutes since drive started - Vehicle speed is less than about 5 km/h - After having stopped once, less than 6 minutes have elapsed since drive was resumed - Vehicle is stopped
the DM/DAA? Other items of note		After the first notification to encourage rest, the next notification will be after 60 minutes have passed	There will be no more notifications encouraging rest after the first notification - After the alert warning notification, the next
	May not operate normally under the following conditions: - White (yellow) lane lines are less visible because of dirt or paint flaking - Vehicle is jolted or swayed continuously by strong winds or rough roads - Vehicle is driven aggressively - Changing lanes frequently - Driving on curve	alert warning notification will be after 45 minutes have passed - After the warning notification, the next warning notification will be after 15 minutes have passed - After the warning notification, the next alert warning notification will be after 45 minutes have passed	
	5 km/h = 3 m 65 km/h = 40	oh mph	
What is the operation start condition that is registered in the DM/DAA operation conditions?	DAA: Aims for system perfor DM: Aims for	a timing when the vehicle speed is ms learning over a traveled distance a timing when the vehicle speed is	s 40 mph (65 km/h) or more. The ce applicable to this condition. about 3 mph (5 km/h) or more.
Does the DM/DAA operate when a mask is worn, and with that, is there a limit to the type of mask and color?	The owner's r under the foll The descriptic matter, it is ba However, eve worn.	nanual indicates the following: The owing conditions: When wearing g on indicates that the system may o ased on the assumption of a gener n at that, the system may not oper	e system may not operate normally classes or sunglasses. perate, however, with regard to this al mask (white, square-shape). rate normally depending on how it is
Can the operation	The operatior divided into w	history remains in the non-volatile varning activation or non-activatior	e memory on the CMU and it can be n based on internal or external

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history of the	operation conditions. However, because the non-volatile memory is encrypted, it is
DM/DAA be	necessary to send the part (CMU) to the supplier."
verified at a	
dealer?	

# 360°VM

Question	Answer	
How far has the 360° degree view monitor camera performance improved from the 6th generation to 7th generation vehicles?	6th generation: Video signal is analog/camera with 300,000 pixel. 7th generation: Video signal is digital/camera with 1,300,000 pixel.	
The camera image is difficult to view or it sometimes flickers. What could be the cause of this?	<ol> <li>The following are possible causes:</li> <li>Flares/ghosts/halation: Highly bright light is picked up by the camera or there is oil on the lens.</li> <li>LED flicker: Flicker from the LED of own vehicle or other vehicles may occur.</li> <li>Noise: Noise which occurs during low light conditions such as at night.</li> <li>Other: Rain or snow on the lens, backlight.</li> </ol>	
If the tires are replaced, is camera aiming required?	If tire replacement is required, such as changing to winter tires, there is the possibility of the camera images deviating, therefore aiming may be necessary. Do an inspection using the inspection procedure and then do the aiming if necessary. NOTE: For tire sizes other than the factory setting, it would not be covered by the warranty.	

# SBS

Question	Answer
Are there any differences in the functions of the SCBS (low speed) on the 6th generation and the SBS?	The AEB (automatic braking) function when driving in the forward direction was standardized on the SBS.

# Accident avoidance support system-general

Question	Answer
What changes have been made to the pre-collision throttle control from the 6th to the 7th generation?	<ul> <li>(1) The operation vehicle speed has changed from less than or equal to 6 mph (10 km/h) to less than or equal to 9 mph (15 km/h).</li> <li>(2) The collision avoidance by automatic braking was added in addition to the torque control.</li> </ul>
For inquiries concerning unintended SBS operation, does the operation history remain in the vehicle?	Yes, it is recorded in the VCM. It can be read out using the diagnostic tool, however, because analysis cannot be done in markets, it needs to be sent to Mazda with an analysis request.
What are the functions available for turning i-activsense on/off?	<ul> <li>The following functions can be switched on/off all at once.</li> <li>However, functions turned off using the personalization features do not turn on.</li> <li>1. Blind Spot Monitoring (BSM)</li> <li>2. Rear Cross Traffic Alert (RCTA)</li> <li>3. Lane Departure Warning System (LDWS)</li> <li>4. Lane-keep Assist System (LAS)</li> <li>5. Distance Speed Alert (DSA)</li> </ul>

### **Sensors - General**

Question	Answer
In what unit are DTCs	They are stored in the VCM. Only the internal malfunction DTC (U3000:04) in
stored?	each sensor is stored.

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