
EMISSION CONTROL

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EMISSION CONTROL SYSTEM

EC026-03

PURPOSE

The emission control systems are installed to reduce the amount of CO, HC and NOx exhausted from the engine ((3) and (4)), to prevent the atmospheric release of blow-by gas-containing HC (1) and evaporated fuel containing HC being released from the fuel tank (2).

The function of each system is shown in these table.

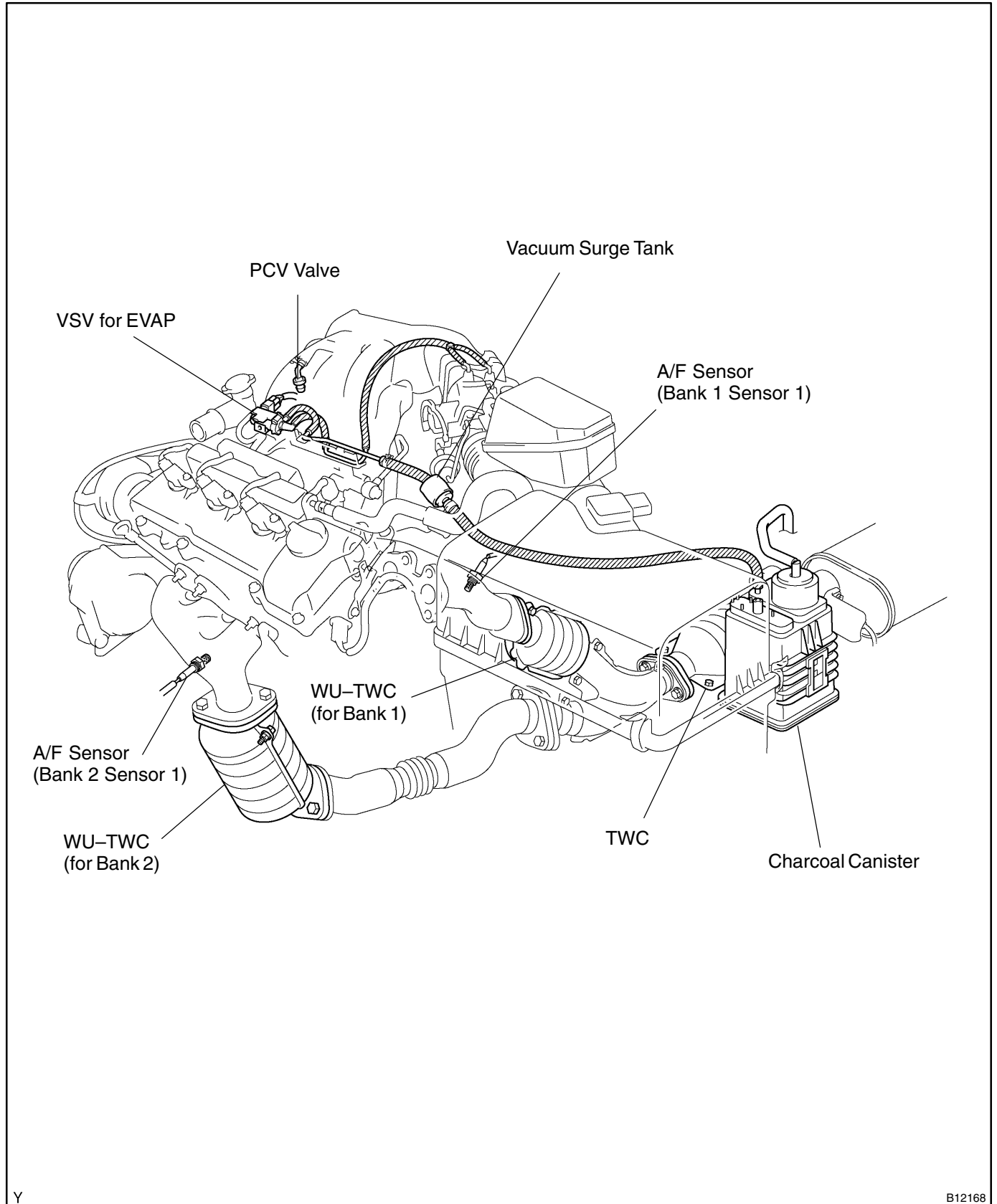
System	Abbreviation	Function
(1) Positive Crankcase Ventilation	PCV	Reduces HC
(2) Evaporative Emission Control	EVAP	Reduces evaporated HC
(3) Three-Way Catalytic Converter	TWC	Reduces HC, CO and NOx
(4) Electronic Fuel injection*	EFI	Injects a precisely timed, optimum amount of fuel for reduced exhaust emissions

Remark: * For inspection and repair of the EFI system, refer to the FI section of this manual.

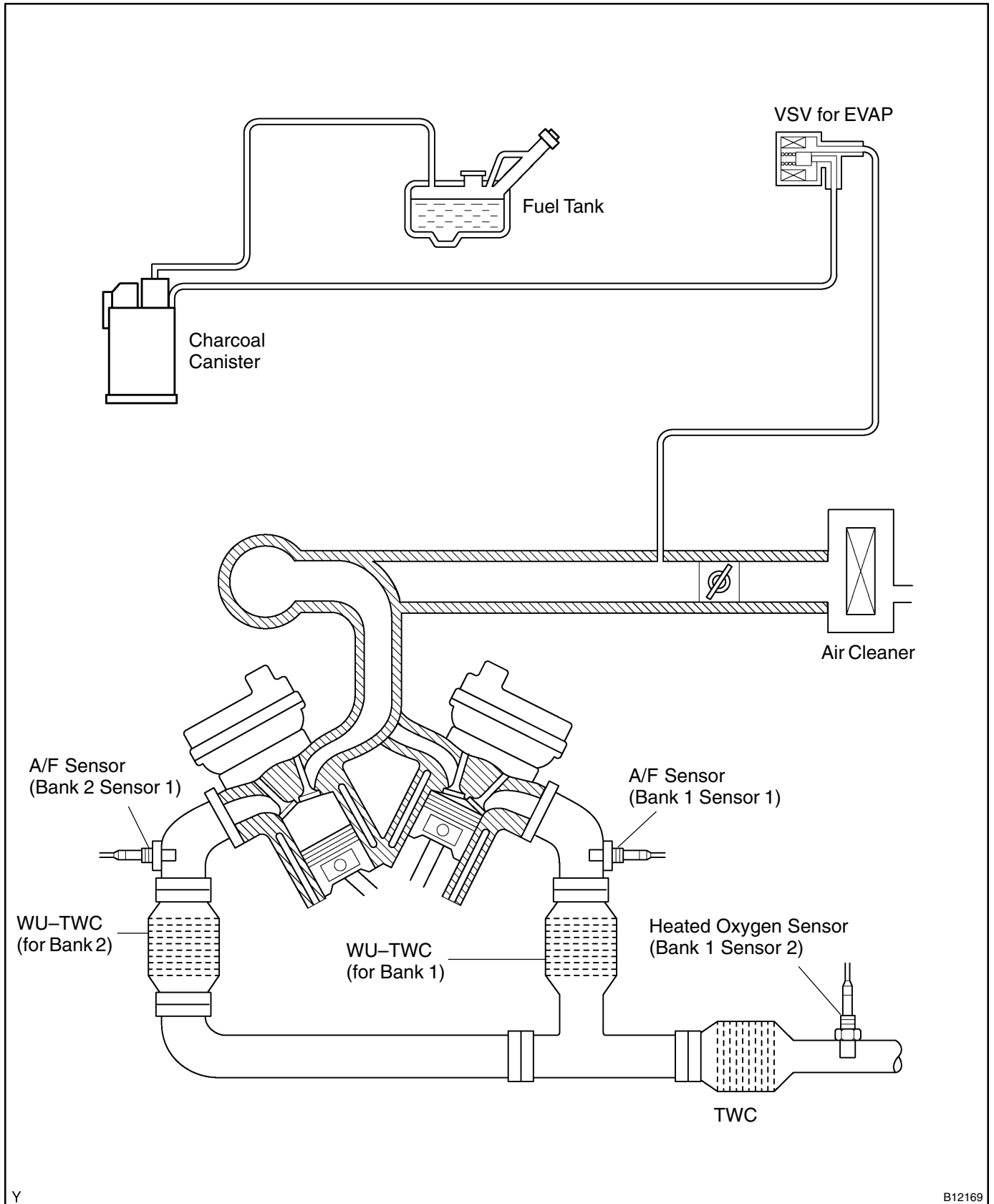
PARTS LAYOUT AND SCHEMATIC DRAWING

LOCATION

EC027-05

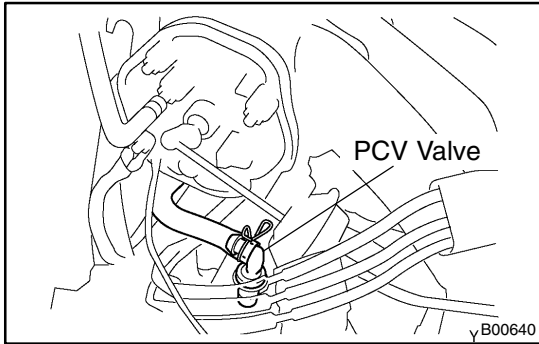


DRAWING



Y

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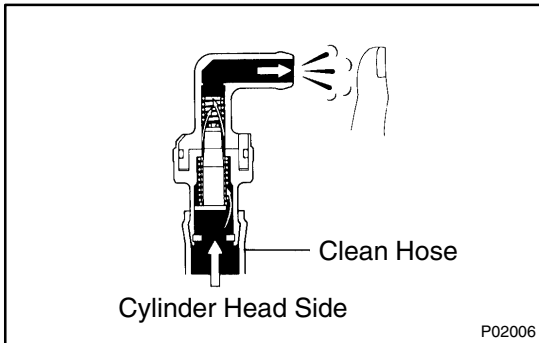


POSITIVE CRANKCASE VENTILATION (PCV) SYSTEM INSPECTION

EC029-04

1. REMOVE PCV VALVE

- (a) Disconnect the PCV hose from the PCV valve.
- (b) Remove the PCV valve.



2. INSTALL CLEAN HOSE TO PCV VALVE

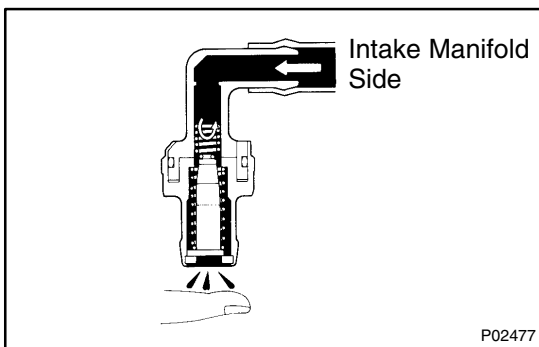
3. INSPECT PCV VALVE OPERATION

- (a) Blow air into the cylinder head side, and check that air passes through easily.

CAUTION:

Do not suck air through the valve.

Petroleum substances inside the valve are harmful.

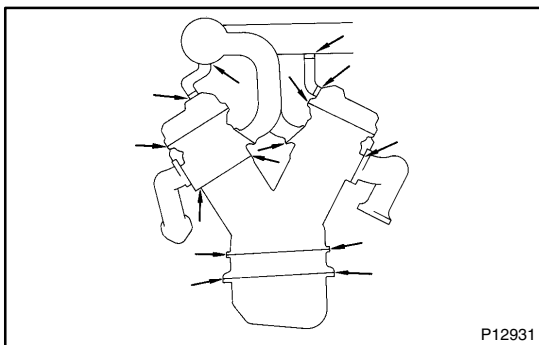


- (b) Blow air into the intake manifold side, and check that air passes through with difficulty.

If operation is not as specified, replace the PCV valve.

4. REMOVE CLEAN HOSE FROM PCV VALVE

5. REINSTALL PCV VALVE



6. VISUALLY INSPECT HOSES, CONNECTIONS AND GASKETS

Check for cracks, leaks or damage.

EVAPORATIVE EMISSION (EVAP) CONTROL SYSTEM INSPECTION

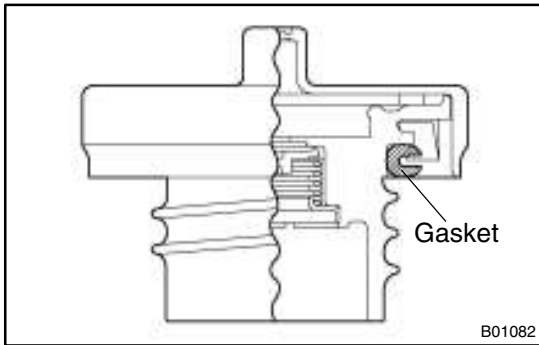
EC013-01

1. VISUALLY INSPECT LINES AND CONNECTORS

Look for loose connections, sharp bends or damage.

2. VISUALLY INSPECT FUEL TANK FILLER PIPE

Look for deformation, cracks or fuel leakage.



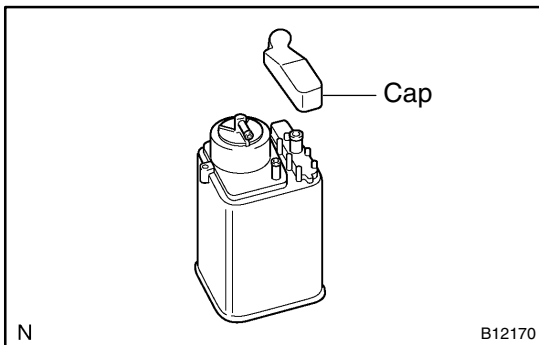
B01082

3. VISUALLY INSPECT FUEL TANK CAP

Check if the cap and/or gasket are deformed or damaged. If necessary, repair or replace the cap.

4. REMOVE CHARCOAL CANISTER ASSEMBLY

Disconnect the 2 hoses and pull up the canister.

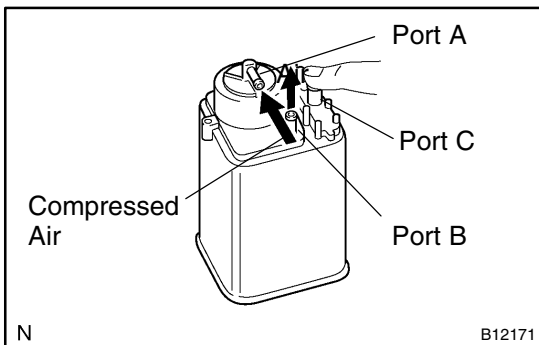


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5. INSPECT CHARCOAL CANISTER

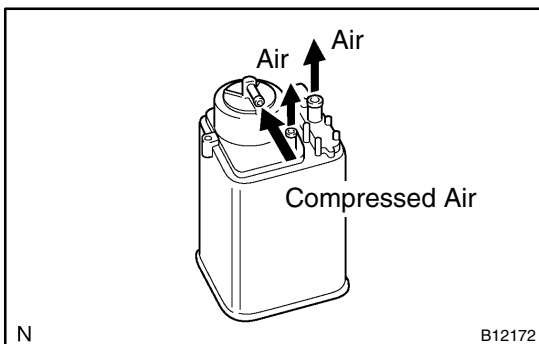
(a) Remove the charcoal canister cap.

(b) Visually check the charcoal canister for cracks or damage.



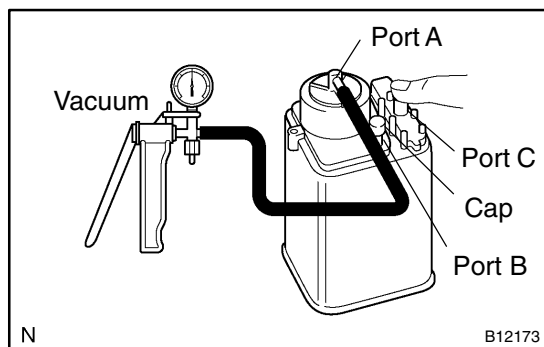
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(c) While holding port C closed, using low pressure compressed air (4.9 kPa (50 gf/cm², 0.71 psi)), blow into port A and check that air flows without resistance from the port B.



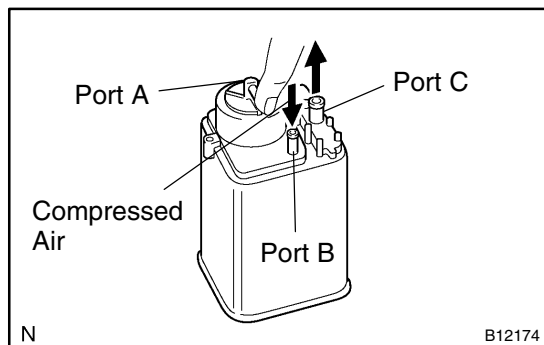
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(d) Using low pressure compressed air (4.9 kPa (50 gf/cm², 0.71 psi)), blow into port A and check that air flows without resistance from the other ports.



- (e) Apply vacuum (1.96 kPa (20 gf/cm², 0.28 psi)) to port A, check that the vacuum does not decrease when port B and C are closed, and check that the vacuum decreases when port B is opened.

If a problem is found, replace the charcoal canister.



6. CLEAN FILTER IN CANISTER

Clean the filter by blowing 19.6 kPa (0.2 kgf/cm², 2.8 psi) of compressed air into port B while holding port A closed.

NOTICE:

- Do not attempt to wash the canister.
- No activated carbon should come out.

7. REINSTALL CHARCOAL CANISTER

WARM UP THREE-WAY CATALYTIC CONVERTER (WU-TWC) SYSTEM

EC020-05

ON-VEHICLE INSPECTION

1. INSPECT EXHAUST PIPE ASSEMBLY

- (a) Check the connections for looseness or damage.
- (b) Check the clamps for weakness, cracks or damage.

2. INSPECT WU-TWC

Check for dents or damage.

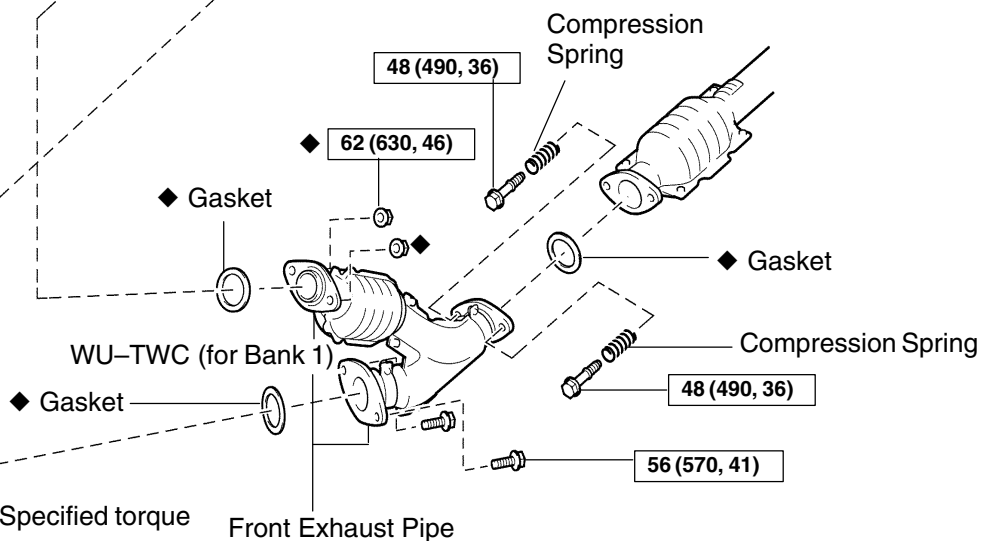
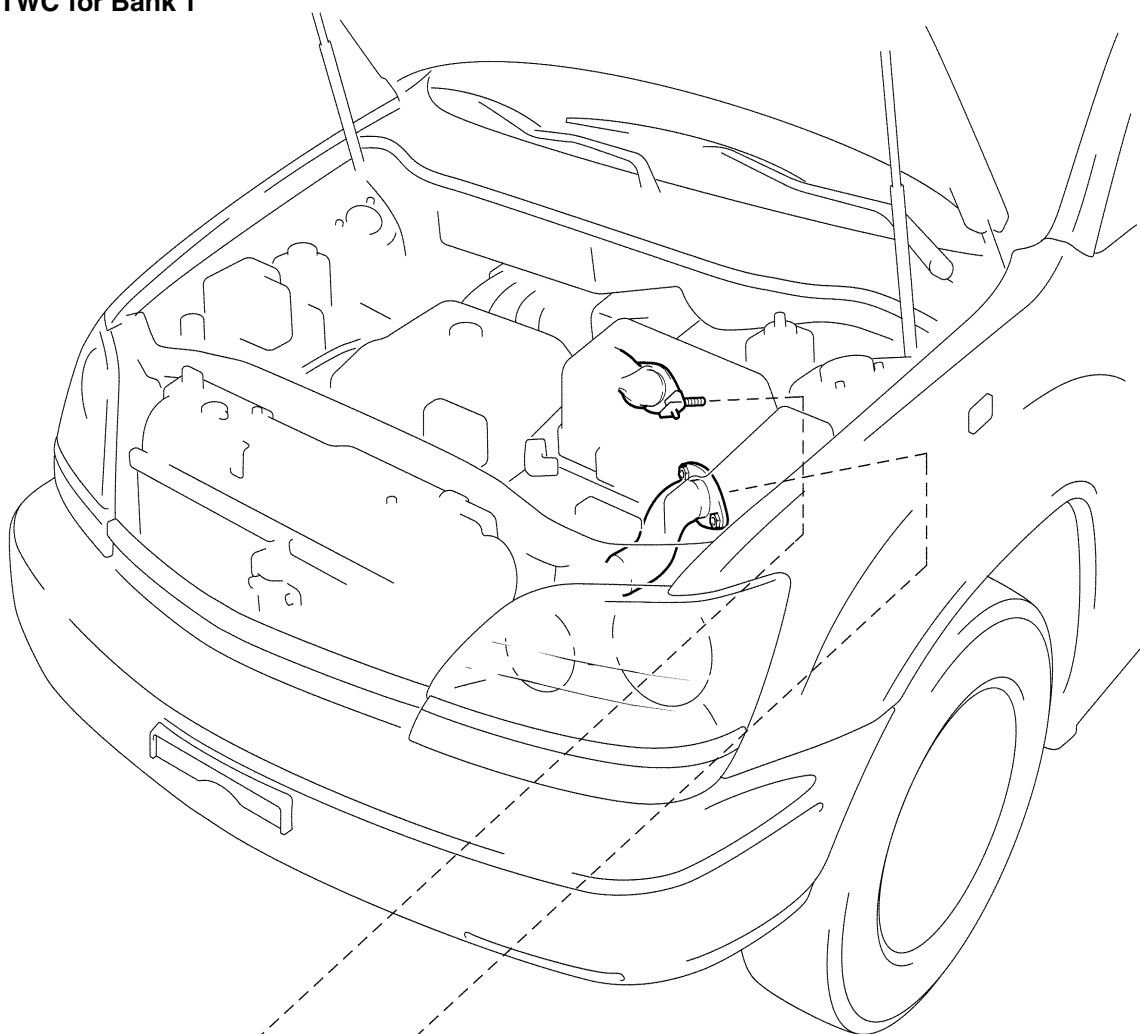
If any part of the protector is damaged or dented to the extent that it contacts the WU-TWC, repair or replace it.

3. INSPECT WU-TWC HEAT INSULATOR

- (a) Check the heat insulator for damage.
- (b) Check for adequate clearance between the catalytic converter and heat insulator.

COMPONENTS

WU-TWC for Bank 1



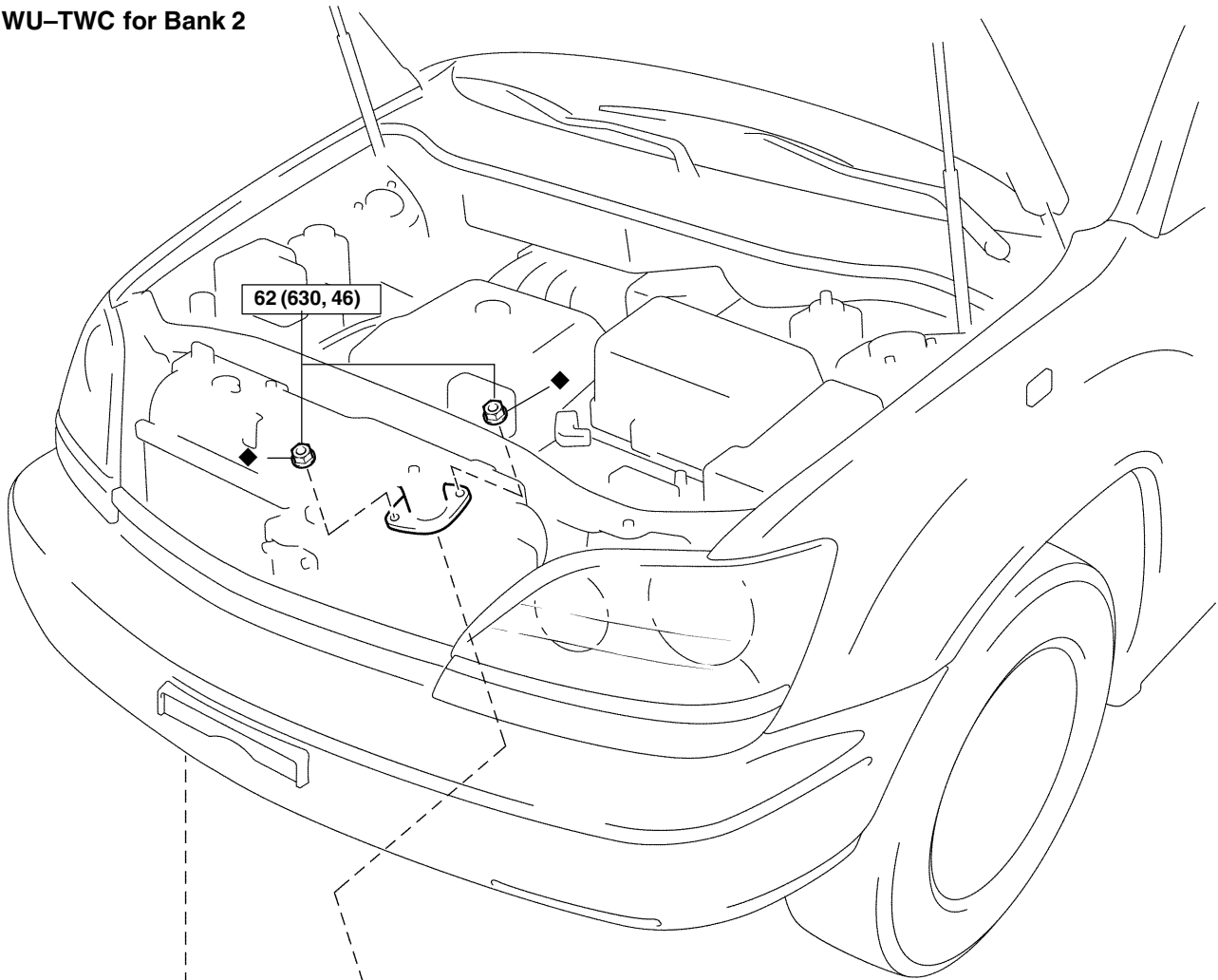
N·m (kgf·cm, ft·lbf) : Specified torque

◆ Non-reusable part

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WU-TWC for Bank 2

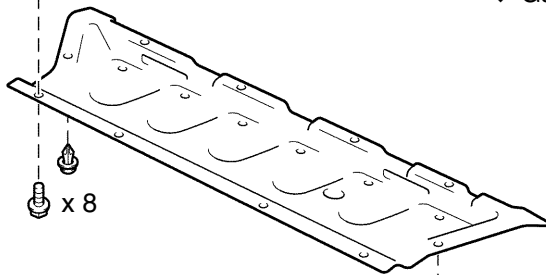


◆ Gasket

WU-TWC
(for Bank 2)

56 (570, 41)

◆ Gasket



Engine Under Cover

N·m (kgf·cm, ft·lbf) : Specified torque

◆ Non-reusable part

THREE-WAY CATALYTIC CONVERTER (TWC) SYSTEM

ON-VEHICLE INSPECTION

EC022-02

1. INSPECT EXHAUST PIPE ASSEMBLY

- (a) Check the connections for looseness or damage.
- (b) Check the clamps for weakness, cracks or damage.

2. INSPECT TWC

Check for dents or damage.

If any part of the protector is damaged or dented to the extent that it contacts the TWC, repair or replace it.

3. INSPECT TWC HEAT INSULATOR

- (a) Check the heat insulator for damage.
- (b) Check for adequate clearance between the catalytic converter and heat insulator.

COMPONENTS

