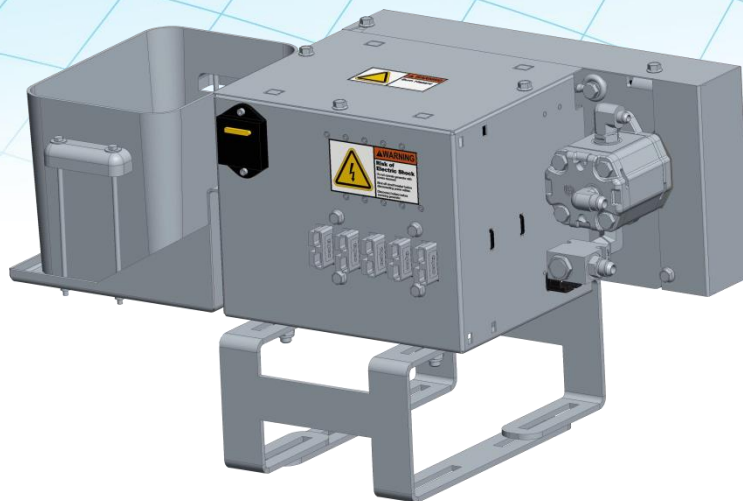


Ag Leader® ***Technology***



SureDrive™ Generator

**Generator
Installation Instructions
PN: 2006456-ENG REV. D**

Installation Overview

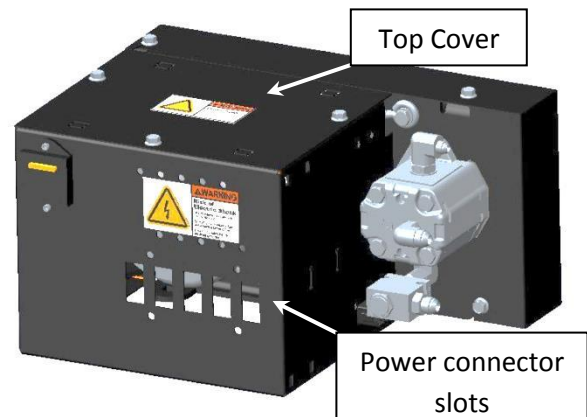
Required Parts

Generator Kit P/N: 4101396		
Part Number	Qty *	Description
4004364	2	Bracket - valve block, strap
4004836	1	Battery box - group 24
4004837	2	Bracket - generator mounting
4004838	1	Generator - 200 amp
4005186	1	Cable - pcm i/o (full)
4005077	1	Bracket - generator battery tray
4005123	1	Cable - generator to battery power
2002021-50125	4	Carriage bolt - 1/2in x 1 1/4in*
2002055-50	8	Hex nylock nut - 1/2in*
2002071-25	4	Flat washer - 1/4in*
2002071-50	8	Flat washer - 1/2in*
2002101-06180	4	Hex head bolt - 6 x 180mm*
2002121-0507	4	Carriage bolt - 1/2-13 x 7*
2002121-0512	4	Carriage bolt - 1/2-13 x 12*
2002121-0514	4	Carriage bolt - 1/2-13 x 14*
2002271-08016	8	Hex flange bolt - 8mm x 16mm*
4004845 OR 4004843	1	Distribution power - 5 section panel assembly or distribution power - 3 section panel assembly **
* Hardware can be located in Generator Hardware Kit P/Ns 4101243-22		
** Distribution Power Panel Assembly is located in the Master Kit (Section option depends on planter configuration)		

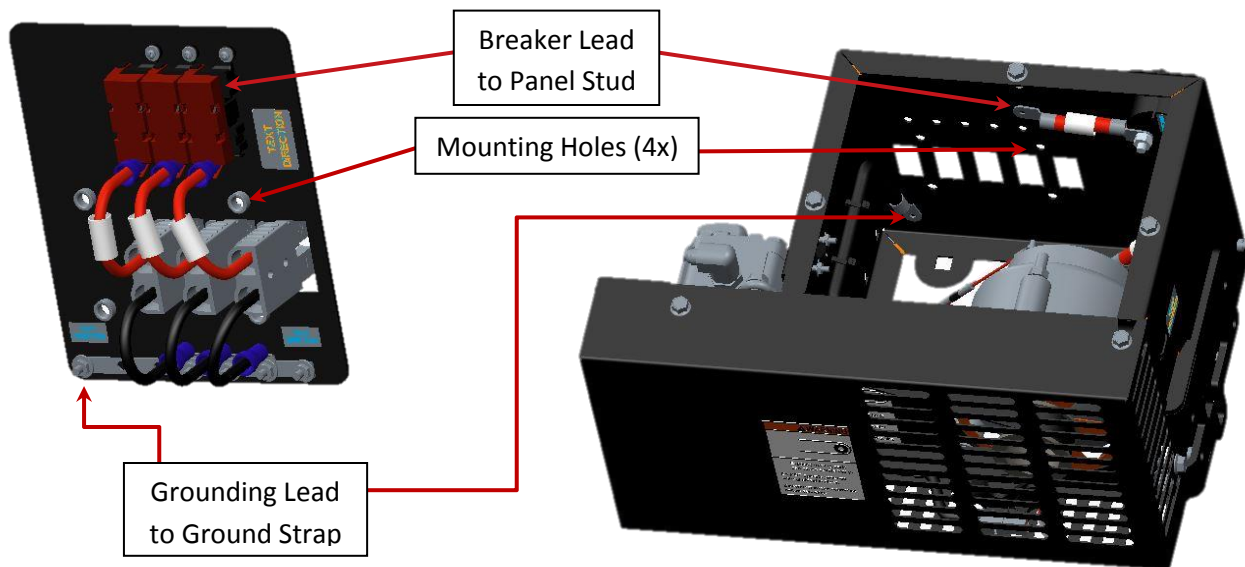
Installation Procedure

Installing Panel Assembly

1. Remove top cover and install Panel Assembly into Generator by inserting power connectors through slots from inside of generator box. Fasten panel with 4 provided 8 x 16mm hex head bolts in generator hardware kit.



2. Secure short lead from breaker switch to top right stud of Panel Assembly.
3. Attach Grounding Lead to Ground Strap.



NOTE

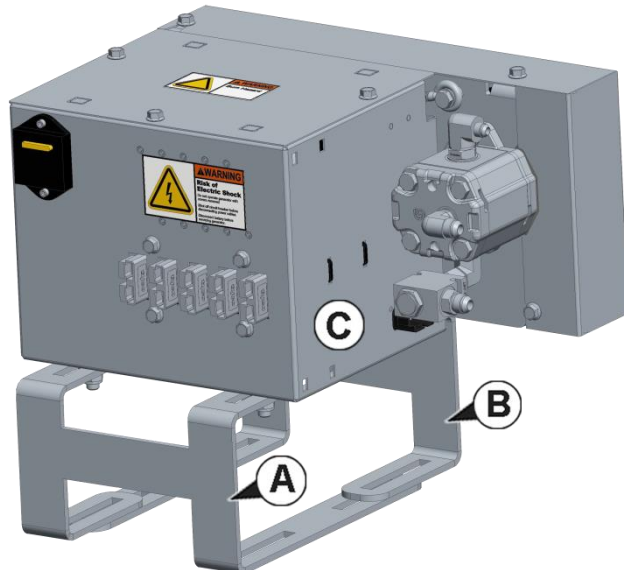
It is recommended that the generator is mounted within 5ft from the center of the tool bar of the planter.

Attaching on top of Hitch or on Platform

- If generator will be suspended on planter, go to next section, “Suspending Generator”.

1. Attach brackets (A) and (B) to enclosure (C) with (4) 8 x 16mm bolts, flat washers, and nuts.

- Brackets are not necessary if generator is being attached to a platform.



2. Attach to planter using supplied carriage bolts, washers, nuts and flat brackets. Choose length of carriage bolt that is most applicable.

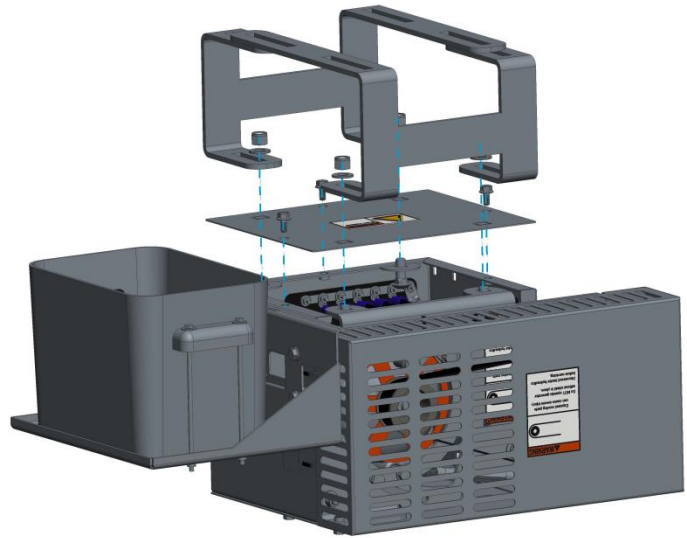


3. Attach battery tray to enclosure with (4) 8 x 16mm flange bolts.
4. Attach battery box to tray with (4) 6 x 180mm bolts.
5. Install battery
 - A group 34 battery recommended.
 - A group 24 battery will also work.
6. Replace Generator cover.

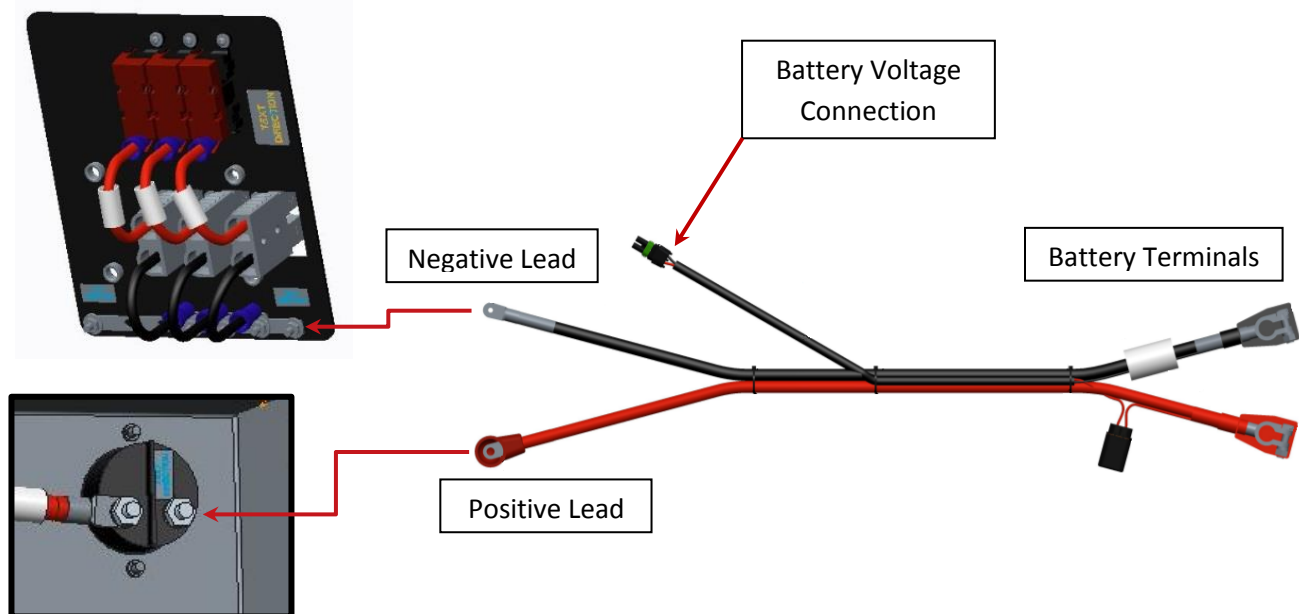


Suspending Generator

1. Turn enclosure over and attach plate between enclosure and brackets.
 - Plate has knockouts for bracket bolts.
2. Attach to planter using supplied carriage bolts, washers, nuts and flat brackets. Choose length of carriage bolt that is most applicable.
3. Attach battery tray to enclosure with (4) 8 x 16mm flange bolts
4. Attach battery box to tray with (4) 6 x 180mm bolts.
5. Install battery
 - A group 34 battery recommended.
 - A group 24 battery will also work.

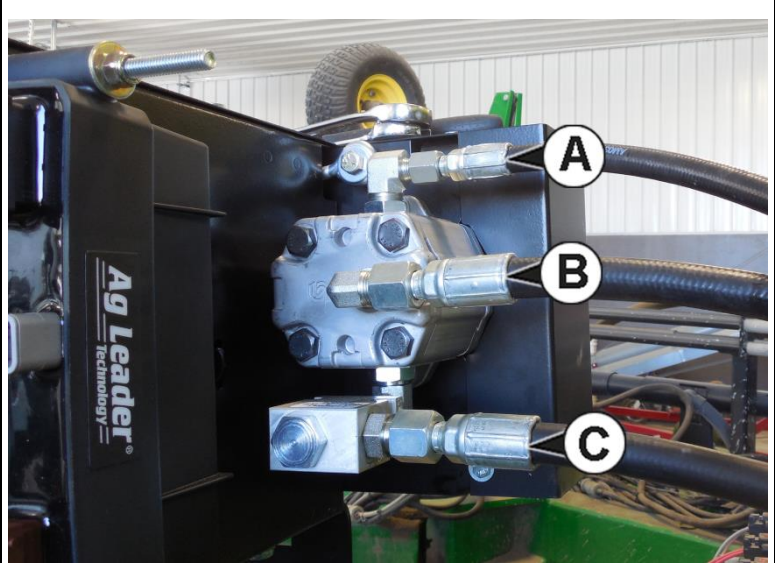


6. Secure positive ring terminal of battery cable to circuit breaker stud.
7. Secure negative ring terminal of battery cable to the ground busbar on the panel assembly.
8. Connect battery voltage connector to mating 2 pin weatherpack of generator bulkhead connector.



Hydraulics

1. Attach hydraulic hoses to generator.
 - (A) Pressure
 - (B) Case Drain (or Tank or Zero-Pressure Return)
 - (C) Return
2. Route hoses to hitch, ensuring enough slack where planter folds and avoiding points that may pinch, wear, or damage the hose



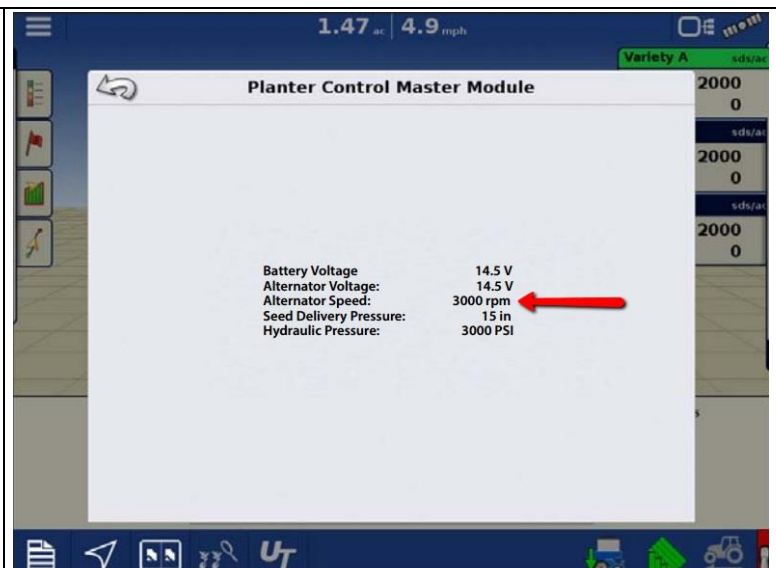
IMPORTANT: For hydraulic motors, the pressure hose should be connected to the **Retract** port of SCV, so float position can be used to safely turn off spinning motors. Return hose can be connected to the **Extend** port of the same SCV or to a motor return port.

3. Generator will require a needle valve installed between the motor and pressure line (A) **when SureDrive system is used with Hydraulic DownForce**. Needle valve kit purchased separately.
 - **Note:** Reference **Tee into Generator** instructions for further clarification.



Generator Start-Up Procedure

1. Before engaging generator hydraulic source, set the hydraulic flow to a minimum output (< 1 GPM) and needle valve (if equipped) should be shut.
2. Enter the Planter Control Master Module diagnostic screen to view the alternator speed.



3. Engage generator hydraulic source.
 4. (A) Without needle valve - Increase hydraulic flow until desired RPM is reached.
(B) With needle valve - Increase hydraulic flow to max flow. Slowly open the needle valve until desired RPM is reached.
- **NOTE:** Recommended operating Alternator RPM is between 3000 and 4000 RPM (4000 RPM \approx 6 GPM).
 - Down force input pressure will need to be above 2200 psi when Teed with Generator
 - Battery Voltage and Alternator Voltage should be within the range of 13.5 V to 15.5 V. The Alternator Voltage will always be slightly higher than the Battery Voltage.
 - Operating alternator higher than 4000 RPM will not produce a higher amperage output, and is not recommended.
 - **Important:** When powering down generator, **ALWAYS** put SCV to "FLOAT" position for at least 10 seconds before disengaging SCV. This ensures hydraulic motor does not come to a sudden stop which will damage the generator.