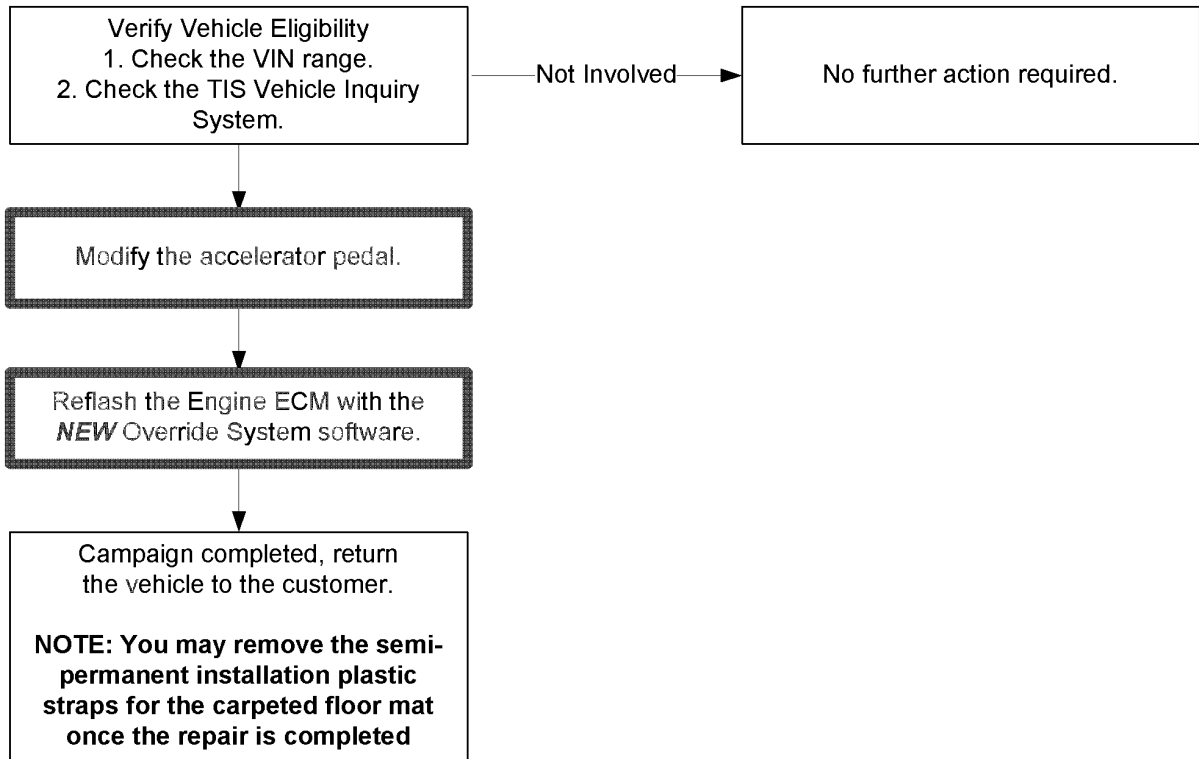


TECHNICAL INSTRUCTIONS
FOR
SPECIAL SERVICE CAMPAIGN 90L (SAFETY RECALL)
ACCELERATOR PEDAL MODIFICATION
2005 – 2010 MODEL YEAR AVALON

I. OPERATION FLOW CHART



II. IDENTIFICATION OF AFFECTED VEHICLES

A. AFFECTED VIN RANGE

Model	WMI	Year	VIN Range	
			VDS	Range
AVALON	4T1	2005	BK36B	U [REDACTED] - U [REDACTED]
		2006	BK36B	U [REDACTED] - U [REDACTED]
		2007	BK36B	U [REDACTED] - U [REDACTED]
		2008	BK36B	U [REDACTED] - U [REDACTED]
		2009	BK36B	U [REDACTED] - U [REDACTED]
		2010	BK3DB	U [REDACTED] - TBD

NOTE:

- Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this SSC, 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

Part Number	Part Description	Quantity
58571-07010	Tibia Pad	1
78118-41010	Rubber Pad	1

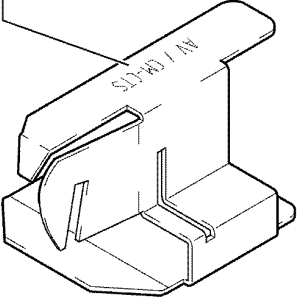
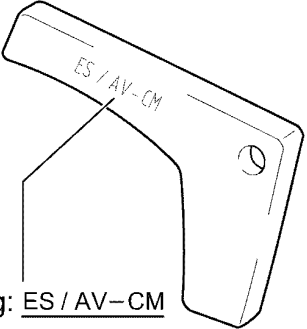
[APG]

B. TOOLS & EQUIPMENT

- Dust mask
- Hair dryer or
- Low temperature heat gun
- Hack saw
- Hand file
- Orbital sander *
- Protective eyewear
- Protective work gloves
- Reciprocating Saw *
- Scribe
- Standard hand tools
- Techstream
- Torque wrench
- Workbench with vise

* One orbital sander and one reciprocating saw will be provided to each dealership.

C. ACCELERATOR PEDAL TEMPLATE & GAUGE

Cutting Template (Color: White) ** Application: CTS Accelerator Pedal	Shape Gauge (Color: Silver) ** Application: All Accelerator Pedals
<p>Stamping: <u>AV / CM-CTS</u></p> 	 <p>Stamping: <u>ES / AV-CM</u></p>

** One cutting template and one shape gauge will be provided to each dealership.

D. MATERIALS

- Bubble wrap
- Double sided tape – (3/4" wide Scotch ® Heavy Duty Mounting Tape 110-Long)
- Industrial tape – (2" wide Gorilla Tape ®)
- Masking tape
- Sandpaper 400 grit
- Shop cloth

IV. BACKGROUND

In early October, Toyota announced it will initiate a Safety Recall Campaign (Special Service Campaign) for potential floor mat interference with the accelerator pedal. The condition involves the potential for an unsecured or incompatible driver's floor mat to interfere with the accelerator pedal and cause it to get stuck in the wide open position.

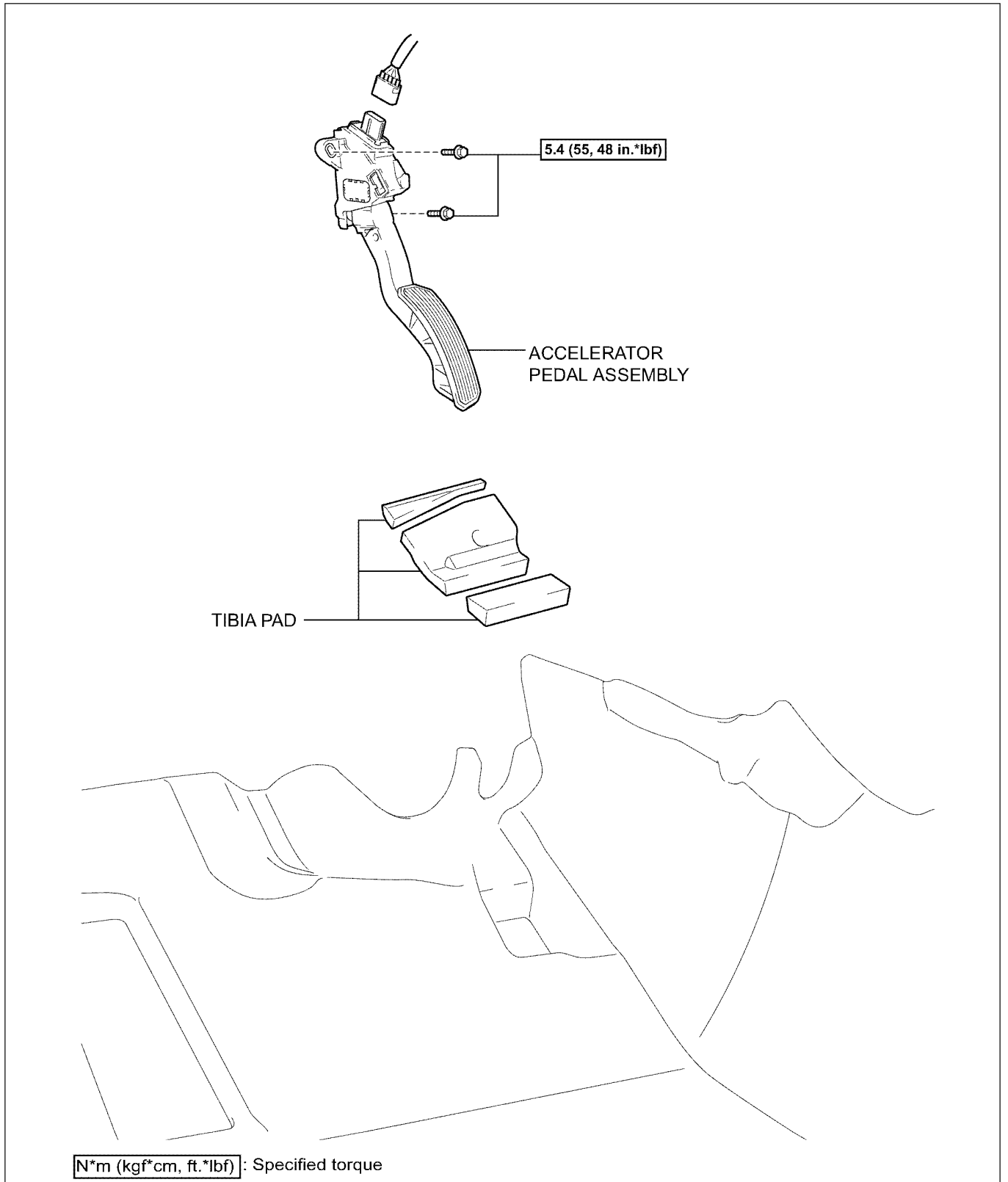
- The accelerator pedal will be modified to reduce the risk of an unsecured or incompatible floor mat from interfering with the accelerator pedal.
- Foam pads underneath the carpet in the accelerator pedal area will also be removed and/or replaced to modify the shape of the floor.
- Vehicles equipped with the optional genuine Toyota All Weather Floor Mats (AWFM) will be inspected to determine if the AWFM set is of an older design. If it is, the older design AWFM for the driver and the front passenger will be replaced with newly designed ones.
- Finally, the ECM will be reflashed with newly designed software to provide customers an extra measure of confidence. This reflash will allow the system to cut engine power in case of simultaneous application of both the accelerator and brake pedals during certain driving speeds.

[APG]

[APG]

V. WORK PROCEDURE

A. COMPONENTS



[APG]

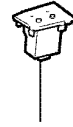


SHIFT LEVER KNOB
SUB-ASSEMBLY



POSITION INDICATOR
HOUSING ASSEMBLY

w/ Seat Heater System:

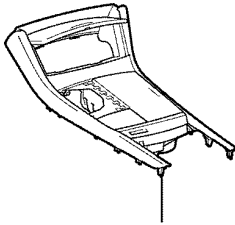


SEAT HEATER SWITCH

w/ Box:

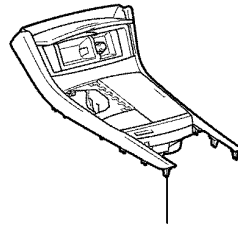


UPPER CONSOL BOX



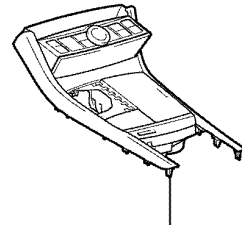
UPPER CONSOLE
PANEL SUB-ASSEMBLY

w/ Ash Receptacle:

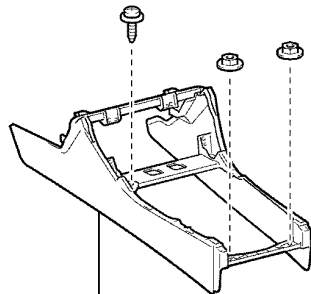


UPPER CONSOLE
PANEL SUB-ASSEMBLY

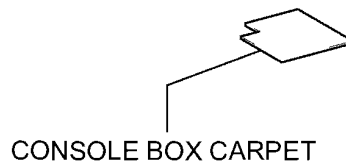
w/ Navigation:



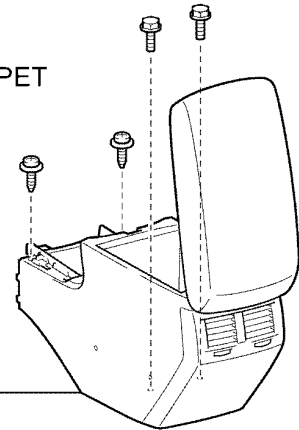
UPPER CONSOLE
PANEL SUB-ASSEMBLY



CONSOLE BOX FRONT



CONSOLE BOX CARPET



CONSOLE BOX ASSEMBLY

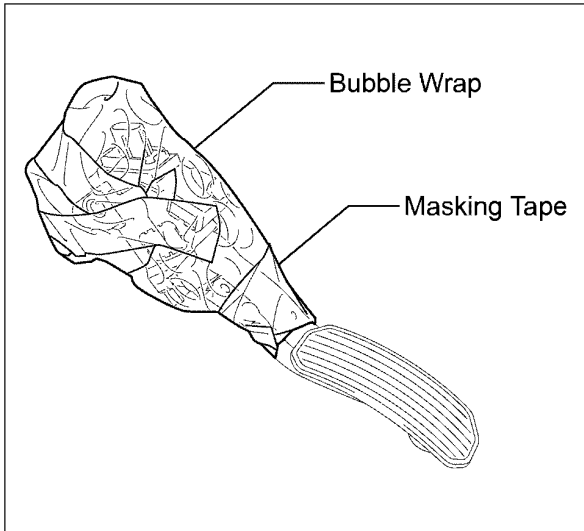
[APG]

B. REMOVE AND CUT THE ACCELERATOR PEDAL



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

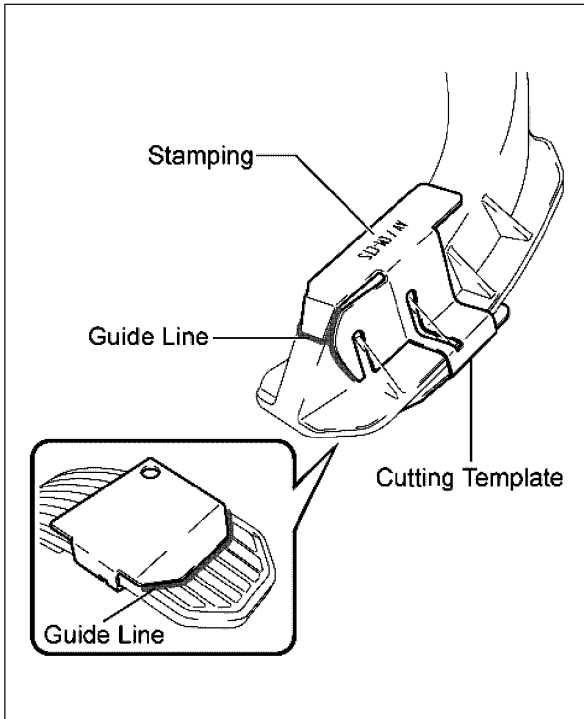


1. REMOVE THE ACCELERATOR PEDAL ASSEMBLY

- a) Disconnect the accelerator pedal connector.
- b) Remove the 2 bolts.
- c) 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

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

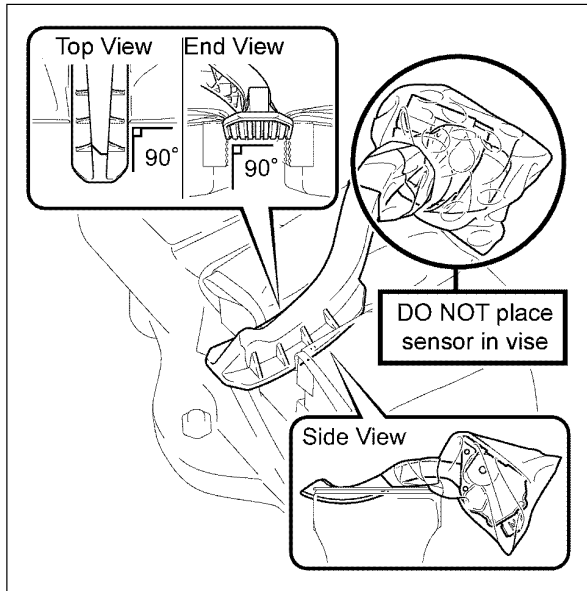
Cutting Template:

- Color: white
- Stamping: AV / CM-CTS

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.

[APG]

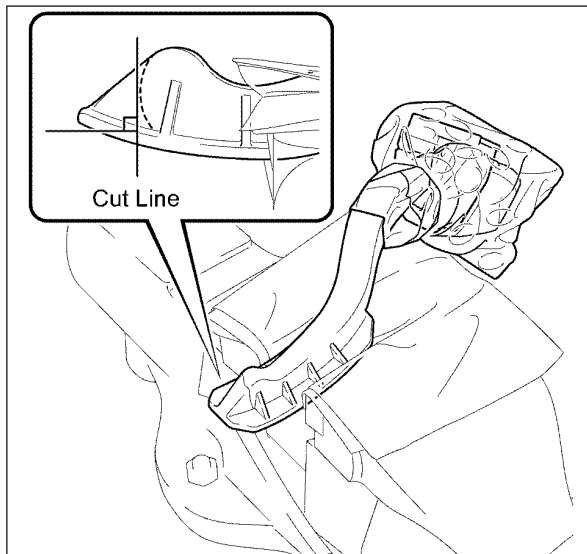


3. SECURE THE ACCELERATOR PEDAL ASSEMBLY

- a) Set the pedal in the vise at a right angle using a shop cloth while avoiding the sensor.

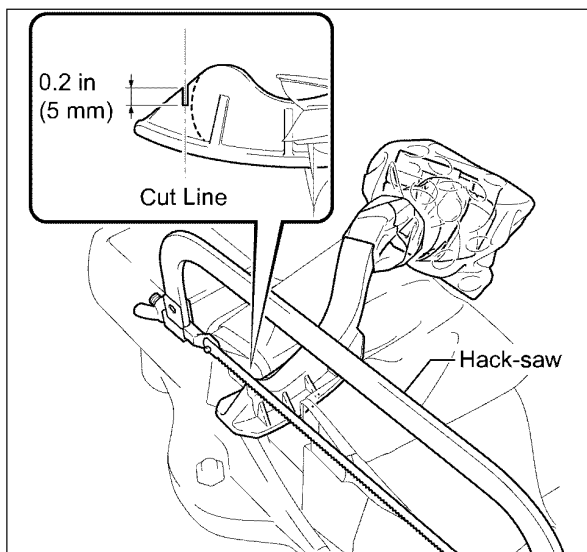
NOTE:

- DO NOT place the sensor in the vise to avoid damage.
- Firmly secure the pedal to prevent it from moving.
- DO NOT over tighten the vise.



4. CUT THE LOWER SECTION OF THE ACCELERATOR PEDAL ASSEMBLY

- a) The cut line is slightly outside from the scribed line and its positioned 90 degrees from the pedal foot pad as illustrated.

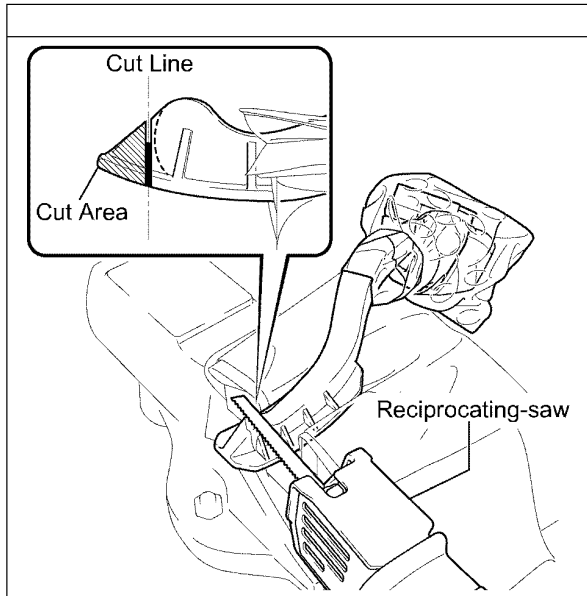


- b) Using a hack-saw, cut the pedal 0.2 in (5 mm) to create a guide cut for the reciprocating-saw.

NOTE:

- Always wear protective eyewear, gloves, and dusk mask when cutting.
- Guide cut must be straight and clean.

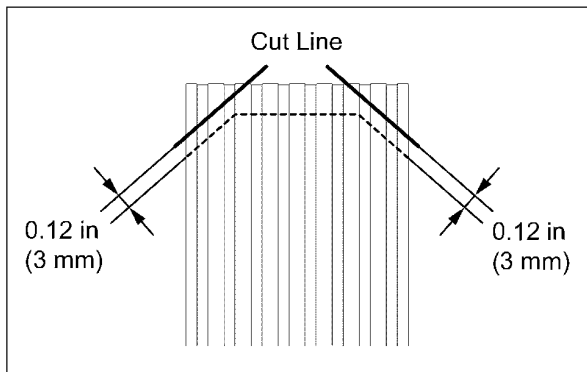
[APG]



- c) Using a 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.

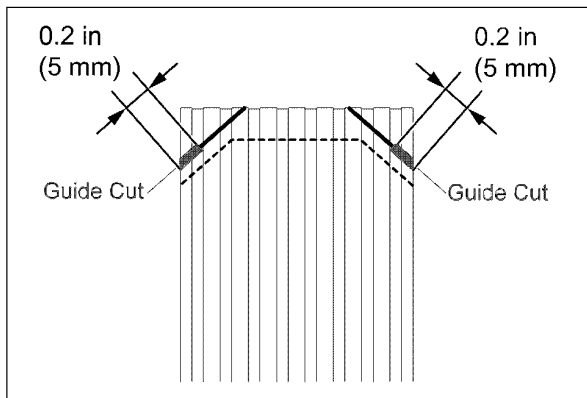


5. CUT THE CORNERS OF THE ACCELERATOR PEDAL ASSEMBLY

- a) Turn the pedal over in the vise so the top of the pedal is facing up; do not clamp the sensor portion of the pedal.
- b) The cut line is 0.12 in (3 mm) outside from the scribed line as illustrated.

NOTE:

Do not cut at the scribed line. This area will be sanded later.

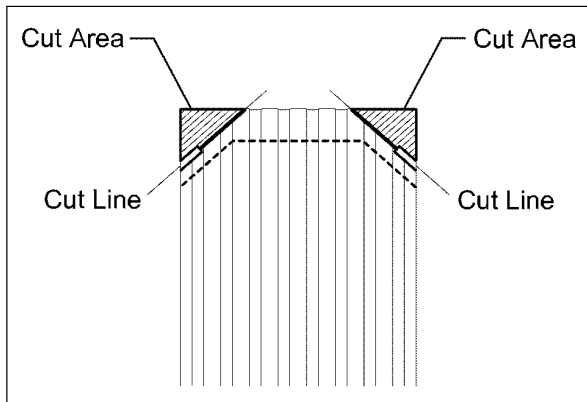


- c) Using a hack-saw, cut the pedal 0.2 in (5 mm) to create a guide cut for the reciprocating-saw.

NOTE:

- Always wear protective eyewear, gloves, and dust mask when cutting.
- Guide cut must be straight and clean.

[APG]



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

NOTE:

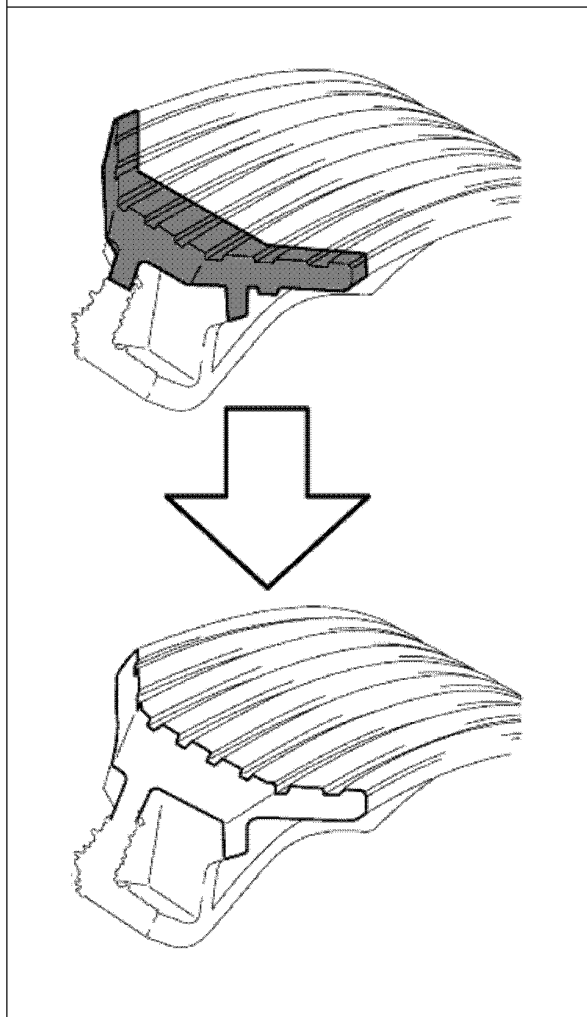
- Always wear protective eyewear, gloves, and dusk mask when cutting.
- Each cut must be straight and clean.
- Apply consistent pressure during cutting.
- Do not stop while cutting.

6. SAND THE TOP SURFACE

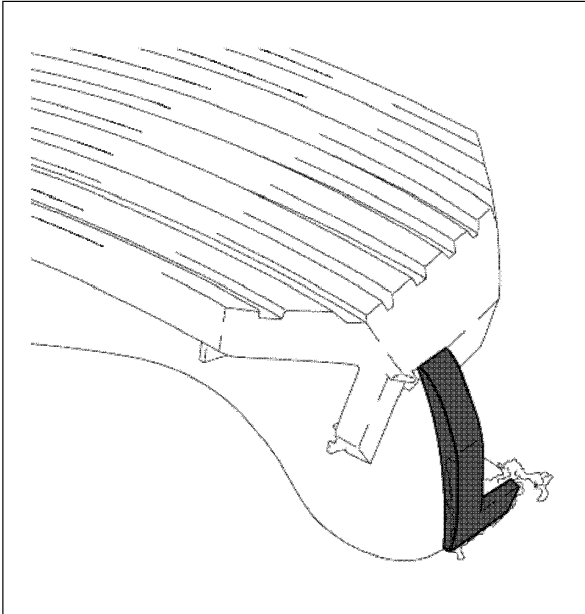
a) Using an orbital sander, sand the top surface until you reach the scribed line and remove the edges and burrs. (remove the section of the pedal indicated in red)

NOTE:

Always wear protective eyewear, gloves, and dusk mask when sanding.



[APG]

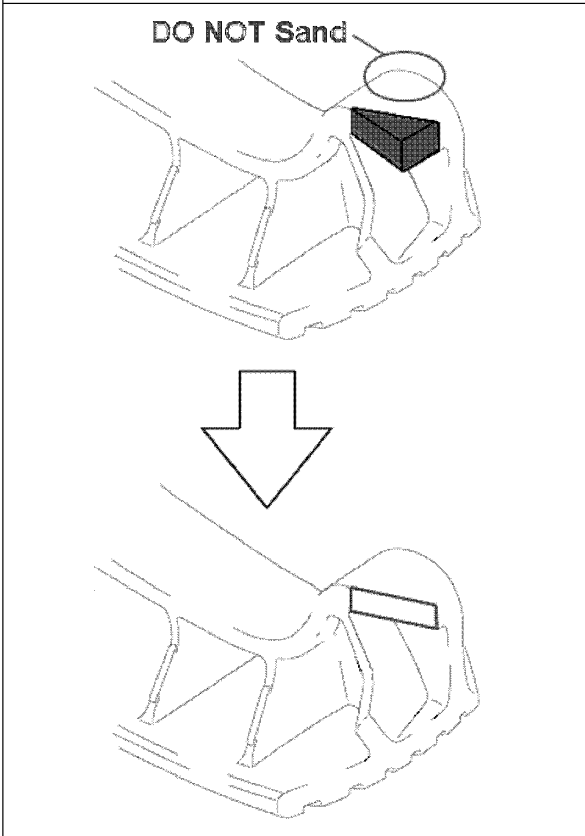


7. SAND THE RADIUS LINE

- a) Using an orbital sander, sand the scribed radius line and remove the edges and burrs.

NOTE:

Always wear protective eyewear, gloves, and dusk mask when sanding.



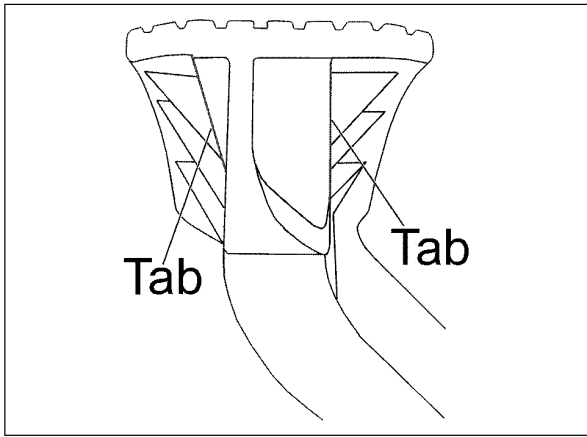
8. SAND THE LOWER CORNER NEAR THE PEDAL STOPPER

- a) Turn the pedal over in the vise so the bottom of the pedal is facing up; do not clamp the sensor portion of the pedal.
- b) Using an orbital sander and hand file, sand the lower corner near the pedal stopper.

NOTE:

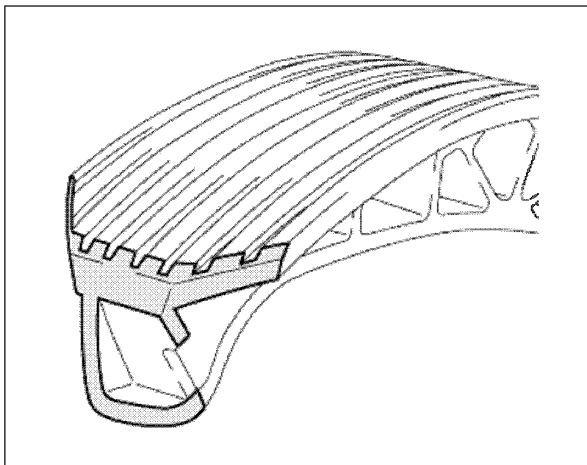
- **Always wear protective eyewear, gloves, and dusk mask when sanding.**
- **Always use a shop cloth to protect the pedal when clamping it in a vise.**
- **DO NOT sand the pedal stopper area**

[APG]



9. FILE THE PEDAL ARM TABS

- a) File the tabs on both sides of the pedal arm; file until the tabs do not extend beyond the foot pad and no longer have sharp edges.



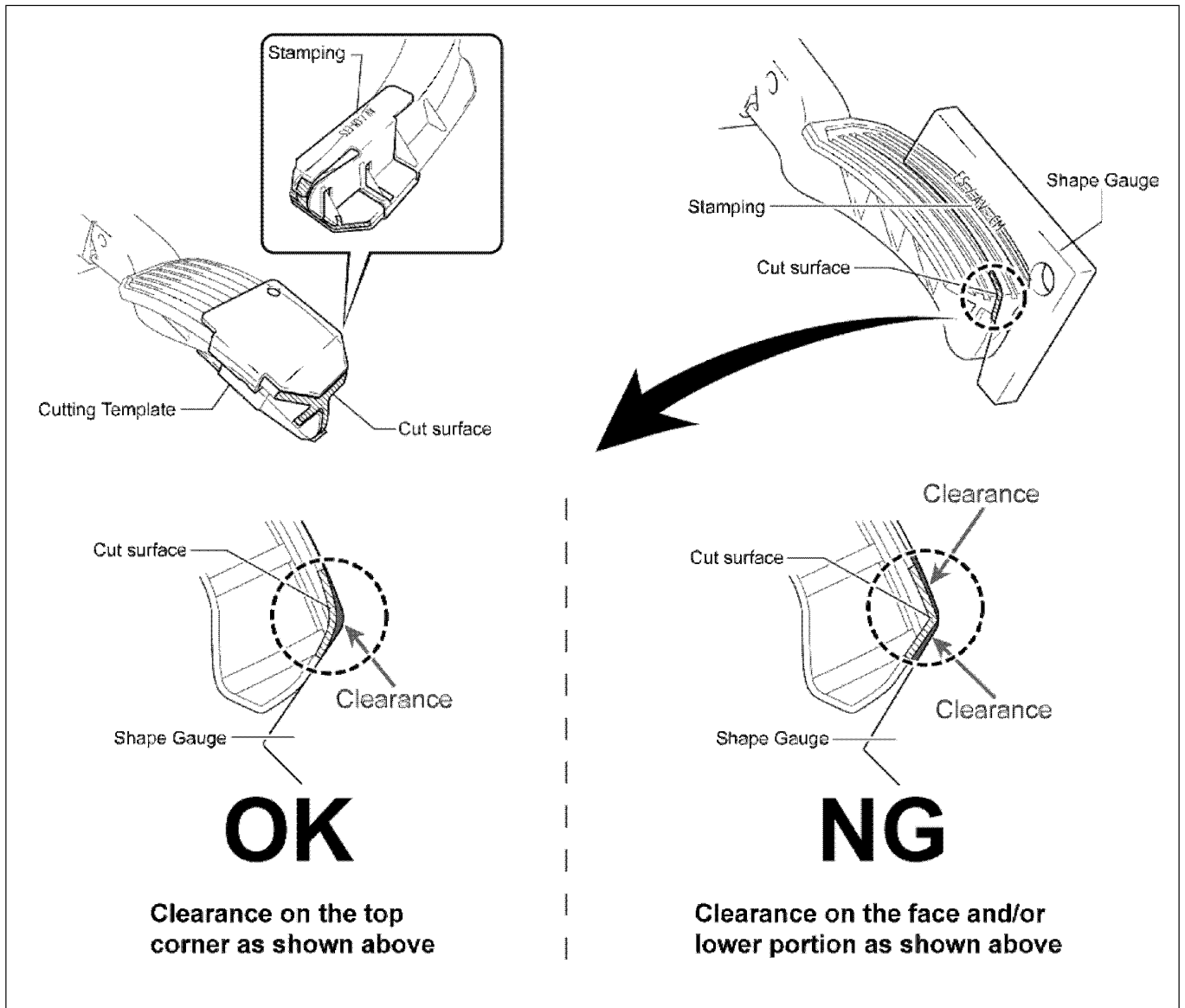
10. REMOVE ALL BURRS FROM THE CUTTING SURFACE

- a) Finish removing all burrs from the cutting surface. The cut surface along the foot pad should be rounded and not square.
- b) Finish the cut surface and all edges with 400 grit sandpaper.

NOTE:

Always wear protective eyewear, gloves, and dusk mask when sanding.





2. CHECK THE SHAPE OF THE PEDAL

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

Cutting Template
Color: White,
Stamping: AM / CM-CTS

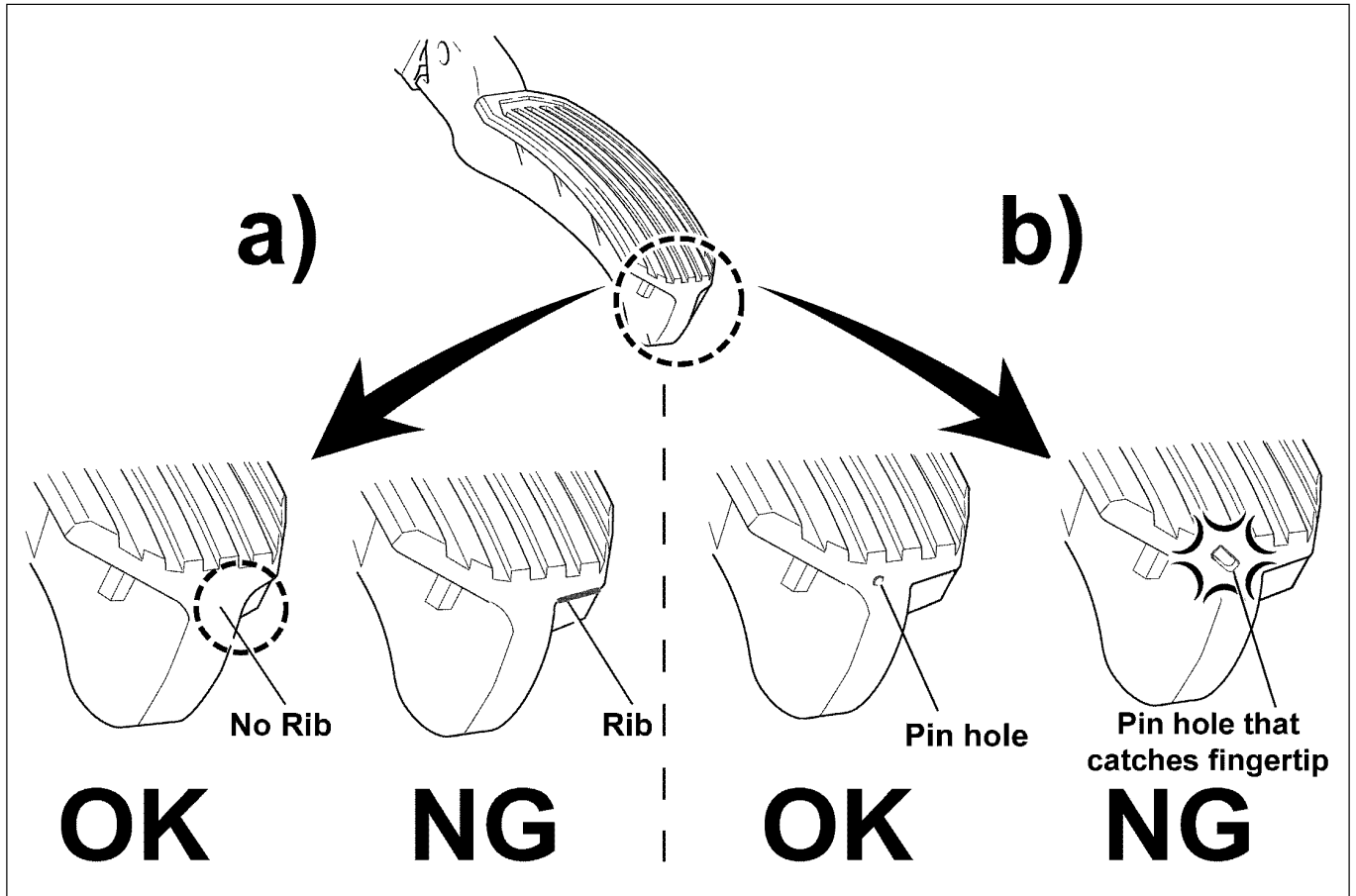
Shape Gauge
Color: Silver
Stamping: ES / AV-CM

- 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.

[APG]



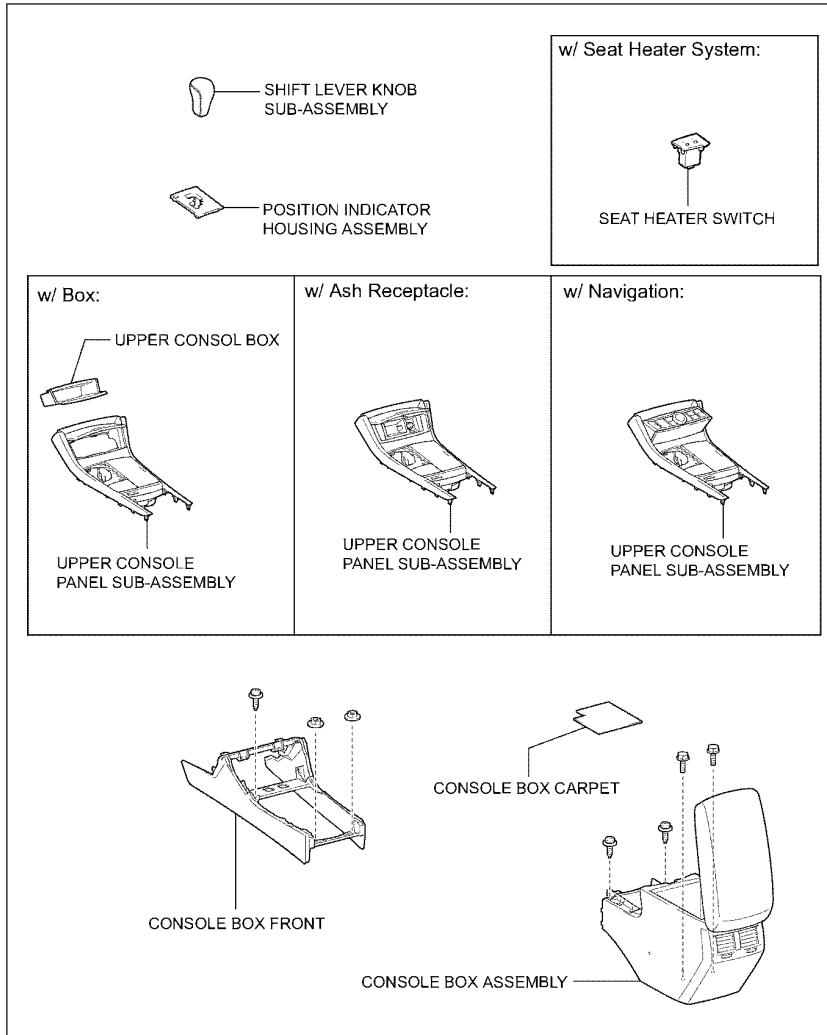
- a) Check for a rib as shown. If there is a rib, file it until it is gone.
- b) Check for a pin hole on the finished surface. If there is a pin hole, touch it with your fingertip. If the edges of hole catch your fingertip, replace and modify a new pedal.

NOTE:

Regarding the pin hole, the key point of judgment is a “smooth pedal surface”, not necessarily size.

[APG]

C. FLOOR CARPET MODIFICATION

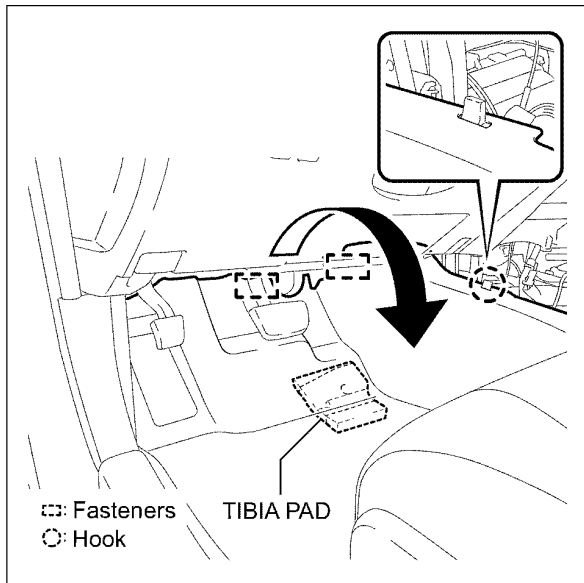


1. REMOVE THE FOLLOWING COMPONENTS

- Shift lever knob sub-assembly
- Position indicator housing assembly
- Seat heater switch (*if equipped*)
- Upper console panel sub-assembly
- Console box carpet
- Console box assembly
- Front console box

NOTE

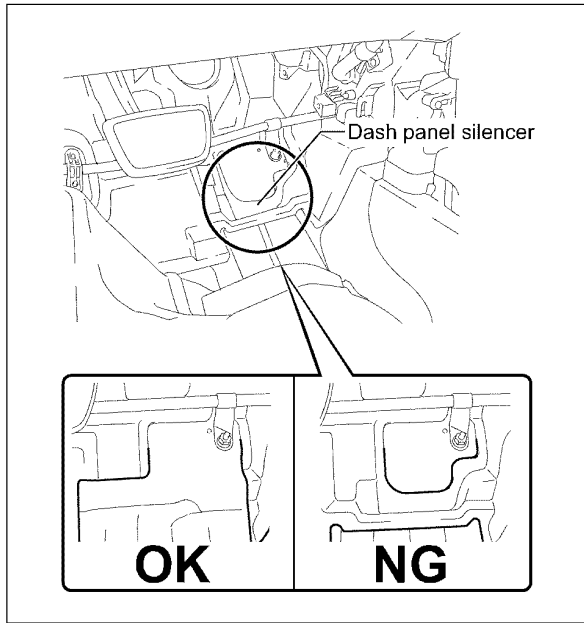
For additional information on removal of the components above, please refer to TIS.



2. PULL BACK THE FLOOR CARPET

- Disengage the 2 fasteners.
- Disengage the floor carpet from the hook and pull it back as illustrated.

[APG]



3. INSPECT THE LOWER PORTION OF THE FABRIC FLOOR SILENCING MATERIAL

- a) Inspect the lower portion of the fabric floor silencing material.
 - If OK, proceed to step 5 "RUBBER PAD APPLICATION" below.
 - If NG, please refer to APPENDIX "B" for "CUT THE FLOOR SILENCING MATERIAL"

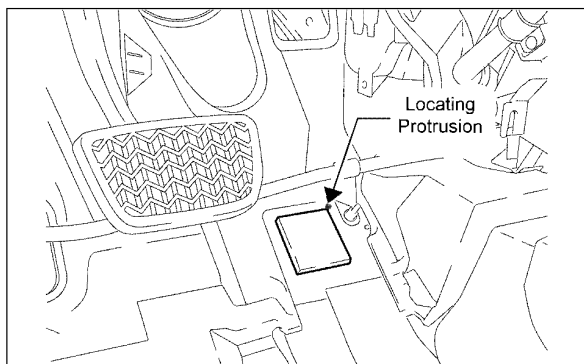
NOTE:

The fabric floor silencing material is a soft, gray, paper-like material beneath the carpet.



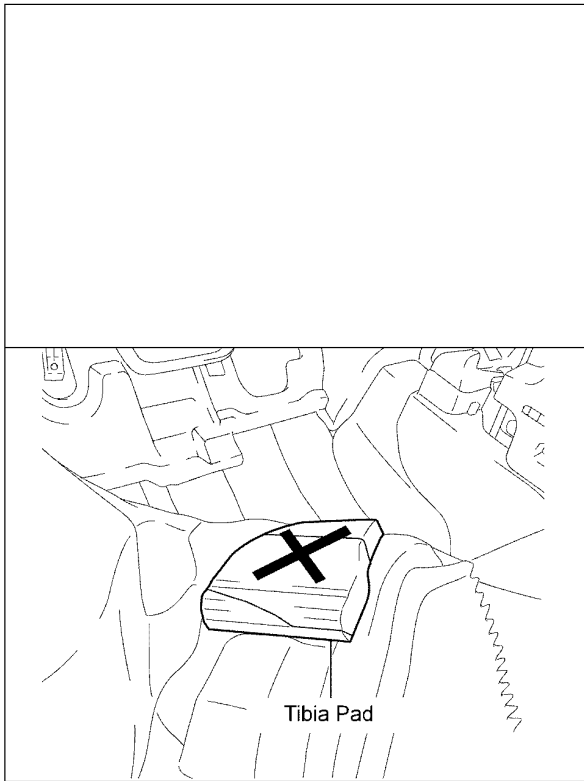
4. RUBBER PAD APPLICATION

- a) Inspect the rubber pad application area for sound deadening material.
 - If OK (no sound deadening material in pad application area), proceed to step "b" below.
 - If NG (sound deadening material found in application area), please refer to APPENDIX "C" for "REMOVE THE SOUND DEADENING MATERIAL".



- b) Clean and degrease the rubber pad application area.
- c) Peel the double sided tape cover off the **NEW** rubber pad.
- d) Apply the rubber pad to the floor pan. The upper right corner of the rubber pad needs to be positioned next to the locating protrusion.

[APG]

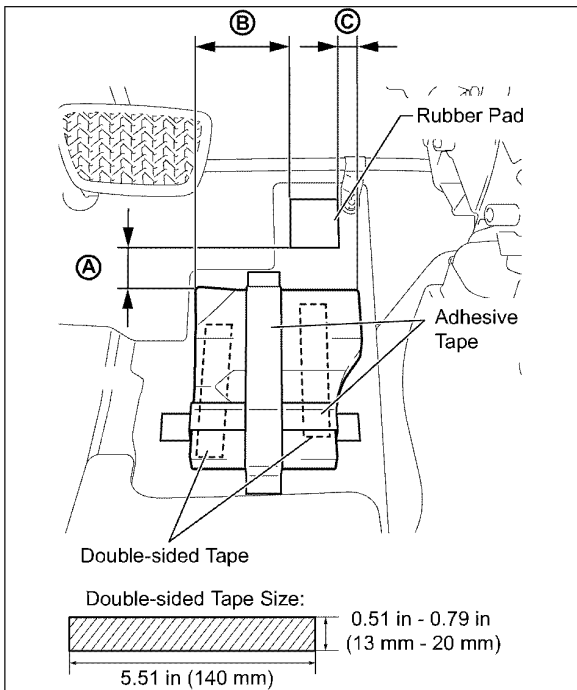


5. REMOVE THE TIBIA PADS

- a) Place an "X" mark on the tibia pads before removing. This will prevent them from being mixed up with the new pads.
- b) Using a hair dryer or a low temperature heat gun, warm up the carpet side of the 2 tibia pads until the adhesive is loose. This will make it easier to remove the 2 tibia pads from the carpet. **Pay close attention when using the hair dryer or low temperature heat gun to prevent damage to the carpet.**
- c) Remove the tibia pads. **CAUTION: DO NOT** forcefully pull the pads. Doing so may damage the carpet. If necessary, re-heat the carpet to make the adhesive more pliable.



Carefully take the time to understand Step 6 (Next step). It is necessary to correctly complete this procedure to prevent the tibia pads from slipping.



6. INSTALL THE NEW TIBIA PADS

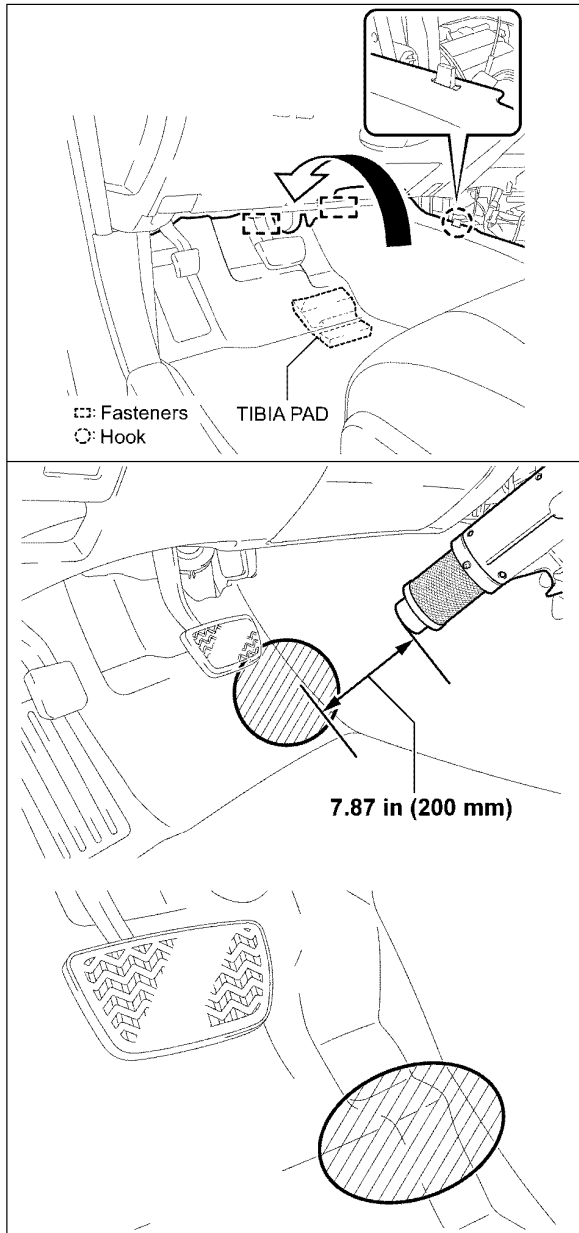
- a) Apply double sided tape to the bottom (floor pan side) of the tibia pads as illustrated.
- b) Position the **NEW** tibia pads on the floor pan as indicated using the rubber pad and chart below as a guide.
- c) Apply a piece of industrial adhesive tape from the top to the bottom of the tibia pads.
- d) Apply a second piece of industrial adhesive tape from the left to the right side of the tibia pads.

NOTE:

Both pieces of industrial adhesive tape should have a good contact surface to the floor pan.

Part	Length	
A	1.96 in	49.9 mm
B	3.25 in	82.6 mm
C	7.50 in	0.30 mm

[APG]



- e) Place the floor carpet back into position and engage the hook as shown in the illustration.
- f) Engage the 2 fasteners.

NOTE:

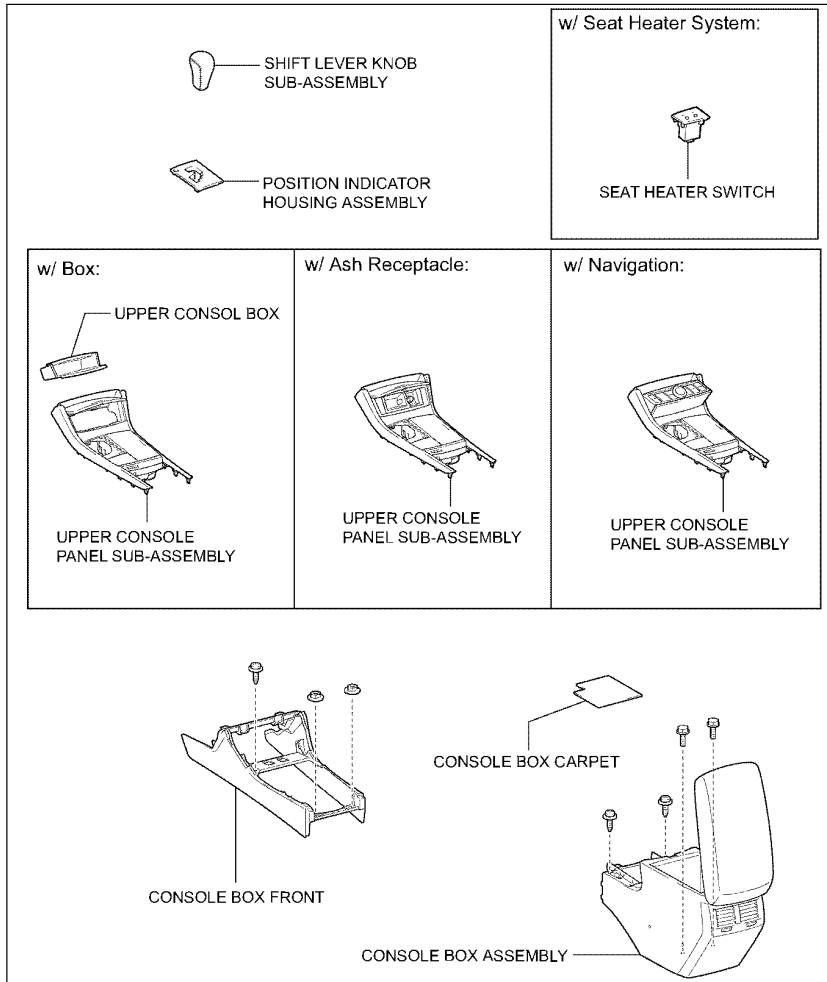
Be careful not to detach the tibia pads when placing the carpet back into position.

- g) Heat the floor carpet area for 2 minutes as shown and smooth it out by pushing it with your hand. Heat the same area again for another minute, and smooth the carpet firmly.

NOTE:

- Always wear protective gloves when heating the floor carpet.
- Keep the hair dryer/ low temperature heat gun more than 8 inches (20 cm) away from the floor carpet, and stop after 1 or 2 minute intervals. Continuous heating of the floor carpet may cause damage.
- DO NOT leave hair drier or low temperature heat gun inside the vehicle when it is hot, to prevent unintended heat damage to interior parts.

[APG]



7. REINSTALL THE FOLLOWING COMPONENTS

- Front console box
- Console box assembly
- Console box carpet
- Upper console panel sub-assembly
- Seat heater switch (*if equipped*)
- Position indicator housing assembly
- Shift lever knob sub-assembly

NOTE

For additional information on installation of the components above, please refer to TIS.

[APG]

D. REINSTALL THE ACCELERATOR PEDAL ASSEMBLY

1. 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.

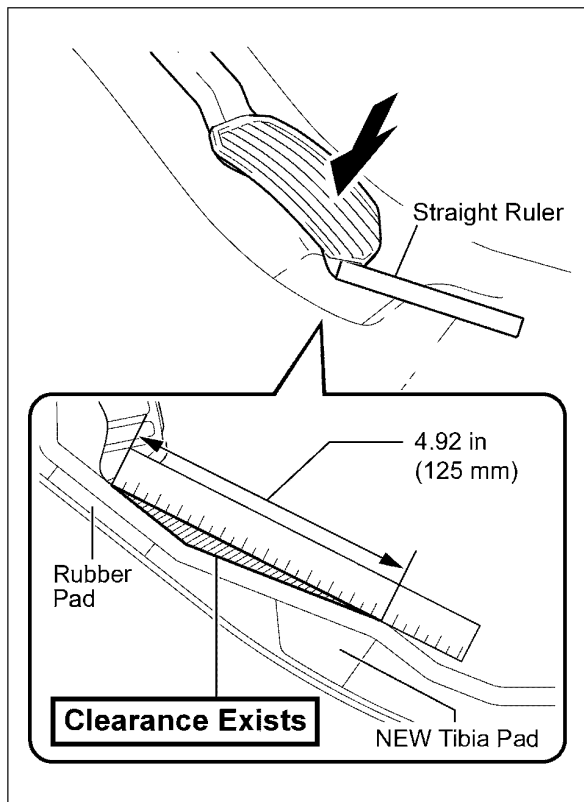
Torque Specification:

5.4 Nm (55 kgf cm, 48 in. lbf)

- c) Reconnect the accelerator pedal connector.

NOTE

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



2. INSPECT THE FLOOR CARPET

- a) With the accelerator pedal fully depressed, confirm clearance exists between the floor carpet and the straight ruler as shown.
- b) If no clearance exists, reshape the carpet again.
- c) Confirm the claw and all fasteners of the floor carpet are securely attached.

[APG]

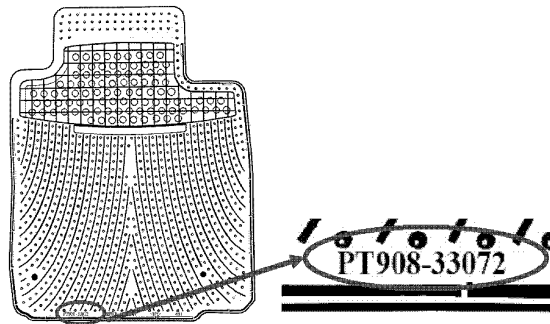
3. INSPECT ACCELERATOR PEDAL OPERATION

- a) Inspect the carpet and floor mat and clean them as appropriate.
- b) Confirm the correct floor mat for this model is secured with the retaining hooks (clips).
 - If the grommets in the floor for the vehicle are in poor condition, refer to the appropriate TSB and repair the grommets.

NOTE:

- If a Recalled All Weather Floor Mat (AWFM) has been identified, remove the AWFM from the vehicle and CUT THE RECALLED AWFM SO THAT IT CANNOT BE REUSED.
- You may remove the semi-permanent installation plastic straps for the carpeted floor mat once the repair is completed.

Locate the ten digit floor mat part number on the bottom of the back side of the mat as illustrated below. PLEASE NOTE, the floor mat part numbers are 12 digits but only the first ten are shown.



For Carpeted Floor Mats:

Utilizing the ten digit part number and the chart below, confirm the vehicle has the correct carpeted floor mat.

Part Number	Model	Type	'05	'06	'07	'08	'09	'10	Color
PT206-07090-02	Avalon	Carpeted					x	x	Ivory
PT206-07090-16	Avalon	Carpeted					x	x	Graphite
PT206-07090-17	Avalon	Carpeted					x	x	Lt Gray
PT206-07090-18	Avalon	Carpeted					x	x	Dk Charcoal
PT548-07050-10	Avalon	Carpeted	x	x	x	x	x	x	Ivory
PT548-07050-11	Avalon	Carpeted	x	x	x	x	x	x	Lt Gray
PT548-07050-12	Avalon	Carpeted	x	x	x	x	x	x	Dk Charcoal
PT548-07050-22	Avalon	Carpeted	x	x	x	x	x	x	Graphite
PT548-07070-10	Avalon	Carpeted			x	x	x	x	Ivory
PT548-07070-11	Avalon	Carpeted			x	x	x	x	Lt Gray
PT548-07070-12	Avalon	Carpeted			x	x	x	x	Dk Charcoal
PT548-07070-22	Avalon	Carpeted			x	x	x	x	Graphite

For All Weather Floor Mats (AWFM):

Utilizing the ten digit part number and the chart below, confirm the vehicle has the newly designed AWFM.

Part Number	Model	Type	'05	'06	'07	'08	'09	'10	Color
PT908-0710W-02	Avalon	All Weather	x	x	x	x	x	x	Black
PT908-0710W-14	Avalon	All Weather	x	x	x	x	x	x	Brown

NOTE:

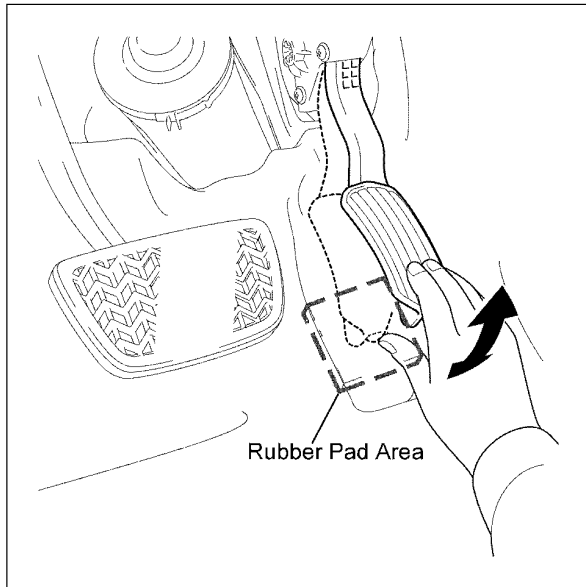
The part numbers listed above are for the 2 piece (driver & front passenger) campaign set ONLY.

DO NOT use the recalled AWFM listed below. These AWFM must be removed from the vehicle and recovered by the dealer.

Part Number	Model	Type	'05	'06	'07	'08	'09	'10	Color
PT908-07050-02	Avalon - Do not use	All Weather	x	x	x	x	x	x	Black
PT908-07050-14	Avalon - Do not use	All Weather	x	x	x	x	x	x	Brown

All recalled AWFM will be placed on Warranty Parts Recovery, and dealers will be required to return them to TMS. AWFM that are not returned will result in the claim being debited.

[APG]



- c) Confirm the pedal does not get caught on the floor or floor mat during operation.
- d) Confirm the pedal operates properly.
- e) Confirm that the bottom of the pedal contacts the rubber pad area when the accelerator pedal is fully depressed.

4. INSPECT THE ACCELERATOR PEDAL ASSEMBLY OPERATION

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

Tester Display	Measurement: Range (Display)	Normal Condition	Diagnostic Note
Accelerator Opening Angle	Accelerator Opening Angle	Accelerator Pedal Released: 0%	-
	Min: 0%, Max: 100%	Accelerator Pedal Fully Depressed: 100%	

Model Year	Current CID	New CID
2005	30701000	30701200
	30701100	
2006 - 2007	30705000	30707300
	30705100	
	30707000	
	30707100	
2008 - 2009	30707200	30708200
	30708000	
	30708100	
2010	30710000	30710100

5. REFLASH THE ECM

- a) Reflash the ECM with the **NEW** Override System software following TSIB SS002-07.
- b) For Calibration ID, please refer to the table on the left.

6. PERFORM HEALTH CHECK

- a) Connect Techstream to the DLC3.
- b) From the System Select screen select Health Check.
- c) Check for DTC codes.

NOTE:

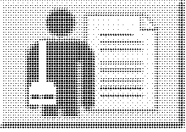
If DTC(s) are displayed, verify the code(s) and record freeze frame data, then perform repairs as necessary.

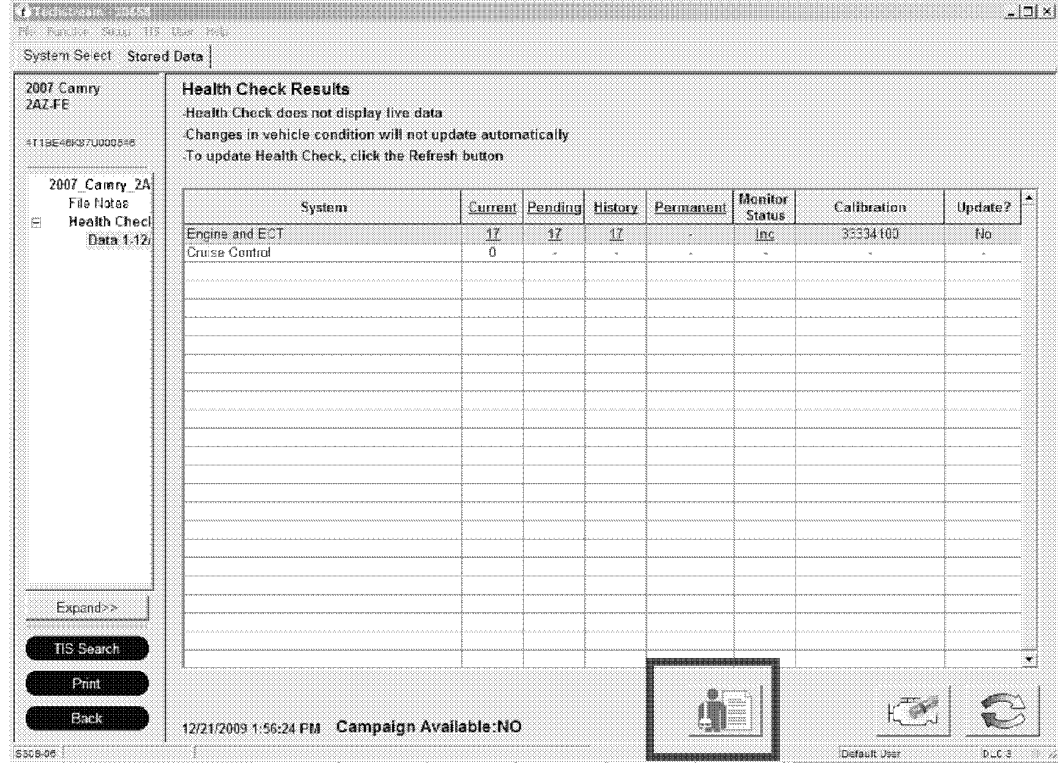
[APG]

7. PRINT CUSTOMER HEALTH CHECK REPORT

- a) From the Health Check Results screen select the Customer Health Check Report button (TIS will launch when button is pressed).

Customer Health Check Button





2007 Camry
2AZ.FE
4T1BE48K37J000918

2007 Camry 2A
File Notes
Health Check
Data 1:12

Expand>>


TIS Search
Print
Back

12/21/2009 1:56:24 PM Campaign Available:NO

Default User DUC 3

System	Current	Pending	History	Permanent	Monitor Status	Calibration	Update?
Engine and ECT	17	17	17	-	Inc	3334100	No
Cruise Control	0	-	-	-	-	-	-

- b) Log in to TIS.
- c) Input Vehicle Mileage and Repair Order number.
- d) Check the "Performed" radio button for the 90L campaign and any other campaigns completed during this service event.
- e) Select the Report button.



Diagnostic Report

Vehicle Information

Mileage: 7707


Repair Order: 77088

Our systems show the following campaigns are outstanding. Have any of these campaigns been completed? (Check for SSC door label if unsure.)

90L Performed Not Performed

[APG]

d) Confirm Customer Health Check Report information is correct.

		<h1>Diagnostic Report</h1>	
Vehicle Information			
Vehicle: 2007 Camry	VIN: 4T1BE46K07A	Mileage: 7787	
Repair Order: 77698			
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: 12/21/09, 3:49 PM			

- e) Print Customer Health Check Report from TIS.
- f) Sign and provide to the customer.

8. TEST DRIVE THE VEHICLE AND INSPECT FOR ANY PROBLEMS

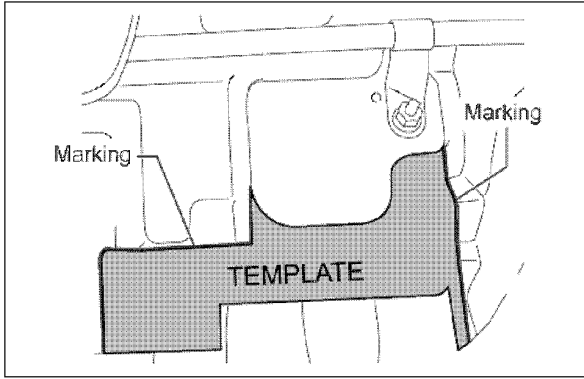
VI. APPENDIX

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.***

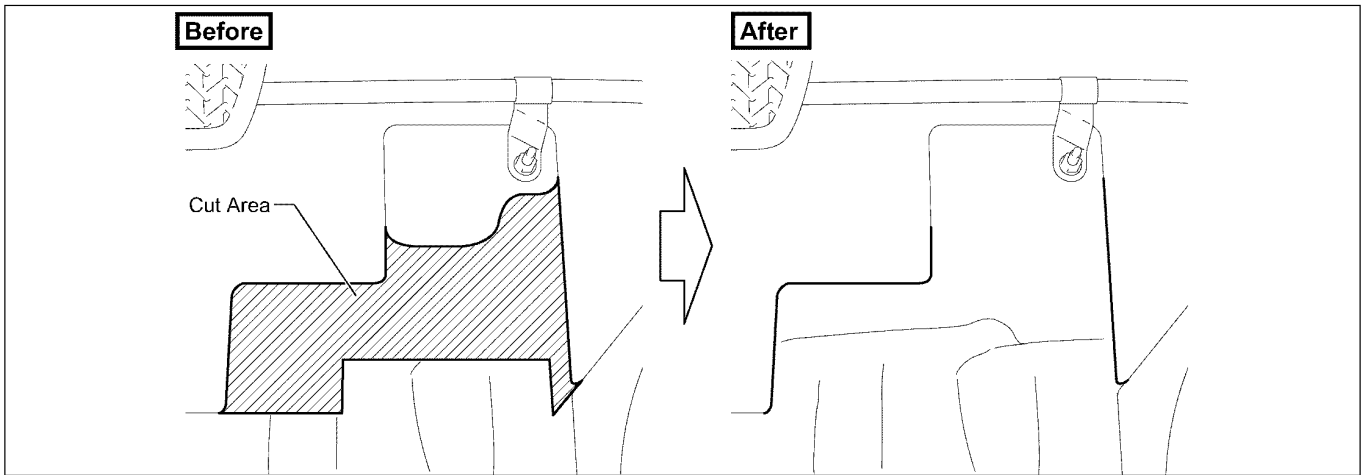
[APG]

B. CUT THE FABRIC FLOOR SILENCING MATERIAL



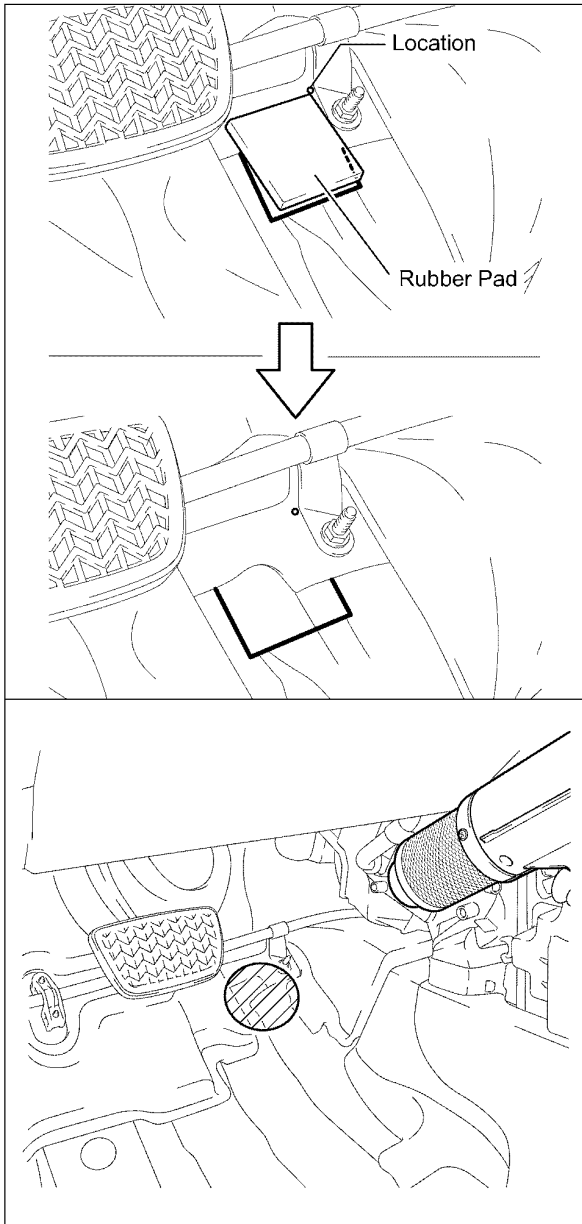
- a) Photocopy and cut out the template located at the end of the appendix.

- b) Hold the template against the dash panel silencer and mark the template outline with a pen.



C. REMOVE THE SOUND DEADENING MATERIAL

[APG]



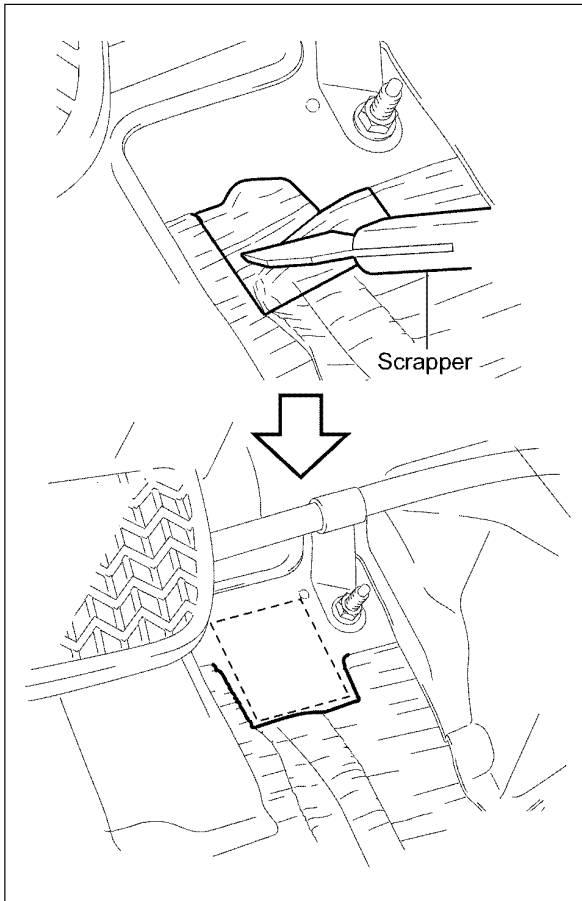
1. Temporarily place the rubber pad on the floor panel as shown, and outline the pad on the sound deadening material with a ball point pen.

2. Using a hair dryer or low temperature heat gun, warm up the sound deadening material until it becomes soft.

NOTE:

- **Make sure not to damage the fabric floor silencing material.**
- **Pay close attention when using the hair dryer or low temperature heat gun to prevent damage to the carpet.**

[APG]



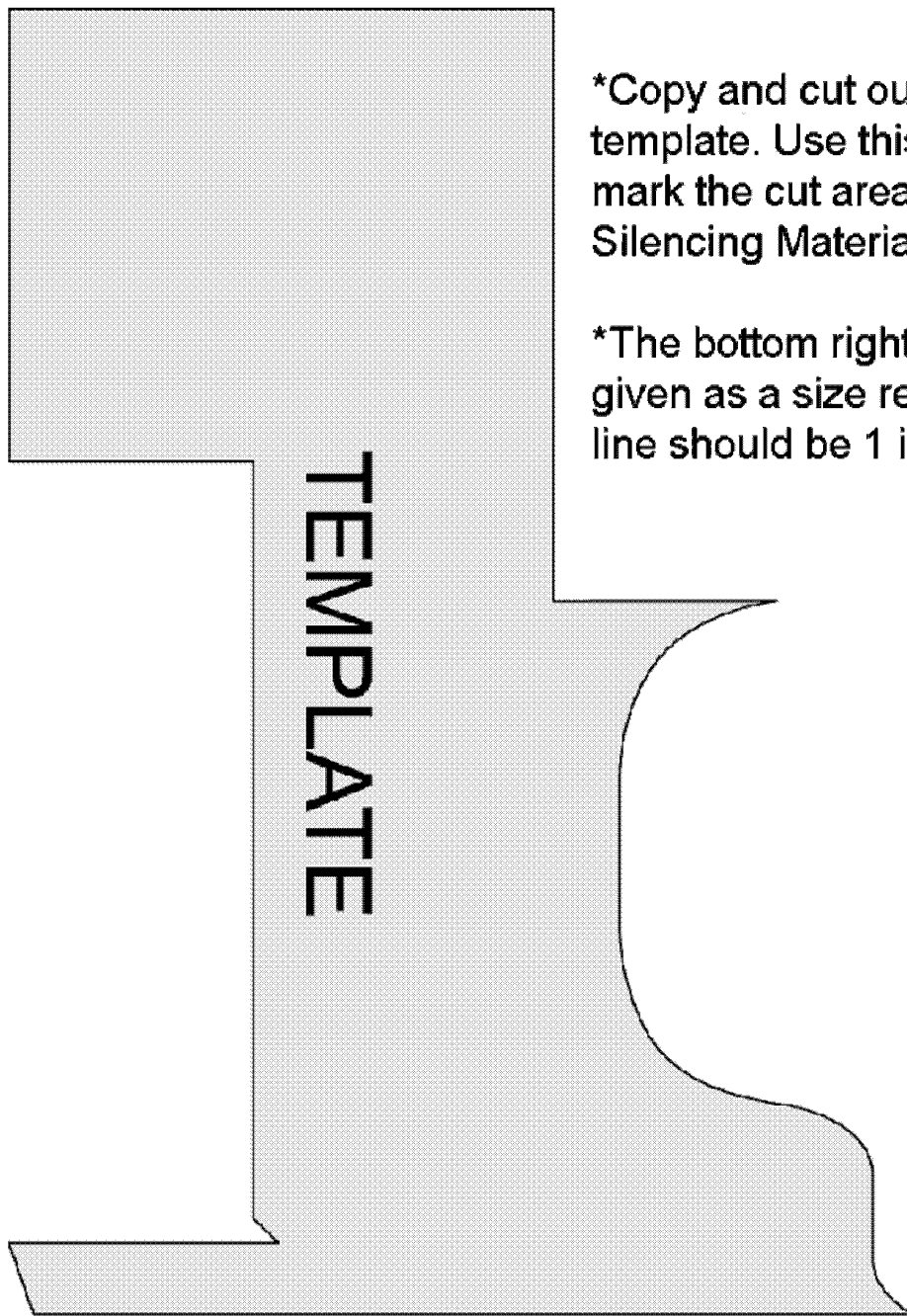
3. Using a scraper, remove the fabric floor silencing material from the rubber pad application area.
4. Remove any loose sound deadening material from the rubber pad application area.

NOTE:

- Wear protective gloves during the scraping process.
- Warm up the sound deadening material again, if it becomes hard during removal.
- Remove the sound deadening material until the rubber pad application surface is smooth.
- Make sure not to damage the paint film on the floor panel when scraping.
- Apply touch up paint if the paint film was damaged.

[APG]

Floor Silencing Material Template



*Copy and cut out this template. Use this template to mark the cut area on the Floor Silencing Material.

*The bottom right guide line is given as a size reference. This line should be 1 inch in size.

1 inch
(25.4 mm)

1 inch
(25.4 mm)

[APG]

[APG]