TECHNICAL INSTRUCTIONS

FOR

SAFETY RECALL 90L

ACCELERATOR PEDAL MODIFICATION

2005 – 2010 MODEL YEAR TACOMA

REVISED JULY 22, 2010

TECHNICAL INSTRUCTION REVISION NOTICE:

- **July 22, 2010:**
  - **The ECM Calibration ID (CID) tables on pages 7, 8, 18, 19, 21 and 22 were updated to include PreRunner models.**
  - **An AWFM part number in Section B, step 10, "INSPECT THE FLOOR MAT" was corrected.**

Previous versions of this Technical Instruction should be discarded.

II. IDENTIFICATION OF AFFECTED VEHICLES

A. AFFECTED VIN RANGE

Model	WMI	Year	VIN Range	
			VDS	Range
TACOMA	3TM	2005	JU62N	M001038 – M008091
			KU72N	M001035 – M004841
			LU42N	M001025 – M002890
			MU52N	M001026 – M001900
		2006	JU62N	M007884 – M028771
			KU72N	M004775 – M010145
			LU42N	M002891 – M008847
			MU52N	M001878 – M003617
		2007	JU62N	M028772 – M049700
			KU72N	M010029 – M013697
			LU42N	M008667 – M013600
			MU52N	M003618 – M005093
		2008	JU62N	M049701 – M070800
			KU72N	M013698 – M017962
			LU42N	M013601 – M020109
			MU52N	M005056 – M007830
		2009	JU62N	M070182 – M091906
			KU72N	M017780 – M023467
			LU42N	M020024 – M038092
			MU52N	M007784 – M015694
		2010	JU4GN	M091570 – M106294
			KU4HN	M023403 – M026364
			LU4EN	M037788 – M051927
			MU4FN	M015695 – M021776
	5TE	2005	JU62N	Z001028 – Z144893
			KU72N	Z001077 – Z144860
			LU42N	Z001003 – Z144901
			MU52N	Z001010 – Z144879
			NX22N	Z001023 – Z144884
			NX62N	Z001659 – Z144755
			PX42N	Z001187 – Z144724
			TU22N	Z001007 – Z144886
			TU62N	Z001020 – Z144895
			TX22N	Z001048 – Z144900
			TX62N	Z001181 – Z144873
			UU42N	Z001009 – Z144899
			UX42N	Z001302 – Z144707

AFFECTED VIN RANGE CONTINUED...

Model	WMI	Year	VIN Range	
			VDS	Range
TACOMA	5TE	2009	JU62N	Z592695 – Z671264
			KU72N	Z592696 – Z668993
			LU42N	Z592756 – Z671368
			MU52N	Z592693 – Z668540
			NX22N	Z592697 – Z671320
			NX62N	Z592974 – Z670223
			PX42N	Z592698 – Z671254
			TU22N	Z592690 – Z671370
			TU62N	Z592694 – Z671356
			TX22N	Z593018 – Z671260
			TX62N	Z592970 – Z671185
			UU42N	Z592691 – Z671420
			UX42N	Z592992 – Z671203
		2010	JU4GN	Z671670 – Z749018
			KU4HN	Z671655 – Z748760
			LU4EN	Z671445 – Z749000
			MU4FN	Z671727 – Z749004
			NX4CN	Z671597 – Z749058
			NX4GN	Z671782 – Z748524
			PX4EN	Z671812 – Z749106
			TU4CN	Z671426 – Z735120
			TU4GN	Z671422 – Z749014
			TX4CN	Z671424 – Z749091
			TX4GN	Z671425 – Z749126
			UU4EN	Z671428 – Z749134
			UX4EN	Z671780 – Z749122

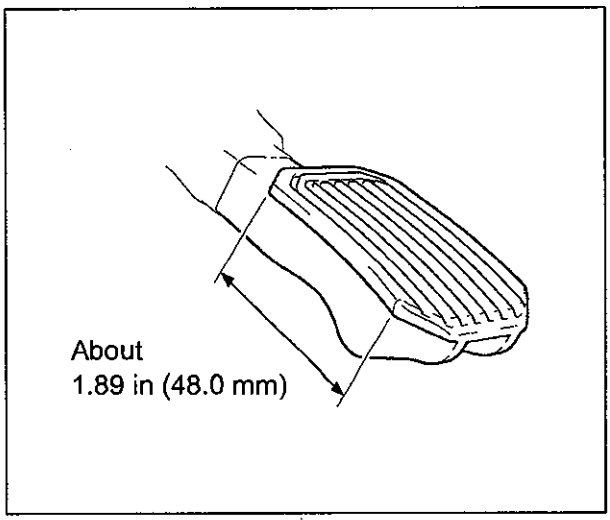
NOTE:

- 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.

V. WORK PROCEDURE

A. PRELIMINARY INSPECTION FOR 2010 MODELS ONLY

STOP **The following inspection procedure is to determine if some 2010 models produced in April 2010 may have had a remedy applied to the accelerator pedal by the factory.**



1. INSPECT THE ACCELERATOR PEDAL ASSEMBLY

- FOR 2010 MODELS PRODUCED IN APRIL 2010 -

a) Inspect the accelerator pedal length, is it approximately 1.89 in. (48 mm)?

YES

- The accelerator pedal remedy has been applied by the factory, NO modification is required.
- Confirm the vehicle has the correct floor mat following the Work Procedure.

NO

- The accelerator pedal requires modification. Make sure to perform the modification process in the Work Procedure.

2. INSPECT THE ECM CALIBRATION ID (CID)

a) Verify if the ECM has the ***NEW*** CID using the table below and on the next page.

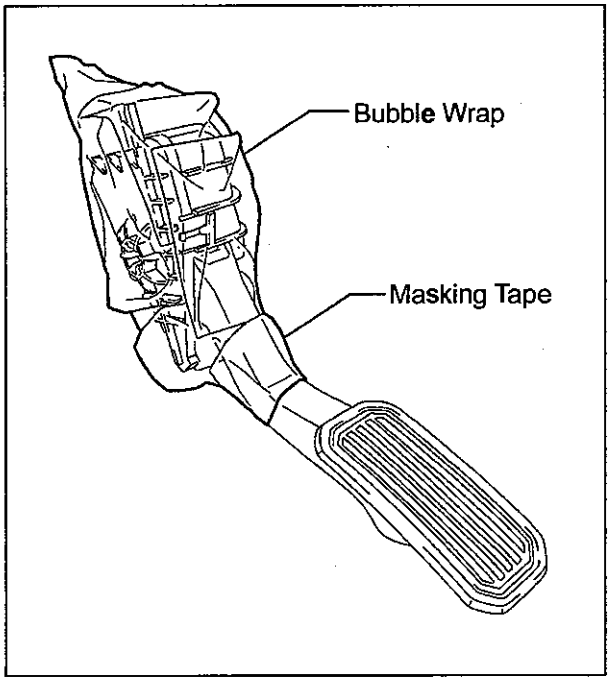
Model Year	Engine	Drivetrain	Current CID	New CID
2005	2TR	MT / 2WD	30423000	30423200
			30423100	
		MT / 4WD & PreRunner	30424000	30424200
			30424100	
		AT / 2WD	30425000	30425300
			30425100	
			30425200	
	1GR	AT / 4WD & PreRunner	30426000	30426300
			30426100	
			30426200	
		MT / 2WD	30429000	30429300
			30429100	
			30429200	
		MT / 4WD & PreRunner	30430000	30430300
			30430100	
			30430200	
			30441100	
2006	2TR	MT / 2WD	30414000	30414100
		MT / 4WD & PreRunner	30415000	30415100
		AT / 2WD	30416000	30416200
			30416100	
	1GR	AT / 4WD & PreRunner	30433000	30433200
			30433100	
		MT / 2WD	30434000	30434200
			30434100	
		MT / 4WD & PreRunner	30435000	30435200
			30435100	

B. ACCELERATOR PEDAL MODIFICATION

ACCELERATOR PEDAL HANDLING NOTES:

- **DO NOT drop**
- **DO NOT reuse an accelerator pedal that has been dropped**
- **Avoid vibration and shock**
- **DO NOT place sensor in vise**
- **Cover and uncover the sensor while in the vehicle to prevent damage and debris from entering**

CLICK HERE TO WATCH THE VIDEO BEFORE BEGINNING THE WORK PROCEDURE



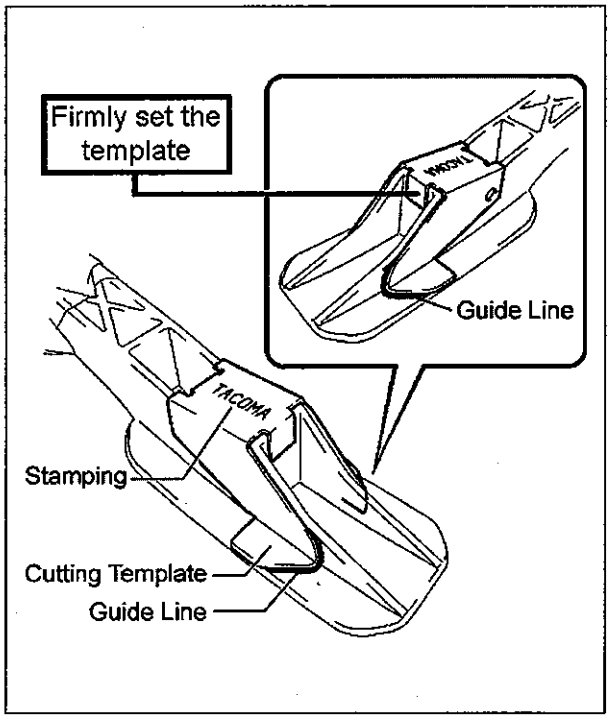
1. REMOVE THE ACCELERATOR PEDAL ASSEMBLY

Click here to watch the video to supplement this step

a) Record the radio station preset.
b) Disconnect the negative battery cable and wait 90 seconds.
c) Disconnect the accelerator pedal connector.
d) Remove the 2 bolts.
e) While still inside the vehicle, use bubble wrap and masking tape to cover and protect the sensor.

NOTE:

- **For additional information on accelerator pedal removal, please refer to TIS.**
- **Be sure to use bubble wrap to protect the sensor.**
- **Be sure to seal the bubble wrap with masking tape to prevent damage to the sensor, and cutting debris from entering the pedal's movable lock.**
- **DO NOT reuse the bubble wrap.**



2. MARK THE AREA TO BE CUT

Click here to watch the video to supplement steps 2-3

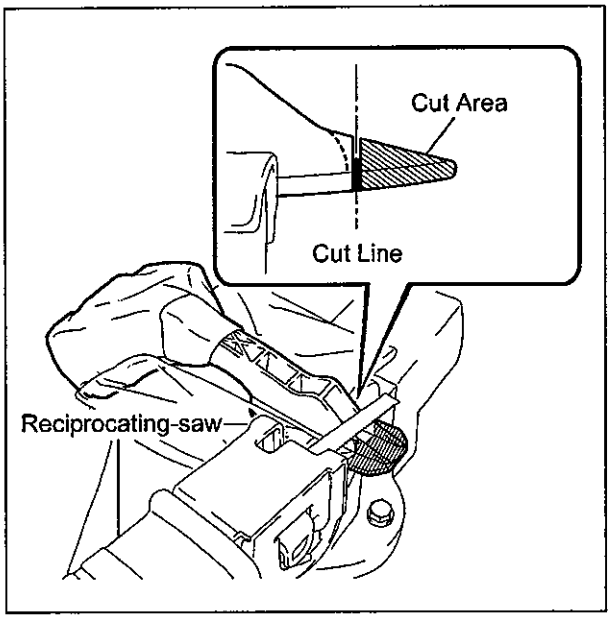
a) Firmly set the template to the pedal and scribe guide lines to outline the area to be cut.

Cutting Template:

- Color: Red
- Stamping: TACOMA

NOTE:

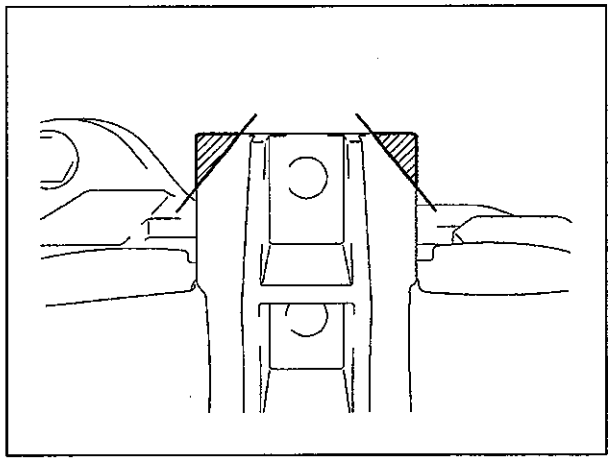
- **DO NOT mark the area beyond the template.**
- **Use a flat tip screwdriver if a scribe is not available.**
- **Make sure to use the correct cutting template by verifying the color and stamping.**
- **Never cut or sand the pedal while the template is on the pedal.**



c) Using the reciprocating-saw, cut off the lower section of the pedal as illustrated.

NOTE:

- **Always wear protective eyewear, gloves and dust mask when cutting.**
- **The cut must be straight and clean.**
- **Apply consistent pressure during cutting.**
- **Do not stop while cutting.**

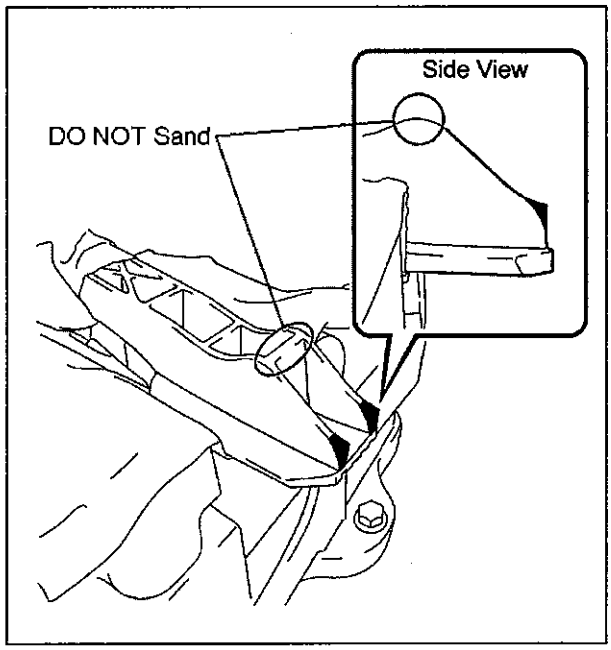


5. CUT THE CORNERS OF THE ACCELERATOR PEDAL ASSEMBLY

a) Using the reciprocating-saw, cut off the pedal corners as illustrated.

NOTE:

- **Always wear protective eyewear, gloves, and dusk mask when cutting.**
- **Guide cut must be straight and clean.**
- **Apply consistent pressure during cutting.**
- **Do not stop while cutting.**

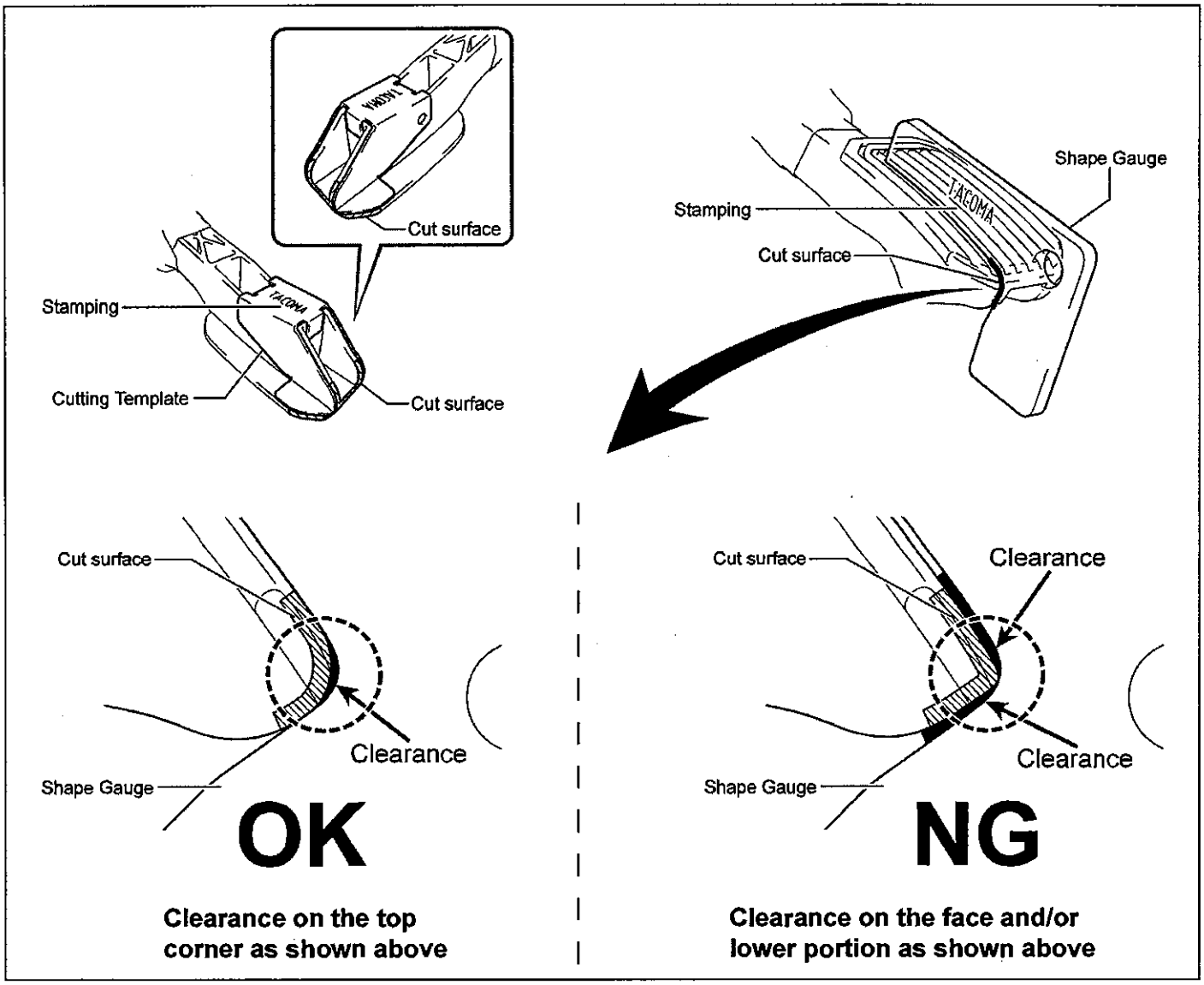


6. SAND THE RADIUS LINE

a) Using an orbital sander, sand the radius line which was scribbed and remove the sharp edges and burrs.

NOTE:

- **Always wear protective eyewear, gloves, and dust mask when sanding.**
- **DO NOT sand the back of the pedal arm as illustrated.**



8. CHECK THE SHAPE OF THE PEDAL

a) Using the correct cutting template and shape gauge, check the shape of the pedal.

Cutting Template	Shape Gauge
Color: Red	Color: Red
Stamping: TACOMA	Stamping: TACOMA

b) If the shape does NOT match the template and/or gauge, continue filing.
c) If the shape matches the template and gauge, touch the cut surface with your hand to verify it is smooth and free of burrs.

NOTE:

- **Always wear protective eyewear, gloves and dusk mask when sanding or filing.**
- **A tolerance of -1.0 mm is permissible between the final cut surface and the template.**

9. REINSTALL THE ACCELERATOR PEDAL ASSEMBLY

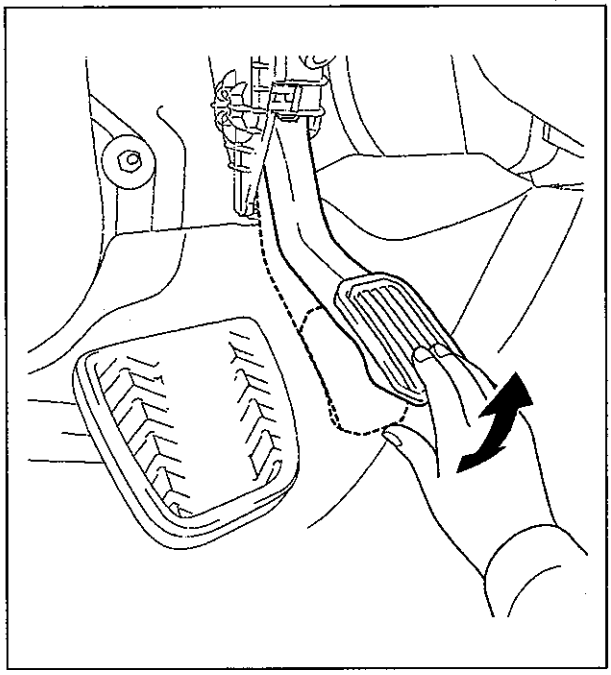
a) Remove and discard the masking tape and bubble wrap from the accelerator pedal assembly, while it is inside the vehicle.
b) Reinstall the pedal with the 2 bolts and torque to specification.

Torque Specification: 5.0 Nm (51 kgf cm, 44 in. lbf)

c) Reconnect the accelerator pedal connector.
d) Reconnect the negative battery cable.
e) Set the clock and radio station presets.
f) Reinitialize the vehicle system(s) as outlined in the repair manual on TIS for the vehicle you are working on.

NOTE

- **DO NOT reuse the bubble wrap.**
- **For additional information on accelerator pedal installation, please refer to TIS.**



c) Confirm the pedal does not get caught on the floor or floor mat during operation.
d) Confirm the pedal operates properly.

11. INSPECT THE ACCELERATOR PEDAL ASSEMBLY OPERATION

a) Connect Techstream to the DLC3.
b) Enter the following menus: Powertrain / Engine and ECT / Data List.
c) Check the values by referring to the table below.

Tester Display	Measurement: Range (Display)	Normal Condition	Diagnostic Note
Accel Sensor Out No. 1	APP sensor No. 1 voltage	Accelerator Pedal Released: 0.5 to 1.1 V	Read value with ignition switch to ON (Do not start engine)
		Accelerator Pedal Fully Depressed: 2.6 to 4.5 V	
Accel Sensor Out No. 2	APP sensor No. 2 voltage	Accelerator Pedal Released: 1.2 to 2.0 V	Read value with ignition switch to ON (Do not start engine)
		Accelerator Pedal Fully Depressed: 3.4 to 5.0 V	

NOTE:
There are two sets of Accel Sensor Out No. 1 & No. 2 parameters. Select ALL DATA (A to Z) on the pull down menu at the bottom of the screen when searching for the correct parameter set.

Model Year	Engine	Drivetrain	Current CID	New CID
2008	2TR	MT / 2WD	30446000	30446100
		MT / 4WD & PreRunner	30447000	30447100
		AT / 2WD	30438000	30448200
			30448000	
			30448100	
	1GR	AT / 4WD & PreRunner	30442000	30442200
			30442100	
		MT / 2WD	30443000	30443100
		MT / 4WD & PreRunner	30444000	30444100
2009	2TR	MT / 2WD	30446000	30446100
		MT / 4WD & PreRunner	30447000	30447100
		AT / 2WD	30438000	30448200
			30448000	
			30448100	
	1GR	AT / 4WD & PreRunner	30449000	30449300
			30449100	
			30449200	
		MT / 2WD	30450000	30450200
			30450100	
		MT / 4WD	30451000	30451200
			30451100	
2010	2TR	MT / 2WD	30460000	30460100
		MT / 4WD & PreRunner	30461000	30461100
		AT / 2WD	30462000	30462100
	1GR	AT / 4WD & PreRunner	30457000	30445000
			30457100	
		MT / 2WD	30458000	30453000
		MT / 4WD	30459000	30454000

13. CHECK FOR DTC CODES

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

NOTE:
- **A U0101 DTC may set during reprogramming. This is normal and should be cleared.**
- **For 2010 MY, a U0101 Permanent DTC may remain after DTCs are cleared. This is normal. A Permanent DTC does not illuminate the MIL and will not be cleared by a scantool. If the DTCs are cleared using Techstream but a U0101 Permanent DTC remains, there is no need to troubleshoot. The permanent DTC will clear during customer driving after completing the Universal Trip Drive Pattern.**
- **If any Pending, Current, and/or History DTCs are set, troubleshoot according to the repair manual.**

f) Confirm Customer Health Check Report information is correct.

Diagnostic Report

Vehicle Information

Vehicle: 2010 Tacoma **VIN:** 5TETU4CN5AZ675652 **Mileage:** 7787
Repair Order: 77888

Health Check Summary

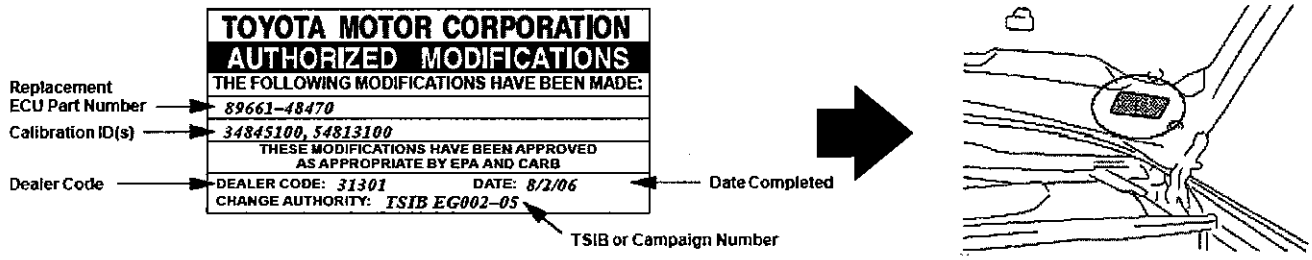
Checkpoints	Status		Comments
Powertrain Systems	All systems OK		
Chassis Systems	All systems OK		
Electrical Systems	All systems OK		
Network Systems	All systems OK		
Service Campaigns	No Action Required	90L	Performed

Performed: 3/11/10, 10:12 AM

g) Print Customer Health Check Report from TIS.
h) Sign and provide to the customer.

15. TEST DRIVE THE VEHICLE AND INSPECT FOR ANY PROBLEMS

16. AFFIX THE AUTHORIZED MODIFICATIONS LABEL



a) Using a permanent marker or ball point pen, complete the Authorized Modifications Label and attach it to the underside of the hood in front of the driver as shown.

- **Replacement ECU Part Number & Calibration ID(s)**

Model Year	Engine	Drivetrain	Replacement ECU P/N	New CID
2005	2TR	MT / 2WD	89661-04A02	30423200
		MT / 4WD & PreRunner	89661-04A12	30424200
		AT / 2WD	89661-04A23	30425300
	1GR	AT / 4WD & PreRunner	89661-04A33	30426300
		MT / 2WD	89661-04A63	30429300
		MT / 4WD & PreRunner	89661-04A73	30430300

VI. APPENDIX

A. RECALLED PARTS DISPOSAL

As required by Federal Regulations, please make sure all recalled parts (original parts) removed from the vehicle are disposed of in a manner in which they will not be reused, ***unless requested for parts recovery return.***