ATTENTION: GENERAL MANAGER PARTS MANAGER CLAIMS PERSONNEL SERVICE MANAGER			merica, Inc. All rights re	rserved.	QUALITY DRIVEN	
APPLICABILI	TY:	2015-2016MY Crosstrek Hybrid (HEV) Models			<mark>16-110-18R</mark> 01/30/18	
SUBJECT:		Reprogramming for "Shock" Felt During		REVISED	03/03/21	

INTRODUCTION:

This bulletin announces reprogramming file availability to optimize the Transmission Control Module (TCM). These files will address isolated customer concerns of a "shock" or "bump" feeling felt during low speed braking during engine warm-up after a cold soak.

PACK FILE APPLICABILITY:

NOTE: These new reprogramming files are being supplied in the January 2018 SSM update.

Model / Applicability	PAK File Name	New TCM Part Number	Old TCM Part Numbers	Decryption Keyword	New CID Number
2015 MY CROSSTREK HEV	30919AE122.pak	30919AE122	30919AE120, 121	5A6D112E	C4FA4082
2016 MY CROSSTREK HEV	30919AE642.pak	30919AE642	30919AE640, 641	4613654C	B5FA4081

SERVICE PROCEDURE / INFORMATION:

Low-Speed Braking

Step 1: Reprogram the TCM using the SSM4 following the normal FlashWrite procedure.

CRITICAL: When reprogramming is complete, turn the ignition ON and <u>WAIT</u> AT LEAST 15 SECONDS before moving the selector out of Park to activate the newly-installed TCM update.

NOTES:

SOA now highly recommends connecting the Midtronics GR8 Diagnostic Battery Charger to the vehicle and utilizing the Power Supply Mode feature anytime a vehicle control module is being reprogrammed. Once the GR8 is connected to the vehicle and as long as the battery is fully charged, it takes less than 3 minutes to boot-up the charger, select the Power Supply Mode, and have the battery voltage stabilized and ready for reprogramming.

Continued...

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.

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VERY IMPORTANT: This information is applicable to the Midtronics GR8 Diagnostic Battery Charger **ONLY**. It does not apply to any other brand / type of "generic" battery charger whatsoever. **ONLY** the GR8 and its Power Supply Mode feature has been tested and approved by Subaru of America, Inc. (SOA).

- If the GR8 indicates the vehicle's battery must be charged, charge the battery using the GR8 before proceeding to reprogram the vehicle while using the Power Supply Mode.
- Control module failures as a result of 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.

Step 2: Using the SSM4, clear the AT Learning Data using the following procedure:

- Start > Diagnosis > Vehicle Selection > Each System > Transmission > Work Support > Clear AT Learning Data.
- Click "YES" and when "Execute Clear AT Learning" is displayed, click "YES" again.
- Turn the ignition OFF, wait at LEAST 30 seconds then turn the ignition back ON. At this point, the AT Temp light will start blinking; 4 times in 2 seconds to signify the Clear AT Learning procedure has completed successfully. If the AT Temp light does not flash as described, repeat Step 2 again from the beginning.

Step 3: Using the SSM4, perform the AT Learning Control following the procedure outlined Service Manual excerpt supplied below:

1. PREPARATION FOR LEARNING:

- *1.* Warm up or cool down until the ATF temperature displayed on the Subaru Select Monitor is 40-65°C (104-149°F).
- 2. After stopping the vehicle, shift the select lever to "P" range.
- **3.** Fully apply the parking brake.
- *4.* Lift up the vehicle.

CAUTION:

While working, be sure to keep the lower edge of the tires 30 cm or more above the ground as vehicle will vibrate.

- 5. Connect the Subaru Select Monitor to data link connector.
- 6. Turn the ignition switch to ON.
- 7. Turn off all switches causing an electrical load, e.g. headlights, A/C, seat heater and rear defogger, etc.

2. SIMPLE LEARNING:

NOTE: Simple learning is performed with the vehicle lifted, without actually running the vehicle.

CAUTION: Do not turn the power of the Subaru Select Monitor OFF during work, and do not disconnect the data link connector.

1. Select {Work Support} in the «Transmission Diagnosis» display screen of the Subaru Select Monitor.

- **2.** Select {Compulsory learning mode} in the «Work Support» display screen of the Subaru Select Monitor.
- 3. Follow the messages displayed on the Subaru Select Monitor screen when working.

NOTE: During AT learning in progress, AT OIL TEMP light in the combination meter starts flashing at 2 Hz and the learning operation starts. The following message is displayed on the screen when the AT OIL TEMP light which was flashing at 2 Hz turns off.

4. When «AT learning normally ended.» is displayed, simple AT learning is completed.

NOTE:

- If communication error occurs during learning, retry the "AT learning mode" from the beginning.
- If the message «Execute AT learning again after fixing troubles of the vehicle» appears during learning, select [OK] and display the DTC list. After repairing the locations indicated by the DTC, start the "AT learning mode" over from the beginning.
- When communication error occurs during learning, select lever does not shift occasionally. If select lever does not shift, turn the ignition switch to OFF before operating the select lever.
- If the message «AT learning ended abnormally.» is displayed, start the "AT learning mode" over from the beginning. List of Main Causes for Abnormal Termination:
 - ► Fault is detected during AT learning.
 - > The accelerator pedal is depressed during AT learning.
 - > An unspecified operation was performed during AT learning
 - > ATF temperature becomes out of specification during AT learning.
 - ► Battery voltage is low.
 - > Malfunction indicator light illuminates.
 - ► Hybrid fail lamp illuminates.
 - > Parking brake not applied strongly enough.
 - > Brake pedal is not fully depressed.
 - ► Abnormal idle speed increase, etc.
- For detailed operation procedures, refer to "PC application help for Subaru Select Monitor".

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, Clear AT Learning and perform Learning Control	A860-732	MJZ-48	0.7

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 pack 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.