
INSTALLATION INSTRUCTIONS

Original Issue Date: 11/90
Model: 4-300 kW
Market: Industrial, RV/Mobile, Marine
Subject: Flush-Fit End Bracket Installation



**Accidental starting.
Can cause severe injury or death.**

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

Accidental starting can cause severe injury or death. Turn generator set 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 set. The generator set can be started by automatic transfer switch or remote start/stop switch unless these precautions are followed.

Accidental starting can cause severe injury or death. Disconnect battery cables (remove negative lead first and reconnect it last) to disable generator set before working on any equipment connected to generator set. The generator set can be started by the remote start/stop switch unless this precaution is followed.

The following procedure applies to end bracket installation. Determine the type of end bracket on the generator set before continuing with one of the following procedures. 4-18 kW generators have an aluminum end bracket with a steel insert. 18-300 kW generators have a cast iron end bracket with a precision machined bore. Neither end bracket uses a tolerance ring because the mating surfaces have strict tolerances.

An end bracket without a tolerance ring is a flush-fit end bracket. End brackets which employ tolerance rings have service replacements using the flush-fit end bracket.

The flush-fit cast iron end bracket can be identified by the bearing bore having a continuous contour and the lack of the recessed bore which served as the tolerance ring groove.

The flush-fit aluminum end bracket can be identified by a 1/8 in. (3 mm) wide groove in the steel insert with an o-ring.

Follow the appropriate assembly procedure when installing a new end bracket and when service requires removal and replacement of the existing end bracket.

For precise fit the end bracket and rotor bearing should be at the same temperature during assembly.

8-12.5 C-Marine:

To maintain correct fit replace the rotor ball bearing if the bearing outer race or end bracket bore show any sign of wear.

Assembly Procedure For 4-18 kW Aluminum End Bracket With Steel Insert

Installation

1. Insert a new o-ring into the bearing bore groove.
2. Align end bracket on stator assembly and rotor bearing.

NOTE

Some 8-12.5 kW rotor bearings have a slotted outer race. Align the slotted outer race with the mating pin fixed into the end bracket bore.

NOTE

Do NOT attempt to install end bracket to rotor by tightening overbolts. Damage to end bracket and/or generator adapter may result.

NOTE

Do not use lubricant during assembly.

Check that stator shell notches are at the top and end bracket is aligned. Alignment of these components is critical for complete assembly of generator set.

3. Use a hard rubber or dead-blow hammer to alternately strike end bracket with medium force blows. Use the sequence shown in Figure 1 (use applicable illustration) to install end bracket.
4. Install and torque overbolts when end bracket is completely installed in stator assembly. Refer to generator set Service Manual for torque specification.

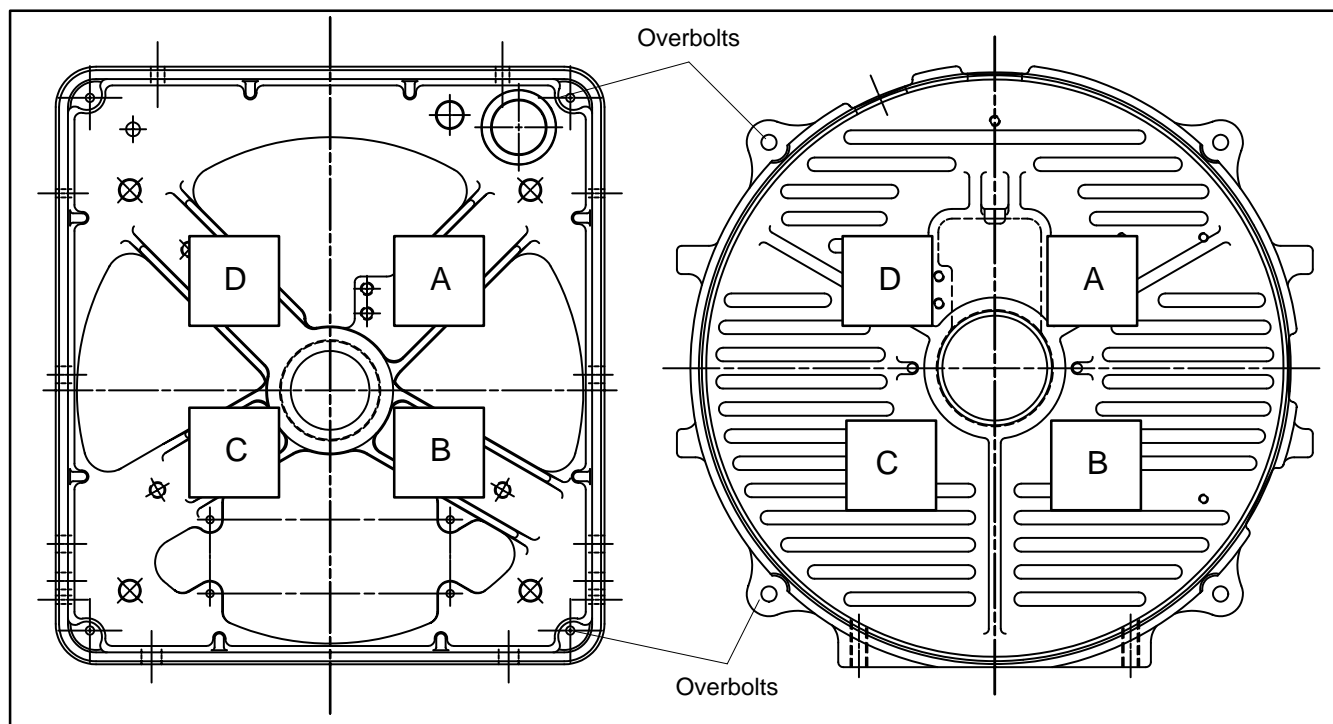


Figure 1. Aluminum End Bracket

Assembly Procedure For 20-300 kW Cast Iron End Bracket

Installation

1. Align end bracket on stator assembly and rotor bearing. Install and alternately tighten overbolts until snug.

NOTE

Do NOT attempt to install end bracket to rotor by tightening overbolts. Damage to end bracket and/or generator adapter may result.

2. Use a hard rubber or dead-blow hammer to alternately strike end bracket with medium force blows. Use the sequence shown in Figure 2 (use applicable illustration) to install end bracket.

Tighten the cap screws to enable easy assembly of the end bracket onto the rotor bearing. Tighten the cap screws in a rotating sequence.

3. Torque cap screws when end bracket is completely installed in stator assembly. Reference generator set Service Manual for torque specifications.

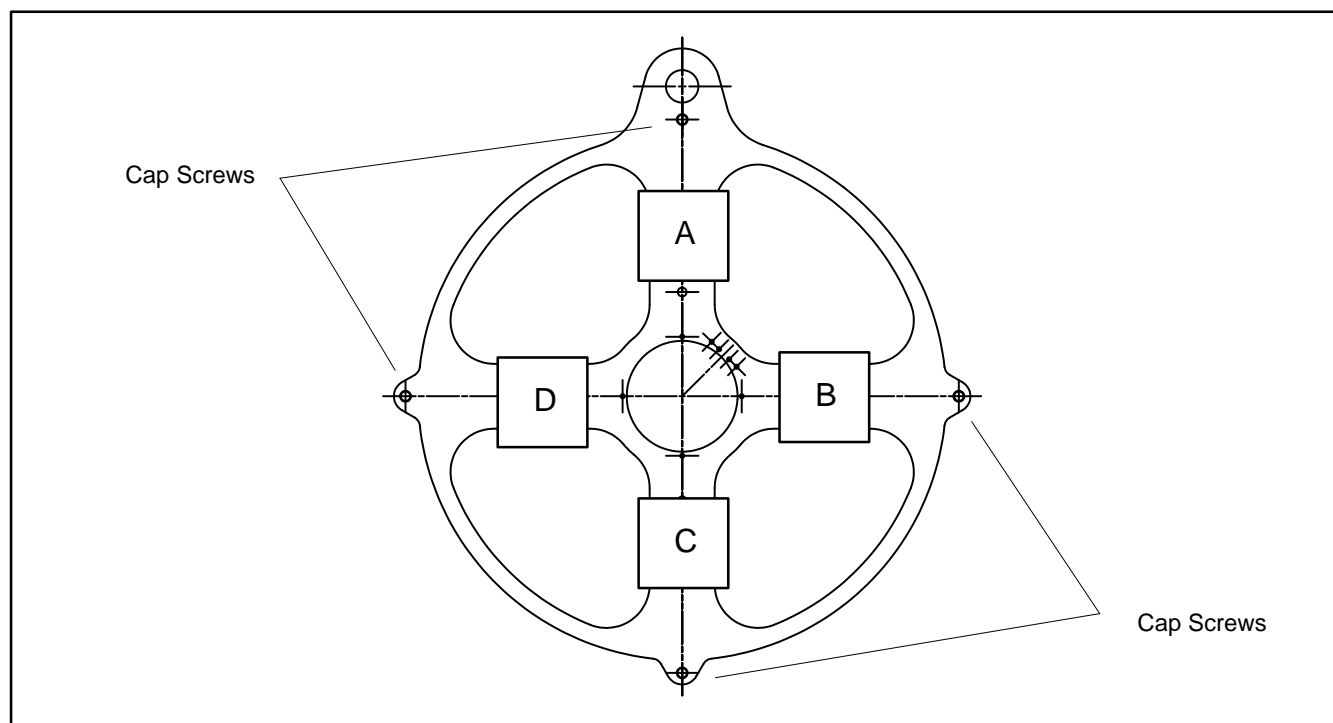


Figure 2. Cast Iron End Bracket