



GUIDELINES FOR SUCCESSFUL OPERATION OF A FAILSAFE BRAKE

1. Know your Back-Driving Torque:

If you are unaware of your back-driving torque, further testing may be required. It is recommended that the brake which is identified to be used is verified to have sufficient holding torque for your specific load. If you require any assistance in determining the optimal brake for your application, please contact us and we can assist you.

2. Ensure the brake will be properly employed:

Please be aware that our Standard Brakes are not to be considered dynamic brakes. Our failsafe brakes are intended to simply hold a static load in place.

3. Ensure the proper voltage level is applied:

Check the incoming power to ensure the correct voltage level is present at the brake. Please note that our brakes are not polarity sensitive, so the coil can be energized, along with the Motor Power, for either direction of operation.

4. Ensure adequate current is available:

In order to prevent potential damage to the Motor or the Brake, adequate current must be available to the Brake at all times. If you intend to connect the Motor and Brake to the same power source, please be aware that your power supply must have sufficient current capacity to provide enough power to initiate rotation of the Motor/Gearmotor, as well as the brake. Even though the brake requires only "milliamps" to excite the coil, if the Motor/gearmotor requires as much or more than your power supply's capacity, the brake may not release, and you may not have an OPERABLE System as a result. This is typically not the case with most systems powered by a Battery, as there's normally plenty of current available from most battery sources. **Note:** To Calculate the maximum potential acceleration current required, employ Ohm's Law by dividing the armature resistance into the input voltage ($I=E/R$) ... This will provide the acceleration current.

5. Ensure Brake is functional:

If the motor is not attached to anything, the shaft should freely rotate when the brake is energized. Otherwise, when the coil is energized, an audible click can be heard. If this click is not heard when applying power to the brake, it is possible that the brake has not properly disengaged. If this is confirmed, double-check that the proper power is being applied to the brake, again, to avoid damage to the unit.

Please consider reviewing our [Quick Tips](#) document for additional useful information on general motor & gearmotor operation.

These are only the very basic fundamentals, but a good checklist before you begin to apply your failsafe brake.

If you have any questions or concerns, please contact us directly at 320-490-7060 or email: support@midwestmotion.com