To prevent loss of communications the installation of a 0.1 uf capacitor and a grounding wire to the A/D data system (302 or 333) may be necessary. To perform this modification you will need a 0.1 uf capacitor, a 1000 ohm 1/2 watt resistor, a length of insulated wire, shrink wrap (or electrical tape) and a soldering iron. These parts can be obtained from SRI Instruments for little or no charge.

Gain access to the inside of the GC by removing the six screws that hold the chassis to the base plate of the GC. Tilt the GC up on its side. The A/D board is located on the far right of the GC.

Remove the 4 hex screws, located on the outside of the chassis, that secure the A/D board to the chassis by using a 5/64" allen wrench. Pull out the board so that you can work on it.
Solder one end of the resistor to one end of the ground wire. The wire should be approx. 3 feet long. Secure some heat shrink (or electrical tape) over the connection.

Solder the resistor directly to the shell of the USB jack on either the 302 or 333 A/D board.

Run the loose end of the ground wire down the length of the chassis and then behind the L-shaped circuit board brackets. Attach the wire to the chassis ground stud with a ring terminal.
A/D Board Capacitor and Ground Wire Installation
302 and 333 Boards

For a 333 A/D Board: Solder the capacitor to the same terminals on the back of the A/D board as shown in the picture to the right. Trim the capacitor legs short in order to prevent electrical short circuiting and to make sure the board will fit back into the chassis. Once it is soldered in, bend the capacitor down so that it rests flat on the board.

For a 302 A/D Board: Solder the capacitor to the small board attached directly to the shell of the USB jack as shown in the picture to the right. Trim the capacitor legs short in order to prevent electrical short circuiting and to make sure the board will fit back into the chassis. Once it is soldered in, bend the capacitor down so that it rests flat on the board.

Gently replace the board back into its space in the GC chassis and re-secure it using the 4 hex screws. Tilt the GC back down and reattach the chassis to the base plate with the 6 screws.