ATTENTION: IMPORTANT - AII GENERAL MANAGER ISSurvice Personnel PARTS MANAGER ISSurvice Personnel Should Read and Initial in the boxes provided, right. SERVICE MANAGER ISSURVICE MANAGEN I

SERVICE BULLETIN

APPLICABILITY: 2019MY Forester

SUBJECT: DTCs B112C and / or B112E in Driver Monitoring System (DMS)

INTRODUCTION:

This bulletin announces availability of DMS reprogramming files to address DTCs B112C and / or B112E when they appear in memory. In some cases, when multiple functions are processed by the DMS control module at same time, a task error may occur and cause the system's indicator lamp to illuminate yellow (as opposed to green during normal system operation). A work flow to follow for proper diagnosis is also supplied in the Service Procedure section below.

IMPORTANT NOTE: This bulletin supersedes **TSB 07-151-19R** which outlined the steps to replace the DMS control unit instead of reprogramming it.

PRODUCTION CHANGE INFORMATION:

• This bulletin will be updated with the starting VIN information for this logic change when it becomes available.

PAK File Name	Old DMS C/M Part Numbers	Decryption Keyword	OLD ROM ID Numbers	NEW ROM ID Number
98401SJ010to013-1.pk2	98401SJ010	038BA84E	50 01 00 00 09	
98401SJ010to013-2.pk2	9040133010	A65F57D4	50 01 00 00 09	
98401SJ011to013-1.pk2	98401SJ011	CFBB4ECE	50 01 00 00 0C	50 01 00 00 0E
98401SJ011to013-2.pk2	9040153011	A65F57D4		50 01 00 00 0E
98401SJ012to013-1.pk2	98401SJ012	EA1EDD4A	F0 01 00 00 0D	
98401SJ012to013-2.pk2	904015J012	A65F57D4	50 01 00 00 0D	

PACK FILE APPLICABILITY:

CAUTION: VEHICLE SERVICING PERFORMED BY UNTRAINED PERSONS COULD RESULT IN SERIOUS INJURY TO THOSE PERSONS OR TO OTHERS.

Subaru Service Bulletins are intended for use by professional technicians ONLY. They are written to inform those technicians of conditions that may occur in some vehicles, or to provide information that could assist in the proper servicing of the vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do the job correctly and safely. If a condition is described, DO NOT assume that this Service Bulletin applies to your vehicle, or that your vehicle will have that condition.

Subaru of America, Inc. is ISO 14001 Compliant

ISO 14001 is the international standard for excellence in Environmental Management Systems. Please recycle or dispose of automotive products in a manner that is friendly to our environment and in accordance with all local, state and federal laws and regulations.

QUALITY DRIVEN® SERVICE

NUMBER: 07-192-21 DATE: 03/15/21



IMPORTANT NOTES:

- These update files were included in the January, 2021 Select Monitor update .
- Each of the PAK Files in the table above consists of TWO (2) separate update files in FlashWrite. **BOTH** files listed in FlashWrite must be installed to complete the applicable update.
- A screenshot of the current FlashWrite screen is supplied below for reference.

ption											
Search Condition	Search Result										
	PackNumber	Year	VehicleLine	EmissionSpec	Engine	Aspiration	Tran	CPU			
Vehicle Spec	98401SJ011	2019	Forester	FED CAL	2.5L	non-Turbo	CVT	DMS			
	98401SJ010to013-1	2019	Forester	FED CAL	2.5L	non-Turbo	CVT	DMS			
ROMID	98401SJ010to013-2	2019	Forester	FED CAL	2.5L	non-Turbo	CVT	DMS			
	98401SJ011to013-1	2019	Forester	FED CAL	2.5L	non-Turbo	CVT	DMS			
CID #	98401SJ011to013-2	2019	Forester	FED CAL	2.5L	non-Turbo	CVT	DMS			
	98401SJ012to013-1	2019	Forester	FED CAL	2.5L	non-Turbo	CVT	DMS			
	98401SJ012to013-2	2019	Forester	FED CAL	2.5L	non-Turbo	CVT	DMS			
/ehicleSpec											
DMS	~										
2019	~										
Forester	~ <							>			
<engine></engine>			Print		[Transfer	Contin				
<aspiration></aspiration>	Detail Update : DTC B112C.	DTC B11	2E and 1st PAK	file for DTC B118B	B11E5 B11E6 s	et (Release:January 202	21)	~			
Applications											
Search	Part_Number : 98401	SJ010									
	Necessary connector	: None									
Clear Selection Decryption Keyword : 0388A84E SUM Value :											
	NEW CID :					Note : With Driver Monitoring System. ROM ID: 50 01 00 00 09					
		onitorin	g System. ROM	ID: 50 01 00 00 09							

SERVICE PROCEDURE / INFORMATION:

REMINDER: Customer satisfaction and retention starts with performing quality repairs.

- Step 1) Using the SSM4, check for any CURRENT DTCs.
- Step 2) Diagnose any CURRENT DTCs (including B112C or B112E) using the procedure in the applicable Service Manual.
- Step 3) Turn the ignition OFF then back ON again.
- Step 4) Check for any STORED DTCs in memory.

CHECK: Is either DTC B112C or B112E stored in memory?

YES: Proceed to Step 5 below.

NO: If any DTC(s) other than B112C or B112E are stored, no further DMS repairs are necessary.

Step 5) Check the ROM ID numbers of the DMS C/M using the screen shots below as a guide:

Go to: Diagnosis > Each System > select Driver Monitor from the System List.

Start Diagnosis	System List								
	Engine	Transmission			^				
Vehicle Forester	Brake Control	Tire Pressure Monitor							
	Body Control	Occupant Detection							
Target Each System	Airbag	Air Conditioner							
	Power Steering	Keyless Access with Push Button Start							
Select System	EyeSight	Combination Meter							
	Multi-function Display	Drive Motor							
	Hybrid Powertrain Control	High Voltage Battery							
	Power Rear Gate	Headlight / Foglight							
	Immobilizer	Pedestrian Alert							
	Blind Spot Detection/Rear Cross Traffic Alert(RH)	Blind Spot Detection/Rear Cross Traffic Alert(LH)							
	Infotainment	Power Seat Memory							
	Telematics	Power Window (Driver)							
	Power Window (Passenger)	Power Window (Rear Right)							
	Power Window (Rear Left)	Power Window (Switch)							
	Reverse Assist Braking	Keyless Entry							
	Driver Monitor								

To check the ROM ID, select Software information to display the ROM ID.

SUBARU Select Monit	er 4 - Work Support - Driver Monitor	- 0	×
Start Diagnosis	Work Support item		
	ECU Parts Number		
Vehicle Forester	Software information		
	Read Control module setting information		
Target Each System	Write ECU setting save		
	ECU ROM ID 500100000C		
System Driver Monitor			
Select Function			
Г отс			
Cancel Code			
Data Monitor			
Active Test			
Work Support			
Customize	· · · · · · · · · · · · · · · · · · ·		
	ОК		
2 13.48V			
EI0 INFO	v		
🕷 💾 🦚		-	Select
📕 🔎 👄 Suber	u Desktop 📲 SUBARU Select Monit 🦉 📴 🐂 🐄 🔬 🗘	a) 🧔 📼 1	10:45 AM

CHECK: Is the ROM ID 50 0* 00 00 09, 50 0* 00 00 0C or 50 0* 00 00 0D?

YES: Proceed with reprogramming the DMS using the normal FlashWrite procedure. Use the Pack File table above to select the proper reprogramming files from the FlashWrite result after entering the Vehicle Spec. parameters.

NO: Diagnose the DMS following the procedure in the applicable Service Manual.

Step 6: Reprogram the DMS (if determined necessary).

Subaru of America, Inc. (SOA) highly recommends connecting either the Subaru Midtronics DCA-8000 Dynamic Diagnostic Charging System or the Subaru Midtronics GR8-1100 Diagnostic Battery Charger to the vehicle and utilizing the Power Supply Mode feature anytime a vehicle control module is being reprogrammed. Once the Midtronics charger is connected to the vehicle, **if the battery is fully charged**, it takes less than three (3) minutes to boot-up the charger, select the Power Supply Mode, and have the battery voltage stabilized and ready for reprogramming.

NOTES:

- For instructions on using the power supply mode, reference the applicable User Manual for the Midtronics DCA-8000 Dynamic Diagnostic Charging System and the Midtronics GR8-1100 Diagnostic Battery Charger on STIS.
- Confirm all electrical loads such as lights, audio, HVAC, seat heaters, and rear defroster are all switched **OFF** before setting up the charger for Power Supply Mode.
- Select the correct battery type (Flooded, EFB, Gel, AGM or AGM Spiral).
- Input the CCA which matches the vehicle's battery. **NOTE:** OE and replacement batteries have different CCA ratings. Always confirm the battery's CCA rating before proceeding.
- If using a DCA-8000 Dynamic Diagnostic Charging System, set the power supply voltage to 13.5 volts.
- **DO NOT** connect the DST-i or SDI until the Power Supply mode function has completed its battery test mode and the Charging Voltage has dropped to and shows a steady 13.5 Volts on the display.
- Once Power Supply Mode reaches a steady 13.5 volts, connect the DST-i or SDI to the OBD connector and proceed with initiating the normal FlashWrite reprogramming process.
- Amperage will fluctuate based upon the vehicle's demand for power. **NOTE:** If the voltage rises beyond 14V while programming is in process, the procedure will abort. This can indicate a need to test or charge the vehicle battery before any further attempt at programming is made.

VERY IMPORTANT:

This information is applicable to the Subaru Midtronics DCA-8000 Dynamic Diagnostic Charging System and the Subaru Midtronics GR8-1100 Diagnostic Battery Charger **ONLY**. It does not apply to any other brand / type of "generic" battery charger whatsoever. **ONLY** the DCA-8000 and the GR8-1100 and their Power Supply Mode feature have been tested and approved by SOA.

REMINDER: If the DCA-8000 or GR8-1100 indicates the vehicle's battery must be charged, charge the battery fully before proceeding to reprogram the vehicle while using the Power Supply Mode.

NOTES:

• Control module failures resulting from battery discharge during reprogramming are not a matter for warranty. Should any DTCs reset after the reprogramming update is performed, diagnose per the procedure outlined in the applicable Service Manual.

IMPORTANT: Before installation of the first reprogramming file can be accomplished, the DMS / CAN system must be "put to sleep" using the following procedure:

- a) Switch the ignition OFF.
- **b)** Close all windows, doors and rear gate.
- c) Wait approximately 2 minutes.
- **d)** When the red LED in the small DMS window located above the CP-1 multi-function touch screen display goes out, the DMS is "asleep".

IMPORTANT: For push-button start vehicles, the keyless access remote must be **at least** 7 feet away for the system to go to sleep.

IMPORTANT: This DMS update requires installation of 2 reprogramming files as shown in the FlashWrite screenshot above. Each file will take about 15 minutes to install. **BOTH update files <u>MUST</u> be installed.** If this update has been performed previously, a "Latest version already installed" message will be displayed. Due to the system structure, the FlashWrite reprogramming procedure must be performed twice (once for each file) to complete the update successfully.

- **Step 7)** After the **FIRST** file installation is successfully completed, switch the Ignition back ON and repeat the FlashWrite procedure to install the **SECOND** file. The DMS / CAN system does NOT have to be put to sleep again.
- Step 8) After successful installation of BOTH update files, switch the ignition back ON and using the SSM4, check again for any stored DTCs.

CHECK: Does either DTC B112C or B112E remain stored in memory?

YES: Diagnose the stored DTC(s) per the applicable Service Manual.

NO: Proceed to Step 9 below.

Step 9) Repeat Step 5 above to confirm the new ROM ID number is 50 01 00 00 0E and complete the procedure.

WARRANTY / CLAIM INFORMATION:

For vehicles within the Basic New Car Limited Warranty period or covered by an active Subaru Added Security Gold plan, this repair may be submitted using the following claim information:

Labor Description	Labor	Labor	Fail
	Operation #	Time	Code
DRIVER MONITORING SYSTEM CONTROL MODULE REPROGRAMMING	A067-458	0.4	ZTC-48

IMPORTANT REMINDERS:

- SOA strongly discourages the printing and/or local storage of service information as previously released information and electronic publications may be updated at any time.
- Always check for any open recalls or campaigns anytime a vehicle is in for servicing.
- Always refer to STIS for the latest service information before performing any repairs.