THREE-WAY CATALYTIC CONVERTER (TWC) SYSTEM



To reduce HC, CO and NOx emissions, they are oxidized, reduced and converted to nitrogen (N ₂), carbon dioxide (CO ₂), and water (H ₂ O) by the catalytic converter.						
Exhaust Port	N	TWC	N	Exhaust Gas		
HC, CO and NOx		Oxidation and reduction		CO ₂ H ₂ O N ₂		

EXHAUST PIPE ASSEMBLY INSPECTION

- 1. CHECK CONNECTIONS FOR LOOSENESS OR DAMAGE
- 2. CHECK CLAMPS FOR WEAKNESS, CRACKS OR DAMAGE



THREE-WAY CATALYTIC CONVERTER INSPECTION

CHECK FOR DENTS OR DAMAGE

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



HEAT INSULATOR INSPECTION

- 1. CHECK HEAT INSULATOR FOR DAMAGE
- 2. CHECK FOR ADEQUATE CLEARANCE BETWEEN CATALYTIC CONVERTER AND HEAT INSULATOR



THREE-WAY CATALYTIC CONVERTER REPLACEMENT

1. REMOVE CONVERTER

- (a) Jack up the vehicle.
- (b) Check that the converter is cool.
- (c) Remove the bolts at the front and rear of the converter.
- (d) Remove the converter and gaskets.
- 2. INSTALL CONVERTER
- (a) Place new gaskets on the converter front and rear pipes, and connect the converter to the exhaust pipes.
- (b) Torque the bolts. Torque: 39 N·m (400 kgf cm, 29 ft lbf)
- (c) Reinstall the bracket bolts and tighten them.

SERVICE SPECIFICATIONS TORQUE SPECIFICATIONS

Part tightened	N∙m	kgf⋅cm	ft·lbf
Cylinder head X EGR valve	13	130	9
Air intake chamber X EGR pipe	13	130	9
Intake manifold X PAIR reed valve	13	130	9
No. 1 air injection manifold X PAIR reed valve	13	130	9
Three-way catalytic converter X Front and rear pipes	39	400	29