

# Agilent 1100 Series LC/MSD

System Installation Manual



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#### **Customer Responsibilities**

The following are **not** included in the standard installation. They are the responsibility of the customer unless previous arrangements have been made between the customer and the Agilent Technologies Customer Service Organization.

- Preparation of all site facilities including the provision of adequate space, supporting bench, ventilation and ac power as stated in the *1100 Series LC/MSD Site Preparation Manual* (part number G1946-90098).
- Operating supplies: syringes, vials, and solvents.
- Nitrogen gas: the LC/MSD requires a large quantity of contaminant-free nitrogen gas. Agilent recommends that the nitrogen source be either a nitrogen generator or a large (160 liter or greater) dewar of liquid nitrogen. For additional information on nitrogen gas requirements, see the *1100 Series LC/MSD Site Preparation Manual* (part number G1946-90098).

## W A R N I N G Nitrogen is the *only* acceptable drying and nebulizing gas. Use of air, oxygen, or other gases, when combined with solvents and high voltages in the spray chamber, could result in explosion.

#### NOTE

Solvents that are acceptable for most LC applications may contain unacceptably high levels of background contaminants detectable by the more-sensitive LC/MSD. Ideally, LC solvents used with the LC/MSD should be rated for both HPLC and pesticide, environmental, or GC/MS analyses. Use the highest purity solvents you can obtain. Acceptability of solvents for a specific application must be *empirically* determined.

- Separate vents for pump and spray chamber exhaust
- Secondary containment containers for the drain bottle
- Testing, modification, and/or repair of instruments not purchased as part of the Agilent 1100 LC/MSD system
- Operational training for programs not specifically listed in this document
- Tests using customer-supplied samples or equipment
- Any tasks not described in this manual
- In addition, the customer is required to:
- Provide someone to help lift the LC/MSD (63.1 kg) onto the bench
- Have the primary user present during installation and familiarization

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#### Installation

# ) Installation Preparing for installation

# 7 Install the mist filter on the outlet port.

Be sure the small port on the side of the filter is on the side facing the ballast CONtrol and port (toward the motor end of the pump).

C	Oil return line
	-
Exhaust nose	
KF 25 to 3/4-inch adapter	Foreline hose
()il mist filte:	
	Ballast control
	Demost point +
Oil level sight glass	
	Oil drip pan
Oil drain plug	

### 8 Install the oil return line:

- Install the restrictor into the black nitrile rubber tubing.
- Connect the tubing between the ballast port fitting and the oil mist filter. Use a pair of needlenose pliers to compress the clamps.

- 9 Set the ballast control at least 2 turns open (counterclockwise). This allows oil trapped by the filter to return to the pump. If the Stage 1 pressure is greater than 2.5 Torr for G1946C LC/MSD VL and 3.5 Torr for G1946D LC/MSD SL after pumpdown, turn the ballast control clockwise to partially close the ballast.
- 10 Use the KF 25 to 1/2-inch hose fitting adapter to connect the 3/4-inch OD Tygon exhaust hose to the mist filter.

The foreline pump comes filled with Inland 45 pump oil. You do **not** need to add additional oil at installation.

Pump oil (fluid)