

ATTENTION:

GENERAL MANAGER ☐
 PARTS MANAGER ☐
 CLAIMS PERSONNEL ☐
 SERVICE MANAGER ☐

IMPORTANT - All
 Service Personnel
 Should Read and
 Initial in the boxes
 provided, right.

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QUALITY DRIVEN® SERVICE

SERVICE BULLETIN

APPLICABILITY: 2019-23MY Ascent

NUMBER: 16-141-23R

SUBJECT: DTC P0711 / TCM Reprogramming
 File Availability

DATE: 05/16/23

REVISED: 07/11/23

INTRODUCTION:

This bulletin announces availability of reprogramming files to optimize the Transmission Control Module (TCM). The new files were designed to address cases of DTC P0711 (Transmission Fluid Temperature Sensor “A” Circuit Range/Performance) being detected by the TCM during low ambient temperatures (32° F(0° C)). The new files contain enhanced software providing precise detection of P0711. If DTC P0711 is found within the TCM and the vehicle has been exposed to low ambient temperatures, perform the reprogramming procedures outlined below.

PRODUCTION CHANGE INFORMATION:

The production information regarding these new files is currently TBD.

PAK FILE APPLICABILITY:

Model	MY	File Description	Old Part #	Keyword	New CID #
Ascent	19	30919AF98G.pak	30919AF98D 30919AF98E 30919AF98F	6CB17BE5	R83EE000
		30919AF99G..pak	30919AF99D 30919AF99E 30919AF99F	1648933C	R83EF000
	20-21	30919AH13H.pk2	30919AH13E 30919AH13F 30919AH13G	B3DFD2E3	Q93EE100
		30919AH14H.pk2	30919AH14E 30919AH14F 30919AH14G	B5D0FB3D	Q93EF100
	22	30919AJ53C.pk2	30919AJ53A 30919AJ53B	C7FDE264	N2FEE700
		30919AJ54C.pk2	30919AJ54A 30919AJ54B	E64CC4D4	N2FEF700

These files have been included the January 2023 SSM software update.

**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.

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PFC FILE APPLICABILITY:

Model	MY	File Description	Old Part #	New CID #
Ascent	23	30919AJ79B.pfc	30919AJ79A	M3FEE60000L
		30919AJ80B.pfc	30919AH80A	M3FEF60000L

Detailed information regarding the SSM5-R reprogramming procedures can be found in TSB 14-28-21.

SERVICE PROCEDURE / INFORMATION:

- **PAK Files** - Reprogram the TCM following the normal FlashWrite procedure. If P0711 cannot be cleared or is still current after reprogramming, review the additional diagnostic information found in **APPENDIX A**.
- **PFC Files** - Reprogram the TCM following the normal SSM5-R procedure. Detailed information regarding the SSM-R reprogramming procedures can be found in TSB 14-28-21. If P0711 cannot be cleared or is still current after reprogramming, review the additional diagnostic information found in **APPENDIX A**.

Subaru of America, Inc. (SOA) highly recommends utilizing either the Subaru Midtronics DCA8000 Dynamic Diagnostic Charging System or the Subaru Midtronics GR8-1100 Diagnostic Battery Charger to the vehicle in 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 will take 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 (Enhanced Flooded, Flooded, 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 DST-010 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 DST-010 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 14 Volts 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.

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- ALWAYS set the power supply voltage to 13.5 Volts when using Power Supply Mode. NEVER turn the ignition switch on when charging at voltages 15 Volts or higher.

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 it fully using the DCA-8000 or GR8-1100 before proceeding to reprogram the vehicle using the Power Supply Mode.

NOTE: 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.

WARRANTY / CLAIM INFORMATION:

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

Labor Description	Labor Operation #	Fail Code	Labor Time
TCM Reprogramming	A860-732	MJZ-48	0.4

IMPORTANT: The **NEW** Calibration Identification number (CID) for any newly-installed programming (as confirmed from the actual control module **AFTER** installation) **MUST** be noted on the repair order as this information is required for claim submission.

NOTE: The PAK file and PFC file listings provided in this bulletin are the latest available at the time of publishing. Updates are often released thereafter without revision to the original bulletin. For this reason, it is critical to always have the latest version of Select Monitor software installed on your system. You can confirm if a later version is available by entering the CID listed in this bulletin into FlashWrite. If a newer CID is shown as available in FlashWrite, reprogram using that file.

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.

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APPENDIX A

The new files referenced to in this bulletin were developed after the Service Manual, therefore the diagnostic criteria of the CVTF Temperature Sensor has been changed. The additional information is outlined below.

Refer to STIS: DIAGNOSTICS > TRANSMISSION (DIAGNOSTICS) > Diagnostic Procedure with Diagnostic Trouble Code > P0711

The following information is to be used in conjunction with the Service Manual when diagnosing P0711. The changes have been outlined in **RED**.

3. DIAGNOSTIC METHOD

If the duration of time while the following conditions are met is longer than the time indicated, judge as NG.

Judgment value

Malfunction Criteria	Threshold Value
Diagnosis 1 Absolute change of measured Transmission fluid temperature sensor input voltage Transmission fluid temperature	Less than 0.049 V Less than 20 degC
Diagnosis 2 Transmission fluid temperature at engine start – Engine coolant temperature at engine start	Exceeds 18 degC

Time needed for diagnosis:

- **Diagnosis 1:** 600 s
- **Diagnosis 2:** Immediately

Malfunction indicator light illumination: Illuminates when malfunction occurs in 2 continuous driving cycles.

Threshold Value in Diagnosis 1 (Less than 20 degC) is to be replaced with the below table.

Table

Ambient Temperature °C	-40	-30	-20	-10	0	10	50
Transmission Fluid Temperature °C	-7	0	6	13	19	20	20

NOTE: The following DTCs may be additionally detected with P0711.

U0155: Lost Communication with Instrument Panel Cluster (IPC) Control Module.

U0423: Invalid Data Received from Instrument Panel Cluster Control Module.

Refer to STIS: DIAGNOSTICS > TRANSMISSION (DIAGNOSTICS) > Diagnostic Procedure with Diagnostic Trouble Code > U0115 and/or U0423

The following information is to be used in conjunction with the Service Manual when diagnosing U0115 & U0423. The changes have been outlined in **RED**.

3. DIAGNOSTIC METHOD

If the duration of time while the following conditions are met is longer than the time indicated, judge as NG.

Judgment value

Malfunction Criteria	Threshold Value
CAN data from combination meter	Lost

Time needed for diagnosis: 4 s

Malfunction indicator light illumination: **Does not illuminate.**

Malfunction indicator light illumination (Does not illuminate) is to be changed with "Illuminates as soon as a malfunction occurs".