Component Procedures: Alternator

Table of Contents

Component Procedures: Alternator

Parts and Labor (itype_189)

Parts

Qualifier	Part #	Name	Price	Note
Alternator	22859538	Alternator	498.14	

Labor

Operation	Qualifier Path	Skill	Std Hrs	Wty Hrs
Remove & Replace	Alternator > Alternator, R&R	B	1.3	0.0

Generator Replacement (LFX) (Article 11958)

Callout Component Name
Preliminary Procedure Disconnect the negative battery cable . Refer to Battery Negative Cable Disconnection and Connection . Remove the engine manifold cover. Refer to Intake Manifold Cover Replacement - Front . Remove the radiator outlet pipe. Refer to Radiator Outlet Pipe Replacement . Remove the generator drive belt. Refer to Drive Belt Replacement .
Preliminary Procedure
- Disconnect the negative battery cable . Refer to Battery Negative Cable Disconnection and Connection .
- Remove the engine manifold cover. Refer to Intake Manifold Cover Replacement - Front .
- Remove the radiator outlet pipe. Refer to Radiator Outlet Pipe Replacement .
- Remove the generator drive belt. Refer to Drive Belt Replacement .

1 Engine Harness Connector
2 Battery Positive Fastener Caution: Refer to Fastener Caution . Tighten 15 Nm (11 lb ft)
15 Nm (11 lb ft)
3 Battery Positive Cable
4 Generator Mounting Fastener (Qty: 3) Tighten 58 Nm (43 lb ft)
58 Nm (43 lb ft)
5 Generator

Generator Noise Diagnosis (Article 11941)

Diagnostic Instructions
- Perform the Diagnostic System Check - Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category.

Diagnostic Aids
Noise from a generator may be due to electrical or mechanical noise. Electrical noise or magnetic whine usually varies with the electrical load placed on the generator and is a normal operating characteristic of all generators. When diagnosing a noisy generator, it is important to remember that loose or misaligned components around the generator may transmit the noise into the passenger compartment and that replacing the generator may not solve the problem.

Circuit/System Testing
- Start the engine. Verify the noise can be heard. Compare the concern to a similar vehicle.
- Perform a charging system test. Verify that the generator is charging properly.
- Inspect the generator, generator mounting, wiring harness , heater hoses, A/C lines, or other accessory equipment that may be misrouted or be the cause of noise being transmitted into the passenger compartment.
- Ignition OFF, remove the engine drive belt. Verify the generator, A/C compressor, water pump pulley, power steering pump, idler pulley, and tensioner pulley spin freely.
- If any of the pulleys do not spin freely, replace the affected component.
- Start the engine, with the drive belt removed. Verify that the noise goes away. Operate the engine for no longer than 30-40 seconds.
- If the noise is still present, the generator is not the cause of the noise.
- Loosen all generator mounting bolts and ensure the generator is properly aligned. Tighten the mounting bolts to specification, refer to Generator Replacement .

Repair Instructions
Perform the Diagnostic Repair Verification after completing the diagnostic procedure.
- Drive Belt Tensioner Replacement - Accessory for the 6.2L engine

- Drive Belt Replacement - Accessory for the 6.2L engine
- Drive Belt Replacement for the 2.8L, 3.0L, 3.2L and 3.6L engines
- Drive Belt Tensioner Replacement for the 2.8L, 3.0L, 3.2L and 3.6L engines
- Generator Replacement