

Subject: HIGH ENGINE COOLANT TEMPERATURE WARNING LIGHT ON WITH DTC P111A:00 AND/OR NO HEAT FROM HVAC	Bulletin No: 01-022/15
	Last Issued: 09/28/2015

APPLICABLE MODEL(S)/VINS

2014-2015 Mazda3 Mexico built vehicles with VINs lower than 3MZ BM ***** 137384 (produced before August 15, 2014)

DESCRIPTION

Some vehicles may exhibit one or more of the following concerns:

- The High Engine Coolant Temperature warning light ON with DTC P111A:00 (Engine coolant temperature is high) in extremely cold temperatures.
- Poor heater performance.
- Low coolant concentration.

The coolant concentration may not have been adjusted properly during mass production. This may cause coolant freezing in extremely cold temperatures.

Customers having this concern should have their vehicle repaired using the following repair procedure.

REPAIR PROCEDURE

WARNING:

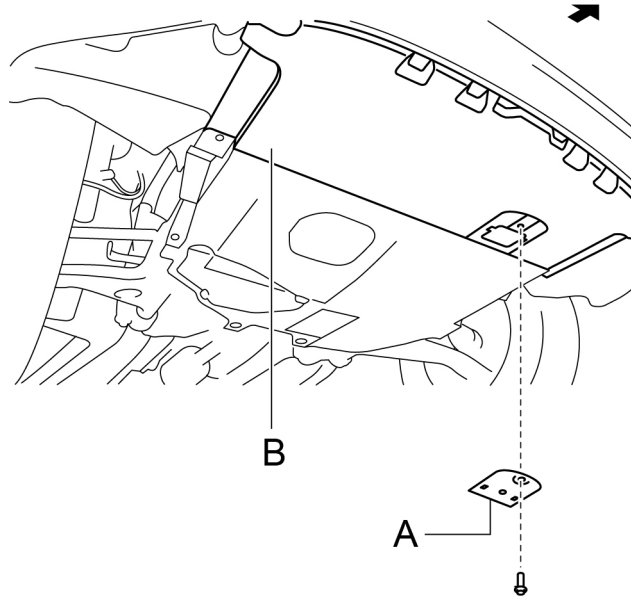
- Never remove the cooling system cap or loosen the radiator drain plug while the engine is running, or when the engine and radiator are hot. Scalding engine coolant and steam may shoot out and cause serious injury. It may also damage the engine and cooling system.
- Turn off the engine and wait until it is cool. Even then, be very careful when removing the cap. Wrap a thick cloth around it and slowly turn it counterclockwise to the first stop. Step back while the pressure escapes.
- When you are sure all the pressure is gone, press down on the cap using the cloth, turn it, and remove it.

NOTE: New FL22 comes premixed to a 55% coolant concentration. Never dilute FL22 with water.

1. Verify customer concern.
2. Adjust the coolant reserve tank concentration.
3. Check the coolant concentration at the radiator filler neck and note the value.

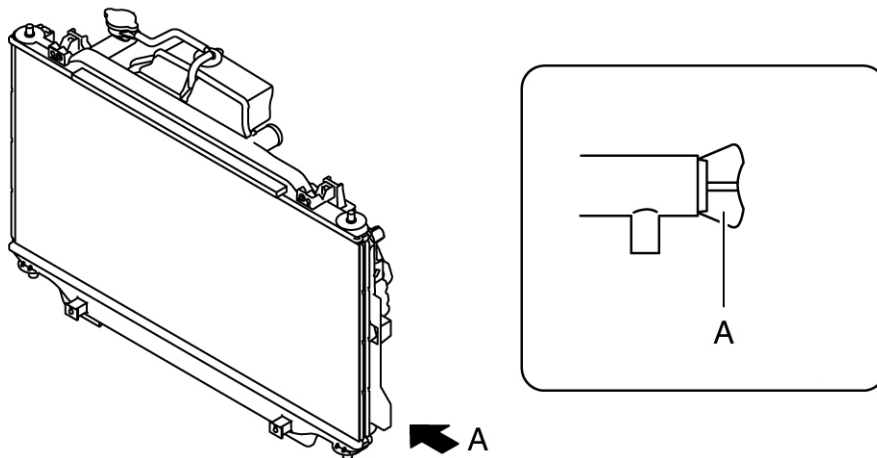
NOTE: If the vehicle mileage is low, mixing the coolant in the system may be necessary to measure the concentration accurately. Follow the procedure mentioned in step 4-e.

4. Adjust the concentration of the coolant using the following steps:
 - a. Remove the radiator cap.
 - b. Remove the service hole cover (A) installed at the front, under cover No.1 (B) used to drain the engine coolant.



- c. Loosen the radiator drain plug (A) and drain the engine coolant.

NOTE: This step will not remove all of the coolant from the system. Some old coolant will remain.



- d. Tighten the radiator drain plug (A) and refill with FL22 (55% premix) coolant from the radiator filler neck until it is close to the top of the radiator filler neck. Install the radiator cap.

- e. Mix the coolant using the following steps:

Run the engine to normal operating temperature to open the thermostat.

Thermostat initial-opening temperature

U.S.A and Canada: 80.5 - 83.5°C {177 - 182°F}

Except U.S.A. and Canada: 86.5 - 89.5°C {188 - 193°F}

Thermostat full-open temperature

95°C {203°F}

- e-1. Run the engine at 2,500 rpm for 5 min.

NOTE: If the engine rpm drops down to idle speed (fail safe), release the pedal to cancel fail safe function and depress it again.

- e-2. Maintain the engine speed at 3,000 rpm for 5s, and then allow the engine to idle.

- e-3. Repeat step e-1 and e-2 several times to ensure coolant has been sufficiently mixed.

- f. Allow the engine to cool down, then check coolant concentration at the radiator filler neck. Is the coolant concentration within 50%-55%?

- No: Repeat steps 4a. to 4e until the coolant concentration is within 50%-55%.

- Yes: Proceed to the next step.

- g. Inspect the engine coolant level and adjust as needed.

NOTE: Also adjust the coolant level in the coolant reserve tank.

The chart below shows how the concentration will be changed by adding new FL22 (55%) coolant. (Remaining old coolant in the cooling system will dilute the newly added coolant.)

Coolant Concentration Start (Step 3 value)	Concentration after 1st FL22 fill	Concentration after 2nd FL22 fill	Concentration after 3rd FL22 fill
20%	37%	46%	50%
25%	40%	47%	51%
30%	42%	48%	52%
35%	45%	50%	52%
40%	47%	51%	53%
45%	50%	52%	54%

FREEZING TEMP. of FL22 coolant

Coolant Concentration	Freezing temp.	
30%	-16.2 degrees Celsius	2.8 degrees Fahrenheit
35%	-20.5 degrees Celsius	-4.9 degrees Fahrenheit
45%	-31.2 degrees Celsius	-24.2 degrees Fahrenheit
50%	-37.6 degrees Celsius	-35.7 degrees Fahrenheit
55%	-45.2 degrees Celsius	-49.4 degrees Fahrenheit

5. Verify repair.

WARRANTY INFORMATION

NOTE:

- This warranty information applies only to verified customer complaints on vehicles eligible for warranty repair.
- This repair will be covered until the first time the coolant is to be replaced at 10 years / 120,000 mile.
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	A
Symptom Code	64
Damage Code	9H
Diagnostic Trouble Code (DTC)	P111A:00
Part Number Main Cause	7777SPK43
Quantity	0
Operation Number / Labor Hours:	XXL7ACRX / 1.2 Hrs.

NOTE: Warranty claim submission will require entry of a valid DTC.

Claim used quantity (Liter) of the coolant as Related Part.