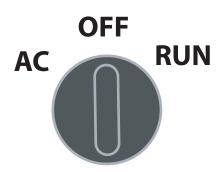




e240 Electric Excavator Quick Start Guide

POWER SWITCH

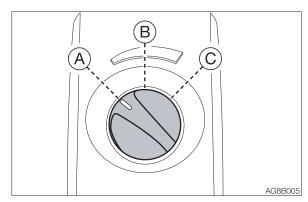


AC Position for powering the AC convenience outlets.

OFF Position for stopping the motor and inserting or removing the key.

RUN Position in which the motor is running. At this position, all the electrical equipment is functional.

THROTTLE CONTROLLER

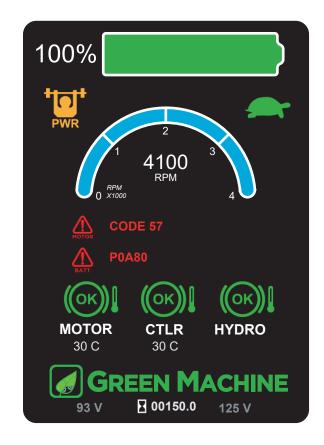


This controls the motor speed.

(A).....Stopped

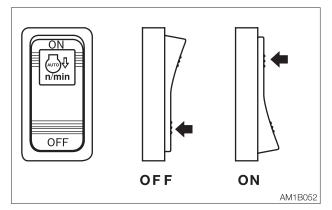
(B) Medium speed

(C) Maximum speed



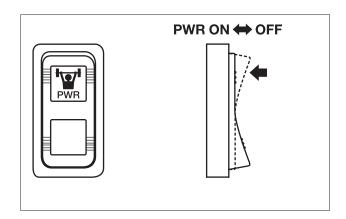
- Battery gauge shows the amount of battery energy remaining, similar to a fuel gauge
- •LOW BATTERY lights when battery reaches 10% remaining. A buzzer sounds when the battery is at 7%.
- •PWR on when in power mode.
- High speed
 Turtle when in normal speed mode.
 vRabbit when high speed travel mode.
- •RPM shows the motor RPM.
- Motor Error lights if there is an error in the motor system.
- Battery Error lights if there is an error in the battery system.
- Motor Temp Green "OK" when motor is below a safe temperature (140 $^{\circ}$ C).
- •Controller Temp (CTLR) Green "OK" when motor controller is below a safe temperature (80°C).
- •Hydro Temp Green "OK" when hydraulic oil is below a safe temperature.
- •All temperatures red "HOT" when oil is overheated.

AUTOMATIC DECELERATION SWITCH



When the ON side of the switch is pressed, the engine speed automatically drops to low idle (deceleration mode) four seconds after the control levers are set to neutral, to reduce battery consumption. Moving the control levers will cause the speed to return to the original engine speed.

POWER MODE SWITCH

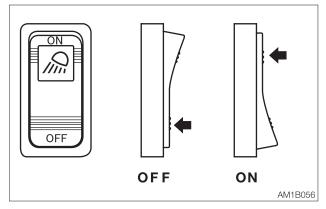


• Power mode

- Pressing the PWR symbol side of the switch turns on the Power mode indicator lamp on the instrument cluster.
 The maximum engine output is obtained.
- The machine stays in Power mode for 15 minutes, then automatically returns to standard mode.
- STD mode: Pressing the PWR symbol side of the switch again turns off the power mode indicator lamp.



LIGHT SWITCH



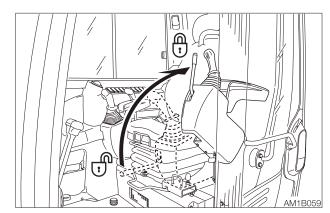
When this switch is turned while the starter switch is at ON, the lights turn on as follows:

OFF Off

ON Switch lamps, front light, boom light, side lights and tail lamps will be lit. (switch lamp is lit)

LEVER LOCK

Before standing up from the operator's seat to open/close the window or remove/install the lower window, lower the working equipment to the ground, raise the safety lock lever to engage the lock and stop the engine. If any controls should be accidentally touched when the safety lock lever is lowered (unlocked), the machine will suddenly move and cause serious injury or death.

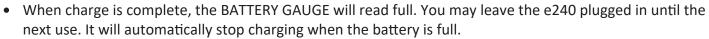


This device is for locking the operations of hoe attachment, slewing, auxiliary, dozer blade and traveling.

When the lever is raised, the lever stand springs up to lock the lever.

Charging

- To charge the e240, turn off the key switch. Then plug the CHARGE PLUG into the CHARGE PORT.
- Raise the LOCK LEVERS to insert the CHARGE PLUG.
 Lower the levers to lock the CHARGE PLUG into the PORT.
- The LOCK LEVERS should also be lowered to hold the CHARGE PORT cover in place while not charging.
- Plug the e240 CHARGER into either 240VAC.
 (See specification for required charging outlet.)



- The e240 will not run while charging. The drive system is deactivated while charging in order to protect the battery, and prevent operation while the e240 is connected to the charger.
- Recharge the e240 as often as possible. The battery in the e240 does not need to be drained before being recharged. When work is complete, plug in the e240 and recharge regardless of the battery level.
- Any time the Green Machine is not in use for more than 24 hours, connect the charger and leave the charger plugged in to the wall outlet. This includes long term storage for weeks or months.

AC Outlet

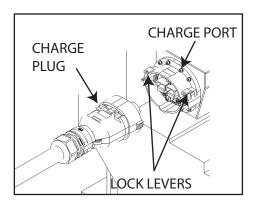
- The e240 provides a 120V / 20A convenience outlet next to the charging port. Activate the outlet by turning the key switch to "AC".
- This outlet can run tools, equipment, anything that plugs into a standard outlet.
- The outlet cannot be used while the e240 is running.

Towing

- e240 weight: 8570 lb. (3890 kg)
- Load Securement
 - o 3/8" grade 70 transport chain with 3/8" ratchet binders
 - o 1x 15' Chain, 4x 10' Chains

Troubleshooting

- The e240 will not run.
 - Check that the key switch is on, and the throttle is not at zero.
 - Check that the battery gauge is not zero. If battery gauge is zero, plug in the e240 to charge.
 - Check that the e240 is not plugged in to charge.
 - Check for a battery error. If a battery error is present, contact a service technician.
 - o Check for a controller error. If a controller error is present, contact a service technician.
 - Check the outside temperature. The e240 will not run if the battery is below -4 °F (-20 °C). Move the e240 into a warmer space until the battery has warmed up.
- The e240 will not charge.
 - Check that a battery error is not present. If a battery error is present, unplug the charging cable and contact a service technician.
 - o Check that the wall charge outlet has power.
 - The e240 will not charge if the temperature is below -4° F (-20° C). If it is below that temperature, move the e240 into a space where the temperature is above 45° F (7° C). Plug in the e240 charging cable. When the battery has warmed up, the e240 will automatically start to charge the battery.



Frequently Asked Questions

1. Does the Green Machine work the same as a diesel excavator?

Yes. All the controls work exactly the same, including the variable speed throttle. The hydraulic system is exactly the same as a diesel machine.

2. Can I operate the Green Machine in the rain?

Yes. You can operate the Green Machine in rain, dust, or any other condition that you would operate a diesel machine.

3. Can I operate and charge the Green Machine in the cold?

Yes. The Green Machine can run or charge in temperatures down to -4 °F (20 °C).

4. Does the Green Machine create any sparks?

No. The motor in the Green Machine is brushless so it does not create any sparks. The battery and power electronics are sealed from the environment.

5. Is the Green Machine's battery safe from fires?

Yes. There are many types of Li-ion cells. Some are more volatile than others. The cells used in the Green Machine battery have been safety tested not to catch fire or explode from being shorted, crushed, dropped, overcharged, or overheated.

6. Do I need a special charge station?

No. The e240 charger will plug into a standard 220V/50A AC outlet. (See charge outlet installation.)

7. Can I charge the e240 while it is operating?

No. Charging while operating is not currently supported.

8. Should I run the battery all the way down each time I use the machine?

No. The li-ion batteries used in the Green Machine do not have "memory" like some other batteries. Use as little of the battery as you need, and then plug the machine back in to charge.

9. Do I need to unplug the Green Machine when it is done charging?

No. The Green Machine will automatically stop charging when it is done, even if it is still plugged in.

10. Will I hurt the battery if I run it down to zero?

No. The battery can be run to zero without being harmed.

11. How should I store the Green Machine?

Any time the Green Machine is not in use for more than 24 hours, connect the charger and leave the charger plugged in to the wall outlet. This includes long term storage for weeks or months.

12. Is there any maintenance I need to do on the Green Machine?

Not on the electric drive system. The brushless electric motor needs no maintenance. The battery is automatically maintained by a sophisticated battery management system. The drive system has no coolant, engine oil, or filters to change.