

SERVICE BULLETIN

Original Issue Date: **5/94**
 Model: **33-45 kW (Ford Powered)**
 Market: **Standby**
 Subject: **Cylinder Head Bolt Torquing Procedure**

A new cylinder head bolt torquing procedure is required for engines used on 33-45 kW generator sets. The Ford CSG-649 engine uses a new type of cylinder head bolt referred to as a torque-to-yield bolt. **This change applies to engines manufactured after August, 1993.**

Refer to the date code cast in the engine block to determine the engine's date of manufacture. The 4-character (numeric, alpha, numeric, numeric) date code is cast in the face of the block on the upper left side below the cylinder head parting line.

The first character is numeric and is the last digit of the year beginning 199-. The second character is alphabetic and corresponds to the month of manufacture. The last two characters are numeric and refer to the day of manufacture.

Example: 3I01
 3 = 1993
 I = September (A = January, B = February, etc.)
 01 = first day of the month

If the date of manufacture is August, 1993 or before, use the procedure shown in the CSG-649 Industrial Service Manual, Part No. TP-5185.

Use the following procedure if the date of manufacture is after August, 1993:

Do not reinstall the existing torque-to-yield bolts. Replace used torque-to-yield bolts with new bolts. The part no. of the torque-to-yield bolt is F3ZZ-6065-B.

First torque all bolts in the specified numerical sequence to 50-55 ft. lbs. (68-75 Nm). See Figure 1 for correct cylinder head bolt sequence. An then turn all bolts clockwise in numerical sequence an additional 90° ±5°.

Use the CSG-649 Industrial Service Manual, Part No. TP-5185 for the remainder of the reassembly procedure.



WARNING

Accidental starting.

Can cause severe injury or death.

Disconnect battery cables before working on generator set (negative lead first and reconnect it last).

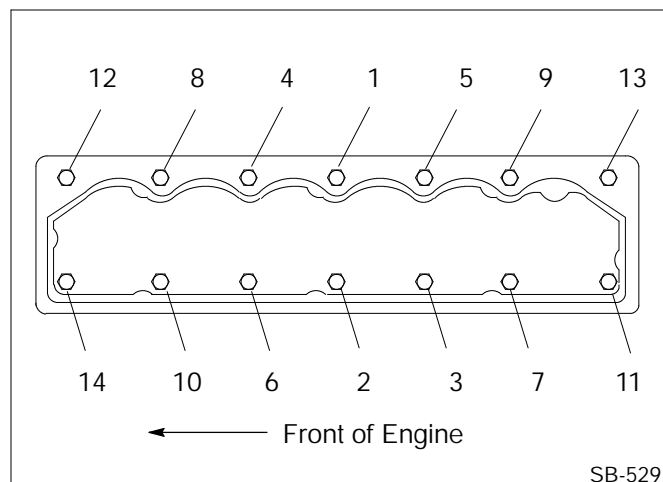


Figure 1. Cylinder Head Bolt Sequence

Accidental starting can cause severe injury or death.

Turn generator master switch to OFF position, disconnect power to battery charger, and remove battery cables (remove negative lead first and reconnect it last) to disable generator set before working on any equipment connected to generator. The generator set can be started by automatic transfer switch or remote start/stop switch unless these precautions are followed.

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