

Diagnosis and Testing

Exhaust System

Symptom Chart(s)

Symptom Chart: Symptom Chart - Exhaust System

Verify the customer concern. Inspect the components of the exhaust system for obvious signs of damage or other mechanical concerns using the following chart.

Visual Inspection Chart - Mechanical

Mechanical
- Exhaust pipe pinched or crushed - Damaged muffler - Broken or damaged exhaust hanger brackets - Damaged catalytic converter - Loose or damaged heat shields

Verify the exhaust system is installed correctly, with clamps correctly located and tightened to specifications. If the fault is not visually evident, determine the symptom. GO to Symptom Chart below.

Symptom Chart

Condition	Possible Sources	Actions
Vehicle has low or no power – vehicle performance complaint	- Exhaust pipe pinched or crushed - Damaged catalytic converter - Loose obstruction in exhaust	REFER to the Powertrain Control/Emissions Diagnosis (PC/ED) manual.
	Restricted exhaust (possible frozen condensate in muffler)	CHECK drain holes for foreign material. PARK the vehicle inside to thaw. TEST the vehicle for normal operation. If the concern is still present, REFER to the Powertrain Control/Emissions Diagnosis (PC/ED) manual.
Burning smell – usually occurs at idle, with possible traces of smoke	- Foreign material caught in exhaust system - Missing heat shields	INSPECT the exhaust system for foreign material or missing heat shields. REPAIR or INSTALL new components as necessary.
Odor – described as a sulfur or rotten egg smell	- Catalytic converter - Excessive sulfur content in fuel	At times, a slight sulfur smell is normal for catalytic converters. The cause is the sulfur content in the gasoline being used. ADVISE the customer no repair is required.