

<b>Subject:</b> MAZDA SERVICE PROGRAM (MSP45) – TIRE PRESSURE MONITORING SYSTEM WARNING LIGHT	<b>Bulletin No:</b> 02-006/15
	<b>Last Issued:</b> 11/03/2015

## APPLICABLE MODEL(S)/VINS

2014 - 2015 Mazda6 vehicles built from October 26, 2012 through November 26, 2014

- 2014 VIN Range: JM1 GJ \*\*\*\* 100042 - 162745
- 2015 VIN Range: JM1 GJ \*\*\*\* 162748 - 224852

## DESCRIPTION

Some Mazda6 vehicles may experience Tire Pressure Monitoring System (TPMS) warning light on even if the TPMS system has been properly initialized at the specified tire air pressure.

This may be caused by improper tire air pressure detection by the TPMS system on certain types of road surfaces.

### NOTE:

- UNDER THE MAZDA SERVICE PROGRAM (MSP45), ALL CURRENT DEALER INVENTORY AND RETAILED VEHICLES FOUND TO BE WITHIN THE ABOVE VIN AND PRODUCTION DATES RANGES MUST BE REPAIRED ACCORDING TO THE INSTRUCTIONS CONTAINED IN THIS SERVICE BULLETIN.
- BEFORE PERFORMING ANY REPAIR, VALIDATE THAT THE VEHICLE IS APPLICABLE TO THIS PROGRAM BY PERFORMING AN "eMDCS WARRANTY VEHICLE INQUIRY" AND VERIFYING THE VEHICLE DISPLAYS CAMPAIGN "MSP45" AND ITS CAMPAIGN STATUS DISPLAYS "OPEN". SEE "VEHICLE INSPECTION PROCEDURE" BELOW.

### DEALER INVENTORY:

Repair all applicable vehicles currently in dealer inventory according to the procedures contained in this service bulletin.

### RETAIL VEHICLES:

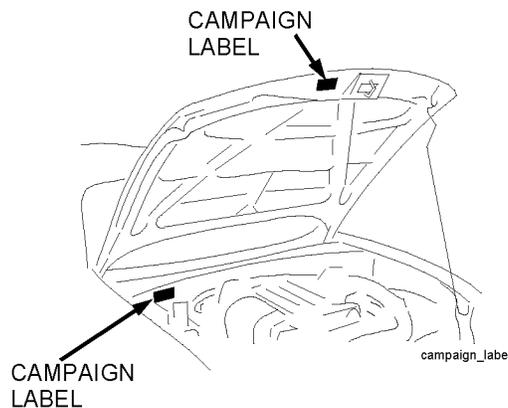
When an applicable retailed vehicle is brought into the dealer for any type of repair or scheduled maintenance, perform an eMDCS Warranty Vehicle Inspection and check the status of MSP45. If status of MSP45 is "OPEN" repair the vehicle according to the procedures contained in this service bulletin.

**CONSUMER NOTICE:** The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/equipment and take training to correctly and safely maintain Mazda vehicles. These instructions should not be performed by "do-it-yourselfers." Customers should not assume this bulletin applies to their vehicle or that their vehicle will develop the described concern. To determine if the information applies, customers should contact their nearest authorized Mazda dealership. Mazda North American Operations reserves the right to alter the specifications and contents of this bulletin without obligation or advance notice. All rights reserved. No part of this bulletin may be reproduced in any form or by any means, electronic or mechanical—including photocopying and recording and the use of any kind of information storage and retrieval system ---without permission in writing.

## VEHICLE INSPECTION PROCEDURE

1. Verify the vehicle is within one of the following VIN ranges:  
 2014-2015 Mazda6 vehicles produced between October 26, 2012 and November 26, 2014
  - 2014 VIN Range: JM1 GJ \*\*\*\* 100042 - 162745
  - 2015 VIN Range: JM1 GJ \*\*\*\* 162748 - 224852
    - If the vehicle is within the above VIN and production date ranges, proceed to Step 2.
    - If the vehicle is not within the above VIN and production date ranges, return the vehicle to the customer or inventory.
2. Perform a Warranty Vehicle Inquiry using your eMDCS System and inspect the vehicle for a Campaign Label MSP45 attached either to the vehicle's bulkhead or to the vehicle's hood. Refer to eMDCS System - Warranty Vehicle Inquiry Results table below.

**NOTE:** Verify the campaign number as the vehicle may have multiple labels.



### eMDCS System - Warranty Vehicle Inquiry Results

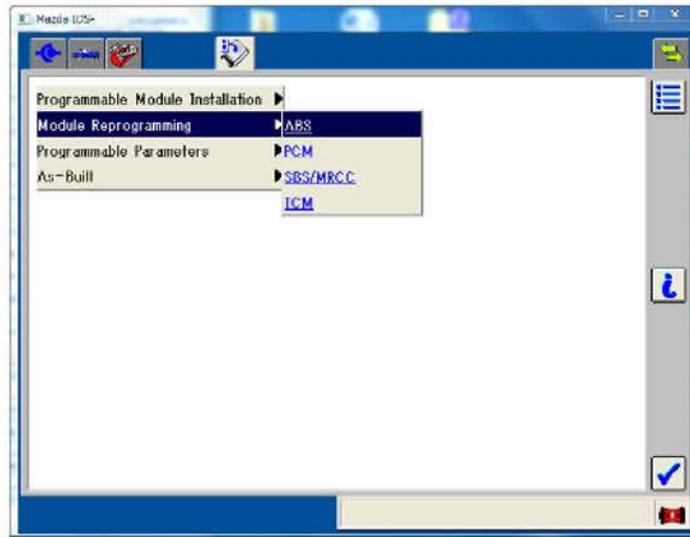
If eMDCS displays:	Campaign Label is:	Action Required:
"Campaign: MSP45 Open"	Present	Contact the Warranty Hotline at (877) 727-6626, option 3 to update vehicle history
	Not present	Proceed to "INSPECTION PROCEDURE"
"Campaign: MSP45 Closed"	Present	Return vehicle to inventory or customer
	Not present	Complete a label and apply it to vehicle's bulkhead or hood
"Campaign: MSP45 Open" or "Closed" is not displayed	Does not apply	Campaign does not apply to this vehicle. Return the vehicle to inventory or customer

## REPAIR PROCEDURE

1. Verify that the recall campaign 8014J is closed or not applicable for the vehicle (Except Canada and Mexico).
2. Reboot the IDS to clear memory before reprogramming.
3. Using IDS 94.02 or later software, reprogram the ABS module to the latest calibration following the "Module Reprogramming" procedure.

**NOTE:** ABS module reprogramming may fail if VCM cable connections are poor and/or battery voltage is low. For details, refer to "SERVICE CAUTION FOR ABS MODULE REPROGRAMMING"

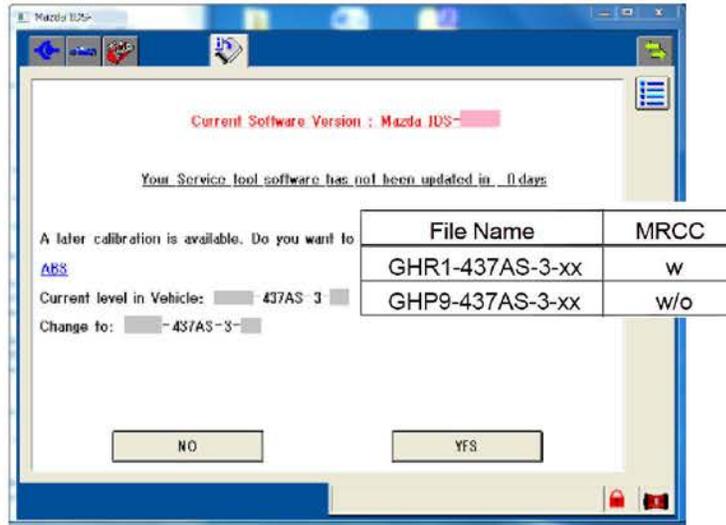
- a. Select "Module Reprogramming", then select "ABS".



b. The following screen will be displayed:

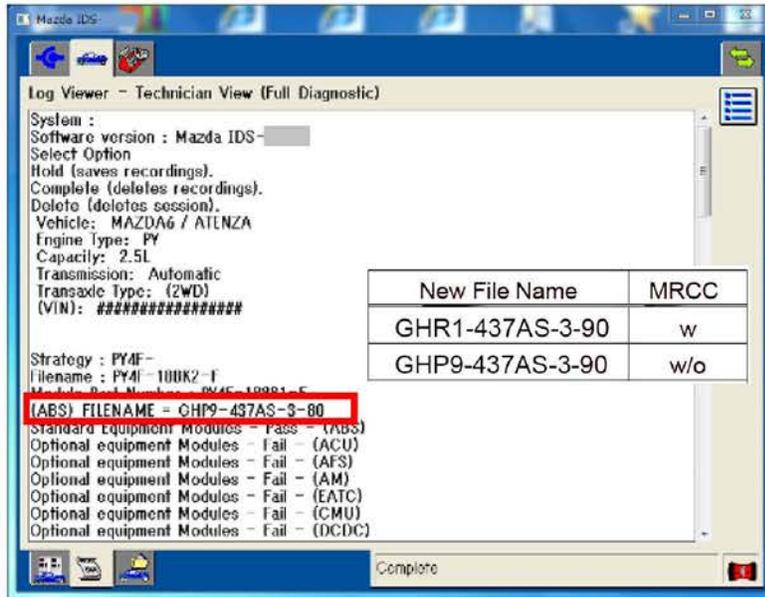
Click "YES" and follow the M-MDS instructions to reprogram the ABS module.

If the message "No later calibration is available on the system for this ABS" is displayed, the ABS module is already at the latest calibration. "Current level in Vehicle" will show the new file name. This service bulletin does not apply.



**NOTE:** If reprogramming stops before completion, refer to "SERVICE CAUTION FOR ABS MODULE REPROGRAMMING"

- c. After reprogramming, remove the session. Then, open a new session again and go to the “Log Viewer” screen on which the programmed file name is displayed as shown in figure below. If the new file name matches the list, the reprogramming has been successfully completed.



**NOTE:**

- After reprogramming, communication error related DTCs may be stored. This is a normal operation. Delete these DTCs.

Possible DTCs:

U0155:00-28	EATC - Communication error with instrument cluster
U2300:54-28	EATC - Configuration error (data not received)
U0155:00-08	R_BCM - Communication error with instrument cluster
U0100:00-28	BSML - Communication error with PCM
U0155:00-28	BSML - Communication error with instrument cluster
U0214:00-28	BSML - Communication error with start stop unit
U0100:00-28	BSMR - Communication error with PCM
U0155:00-28	BSMR - Communication error with instrument cluster
U0214:00-28	BSMR - Communication error with start stop unit
U0316:09-08	SBS/MRCC - Error signal received from DSC HU/CM
C0023:62-08	ABS - Brake light/Brake switch

- In some cases, the ABS warning light may illuminate and the engine will not shut off by one-press of the engine start/stop button. To correct this concern, disconnect the ABS/DSC 30A fuse for 10 seconds.

## IMPORTANT INFORMATION FOR MODULE PROGRAMMING

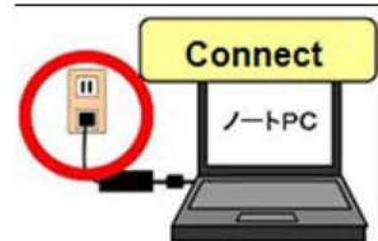
- Always update the IDS tool first, then follow on-screen instructions to download the needed calibration file for ABS module reprogramming.
- It is not necessary to remove any fuses or relays during ABS module reprogramming when the IDS screen prompts you to do so. You may accidentally stop power to one of the ABS module terminals and cause the ABS module to be blanked, or you may receive error messages during the IDS reprogramming procedure.
- IDS shows the calibration part numbers after programming the ABS module.
- Please be aware that ABS module calibration part numbers and file names listed in any Service Bulletin may change due to future releases of IDS software, and additional revisions made to those calibrations for service related concerns.
- When reprogramming an ABS module, IDS will always display the “latest” calibration P/N available for that vehicle. If any calibration has been revised/updated to contain new information for a new service concern/issue, it will also contain all previously released calibrations.

## SERVICE CAUTION FOR ABS MODULE REPROGRAMMING

**NOTE: Poor connection between the vehicle and M-MDS and/or low voltage may result in abnormal termination and/or ABS data corruption.**

- a. Make sure the following connections are secured. Do NOT touch the VCM and DLC cable. This may cause electrical noise and connection disruption.

- Between the vehicle-side connector and the DLC cable.
- Between the PC-side connector and USB port of PC.



- b. Connect AC adapter to the PC in order to stabilize voltage fluctuation during reprogramming.

Do NOT use vehicle battery outlet as power source for the PC.

- c. When performing this procedure, we recommend using the “Power Supply” mode in the Battery Management System to keep the vehicle battery up to capacity. If a different charger is used, make sure it does not exceed 20 AMPS. If it exceeds 20 AMPS, it could damage the VCM.



**Before reprogramming, pay attention to the vehicle condition and PC environment.**

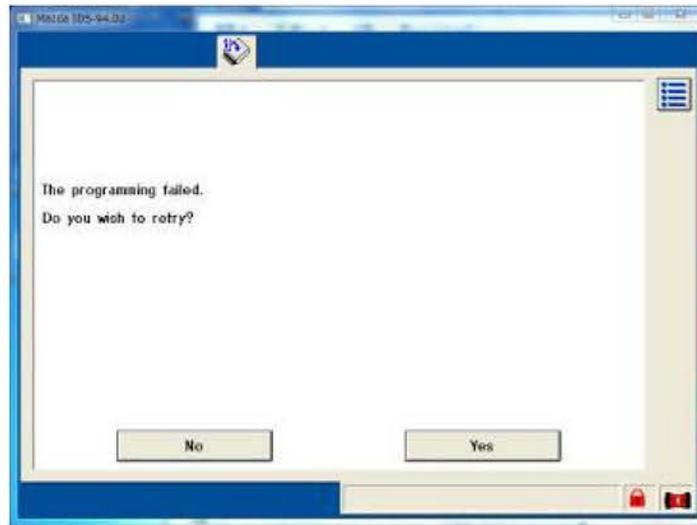
- Turn off all the electrical loads, especially the A/C (blower), audio, rear defogger and headlights.
- Perform self-test and verify no DTC is stored. If any DTC is stored, fix the concern and delete the DTC.
- Disconnect all non-genuine aftermarket accessories.
- Terminate all programs other than IDS on the PC. This may extend reprogramming, PC may freeze or it may cause other problems.
- Verify that the latest IDS software is installed on the PC.
- Perform reprogramming under proper Internet environment. Especially when using wireless network, make sure the connection is strong.
- Make sure to keep proper free space on the PC's hard disc. Insufficient free space (less than 1 GB) may result in PC freeze during reprogramming.

### Trouble Shooting Procedure for ABS Module Reprogramming

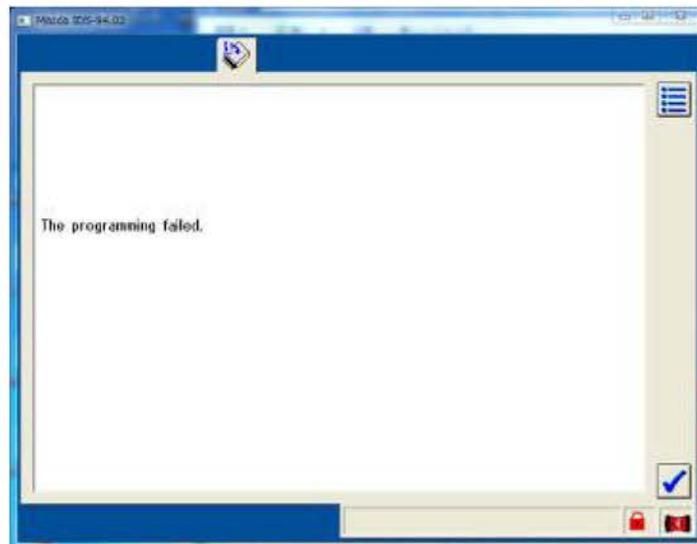
Before performing the following trouble shooting procedure, check all VCM cable connections and the battery voltage.

#### Failure screen

- a. If the screen shows “The programming failed. Do you wish to retry?” with Yes/No buttons, DO NOT Click the buttons and proceed to “**Recovery**” below.

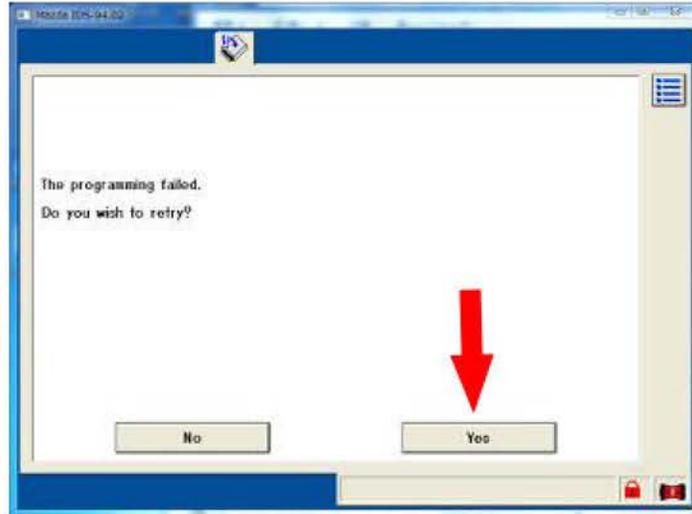


- b. If the screen shows “The programming failed.” without Yes/No buttons, the ABS module has to be replaced with new one.

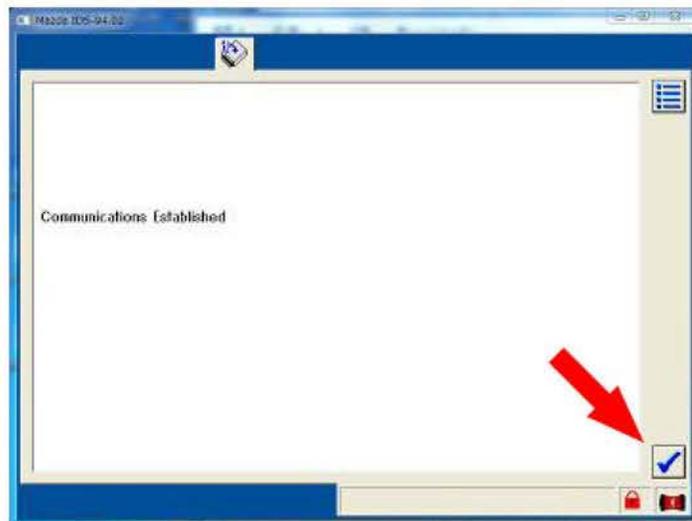


## Recovery

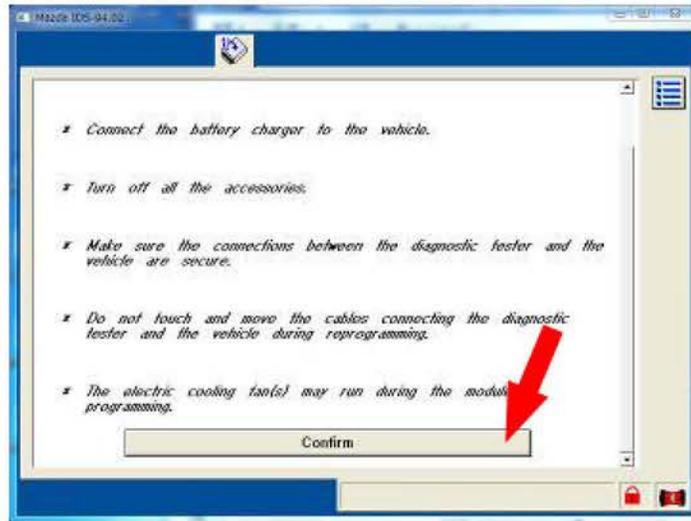
- a. Turn IG off. (If needed, press and hold the start button.)
- b. Remove the ABS/DSC 30A fuse for 10 seconds.
- c. Install the fuse and turn IG ON.
- d. Click "Yes" button and follow the on-screen instruction.



- e. Click the check button.

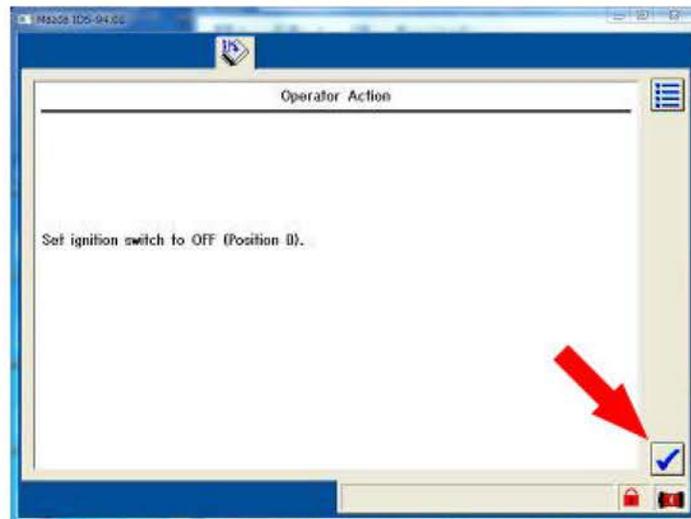


f. Click the "Confirm" button.



g. Turn IG OFF.

h. Click the check button.



- i. Turn IG ON. Reprogramming will resume.



4. After performing the ABS module reprogramming procedure, adjust all four tire pressures to the specification and initialize the TPMS using IDS.

**NOTE:**

- ABS module reprogramming does not reset TPMS misuse prevention history.
- DO NOT press the TPMS set switch after ABS module programming. This may cause the vehicle to enter the TPMS misuse prevention mode.

Select the following items from the initial screen of the IDS.

- a. Select "Chassis"
  - b. Select "ABS/DSC"
  - c. Select "TPMS Reset"
5. Verify the repair by starting the engine and making sure there are no MIL illumination or abnormal warning lights present.

**NOTE:** After ABS module reprogramming, it is no longer necessary to road test the vehicle to "relearn" KAM (Keep Alive Memory).

## CALIBRATION/PART(S) INFORMATION

File Name	Note	Equivalent ABS module part number
GHR1-437AS-3-90	With Mazda Radar Cruise Control (MRCC)	GHY1-437A0-H
GHP9-437AS-3-90	Without Mazda Radar Cruise Control (MRCC)	GHY9-437A0-H

## CAMPAIGN LABEL

1. Fill out a blue "Campaign Label" (9999-95-065A-06) with the Campaign No: "MSP45", your dealer code, today's date, and affix it to the vehicle's hood.

**CAMPAIGN LABEL**

CAMPAIGN NO: \_\_\_\_\_

DEALER CODE: \_\_\_\_\_

DATE:                    // /

P/N 9999-95-065A-05

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2. Return the vehicle to the customer.

## WARRANTY INFORMATION

**NOTE:**

- This repair will be covered under Mazda's New Vehicle Limited Warranty or under California Component Emissions Warranty 7/70 and PZEV Warranty where applicable.
- Additional diagnostic time cannot be claimed for this repair.

	ABS Unit Reprogramming	ABS Unit Replacement
Process Number	AF042A	AF042B
Symptom Code	99	99
Damage Code	99	99
Part Number Main Cause	7777-SP-K51	GHY1-43-7A0H, or GHY9-43-7A0H
Quantity	0	1
Operation Number / Labor Hours	XXL8NXFX / 0.3 Hrs.	XXL8PBRX / 1.2 Hrs.