



Elec-Trak[®]

Garden Tractor

PRODUCT SERVICE BULLETIN NO. 14

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ELEC-TRAK MOWER PERFORMANCE

There have been some instances reported of mower motors cutting out, leaving an unmowed strip of grass where that motor has stopped running. The motor has stopped because the circuit breaker has acted as intended and has interrupted electrical power from the drive motor because of overcurrent and/or overtemperature conditions. The circuit breaker recloses and the motor usually restarts within 10 to 30 feet of travel.

Our engineers have made a very careful investigation of a number of reported cases of this overload condition, testing both the Elec-Trak mower and competitive gasoline tractor-mowers in all kinds of conditions including Bahia grass found primarily in the southern states. Some of the significant facts reported include:

1. The Elec-Trak mower motors give no audible warning of being worked at an overloaded condition. Unless the operator watches the power use gage and avoids prolonged operation in the red zone, he will not be aware that a circuit breaker has opened until he looks behind and observes uncut grass. Under similar conditions a gasoline powered mower gives a definite audible indication of overload and in severe situations will actually bog down. Gasoline powered units tested by our engineers bogged down before the Elec-Trak motors cut out under identical grass conditions and tractor speed.
2. There are transient situations which will generate heat in an Elec-Trak mower motor, and if occurring often enough, can cause an overload to trip. Frequent starts fall in this category. If the operator repeatedly turns the mower on and off several times, the starting surges will generate enough heat in the circuit breaker on the mower motor to trip it.

3. If the Elec-Trak mower is not adjusted to mow in a level position, causing the front or back of the mower to be lower than expected, the blades will be more likely to scalp or produce an overload condition which can contribute to circuit breaker opening.
4. Additional testing, designed to precisely compare the Elec-Trak and gasoline competition, proved that, under the same conditions, gasoline tractors were not capable of more cutting power. Tests made on Bahia grass in Florida showed that with a 3 inch cut from 6 inch height, mowing in "L" the Elec-Trak E-20 mowed continuously where a competitive gasoline unit bogged down requiring the operator to pause while engine speed recovered.

When operators encounter a problem of motor cut out, the remedy is to mow at a slower speed or at higher level of cut or to correct practices which may be causing the power to be cut off by safety interlocks.