

CUSTOMER SERVICE CAMPAIGNS 4003 AND 4004 Equator Airbag Control Unit (ACU) Reprogramming

Affected Models: 2009 - 2012 Equator

Affected Departments: Management, Service, Parts, Warranty

Suzuki Motor Corporation is conducting a customer service campaign on all 2009 - 2012 Equator models to reprogram the Airbag Control Unit (ACU).

This Technical Service Bulletin includes a copy of the customer letter, the service repair procedure, and warranty administrative information for Suzuki Service Providers.

NOTE:

The ACU is referred to as the **Diagnostic Sensor Unit** in Suzuki Repair Information provided on Suzuki PitStopPlus.

What is the problem?

The ACU software could allow an unintended deployment of the side curtain airbags under certain driving conditions. These driving conditions typically include vehicle operation on unpaved roads or off-road areas where one side of the vehicle is higher than the other.

Reprogramming the ACU will improve the rollover-sensing calibration to address these unique conditions and help prevent unintended side curtain airbag deployment while maintaining the design intent for deployment in rollover crashes.

In this bulletin, the ACU is identified by two types of communication systems internal to the vehicle: **FA6** was used in model-year Equators from 2009 - 2011; **FA9** was in 2012 model-year Equators.

Affected Models:

2009 - 2012 Equator

Verify if the vehicle is affected by the service campaign:

Confirm the service campaign status by checking the VIN on the driver's side dashboard against the Vehicle Master in Suzuki Connect to see if the ACU needs to be reprogrammed. If you have a question regarding vehicle eligibility, contact the Suzuki Motor of America, Inc. (SMAI) Warranty Department.

What you will do as a Suzuki Service Provider:

- 1) Reprogram the ACU.
- 2) Submit a warranty claim.

What Suzuki Motor of America, Inc., will do:

During the week of January 8, 2018, SMAI will mail notification letters to owners of affected vehicles for whom we have information. The letter instructs the customer to contact a Suzuki Service Provider to schedule an appointment.

Service Campaign Repair Kit:

No replacement parts are necessary for this service campaign. However, SMAI will send you a service campaign repair kit **free of charge** with the items necessary for the reprogramming procedure. This kit includes:

- Reprogramming Software CD
- FA6 Cable (J-51594, Blue), P/N 99970-00FA6
- FA9 Serial Connector
- FA9 USB Cable, P/N 99970-00FA9

The reprogramming software is also available in Suzuki PitStopPlus under the **Tools and Equipment** tab; it is also located under **Misc. Drivers, Software & Information**.

Additional FA6 and FA9 replacement cables can be ordered using the normal parts ordering system on Suzuki Connect:

Suzuki Service Provider FA6 Cost: \$200.00
Suzuki Service Provider FA9 Cost: \$300.00

If you have any questions related to purchasing or availability of replacement cables, contact National Parts Coordination at (714) 854-2165

Warranty Claim Processing:

Submit a warranty claim for each service campaign repair immediately upon completion. This campaign requires you to file a warranty claim using ONE of the methods described below:

2009 - 2012 EQUATOR — SUZUKI CONNECT SHORT CAMPAIGN CLAIM:

A Short Campaign Claim will reimburse you for reprogramming the airbag control unit with a labor time of:

2009 - 2011 Equator Models – 0.3 hr
2012 Equator Models – 1.1 hr

2009 - 2012 EQUATOR ACU REPROGRAMMING SUZUKI CONNECT SHORT CAMPAIGN CLAIM INSTRUCTIONS	
CLAIM INFORMATION	
CLAIM NUMBER:	XXXXX,X (Service Provider enters number)
ENTRY TYPE:	Vehicle Identification Number (VIN)
VEHICLE IDENTIFICATION NUMBER (VIN):	XXXXXXXXXXXXXXXXXXXX
REPAIR DATE:	Enter date of repair
MILEAGE:	Enter mileage at repair date
CAMPAIGN NUMBER:	4003 (2009 - 2011 Equator Models) 4004 (2012 Equator Models)
VARIATION CODE:	JB

2009 - 2012 EQUATOR — SUZUKI CONNECT LONG CAMPAIGN CLAIM:

The Long Campaign Claim entry should only be used when additional parts are required for the repair or additional labor is required to complete the Service Campaign. **A Long Campaign Claim requires prior Tech-Line authorization.**

2009 - 2012 EQUATOR ACU REPROGRAMMING SUZUKI CONNECT LONG CAMPAIGN CLAIM INSTRUCTIONS	
CLAIM INFORMATION	
CLAIM NUMBER:	XXXXX,X (Service Provider enters number)
ENTRY TYPE:	Vehicle Identification Number (VIN)
VEHICLE IDENTIFICATION NUMBER	XXXXXXXXXXXXXXXXXXXX
REPAIR DATE:	Enter date of repair
MILEAGE:	Enter mileage at repair date
CAMPAIGN NUMBER:	4003 (2009 - 2011 Equator Models) 4004 (2012 Equator Models)
VARIATION CODE:	JK
LABOR OPERATION:	SN9999
LABOR HOURS:	As authorized
PARTS INFORMATION	
FAILED PART NUMBER:	38930-82Z00-RX0 (2009 - 2011 Equator Models) 38930-82Z60-RX0 (2012 Equator Models)
REPLACEMENT PARTS:	As authorized
AUTHORIZATION NUMBER:	(Issued by DSPM)
FAILURE DESCRIPTION	
DESCRIPTION OF DEFECT:	
DESCRIPTION OF REPAIR:	
SUBLET INFORMATION:	Sublet Expenses (Only as authorized by Tech-Line)

REPAIR PROCEDURE:

The Suzuki Equator uses one of two software versions for controlling the airbag control unit (ACU):

- **FA6 (2009 - 2011 model-year)**
- **FA9 (2012 model-year)**

Repair Procedure Table of Contents:

Section 1 – Install the Equator ACU Reprogramming Software to the Shop Computer

Section 2 – Install the Cable Drivers

Section 3 – Program the ACU (**FA6, 2009 - 2011 Models**)

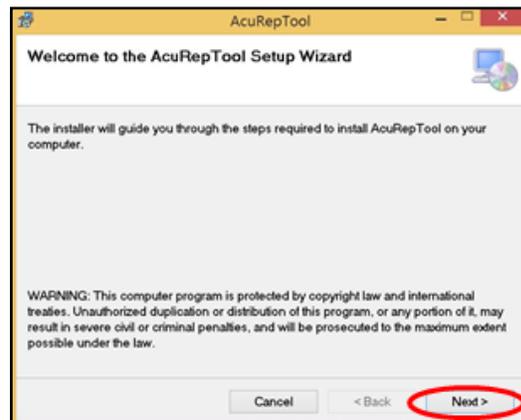
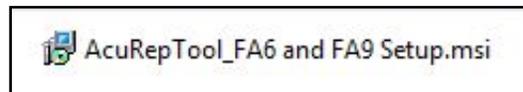
Section 4 – Prepare the Vehicle for Programming the ACU (**FA9, 2012 Models**)

Section 5 – Program the ACU (**FA9, 2012 Models**)

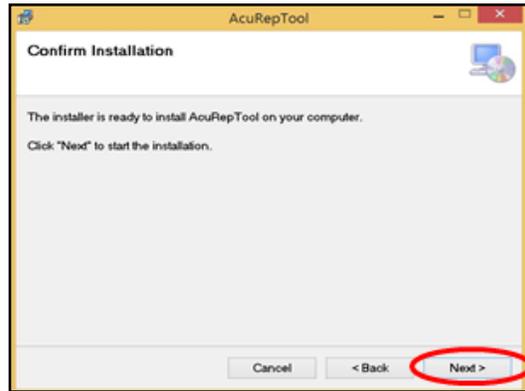
Section 6 – Confirm the ACU Functions Correctly

Section 1 – Install the Equator ACU Reprogramming Software to the Shop Computer

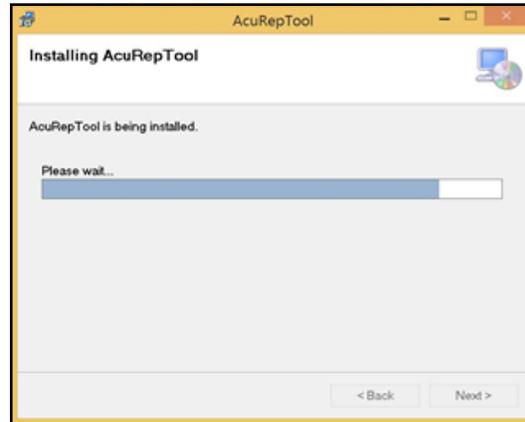
- 1) Close all software programs running on your shop computer before proceeding.
- 2) Locate the **Reprogramming Software CD** included in the service repair kit.
- 3) Create a folder on your computer desktop and name it "Equator Airbag."
- 4) Copy the contents of the CD to the folder on your computer desktop.
- 5) Open the **Equator Airbag** folder on your computer desktop and select **AcuRepTool_FA6 and FA9 Setup**.
- 6) After the setup wizard starts, select **Next** to continue.



7) Confirm the installation by selecting **Next**.

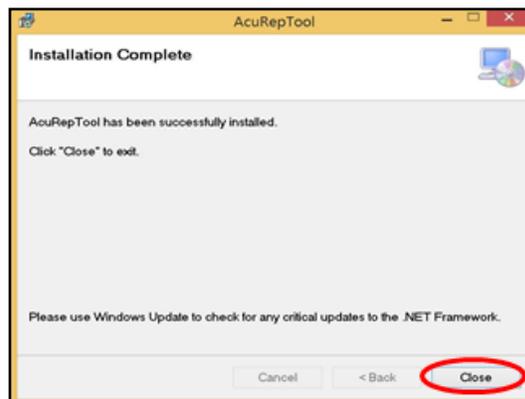


8) The software will begin installing; when the installation is complete, it will reboot your PC.



9) After the PC has rebooted, you may see the following message "Installation Complete"

Select **Close**.



Section 2 – Install the Cable Drivers

1) Go to the Equator Airbag folder you created on your computer desktop to install the driver.



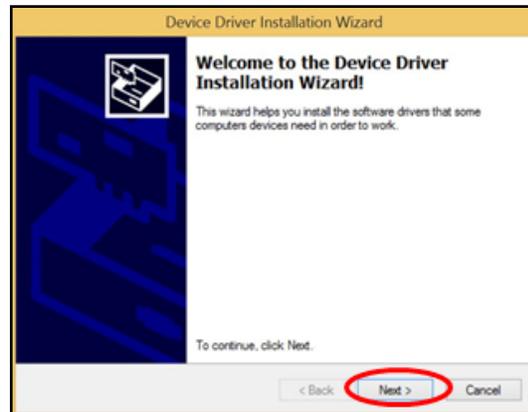
Select the file titled **CDM_v2.10.00_WHQL_Certified**.

- 2) Select **Extract** to extract the software onto your computer.

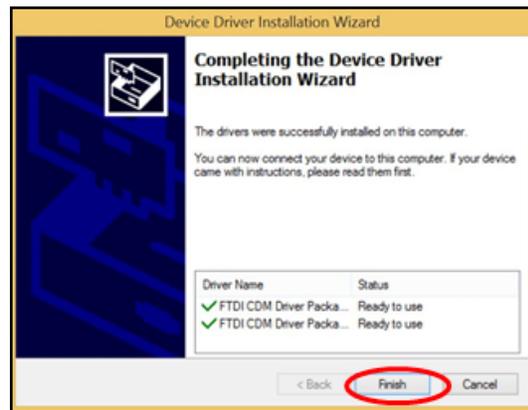


- 3) After the software extracts and loads to your computer, the installation wizard will start automatically.

Select **Next** to continue.



- 4) After the Installation Wizard completes the installation, select **Finish** to close it.
- 5) For **FA6** programming, go to Section 3. For **FA9** programming, go to Section 4.



Section 3 – FA6 (2009 - 2011 Models) Program the ACU

NOTE:

Prior to beginning the reprogramming process, make sure the battery is in a good state of charge. If there is any doubt of the battery condition, attach a battery charger prior to the reprogramming process.

Turn the ignition ON, then watch the supplemental airbag warning light as shown to the right. If this light remains ON after the system check, it is in indication of a stored airbag DTC.

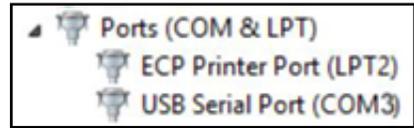
You must resolve this DTC before proceeding with the reprogramming. Any DTCs found prior to reprogramming are not part of this service campaign repair procedure, so you must speak with the customer concerning any related repairs.



1) Connect the single blue **J-51594** FA6 cable to the USB connection on the PC – the drivers should install automatically.



2) To confirm the drivers installed correctly, open the **Device Manager** in the **Control Panel** and select **Ports (COM & LPT)**.



3) You should see the “USB Serial Port” without any errors as shown to the right.

4) Write down the COM Port number for the USB Serial Port (example COM3).

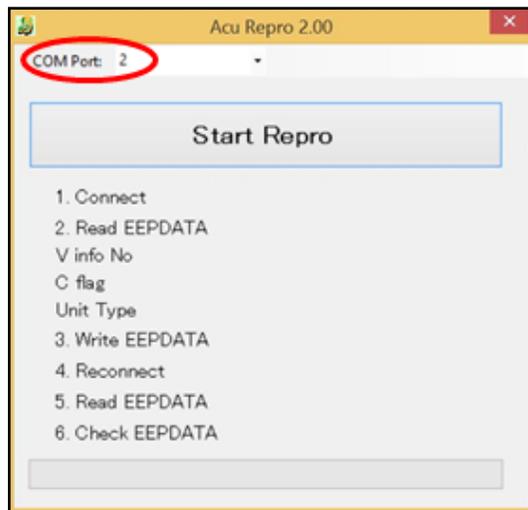
5) Exit the Device Manager and the Control Panel.

6) Connect the J-51594 cable to the vehicle's DLC connector to begin programming.

7) Select the **FA6 icon** on your desktop to start the software as shown to the right.



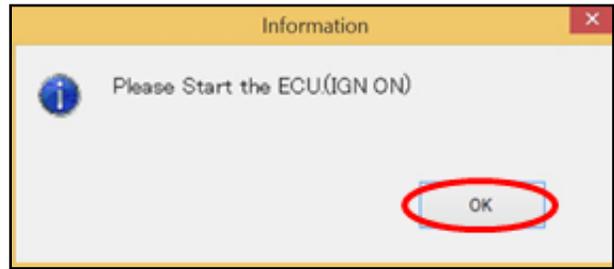
8) Confirm that the COM Port number is set to the correct Port. If it is not correct, click on the drop-down menu and change it.



9) Start programming by selecting **Start Repro** at the top.

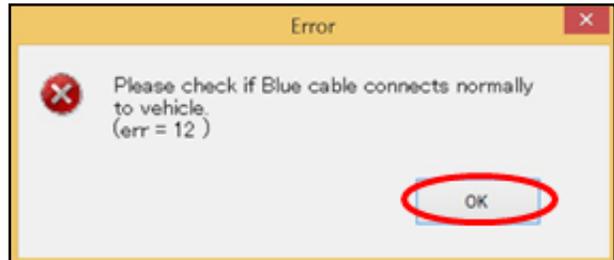


10) Make sure the ignition is ON, but the engine is NOT running, then select **OK**.



11) If you see this error, one of two conditions are present:

- A) The vehicle has already been programmed with the latest software – check the warranty system to confirm this.
- B) You are trying to program an FA9 vehicle with the FA6 cable and software. Stop here, select **OK**, close the software, and start again using the FA9 cable and software. See Section 4 for FA9 programming process.

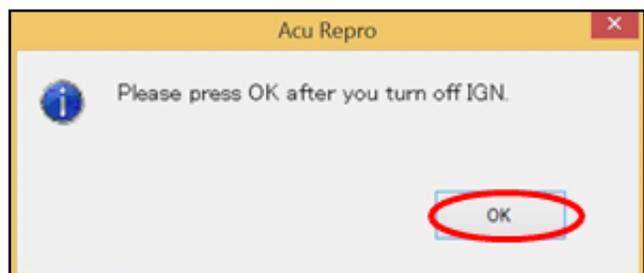


If you do not see error A or B listed above, proceed to the next step.

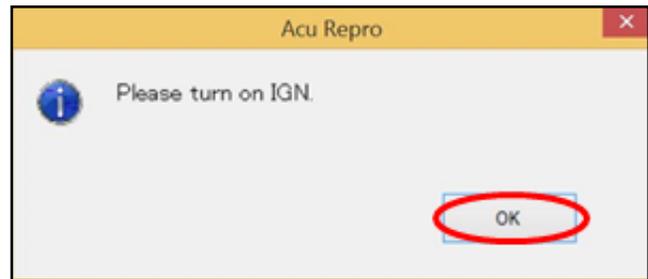
12) The software will begin programming the ACU.



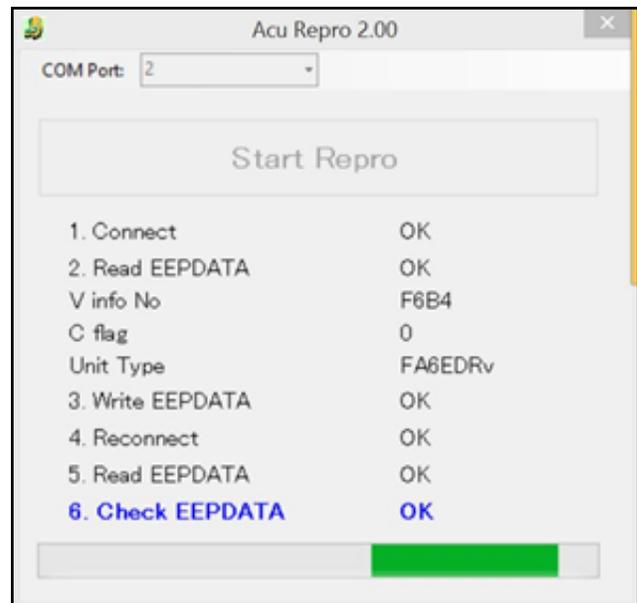
13) When prompted during the programming process, turn the ignition OFF and select **OK**.



14) Wait for the window to appear as shown to the right, then turn the ignition ON (with the engine not running). Then select **OK** to continue.



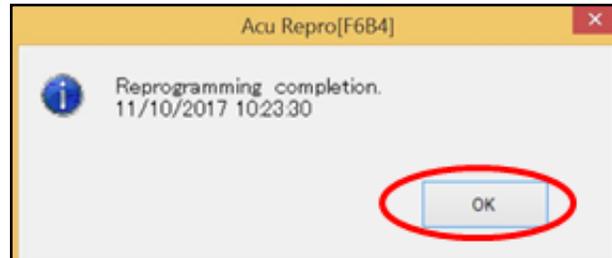
15) The software will check the installation and confirm it is correct.



16) If the software was installed correctly, you will see a final confirmation that the installation is complete – select **OK** and exit the program.

The Airbag Control Unit is now programmed.

17) Proceed to Section 6.



Section 4 – FA9 (2012 Models)

Prepare the Vehicle for Programming the ACU

(If additional repair information is needed, refer to **Diagnostic Sensor Unit: Removal and Installation** on Suzuki PitStopPlus.)

NOTE:

Turn the ignition ON, then watch the supplemental airbag warning light as shown to the right. If this light remains ON after the system check, it is in indication of a stored airbag DTC.

You must resolve this DTC before proceeding with the reprogramming. Any DTCs found prior to reprogramming are not part of this service campaign repair procedure, so you must speak with the customer concerning any related repairs.



⚠ WARNING

The vehicle can move if the wheels are not properly chocked before the procedure is started.

Be sure the vehicle is on a level surface, and chock the tires to prevent the vehicle from moving during the repair procedure.

⚠ CAUTION

The airbag could inflate if the vehicle battery cables are not disconnected from the battery before the procedure is started.

Be sure both battery cables (starting with the negative cable) are disconnected from the battery and wait at least three (3) minutes before starting the repair procedure.

NOTE:

Before you can program the FA9 ACU, you must first gain access to the airbag control unit harness and tape off two terminals on the connector. To do this, you must first disassemble the center console.

- 1) Remove the center console drink holder by lifting up on each side of the drink holder.



- 2) Remove the trim cover and press the shift interlock release, then move the shifter into **Neutral**.



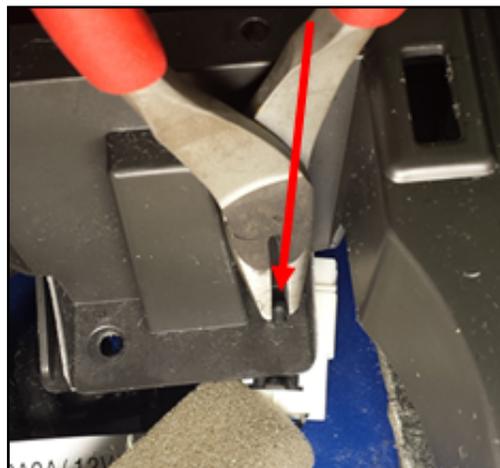
- 3) Remove the front console cover shifter by pulling up on the rear of the cover, then pull up on the front of the cover under the dash panel.



- 4) Remove the three screws connecting the rear section of the center console to the front section of the console.



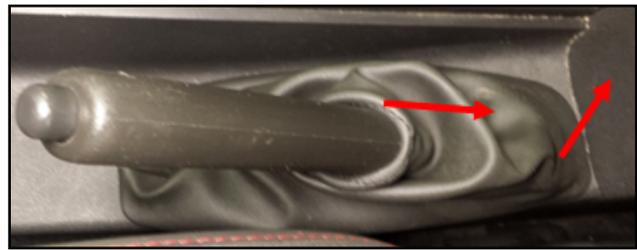
- 5) Disconnect the power port harness from the lower console.



- 6) Remove the two screws on the sides of rear section of the center console.



- 7) Pull up on the rear of the parking brake lever boot and slide it backward to separate it from the center console.



- 8) Carefully lift the rear part of the lower section while separating it from the front section of the center console.

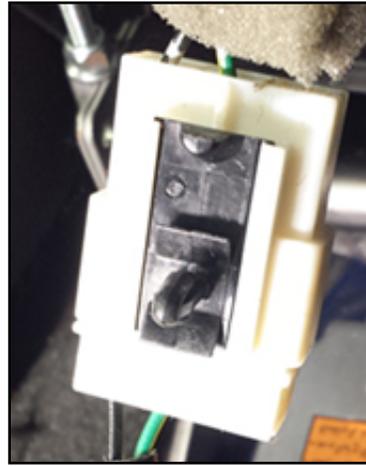


- 9) Disconnect the power port harness to remove the rear console.

⚠ CAUTION

The airbag could inflate if the vehicle battery cables are not disconnected from the battery before the procedure is started.

Disconnect both battery cables (starting with the negative cable) and wait at least three minutes before proceeding.



- 10) Lift the airbag control unit connector shield to access the control unit connectors.

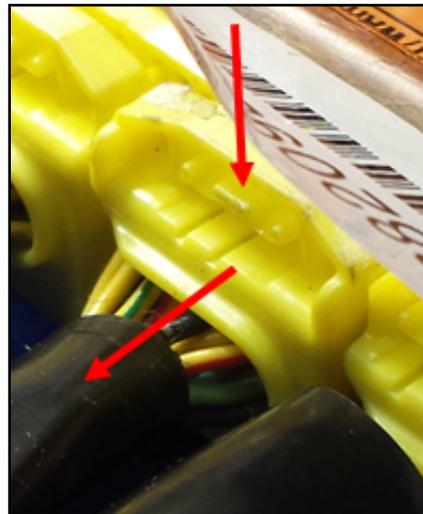


- 11) Depress the retaining lever on the center harness connector and carefully slide the connector out of the ACU.

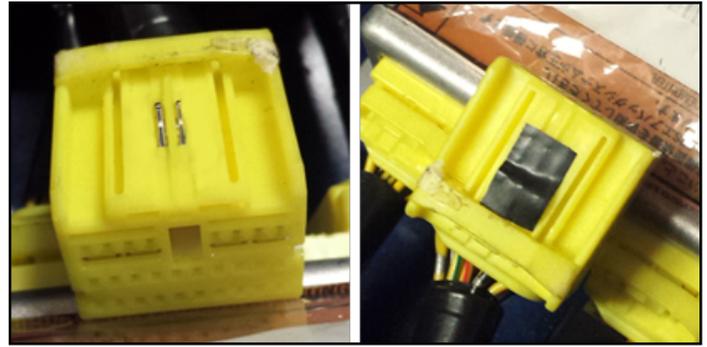
NOTICE

Pulling on the harness can damage the wires.

Do NOT pull on the harness.



- 12) Place a small piece of electrical tape over the two contacts on the top side of the connector and insert the connector back into the ACU.
- 13) Re-attach the battery cables to the battery, starting with the positive cable.
- 14) Continue to Section 5 below.



Before

After

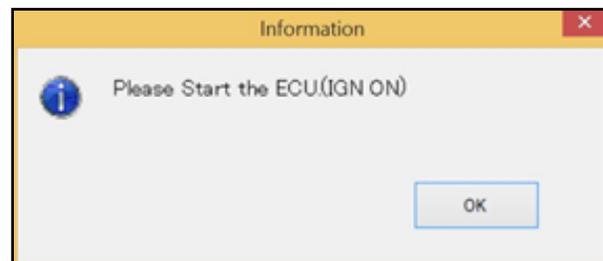
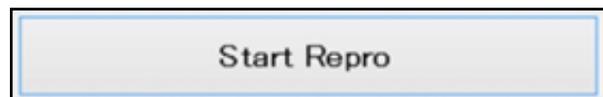
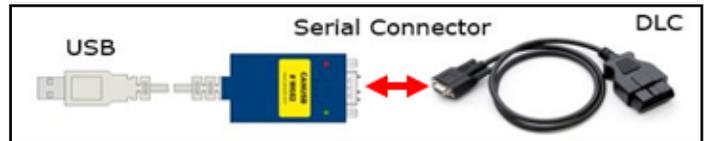
Section 5 – FA9 (2012 Models) Program the ACU

NOTICE

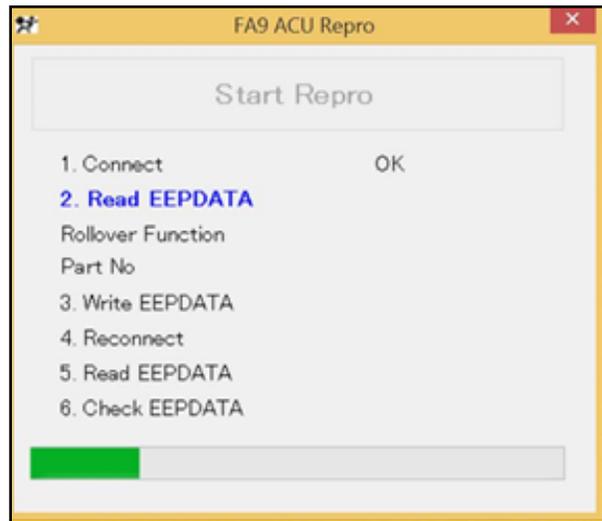
The module hardware could be damaged if the battery is not adequately charged before starting this procedure.

Be sure the battery is in a good state of charge before starting this procedure. If you are unsure of the battery's state of charge, connect a charger to the battery before reprogramming the ACU.

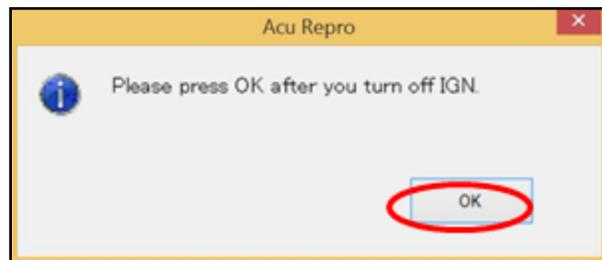
1. Attach the two FA9 cables to each other at the serial connector; attach the USB end to the computer, and the other end to the vehicle's DLC connector.
2. Click on the FA9 icon on your desktop to start the software.
3. To start programming, select **Start Repro** at the top.
4. Make sure the ignition is turned ON, but the engine is not running. Then select **OK**.



5. The software will begin programming the ACU.



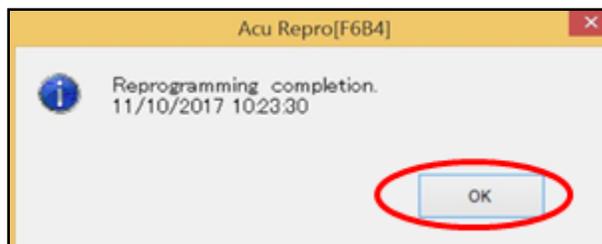
6. When prompted, turn the ignition OFF and select **OK**.



7. Wait for the window to appear as shown to the right, then turn the ignition ON (with the engine not running). Then select **OK** to continue.



8. The program will confirm the software is correctly installed; you will then see a final confirmation that the installation is complete. Select **OK** to exit the program.



9. The ACU is now programmed.

10. Disconnect the programming cables from the vehicle and the computer.

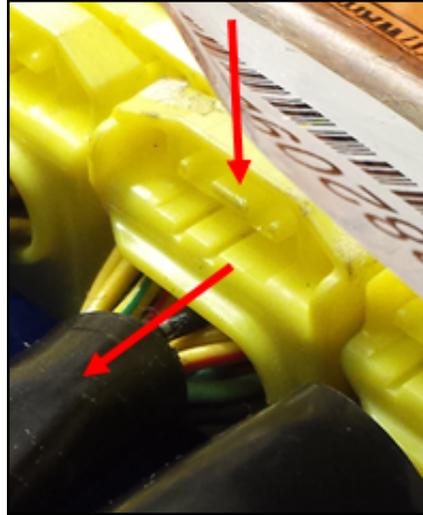
11. Turn the ignition OFF.

CAUTION

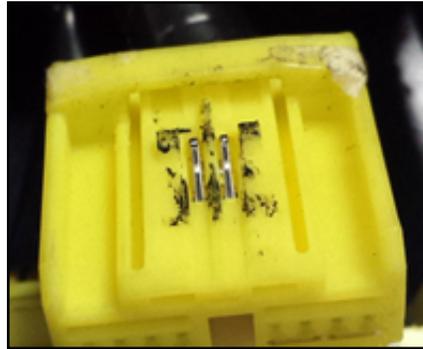
The airbag could inflate if the battery cables are not disconnected from the battery before the procedure is started.

Be sure both battery cables (starting with the negative cable) are disconnected from the battery and wait at least three (3) minutes before starting the repair procedure.

12. Carefully disconnect the center harness connector from the ACU.
13. Remove the electrical tape from the side of the airbag harness connector.



14. If there is any residue left from the electrical tape, carefully clean the contacts and the connector with rubbing alcohol to remove any residual glue from the contacts or connector body.
15. Once the connector is clean, insert it into the ACU.



16. Reassemble the center console, starting with the lower rear section.
17. Be sure to attach the power port harness and the brake lever boot to the lower rear section.
18. Attach the front shifter cover.
19. Shift the transmission into **Park**, and install the shifter interlock cap.
20. Install the drink holder.
21. Reconnect the battery cables, starting with the positive cable.
22. Proceed to Section 6.



Section 6 – Confirm the ACU Functions Correctly

- 1) Start the engine and watch the instrument cluster – the supplemental airbag warning light should flash for a few seconds before turning OFF.
 - **If it does not turn off**, the vehicle has a stored DTC. Diagnose the issue and resolve it before completing the repair.
 - **If the no airbag DTC lights are observed**, the repair is complete.





SUZUKI MOTOR OF AMERICA, INC.

SERVICE CAMPAIGN

This Notice Applies to Your Suzuki Vehicle Identification Number (VIN)
XXXXXXXXXXXXXXXXXXXX

January 11, 2018

Dear Suzuki Owner:

Suzuki Motor Corporation is conducting a customer service campaign on all 2009 - 2012 Equator models to reprogram the Airbag Control Unit (ACU).

What is the problem?

The ACU software could allow an unintended deployment of the side curtain airbags under certain driving conditions. These driving conditions typically include vehicle operation on unpaved roads or off-road areas where one side of the vehicle is higher than the other.

Reprogramming the ACU will improve the rollover-sensing calibration to address these unique conditions and help prevent unintended side curtain airbag deployment while maintaining the design intent for deployment in rollover crashes.

What is Suzuki Motor of America, Inc., doing to solve the problem?

Your Suzuki Service Provider will reprogram the ACU. Depending on the model-year of your vehicle, this procedure will take 30 minutes to 1.5 hours to complete. Parts are available now, and there will be no charge to you for any campaign service-related parts or labor.

What you should do:

Make sure you are prepared for the service by taking the following steps:

- Before taking your vehicle to your Suzuki Service Provider, contact them as soon as possible to set up an appointment for the service.
- We suggest that you bring this letter to your Suzuki Service Provider to help them process your vehicle for repair.

What to do if you receive this letter in error:

This notice was mailed to you according to the most current information we have available. If you no longer own the Suzuki vehicle described in this letter, please forward this campaign information to the current owner (if known), or contact the Suzuki Automotive Customer Relations Department at (714) 572-1490.

Federal regulations require that any vehicle lessor receiving this campaign notice must forward a copy of this notice to the lessee within ten days.

Customer reimbursement for remedies prior to campaign notification:

If you have paid for the ACU to be reprogrammed or other side curtain airbag repairs to address the condition that led to this service campaign, you may be eligible for full or partial reimbursement. To request reimbursement for a previous repair, contact your Suzuki Service Provider.

Please note the following conditions for reimbursement:

- Only repairs made to address the condition that led to this service campaign are reimbursable. Additional expenses such as towing, car rental, accommodations, damage repairs, etc., will not be reimbursed. Reimbursement will not be provided for routine scheduled maintenance.
- Reimbursement may be limited to the suggested list price for parts, the Suzuki published flat rate time allowance for the repair, and the labor rate that an authorized Suzuki Service Provider in the same area would charge for the same repair.
- An owner will not be eligible for reimbursement if the expenses for repairs are incurred more than 10 days after the date of the last owner notification letter sent by Suzuki Motor of America, Inc.
- Reimbursement claims may also be excluded when adequate documentation is not submitted by the claimant. This includes a proof of ownership, a repair order, and proof of payment for the repair.

To request reimbursement for a previous customer paid repair, contact the Suzuki Automotive Customer Relations Department, PO Box 1100, Brea, CA 92822-1100 or call (714) 572-1490. We will request an original or copy of your receipt for the repair or replacement, and your owner notification letter.

We sincerely regret any inconvenience that this service campaign may cause, but we are certain you understand our interest in your continued satisfaction with your Suzuki vehicle.

Sincerely,

Suzuki Motor of America, Inc.