

# Replacing the TCD current set resistor

The TCD current set resistor controls the constant current delivered to the filaments. For use with Argon or Nitrogen carrier it is advisable to reduce the current to 80 milliamps. This requires the installation of a 15 ohm resistor instead of the 10 ohm resistor which was installed on SRI GCs prior to October 2010.

You will need a Phillips screwdriver, a 5/64th hex head wrench and a small flat blade screwdriver.

Remove the 6 Phillips screws holding the bottom plate of the GC to the chassis.

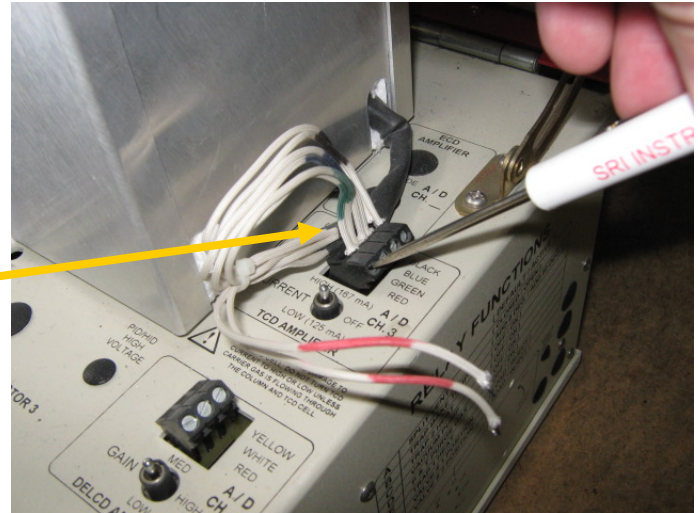
Remove the 8 hex head screws and 2 Phillips head screws holding the front panel to the chassis.

The Phillips screws are in the two rubber bumpers.



## Replacing the TCD current set resistor

Remove the filament wires from the terminal block using the flat blade screwdriver. Hold the terminal block with one hand to avoid overstressing the connector.



If your GC is equipped with other detectors also ( FID, FPD, PID etc. ) then remove the nuts holding the BNC connectors.

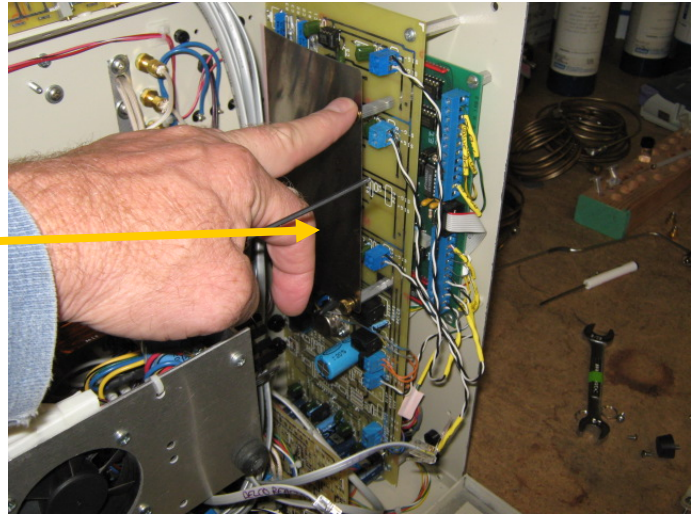


Tilt the GC up on its back to expose the circuit boards inside.

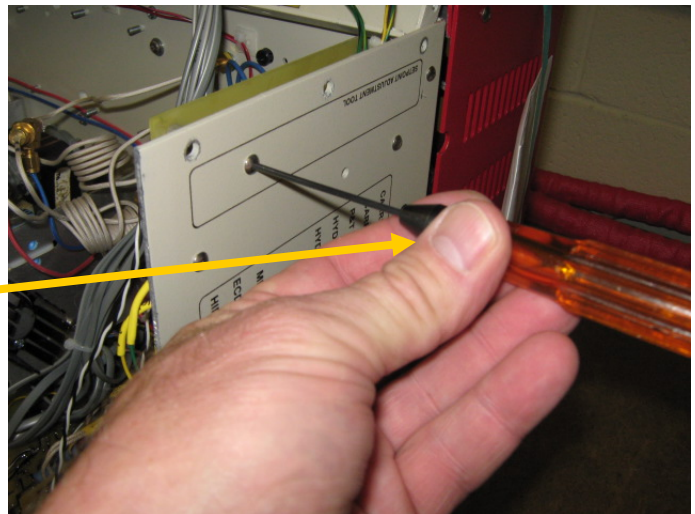


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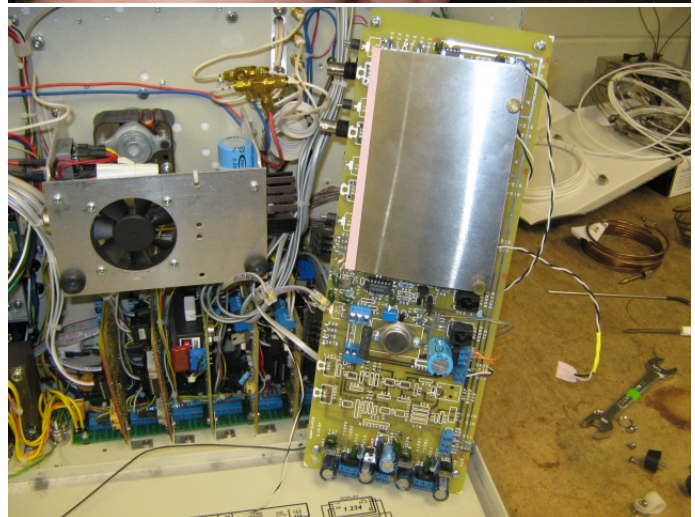
The amplifier board is the long board along the right side inside the GC.



Remove the 4 hex head screws holding the amplifier board.



Wiggle the amplifier board out of the GC. You will not have to remove any wires.



## Replacing the TCD current set resistor

Use the flat blade screwdriver to remove the two current set resistors from the amplifier board.

The existing resistors will be labeled 7.5 ohms ( high current ) and 10 ohms ( low current ).

Insert the 10 ohm resistor in the high current position ( closest to the top of the board ) and the new 15 ohm resistor in the low current position.

The resistor value is labeled on the body of the resistor.

15Ω is the symbol for 15 ohms.

When the resistors are secured, re-assemble the boards, filament wires, front panel and bottom.

