

Service Bulletin 1014 Dealing with GFCI Circuits

Date

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Product

- All HiTorque Mills
- All HiTorque Lathes
- Other mini mills and mini lathes with brushless DC drives

Issue

Ground Fault Circuit Interrupter (GFCI) trips when using the machine.

Symptoms

- The GFCI, either at a local receptacle or a circuit breaker, trips when you start or while you are running your machine. This may occur intermittently or every time.

Electrical Safety

- Do not work on electrical equipment if you are not knowledgeable or comfortable. Hire an electrician.
- Always turn off the power before inspecting the wiring and devices.
- Place a tag on the circuit breaker or switch indicating that you are working on the circuit and warning others not to turn it on.

Solution

There is nothing in a HiTorque machine that will cause a GFCI to trip, so you should check the following:

- If the GFCI won't reset, make sure that there isn't an actual ground fault on the circuit.
- Make sure the GFCI has been installed properly and is functioning properly. They usually have a Test button.
- Check if there is an outdoor receptacle on the same GFCI circuit. If so, check it for moisture and insects.
- Unplug everything else from the GFCI protected circuit and see if the problem persists.

- Don't use plug strips with surge protection.
- Don't use extension cords.
- There can be problems if there are too many receptacles on one GFCI. The total one-way wire connecting all the receptacles should not exceed 100 feet. That includes any cords plugged into the circuit.
- Make sure the line and load wire on the GFCI are not reversed.
- Have an electrician check to see if the wiring is proper at the GFCI and all downstream receptacles.
- Make sure there isn't another GFCI connected downstream of the one that is tripping. Connecting GFCIs in series can cause nuisance trips.
- GFCIs can fail. Replace the GFCI.
- Install a dedicated circuit and dedicated GFCI receptacle for the device.