## TSB 11-145-14R

## **Reprogramming File Availability for Oil Level Detection**

2013-2014 Legacy and Outback 2.5L Models

Availability of reprogramming files and a revised oil level switch to optimize the ECM logic for engine oil level detection in the event of false or premature low engine oil level warning lamp illumination.

Should a customer present a concern with a low engine oil warning lamp illumination and the diagnosis indicate the oil level is full or nearly full (oil level between the full and add marks/holes on the dipstick) and the customer has not added any engine oil, the ECM must be updated with this new logic and the oil level switch replaced.

The new oil level switch part number supplied in this bulletin must be used. If the customer has added oil, determine how much was added.

Based upon the information provided, estimate where the oil level was when the lamp illuminated in order to determine if additional action is required beyond what is described in this bulletin such as an oil consumption test.

The ECM must still be updated with this new logic and the oil level switch replaced. The new oil level switch part number supplied in this bulletin must be used.

## PART INFORMATION

PART NUMBER DESCRIPTION 11136AA140 Oil Level Switch

MODEL / MODEL YEAR	PAK FILE NAME	NEW ECM PART NUMBER	OLD ECM PART NUMBERS	TRANSMISSION & EMISSION SPECIFICATION	NEW CID NUMBER
2013-14MY Legacy and Outback w/ 2.5L NA	22765AE04F.pak	22765AE04F	22765AE04A,B,C,D,E	6MT CAL	EA1P102c
	22765AE05F.pak	22765AE05F	22765AE05A,B,C,D,E	6MT FED	EA1P102e
	22765AE06F.pak	22765AE06F	22765AE06A,B,C,D,E	CVT CAL	EA1P102d
	22765AE07F.pak	22765AE07F	22765AE07A,B,C,D,E	CVT FED	EA1P102f

## PACK FILE APPLICABILITY

PACK FILE APPLICABILITY

Step 1- Reprogram the ECM using the applicable pack file from the table above.

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, 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.

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).

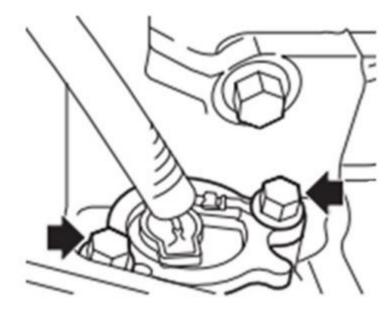
• If the GR8 indicates the vehicle's battery must be charged, charge the battery using the GR8 before proceeding to reprogram the vehicle while using the Power Supply Mode.

• 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 - Always confirm any low oil level lamp false illumination is not a result of a poor electrical connection or grounding concern. Inspect the circuit following the diagnosis found in the applicable Service Manual to insure no other related concern exists.

Step 3 – Once the ECM reprogramming has been completed and the oil level switch wiring has been confirmed to be OK, proceed with replacing the oil level switch assembly shown in the illustration below following the procedure outlined in the applicable Service Manual.

Torque the 2 retaining bolts to 6.4 Nm (56 inch-pounds). Torque the 2 retaining bolts to 6.4 Nm (56 inch-pounds).



Oil Level Switch

Step 4 – Confirm the engine oil level has been restored to the FULL mark on the dipstick before releasing the vehicle.

An Approved j2534 Device can be used to reprogram the PCM

Subaru reprogramming files using a generic (non-OEM) SAE J2534 pass-thru vehicle programming device are available by contacting Service Technical Information Company toll free at 1-866-428-2278.

The cost for the CD-ROM with all reprogramming files is \$75.00 plus S/H and applicable state tax. Files will be updated four (4) times per year, in CD-ROM format, with all available reprogramming service information at the same above offered cost. Authorized Subaru Dealers are provided the same reprogramming information.

11-145-14R