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If the concern is not visually evident, verify the symptom.

DIAGNOSIS AND TESTING > TURBOCHARGER > SYMPTOM CHART

Symptom	Possible Sources	Action
Loss of power/performance	Clogged Air Cleaner (ACL) element Loose connections or damage to air intake hoses and tubes Malfunctioning fuel system Poor fuel quality Engine wear (piston rings, valve guides) Turbocharger turbine or compressor wheel damage Damaged exhaust or exhaust leaks at turbocharger housing Malfunctioning turbocharger bypass valve Obstructed wastegate actuator linkage Damaged wastegate actuator linkage Wastegate actuator operation PCM - DTC	INSTALL a new Air Cleaner (ACL) element. TEST the system for normal operation. TIGHTEN the hose clamps. INSPECT for damage and REPAIR as necessary. Refer to ENGINE CONTROLS - POWERTRAIN DTC CHARTS & DESCRIPTIONS (EXCEPT DIESEL & HYBRID) . DRAIN and FILL with fresh fuel. REPAIR as required. INSPECT the turbocharger. REFER to the Check for Free Rotation - Off Vehicle in Component Tests . INSPECT for leaks. Leaks can usually be detected audibly or visually, by a discoloration caused by escaping hot exhaust gases. REPAIR as required. Refer to ENGINE CONTROLS - POWERTRAIN DTC CHARTS & DESCRIPTIONS (EXCEPT DIESEL & HYBRID) . INSPECT the turbocharger wastegate linkage for obstructions. REPAIR as required. INSPECT the turbocharger wastegate linkage for damage. INSTALL a new turbocharger as necessary. REFER to: Turbocharger LH . REFER to: Turbocharger RH . TEST the wastegate actuator operation. Refer to ENGINE CONTROLS - POWERTRAIN DTC CHARTS & DESCRIPTIONS (EXCEPT DIESEL & HYBRID) . REFER to: ELECTRONIC ENGINE CONTROLS .

Symptom	Possible Sources	Action
Excessive oil consumption	Incorrect type or grade of oil Oil in exhaust manifolds Clogged Air Cleaner (ACL) element Blocked or restricted turbocharger oil drain tubes Damaged or collapsed air intake hoses and tubes Damaged exhaust or exhaust leaks at turbocharger housing to cylinder head Turbocharger oil seals leaking Damaged crankcase ventilation system	DRAIN and FILL with specified oil. REPAIR as required. INSTALL a new Air Cleaner (ACL) element. TEST the system for normal operation. INSPECT the turbocharger oil drain tube. REPAIR as necessary. TIGHTEN hose clamps. INSPECT for damage and REPAIR as necessary. INSPECT for leaks. Leaks can usually be detected audibly or visually, by a discoloration caused by escaping hot exhaust gases. REPAIR as required. REFER to Turbocharger Internal Oil Leak Test in Component Tests . Visually INSPECT the crankcase ventilation system. REPAIR as necessary.

Symptom	Possible Sources	Action
Excessive noise	Turbocharger compressor air intake pipe leaking Loose connections or damage to air intake hoses and tubes Air leaks at turbine housing, blown joints or damaged exhaust Carbon build up in the turbine housing causing contact with turbine wheel Turbocharger imbalance due to foreign object/damage Turbine bearing failure Inoperative turbocharger bypass valve	REPAIR or INSTALL a new pipe as required. TIGHTEN hose clamps. INSPECT for damage and REPAIR as necessary. INSPECT for leaks. Leaks can usually be detected audibly or visually, by a discoloration caused by escaping hot exhaust gases. REPAIR as required. INSPECT the turbocharger. REFER to the Check for Free Rotation - Off Vehicle in Component Tests . REPAIR as required. INSPECT the turbocharger. REFER to the Check for Free Rotation - Off Vehicle in Component Tests . Refer to ENGINE CONTROLS - POWERTRAIN DTC CHARTS & DESCRIPTIONS (EXCEPT DIESEL & HYBRID) .

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