

# Component Procedures: Evaporative Emissions System

## Table of Contents

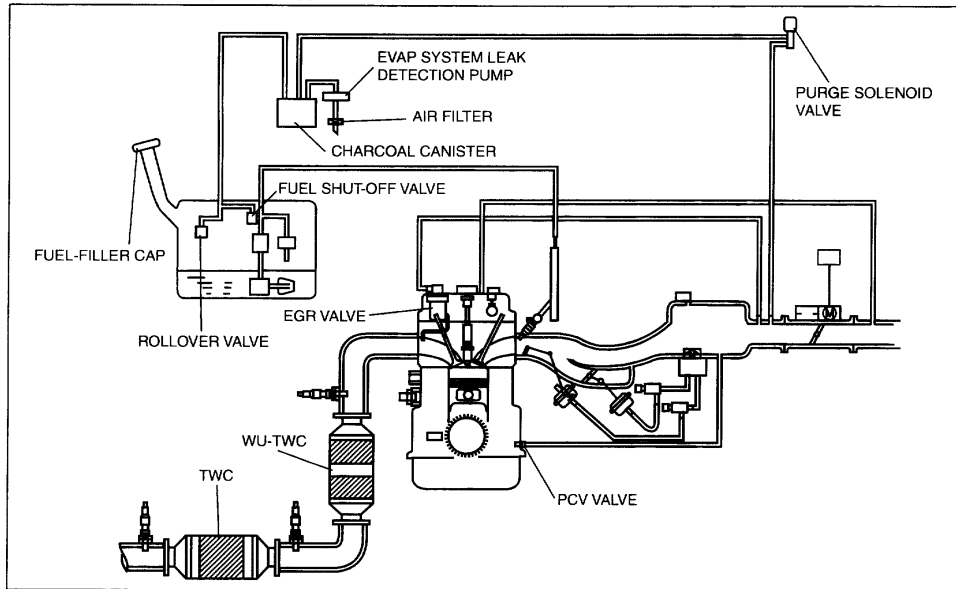
1. Vacuum and Vapor Hose (itype\_24)
2. Components (itype\_32)
3. All Technical Service Bulletins (itype\_100)
4. Customer Interest Bulletins (itype\_109)
5. EVAP System Leak Inspection (Article 1443194)
6. Purge Control System Inspection (Article 1431061)
7. Leaks (itype\_149)
8. Noise (itype\_156)
9. Sticking/Binding (itype\_173)
10. New / Updated Parts (itype\_117)

# Component Procedures: Evaporative Emissions System

## Vacuum and Vapor Hose (itype\_24)

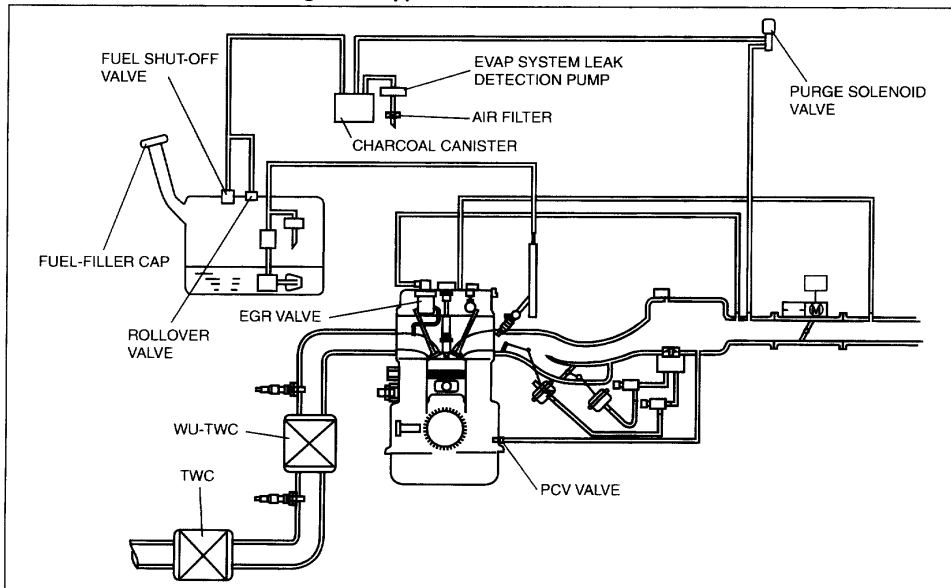
10U110A00UJ00U

### California emission regulation applicable model



c3u0116w013

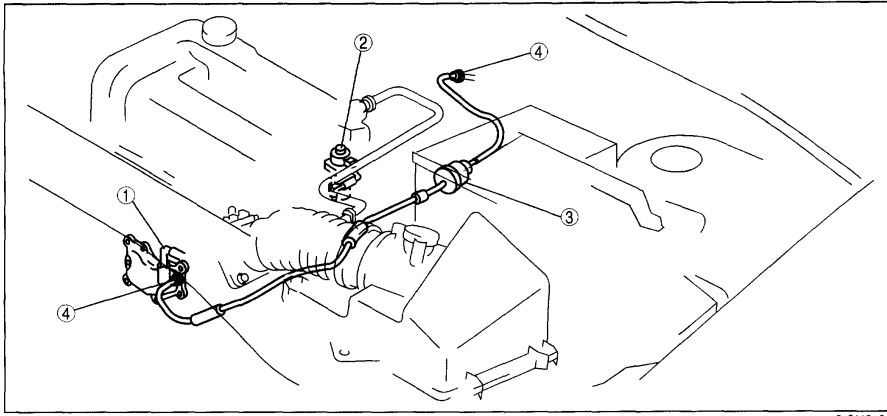
### Except for California emission regulation applicable model



c3u0116w014

## Components (itype\_32)

**Engine Compartment Side**

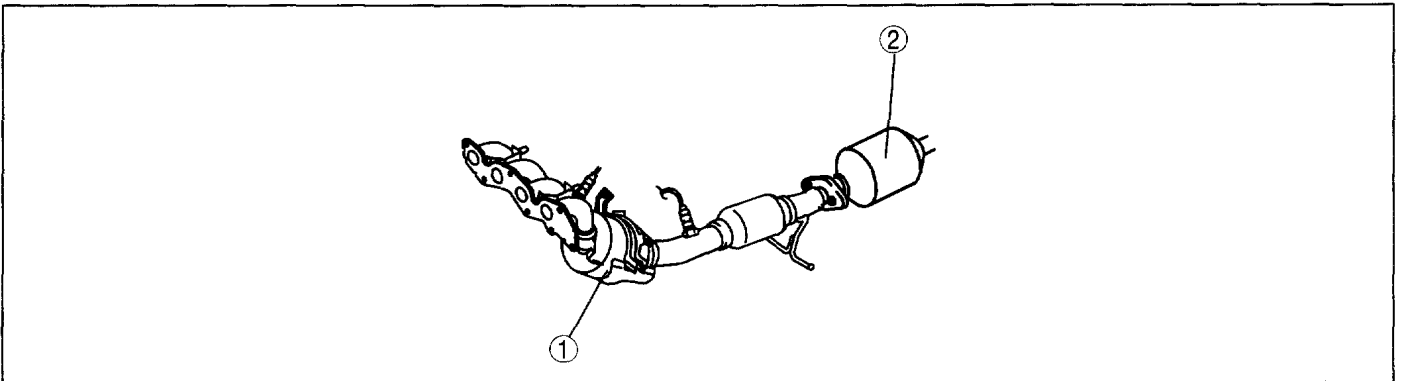


c3u0116w010

1	Positive crankcase ventilation (PCV) valve
2	EGR valve

3	Purge solenoid valve
4	Quick release connector (Type A)

**Exhaust System**

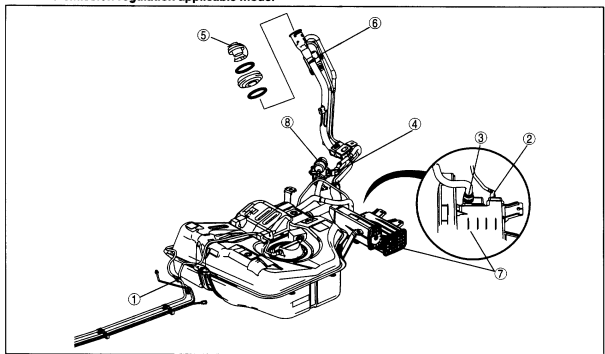


c3u0116w015

1	WU-TWC
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2	TWC
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**Fuel Tank Side  
California emission regulation applicable model**

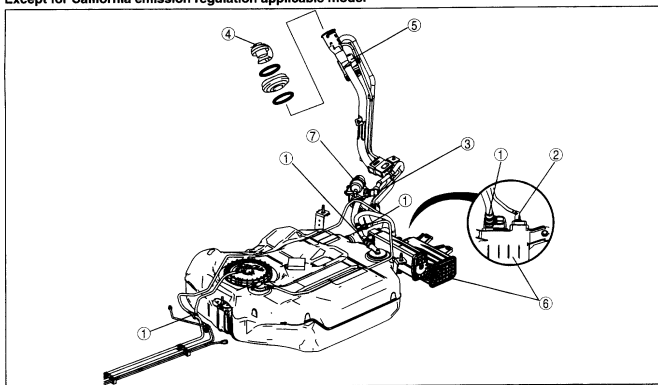


c3u0116w01c

1	Quick release connector (Type B)
2	Quick release connector (Type C)
3	Quick release connector (Type D)
4	Quick release connector (Type E)

5	Fuel-filler cap
6	Air filter
7	Charcoal canister
8	EVAP system leak detection pump

**Except for California emission regulation applicable model**



c3u0116w01f

1	Quick release connector (Type B)
2	Quick release connector (Type C)
3	Quick release connector (Type E)
4	Fuel-filler cap

5	Air filter
6	Charcoal canister
7	EVAP system leak detection pump

**All Technical Service Bulletins (itype\_100)**

Tsbs

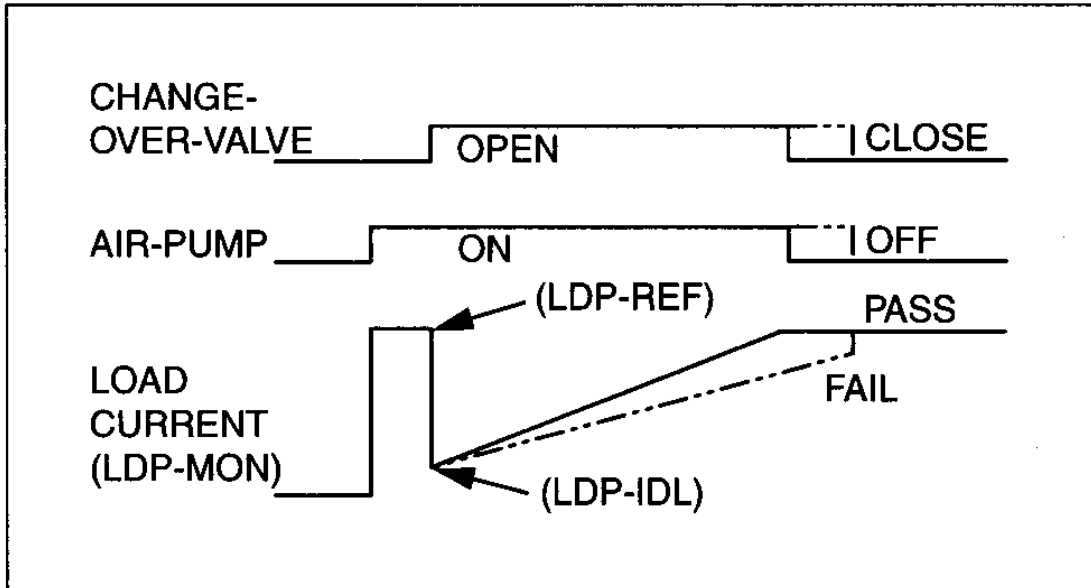
- Emissions - Ticking Noise From Purge Solenoid At Idle (0101009, 2009/03/23)
- Fuel System - MIL ON/DTC's P0442/P0455/P0456 (0102010, 2010/03/26)
- Emissions - MIL ON/DTC P0441 Set (0100309, 2009/01/23)
- 01-002/18 - MULTI-MODEL - DETERMINING EVAPORATIVE SYSTEM LEAK LOCATION FOR DTCs P0441 / P0442 / P0455 / P0456 (01-002/18, 2018/01/30)

**Customer Interest Bulletins (itype\_109)**

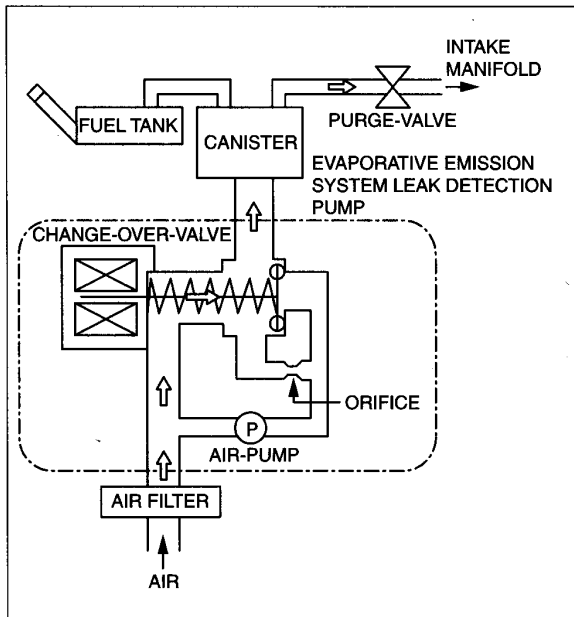
Tsbs

- Emissions - Ticking Noise From Purge Solenoid At Idle (0101009, 2009/03/23)
- Fuel System - MIL ON/DTC's P0442/P0455/P0456 (0102010, 2010/03/26)
- Emissions - MIL ON/DTC P0441 Set (0100309, 2009/01/23)

**EVAP System Leak Inspection (Article 1443194)**



c5u116aw7001

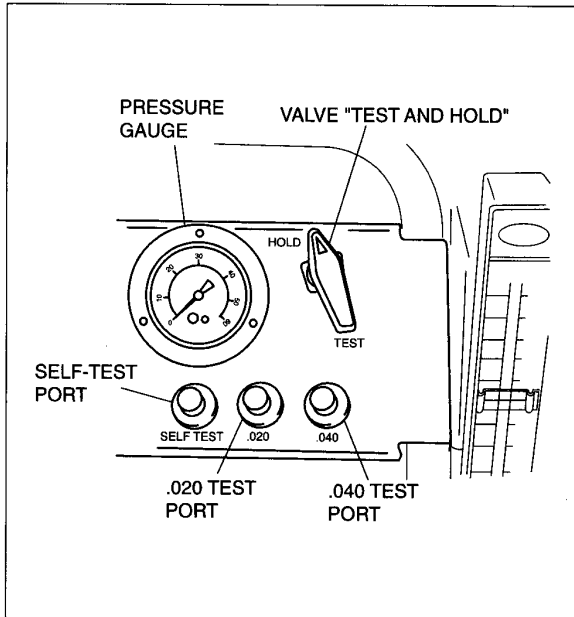


d3u103zw7001

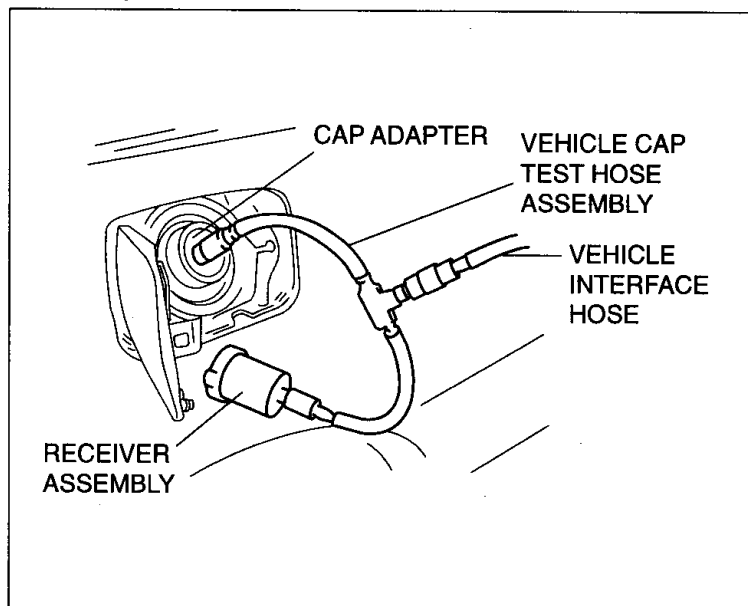
DTC No.	Condition
P0442	Evaporative emission control system leak detected (small leak)
P0446	Change over valve (COV) (EVP system leak detection pump) stuck close
P0455	Evaporative emission control system leak detected (gross leak)
P0456	Evaporative emission system leak detected (very small leak)
P2401	EVAP system leak detection pump motor circuit low
P2402	EVAP system leak detection pump motor circuit high
P2404	EVAP system leak detection pump sense circuit problem
P2405	EVAP system leak detection pump sense circuit low input
P2407	EVAP system leak detection pump sense circuit intermittent

## Specification

PID	PID Range
BARO	72.2 kPa {543 mmHg, 21.3 inHg} or more
FLI	15—85%
IAT	5—45 °C {41—113 °F}
VPWR	11.0 V or more



am3uuw0000059



am3uuw0000059

## Purge Control System Inspection (Article 1431061)

Purge Control System  
Inspection

1. Start the engine.
2. Disconnect the vacuum hose between the purge solenoid valve and the charcoal canister

3. Put a finger to the purge

solenoid valve

and verify that there is no vacuum applied when the engine is cold.

- If there is a vacuum, inspect the following:

- Wiring harness and connectors (Purge solenoid valve-

PCM

terminal 2AN)

- Purge solenoid valve

4. Warm up the engine to the normal operating temperature.

5. Stop the engine.

6. Connect the M-MDS to the

DLC

-2 and verify that the DTC P0443 is shown. Perform DTC inspection. (See DTC TABLE [LF, L3].)

See: A L L Diagnostic Trouble Codes ( DTC ) > Diagnostic Trouble Code Descriptions

7. Turn the

ignition switch

to the ON position.

8. Access

ECT

PID.

9. Verify that the

engine coolant temperature

is more than

78°C {173°F}

- If the M-MDS indicates less than

, perform the

ECT sensor

inspection.

10. Set the vehicle on the dynamometer or chassis roller.

WARNING: When the dynamometer or chassis roller is operating, there is a possibility that the operator may

come into contact with or be caught up in the rotating parts, leading to serious injuries or death. When

performing work while the dynamometer or chassis roller is operating, be careful not to come into contact with

or be caught up in any of the rotating parts.

11. Drive vehicle at engine speed approx.

2000 rpm

for

30 s

or more.

12. Put a finger to the purge solenoid valve and verify that there is no vacuum applied while step 2.

- If there is no vacuum, inspect the following:

- Wiring harness and connector (

Main relay

- purge solenoid valve - PCM terminal 2AN)

-

MAF

, APP1, APP2, TP and LOAD PIDs

- If there is vacuum, inspect the following:

- Vacuum hose (Purge solenoid valve - charcoal

canister

)

## Leaks (itype\_149)

Tsbs

- 01-002/18 - MULTI-MODEL - DETERMINING EVAPORATIVE SYSTEM LEAK LOCATION FOR DTCs P0441 / P0442 / P0455 /

P0456 (01-002/18, 2018/01/30)

## Noise (itype\_156)

Tsbs

- Emissions - Ticking Noise From Purge Solenoid At Idle (0101009, 2009/03/23)

## **Sticking/Binding (itype\_173)**

Tsbs

- Emissions - MIL ON/DTC P0441 Set (0100309, 2009/01/23)

## **New / Updated Parts (itype\_117)**

Tsbs

- Emissions - Ticking Noise From Purge Solenoid At Idle (0101009, 2009/03/23)
- Fuel System - MIL ON/DTC's P0442/P0455/P0456 (0102010, 2010/03/26)
- Emissions - MIL ON/DTC P0441 Set (0100309, 2009/01/23)