

SERVICE BULLETIN

Original Issue Date: **9/09 (not released)**

Model: **17/18 kW Residential Generator Sets**

Market: **Residential/Commercial**

Subject: **Stepper Motor Fasteners**

Introduction

The generator set manufacturer has received reports of loose stepper motors on 17 kW and 18 kW residential/commercial generator sets. The hex flange nuts that hold the stepper motor mounting bracket to the engine have come loose on some generator sets. Loosening of the nuts may cause the generator set to shut down on an overcrank fault.

Check the four hex flange nuts that secure the stepper motor bracket and carburetor assembly to the engine. See Figure 1. Perform this check during generator set startup or the next routine maintenance visit or service call. There will be no warranty allowance for this procedure. Apply Loctite® 242 removable thread locker as described in this procedure to secure the hex flange nuts, if necessary. Engines built after 4/13/09, with serial numbers beginning with 3910300011 and after, have Loctite applied by the manufacturer.

Read the entire service bulletin before proceeding. Perform steps in the order shown. Contact the Generator Service Department with any questions.

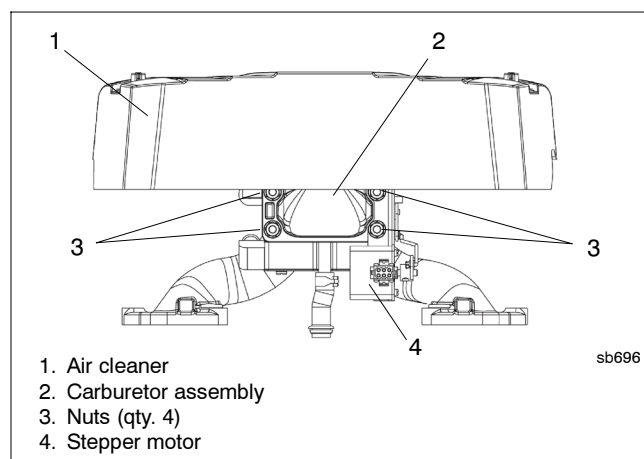


Figure 1 Location of Nuts Securing Stepper Motor Bracket and Carburetor Assembly

Safety Precautions

Observe the following safety precautions while servicing the unit.

⚠ WARNING



Accidental starting.
Can cause severe injury or death.

Disconnect the battery cables before working on the generator set. Remove the negative (-) lead first when disconnecting the battery. Reconnect the negative (-) lead last when reconnecting the battery.

Disabling the generator set. Accidental starting can cause severe injury or death. Before working on the generator set or connected equipment, disable the generator set as follows: (1) Move the generator set master switch to the OFF position. (2) Disconnect the power to the battery charger. (3) Remove the battery cables, negative (-) lead first. Reconnect the negative (-) lead last when reconnecting the battery. Follow these precautions to prevent starting of the generator set by an automatic transfer switch, remote start/stop switch, or engine start command from a remote computer.

⚠ WARNING



Hot engine and exhaust system.
Can cause severe injury or death.

Do not work on the generator set until it cools.

Routing	Service Manager	Sales Manager	Parts Manager	Technician No. 1	Technician No. 2	Technician No. 3	Return This to
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Servicing the engine heater. Hot parts can cause minor personal injury or property damage. Install the heater before connecting it to power. Operating the heater before installation can cause burns and component damage. Disconnect power to the heater and allow it to cool before servicing the heater or nearby parts.

Service Procedure

1. Place the generator set master switch in the OFF position.
2. Disconnect the power to the battery charger, if equipped.
3. Disconnect the generator set engine starting battery, negative (-) lead first.
4. Open the enclosure roof and remove the front panel, if necessary, to gain access to the stepper motor area shown in Figure 2. Identify the four nuts that secure the stepper motor mounting bracket and carburetor assembly to the engine.
5. Working one fastener at a time, loosen the existing hex flange nut and apply Loctite® 242 removable thread locker to the threads of the stud. Use a torque wrench to tighten the nut to 7.5 – 9.1 Nm (66 – 81 in. lbs.). Repeat for all four nuts securing the carburetor assembly to the engine.
6. Reconnect the generator set engine starting battery, negative (-) lead last.
7. Reconnect power to the battery charger.

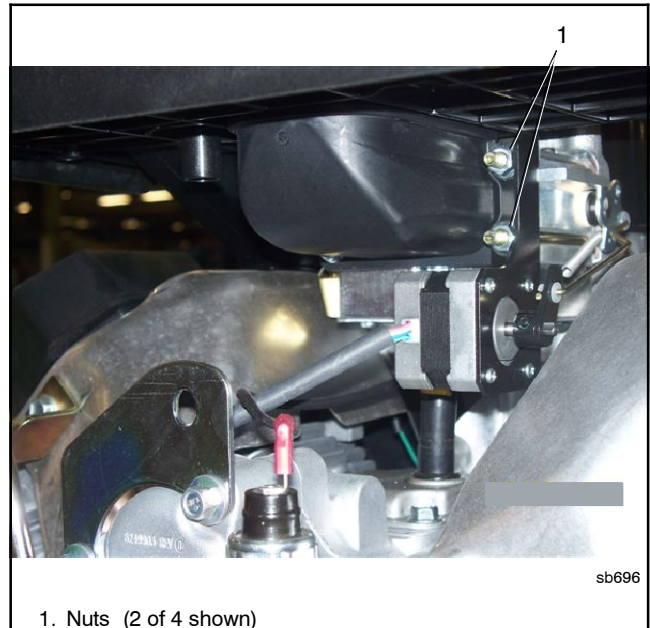


Figure 2 Carburetor Assembly and Stepper Motor