



LC AND LC/MS

Your Essential Resource for Columns & Supplies



The Measure of Confidence



Agilent Technologies

LC/MS Supplies

Combined with Agilent's industry-leading LC systems, our single quadrupole, ion trap, triple quadrupole, TOF and Q-TOF LC/MS solutions combine world-class performance with legendary reliability and ease-of-use.

This section contains all of the mass spectrometry supplies you need to keep your LC mass spectrometer running at peak performance.



LC/MS Maintenance Schedule

Procedure	When to Perform
Flush the nebulizer	Daily or at the end of each shift to flush traces of samples and buffers out of the tubing, valves, and nebulizer.
Clean the electrospray spray chamber	Daily or anytime you suspect carryover contamination from one sample or analysis to another.
Replace the electrospray nebulizer needle	When the needle is plugged. Common symptoms of a plugged needle are increased LC backpressure, off-axis spraying, or dripping from the nebulizer.
Clean the APCI spray chamber	Daily or anytime you suspect carryover contamination from one sample or analysis to another.
Replace the APCI nebulizer needle	When the needle is plugged. Common symptoms of a plugged needle are increased LC backpressure or off-axis spray from the nebulizer.
Clean the multimode source	Daily or anytime you suspect carryover contamination from one sample or analysis to another, or when you must access the end cap and capillary cap for cleaning and inspection.
Check calibrant levels	Monthly or weekly if you tune the LC/MS frequently.





Agilent 6100 Series
Single Quadrupole LC/MS, G6140A

LC/MS Preventive Maintenance Kit

For your convenience, the LC/MS Preventive Maintenance Kit has the recommended common supplies needed for most Agilent LC/MS systems. Unique source parts should be ordered separately.

LC/MS Preventive Maintenance kit

Description	Part No.
LC/MS Preventive Maintenance kit	5190-1443
Foreline pump (rotary pump) oil, Inland 45, 1 L, for E1M18/E2M28	6040-0834
Oil mist filter element for E2M18	1535-4970
Filter element, 5 µm, 5/pk	0100-2051
Spring, canted coil, 4/pk	1460-2571
Big hydrocarbon trap, 1/4 in fittings	BHT-4
Rotor seal, Vespel, pH 0 to 10	0100-1855



Foreline pump oil, 6040-0834



Oil mist filter element for E2M18, 1535-4970



TIPS & TOOLS

Save ordering time and money with the LC/MS PM Kit! It contains the common supplies specified in Agilent service engineer preventive maintenance procedure for LC/MS platforms.

LC/MS Supplies

Description	6100 Series	6200 Series	6300 Series	6400 Series	6500 Series	Part No.
	Single Quadrupole LC/MS			TOF LC/MS		
ES nebulizer assembly, original	✓	✓	✓	✓	✓	G1946-60098
ES nebulizer needle (original) replacement kit	✓	✓	✓	✓	✓	G2427A
ES nebulizer assembly, new	✓	✓	✓	✓	✓	G1958-60098
ES nebulizer needle (new) replacement kit	✓	✓	✓	✓	✓	G1958-60136
APCI nebulizer assembly	✓	✓	✓	✓	✓	G1946-60037
APCI nebulizer needle replacement kit	✓	✓	✓	✓	✓	G2428A
Needle assembly APCI/Multimode	✓	✓	✓		✓	G1947-60103
Corona needle APCI/Multimode	✓	✓	✓	✓	✓	G1947-20029
Capillary cap, high temperature, 3.0 mm	✓	✓	✓	✓	✓	G1946-20301
Capillary, 0.5 mm id, dielectric*	✓		✓			G1946-80009
Capillary, 0.6 mm id, dielectric*	✓	✓	✓	✓	✓	59987-20040
Capillary, 0.6 mm id, resistive, fast polarity switching*				✓		G1960-80060
Spring, canted coil, 0.25 in id, 0.53 mm	✓	✓	✓	✓	✓	1460-2571
1/6 in tee, low dead volume, stainless steel		✓			✓	0100-0969

*Dielectric capillary supports standard polarity switching only. Resistive capillary supports fast polarity switching.

(Continued)



Corona needle APCI, G1947-20029

TIPS & TOOLS

ES nebulizer (original) is compatible with the following ion sources:

- ESI G1948A with Serial Number < US91801994
- ESI G1948B with Serial Number < US91201787
- Multimode G1978A with Serial Number < US90800804
- Multimode G1978B with Serial Number < US90700787
- Dual ESI G3251A with Serial Number < US91200355
- Dual ESI G3251B with Serial Number < US91200355



LC/MS Supplies

Description	6100 Series	6200 Series TOF LC/MS	6300 Series Ion Trap LC/MS	6400 Series	6500 Series Accurate-Mass Q-TOF LC/MS	Part No.
	Single Quadrupole LC/MS			Triple Quadrupole LC/MS		
Syringe adapter			✓			9301-1291
Syringe pump			✓			3162-0178
1/16 in finger-tight PEEK fitting		✓	✓		✓	0100-1516
Female luer to female 10/32 adapter		✓	✓		✓	0100-2304
PEEK tubing		✓	✓		✓	0890-1915
Gas-tight syringe, PTFE Luer lock		✓	✓		✓	5182-9710
High-throughput skimmer, 2 mm		✓		✓	✓	G1969-20302
Skimmer 1 (G1956A/B)	✓					G1956-20302
HED assembly	✓					G1946-80019
HED assembly (G6140A, G6460A, G6530A)				✓		G2571-80103
HED assembly		✓				G1956-80000
Electron multiplier replacement horn	✓	✓		✓		05971-80103
Replacement horn and dynode	✓		✓	✓		G2441-80010



Electron multiplier replacement horn,
05971-80103

LC/MS Foreline Pump Supplies

Description	Part No.
Oil mist filter kit for E1M18/E2M28	3162-1056
Oil mist cartridge filter for MS40+	G1960-80039
Oil return kit	3162-1057
Foreline pump (rotary pump) oil, Inland 45, 1 L, for E1M18/E2M28	6040-0834
Foreline pump (rotary pump) oil, 4 L, for E1M18/E2M28	6040-0798
Foreline exhaust adapter	59980-20134
Hose clamp	1400-0563
Oil mist filter element for E2M18	1535-4970
KF25 clamp, stainless steel	0100-0549
KF25 coseal (inside clamp)	0100-1597
Exhaust tubing	0890-1727
Pump oil drip pan	G1946-00034



Adding foreline pump (rotary pump) oil, 4 L

LC/MS Chemicals

Description	6100 Series		6300 Series		6400 Series		Part No.
	Single Quadrupole LC/MS	6200 Series TOF LC/MS	Ion Trap LC/MS	Triple Quadrupole LC/MS	6500 Series Accurate-Mass Q-TOF LC/MS		
ES/APCI positive ion performance standard, 5 x 1 mL ampoules	✓	✓		✓	✓		G2423A
Electrospray LC demo sample (Sulfamix)	✓			✓*			59987-20033
ESI+APCI LC demo sample	✓						G1978-85000
ES negative ion performance standard, 5 x 1 mL ampoules	✓			✓			G2424A
APCI negative ion performance standard, 5 x 1 mL ampoules	✓						G2425A
ES/APCI positive ion performance standard	✓						G1946-85004
Multiple-charge compound performance evaluation sample (horse heart myoglobin)	✓						G2426A
ES/APCI positive ion performance standard, 5 x 1 mL ampoules	✓						G2423A
ES-TOF reference mix, 6 x 2 mL ampoules		✓				✓	G1969-85001
ES-TOF biopolymer reference standard kit		✓					G1969-85003
Flushing solvent	✓	✓	✓	✓	✓	✓	G1969-85026
High purity water, 4 L	✓	✓	✓	✓	✓	✓	8500-2236
Methyl alcohol, 1 L	✓	✓	✓	✓	✓	✓	8500-1867
Ammonium formate	✓	✓	✓	✓	✓	✓	G1946-85021
Formic acid, 5 mL	✓	✓	✓	✓	✓	✓	G2453-85060
Acetonitrile, 1 L	✓	✓	✓	✓	✓	✓	G2453-85050

*Recommended item for familiarization

LC/MS Common Supplies*

Description	Part No.
Common Parts	
Filter element, 5 µm, 5/pk	0100-2051
Rotor seal, Tefzel, pH 0 to 14	0100-1854
Rotor seal, Vespel, pH 0 to 10	0100-1855
Inlet filter assembly	G1946-60180
SSV long drain tubing assembly	G1969-60086
Spring, canted coil	1460-2571
Cleaning Supplies	
Abrasive mesh, 4000 grit	8660-0827
Capillary cleaning wire for dip tube	G1946-80054
Cleaning powder, dielectric capillary, Alconox	5190-1401
Cloths, lint-free	05980-60051
Cotton swabs, 100/pk	5080-5400
Gas Purifiers	
Big hydrocarbon trap, 1/4 in fittings	BHT-4
Big moisture trap, 1/4 in fittings	BMT-4
Big universal trap, 1/4 in fittings	RMSN-4
Big universal trap, 1/8 in fittings, Nitrogen	RMSN-2
Tools	
LC/MS tool kit	G1946-60157
Nebulizer adjustment fixture	G1946-20215
Nebulizer 25X magnifier	G1946-80049
Plastic tubing cutter	8710-1930
Screwdriver, Torx T15	8710-1622
Screwdriver, Torx T20	8710-1615
Open end wrench, 1/4 and 5/16 in	8710-0510
Wrench, 1/2 and 7/16 in	8710-0806
Needle nose pliers, pointed serrated jaws	8710-0004
3 mm wrench for nebulizer needle adjustment	8710-2699

*These parts are common to all LC/MS systems



Quiet Cover

Agilent has a solution to the frequent maintenance of LC/MS and ICP-MS rough pumps (visual check of oil levels, oil changes, oil additions, clean-up of oil leaks, etc.), as well as the inherent noise produced by the pumps. Quiet Covers are designed for easy movement, maintenance, and better living with rough pumps used with Agilent and other LC/MS systems.

- Locking castors to move heavy pump for maintenance
- No tools necessary to remove sectioned cover for easy access to pump
- Built in lift-and-tilt lever raises end of pump to drain oil
- Removable drip pan with well and hand holds to collect and transport oil
- Sound absorbing cabinet with resistant foam insulation to reduce pump noise
- Pump mounted to minimize vibration
- 2 Integrated fans maintain temperature inside cover
- LEDs and audible alarm if temperature exceeds 35 °C limit
- Maximum ambient temperature of 35 °C when airflow is neither restricted nor recycled
- Standard one-year warranty; installation and familiarization included with new LC/MS or ICP-MS orders

Please check www.agilent.com/chem/quietcover for the most up-to-date instrument compatibility guide.

Please confirm rough pump used in your Agilent system to ensure compatibility.

Quiet Cover

Description	Compatible Pump Models	Part No.
Quiet Cover	BOC Edwards Pumps, E2M28, E2M18, or E1M18	G3199B
Quiet Cover MS	Agilent MS40+	G6011A
Quiet Cover DS	Agilent DS202, DS302, DS402, and DS602	G6012A
Quiet Cover TS	Agilent TS300, TS300INV, TS600, TS600INV, and TS800	G6013A
Quiet Cover GC/MS*	Agilent DS42, Pfeiffer Duo 2.5	G6014A

*This model does not contain all features.



Quiet Cover MS, G6011A



Quiet Cover DS, G6012A



Quiet Cover MS, G6011A

LC/MS Standards Kits

LC/MS Standards Kits

Description	Part No.
Caffeine standards kit for LC/MS OQ/PV	8500-6917
Caffeine standards kit for LC/MS-Trap OQ/PV	5065-9908
Sulfa drug standards kit for LC/MS OQ/PV	5188-6523

LC/MS Application Kit Standards

Description	Part No.
LC/MS pesticide checkout mixture	5190-0469
LC/MS pesticide comprehensive mixture	5190-0551
LC/MS toxicology checkout mixture	5190-0556
LC/MS toxicology comprehensive mixture	5190-0555
LC/MS vet drug checkout mixture	5190-0443
LC/MS vet drug comprehensive mixture	5190-0554

LC/MS Calibrant Mixes

Description	Part No.
Calibrant, ES	G2421-60001
APCI/APPI calibrant solution, 100 mL	G2432A
ESI tuning mix for ion trap, 100 mL	G2431A
ES-TOF tuning mix, 100 mL	G1969-85000
APCI-L low concentration tuning mix, 100 mL	G1969-85010
MMI-L low concentration tuning mix, 100 mL	G1969-85020

LC/MS Calibrant Mix and Source Compatibility Matrix

Source	6100 Series Single Quadrupole LC/MS*	6140A/6150B Single Quadrupole LC/MS	6200 Series TOF LC/MS	6300 Series Ion Trap LC/MS	6400 Series Triple Quadrupole LC/MS	6500 Series Accurate-Mass Q-TOF LC/MS
ESI	G2421-60001	G1969-85000	G1969-85000	G2431A	G1969-85000	G1969-85000
APCI	G2432A	G1969-85010	G1969-85010	G2432A	G1969-85010 ²	G1969-85010 ²
APPI	G2432A	G2432A	G1969-85010	G2432A	G2432A ²	G1969-85010 ²
MMI	G2432A	G1969-85000	G1969-85020	G2432A	G1969-85020	G1969-85020
NanoESI			G1969-85000 ⁴	G2431A		G1969-85000 ⁴
HPLC-Chip Cube		G1969-85000 ²	G1969-85000 ⁴	G2431A ¹	G1969-85000 ³	G1969-85000 ⁴

*G6110A, G6120A/B, G6130A/B

¹5X dilution suggested

²No autotune

³ESI positive tune only

⁴Calibration only

