

# TOYOTA

Toyota Motor Sales, U.S.A., Inc.  
19001 South Western Avenue  
Torrance, CA 90501  
(310) 468-4000

To: All Toyota Dealer Principals, Service Managers, Parts Managers

Subject: Safety Recall – A0B  
Certain 2010 Model Year Prius Vehicles  
ABS Actuator ECU Update

On February 9, 2010, Toyota filed a Defect Information Report (DIR) with the National Highway Traffic Safety Administration (NHTSA) informing the agency of our intent to conduct a voluntary Safety Recall on certain 2010 Model Year Prius vehicles.

## **Background**

Toyota has received complaints of inconsistent brake feel during slow and steady application of brakes on rough or slick road surfaces when the anti-lock brake system (ABS) is activated in an effort to maintain tire traction. The system, in normal operation, engages and disengages rapidly (many times per second) as the control system senses and reacts to tire slippage. If the same brake pedal force is applied under these conditions, in the worst case, this may lead to an increase of vehicle stopping distance and thus raise the possibility of a crash.

Toyota dealers are requested to install a newly designed software update (reflash) to the ABS Actuator Electronic Control Unit (ECU) at **no charge** to the vehicle owner.

The following vital information is provided to inform you and your staff of the owner notification phase of this Safety Recall and your degree of involvement.

### **1. Owner Notification Mailing Date**

The owner notification will commence in late February, 2010.

Only owners of the affected vehicles will be notified. If a dealer is contacted by an owner, who has not yet received a notification, please instruct the dealer to **verify eligibility by confirming through Dealer Daily/TIS prior to performing repairs**. Dealers should perform the reflash program as outlined in the attached Technical Instructions which is also located on TIS.

### **2. Vehicles in Dealer Stock**

As required by Federal law, dealers are not to deliver any new vehicles in their inventory, which are involved in a Safety Recall unless the defect has been remedied. Vehicle Safety Recall completion can be verified through TIS.

### **3. Dealer Summary Reports**

Summary Reports containing the **number** of involved vehicles in your dealership's primary marketing area and a VIN list containing vehicles in dealer stock have been distributed to each dealership's Service and Parts Manager. (VIN lists of vehicles in the dealership's PMA will no longer be provided. Please verify eligibility by confirming through Dealer Daily or TIS prior to performing repairs.)

**4. Number and Identification of Involved Vehicles**

There are approximately 133,000 Prius vehicles (2010 model year) involved in the U.S.

PRIUS	JTD	2010	KN3DU	VIN Range
				0001044 - 0124257
				1000089 - 1157301
				5000063 - 5118198

**NOTE:**

- Not all vehicles in the VIN range are affected by this Safety Recall.
- If your dealership is contacted by an owner who has not yet received a notification, please **verify eligibility by confirming through Dealer Daily/TIS prior to performing repairs.**
- Dealers should perform the repair as outlined in the Technical Instructions found on TIS.

**5. Parts Ordering**

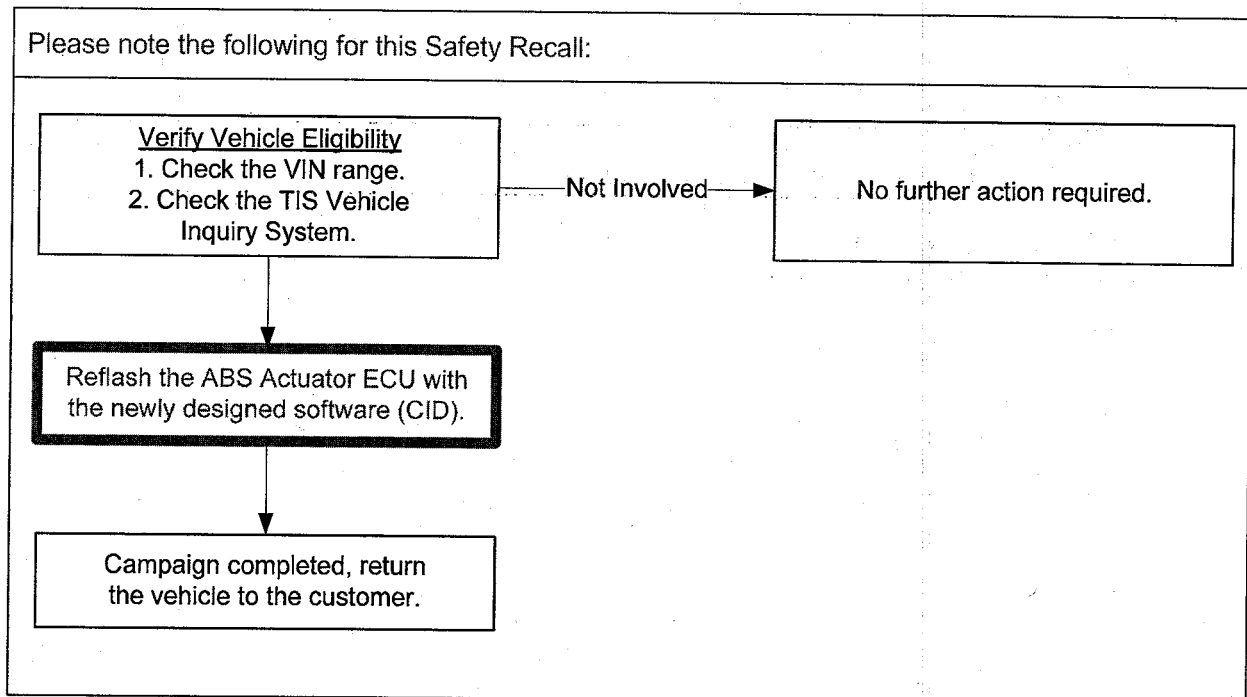
*The reflash process will not require any parts.*

**6. Repair Procedures**

Technicians will need to utilize the TechStream for the reflash. The necessary reflash software can be downloaded from TIS. Refer to TIS for the appropriate Technical Instructions for additional information.

*Conduct all applicable, open Safety Recall and Service Campaigns on the vehicle during the time of appointment.*

**7. Warranty Processor Instructions**



***(Warranty Processor Instructions Continued. . .)***

**The operation codes to be used for this Safety Recall are:**

<b>Safety Recall No.</b>	<b>Op. Code</b>	<b>Description</b>	<b>Flat Rate Hour</b>
A0B	0508B1	Check the current ID of the ABS control ECU	0.3 hr/vehicle
A0B	0508B2	1. Check the current ID of the ABS control ECU 2. Reflash the ABS Control ECU	0.9 hr/vehicle

- The above flat rate time includes 0.1 hour for administrative cost per unit.

**8. Customer Handling**

Please consider this Safety Recall a great opportunity to focus on assuring customers that their safety remains Toyota's highest priority. Customers who receive the owner letter may contact your dealership with questions regarding the letter and/or Safety Recall remedy. Please welcome them to your dealership and answer any questions that they may have. A Q&A is provided to assure a consistent message is communicated.

Customers with additional questions or concerns are asked to please contact the Toyota Customer Experience Center (1-888-270-9371).

**9. Media Contacts**

**For News media inquiries only:**

Due to the nature of this Safety Recall, it is imperative that all media contacts (local and national) receive a consistent message. In this regard, **all media contacts** must be directed to Brian Lyons (310) 468-2552, John Hanson (310) 468-4718, in Corporate Communications. (Please do not provide these numbers to customers or direct dealership associates to call).

***Please review this entire package with your Service and Parts staff to familiarize them with the proper step-by-step procedures required to implement this Safety Recall.***

Thank you for your cooperation.  
TOYOTA MOTOR SALES, U.S.A., INC.

**Safety Recall A0B - Certain 2010 Model Year Prius Vehicles**  
**ABS Actuator ECU Update**  
**SAFETY RECALL NOTICE**

Dear Toyota Customer:

This notice is being sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. Toyota has decided that a defect, which relates to motor vehicle safety, exists in certain 2010 model year Prius vehicles.

**What is the condition?**

Toyota has received complaints of inconsistent brake feel during slow and steady application of brakes on rough or slick road surfaces when the anti-lock brake system (ABS) is activated in an effort to maintain tire traction. The system, in normal operation, engages and disengages rapidly (many times per second) as the control system senses and reacts to tire slippage. If the same brake pedal force is applied under these conditions, in the worst case, this may lead to an increase of vehicle stopping distance and thus raise the likelihood of a crash.

Each circumstance may vary, and drivers must use their best judgment, but until the remedy is completed on your vehicle Toyota advises drivers to depress the brake pedal using firm pressure. Also, please allow additional distance between your vehicle and the vehicle in front of you so as to provide additional stopping distance.

**What will Toyota do?**

Toyota has developed a software update for this condition. Any authorized Toyota dealer will update the ABS Electronic Control Unit ("ECU") with the newly designed software at **no charge** to the vehicle owner.

**What should you do?**

***This is an important Safety Recall***

Please contact your authorized Toyota dealer to install the newly designed ABS ECU software as soon as possible. The installation will take approximately 30 minutes. However, depending upon the dealer's work schedule, it may be necessary for you to make your vehicle available for a longer period of time.

**We request that you present this notice to the dealer at the time of your service appointment.**

If you would like to update your vehicle ownership or contact information, please go to [www.toyota.com/ownersupdate](http://www.toyota.com/ownersupdate). You will need your full 17-digit Vehicle Identification Number (VIN) to input the new information.

**What if you have other questions?**

***Your local Toyota dealer will be more than happy to answer any of your questions and set up an appointment to perform this important Safety Recall.*** If you require further assistance, you may contact the Toyota Customer Experience Center at 1-888-270-9371 Monday through Friday, 5:00 am to 6:00 pm, Saturday 7:00 am through 4:00 pm Pacific Time.

If you believe that the dealer or Toyota has failed or is unable to remedy the defect within a reasonable time, you may submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue S.E., Washington, DC 20590 or call the toll free Vehicle Safety Hot Line at 1-888-327-4236 (TTY: 1-800-424-9153), or go to <http://www.safercar.gov>.

If you are a vehicle lessor, Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

We have sent this notice in the interest of your continued satisfaction with our products and we sincerely regret any inconvenience this condition may have caused you.

Thank you for driving a Toyota.

Sincerely,  
TOYOTA MOTOR SALES, U.S.A., INC.



**Safety Recall A0B – Certain 2010 Model Year Prius Vehicles  
ABS Actuator ECU Update – Q&A**

**Q1: What is the condition?**

A1: Toyota has received complaints of inconsistent brake feel during slow and steady application of brakes on rough or slick road surfaces when the anti-lock brake system (ABS) is activated in an effort to maintain tire traction. The system, in normal operation, engages and disengages rapidly (many times per second) as the control system senses and reacts to tire slippage. If the same brake pedal force is applied under these conditions, in the worst case, this may lead to an increase of vehicle stopping distance and thus raise the likelihood of a crash.

**Q2: What is the cause of the condition?**

A2: The condition is caused by improper programming of the ABS Electronic Control Unit (ECU). Due to this programming, there is a possibility that the braking force after the ABS activation may slightly degrade as compared to the braking force before the activation.

**Q3: Are there any warnings that this condition exists?**

A3: The driver may notice inconsistent brake feel during slow and steady application of brakes on rough or slick road surfaces when the anti-lock brake system (ABS) is activated.

**Q3a: Are there any steps a driver may take if they experience this condition?**

A3a: Each circumstance may vary, and drivers must use their best judgment, but until the remedy is completed on the vehicle Toyota advises drivers to depress the brake pedal using firm pressure.

**Q4: Which and how many vehicles are involved?**

A4: There are approximately 133,000 Prius (2010 model year) vehicles involved in the U.S.

MODEL	MY	UIO
Prius	2010	133,000

**Q5: What is the production period of the affected vehicles?**

A5: The vehicles specific to this Safety Recall were produced from April, 2009 to January, 2010 (for Prius).

**Q6: Are there any other Toyota or Lexus vehicles involved?**

A6: Yes, there are approximately 14,550 Lexus HS250h vehicles (2010 model year) involved.

**Q6a: Why are first and second generation Prius vehicles not involved in this Safety Recall?**

Q6a: The third generation Prius is an all-new vehicle built from the ground-up. The ABS management program is different from the previous generation Prius vehicles.

**Q6b: Why are other Toyota and Lexus Hybrids not involved?**

A6b: ABS management programs for other models are different from the subject models.

**Q7: What is Toyota going to do?**

A7: Owners will be notified by first class mail beginning in late February. Toyota dealers will install a newly designed software update (reflash) to the ABS Actuator ECU at no charge to the vehicle owner.

**Q7a: What should an owner do if they experience this condition before the ABS management program has been updated?**

A7a: This condition only occurs momentarily during light pedal application at the moment the ABS system begins to activate. If an owner is experiencing this condition, he/she should firmly and steadily apply additional force to the brake pedal.

**Q7b: What does this condition feel like?**

A7b: If the brake pedal is lightly depressed on certain road surfaces such as icy or bumpy road, drivers may perceive a **momentary** reduction in braking performance.

**Q8: Have any production changes been implemented?**

A8: A production change was made to the ABS Actuator ECU at the end of January, 2010.

**Q9: How many incidents of this condition have been reported?**

A9: As the conditions and details of each incident are not always clear, it is difficult to identify the number of related incidents.

**Q10: Have there been any accidents reported?**

A10: Although there are some accidents which suggest a relation to this condition, it is difficult to identify each case.

**Q11: What if an owner has additional questions or concerns?**

A11: Owners with questions or concerns are asked to contact their local Toyota dealer for diagnosis, and if applicable, repair. Owners may also contact the Toyota Customer Experience Center (1-800-331-4331).

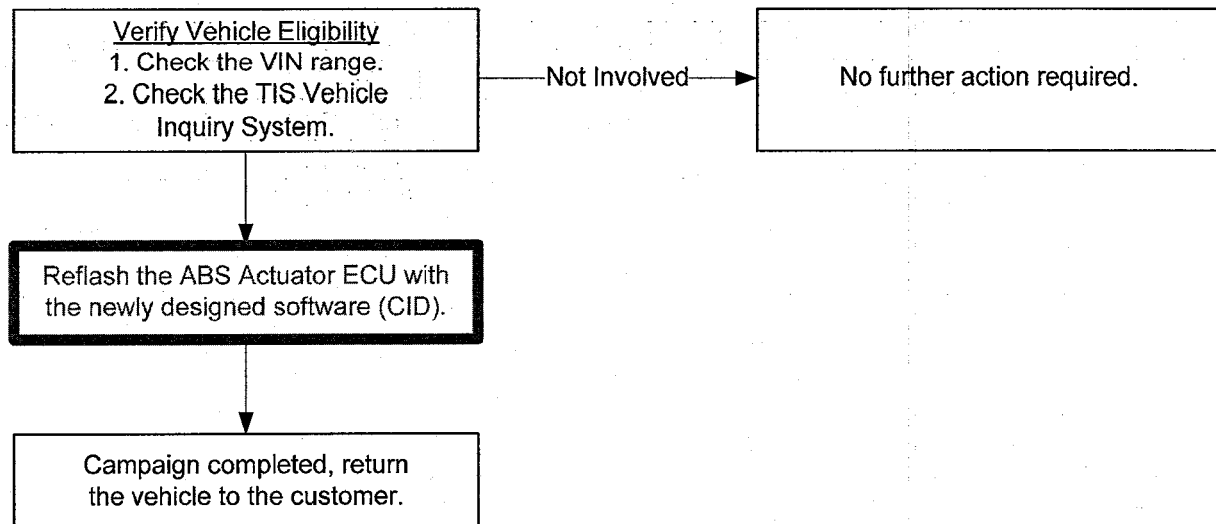
**TECHNICAL INSTRUCTIONS**  
**FOR**  
**SAFETY RECALL AOB**  
**ABS ACTUATOR ECU UPDATE**  
**2010 MODEL YEAR PRIUS**  
***REVISED FEBRUARY 18, 2010***

**TECHNICAL INSTRUCTION REVISION NOTICE:**

- **February 9, 2010:**
  - Information was added to the CID table in Work Procedure, step 1, "REFLASH THE ECU".
  - Note in Work Procedure, step 1d, "REFLASH THE ECU" was updated.
- **February 18, 2010:**
  - Information was added to Preparation, section B, "TOOLS AND EQUIPMENT".
  - The order of steps was changed in Work Procedure, for steps 1a through 1c, "REFLASH THE ECU".
  - Information, images and note in Work Procedure, step 1a, "REFLASH THE ECU" was updated.
  - Step 1e was added to Work Procedure, "REFLASH THE ECU".

**Previous versions of this Technical Instruction should be discarded.**

## I. OPERATION FLOWCHART



## II. IDENTIFICATION OF AFFECTED VEHICLES

### A. AFFECTED VIN RANGE

Model	WMI	Year	VIN Range	
			VDS	Range
PRIUS	JTD	2010	KN3DU	0001044 - 0124257
				1000089 - 1157301
				5000063 - 5118198

#### NOTE:

- Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Safety Recall, and that the campaign has not already been completed prior to dealer shipment or by another dealer.
- TMS warranty will not reimburse dealers for repairs conducted on vehicles that are not affected or were completed by another dealer.

## III. PREPARATION

### A. PARTS

- No parts are required.

### B. TOOLS & EQUIPMENT

- Techstream or Techstream Lite with v4.21.002 software
- GR8 Battery Diagnostic Station, if unavailable, the PSC Power Supply Charger / Maintainer (MTRPSC550SKT) may be used.

## IV. BACKGROUND

Toyota has received complaints of inconsistent brake feel during slow and steady application of brakes on rough or slick road surfaces when the anti-lock brake system (ABS) is activated in an effort to maintain tire traction. The system, in normal operation, engages and disengages rapidly (many times per second) as the control system senses and reacts to tire slippage. If the same brake pedal force is applied under these conditions, in the worst case, this may lead to an increase of vehicle stopping distance and thus raise the likelihood of a crash.



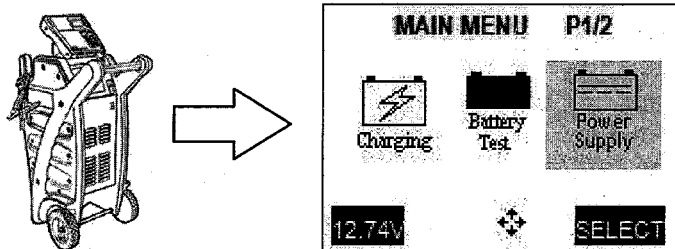
## V. WORK PROCEDURE

Model	Model Year	Wheel Size*	Current CID	New CID
Prius	2010	15 in.	F152647103	F152647106
			F152647104	
			F152647105	
		17 in.	F152647123	F152647126
			F152647124	
			F152647125	

\* Wheel size information can be found on the certification label, located on the drivers door jamb / B-pillar.

### 1. REFLASH THE ECU

- a) Connect the GR8 Battery Diagnostic Station to the vehicle and turn it ON, then select Power Supply Mode as shown below.



#### NOTE:

- The GR8 Battery Diagnostic Station **MUST** be used in Power Supply Mode to maintain battery voltage at 13.5 volts while flash reprogramming the vehicle.
- For details on how to use the GR8 Battery Diagnostic Station, refer to the GR8 Instruction Manual located on TIS, *Diagnostics – Battery*.
- If the GR8 Battery Diagnostic Station is unavailable, the PSC Power Supply Charger / Maintainer (MTRPSC550SKT) may be used.

- b) Connect Techstream to the DLC3.
- c) Place the car in the "IG-ON" mode (push the Power button **twice** when the car is OFF – DO NOT depress the brake pedal).
- d) Reflash the ABS Actuator ECU with the newly designed software (CID), following the procedures outlined in T-SB-0064-10, "Techstream ECU Flash Reprogramming Procedure". Please refer to the table above for the **NEW** CID.

#### NOTE:

Please utilize the following instructions for verifying A0B applicability with Techstream v4.21.002:

1. Perform a Health Check using the Techstream.
2. From the Health Check Results screen, confirm campaign availability status located at the bottom of the screen.

**NOTE:** Techstream v4.21.002 does not retrieve Calibration ID for the ABS/VSC/TRAC ECU when performing a Health Check. Calibration update applicability can be checked using the Calibration Update Wizard (CUW), see steps 3 – 7 on the next 2 pages.

**NOTE CONTINUED...**

3. If Campaign Available status is "NO", the A0B campaign does not apply. If status is "YES", click the "YES" link to access Calibration files from the campaign instructions and to confirm the vehicle requires a Calibration update.

**Health Check Results**  
 Health Check does not display live data  
 Changes in vehicle condition will not update automatically  
 To update Health Check, click the Refresh button

System	Current	Pending	History	Permanent	Monitor Status	Calibration	Update
Main Body	1	-	3	-	-	-	-
Smart Key	0	-	4	-	-	-	-
Engine and ECT	0	0	0	0	Com	34715100	NO
						A4701000	NO
Hybrid Control	0	-	0	0	-	896B34701000	NO
						896B54701000	NO
						898B44701200	NO
						898B44702100	NO
Tire Pressure Monitor	0	-	-	-	-	-	-
ABS/VSC/TRAC	0	-	-	-	-	-	-
EMPS	0	-	0	-	-	-	-
Transmission Control	0	-	-	-	-	-	-
Occupant Detection	0	-	0	-	-	-	-
Air Conditioner	0	-	0	-	-	-	-
Combination Meter	0	-	0	-	-	-	-
D-Door Motor	0	-	0	-	-	-	-
P-Door Motor	0	-	0	-	-	-	-
RR-Door Motor	0	-	0	-	-	-	-
RL-Door Motor	0	-	0	-	-	-	-
Master Switch	0	-	-	-	-	-	-
SRS Airbag	0	-	0	-	-	-	-
Navigation System	0	-	0	-	-	-	-
PM1 Gateway	0	-	0	-	-	-	-
PM2 Gateway	0	-	0	-	-	-	-

2/4/2010 2:09:38 PM Campaign Available: YES

Click "YES" to access campaign instructions and Calibration files.

4. Select the appropriate Calibration file to launch the CUW.
5. Confirm Calibration applicability from the Calibration Selection Confirmation screen.

Sample Screen Shot of Update Available

Calibration Update Wizard - Screen 5/01-09

**Calibration Selection Confirmation**

Current Calibration ID and New Calibration ID does not match.

VSC/ABS/ECB

Current Calibration:

Current Cal ID	F152647123
Current Cal ID	
Current Cal ID	

New Calibration Information:

New Cal ID	F152647126
New Cal ID	
New Cal ID	
Issue Date	Jan. 18, 2010
Model Name	prius_10-11MY
Model Year	10
System	ECB
Vehicle Type	17inch

Confirm CUW application states file is authorized to update the vehicle.

✓ Selected Calibration file is authorized to update this vehicle. Press NEXT to continue.

NOTE: Refer the applicable TSB for calibration file information.

Select New Cal Next Cancel

6. If Current Calibration ID from the vehicle does not match the New Calibration ID and the CUW application states "Selected Calibration file is authorized to update this vehicle", then proceed with the update.

**NOTE CONTINUED...**

7. If the Current Calibration ID and the New Calibration ID match the update has already been performed. Proceed with filing an Inspection Claim.

Sample Screen Shot of Update Not Available

Current Calibration		New Calibration Information	
Current Cal ID	F152647106	New Cal ID	F152647106 Updated
Current Cal ID		New Cal ID	
Current Cal ID		New Cal ID	
		Issue Date	Jan. 18, 2010
		Model Name	prius_10-11MY
		Model Year	10
		System	ECB
		Vehicle Type	15inch

**X** Selected Calibration file is NOT authorized to update this vehicle.  
Use Select New Cal button to choose another Cal file or press Cancel to exit this function.

NOTE: Refer the applicable TSB for calibration file information.

Select New Cal    NEXT    Cancel

- e) After completing the ABS Actuator ECU reflash, disconnect the GR8 Battery Diagnostic Station or PSC Power Supply Charger / Maintainer (MTRPSC550SKT).

**NOTE:**

**DO NOT** start the vehicle ("IG-ON" mode with "READY" light ON) with the GR8 Battery Diagnostic Station or PSC Power Supply Charger / Maintainer (MTRPSC550SKT) connected to the vehicle.

**2. CHECK FOR DTC CODES**

- a) Connect the Techstream to the DLC3
- b) Check for DTC codes.

**NOTE:**

If any Pending, Current, and/or History DTCs are set, troubleshoot according to the repair manual.

**3. TEST DRIVE THE VEHICLE AND INSPECT FOR ANY PROBLEMS**

**- CAMPAIGN COMPLETE -**