

diagnostic practices. REFER to: Diagnostic Methods .

Condition	Possible Sources	Actions
Vibration when the brakes are applied	Brake disc(s)/ Suspension components	GO to Pinpoint Test A
Brake vibration/shudder - occurs when the brake pedal is released	Brake drag	REFER to Symptom Chart: Brake System in Symptom Chart(s)
Rattling noise	Caliper guide pins or guide pin bolts Missing or damaged anti-rattle clips or springs Loose brake disc shield	INSPECT the caliper guide pins and guide pin bolts. INSTALL new components as necessary. INSPECT the brake pads for missing clips or broken springs. INSTALL new components as necessary. TIGHTEN the brake disc shield bolts to specification. REFER to: Brake Disc Shield . REFER to: Brake Disc Shield .
Squealing noise - occurs on first (morning) brake application	Brake pads	Acceptable condition. Caused by humidity and low brake pad temperature.
Squealing noise - a continuous squeal	Brake pads	INSPECT the brake pads. INSTALL new components as necessary. REFER to: Brake Pads . REFER to: Brake Pads - Vehicles Without: Electronic Parking Brake (EPB) . REFER to: Brake Pads - Vehicles With: Electronic Parking Brake (EPB) .
Squealing noise - an intermittent squeal	Brake pads	Acceptable condition. Caused by cold, heat, water, mud or snow.
Groaning noise - occurs at low speeds with brake lightly applied (creeping)	Brake pads	Acceptable condition.
Grinding/moaning noise - continuous	Brake pads Brake disc	INSPECT the brake pads, brake discs and attaching hardware for damage. VERIFY brake components are within specifications. INSTALL new components as necessary.

DIAGNOSIS AND TESTING > BRAKE SYSTEM > PINPOINT TESTS

Diagnostics in this service information assume a certain skill level and knowledge of Ford-specific diagnostic practices. REFER to: Diagnostic Methods .