Technical Service Bulletin

Mazda North American Operations
Irvine, CA 92618-2922

Subject:	**Bulletin No.:** 15-001/18
FORWARD SENSING CAMERA (FSC) RELATED CONCERNS (FSC)	**Last Issued:** 01/18/2018

APPLICABLE MODEL(S)/VINS

2017 Mazda3 (Japan built) with VINs lower than JM1BN******145629 (produced before March 22, 2017)
2017 Mazda3 (Mexico built) with VINs lower than 3MZBN******148602 (produced before April 11, 2017)
2017 Mazda6 with VINs lower than JM1GL******135981 (produced before March 22, 2017)
2017 CX-5 with VINs lower than JM3KF******120941 (produced before March 22, 2017)

DESCRIPTION

Some customers may experience the following symptom relating to the Forward Sensing Camera (FSC) with DTC C1001:92 [Forward sensing camera (FSC) poor field of view] stored in memory.

When the visibility out the windshieldis poor (i.e. fog or raining at night), the following warning lights may illuminate.

	Master Warning Light
	High Bean Control Warning Light
	Lane-keep Assist System (LAS) Lane Departure Warning System (LDWS) Warning Light
	Smart Brake Support/Smart City Brake Support (SBS/SCBS) Indicator Light

This is caused by the control logic of the FSC being too sensitive. To correct this issue, the control logic of the FSC has been modified.

Customers having this concern should have their vehicle repaired using the following repair procedure.

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REPAIR PROCEDURE

NOTE: If DTC C1001:92 is not stored in memory, this TSB is not applicable. Diagnose according to the instructions on MGSS.
1. Verify the customer concern.
2. Reboot the IDS to clear memory before reprogramming.
3. Using IDS 107.05 or later software, reprogram the FSC to the latest calibration.

NOTE:

- Always update the IDS tool first, then follow the on-screen instructions to download the calibration file for FSC reprogramming.
- Refer to "Service Caution for reprogramming" on MGSS IDS Page.

NOTE:

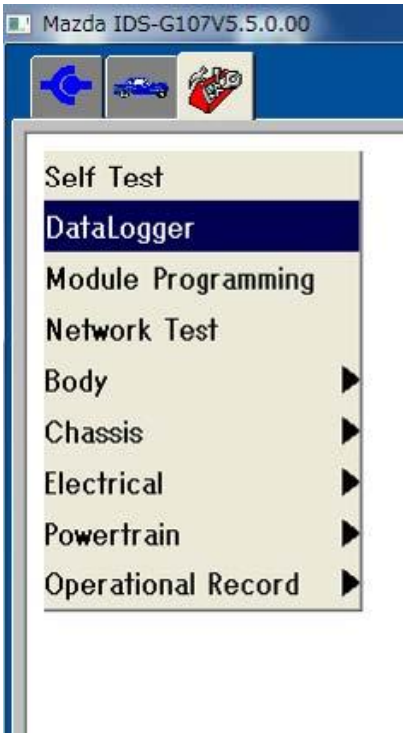
- It is not necessary to remove any fuses or relays during FSC reprogramming when the IDS screen prompts you to do so. You may accidentally stop power to one of the FSC terminals and cause the FSC to be blanked, or you may receive error messages during the IDS reprogramming procedure.
- IDS shows the calibration part numbers after programming the FSC.
- Please be aware that FSC calibration part numbers and file names listed in any Service Bulletin may change due to future releases of IDS software, and additional revisions made to those calibrations for service related concerns.
- When reprogramming a FSC, IDS will always display the "latest" calibration P/N available for that vehicle. If any calibration has been revised/updated to contain new information for a new service concern/issue, it will also contain all previously released calibrations.
- Start/Stop button vehicles only: DO NOT press the start/stop button during the reprogramming process.
- **When performing this procedure, we recommend using the "Power Supply" mode in the Battery Management System to keep the vehicle battery up to capacity. If a different charger is used, make sure it does not exceed 20 AMPS. If it exceeds 20 AMPS, it could damage the VCM.**

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4. If the FSC seems to be hot [140 °F (60 °C) or higher], cool it down by parking the vehicle in the shade with the ignition OFF.

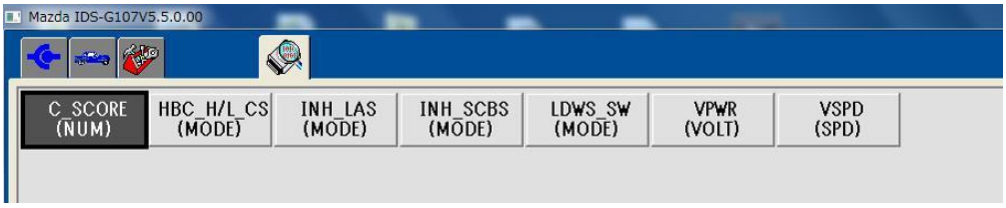
NOTE: If the FSC is hot, the FSC reprogramming process may fail. The FSC temperature can be monitored using the data logger function of the M-MDS. "C_SCORE" has to be 174 or higher to reprogram the FSC.

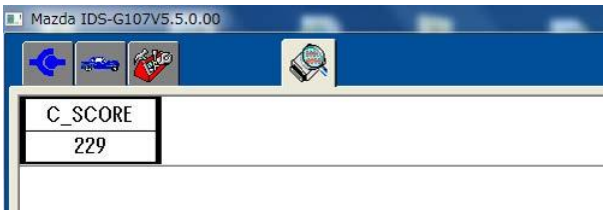


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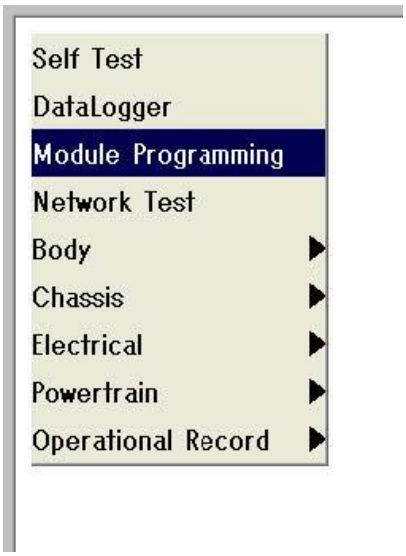




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5. Select “Module Reprogramming”, then select “FSC”.

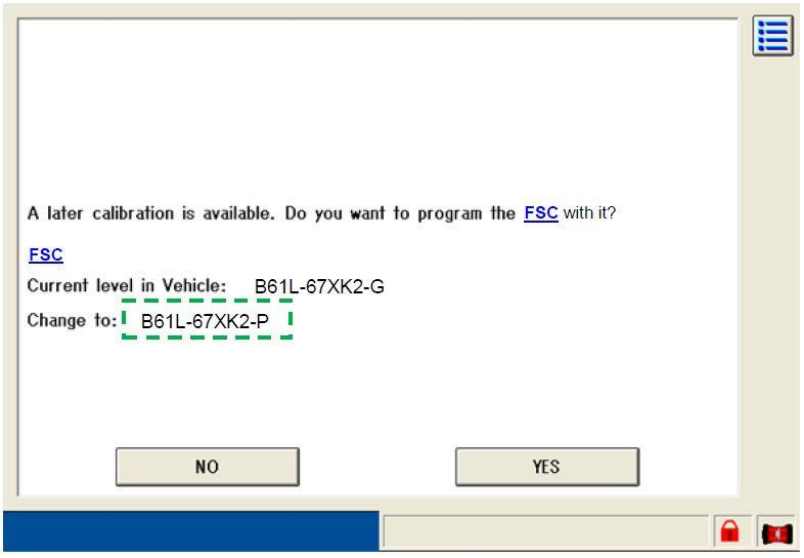




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6. The following screen will be displayed. Click "YES" and follow the M-MDS instructions to reprogram the FSC.



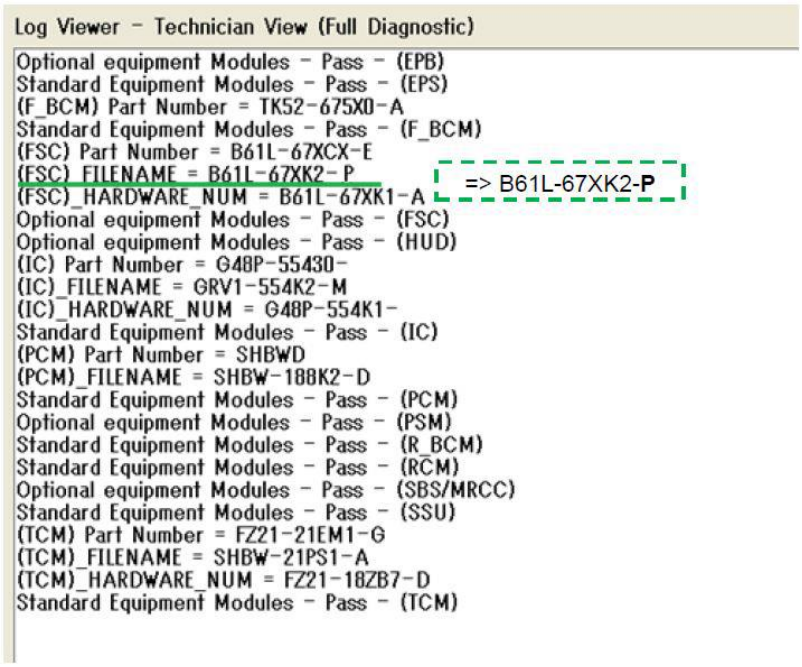
NOTE: If the message "No later calibration is available on the system for this FSC" is displayed, the FSC is already at the latest calibration and this TSB does not apply. "Current level in Vehicle" will show the new file name.

NOTE: The calibration level does not match to the part number level.

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7. After reprogramming, remove the session. Then, open a new session again and go to the “Log Viewer” screen on which the programmed file name is displayed as shown in the figure. If the new file name matches to “B61L-67XK2-P”, the reprogramming has been successfully completed.



NOTE: After the reprogramming, the FSC with file name “B61L-67XK2-P” is equivalent to part number B61L 67 XCXN.

8. After performing the FSC reprogramming procedure, clear DTCs.
9. After clearing DTCs, start the engine and confirm that no warning lights stay on.

NOTE:

- If any DTCs should remain after performing DTC erase, diagnose the DTCs using MGSS online instructions.
- After FSC reprogramming, it is no longer necessary to road test the vehicle to “relearn” KAM (Keep Alive Memory).

10. Print a copy of the "Customer Information" PDF for the customer.
11. Verify repair.

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WARRANTY INFORMATION

Warranty Type	A
Symptom Code	64
Damage Code	9W
Part Number Main Cause	B61L-67-XCXJ
Quantity	0
Operation Number / Labor Hours:	XXN5PXFX/ 0.3 Hrs.

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