

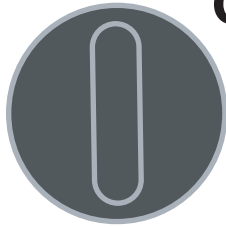


## e210™ Electric Excavator Quick Start Guide

### POWER SWITCH

**OFF**

**ON**

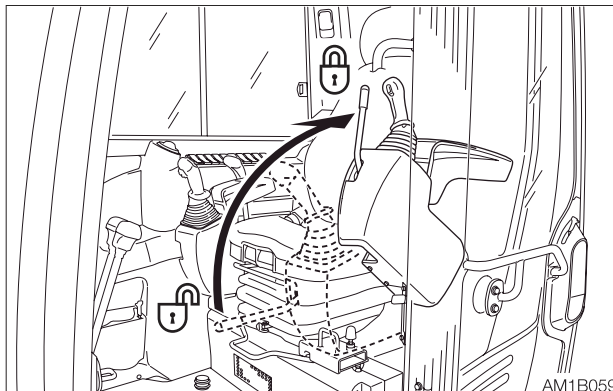


**OFF** ..... Position for stopping the motor and inserting or removing the key.

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

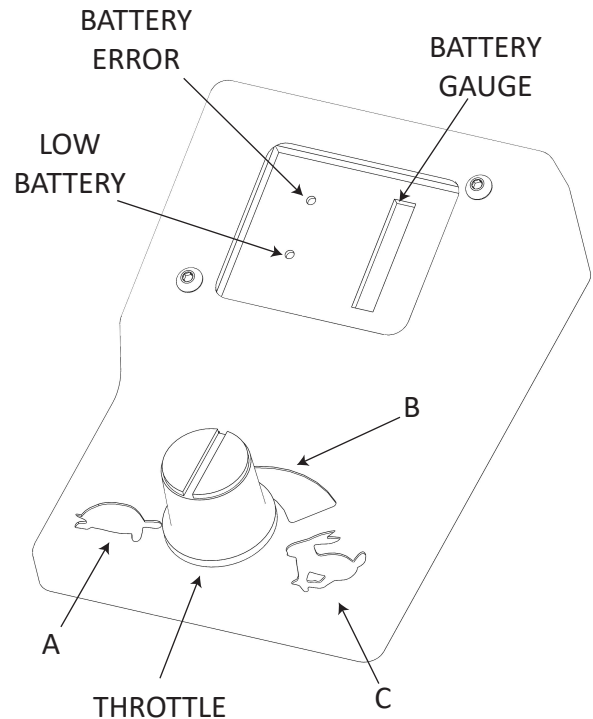
### LEVER LOCK

Before standing up from the operator's seat 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.



### THROTTLE

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%.
- **BATTERY ERROR** – lights if there is an error in the battery system.

## CHARGING

To charge the e210, turn off the key switch. Then plug the CHARGE PLUG into the CHARGE PORT. The light on the charger will flash while charging. The light will turn off when charging is complete.

Be sure to raise the LOCK LEVERS to insert the CHARGE PLUG. The LOCK LEVERS ARE two metal levers on either side of the charge port. 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.

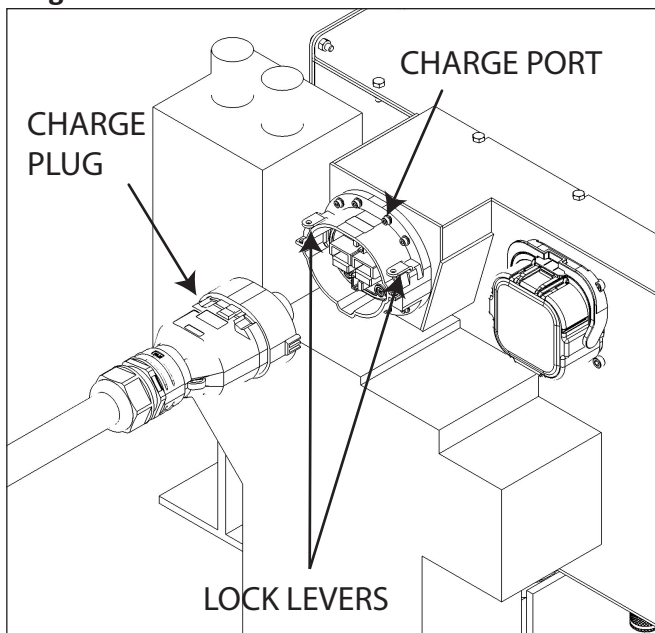
To charge, plug the e210 BASE CHARGER into 120VAC, or the FAST CHARGER into either 240 or 120VAC. (See specification for required charging outlet.)

When charge is complete, the BATTERY GAUGE will read full. You may leave the e210 plugged in until the next use. It will automatically stop charging when the battery is full.

For safety, the e210 will not run while charging.

Recharge the e210 as often as possible. The battery in the e210 does not need to be drained before being recharged. When work is complete, plug in the e210 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.**



## TOWING

e210 weight: 2370 lb (1075 kg)

Load securement:

3/8" grade 70 transport chain with 3/8" ratchet binders  
1x 15' chain, 4x 10' chains

## FOLDING DOWN THE CANOPY

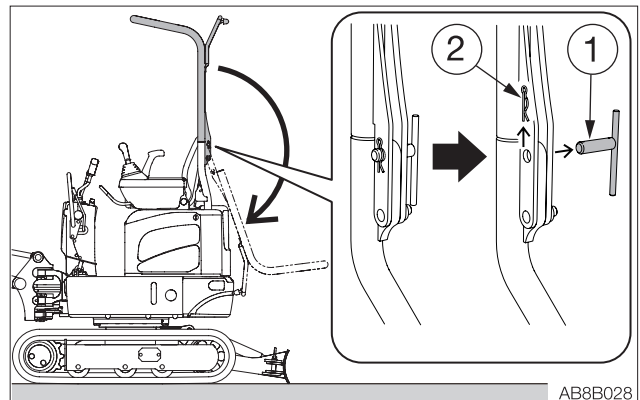
### **WARNING**

Do not operate the machine with the canopy folded down.

The TOPS will not be applicable to the machine if the canopy is folded down.  
TOPS (ISO12117): Tip-over protection structure

### **CAUTION**

When folding down the upper canopy, be sure to lower it slowly. If lowered too rapidly, the canopy could come in contact with your body, resulting in an injury.



1. Pull out the R-pins (2) from the lock pins (1) on the left and right sides.
2. Pull out the lock pin (1) from one side.
3. Pull out the other side lock pin (1) while supporting the upper canopy (15 kg/35 lb) by hand.
4. Slowly lower the upper canopy in a rearward direction to fold it down.

# TRACK WIDTH SWITCHING

## **WARNING**

Operate the machine with the maximum track width

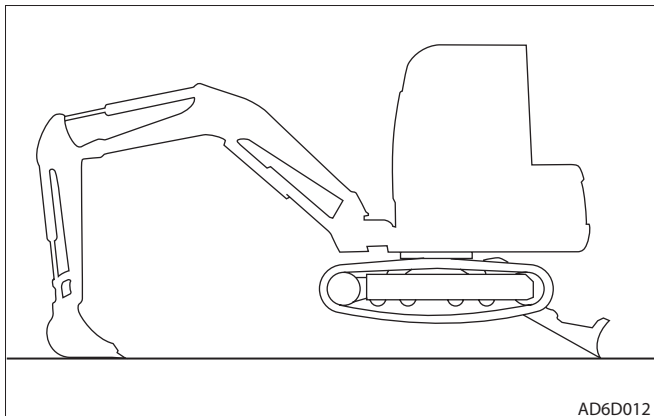
- Always operate the machine with the track width extended to 1020 mm (40.2 in.) to maximize the machine stability. If the machine is operated with the track width narrowed (750 mm, 29.5 in.), the machine may tip over due to its poor stability.
- If the machine must be operated with the narrowed track width (750 mm, 29.5 in.), traveling should be done after folding the hoe attachment, lowering the boom to lower the center of gravity and keeping the machine facing forward.

**IMPORTANT:** All debris, mud, soil, stones, etc. must be removed from the track frame before switching the track width. Do it in a safe manner and do not work under the machine.

This machine is able to change the track width. Normally, it is best to operate with the crawler width extended for machine's stability.

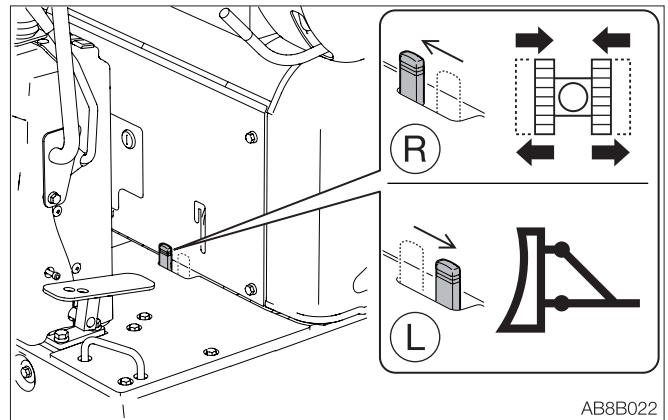
### Switching the track width

Perform the operation on a flat and rigid ground where no obstacles around.

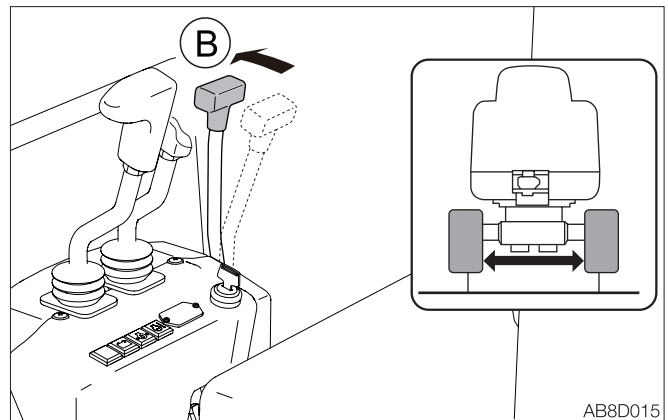


1. Raise the machine body by using the hoe attachment and the dozer blade.

**IMPORTANT:** Be sure to raise the machine body before switching the track width. If the operation is attempted when the crawler is rested on the ground, the travel frame or span cylinder may be damaged.



2. Turn the selector lever to the (R) side.



3. Push the blade lever forward (B) to increase the track width (1020 mm or 40.2 in.).

## TROUBLESHOOTING

The e210 will not run:

Check throttle is not at zero.

Check that battery gauge is not zero.

Check for a battery error.

Check the outside temperature. The e210 will not run below -4 F (-20 C).

The e210 will not charge:

Check for a battery error.

Check that the wall outlet has power.

Check the outside temperature. The e210 will not charge below -4 F (-20 C). Move the e210 into a warmer area. Plug in the e210 to charge. When the battery has warmed up the e210 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 outlet?

No. The e210 charger will plug into a standard 220V/50A or 120V/20A AC outlet.

### 7. Can I charge the e210 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 fluids or filters to change. Refer to the operator and service manuals for scheduled maintenance.