

SERVICE NOTE

# High voltage generators for diesel and gas engines, frame sizes 0710, 0900, 1120, 1250, 1600

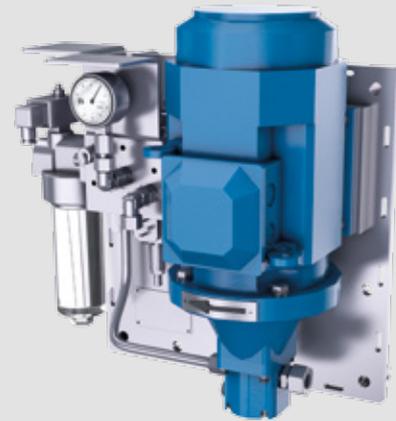
## Retrofit kit: Hydrostatic jacking



01

01 High voltage generator for diesel and gas engines with hydrostatic jack-up unit

02 Hydrostatic jack-up unit



02

Sleeve bearings are used in ABB's synchronous generators for diesel and gas engines, type AMG 0710, 0900, 1120, 1250 and 1600. These bearings are based on the principle that an oil film prevents contact between the generator shaft and bearing shells. When the shaft is rotating slowly, however, the oil film does not form sufficiently which causes wear to the sliding surface.

To avoid additional bearing wear at slow rotational speeds, jack-up units are used to ensure that an oil film is present. They supply oil at high pressure to lift the shaft up off the bearings and create the necessary oil film between the shaft and bearing.

Slow rotational speeds usually occur on engine startup or shutdown, during barring, or when the engine is turned slowly to remove any leaked liquid or moisture from the engine cylinders. Test runs are also often conducted at slow speeds.

Sleeve bearings wear rapidly at speeds below nominal. Jack-up units remove this limitation, enabling the generator to be rotated slowly without causing additional wear to the bearing shells.

Installation of jack-up units requires that the bearing shells are changed and the bearing housing is modified. It is therefore recommended that jack-up units are installed during bearing maintenance. ABB supplies all the necessary materials and documentation. For the best possible results, ABB service engineers are available to provide on-site installation assistance.

### Benefits

- Longer bearing lifetime
- Enables slow rotation without additional bearing wear
- System is easy to maintain
- Full manufacturer support

For more information please visit:

[new.abb.com/motors-generators/service](http://new.abb.com/motors-generators/service)

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