

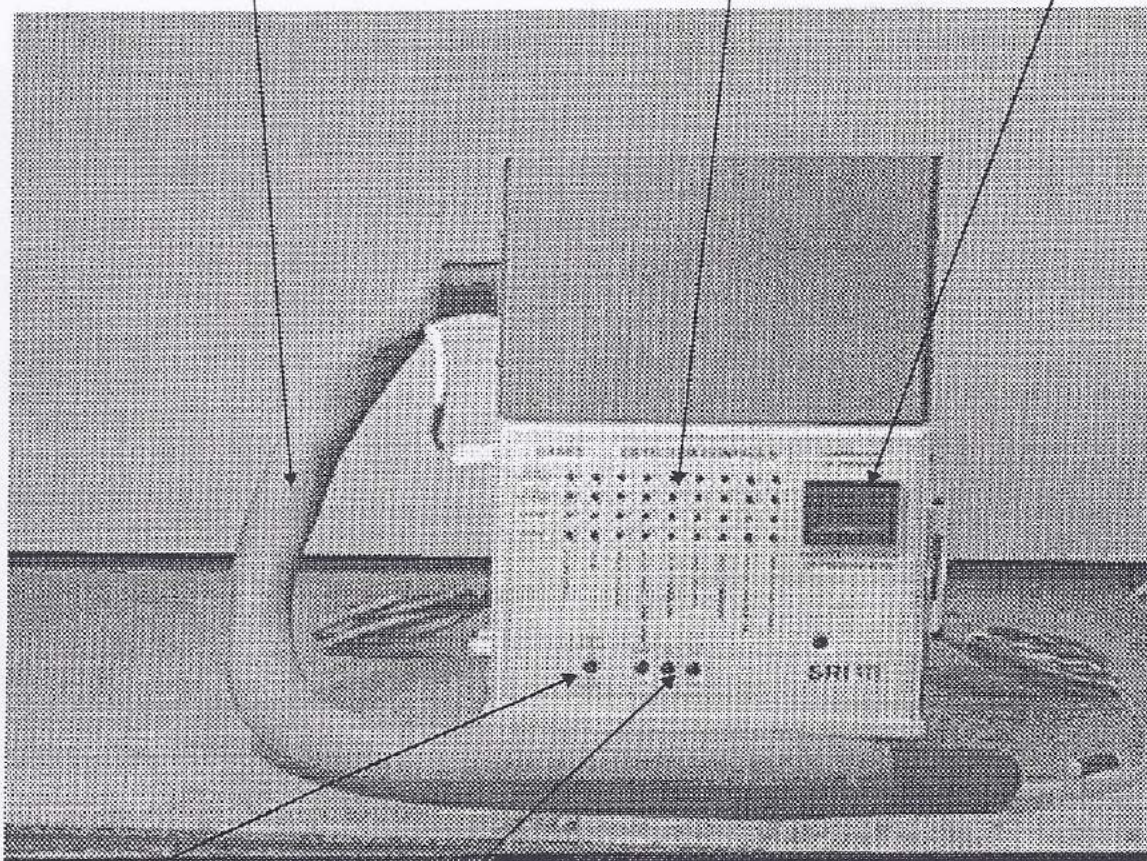
Chapter: MODEL 110 GC CHASSIS

Topic: FRONT PANEL ORIENTATION

Heated transfer line runs about 200 degrees C and has a thick layer of insulation covered by red colored woven tubing. A length of .53mm I.D. silco-steel tubing carries the carrier gas from the host GC to the detector mounted in the 110 chassis.

"At a glance" LED display shows status of all detector parameters

Digital panel meter reads out detector temperatures, voltages, etc. when a specific button on the front panel is depressed.



On/off switch for optional built-in air compressor

Detector parameter on/off switches for FID ignitor, NPD bead voltage, PID lamp current, etc.

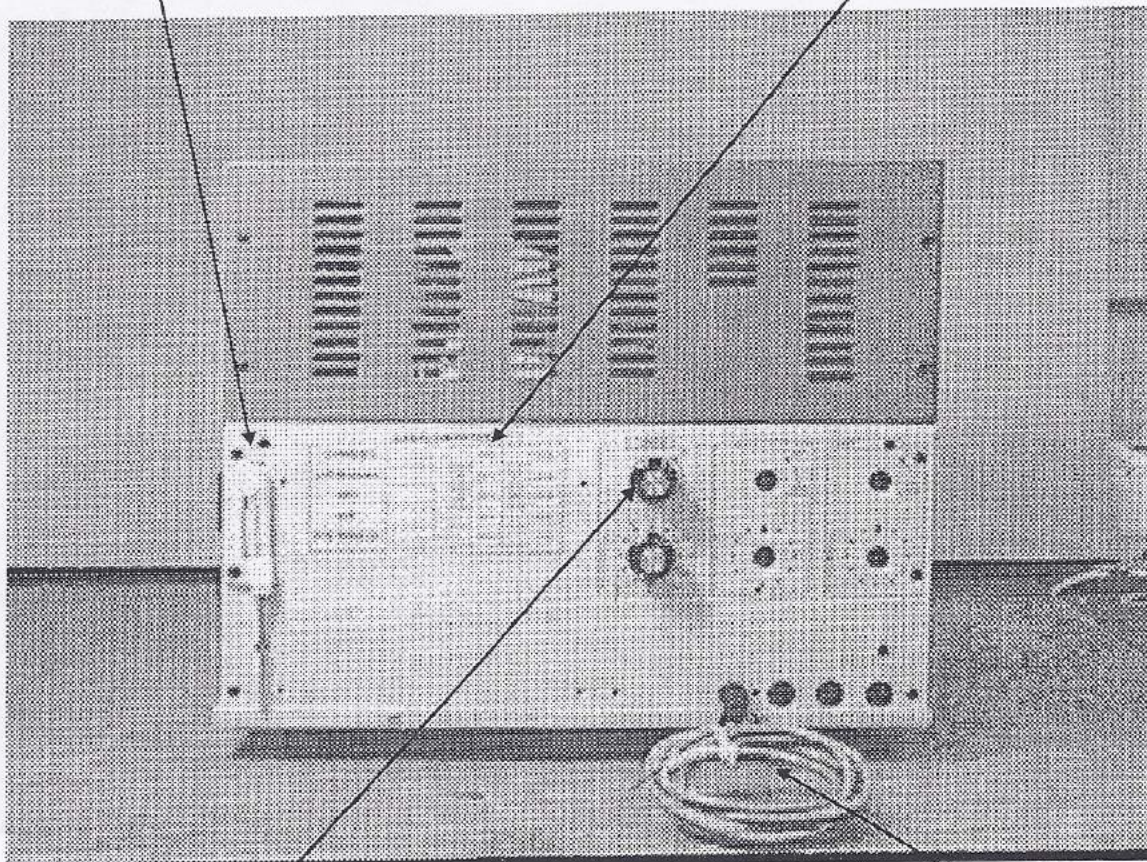
The SRI Model 110 chassis is used primarily as a mounting platform for stand-alone GC detectors. The heated transfer line makes it easy to connect the detector to the host GC since only a small opening into the host GC's column oven is required. User's should note that because the heated transfer line operates at 200 C, some high boiling point analytes may condense before reaching the detector. Where high temperature analyses are envisioned, it makes sense to mount the detector on the GC itself instead of on the stand-alone chassis.

Chapter: MODEL 110 GC CHASSIS

Topic: RIGHT SIDE PANEL ORIENTATION

Screwdriver mounted in handy "holster" for adjusting detector parameters or temperature setpoints

Gas flow rate table is used to record the flow rates and pressures used for detector support gases. Factory technicians record typical flow rates and pressures used to test detectors before shipment during final test at the manufacturing facility.



Zero and attenuator controls for detector output signals. The zero control is a ten turn potentiometer which allows the output from the detector to be offset to 0.00. The attenuator divides the signal by selectable powers of 2 (1,2,4,8 etc.) so that the peak remains on scale when using a strip chart recorder with a fixed span (i.e. 10millivolts full scale). When used with a computer data system or integrator the attenuator control is normally set and left on maximum sensitivity (att=1).

Detector signal cable output wire. This cable containing two wires is hooked up to your strip chart recorder or data system.

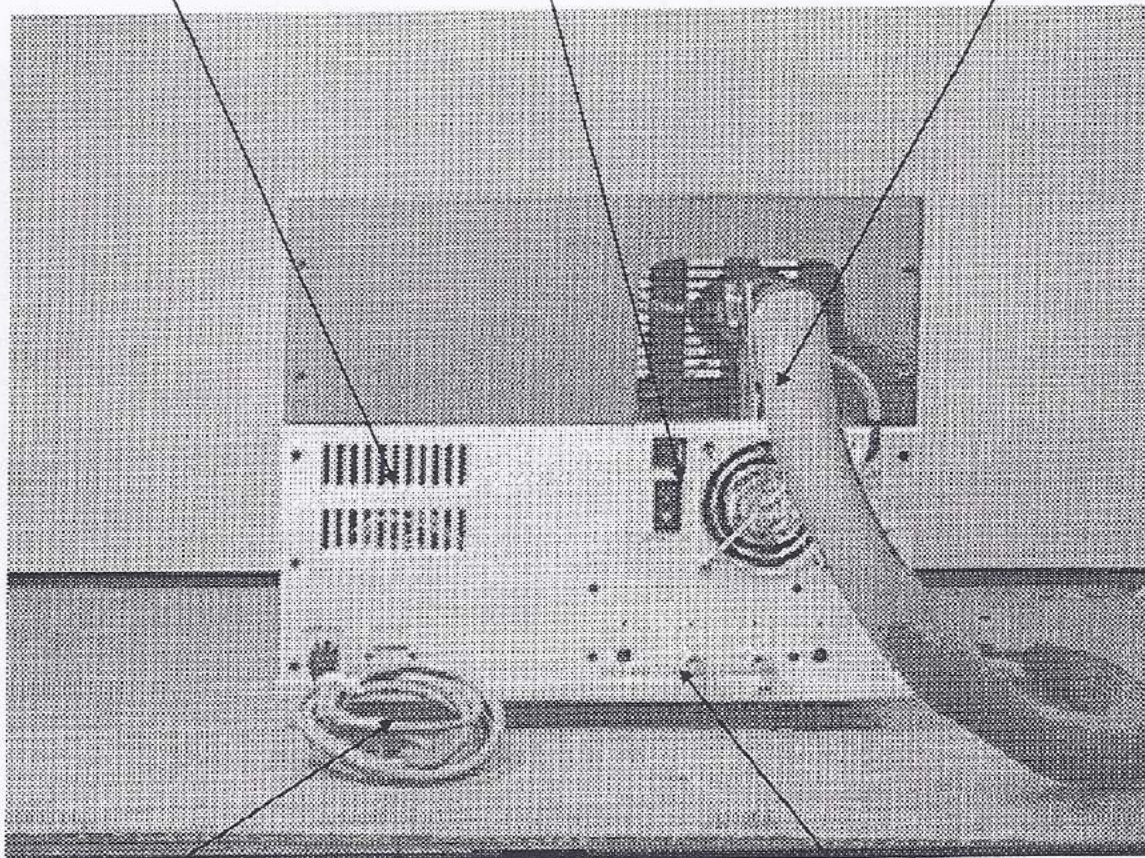
Chapter: MODEL 110 GC CHASSIS

Topic: LEFT SIDE PANEL ORIENTATION

Chassis cooling air exit slots. Air expelled from the chassis by the cooling fan exits through these slots. Do not obstruct the slot openings.

Main power switch, circuit breakers, and chassis cooling fan. This fan cycles on and off to maintain the selected interior chassis temperature.

Heated transfer line for connecting column outlet from host GC to stand-alone detector on Model 110 chassis. Transfer line operates at 200 degrees C. Take care to route transfer line away from heat sensitive surfaces.



Power cord. On 220 volt models it may be necessary to replace the plug on the end of this cord to match the plug type for the country or region.

Gas inlet bulkheads for connection of detector support gases (typically hydrogen and air). Use 1/8th inch O.D. copper tubing to connect gas cylinder to stainless steel bulkhead, not teflon or other plastic tubing types. Use brass ferrules for good sealing.

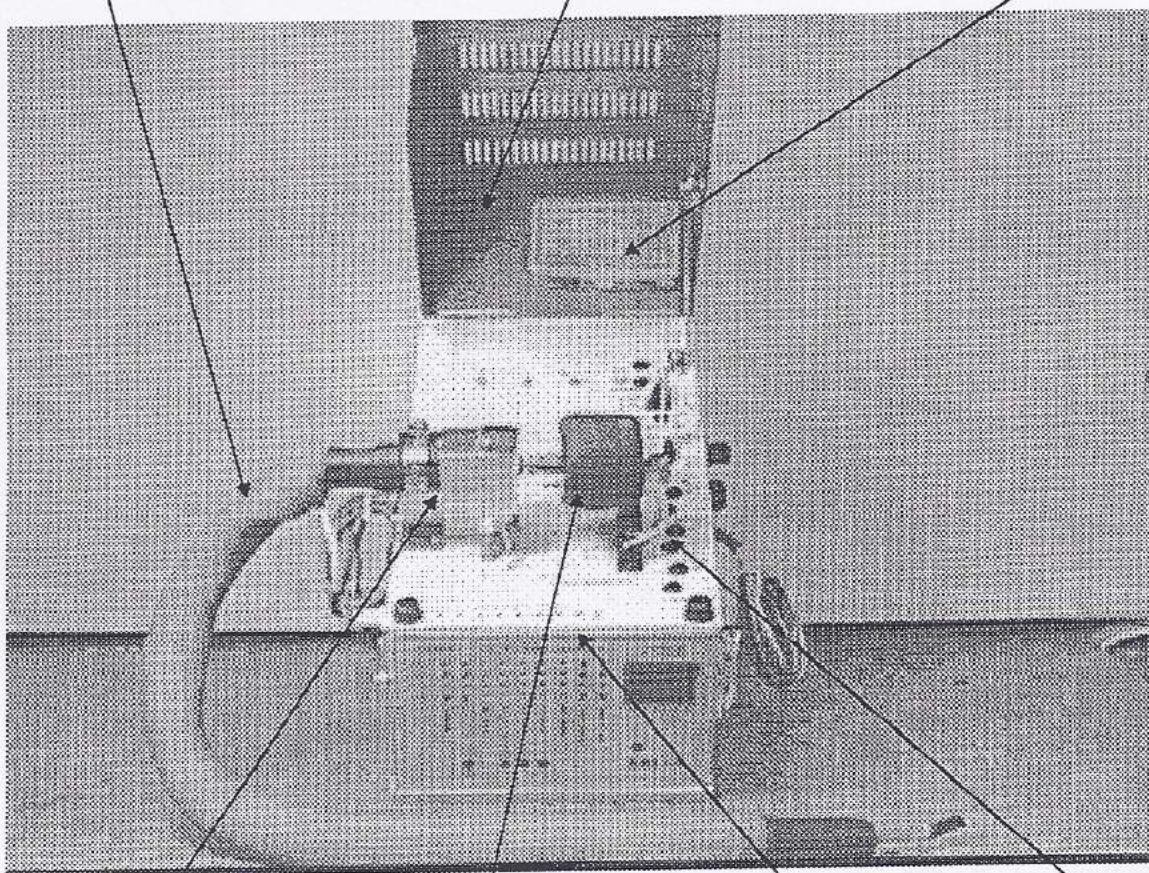
Chapter: MODEL 110 GC CHASSIS

Topic: TOP PANEL ORIENTATION

Heated transfer line connects from host GC to detector mounted on Model 110 chassis. .53mm I.D. silco-steel tubing runs inside heated transfer line so sample only contacts inert fused silica surfaces for most of the length.

Red lid hinges up to allow access to detectors

Spare parts storage container is convenient for keeping extra nuts, ferrules, etc.



Detector heated block and cover terminate transfer line in a hot location to avoid sample condensation

Detector shown above is the SRI DELCD detector, but any of 13 detector types or combinations of detectors may be mounted.

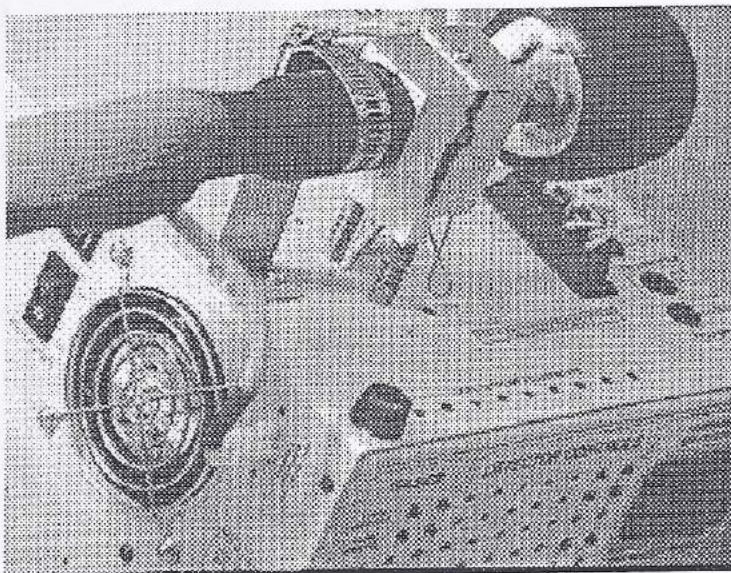
Detector parameter and temperature adjustments are done by using the provided screwdriver to adjust the setpoints through the holes in the forward edge of the chassis

Detector gain controls are located here in the exact same layout as the 310 and 8610C GCs.

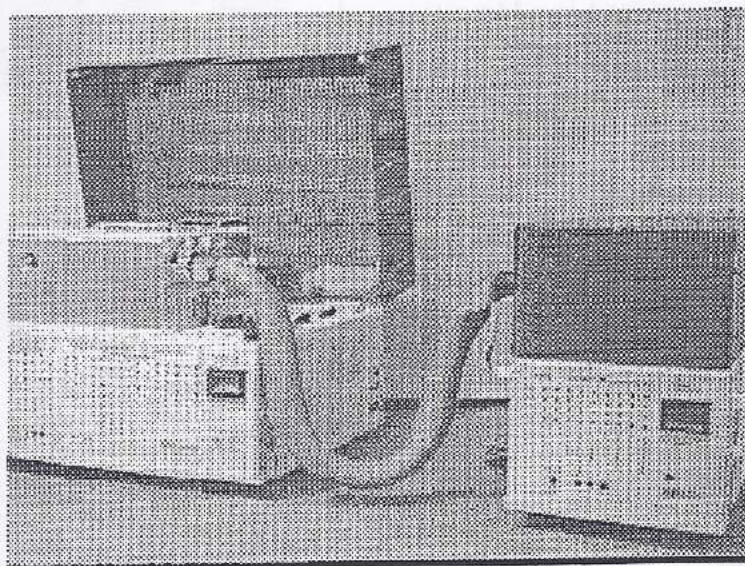
Chapter: MODEL 110 GC CHASSIS

Topic: HEATED TRANSFER LINE

This photo shows the detector end of the heated transfer line as it attaches to the heater block and enclosure. When removing and reattaching the heated transfer line be careful to eliminate any cold spots which could cause sample condensation.



This photo shows the typical installation of the Model 110 to the right of the GC with the heated transfer line connecting the two units. Be careful to route the transfer line so it does not rest on heat sensitive surfaces. In some cases, the lid of the GC may need to have a small notch cut-out of the right side panel to allow the transfer line to exit cleanly from the GC when the red lid is lowered.

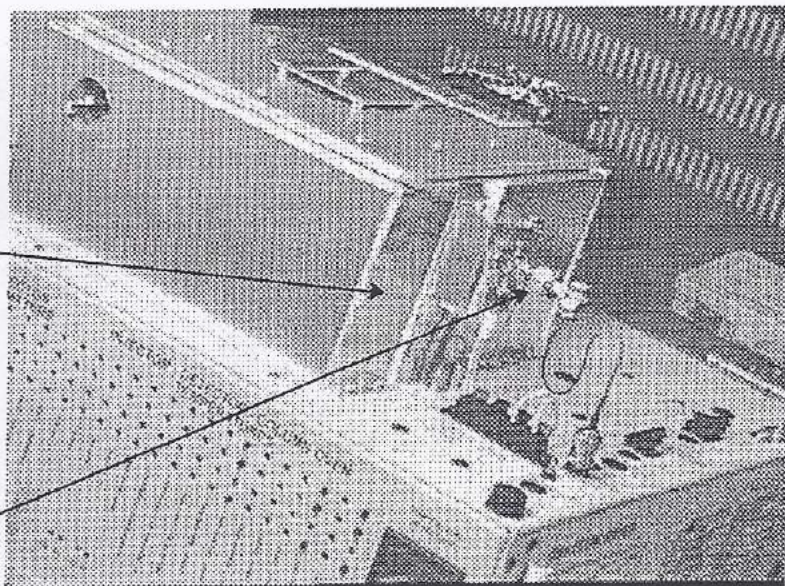


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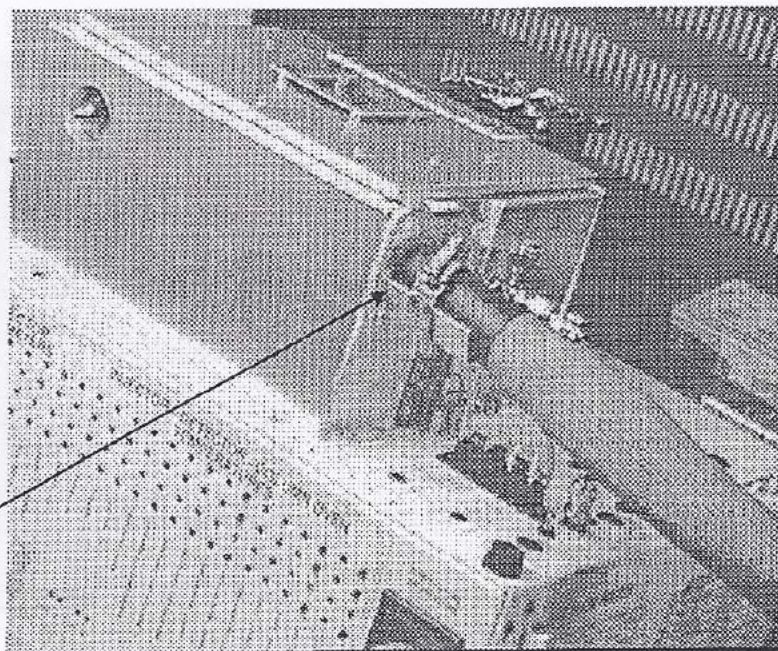
Topic: CONNECTING TRANSFER LINE TO GC

If you are connecting the Model 110 detector to a SRI Model 8610C or 310 GC the right hand side of the GC's column oven has 4 identical detector mounting locations. Locations where no detector is installed are supplied with blank cover plates.

FID detector installed



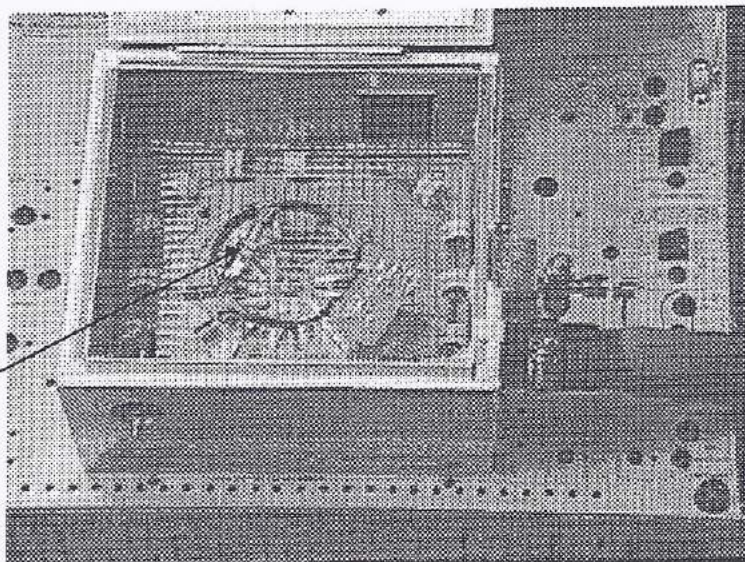
Replace one of the blank cover plates with the Transfer Line Mounting Plate (SRI part# 8670-9836) by removing the two screws at the base of the plate. The nuts on the underside of the chassis must be accessed by removing the bottom plate of the GC. The heated transfer line is then lightly secured to the plate with the hose clamp so that the heated portion of the line penetrates into the column oven so that cold spots are eliminated



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Topic: COLUMN/TRANSFER LINE CONNECTION

The .53mm I.D. silco-steel tubing which runs down the center of the transfer line is connected to the end of the analytical column inside the GC's column oven. A special 1/8th inch stainless steel bulkhead union and insert are provided to ensure a low dead volume butt type connection. The union may be mounted on a flange or bracket, or just left hanging in the oven.



The separate parts of the union and column to transfer line connection hardware consist of:
GC column

Nut with graphite ferrule (2)

Stainless Steel bulkhead

Internal alignment guide which holds the transfer line and column butt to butt inside the bulkhead union

