

- Campaign - ECM Software Update

NUMBER: WVU-31

DATE: March 2011

Revised 6-3-11

APPLICABILITY: 2006-10 MY Legacy, Outback, Forester & Impreza with a 2.5 Liter N/A engine only

SUBJECT: **Engine Control Module (ECM) Reprogramming**

## **INTRODUCTION**

Subaru of America, Inc has determined that vehicles affected by this Service Program require ECM reprogramming.

A modification to the Engine Control Module software logic has been developed to improve the performance of the emission control system. This software change will not adversely affect fuel economy or performance.

This software update is intended to improve vehicle emissions when the vehicle is operated in cold weather and the engine is turned off and restarted within short periods of time such as in several minute intervals. The A/F sensor contains a heating element, which is controlled by the ECM, and which assists the sensor in reaching an optimum temperature, resulting in better accuracy. When the vehicle is operated under the conditions described above, there could be a longer than desired delay in the ECM's turning on the A/F sensor heating element, resulting in higher than desired emissions. This software enhancement will correct that condition.

Please note the following special information concerning affected vehicles and the availability of ECM reprogramming PAK files.

^ ECM reprogramming PAK files will not be available for all models at the time this Service Program is initially released PAK files will be released in accordance with the schedule found in the service procedure of this bulletin

^ Vehicle Coverage Inquiry, available at Subarunet, will be periodically updated to coincide with release of PAK files. WVU-31 coverage will only appear for those vehicle models that have corresponding PAK files available.

^ Dealers are requested to check for "open" campaigns whenever a potentially affected vehicle is in for service. If a PAK file is available, this update should be performed in accordance with the service procedure found in this bulletin and the vehicle owner informed that the WVU-31 Service Program update has been completed. It is important that an RC claim be immediately submitted and approved in order to show the campaign "completed". Prior to mailing owner notification letters, the claims database will be checked and any completed vehicles will be removed from the list. These actions will reduce potential customer inconvenience.

- 2006-2010 MY Subaru Legacy, Outback, Impreza & Forester with 2.5 Liter normally aspirated engine only. Models with 6 cylinder or turbo charged engines are NOT affected.

Affected vehicles are identified in the VIN range chart below. Prior to performing repairs, confirm coverage by using the Vehicle Coverage Inquiry function at [Subarunet.com](http://Subarunet.com).

**Note:** Vehicle Coverage Inquiry will be periodically updated to coincide with release of PAK files. WVU-31 coverage will only appear for those vehicle models that have corresponding PAK files available.

Model	From	To	
2006MY	Legacy Sedan	6*200001	6*220857
	Legacy Wagon / Outback	6*300001	6*364201
	Impreza Sedan	6*500009	6*526779
	Impreza 5-Door	6*800007	6*822263
	Forester	6*700001	6*760060
2007MY	Legacy Sedan	7*200009	7*215146
	Legacy Wagon / Outback	7*300004	7*346352
	Impreza Sedan	7*500002	7*526052
	Impreza 5-Door	7*800001	7*819619
	Forester	7*700001	7*748362
2008MY	Legacy Sedan	8*200008	8*227207
	Legacy Wagon / Outback	8*300005	8*367431
	Impreza Sedan	8*500001	8*530288
	Impreza 5-Door	8*800001	8*838495
	Forester	8*700002	8*733308
2009MY	Legacy Sedan	9*210001	9*236941
	Legacy Wagon / Outback	9*310001	9*348625
	Impreza Sedan	9*500007	9*522884
	Impreza 5-Door	9*800003	9*828092
	Forester	9*700002	9*797855
2010MY	Legacy Sedan	A*210007	A*247983
	Outback	A*310003	A*386571
	Impreza Sedan	A*500001	A*517646
	Impreza 5-Door	A*800004	A*828797
	Forester	A*700001	A*799999
		A*800000	A*807110
		A*900001	A*918317

\* Various characters may occupy this position of the VIN.

**Dealer Affected VIN lists:** Dealers will be sent an affected VIN list for each model year around the time owner notification letters are mailed.

Affected VIN lists are created and “dealerized” as follows:

- Original vehicle owners are assigned to the original selling dealer when their current address is within a 100 mile radius of that dealer.
- If the original selling dealer code was found to be inactive, the VIN has been assigned to the nearest active dealer.
- For any new owners or when original owners live more than 100 miles from the original selling dealer, the VIN has been assigned to the nearest active dealer.

**Important: Dealer affected VIN lists include owner name and address information for vehicles affected by this Service Program. This information will enable dealers to follow-up with owners of potentially affected vehicles. The lists contain owners’ names and addresses obtained from State Motor Vehicle Registration Records. The use of such motor vehicle registration data for any other purpose is unlawful. Accordingly, dealers are urged to limit the use of these lists for the purpose of completion of this Service Program.**

## **AFFECTED VEHICLES**

### **OWNER NOTIFICATION**

Because this program affects a high volume of vehicles, SOA will prepare and mail Owner Notification Letters to owners of affected vehicles according to the following schedule:

2006MY	Beginning on or about 03/28/11
2007MY	Beginning on or about 04/25/11
2008MY	Beginning on or about 06/07/11
2009MY	Beginning on or about 06/27/11
2010MY	Beginning on or about 07/25/11

#### **Note:**

For dealers with more than 600 customers affected by this program for any given model year, initially the first 600 letters will be mailed according to the schedule. Any additional letters will be mailed during the following week.

A copy of the Owner Notification Letter is shown in this bulletin.

### **DEALER PROGRAM RESPONSIBILITY**

Dealers are to promptly perform the applicable service procedures defined in this bulletin to correct all affected vehicles in their inventory (new, used, demo). Additionally, whenever a vehicle subject to this Service Program is taken into dealer new or used inventory, or is in the dealership for service, necessary

steps should be taken to ensure the Service Program correction has been made before selling or releasing the vehicle.

New or used vehicles listed in a Service Program that are in dealer stock must be:

^ Immediately identified.

^ Tagged or otherwise marked to prevent their delivery or use prior to repair.

^ Repaired in accordance with the repair procedures outlined in this Service Program Bulletin.

#### PARTS INFORMATION

No repair parts are needed to perform this procedure.

#### SPECIAL TOOLS

Vehicle ECM reprogramming will require the following:

Subaru Diagnostic System (SDS)

^ SDS Toughbook

^ Subaru Select Monitor III (SSMIII Application Software)

^ Subaru Diagnostic Interface Box (SDI)

^ USB Data Link Cable and Reprogramming Cable

**Note:**

If you require assistance with using the Subaru Diagnostic System (SDS), use the "HELP" function icon, which will allow you to access the tutorial information.