

QUICK START GUIDE



WHISPERWATT™ SERIES
MODEL
DCA300SSJU4F3PB
60 Hz GENERATOR
(JOHN DEERE 6090HFG06 DIESEL ENGINE)

Revision #0 (03/11/25)

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GENERATOR START-UP PROCEDURE (MANUAL)

WARNING

DO NOT operate this equipment without first reading and understanding all relevant safety information. Refer to the **Safety Information** section in the operation manual provided with this equipment.

NOTICE

Make sure all necessary setup and inspections have been performed prior to operating this equipment. Refer to the **Inspection/Setup** section in the operation manual.

NOTICE

This Quick Start Guide contains instructions for single-generator use only. For information regarding parallel operation of multiple generators, refer to the operation manual.

BEFORE STARTING

CAUTION

The engine's exhaust contains harmful emissions. **ALWAYS** have adequate ventilation when operating. Direct exhaust away from nearby personnel.

WARNING

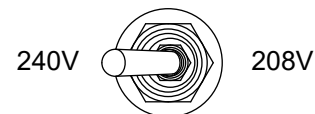
NEVER manually start the engine with the **main, GFCI, or auxiliary** circuit breakers in the **ON** (closed) position.

1. Make sure the **voltage change-over board** has been configured for the desired output voltage.

NOTICE

Make sure the tie bolts securing the voltage change-over board bus bars are **secure** and **tight**. The possibility exists of arcing that could cause a fire. Torque bolts to 221.3 lbf-in (25.0 N·m).

2. If the voltage change-over board has been configured for 240/139-volt output, make sure the **AC Voltage Select switch** (Figure 1) is in the correct position for the desired voltage output (240V or 208V).



**Figure 1. AC Voltage Select Switch
240-Volt Position**

3. Place the **Control Power switch** (Figure 2) in the **ON** position.



Figure 2. Control Power Switch (ON)

GENERATOR START-UP PROCEDURE (MANUAL)

- Make sure the **Circuit Breaker OFF** button LED is **ON (red)**. See Figure 3.

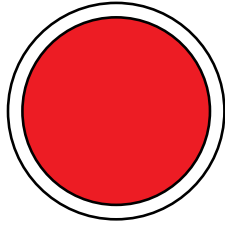


Figure 3. Circuit Breaker OFF Button (ON/RED)

- Connect the load to the **receptacles, cam-loks, or output terminal lugs** as shown in Figure 4. These load connection points can be found on the output terminal panel and the output terminal panel's hard wire hookup panel.

NOTICE

ALWAYS make sure that the connections to the UVW0 terminals are **secure** and **tight**. The possibility exists of arcing that could cause a fire. Torque tie bolts to 1,088.6 lbf-in (123.0 N·m).

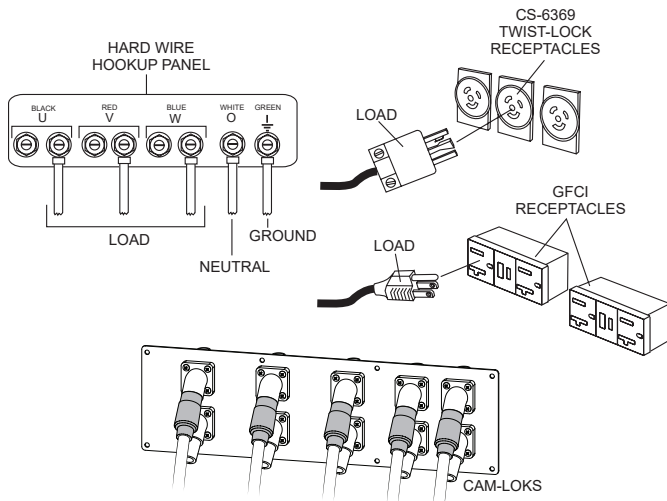
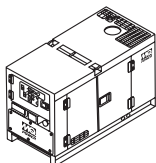
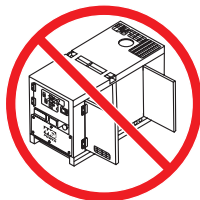


Figure 4. Connecting Loads

- Close all engine enclosure doors (Figure 5).



CORRECT



INCORRECT

Figure 5. Engine Enclosure Doors

STARTING (MANUAL)

- To start the engine, press the **Run** button (Figure 6) on the digital controller.

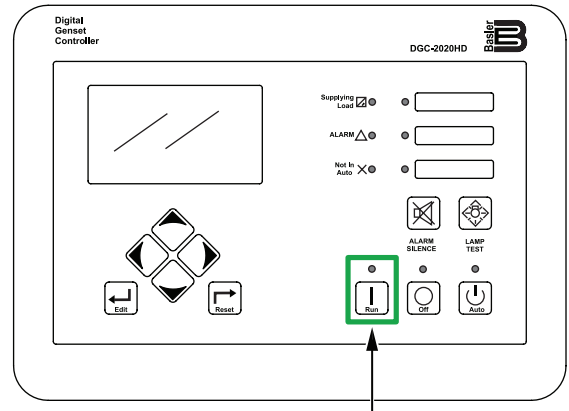


Figure 6. Digital Controller (Run Button)

NOTICE

If the engine fails to start within 3 attempts, press the **OFF** button on the controller and place the battery switch in the **OFF** position. Wait for at least 1 minute before repeating the starting process.

NOTICE

The engine will pre-heat automatically in cold weather conditions. The message **“Glow Plug Hold”** will be shown on the controller display and the engine will start automatically after pre-heating.

- Once the engine starts, let the engine run at idle (1,200 rpm) for approximately 30 seconds. Let the engine idle longer in cold weather conditions. Listen for any abnormal noises. If any abnormalities exist, shut down the engine and correct the problem.

NOTICE

Once the engine has warmed up, engine speed will automatically increase to 1,800 rpm.

GENERATOR START-UP PROCEDURE (MANUAL)

- The controller display will indicate the 60-cycle output frequency in **HERTZ** (Figure 7C).

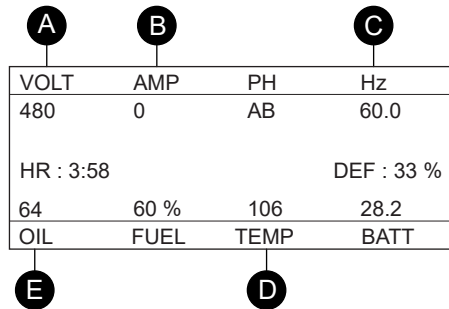


Figure 7. Controller Display

- The controller display will indicate the generator's output in **VOLTS** (Figure 7A).
- If the voltage is not within the specified tolerance, use the **voltage regulator** (Figure 8) to increase or decrease the desired voltage.

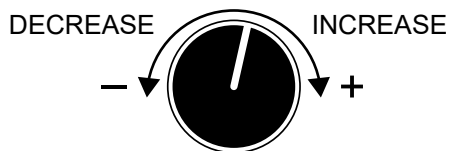


Figure 8. Voltage Regulator

- The controller display will indicate **zero amps** with no load applied (Figure 7B). When a load is applied, the display will indicate the amount of current that the load is drawing from the generator.
- The controller display will indicate the **oil pressure** of the engine (Figure 7E). Under normal operating conditions the oil pressure should be approximately 47 psi. (324 kPa).

NOTICE

Oil pressure readings may be higher immediately after starting, especially in cold weather conditions, but should return to normal as the engine temperature increases.

- The controller display will indicate the **coolant temperature** (Figure 7D). Under normal operating conditions the coolant temperature should be 185°–207°F (85°–97°C).

- Press the **Circuit Breaker ON button** (Figure 9). The button LED will turn **ON (green)** and power will be supplied to the output terminals, cam-locks, and receptacles.

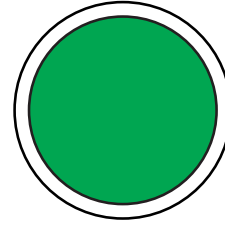



Figure 9. Circuit Breaker ON Button (ON/GREEN)

- Observe the amperage reading on the controller display (Figure 7B) and verify that it is the anticipated amount of current with respect to the load. The ammeter will only display an amperage reading if a load is in use.
- The generator will run until manually stopped or an abnormal condition occurs.

GENERATOR START-UP PROCEDURE (AUTO MODE)

STARTING (AUTO MODE)

! DANGER



Before connecting this generator to any building's electrical system, a **licensed electrician** must install an **isolation (transfer) switch**. Serious damage to the building's electrical system may occur without this transfer switch.

NOTICE

When connecting the generator to an isolation (transfer) switch, **ALWAYS** have power applied to the generator's internal battery charger. This will ensure that the engine will not fail due to a dead battery.

NOTICE

When the generator is set to **Auto mode**, the generator will **automatically start** in the event of commercial power falling below a prescribed level by means of a contact closure that is generated automatically by a transfer switch.

! WARNING

When running the generator in **Auto mode**, remember that the generator can start up at any time without warning. **NEVER** attempt to perform any maintenance while the generator is in Auto mode.

NOTICE

When the **Auto button** is pressed, the engine glow plugs will be warmed and the engine will start automatically after a start signal is received from the auto-start contacts.

When starting the generator in **Auto mode** use the manual start-up procedure except where noted (see below).

1. Perform steps 1 through 6 in **Before Starting** found in the **Generator Start-Up Procedure (Manual)** section.
2. Press the **Auto button** (Figure 10) on the digital controller. When a start signal is received from the auto-start contacts, the engine will start automatically after the preheating process has completed.

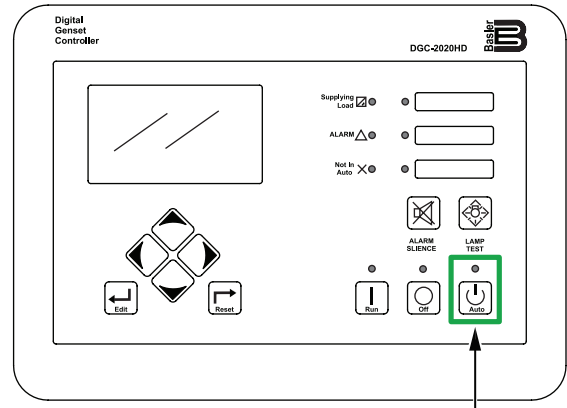


Figure 10. Digital Controller (Auto Button)

3. The main circuit breaker will automatically turn **ON** after the engine starts. Observe that the LED on the **Circuit Breaker ON button** has turned **ON (green)**. See Figure 9.

NOTICE

If the unit has **PowerBalance®** installed and the main breaker is closed, PowerBalance® should activate after 1 minute if the load is below 30% of the rated load.

If at any time the load spikes to 90% or more, PowerBalance® will immediately drop out and wait 5 minutes to re-evaluate the load.

GENERATOR SHUTDOWN PROCEDURE

NORMAL SHUTDOWN PROCEDURE (MANUAL)

WARNING

NEVER stop the engine suddenly except in an emergency.

1. Place the load's ON/OFF switch in the **OFF** position.
2. Press the **Circuit Breaker OFF button**. The button LED will turn **ON (red)**.

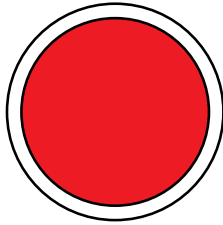


Figure 11. Circuit Breaker OFF Button (ON/RED)

3. Press the **OFF button** on the digital controller (Figure 12) to stop the engine. The engine will stop after a 1-minute cool-down process.

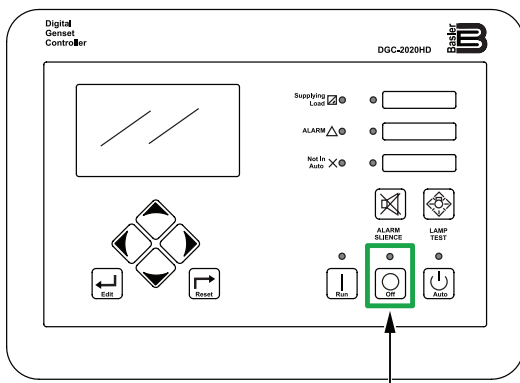


Figure 12. Digital Controller (OFF Button)

4. After the engine has stopped completely, place the **Control Power switch** in the **OFF** position (Figure 13).



Figure 13. Control Power Switch (OFF)

5. Allow sufficient time for adequate cooling, then inspect the entire generator for any damage or loosening of components that may have occurred during operation.

NORMAL SHUTDOWN PROCEDURE (AUTO)

1. Open the remote-start contacts. The circuit breaker will automatically turn **OFF** and the engine will stop after a 1-minute cool-down process.
2. Press the **OFF button** on the digital controller (Figure 12).
3. Place the **Control Power switch** in the **OFF** position (Figure 13).

EMERGENCY SHUTDOWN PROCEDURE

1. To stop the engine in the event of an emergency, push the **Emergency Stop switch** (Figure 14). This switch is located on the side of the generator next to the output terminal panel.

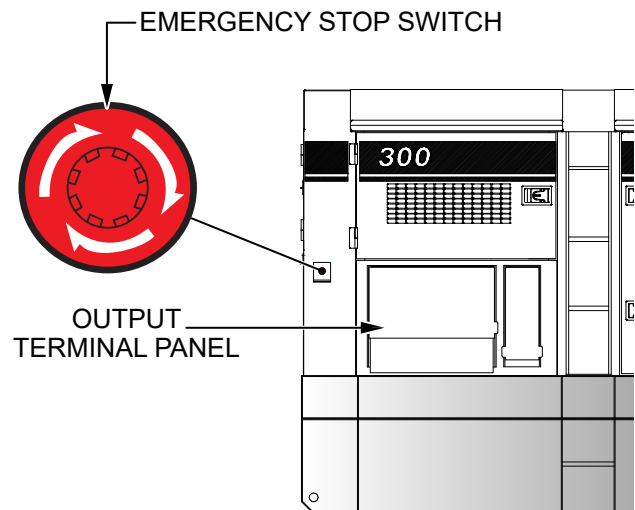


Figure 14. Emergency Stop Switch

2. After the engine has completely stopped, press the **OFF button** on the digital controller (Figure 12) and place the **Control Power switch** in the **OFF** position (Figure 13).
3. The Emergency Stop switch is a push-locked type switch. The switch contact can only be released by rotating the button in the clockwise direction. The engine cannot be restarted until the contact is released (closed).

AUTOMATIC SHUTDOWN SYSTEM

This unit is equipped with safety devices to automatically stop the engine in the event of a fault. Refer to **Protection Devices** in the **Troubleshooting (Diagnostics)** section of the operation manual for more information.

QUICK START GUIDE

HERE'S HOW TO GET HELP

PLEASE HAVE THE MODEL AND SERIAL
NUMBER ON HAND WHEN CALLING

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