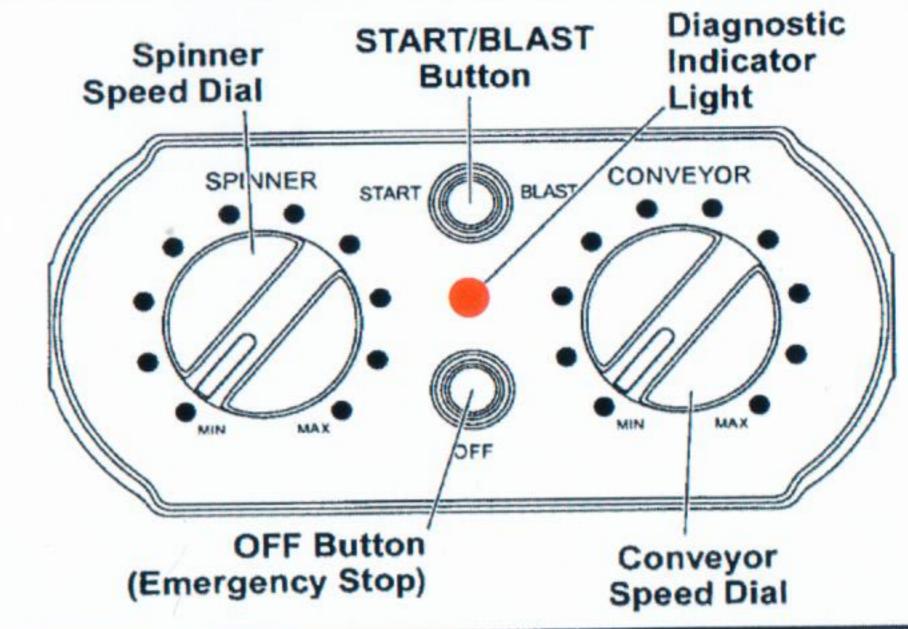
Tornado™ Control PN 78102

Diagnostic Indicator Light and Audio Beep

The diagnostic indicator light located beneath the START/BLAST button remains dark unless a problem with the motor or wiring is detected. The light will flash in coordination with an audio beep a number of flashes/beeps in a row, pause, then repeat. Count the flashes/beeps and refer to diagnostic chart below to determine the nature of the malfunction.

NOTE: Always close the lids on hopper to prevent moisture buildup. Do not let spreader sit idle with material in hopper for an extended period of time. This can cause material to compact, reduce or stop the flow of material and cause permanent hopper body deformation.



# of Flashes/Beeps	Problem	Possible Cause
0	No Error	-
1	No Communication	Loss of communication between spreader module and cab control. Vehicle cable assembly is disconnected or faulty.
2	Empty Hopper	Spreader is empty or material has bridge in the hopper.
3	Conveyor Over Current	Over 70 Amps for up to 3 seconds. Conveyor Chain is stalled.
4	No Power	Battery fuse is blown or vehicle cable assembly is disconnected or faulty.
5,8	Over Temp	Motor is OFF due to spreader module overheating from high-current draw over a long period of time.
6	Battery Saver	Reduced spreader performance due to vehicle voltage drop. Spreader will function at reduced output until vehicle voltage increases.
7	Spinner Over Current	Over 32 amps for up to 3 seconds. Spinner is stalled.
9	Sander Reset	Module came out of reset. Momentary loss of power. Restart unit, check power wiring.
10	Cool Down	If the unit gets more than 5 faults with each fault starting within 60 seconds from the last, it will not start for 60 seconds from the last fault to allow the unit to cool.
11	Low Battery	Low battery voltage or poor electrical connection of vehicle cable assembly.

Tornado™ Amp Draw Reference

Motor Type	Emtpy	Loaded w/ Material
Conveyor	15-20 amps	25-55 amps
Spinner	4-10 amps	10-15 amps
Conveyor & Spinner	20-25 amps	35-70 amps