

AB60F Transmission Clutch/Brake Damage

Service Category Drivetrain

Section Automatic Transmission/Transaxle

Market USA

Toyota Supports
ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2008 – 2011	Land Cruiser	Body Type(s): Wagon Engine(s): 3UR Transmission(s): 6AT VDS(s): HY05J, HY7AJ WMI(s): JTM

REVISION NOTICE

March 20, 2013 Rev1:

- Applicability has been updated to include 2009 – 2011 model year Land Cruiser vehicles.
- The entire bulletin has been updated.

Any previous printed versions of this bulletin should be discarded.

Introduction

Some 2008 – 2011 model year Land Cruiser vehicles may exhibit a MIL “ON” condition with transmission performance DTCs such as P2714, P0751, P0756, P0761, P0766, P0729, P0781, P0894, P2757, or P0776 and/or abnormal transmission shifting. Revised Engine Control Module/ECM (SAE term: Powertrain Control Module/PCM) software logic has been developed to address this condition. In some cases, replacement of the automatic transmission may also be required.

NOTE

Confirm correct transmission fluid level by following the procedures in the Repair Manual BEFORE ordering parts or reprogramming the ECM (PCM) since incorrect fluid level can also cause these DTCs.

AB60F Transmission Clutch/Brake Damage

Warranty Information

OP CODE	DESCRIPTION	TYPE	TIME	MODEL YEAR	OFP	T1	T2
EG1222	Reprogram ECM (PCM) Engine	4WD	0.4	2008 – 2009	89661-60G60 89661-60G61 89661-60G62 89661-60G63 89661-60G64	8A	99
				2010 – 2011	89661-60K80 89661-60K81		
Combo A	R & R Transmission Assembly		5.7	2008 – 2009	89661-60G60 89661-60G61 89661-60G62 89661-60G63 89661-60G64		
				2010 – 2011	89661-60K80 89661-60K81		

APPLICABLE WARRANTY

- This repair is covered under the Toyota Federal Emission Warranty. This warranty is in effect for 96 months or 80,000 miles, whichever occurs first, from the vehicles in-service date.
- Warranty application is limited to occurrence of the specified condition described in this bulletin.

Calibration Information

MODEL YEAR	PREVIOUS CALIBRATION ID	NEW CALIBRATION ID	VDS
2008 – 2009	360C2000 360C2100 360C2200 360C2300 360C2400	360C2500	HY05J
2010 – 2011	360D8000 360D8100	360D8200	HY7AJ

AB60F Transmission Clutch/Brake Damage

Parts Information

MODEL YEAR	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
2008 – 2011	35000-60B80	Same	Transmission Assembly	1
	35000-0W010	Same		1
2008 – 2009	89661-60G60 89661-60G61 89661-60G62 89661-60G63 89661-60G64	89661-60G65	ECM (PCM)	–
2010 – 2011	89661-60K80 89661-60K81	89661-60K82		
2008 – 2011	00289-ATFWS	Same	ATF WS	As Needed
	00451-00001-LBL	Same	Authorized Modification Labels	1

NOTE

- The ECM (PCM) should NOT be replaced as part of the repair procedure.
- Authorized Modification Labels may be ordered in packages of 25 from the Materials Distribution Center (MDC) through *Dealer Daily – Dealer Support Materials Orders*.

AB60F Transmission Clutch/Brake Damage

Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream 2.0*	ADE	TS2UNIT	1
TIS Techstream		TSPKG1	
Techstream Lite		TSLITEDLR01	

NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 8.00.034 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.
- The Diagnostic Tester is NOT recommended for flash reprogramming. Please use Techstream or an approved J2534 interface to perform flash reprogramming updates. Visit techinfo.toyota.com for more information regarding J2534 reprogramming.



SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
GR8 Battery Diagnostic Station*	00002-MCGR8	1
Transmission Fill System*	00002-11100-02	1

NOTE

Additional SSTs may be ordered by calling 1-800-933-8335.

* Essential SST.

AB60F Transmission Clutch/Brake Damage

Repair Procedure

1. Using Techstream, save Freeze Frame data, clear DTCs (if set), and perform a test drive.

- A. Does the MIL "ON" reoccur with transmission performance DTCs resetting?

NOTE

Most transmission performance DTCs are two-trip detection logic DTCs. For more information on two-trip detection, refer to TIS Techstream Help.

- B. Does the transmission display any transmission shifting issues?

- **YES to A or B** — Go to step 2.
- **NO to A and B** — Continue test driving the vehicle and try to duplicate the MIL "ON" or abnormal transmission shifting. **If unable to duplicate complaint, return the vehicle to the customer. Do NOT attempt to repair the vehicle.**

2. Check the transmission for evidence of leakage, and address as necessary.

3. Check the transmission fluid level.

Refer to the Technical Information System (TIS), applicable model and model year Repair Manual:

- [2008](#) / [2009](#) / [2010](#) / [2011](#) Land Cruiser:
Drivetrain – Automatic Transmission/Transaxle – "AB60F Automatic Transmission/Transaxle: Automatic Transmission Fluid: Adjustment"

NOTE

Incorrectly adjusted fluid level can cause transmission shifting issues and MIL "ON" conditions.

Is the transmission fluid level correct?

- **YES** — Go to step 4.
- **NO** — Adjust fluid level to correct level, then repeat step 3 to confirm correct fluid level.

4. Does the transmission fluid smell burnt or have a gritty feel from contamination?

NOTE

It is normal for WS transmission fluid to change from a clear red color when new to an opaque brown color with use.

- **YES** — Reprogram the ECM (PCM) per steps 5 – 6, then replace the transmission assembly per step 8.
- **NO** — Go to step 5.

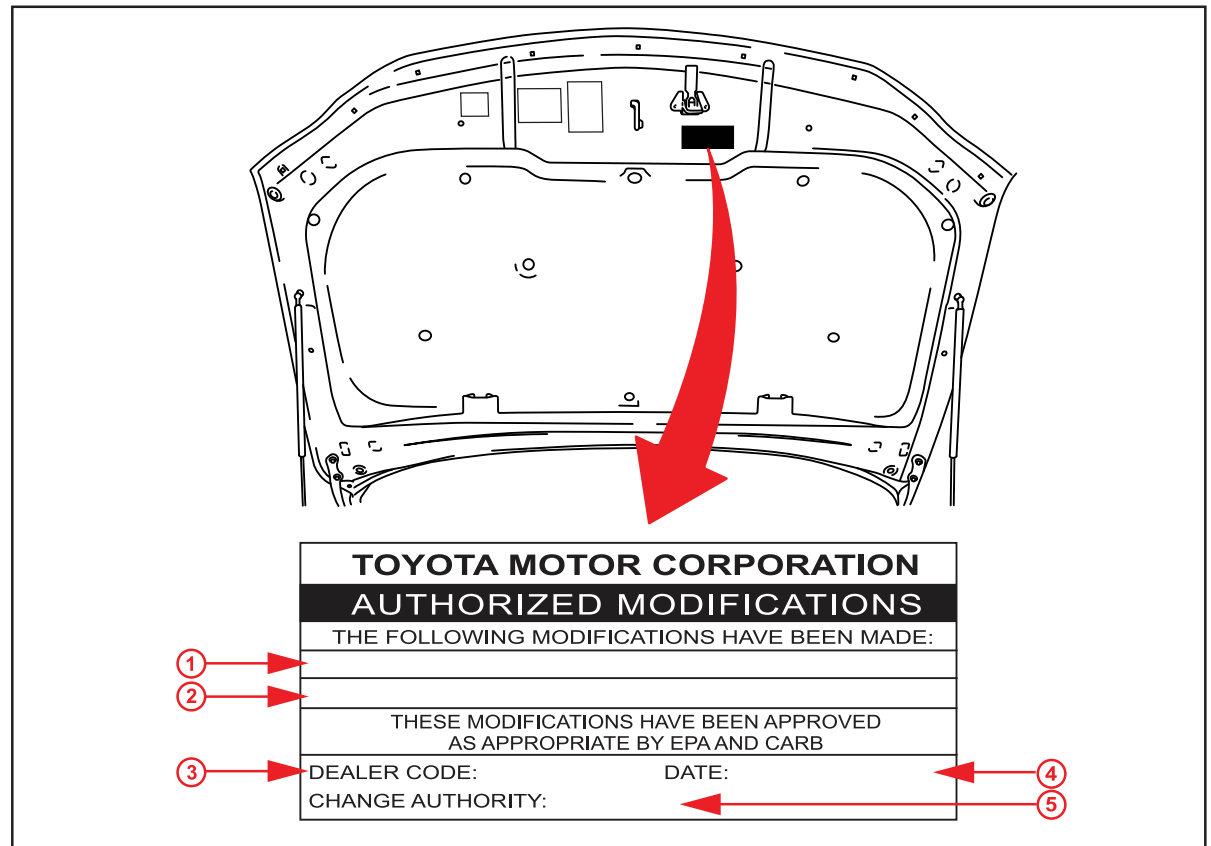
AB60F Transmission Clutch/Brake Damage

Repair Procedure (Continued)

5. Flash reprogram the ECM (PCM).

- A. Check for the Authorized Modifications Label affixed to the vehicle in the location shown in Figure 1. Confirm if the ECM (PCM) calibration has been updated. If the calibration ID listed is NOT the latest ECM (PCM) calibration, go to step B.

Figure 1. Location of Authorized Modifications Label on 2008 – 2011 Land Cruiser



1	Replacement ECM (PCM) Part Number (i.e., 89661-60G65)
2	New Calibration ID(s) (i.e., 360C2500)
3	Dealer Code

4	Date Completed
5	This SB Number

AB60F Transmission Clutch/Brake Damage

Repair Procedure (Continued)

B. Flash reprogram the ECM (PCM).

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 – Tools & Equipment – Battery Diagnostics*.

Follow the procedures outlined in Service Bulletin No. [T-SB-0012-13](#), “Techstream ECU Flash Reprogramming Procedure”, and flash the ECM (PCM) with the NEW calibration file update.

6. Install the Authorized Modifications Label.

A. Using a permanent marker, enter the following information on the label:

- ECM part number [Refer to the **Parts Information** section for the **CURRENT PART NUMBER**]
- Calibration ID(s) [Refer to the **Calibration Identification Chart** for the **NEW CALIBRATION ID**]
- Dealer Code
- Repair Date
- Change Authority [**This bulletin number**]

B. Affix the Authorized Modifications Label to the vehicle at the location shown in Figure 1. The Authorized Modifications Label is available through the MDC, P/N 00451-00001-LBL.

7. Test drive the vehicle and perform transmission initialization.

Refer to TIS, applicable model and model year Repair Manual:

- [2008](#) / [2009](#) / [2010](#) / [2011](#) Land Cruiser:
Drivetrain – Automatic Transmission/Transaxle – “AB60F Automatic Transmission/Transaxle: Automatic Transmission System: Initialization”

A. Does the MIL “ON” reoccur with transmission performance DTCs resetting?

NOTE

Most transmission performance DTCs are two-trip detection logic DTCs. For more information on two-trip detection, refer to TIS Techstream Help.

AB60F Transmission Clutch/Brake Damage

Repair Procedure (Continued)

B. Does the transmission display any transmission shifting issues?

- **YES to A or B** — Go to step 8.
- **NO to A and B** — Continue test driving the vehicle and try to duplicate the MIL “ON” or abnormal transmission shifting. **If unable to duplicate complaint after ECM (PCM) reprogramming, the repair is complete.**

8. Replace the transmission assembly.

Refer to TIS, applicable model and model year Repair Manual:

- 2008 Land Cruiser:
Drivetrain – Automatic Transmission/Transaxle – “AB60F Automatic Transmission/Transaxle: Automatic Transmission Assembly: [Removal](#) / [Installation](#)”
- 2009 Land Cruiser:
Drivetrain – Automatic Transmission/Transaxle – “AB60F Automatic Transmission/Transaxle: Automatic Transmission Assembly: [Removal](#) / [Installation](#)”
- 2010 Land Cruiser:
Drivetrain – Automatic Transmission/Transaxle – “AB60F Automatic Transmission/Transaxle: Automatic Transmission Assembly: [Removal](#) / [Installation](#)”
- 2011 Land Cruiser:
Drivetrain – Automatic Transmission/Transaxle – “AB60F Automatic Transmission/Transaxle: Automatic Transmission Assembly: [Removal \(to 08/2011\)](#) / [Removal \(from 08/2011\)](#) / [Installation \(to 08/2011\)](#) / [Installation \(from 08/2011\)](#)”

9. Confirm the repair.