



Technical Bulletin

Division: Automotive
Category: Technical

Section Title: Restraints
TSB No. TS 05 01140R

SUBJECT: COUNTER-MEASURE PROCEDURE FOR DTC B1318
MODEL(S): GRAND VITARA (JB424W/JB632W)
YEAR: 2009
VIN BREAKS: JB424W: ~JS3TD042494101207 May 26, 2009
 JB632W: ~JS3TD148494100441 May 28, 2009

CONDITION: The Airbag warning light illuminates, and DTC B1318 is stored. This typically can result from a change in load on the passenger seat, such as a passenger shifting their weight on and off the seat, or an object (bag, briefcase, pet, etc.) bouncing on the seat while the vehicle is traveling.

CAUSE: Programming error in the occupant classification module (OCM).

CORRECTION: Reflash the program of the occupant classification module (OCM).

PART(S) INFORMATION:

Part Number	Description	Qty.	Notes
N/A	N/A	N/A	Do Not replace the Seat Cushion or OCM

WARRANTY INFORMATION

Labor Operation	Description	Failed Part Number	Complaint Code	Defect Code	Labor Time
QD9999	Cushion Assy, FR RH	85101-65JA0-REP	36	48	.6

SPECIAL SERVICE TOOL INFORMATION

Part Number	Description	Qty.	Notes
99963-80JKT	OCM Reflash Kit	1	Kit does not include SDT or Laptop

Technical Service Department
Dealership Circulation – Initial and file:

Service Manager	Parts Manager	Service Advisor	Technicians						

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NECESSARY TOOLS:

Note: Tools 1 through 6 are included in the OCM Reflash Kit, the Suzuki SDT (7) and the PC/Laptop (8) are available at the dealership.



	Part Name	Qty	Remark
1	RS232C Interface cable	1	
2	Reprogramming CD-ROM	1	
3	RS232C-USB converter	1	
4	Converter Driver software CD-ROM	1	
5	Power supply 100-240V AC	1	Includes four different type of power plugs
6	K-Line interface cable	1	
7	Suzuki SDT scan tool	1	Software version 3.5 or newer
8	PC or Laptop	1	Refer to "Minimum system requirement"

Minimum system requirement

To setup the Reprogramming Software, the PC must meet with the following minimum system requirements:

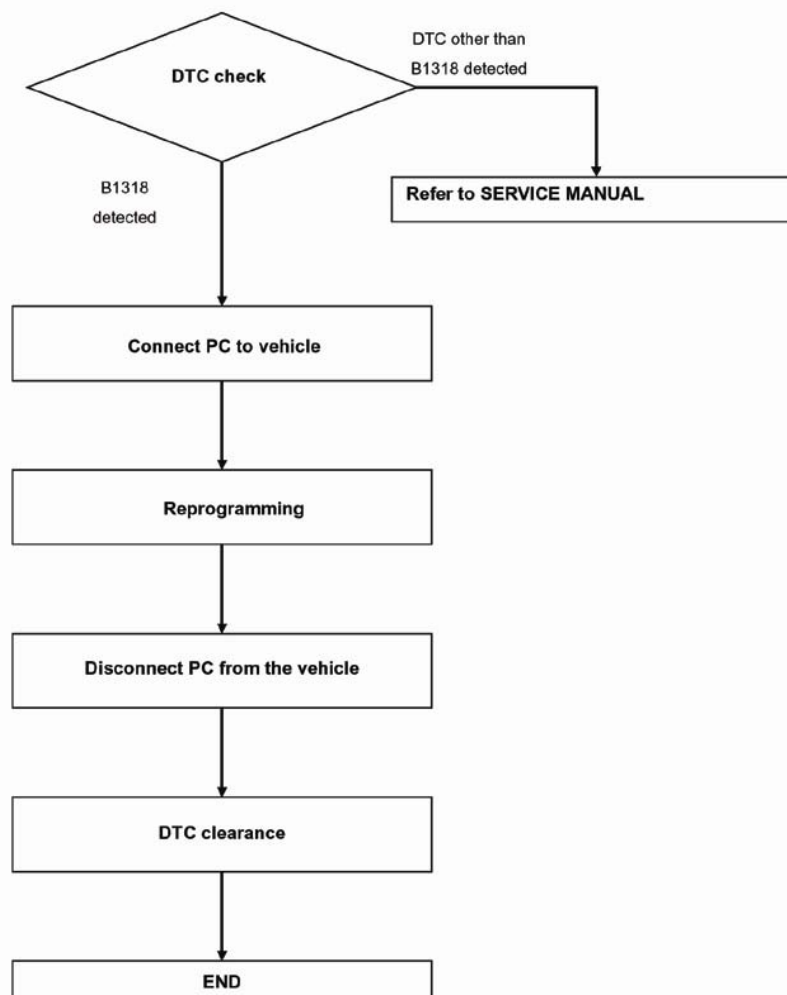
- Windows XP, VISTA or Windows 7 (Software will not work with any other OS)
- CD-ROM drive
- USB interface
- 100MB free HD Space
- 64MB RAM
- 200MHz CPU speed
- 800x600 Video resolution at 8 bit

SOFTWARE INSTALLATION:

Insert the CD into the drive and copy the files to a folder on your desktop. Click on the folder and unzip the files inside the folder. Click on the Reprogramming Software and install it. **If your PC/Laptop is running a 64 bit version of Windows 7, you must install the Reprogramming Software to the C:\Program Files folder (not the C:\Program Files (x86) folder).** Next install the USB TO RS232 adapter drivers (if needed), according to the instructions included with the adapter. **If you need the Windows 7 driver for the Digitus DA-70156 USB to Serial Port adapter, it is available on the Digitus website at:**

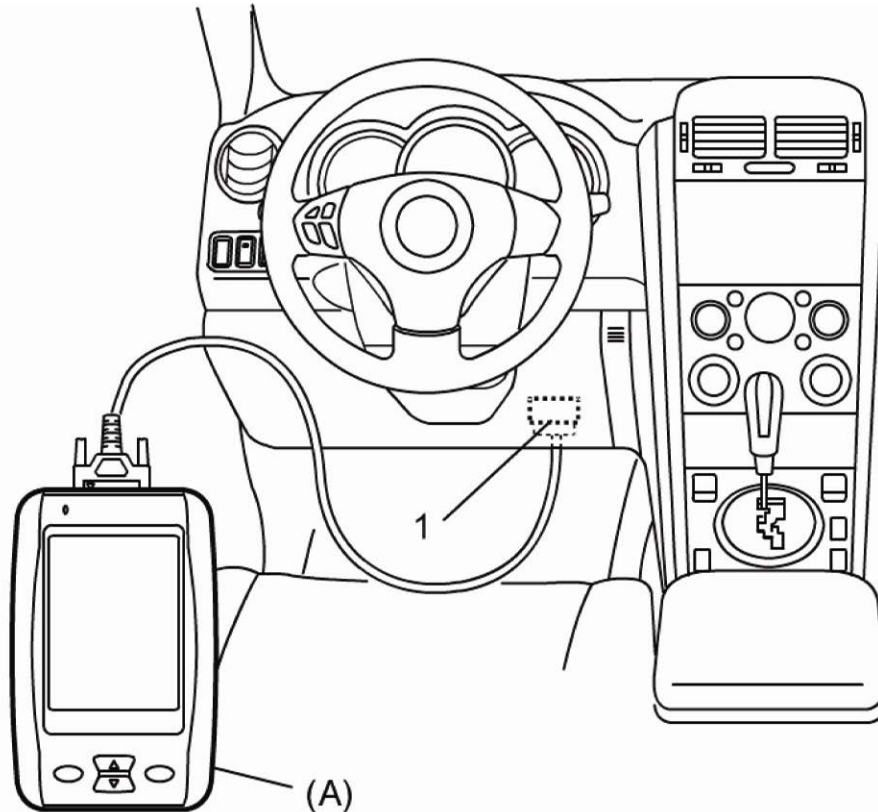
<http://www.digitus.info/en/products/accessories/adapter-and-converter/usb-to-serial-adaptor-usb-20-da-70156/>

These steps should only need to be performed once during the initial setup of the reprogramming tools and the PC.

Repair instructions for B1318 countermeasure:**Work Flow**

Reprogramming Procedures

1. Turn ignition switch to OFF position.
2. Connect the SUZUKI SDT (A) to the data link connector (DLC) (1), located on underside of instrument panel to the right of the steering column.



3. Turn ignition switch to ON position.
4. Read DTC according to instructions displayed on SUZUKI SDT.
Note: Be sure to check for both current and history DTC's
5. If the DTC B1318 is detected as either a current or history code, proceed to the next step. If any DTC(s) are stored and not B1318, stop here and refer to the Service Manual for diagnosis of that DTC(s).
6. After completing the check, turn ignition switch to OFF position and disconnect SUZUKI SDT from DLC.

- 7. Connect the OCS- Interface Box to the PC using the RS232C serial interface cable (and the USB TO RS232 adapter, if needed).



Or



- 8. Connect Power supply 100-240V AC to power connector (for U.S. application) referring to the figure.
 - Note the direction of the connector based on the pin size.
 - Push the connector down and push it to the "left" end lock.



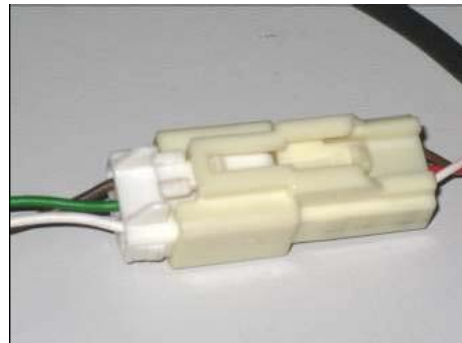
9. Connect the Power Supply to the OCS – Interface Box, and plug into a 120V AC power source.



10. Make sure the ignition switch is turned off. If the ignition is turned on, or left on, while the reprogramming procedure is performed, DTC(s) indicating circuit problems may be stored in the SDM.
11. Find the OCS connector, located under the Passenger Seat Cushion, and disconnect it.
Note: You should not need to remove the strap securing the harness.



12. Connect OCS male connector of the vehicle and OCS female connector of K-Line interface cable.



Reprogramming

Note: Close any software programs running on the PC before reprogramming begins.

13. Make sure the ignition switch is turned off.

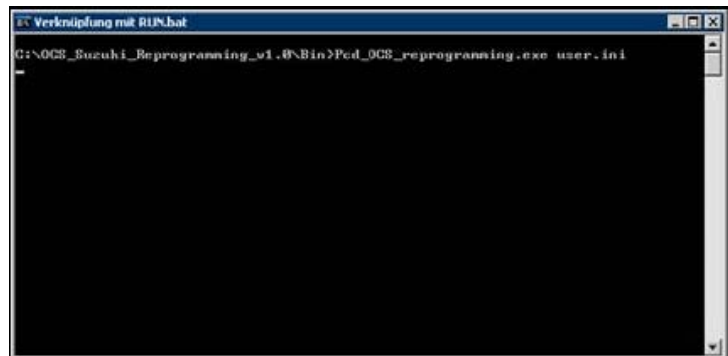
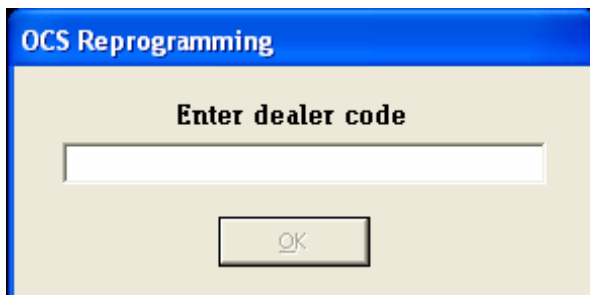
14. Check connection between Power supply 100-240V AC, RS232C interface cable, K-Line interface cable, OCS connector and PC.

15. Double click "PCDlag OCS Reprogramming id15" on PC desktop to open the program.



16. At the start of the program two windows will open, type your dealer code into the "OCS Reprogramming" box and click "OK".

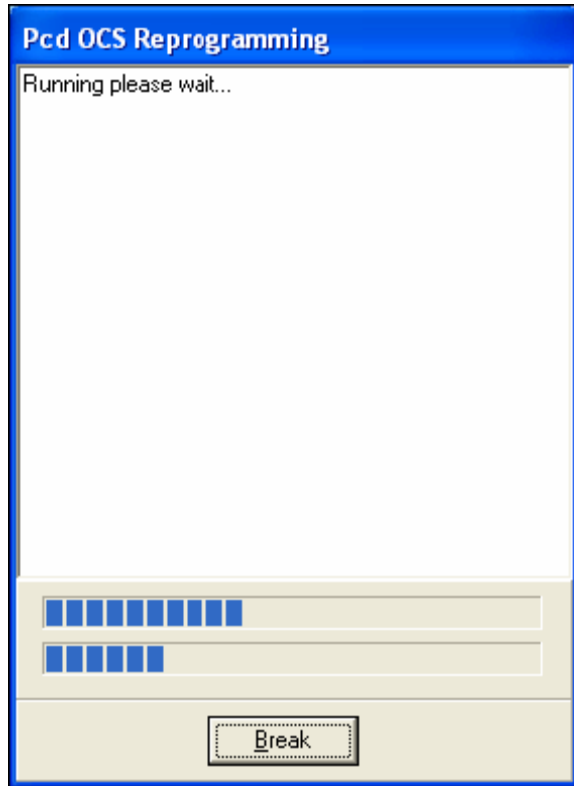
Note: The DOS window is due to a program call running in the background, and can be ignored.




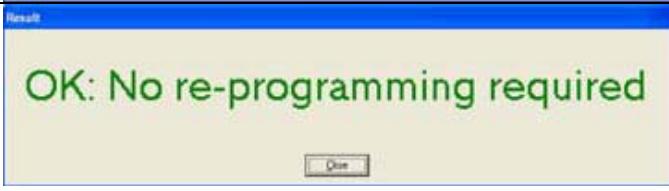


17. The main window opens to show the following information, click the “Start” button to begin reprogramming.



18. Once the reprogramming starts the red and green boxes below the Suzuki logo will begin flashing to indicate active communication, if the boxes do not flash, refer to the “COM Port Troubleshooting instructions”, following step 24. An additional window will also appear, containing a progress bar to show the process for each step and the completion of the cycle.



19. When the process is finished, the progress window closes and one of the following result windows will open:

Result Window	Work Procedure
	<p>If the “PASS” window has opened, reprogramming was successful. Click the “OK” button and continue to the next step in the instructions.</p>
	<p>If the “OK: No reprogramming required” window has opened, there was no need to reprogram, likely due to the vehicle being previously reprogrammed, or it not falling within the affected VIN range. Continue to the next step in the instructions.</p>
	<p>If the “FAIL” window shown to the left has opened, check reprogramming tools, connections, and PC setting by referring to the check list below. Click the “Repeat” button, and retry the reprogramming.</p> <p style="text-align: center;">Note: Reprogramming can be retried twice.</p>
	<p>If the “FAIL” window shown to the left has opened, OCS reprogramming is impossible. In most cases the incorrect com port has been set. Recheck the com port settings and make a second attempt to reprogram the OCS. If this “FAIL” screen continues to appear, click the “CLOSE” button and then replace the OCS/Seat Cushion Assembly referring to the service manual.</p>

Check list

- Main power supply is available and properly connected to K-Line interface cable.
- RS232C Interface cable is properly connected to K-Line cable (screws tightened).
- RS232C Interface cable is properly connected to PC or USB Converter (screws turned in).
- If necessary RS232C - USB Converter is properly connected.
- If necessary USB driver is properly installed.
- OCS connector is properly connected.
- Correct COM port is used.
- No other software is running (specially that uses any port).

20. Disconnect the reprogramming tools from the vehicle starting with the female OCS connector under the seat cushion.
21. Reconnect the OCS female connector to the vehicle harness connector under the seat cushion.



22. Using a green marking pen (included in the OCM Reflash Kit), and put a green dot on the OCS female connector in an area to make it easily visible. This will indicate that the OCM reprogramming has been performed.
23. Connect the Suzuki SDT scan tool to the vehicle, check and clear any DTC(s). After clearing DTC(s), confirm there are no codes stored as current or history.
24. If no codes are present, power off the Suzuki SDT, turn the ignition switch off, and disconnect the Suzuki SDT from the DLC. The process is complete.

COM Port Troubleshooting instructions


1. To check the installation and confirm the Com Port configuration, right click

“My Computer”  , then click “Properties”



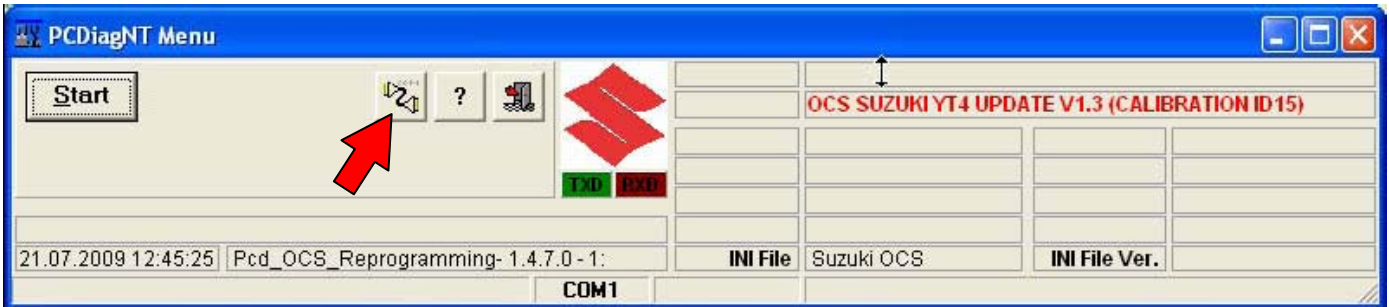
2. From the “Hardware” tab, click on the “Device Manager” button



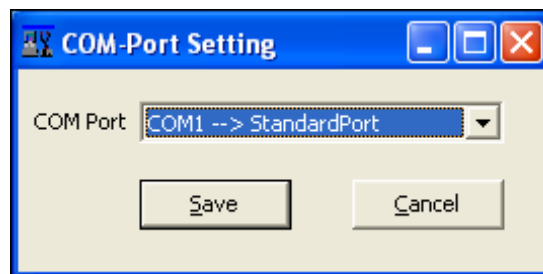
3. The following chart should open on your computer screen, confirm that both of the items indicated in the red rectangle areas are present on your computer, and note the COM Port assigned to the “USB Serial Port”, (example:  USB Serial Port (COM3) , COM3) to be selected during the Reprogramming procedure



- Once you have found the COM Port that the USB Serial Converter was assigned, you can change the setting by clicking the "Com Port Configuration Button" shown below.



- To change the com port, click on the "Com Port Configuration Button". Another small window will open and COM Port can be modified (COM1, COM2, etc.). Choose the Com Port assigned to the serial port (or the USB Serial Port Adapter if used).



- After correctly changing the COM Port setting, go back to step 17 of the Reprogramming instructions.