

# Agilent 490 Micro GC Dual Carrier Gas

## Field Installation Guide



This installation guide describes how to upgrade the Agilent 490 Micro GC with a second carrier gas inlet.

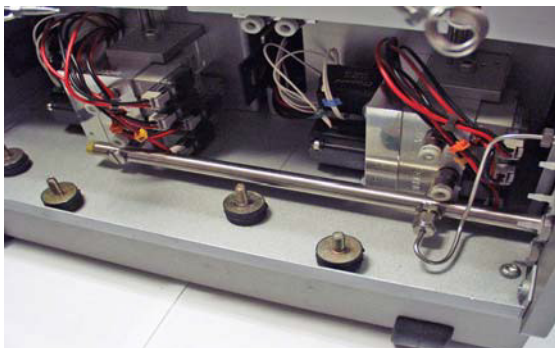
The upgrade requires the 490 Micro GC upgrade kit dual carrier, p/n CP490201. See [Table 1](#) for the upgrade kit components.

**Table 1** Field upgrade kit components

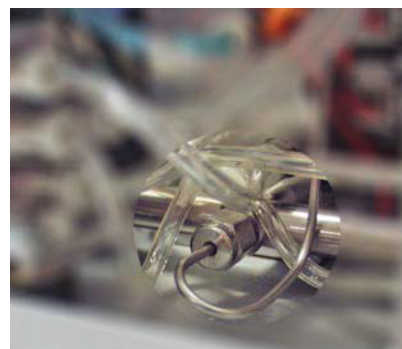
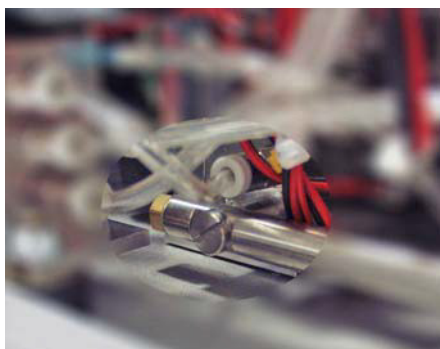
Item	Description	Part number	Quantity
1	Rear lower panel 490 Micro GC	CP750020	1
2	Bulkhead union	CP740585	2
3	Nut M8 × 1 low	CP740204	2
4	SS tubing 1/16 in × 1.0 mm	VLT61C30	2
5	Valco nut 1/16 in	VLZN1	2
6	Valco ferrule	VLZF110	1
7	SS T union 1/16 in	0100-1016	3
8	SS nut 1/16 in	0100-0053	4
9	SS ferrule set 1/16 in	0100-1490	10
10	Male connector 1/16 in × M4	CP740043	4
11	O-ring, Viton	CP740029	4
12	Label for Carrier gas 1	CP741948	1
13	Label for Carrier gas 2	CP741949	1
14	Pump assembly upgrade	CP74020680	1
15	Polyurethane tubing (clear)	2815892301	1
16	Installation guide	G3581-90014	1

## Upgrade Modification for Dual Carrier Gas Micro GC

- 1 Remove the pump(s), tubing from the manifolds/modules, and the rear panel from the instrument.



- 2 Remove all carrier gas connections.



- 3 If present, remove the vent connectors and bulkhead union from the old rear panel, and install them on the new rear panel (p/n CP750020). Complete the rear panel with two bulkhead unions (p/n CP740585) for the separate carrier gas.

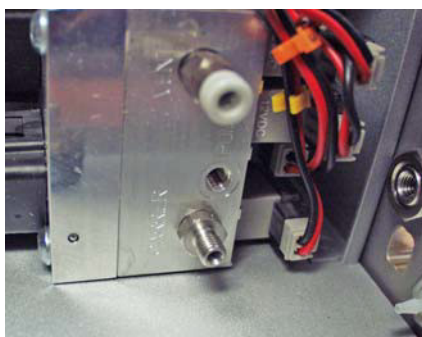


- 4 Install the Viton O-ring on the male connector for the manifold connection.

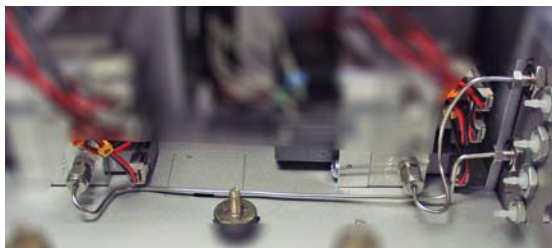


**Male connector 1/16 in × M4 (p/n CP740043)**  
**O-ring, Viton (p/n CP740029)**

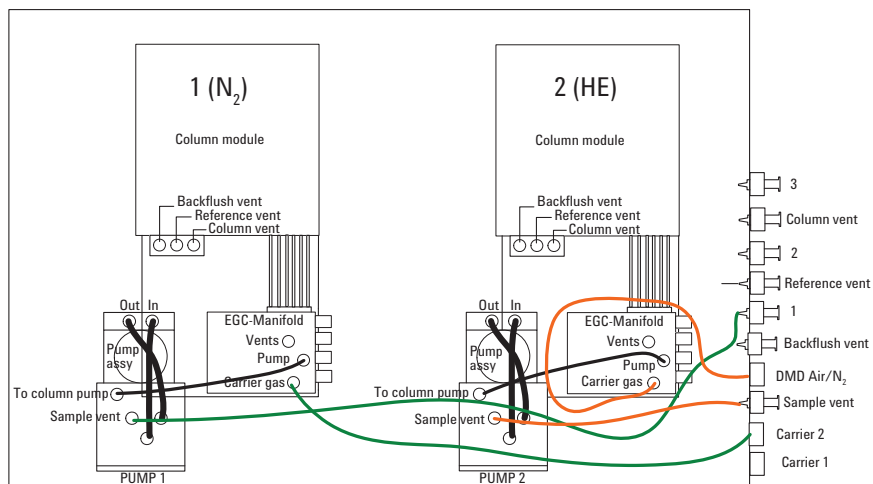
- 5 Connect the male connector to the manifold carrier connection.



- 6 Reconnect the new rear panel (p/n CP7500200).
- 7 Adjust the length of the SS tubing (p/n VLT61C30) to connect from the rear panel to the manifold connection depending on the configuration of the instrument. Connect the 1/16 in nut (p/n 0100-0053) and SS back/front ferrule (p/n 0100-1490) on the SS tubing, and connect the tubing to the Male connector (p/n CP740043). Use a 1/16 in SS T union (p/n 0100-1016) in the carrier gas line when multiple channels needs to be connected to the same carrier gas.



- 8 If the 490 Micro GC is not equipped with two sample pumps, install the second sample pump (p/n CP74020680) delivered with the upgrade kit.



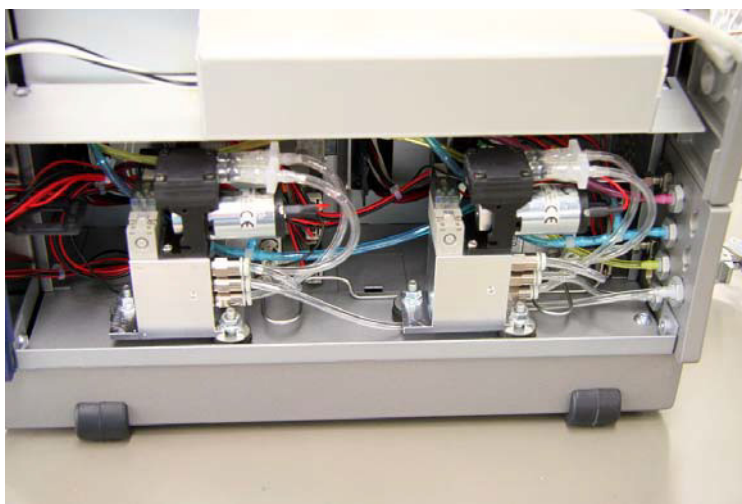
**NOTE**

The tubing colors above are for illustration only, the instrument uses clear tubing for the pump connections.

- 9 Connect the sample vent (green) from PUMP 1 to the rear panel at vent 1.
- 10 Connect the sample vent (orange) from PUMP 2 to the rear panel Sample vent.
- 11 Attach the label Carrier 1 (p/n CP741948) over the screen text DMD Air/N<sub>2</sub>.



The picture below gives an overview after completion.



### **Warranty**

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