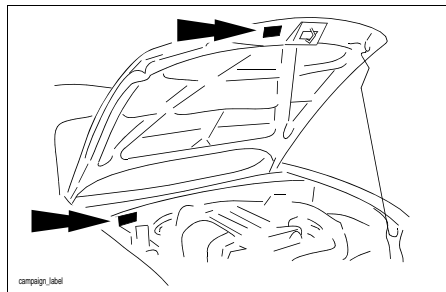


2009-2010 MAZDA6 2.5L ENGINE FUEL TANK SAFETY AND EMISSION RECALL 6211B

A. VEHICLE INSPECTION PROCEDURE

1. Verify that the vehicle is within the following ranges:
 - Year Range (2009-2010) Model (Mazda6 2.5L vehicles) Build Date Range (From April 8, 2008 through February 8, 2010)
 - VIN Range: (2009: 1YVHP****95M00057 – M52255; 2010: 1YVHZ****A5M00013 – M33391).
 - If the vehicle is within the above range, proceed to step 2.
 - If the vehicle is not within the above range, return the vehicle to the customer or inventory.
2. Perform a Warranty Vehicle Inquiry using your eMDCS System and inspect vehicle for a Campaign Label **6211B** attached to the vehicle's hood or bulkhead. Refer to eMDCS System - Warranty Vehicle Inquiry Results table below.

NOTE: Verify Recall number as the vehicle may have multiple Recalls.



CAMPAIGN LABEL

CAMPAIGN NO: _____

DEALER CODE: _____

DATE: // /

P/N 9999-95-065A-06

1326b

eMDCS System - Warranty Vehicle Inquiry Results

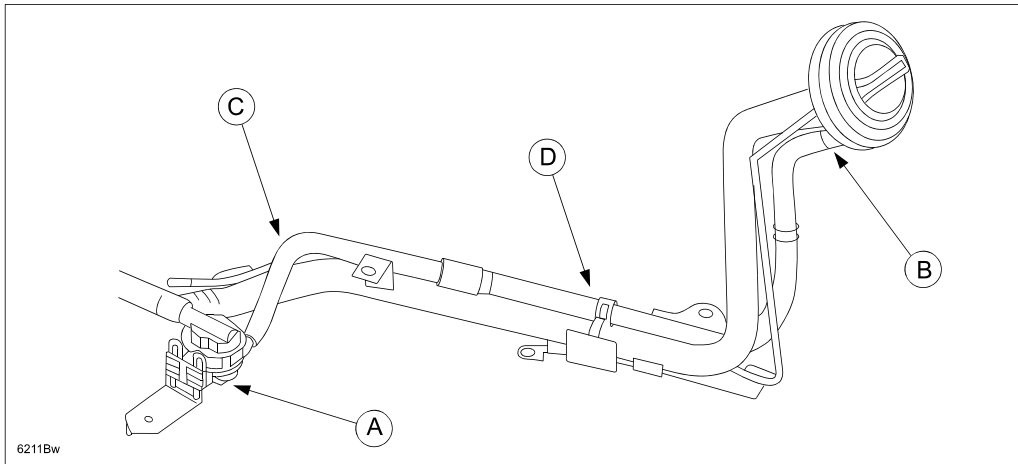
If eMDCS displays:	Campaign Label is:	Action to perform:
6211B OPEN	Present	Contact the Warranty Hotline at (877) 727-6626 to update vehicle history.
	Not present	Proceed to "B. INSPECTION AND REPAIR OUT-LINE".
6211B CLOSED	Present	Return vehicle to customer.
	Not present	Proceed to "F. CAMPAIGN LABEL INSTALLATION".
6211B is not displayed	Does not apply	Recall does not apply to this vehicle. Return vehicle to customer.

B. INSPECTION AND REPAIR OUTLINE

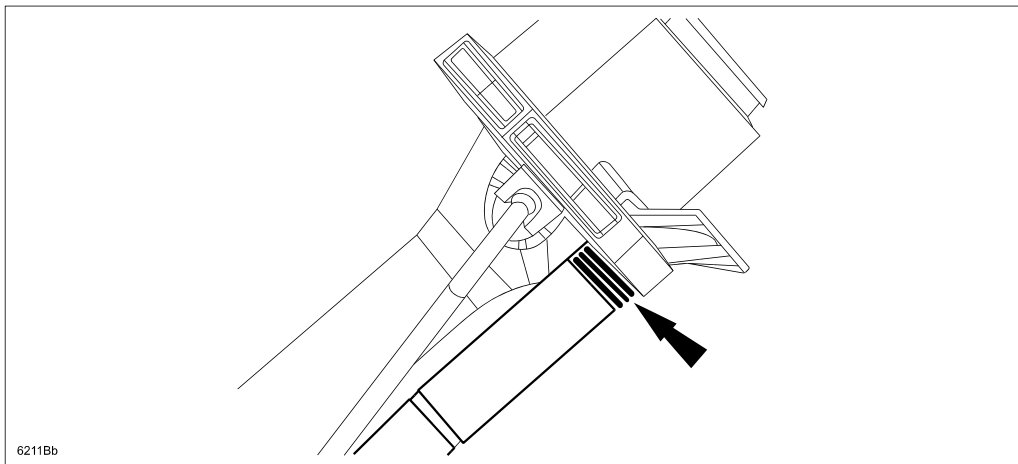
1. Visually inspect inside of the evaporative chamber (A) and vent port (B) to verify if spider webs are present or not. Insert the SST (Spider Brush: Part Number "MAZ6BRUSH") into the vent port and short ventilation hose (C) and long ventilation hose (D) and verify if spider webs are present or not.

NOTE: This operation doubles as cleaning of the vent port and hoses.

- If spider webs are not found during the inspection, perform Step 2 (install spring) and Step 3 (reprogram PCM) only.
- If spider webs are found during the inspection, perform Step 2 (install spring), Step 3 (reprogram PCM) and Step 4 (replace fuel tank/evaporative chamber).

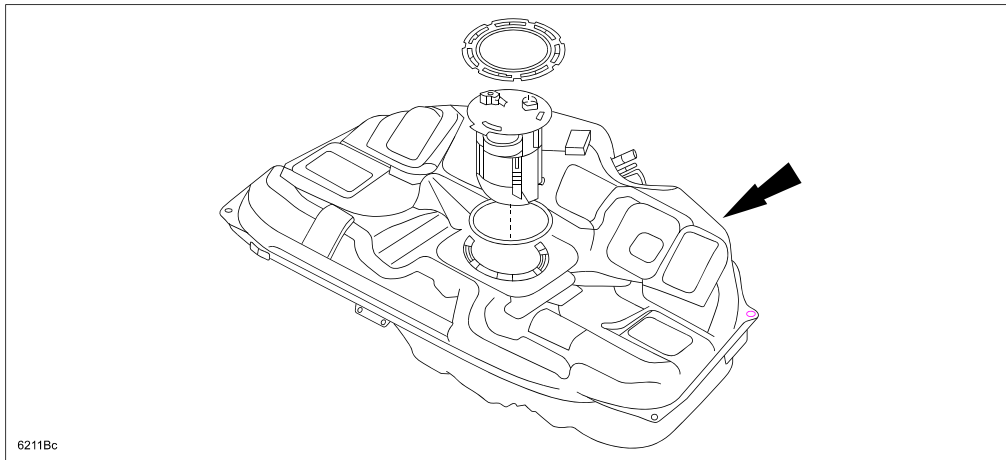


2. Install a new spring to cover the vent port.

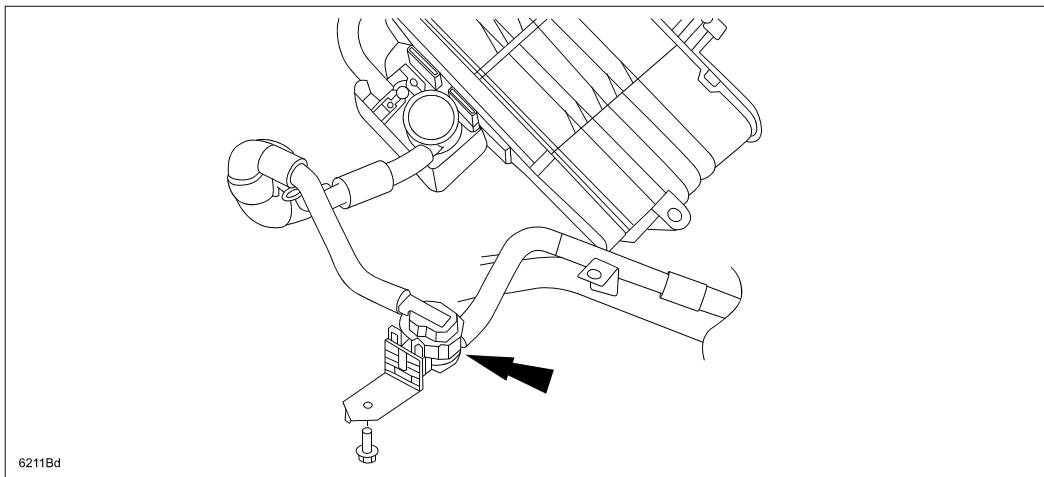


3. Reprogram the PCM.

4. Replace the fuel tank and evaporative chamber with new parts.
 - a. Drain all fuel from the fuel tank, then replace the fuel tank and related parts with new ones.



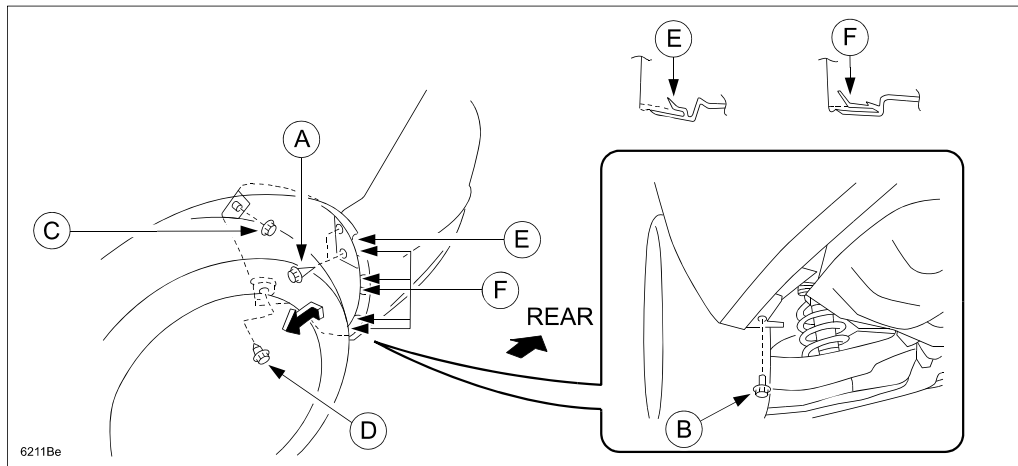
- b. Replace the evaporative chamber with a new one.



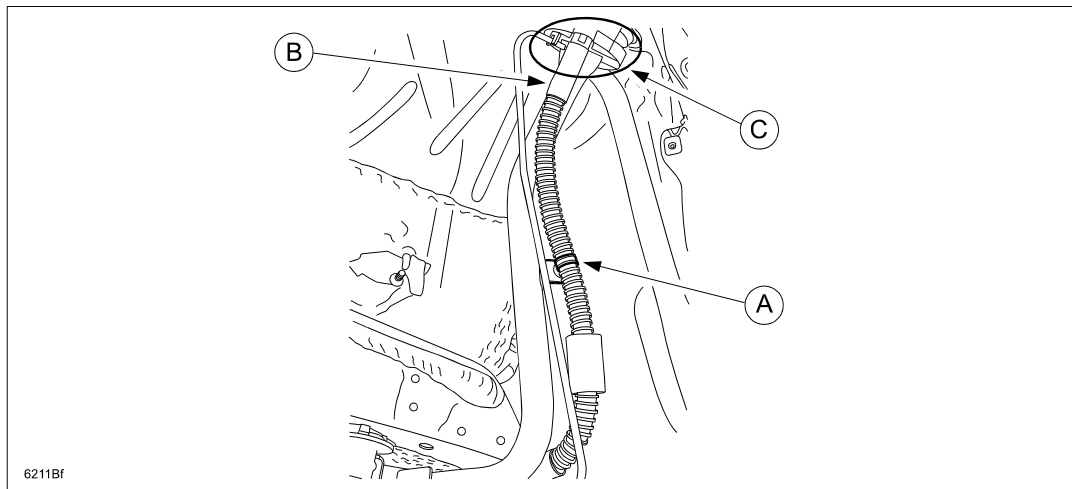
C. INSPECTION AND REPAIR PROCEDURE

Disassembly:

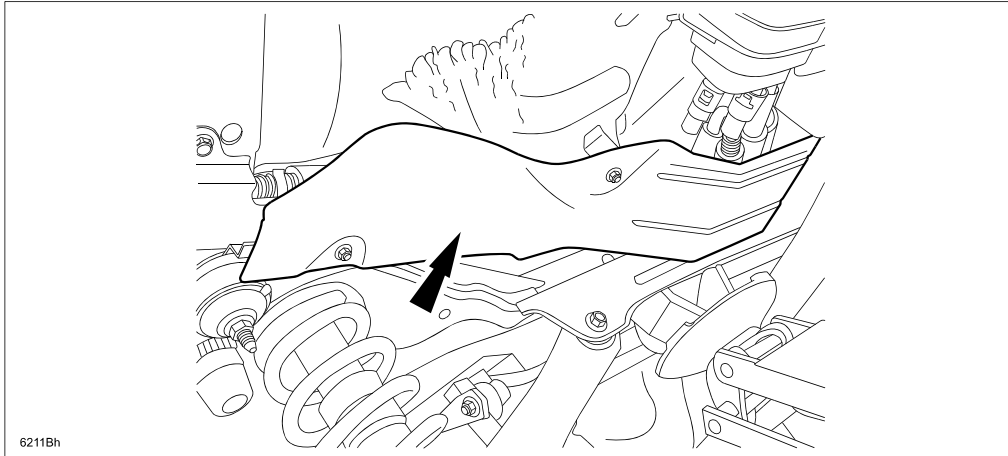
1. Safely lift the vehicle on a hoist.
2. Remove the left rear wheel.
3. Remove the splash shield.
 - Remove screws (A) and (B), cap nut (C) and fastener (D).
 - Pull the splash shield in the direction of the arrow (as shown below).
 - Remove tabs (E) and (F).



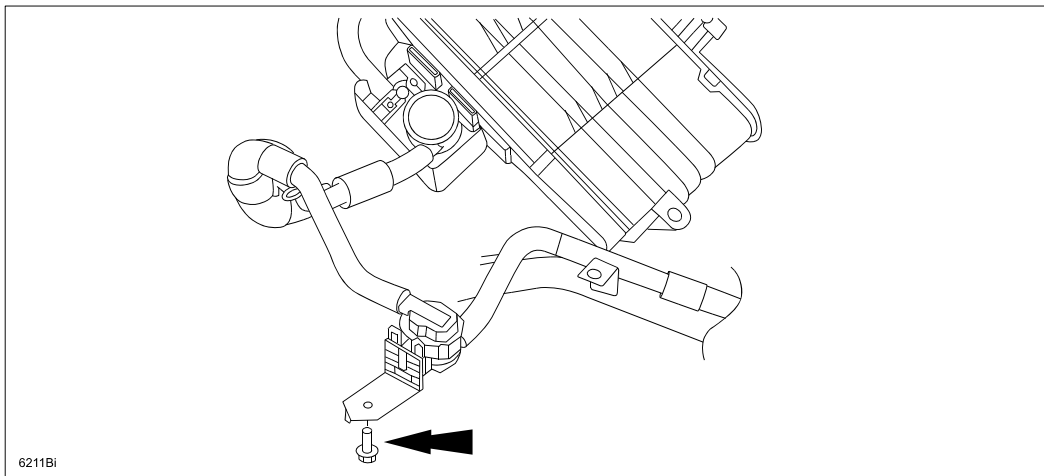
4. Detach hose clip (A), then disconnect the long ventilation hose coupler (B) from vent port nipple (C).



5. Remove the three (3) rear insulator nuts, then remove the rear insulator.



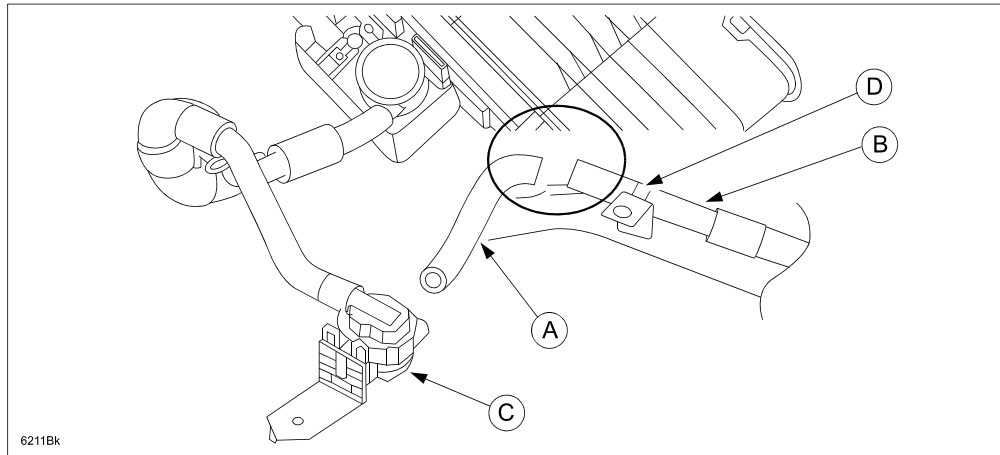
6. Remove the evaporative chamber bolt.



ATTACHMENT II
6211B

7. Disconnect the short ventilation hose (A) from the long ventilation hose (B), then disconnect the hose from the evaporative chamber (C).

NOTE: Support the long ventilation hose around the hose clip (D) by hand to prevent possible damage to the hose clip while disconnecting the short ventilation hose.

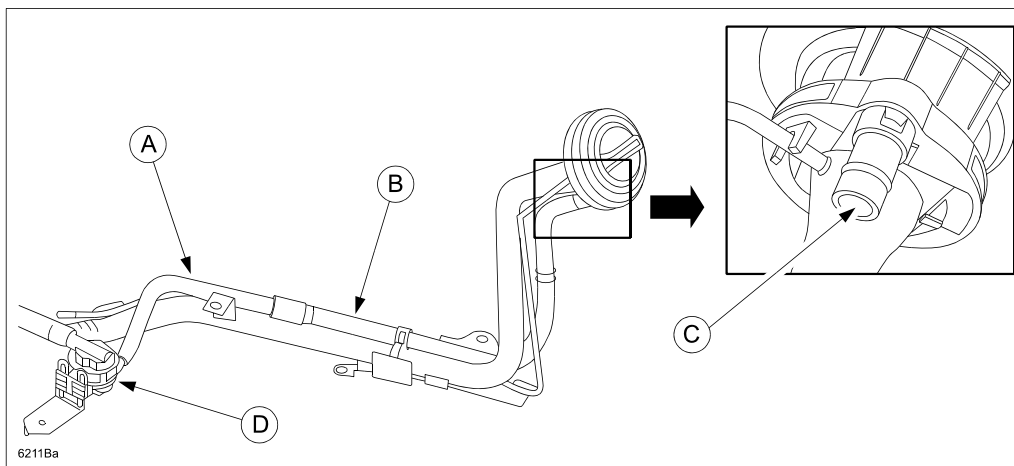


Inspection and Cleaning:

Parts to be inspected and cleaned:

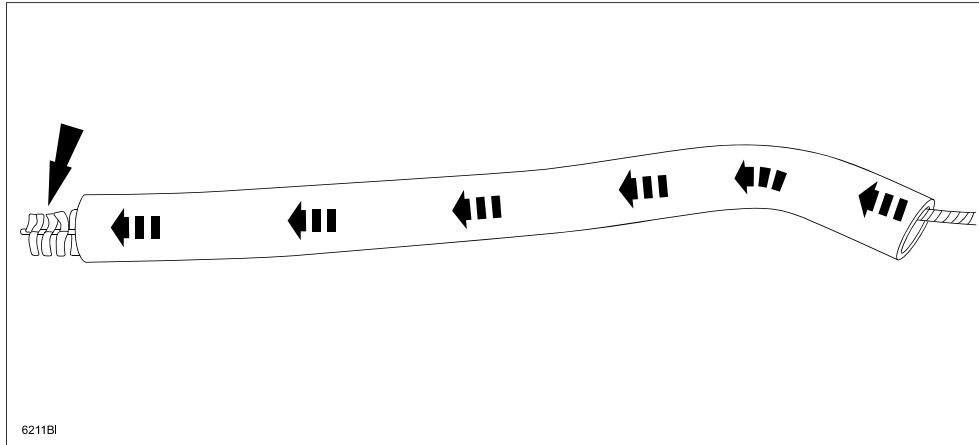
NOTE: Ensure the Spider Brush is clean before beginning the inspection/cleaning.

Using the Spider Brush SST, inspect the short ventilation hose (A), long ventilation hose (B), vent port nipple (C) and evaporative chamber (D) for spider webs.



Short Ventilation Hose:

- a. Run the brush through the short ventilation hose, then check the tip of the bush to see if spider webs are present or not.

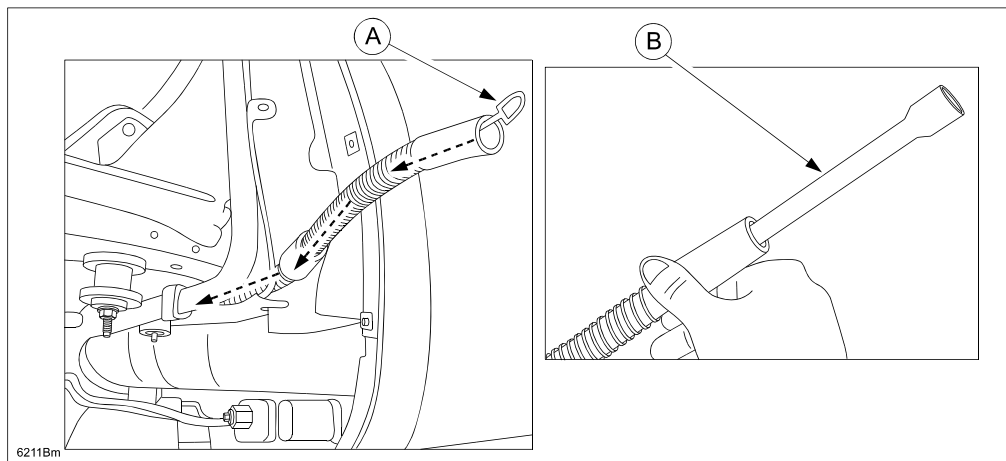


- b. Pull the brush out of the hose.
- c. Clean the brush of spider webs as necessary.

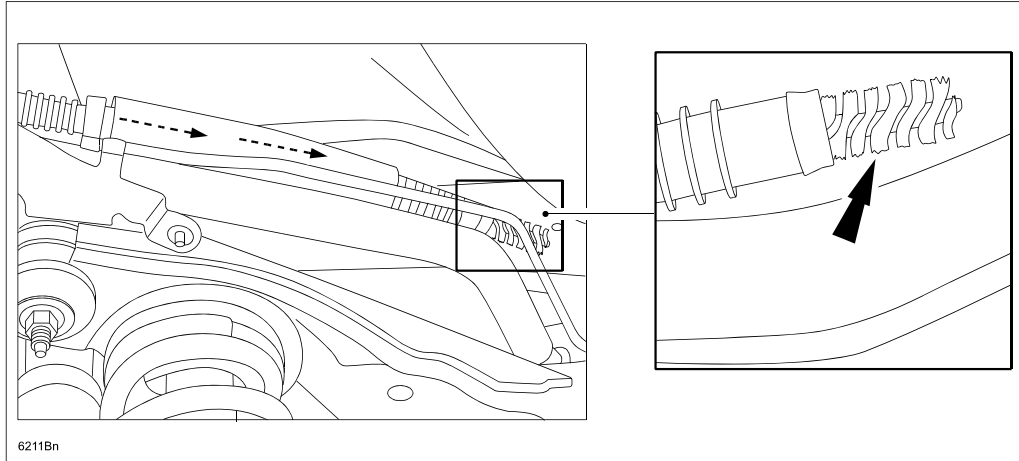
Long Ventilation Hose:

- a. Insert the brush into the long ventilation hose.

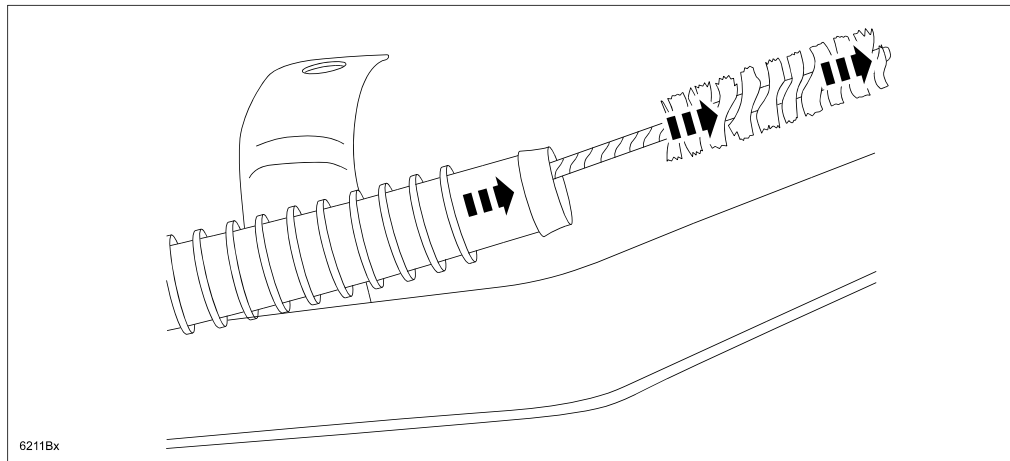
NOTE: To run the brush completely through the ventilation hose, first crimp the brush at the end ring (A) slightly to reduce it's diameter, then insert it completely into the hose. Push it through using an 8 inch, 3/8 extension bar (B).



b. Check the tip of the brush to see if spider webs are present or not.



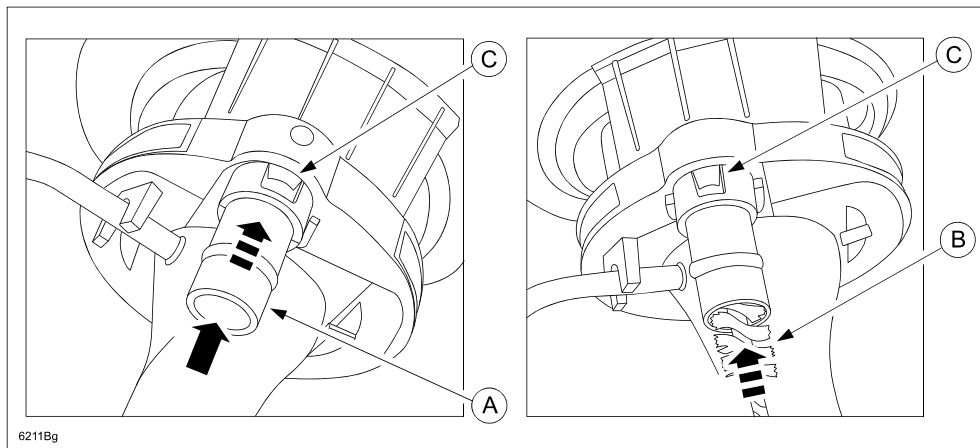
c. Pull the brush out of the hose.



d. Clean the brush of spider webs as necessary.

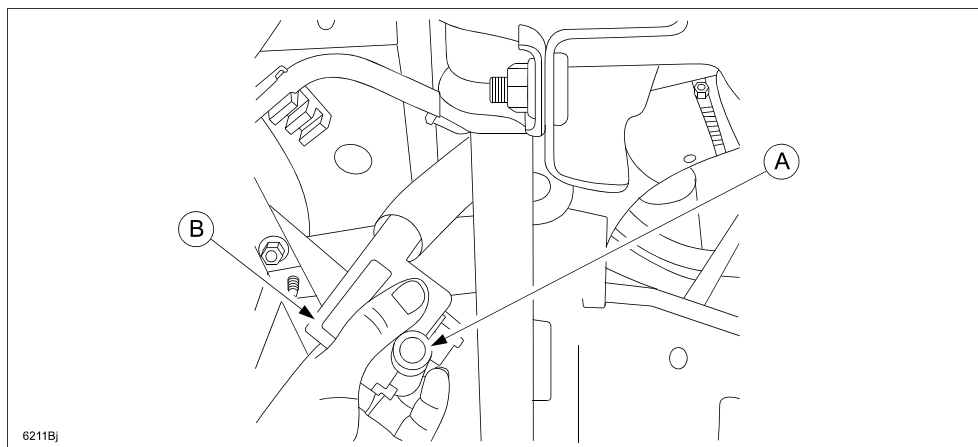
Vent Port Nipple:

- a. Visually check inside of the vent port nipple (A) to see if spider webs are present or not.
- b. Insert the brush (B) into the vent port (C) and pull it out. Check the brush to see if spider webs are present or not.



Evaporative Chamber:

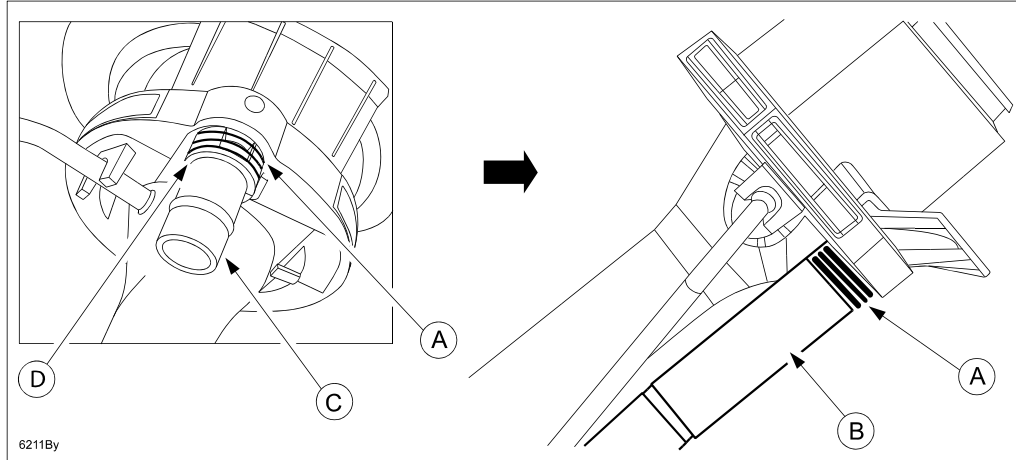
- a. Visually check location (A) inside of the evaporative chamber (B) and verify if spider webs are present or not.



- If spider webs ARE NOT FOUND in any one of the above inspections, proceed to and complete "Spring Installation" and "D. PCM REPROGRAMMING" only.
- If spider webs ARE FOUND in any one of the above inspections, proceed to and complete "Spring Installation", "D. PCM REPROGRAMMING" and "E. FUEL TANK AND EVAPORATIVE CHAMBER REPLACEMENT".

Spring Installation:

1. Install the spring (A) over the vent port.

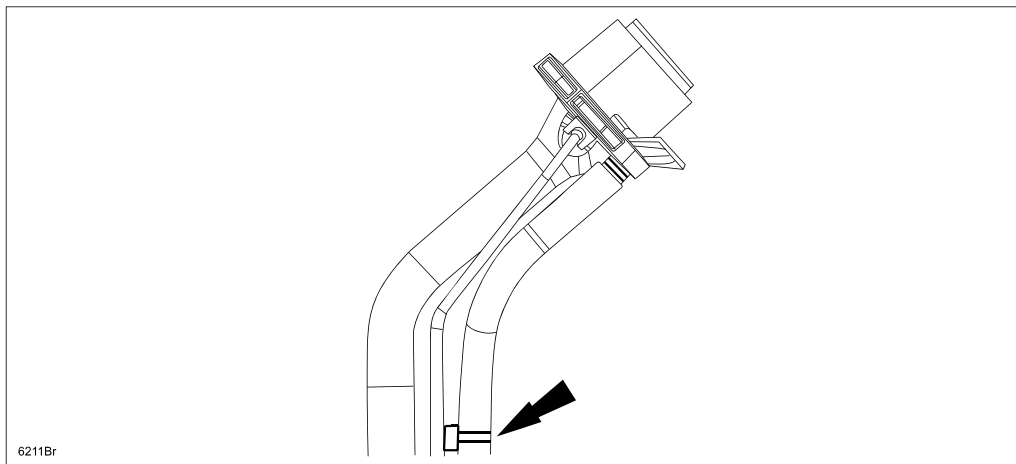


2. Reconnect the long ventilation hose coupler (B) onto the vent port nipple (C) until it completely contacts surface (D).

NOTE: Confirm that the spring (A) is properly aligned over the vent port.

3. Reattach the hose clip (GS3L-42-556) to the bracket.

NOTE: The hose clip is reusable, however, if it is damaged during detachment, replace it with a new one.



NOTE:

- For vehicles where spider webs WERE NOT FOUND during inspection, reinstall the original evaporative chamber onto the body.
- For vehicles where spider webs WERE FOUND during inspection, install a new evaporative chamber onto the body according to "E. FUEL TANK AND EVAPORATIVE CHAMBER REPLACEMENT".

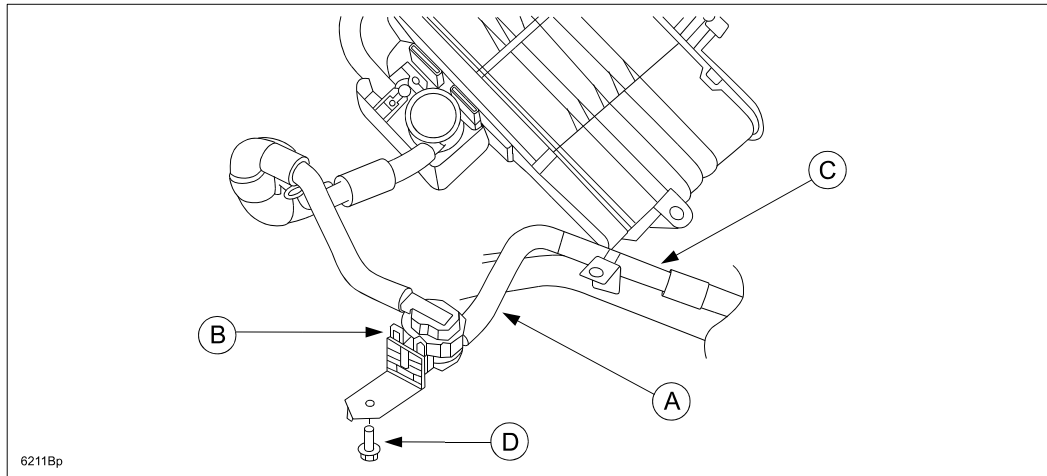
**ATTACHMENT II
6211B**

4. Reconnect the short ventilation hose (A) to the evaporative chamber (B), then connect to the long ventilation hose (C).

NOTE: Verify that the short ventilation hose is not twisted.

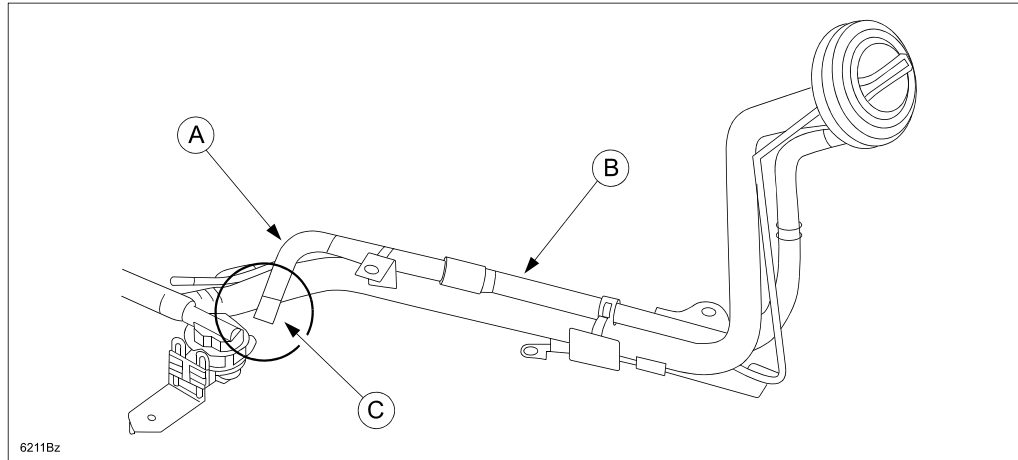
5. Reinstall evaporative chamber bolt (D).

Tightening Torque: 71-97 in. lbf., 8-11 N-m, 82-112 kgf-cm

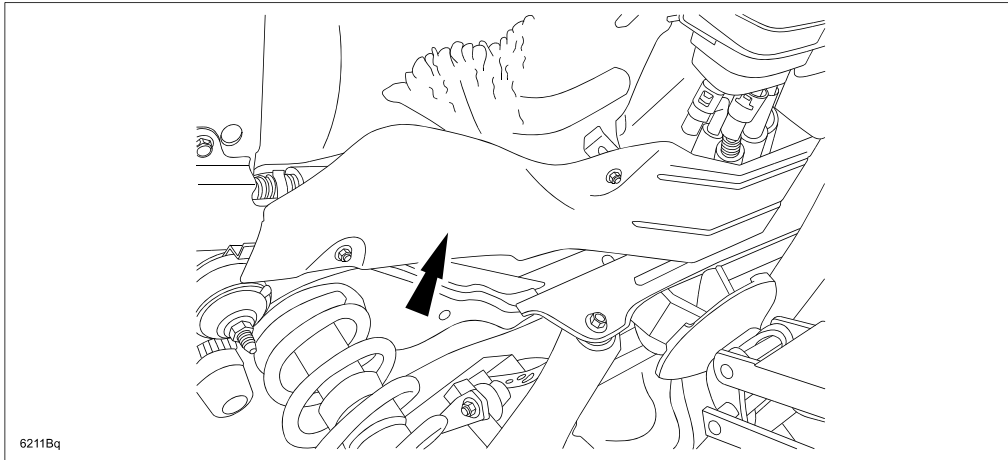


CAUTION: If a new evaporative chamber is not immediately available, make sure to put the parts back as follows to prevent re-entry of spiders into the hose.

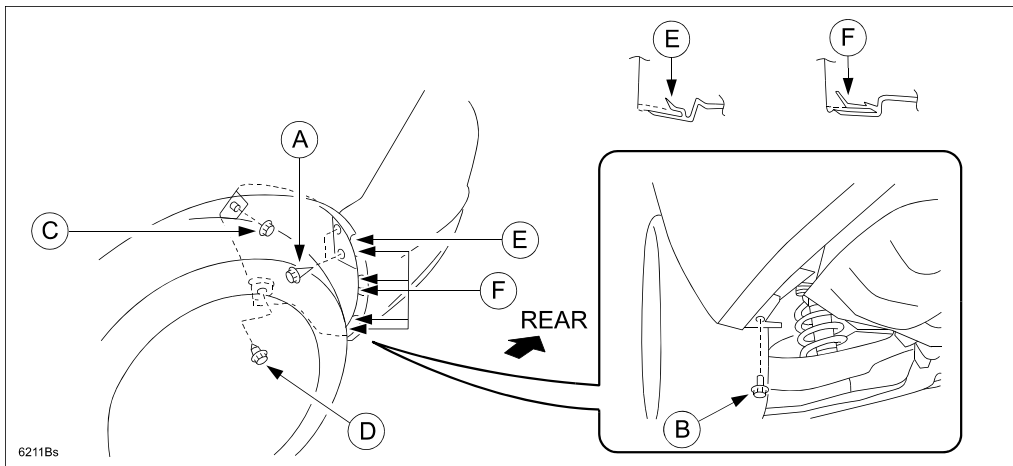
- Connect the short ventilation hose (A) to the long ventilation hose (B).
- Plug the other end of short ventilation hose (C) with a rag or tape. **DO NOT** connect it back to the original evaporative chamber as there may still be spiders inside.



6. Reinstall the rear insulator with three (3) nuts.
Tightening Torque: 62-86 in. lbf., 6.9-9.8 N-m, 71-99 kgf-cm



7. Reinstall the splash shield in reverse order of removal.
- Reinstall tabs (E) and (F).
 - Reinstall screws (A) and (B), cap nut (C) and fastener (D).



8. Reinstall the left rear wheel.
Tightening Torque: 65-87 ft. lbf., 88-118 N-m, 9.0-12 kgf-m
9. Safely lower the vehicle.
10. Proceed to "D. PCM REPROGRAMMING".

D. PCM REPROGRAMMING

1. Reboot the IDS to clear memory before PCM reprogramming.
2. Reprogram the PCM with Mazda Modular Diagnostic System (M-MDS) using IDS 70.06A for IDS version 70 or later software and IDS 71.03A for IDS version 71 or later software to the latest calibration (refer to “Calibration Information” table) by following the “Module Reprogramming” procedure.

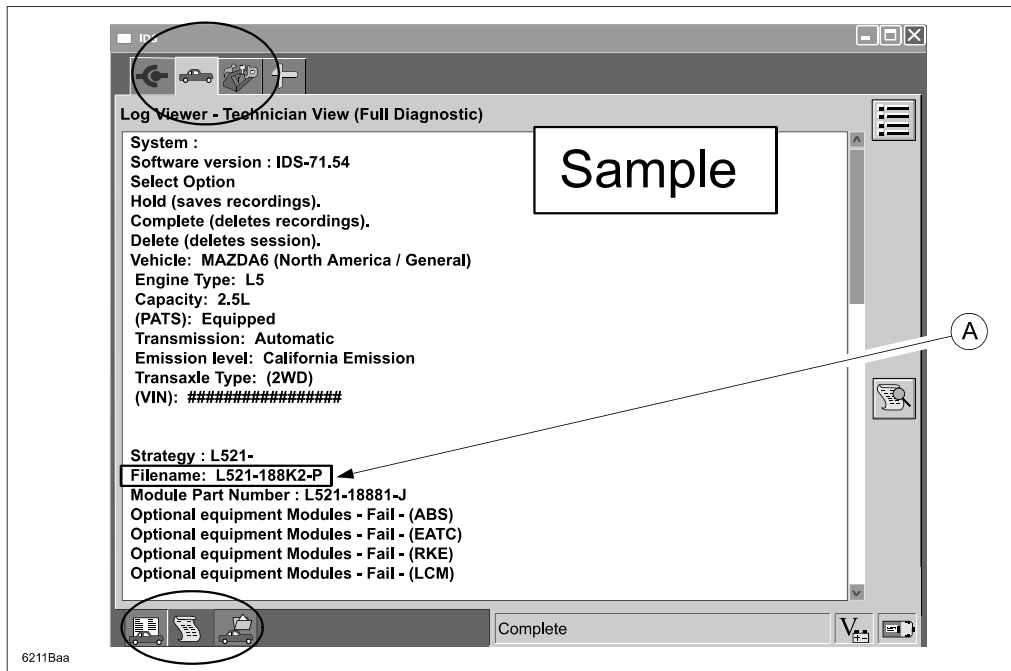
NOTE:

- Always update the IDS tool first, then follow on-screen instructions to download the needed calibration file for PCM reprogramming.
 - It is not necessary to remove any fuses or relays during PCM reprogramming when the IDS screen prompts you to do so. You may accidentally stop power to one of the PCM terminals and cause the PCM to be blanked, or you may receive error messages during the IDS reprogramming procedure.
 - Please be aware that PCM calibration part numbers and file names listed in any Service Bulletin may change due to future releases of IDS software, and additional revisions made to those calibrations for service related concerns.
 - **When performing this procedure, we recommend that a battery charger be installed on the vehicle battery and turned ON to a maximum charge of no more than 20 AMPS to keep the vehicle battery up to capacity. If you exceed 20 AMPS, it could damage the VCM.**
3. Start the engine and make sure there are no MIL illumination or abnormal warning lights present.

NOTE:

- It is not necessary to road test the vehicle to “relearn” KAM (Keep Alive Memory).
- If any DTCs should remain after performing DTC erase, diagnose the DTCs according to the appropriate Troubleshooting section of the Workshop Manual.
- If DTC UXXXX exists after reprogramming the PCM, clear all DTCs stored in the PCM.
- If DTC B10D9 exists after reprogramming the PCM, place the card key inside the cabin, then clear the DTC and check it again. (DTC B10D9 will exist when the card key gets broken or moved out of the cabin during PCM reprogramming.)
- If DTC C0051 exists after reprogramming the PCM, turn the IG ON and confirm the DSC indicator light illuminates and the DSC OFF light flashes.
 - a) Turn the steering wheel to full right lock, then turn it to full left lock.
 - b) Confirm that the DSC OFF light and DSC indicator light goes out.

4. Retain a copy of the “Log Viewer” screen on M-MDS along with the repair order and warranty application sheet. Check the Filename (A) after reprogramming PCM.



5. Once the PCM reprogramming is complete, proceed to the following:
- For vehicles where spider webs WERE FOUND during inspection, proceed to “E. FUEL TANK AND EVAPORATIVE CHAMBER REPLACEMENT”.
 - For vehicles where spider webs WERE NOT FOUND during inspection, proceed to “F. CAMPAIGN LABEL INSTALLATION”.

CALIBRATION INFORMATION

Model Year	Spec.	Transmission	File Name	New PCM Calibration Part
2009	Fed.	M/T	L518-188K2-P	L518-18881-N
2009	Fed.	A/T	L519-188K2-P	L519-18881-N
2009	Calif.	M/T	L520-188K2-P	L520-18881-N
2009	Calif.	A/T	L521-188K2-P	L521-18881-N
2009	Mexico	M/T	L549-188K2-K	L549-18881-J
2009	Mexico	A/T	L550-188K2-K	L550-18881-J
2010	Fed.	M/T	L557-188K2-F	L557-18881-F
2010	Fed.	A/T	L558-188K2-E	L558-18881-E
2010	Calif.	M/T	L559-188K2-F	L559-18881-F
2010	Calif.	A/T	L560-188K2-E	L560-18881-E
2010	Mexico	M/T	L561-188K2-F	L561-18881-F
2010	Mexico	A/T	L562-188K2-E	L562-18881-E

NOTE: These are not necessarily the same Mazda part numbers used to order an actual PCM through the Mazda Parts System. It is not necessary to order a PCM as part of this repair procedure.

E. FUEL TANK AND EVAPORATIVE CHAMBER REPLACEMENT

Perform the fuel tank and evaporative chamber replacement **ONLY** if spider webs were found during the inspection procedure above.

WARNING:

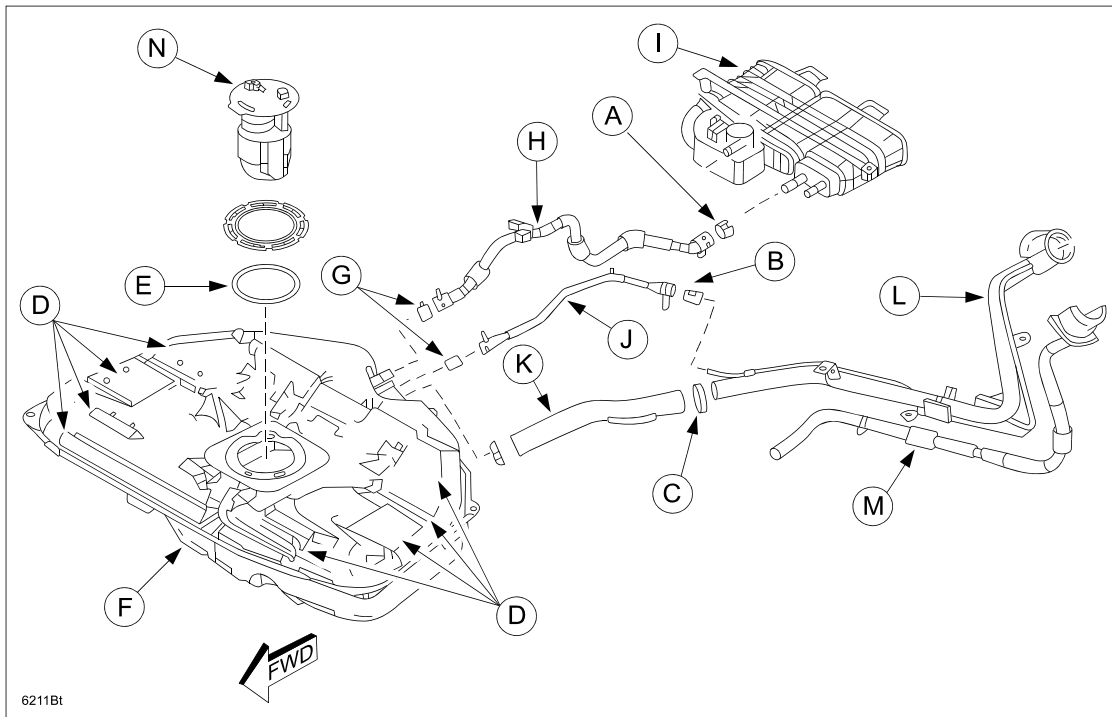
- Fuel line spills and leakage are dangerous. Fuel can ignite and cause serious injuries or death and damage. Fuel can also irritate skin and eyes. To prevent this, do not damage the sealing surface of the fuel pump unit when removing or installing.
- A person charged with static electricity could cause a fire or explosion, resulting in death or serious injury. Before draining fuel, make sure to discharge static electricity by touching the vehicle body.

CAUTION: Disconnecting/connecting the quick release connector without cleaning it may cause damage to the fuel pipe and quick release connector. Always clean the quick release connector joint area before disconnecting/connecting using a cloth or soft brush, and make sure that it is free of foreign material.

1. Record the customer's preset radio stations.
2. Drain all of the fuel from the fuel tank according to the MS3 online instructions or Workshop Manual (section 01-14A FUEL TANK REMOVAL/INSTALLATION [L5]).
3. Complete the "BEFORE SERVICE PRECAUTION" according to the MS3 online instructions or Workshop Manual (section 01-14A BEFORE SERVICE PRECAUTION [L5]).
4. Disconnect the negative battery cable.
5. Remove the rear seat bottom.
6. Remove the sending unit access cover.
7. Disconnect the sending unit connector and fuel line.
8. Remove the complete exhaust system according to the MS3 online instructions or Workshop Manual (section 01-15A EXHAUST SYSTEM REMOVAL/INSTALLATION [L5]).
9. Remove the large under tank heat shield.

NOTE:

- Replacement parts and pads are available as a fuel tank kit (GSYL-42-100).
- Replacement of exhaust system seal ring (L315-40-581) and gasket (L505-40-305B) is necessary.
- Replacement of retaining clips (tank side and canister side) for vent lines is necessary.
- Retaining Clip (Green): CC43-42-693, Qty.: 2
- Retaining Clip (Blue): NC49-42-694, Qty.: 1



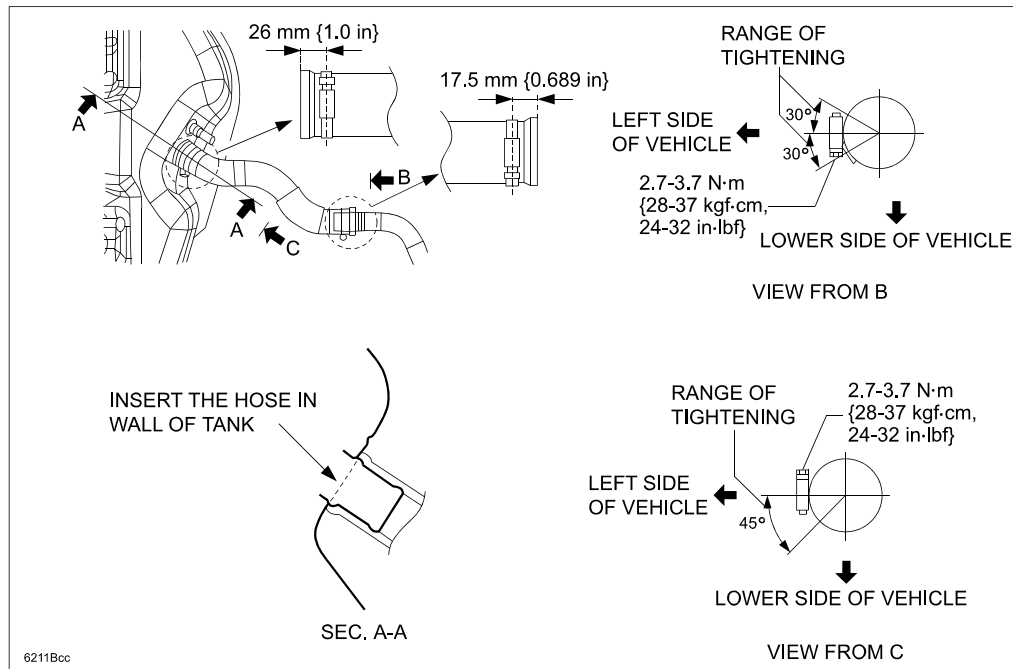
A	Disconnect Location "A"	H	Large Vent Line
B	Disconnect Location "B"	I	Canister
C	Disconnect Location "C"	J	Small Vent Line
D	Fuel Tank Pads - (replace)	K	Fuel Filler Hose
E	Fuel Pump O-Ring - (replace)	L	Fuel Filler Pipe Assy.
F	Fuel Tank - (replace)	M	Ventilation Hoses
G	Retaining Clips - (replace)	N	Fuel Pump

10. Disconnect the large vent line (H) from the canister (I) with a 5/8 inch quick release tool or SST 49E0-42-001 (See Disconnect Location "A" above).
11. Disconnect the FTP (fuel tank pressure sensor) connector from the FTP.
12. Disconnect the small vent line (J) from the small pipe using a 1/4 inch quick release tool or SST 49N0-13-103A (See Disconnect Location "B" above).
13. Disconnect fuel filler hose (K) from the fuel filler pipe (L) (See Disconnect Location "C" above).

**ATTACHMENT II
6211B**

14. Remove the plastic shield located at the left front of the fuel tank.
15. Support the fuel tank, then unbolt the fuel tank straps.
16. Remove the fuel tank (F) from the vehicle.
17. Transfer the fuel pump (N) (with a new o-ring) (E) into the new fuel tank according to the MS3 online instructions or Workshop Manual (section 01-14A FUEL PUMP REMOVAL/INSTALLATION [L5]).
18. Attach new pads (D) to the new fuel tank (refer to the pad placement locations on the original fuel tank).
19. Transfer the fuel filler hose (K) from the old fuel tank to the new fuel tank (aligning green dots).

NOTE: Install the fuel filler hose and clamp as shown below.

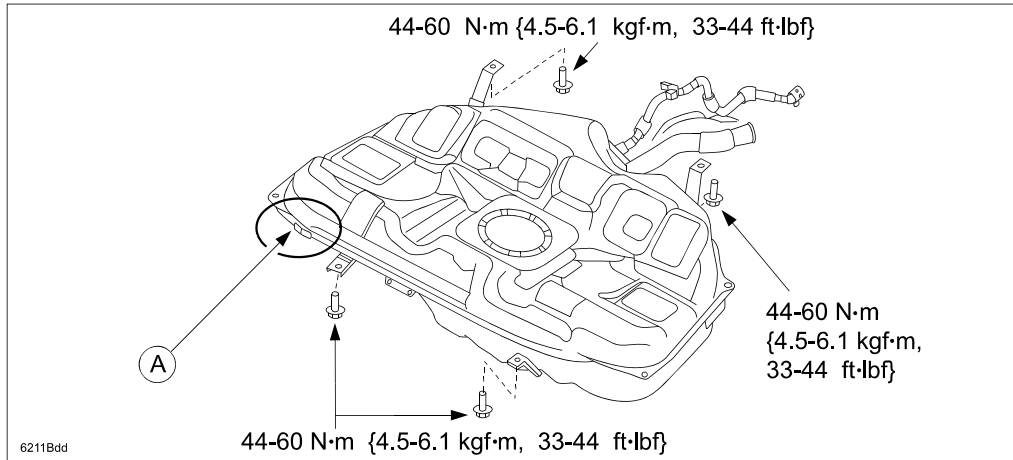


20. Transfer the large and small vent lines from the old fuel tank to the new fuel tank.

NOTE: Use new retaining clips (G): (Green) CC43-42-693, Qty.: 1 and (Blue) NC49-42-694, Qty.: 1

21. Support the new fuel tank, then install it to the vehicle.

NOTE: Two small rubber clips (A) may exist on the flange of the original tank. These rubber clips have been deleted, so there is no need to transfer them to the new tank.



22. Reconnect the large vent line to the canister.

NOTE: If SST 49E0-42-001 is used for removing the quick release connector, replace the retaining clip with a new one (CC43-42-693).

23. Reconnect the small vent lines to the small pipe.

24. Reconnect the FTP (fuel tank pressure sensor) connector to the FTP.

25. Reconnect the fuel filler hose to the fuel filler pipe (refer back to Step 19).

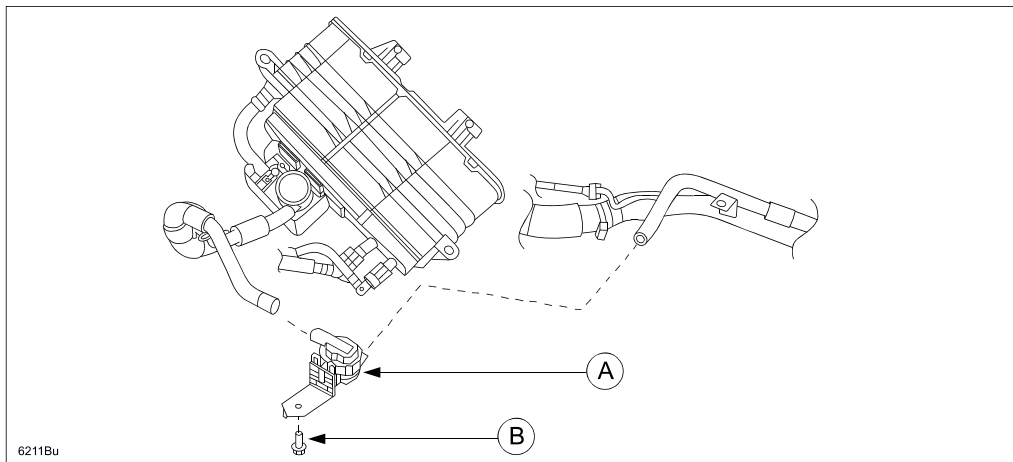
26. Reassemble the large under tank heat shield.

27. Install the exhaust pipe, using a new seal ring (L315-40-581) and new gasket (L505-40-305B) according to the MS3 online instructions or Workshop Manual (section 01-15A Exhaust System [L5] Seal Ring Removal and Installation Notes).

28. Replace the evaporative chamber (A) with the new part (GS3L-42-910).

29. Tighten evaporative chamber bolt (B).

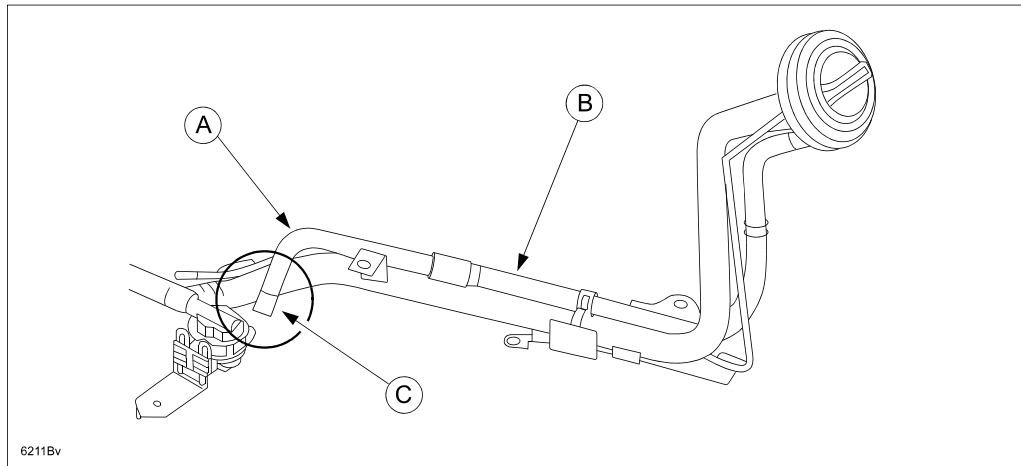
Tightening Torque: 71-97 in. lbf., 8-11 Nm, 82-112 kgf·cm



ATTACHMENT II 6211B

CAUTION: If the new evaporative chamber is not immediately available, make sure to put the parts back as follows to prevent re-entry of spiders into the hose.

- Connect the short ventilation hose (A) to the long ventilation hose (B).
- Plug the other end of short ventilation hose (C) with a rag or tape. DO NOT connect it back to the original evaporative chamber as there may still be spiders inside.



30. Reinstall the remaining parts in the reverse order of removal.
31. Reconnect the negative battery cable.
32. Re-enter the customer's preset radio stations.
33. Proceed to "F. CAMPAIGN LABEL INSTALLATION".

F. CAMPAIGN LABEL INSTALLATION

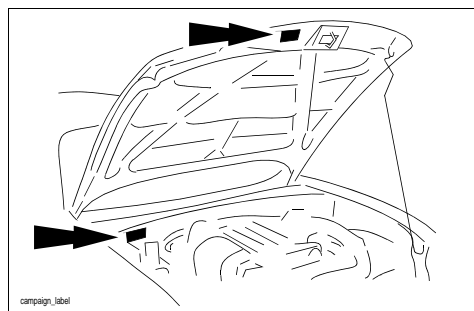
1. Fill out a blue "Campaign Label" (9999-95-065A-06) with Campaign No: "6211B", your dealer code, today's date.

CAMPAIGN LABEL	
CAMPAIGN NO:	_____
DEALER CODE:	_____
DATE:	/ /

P/N 9999-95-065A-06

1326b

2. Affix it to the hood or bulkhead as shown:



3. Return the vehicle to the customer.