

# Kohler Electric Start Systems

## Instruction Sheet

### Kohler Electric Start Systems

This unit has a Kohler Command Pro Engine with a 12 volt starting circuit and regulated 10 amp capacity charging circuit.

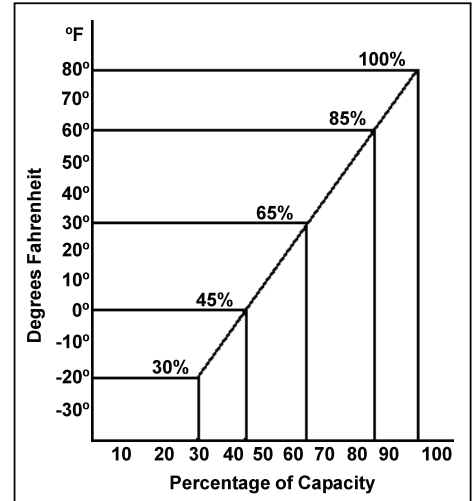
**BATTERY REQUIREMENTS:** A 12 volt Battery with a minimum current rating of 250 cold cranking amps (cca) should be sufficient for cranking this engine.

As temperatures decrease cranking capacity shrinks. Refer to the Battery Capacity/Temperature Chart (to the right) to see the effects of declining temperatures on a battery.

**BATTERY CABLES:** Use #4 or #6 gauge wire from the battery positive terminal to the starter solenoid (see Figure 1) and from the negative terminal to the ground. Be sure not to damage the exciter post when installing the positive cable. Make sure the remainder of the circuit from the negative terminal to the engine block is equivalent. Ideally, the negative ground cable will be connected directly from the battery to the engine block. See Figure 2 for the suggested engine grounding location. Refer to the chart below for SAE size and length recommendations. Always use the shortest length of wire possible.

SAE Cable Size	Maximum Length
6 Gauge	60.0 in. (152.4 cm)
4 Gauge	86.0 in. (218.4 cm)
2 Gauge	144.0 in. (365.7 cm)

**PARASITIC STARTING LOADS:** This refers to any load that is not disconnected from the engine while it is being started. Normally a Kohler engine in good winterized condition with a fully charged battery will start at temperatures down to minus 20° F(-29° C) without any parasitic load. Parasitic loads such as hydraulic pumps and hydrostatic drives can prevent starting at lower temperatures. Starters can overheat and be destroyed trying to crank cold equipment with excessive parasitic loads. A parasitic load disconnect should be considered during the design of the application.



Battery Capacity/Temperature Chart.

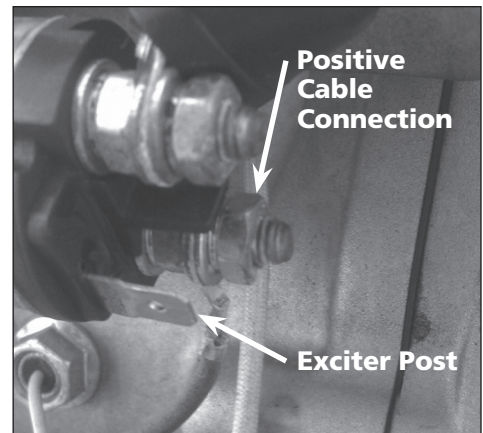


Figure 1



Figure 2