SERVICE BULLETIN

DATE: June 19, 1985 (Revised) *BULLETIN NUMBER:* 127

MODEL: 3.0, 4.4, 7.7, 11 & 12,5KW Generators

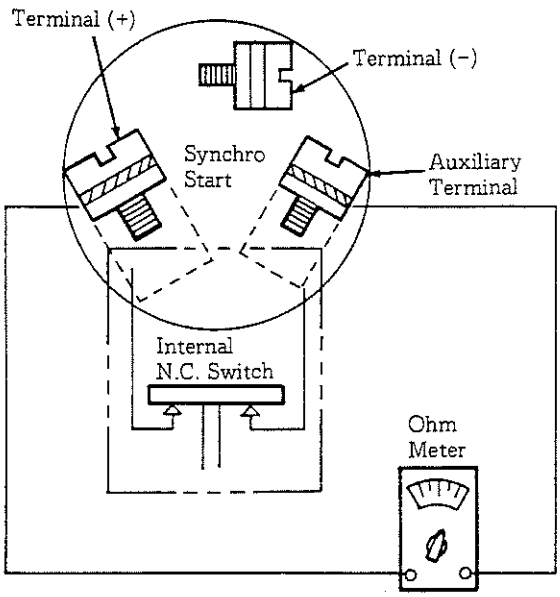
SUBJECT: Fuel Shut-Off Solenoid #23041 - Adjustment

Should it be necessary to disturb the mounting of a fuel shut-off solenoid for unit maintenance or repair or to replace a failed solenoid, the following procedure must be observed when replacing the solenoid on the generator.

With the solenoid de-energized and attached to its mounting bracket (4.4 mounting clamp), the solenoid plunger with linkage should be manually pushed into the solenoid and bottomed . The throttle arm is then moved into the approximate RUN position and the linkage adjusted and connected to it.

NOTE: On 4.4KW generators the solenoid's position may have to be changed by moving it fore or aft under the mounting clamp that holds it against the air intake silencer to properly install and adjust the connecting linkage to the throttle arm.

MANUAL CHECK
Check the operation and bottoming of the fuel solenoid, plunger manually by doing the following:



1. Connect an ohmmeter across the (+) terminal and vacant auxiliary terminal on the back of the fuel solenoid (Figure A).

2. With the fuel solenoid in the STOP position, 0 - 1 ohms resistance should be found across these two terminals.

3. Manually moving the throttle arm into the RUN position and bottoming the fuel solenoid plunger, a resistance of about 15 - 30 ohms should then register on the meter indicating that the plunger has bottomed against the internal switch de-energizing the pull in windings.

WESTERBEKE
WESTERBEKE CORPORATION
AVON INDUSTRIAL PARK, AVON, MA 02322 • TEL: (508) 588-7700

Failure to insure manually that the fuel solenoid operates as described above will result in the failure of the solenoid when operated electrically. (The fuel solenoid may fail within 30 seconds if the plunger does not bottom when electrically energized.)

When operated electrically by use of the preheat switch on the instrument panel, the fuel solenoid plunger should move smoothly and rapidly into the solenoid with no binding or hesitation, drawing the throttle arm into the RUN position with the plunger bottoming in the solenoid.

Slow or hesitant movement of the solenoid plunger into the solenoid when energized can be the result of linkage binding, misalignment and/or a possible voltage loss at the solenoid.

Remote start/stop panels when wired into the generator panel with inadequate wire size for the distance run can produce this effect. Check voltage at the solenoid (+) terminal.

With the solenoid operating properly when energized with the preheat switch, the generator can then be started and the linkage adjusted, so the engine speed will have the generator producing the correct NO LOAD voltage and Hertz. The linkage can then be secured.

> NOTE: 4.4KW generators may require the repositioning of the solenoid under its mounting clamp to adjust engine speed to produce correct NO LOAD voltage and Hertz from the generator.

Refer to SERVICE BULLETIN #144 dated NOVEMBER 19, 1984 as well when servicing the above generator models.