

## ES Service: III. Testing and Replacing the String Ground Fuse

If you plug the guitar in and hear a 60-cycle hum, the cause is most likely a blown string ground fuse.

The procedures in this section will show you how to test the fuse with the Expression System in place, then how to remove and replace the fuse if necessary.



Testing the fuse in Taylor Guitar's patented string ground fusing system is a simple and entirely non-invasive process. The procedure is outlined below.

Start by setting a multi-meter (we recommend the Fluke model 113 or 115) to the proper resistance measurement setting (see page 2 for an explanation of this).

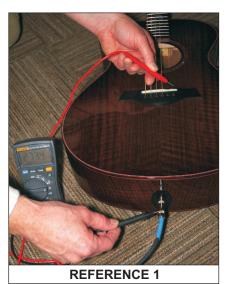
Next, plug a cable into the guitar's output jack, the other end of the cable should not be plugged in.

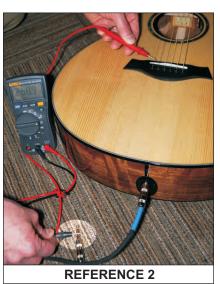
Place one lead from your multi-meter on the metal plug housing of the cable. Place the other lead on an unwound string (see REFERENCE 1).

If the metal plug housing on the particular cable you're using is non-conductive (covered by paint, plastic, etc.) you can use the sleeve of the plug at the other end of the cable (see REFERENCE 2).

A good fuse should give a resistance reading between 100 and 500 ohms.

A **blown** fuse will not give a resistance reading (typically the meter will read 'OL' for 'Open Line' but some meter manufacturers use a different indication for this, be sure to check your meter's manual and fully understand what the different display readings indicate before you start).





The procedure for electric guitars is identical (as shown in REFERENCE 3 and REFERENCE 4) Again, any reading other than an actual ohm reading indicates a fuse that is blown and needs

to be replaced in order to maintain the string ground connection (which helps to reduce hum and buzz in all magnetic pickup systems).





## **ES Service-Replacing the String Ground Fuse**



1. Remove the power supply from the tail end of the guitar (see Section VII). The fuse is located at the back end of the I/O board next to the string ground wire. It is not soldered - simply pull it out.

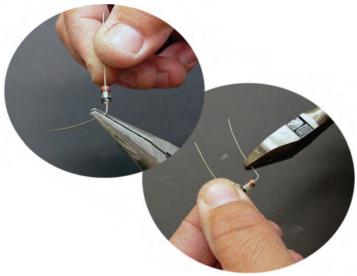




2. Test the fuse to confirm that it needs to be replaced. Any reading other than 100-500 ohms indicates a blown fuse.



5. Insert the new fuse into the I/O board, in either direction (there is no positive or negative terminal).



3. Bend and clip the leads on the new fuse.



6. Re-install the power supply, plug in and test the pickup system.