



## ORDERING INSTRUCTIONS

### BY PHONE

Call toll-free 800.682.6480 or 952.895.8292. Our normal business hours are 8 a.m. to 5 p.m. (Central Standard Time).

### BY FAX

Dial 952.895.8493 to send your order by fax, 24 hours a day.

### BY E-MAIL

sales@sciencix.com

### BY MAIL

Sciencix  
14261 W. Burnsville Pkwy  
Burnsville, MN 55306

Please provide the following information with your order:

- Purchase order number
- Name of purchaser
- Shipping address
- Billing address
- Telephone number
- Item quantities and part numbers
- Contact person in your accounts payable department

### BY CREDIT CARD

Visa, MasterCard, American Express, Discover

### BY WEBSITE

www.sciencix.com

### TERMS

Various payment options available. Please contact customer relations or your Account Manager for availability and qualification. No minimum order size requirement.

### SHIPPING

All packages are shipped according to customer requests. Our default shipping protocol is UPS ground for domestic packages, and UPS express for international shipments.

### WARRANTY

We view your business with us as a partnership based on mutual trust.

Our products are made according to the highest standards as a reflection of our commitment to quality, integrity and in accordance with our ISO certification. Therefore, we are glad to extend a Lifetime Warranty against any manufacturing defects on all Sciencix parts. Sciencix defines the lifetime of a part in accordance with the normal expected performance of the equivalent OEM part. Our intention is to provide replacement parts that are equivalent to the corresponding OEM part. On the rare occasion that you experience a problem with a Sciencix part, we invite you to contact us and share your problem with us. Every attempt will be made to bring resolution in a way that enhances our relationship with you, our valued customer.

Our warranty claim process is simple. Below is a brief outline of how to initiate a warranty claim.

### CUSTOMER

Contact Customer Relations at 800.682.6480 or 952.895.8292, or contact your Account Manager. Provide as much detail as possible about the part in question, such as part number, lot number, date of purchase, etc. Describe the situation in which the performance of the part was unsatisfactory.

### SCIENCIX

We will provide you with a Return Material Authorization (RMA) number and then ship a replacement or credit your account.

### SHIP RETURNS TO

Sciencix  
14261 W. Burnsville Pkwy  
Burnsville, MN 55306

Shipment of returned warranty parts to Sciencix is the responsibility of the customer; shipment of replacement parts to the customer's place of business is the responsibility of Sciencix.

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## OUR PROCESS

### MATERIALS. GEOMETRY. PERFORMANCE. APPEARANCE.

Understanding the requirements of our customers and the analytical instrumentation industry is at the core of our process for solid product design. It all starts with listening. With years of experience and discussions with a variety of customers, we have distilled what we've learned into the four pillars of our product design process: materials, geometry, performance, and appearance.

Our intent is to provide CTS replacement parts that are, in each case, equivalent to the corresponding OEM part.

With the product process in mind, Sciencix pursues two possible paths towards offering OEM alternative parts. Sciencix has cultivated relationships with many parts and component manufacturing companies that cater to high tech industries such as analytical instrumentation. Sciencix uses these vendors wherever possible to source parts that match the performance and look of the OEMs. Alternatively, we develop the products in-house. This process includes reverse engineering dimensions and materials, prototyping, and testing.

Our desired outcome from this rigorous process is to provide you with the analytical instrumentation parts and services you need, when you need them — all supplied by friendly, knowledgeable people at a reasonable price. We want you to be completely satisfied with every aspect of your dealings with Sciencix, from order placement through product delivery and performance. Please help us in our pursuit. Let us know of any issues you have had with any order from Sciencix. We will work with you to try and get it satisfactorily resolved whether through warranty claims, product replacement or process improvement.

That is our process and guarantee to you.



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## PUMP PARTS

MODEL: 1260, 1290



MODEL: 1100, 1120, 1200, 1260, G1310A/B, G1311A/B/C, G1312A/B/C, G1376A, G2226A

**CTS-21035**  
OEM G1312-60071  
**Purge Valve (long), w/PTFE Frit**



MODEL: 1290  
**CTS-21070**  
OEM G4220-60022  
**Inlet Valve**



MODEL: 1260, G1310B, G1311B, G1312B

**11-4145**  
OEM G1312-60020  
**Active Inlet Valve Cartridge (600 bar)**



MODEL: 1260, 1290, 1050, 1100, 1220, G4220A/B  
**CTS-10683**  
OEM 01018-22707  
**PTFE Frits, 5/pk**



MODEL: 1260, 1100, 1200, 1220

**11-4093**  
OEM G1312-60067  
**Outlet Ball Valve (600 bar)**



MODEL: 1260, 1050, 1100, 1120, 1200, 1220  
**11-3321**  
OEM 5062-2484  
**Wash Seal Gasket, 6/pk**



MODEL: 1260, 1100, 1200, 1220

**11-4101**  
OEM G1312-60066  
**Passive Inlet Valve**



MODEL: 1260, 1050, 1090, 1100, 1120, 1200, 1220, G1310A, G1311A, G1312A, G1376A  
**11-4146 KIT**  
OEM G1312-68741  
**PM Kit, G1312 Binary Pump**

- Black Piston Seals, 2/pk (CTS-10417) 2
- Frit, PTFE, 5/pk (CTS-10683) 1
- Gaskets (CTS-10812) 4
- Seal Cap Assembly (CTS-A11454) 3



MODEL: 1260, 1050, 1100, 1120, 1200, 1220, G1310A/B, G1311A/B/C, G1312A/B/C, G1376A, G2226A, G4302A

**CTS-10417**  
OEM 5063-6589  
**Black Piston Seals, 2/pk**



MODEL: 1260, 1220  
**11-4147 KIT**  
OEM G1310-68741  
**PM Kit, 1260 & 1220 Pumps**

- Black Piston Seals, 2/pk (CTS-10417) 1
- Frit, PTFE, 5/pk (CTS-10683) 1
- Seal Cap Assembly (CTS-A11454) 1



MODEL: 1260, 1050, 1100, 1120, 1200, 1220, G7129A

**CTS-10621**  
OEM 0905-1503  
**Seal, Pump**

PUMP PARTS

MODEL: 1260, 1290



MODEL: 1290, G4204A  
**CTS-21566 KIT**  
 OEM G4204-68742  
**PM Kit, Seal Wash for Binary Pump G4204A**

- Wash Seal, PE (11-3832) 2
- Film Washer (CTS-21108) 2
- Peristaltic Pump (CTS-21183) 1



MODEL: 1290, G7167B  
**CTS-21278**  
 OEM 5068-0198  
**Rotor seal, Injector Valve (1300 bar), G7167B**



MODEL: 1260, G1367E  
**CTS-21577 KIT**  
 OEM G1367-68741  
**PM Kit, G1367E**

- Peristaltic Pump (CTS-21183) 1
- Black Piston Seals, 2/pk (CTS-10417) 1
- 2 Position/6 Port Rotor Seal, Vespel (600 bar) (CTS-12012) 1
- Needle Assembly (11-3883) 1
- Needle Seat, 0.12mm ID, 0.8mm OD, PEEK 600 bar (CTS-21277) 1



MODEL: 1260, 1050, 1100, 1120, 1200, 1220, G1310B, G1311B/C, G1312B/C, G2226A, G4302A  
**CTS-11088**  
 OEM 0905-1420  
**Gold Piston Seals, 2/pk**



MODEL: 1260, 1050, 1100, 1120, 1200, 1220  
**CTS-10675**  
 OEM 0905-1175  
**Wash Seal**



MODEL: 1290, G4240  
**CTS-21567 KIT**  
 OEM G4220-68742  
**PM Kit, Seal Wash for Binary Pump G4240A**

- Wash Seal, PE (11-3832) 4
- Film Washer (CTS-21108) 4
- Peristaltic Pump (CTS-21183) 1



MODEL: 1260, 1050, 1100, 1120, 1200, 1220, G1310A/B, G1311A/B/C, G1312A/B/C, G1376A, G2226A  
**CTS-10303**  
 OEM 5063-6586  
**Sapphire Plunger**



MODEL: 1290, G4204A, G4220A, G4220B  
**CTS-21219**  
 OEM 5067-5678  
**Piston Ceramic**



MODEL: 1290  
**11-3472**  
 OEM 5068-0005  
**Rotor Seal, 5-Pos. 7-Port (1200 bar)**



MODEL: 1290, G4226A  
**CTS-21591 KIT**  
 OEM G4226-68735  
**PM Kit, G4226A**

- Peristaltic Pump (CTS-21183) 1
- 2 Position/6 Port Rotor Seal, (1200 bar) (11-2312) 1
- Metering Device Seal (11-3830) 1
- Needle Assembly (11-3883) 1
- Needle Seat Assembly, 0.12mm ID (11-3889) 1

PUMP PARTS

MODEL: 1260, 1290



MODEL: 1290  
**11-3834**  
 OEM 0905-1719  
**Pump Seal, PE**



MODEL: 1260, 1290, 1100, 1200  
**CTS-21069**  
 OEM 5062-8517  
**Frit Adapter, 4/pk**



MODEL: 1290  
**CTS-21421 KIT**  
 OEM G4220-68741  
**PM Kit, 1290 Binary Pump**



MODEL: 1260  
**CTS-21106 KIT**  
 OEM G1310-68742  
**Seal Wash PM Kit, 1260 Pump**



MODEL: 1260, 1290, 1050, 1090, 1100, 1200, 1220  
**CTS-10843**  
 OEM 5041-2168  
**Glass Solvent Filter**

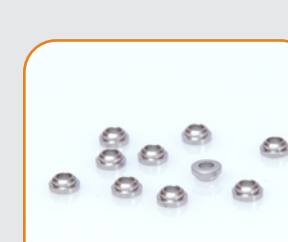


MODEL: 1260, 1290, 1050, 1100, 1200, 1220  
**CTS-A11454**  
 OEM 5067-4728  
**Seal Cap Assembly**

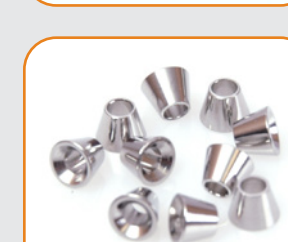


MODEL: 1260, 1290, 1050, 1090, 1100, 1200  
**CTS-11016 KIT**  
 OEM 5062-2418  
**Swagelok® Style Compression Fitting Kit, 10/pk**

- Nut 10
- Front Ferrule 10
- Back Ferrule 10



MODEL: 1290, 1260, 1220, 1200, 1100  
**CTS-21679**  
 OEM 5180-4114  
**Back Ferrule, 1/16", SS, 10/pk**



MODEL: 1290, 1260, 1220, 1200, 1100  
**CTS-21680**  
 OEM 5180-4108  
**Front Ferrule, 1/16", SS, 10/pk**



MODEL: 1290, 1260, 1220, 1200, 1100  
**CTS-21183**  
 OEM 5065-4445  
**Peristaltic Pump**

PUMP PARTS

MODEL: 1260, 1290



MODEL: 1260, 1100, 1200  
**CTS-11456**  
OEM 5021-1816  
**Capillary, 105mm x 0.17mm ID**



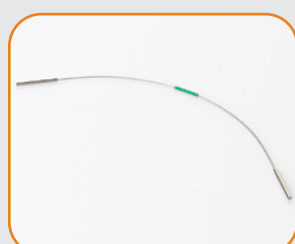
MODEL: 1260, 1100, 1200  
**CTS-11458**  
OEM 5021-1818  
**Capillary, 280mm x 0.17mm ID**



MODEL: 1260, 1100, 1200, G1312  
**CTS-A11456**  
OEM G1312-87306  
**Assy, Capillary, 105mm x 0.17mm ID, w/Fittings**



MODEL: 1260, 1100, 1200, G1312  
**CTS-A11459**  
OEM G1312-87303  
**Assy, Capillary, 400mm x 0.17mm ID, w/Fittings**



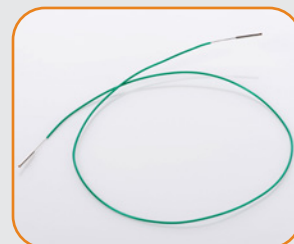
MODEL: 1260, 1100, 1200  
**CTS-11457**  
OEM 5021-1817  
**Capillary, 150mm x 0.17mm ID**



MODEL: 1290, 1260, 1220  
**11-3832**  
OEM 0905-1718  
**Wash Seal, PE**



MODEL: 1260, 1100, 1200  
**CTS-11459**  
OEM 5021-1819  
**Capillary, 400mm x 0.17mm ID**



MODEL: 1260, 1200, 1100  
**CTS-21109**  
OEM 5065-9933  
**Capillary, 600 mm x 0.17 mm ID**



MODEL: 1290, 1260, 1200, 1100  
**CTS-21155**  
OEM 5067-4657  
**Capillary, 300mm x 0.17mm ID, w/Fittings (SST capillary pump to sampler)**



MODEL: 1290, 1260, 1200, 1100  
**CTS-21169**  
OEM G1316-87300  
**Assy, Capillary, 90mm x 0.17mm ID, w/Fittings**

AUTOSAMPLER

MODEL: 1260, 1290



MODEL: 1290  
**11-3889**  
OEM G4226-87012  
**Needle Seat Assembly, 0.12mm ID**



MODEL: 1260  
**11-3857**  
OEM G1367-87012  
**Needle Seat, 0.17mm ID, 0.8 mm OD, 600 bar**



MODEL: 1260  
**CTS-21277**  
OEM G1367-87012  
**Needle Seat, 0.12mm ID, 0.8mm OD, PEEK, 600 bar**



MODEL: 1260, 1290  
**11-3883**  
OEM G4226-87201  
**Needle Assembly**



MODEL: 1260, 1100, 1120, 1200, 1220  
**CTS-10835**  
OEM G1313-87201  
**Needle Assembly**



MODEL: 1260, 1100, 1120, 1200, 1220, G1313A, G1329A/B  
**11-2605**  
OEM G1329-87017  
**Needle Seat, Std., PEEK, 0.17mm ID**



MODEL: 1260, G7167A  
**CTS-21163**  
OEM 5068-0209  
**Rotor Seal, 2 Groove**



MODEL: 1260, 1200  
**CTS-12012**  
OEM 0101-1416  
**2 Position/6 Port Rotor Seal, Vespel (600 bar)**



MODEL: 1290  
**11-2312**  
OEM 5068-0007  
**2 Position/6 Port Rotor Seal (1200 bar)**



MODEL: 1260, 1100, 1120, 1200, 1220, G1313A, G1329A/B  
**11-4148 KIT**  
OEM G1313-68719  
**PM Kit, G1329B**

- Seal, Pump (CTS-10621) 1
- Needle Assembly (CTS-10835) 1
- 2 Position/6 Port Rotor Seal, Vespel (600 bar) (CTS-12012) 1
- Needle Seat, Std., PEEK, 0.17mm ID (11-2605) 1

AUTOSAMPLER

MODEL: 1260, 1290



MODEL: G1313, G1329, G1367, G1389, G4226, G4290, G4294, G7167A, G7129, 1100, 1200, 1220, 1260, 1290  
**CTS-21266**  
 OEM 1535-4045, 7010-006  
**Bearing Ring**



MODEL: 1290  
**11-3830**  
 OEM 0905-1717  
**Metering Device Seal**

DETECTOR LAMPS

MODEL: G1314D, G1314E, G1314FG7114A/B



MODEL: 1260, 1220 DAD, G1315C/D, G1365C/D, G7115A, G7165A  
**11-3984**  
 OEM 2140-0820  
**Long Life Deuterium Lamp, RFID (2000 hr)**



MODEL: G1314D, G1314E, G1314F, G7114A/B  
**11-4111**  
 OEM G1314-60101  
**Long Life HiS Deuterium Lamp, RFID, VWD (2000 hr)**



MODEL: 1290, G4212A/B, G7117A/B/C/D  
**11-4109**  
 OEM 5190-0917  
**Long Life HiS Deuterium Lamp, 8 pin, RFID (2000 hr)**



MODEL: 1260, 1100, 1200, 1220, G1315A/B, G1365A/B  
**CTS-A11218**  
 OEM 2140-0813  
**Long Life Deuterium Lamp (2000 hr)**

PUMP PARTS

MODEL: 1100, 1200, 1220



MODEL: 1100, 1200, 1220, 1260  
**11-4093**  
 OEM G1312-60067  
**Outlet Ball Valve (600 bar)**



MODEL: 1100, 1200, 1220, 1050, 1120, 1260, G1310A/B, G1311A/B/C, G1312A/B/C, G1376A, G2226A  
**CTS-10303**  
 OEM 5063-6586  
**Sapphire Plunger**



MODEL: 1100, 1200, 1220, 1260  
**11-4101**  
 OEM G1312-60066  
**Passive Inlet Valve**



MODEL: 1100, 1200, 1220, 1050, 1120, 1260, G1310B, G1311B/C, G1312B/C, G2226A, G4302A  
**CTS-11088**  
 OEM 0905-1420  
**Gold Piston Seals, 2/pk**



MODEL: 1100, 1200, 1220, 1050, 1120, G1310A/B, G1311A/B/C, G1312A/B/C, G1376A, G2226A, G4302A  
**CTS-10417**  
 OEM 5063-6589  
**Black Piston Seals, 2/pk**



MODEL: 1100, 1200, 1220, 1050, 1120, 1260  
**CTS-10675**  
 OEM 0905-1175  
**Wash Seal**



MODEL: 1050, 1100, 1120, 1200, 1220, 1260, G7129A  
**CTS-10621**  
 OEM 0905-1503  
**Seal, Pump**



MODEL: 1200, 1100, G1367D, G1389A, G1377A  
**CTS-21347**  
 OEM 5022-2175  
**Plunger Seal**



MODEL: 1220, 1200, 1100  
**CTS-21678**  
 OEM 0100-1516  
**PEEK Fitting, 1/16" OD (2/pk)**



MODEL: 1050, 1090, 1100, 1120, 1200, 1220, 1260, G1310A, G1311A, G1312A, G1376A  
**11-4146 KIT**  
 OEM G1312-68741  
**PM Kit, G1312 Binary Pump**

- Black Piston Seals, 2/pk (CTS-10417) 2
- Frit, PTFE, 5/pk (CTS-10683) 1
- Gaskets (CTS-10812) 4
- Seal Cap Assembly (CTS-A11454) 3

PUMP PARTS

MODEL: 1100, 1200, 1220



MODEL: 1100, 1200, 1220, 1050, 1090  
**11-1240**  
 OEM 5063-6591  
**Fingertight One Piece 10-32 PEEK Male Nut/Ferrule for 1/16" OD Tubing, 10/pk**



MODEL: 1100, 1200, 1050, 1090, 1220, 1260, 1290  
**CTS-10843**  
 OEM 5041-2168  
**Glass Solvent Filter**



MODEL: 1100, 1200, 1220, 1050, 1260, 1290  
**CTS-A11454**  
 OEM 5067-4728  
**Seal Cap Assembly**



MODEL: 1100, 1200, 1220, 1050, 1120, 1260  
**11-3321**  
 OEM 5062-2484  
**Wash Seal Gasket, 6/pk**



MODEL: 1100, 1200, 1220, 1050, 1260, 1290, G4220A/B  
**CTS-10683**  
 OEM 01018-22707  
**PTFE Frits, 5/pk**

AUTOSAMPLER

MODEL: 1100, 1200, 1220



MODEL: 1100, 1120, 1200, 1220, 1260  
**CTS-10835**  
 OEM G1313-87201  
**Needle Assembly**



MODEL: 1100, 1200, 1120, 1220, 1260, G1313A, G1329A/B  
**11-2605**  
 OEM G1329-87017  
**Needle Seat, Std., PEEK, 0.17mm ID**



MODEL: 1100, 1200, 1120, 1220, G1313A, G1329A/B  
**11-4059**  
 OEM 01078-87302  
**Capillary, Loop, 100µL**



MODEL: 1100, 1200, 1120, 1220, 1260, G1313A, G1329A/B  
**11-4148 KIT**  
 OEM G1313-68719  
**PM Kit, G1329B**

- Seal, Pump (CTS-10621) 1
- Needle Assembly (CTS-10835) 1
- 2 Position/6 Port Rotor Seal, Vespel (600 bar) (CTS-12012) 1
- Needle Seat, Std., PEEK, 0.17mm ID (11-2605) 1



MODEL: 1220, 1200, 1100  
**CTS-21585**  
 OEM G4280-68770  
**PM Kit, 1220**

- Needle Seat, Std., PEEK™, 0.17mm ID (11-2605) 1
- Black Piston Seals, 2/pk (CTS-10417) 1
- Needle Assembly (CTS-10835) 1
- 2 Position/6 Port Rotor Seal, Vespel (600 bar) (CTS-12012) 1
- Seal Cap Assembly (CTS-A11454) 1

PUMP PARTS

MODEL: 1100, 1200



MODEL: 1100, 1200, 1220, 1260  
**11-4093**  
 OEM G1312-60067  
**Outlet Ball Valve (600 bar)**



MODEL: 1100, 1200, 1050, 1090, 1220, 1260, 1290  
**CTS-10843**  
 OEM 5041-2168  
**Glass Solvent Filter**



MODEL: 1100, 1200, 1050, 1090  
**CTS-A11259**  
 OEM 01018-60025  
**Solvent Inlet Filter, SS**



MODEL: 1100, 1200, 1050  
**CTS-10807**  
 OEM 5063-6505  
**Outlet Valve Sieves, 10/pk**



MODEL: 1100, 1200, 1050  
**CTS-10800 KIT**  
**Seal Wash Kit, Binary Pump**

- Seals (CTS-10675) 4
- Gaskets (CTS-10812) 4



MODEL: 1100, 1200, 1050  
**CTS-10814 KIT**  
 OEM G1310-68731  
**Seal Wash Kit, Binary Pump**

- Seals (CTS-10675) 4
- Gaskets (CTS-10812) 4



MODEL: 1100, 1200, 1050, G1310A, G1311A, G1311C, G1312A/C, G1322A, G1376A,  
**CTS-10673**  
 OEM 5062-8562  
**Active Inlet Valve Cartridge (400 bar)**



MODEL: 1100, 1200, 1050, 1220, 1260, 1290  
**CTS-A11454**  
 OEM 5067-4728  
**Seal Cap Assembly**



MODEL: 1100, 1200, 1050, 1220, 1260, 1290, G4220A/B  
**CTS-10683**  
 OEM 01018-22707  
**PTFE Frits, 5/pk**



MODEL: 1100, 1200, 1220, 1050, 1090  
**11-1240**  
 OEM 5063-6591  
**Fingertight One Piece 10-32 PEEK Male Nut/Ferrule for 1/16" OD Tubing, 10/pk**



MODEL: 1100, 1200, 1050  
**CTS-10833 KIT**  
 OEM G1311-68710  
**Pump Maintenance Kit**

- Black Piston Seals, 2/pk (CTS-10417) 2
- Active Inlet Cartridge (400 bar) (CTS-10673) 1
- PTFE Frits (CTS-10712) 2
- Glass Solvent Filter (CTS-10843) 2
- Seal Cap Assembly (CTS-A11454) 1



PUMP PARTS

MODEL: 1100, 1200



MODEL: 1100, 1200, 1050

**CTS-11284 KIT**  
OEM 5065-4499

**Extended Isocratic Pump PM Kit**

- Sapphire Plunger (CTS-10303) 2
- Black Piston Seals, 2/pk (CTS-10417) 1
- Active Inlet Cartridge (400 bar) (CTS-10673) 1
- Frit, PTFE, 5/pk (CTS-10683) 1



MODEL: 1100, 1200

**CTS-11285 KIT**  
OEM G1312-68730

**Binary Pump PM Kit**

- Black Piston Seals, 2/pk (CTS-10417) 2
- Seal Cap Assembly (CTS-A11454) 3
- PTFE Frits (CTS-10712) 2
- Screen Filter (CTS-10781) 2



MODEL: 1100, 1200

**CTS-11286 KIT**  
OEM G1310-68730

**PM Kit for Isocratic/Quarternary Pump**

- Black Piston Seals, 2/pk (CTS-10417) 1
- PTFE Frits (CTS-10712) 2
- Seal Cap Assembly (CTS-A11454) 2



MODEL: 1100, 1200, 1260, 1290

**CTS-21069**  
OEM 5062-8517

**Frit Adapter, 4/pk**



MODEL: 1100, 1200, 1050, 1090, 1260, 1290

**CTS-11016 KIT**  
OEM 5062-2418

**Swagelok Style Compression Fitting Kit, 10/pk**

- Nut 10
- Front Ferrule 10
- Back Ferrule 10



MODEL: 1100, G1310A/G1311A Pump, G1313A/G1329A Autosampler

**CTS-21586 KIT**  
OEM 01100-68000

**1100 Series Essential Pack, G1310A/G1311A Pump, G1313A/G1329A Autosampler**

- |   |                                      |
|---|--------------------------------------|
| • Needle Seat, Std., PEEK™, 0.17mm ID (11-2605) 1 | • PTFE Frits, 5/pk (CTS-10683) 1     |
| • Black Piston Seals, 2/pk (CTS-10417) 1          | • Needle Assembly (CTS-10835) 1      |
| • Rotor Seal, Vespel, 2-Groove (CTS-10459) 1      | • Glass Solvent Filter (CTS-10843) 4 |
|   | • Frit Adapter, 4/pk (CTS-21069) 1   |
|   | • Seal Cap Assembly (CTS-A11454) 1   |

PUMP PARTS

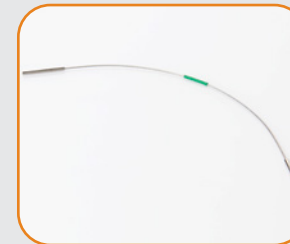
MODEL: 1100, 1200



MODEL: 1100, 1200, 1260

**CTS-11456**  
OEM 5021-1816

**Capillary, 105mm x 0.17mm ID**



MODEL: 1100, 1200, 1260

**CTS-11457**  
OEM 5021-1817

**Capillary, 150mm x 0.17mm ID**



MODEL: 1100, 1200, 1260

**CTS-11458**  
OEM 5021-1818

**Capillary, 280mm x 0.17mm ID**



MODEL: 1100, 1200, 1260

**CTS-11459**  
OEM 5021-1819

**Capillary, 400mm x 0.17mm ID**



MODEL: 1100, 1200, 1260, G1312

**CTS-A11456**  
OEM G1312-87306

**Assy, Capillary, 105mm x 0.17mm ID, w/Fittings**



MODEL: 1100, 1200, 1260, G1312

**CTS-A11459**  
OEM G1312-87303

**Assy, Capillary, 400mm x 0.17mm ID, w/Fittings**

AUTOSAMPLER

MODEL: 1100, 1200



MODEL: 1100, 1200, 1120, 1220, G1313A, G1329A/B

**11-4059**

OEM 01078-87302

**Capillary, Loop, 100µL**



MODEL: 1100, 1200, 1220, 1050, 1120, G1310A/B, G1311A/B/C, G1312A/B/C, G1376A, G2226A, G4302A

**CTS-10417**  
OEM 5063-6589

**Black Piston Seals, 2/pk**



MODEL: 1050, 1100, 1120, 1200, 1220, 1260, G7129A

**CTS-10621**  
OEM 0905-1503

**Seal, Pump**



MODEL: 1200, 1260

**CTS-12012**  
OEM 0101-1416

**2 Position/6 Port Rotor Seal, Vespel (600 bar)**



MODEL: 1100, 1200, 1120, 1220, 1260, G1313A, G1329A/B

**11-2605**  
OEM G1329-87017

**Needle Seat, Std., PEEK, 0.17mm ID**

AUTOSAMPLER

MODEL: 1100, 1200



MODEL: 1100, 1120, 1200, 1220, 1260  
**CTS-10835**  
 OEM G1313-87201  
**Needle Assembly**



MODEL: 1100, 1200  
**CTS-10459**  
 OEM 0100-1853  
**Rotor Seal, Vespel, 2-Groove, 7750-040**



MODEL: 1100, 1200, G1313, G1313A, G1327A G1329A  
**CTS-11287 KIT**  
 OEM 5065-4498  
**Extended PM Kit for Standard Autosamplers**

- Isolation Seal (CTS-11288) 1
- Rotor Seal Assy (CTS-10459) 1
- Stator Face Assy (CTS-A10678) 1
- Needle Assembly (CTS-10835) 1
- Needle Seat, Std., PEEK, 0.17mm ID (11-2605) 1



MODEL: 1100, 1200, G1313, G1313A, G1327A G1329A  
**CTS-11283 KIT**  
 OEM G1313-68730  
**PM Kit for Standard Autosamplers**

- Rotor Seal Assy (CTS-10459) 1
- Needle Assembly (CTS-10835) 1
- Needle Seat, Std., PEEK, 0.17mm ID (11-2605) 1



MODEL: 1100, 1200, 1120, 1220, 1260, G1313A, G1329A/B  
**11-4148 KIT**  
 OEM G1313-68719  
**PM Kit, G1329B**

- Seal, Pump (CTS-10621) 1
- Needle Assembly (CTS-10835) 1
- 2 Position/6 Port Rotor Seal, Vespel (600 bar) (CTS-12012) 1
- Needle Seat, Std., PEEK, 0.17mm ID (11-2605) 1



MODEL: 1100, 1200, G1313, G1327A

**CTS-10722 KIT**  
 OEM G1313-68709

**Autosampler Preventative Maintenance Kit**

- Rotor Seal Assy (CTS-10459) 1
- Black Piston Seals, 2/pk (CTS-10417) 1
- Needle Assembly (CTS-10835) 1
- Needle Seat, Std., PEEK, 0.17mm ID (11-2605) 1
- Finger Caps, 3/pk (CTS-10834) 1

AUTOSAMPLER

MODEL: 1100, 1200



MODEL: 1100, 1200  
**CTS-11419**  
 OEM 0100-1855  
**Rotor Seal, Vespel for p/n 0101-0921**



MODEL: 1100, 1200  
**CTS-A10678**  
 OEM 0100-1851  
**Stator Face Assembly for 0101-0921 Valve**



MODEL: 1100, 1200  
**CTS-11288**  
 OEM 0100-1852  
**Isolation Seal for 0101-0921 Valve**



MODEL: 1100, 1200  
**CTS-11356**  
 OEM G1313-87202  
**Needle, 900µL**



MODEL: 1100, 1200  
**CTS-A019**  
 OEM 0101-0623  
**Manual Injection Valve Rotor Seal, Vespel**



MODEL: 1100, 1200  
**CTS-A11329**  
 OEM 0100-1859  
**Stator Face Assembly for 5063-6502 Valve**

DETECTOR LAMPS

MODEL: 1100, 1200



MODEL: 1100, 1200 DAD, G1315A/B, G1365A/B  
**CTS-10473**  
 OEM 2140-0590  
**Deuterium Lamp (1000 hr)**



MODEL: 1100, 1200 VWD, 1120, 1220 VWD, G1314A, G1314B, G1314C  
**CTS-10494**  
 OEM G1314-60100  
**Long Life Deuterium Lamp (2000 hr)**



MODEL: 1100, 1200 DAD, G1315A/B, G1365A/B  
**CTS-10827**  
 OEM 5181-1530  
**Long Life Deuterium Lamp (2000 hr)**



MODEL: 1100, 1200, 1220, 1260, G1315A/B, G1365A/B  
**CTS-A11218**  
 OEM 2140-0813  
**Long Life Deuterium Lamp (2000 hr)**



MODEL: 1100 DAD, 1200 DAD  
**11-4110**  
 OEM 5182-1530  
**Long Life Deuterium Lamp (2000 hr)**

PUMP PARTS



MODEL: 100A, 110A, 110B, 112, 114M, 116, 118, 125, 126, 127, 128

**CTS-0620**  
OEM 240621  
**Outlet Check Valve Cartridge**



MODEL: 100A, 110A, 110B, 112, 114M, 116, 118, 125, 126, 127, 128

**CTS-0621**  
OEM 240620  
**Inlet Check Valve Cartridge**



MODEL: 100A, 110A, 110B, 112, 114M, 116, 118, 125, 126, 127, 128

**CTS-0721**  
OEM 240721  
**Outlet Check Valve Assembly**



MODEL: 100A, 110A, 110B, 112, 114M, 116, 118, 125, 126, 127, 128

**CTS-0720**  
OEM 240720  
**Inlet Check Valve Assembly**



MODEL: 110A, 110B, 112, 114M, 116, 118, 125, 126, 127, 128

**CTS-A033**  
OEM 240619  
**Check Valve Filter Replacement Kit**



MODEL: 114M, 116, 118, 125, 126, 127, 128

**CTS-2369**  
OEM 240714  
**Sapphire Plunger**



MODEL: 114M, 116, 118, 125, 126, 127, 128

**CTS-7162**  
OEM 237162, 728770  
**Plunger Seal, Black**



MODEL: 114M, 116, 118, 125, 126, 127, 128

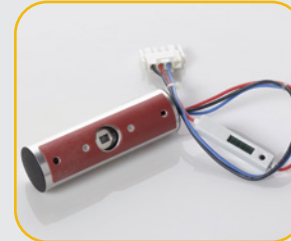
**CTS-10557**  
OEM 728770  
**Plunger Seal, Gold**



MODEL: 125, 126, 127, 128

**CTS-10391**  
OEM 728772, 238627  
**Plunger Wash Seal**

DETECTOR LAMPS

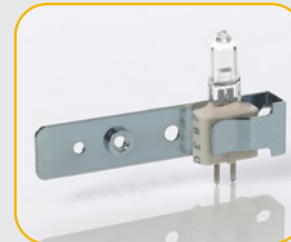


MODEL: 200 Series, 785A UV/Vis  
**CTS-00025**  
OEM N2920149  
**Deuterium Lamp (1000 hr)**



MODEL: 5, 7, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 25, 35, 40, 45, 800, 850, 900, 950, 1050, Bio 19, and Lambda 2 UV/Vis

**CTS-10854**  
OEM L6022728, Old# B0160917  
**Deuterium Lamp (1500 hr)**



MODEL: 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 25, 35, 40, 45, 550, 551, 552, 552A, 553, 559, 559A, 800, 850, 900, 950, 1050, Lambda 2, Lambda Bio, and LC-480 PDA Spectrometers

**11-3343**  
OEM B0114620  
**Tungsten Lamp**

AUTOSAMPLER



MODEL: 200 SERIES  
**CTS-A168**  
OEM 09923270  
**250µL Syringe**



MODEL: 200 SERIES  
**CTS-A019**  
OEM 09904802  
**Rotor Seal**



MODEL: 200 SERIES  
**CTS-A11329**  
OEM 7725-026  
**Stator Face Assembly**



MODEL: 200 SERIES  
**CTS-10724**  
OEM N2930023  
**Injector Needle**

PUMP PARTS



MODEL: 200 SERIES,  
1, 2, 3, 3B, 4, 10, 250, 400,  
410, 620, INT. 4000

**CTS-10758**  
OEM 09907324

**Pump Seal,  
High Pressure**



MODEL: 200 SERIES,  
1, 2, 3, 3B, 4, 10, 250, 400,  
410, 620, INT. 4000

**CTS-10772**  
OEM 09907339

**Pump Seal,  
Low Pressure**



MODEL: 200 SERIES,  
1, 2, 3, 3B, 4, 10, 250, 400,  
410, 620, INT. 4000

**CTS-10757**  
OEM 02540275

**High Pressure  
Seal Kit **KIT****

- Pump Seal (CTS-10758) 4
- Backup Ring (CTS-10759) 4
- O-Ring (CTS-00230-02) 4



MODEL: 200 SERIES,  
1, 2, 3, 3B, 4, 10, 250, 400,  
410, 620, INT. 4000, SERIES  
200 MICROPUMP

**CTS-A159**  
OEM 02540177

**Inlet Check Valve**



MODEL: 200 SERIES,  
1, 2, 3, 3B, 4, 10, 250,  
400, 410, 620, INT. 4000,  
SERIES 200 MICROPUMP

**CTS-A157**  
OEM 02540197

**Outlet Check Valve**



MODEL: 200 SERIES  
**CTS-11265 **KIT****  
OEM N2910383

**S200 Standard  
Pump Seals Kit**



MODEL: 200 SERIES,  
1, 2, 3, 3B, 4, 10, 250, 400,  
410, 620, INT. 4000

**11-1240**  
OEM ED020005

**Fingertight One Piece  
10-32 PEEK Male Nut/  
Ferrule for 1/16" OD  
Tubing, 10/pk**



MODEL: SERIES 4, INT. 4000,  
SERIES 200, 400, 410, MODEL  
250 AND 620 PUMPS BUILT  
AFTER DECEMBER 1989

**CTS-11367**  
OEM N2600104

**Piston, Low Pressure**



MODEL: SERIES 4, INT. 4000,  
SERIES 200, 400, 410, MODEL  
250 AND 620 PUMPS BUILT  
AFTER DECEMBER 1989

**CTS-11366**  
OEM N2600124

**Piston, High Pressure**



MODEL: 200 SERIES,  
1, 2, 3, 3B, 4, 10, 250, 400,  
410, 620, INT. 4000

**CTS-00230-02**  
OEM 09902128

**O-Ring, PTFE**



MODEL: 200 SERIES,  
1, 2, 3, 3B, 4, 10, 250, 400,  
410, 620, INT. 4000

**CTS-10759**  
OEM 02542076

**Piston Seal Backup Ring**

PUMP PARTS



MODEL: 655, 6000, 6200,  
6200A, L-7100, L-7110, L-7120,  
L-2130, L-2160U, L-8800,  
L-8800A, L-8900

**CTS-10322**  
OEM ANO-2328, 810-1033

**Ceramic Plunger**



MODEL: 655, 6000, 6200,  
6200A, L-2130, L-7100,  
L-7110, L-7120

**CTS-10394**  
OEM 655-1080

**Pump Seal, Black**



MODEL: 655, 6000, 6200,  
6200A, L-2130, L-7100,  
L-7110, L-7120

**CTS-10547**  
OEM 655-1080

**Pump Seal, Gold**



MODEL: 655, 6000,  
6200, 6200A, L-2130,  
L-7100, L-7110

**CTS-10493**  
OEM ANO-0835

**Check Valve Cartridge,  
2/pk**



MODEL: L-2130,  
L-7100, L-7110

**CTS-A125**  
OEM ANO-0836, 810-1004

**Inlet Check  
Valve Assembly**



MODEL: L-2130,  
L-7100, L-7110

**CTS-A126**  
OEM ANO-0837, 810-1005

**Outlet Check  
Valve Assembly**

AUTOSAMPLER



MODEL: AS-7200,  
AS-7250

**CTS-10573**  
OEM ANO-0818

**Injection Valve  
Rotor Seal**

INJECTOR VALVE



MODEL: 7000,  
7010, 7040, 7067

**CTS-A083**  
OEM 7010-039

**Rotor Seal, Vespel**



MODEL: 7010, 7725, 7725i,  
9725, 9725i, 3725-038,  
3725i-038, 3725, 3725i

**CTS-10612**  
OEM 7010-015

**Isolation Seal**



MODEL: 7125, 7126,  
7725, 7725i, 9725

**CTS-A019**  
OEM 7125-047

**Rotor Seal, Vespel**



MODEL: 7725, 7725i, 7726,  
9725, 9725i

**CTS-A11329**  
OEM 7725-026

**Stator Face Assembly**

MASS SPEC



MODEL: 3200, 4000, 4500, 5000, 5500, 6500

**33-1034**  
OEM 025392  
**TIS Capillary Electrode**



MODEL: 3200, 3500, 4000, 4500, 5000, 5500, 6500

**CTS-21134**  
OEM 027471  
**1/16" Short Hex PEEK Fitting**



MODEL: 4500, 5500, 6500

**CTS-21309**  
OEM 4465678  
**Rotor Seal, Valco Cheminert**



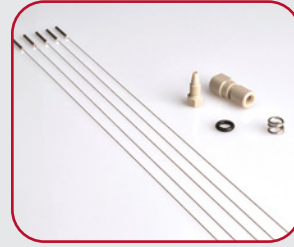
MODEL: 3200, 3500, 4000, 4500, 5000, 5500, 6500

**CTS-21137**  
OEM 025348, 5045984  
**1/16" Union for TIS Probe/APCI for Turbo V Source**



MODEL: 3200, 3500, 4000, 4500, 5000, 5500, 6500

**CTS-21173**  
OEM 003403  
**O-Ring (3/16" ID X 1/16", Viton)**



MODEL: API 4000, 3200, 3500, 4500, 5500, 6500

**CTS-21500 KIT**  
OEM 5058491  
**Electrode Turbo Kit, MS**

- Peek Fitting-Natural (CTS-21446) 1
- Spring, Turbo V Source (CTS-21189) 1
- O-Ring (3/16" ID X 1/16", Viton) (CTS-21173) 1
- 1/16" Union for TIS Probe and APCI (CTS-21137) 1
- TIS Capillary Electrode (33-1034) 5



MODEL: 3200, 3500, 4000, 4500, 5000, 5500, 6500

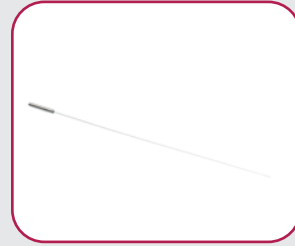
**CTS-21189**  
OEM 026626  
**Spring, Turbo V Source**



MODEL: 3200, 3500, 4000, 4500, 5500, 6500

**CTS-21286 KIT**  
OEM 5058495, (Old# 5043951)  
**PM KIT, MS**

- 1/16" Short Hex PEEK Fitting (CTS-21134) 1
- Spring, Turbo V Source (CTS-21189) 1
- O-Ring (3/16" ID X 1/16", Viton) (CTS-21173) 1
- TIS Capillary Electrode (33-1034) 2
- 1/16" Union for TIS Probe and APCI (CTS-21137) 1
- Fingertight One Piece 10-32 PEEK Male Nut/Ferrule for 1/16" OD Tubing (CTS-1818) 2
- Tubing PEEK Red, 1/16" OD X 0.005" ID X 31.5 in (CTS-21172) 1



MODEL: API-4000, API-5000, 4500, 5500, 6500

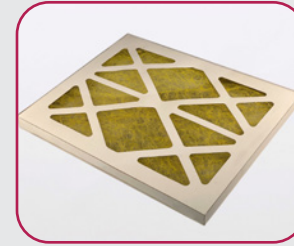
**CTS-21102**  
OEM 025388  
**APCI Capillary Electrode**



MODEL: API 2000, QTRAP

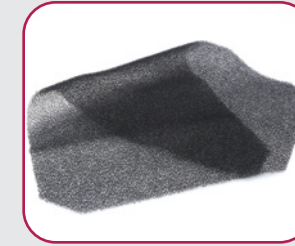
**CTS-21212**  
OEM 018782  
**TIS Capillary Electrode**

MASS SPEC



MODEL: API 3000, API 4000, API 5000

**CTS-21444**  
OEM 1003712  
**Air Intake Filter-Yellow**



MODEL: API 4600, API 5600

**CTS-21573**  
OEM 1032854  
**Air Intake Filter, 4600/5600 Systems**



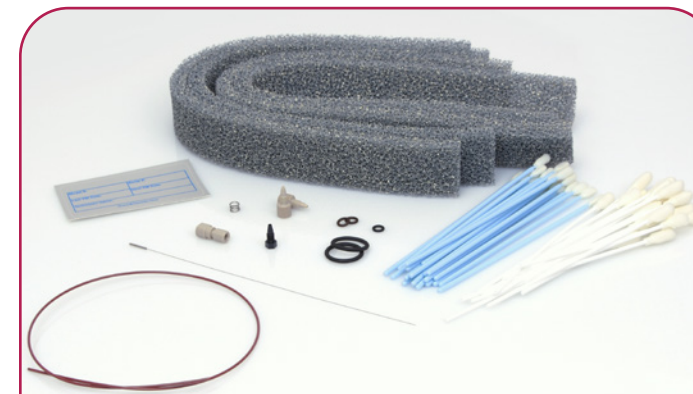
MODEL: API 3200

**CTS-21572**  
OEM 1007740  
**Air Intake Filter**



MODEL: 4500, 5500, 6500

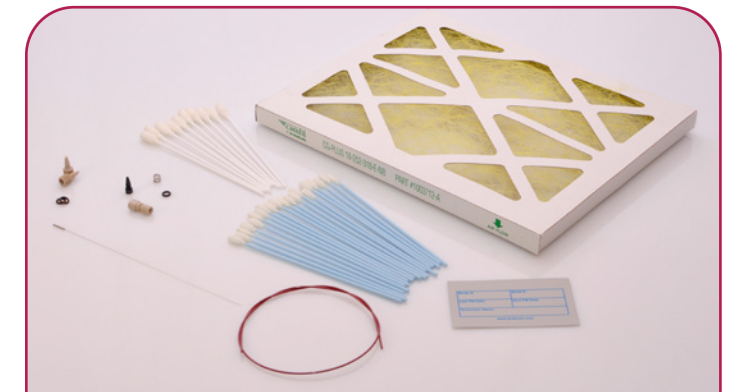
**CTS-21459**  
OEM 1027708  
**Air Intake Filter, 4/pk**



MODEL: API 4500, API 5500, API 6500

**CTS-21568 KIT**  
OEM 5054105  
**PM Kit (4500, 5500, 6500)**

- Air Intake Filter, 4/pk (CTS-21459) 1
- PEEK Tubing-Red 1/6" OD X .005" ID X 19.685 (CTS-21592) 1
- Label, Field Service-Sciencix (CTS- 21447) 1
- Fingertight One Piece 10-32 PEEK Male Nut/Ferrule for 1/16" OD Tubing (CTS-1818) 2
- 1/16" Short Hex PEEK Fitting (CTS-21134) 1
- 1/16" Union for TIS Probe and APCI (CTS-21137) 1
- O-Ring (3/16" ID X 1/16", Viton) (CTS-21173) 1
- Spring, Turbo V Source (CTS-21189) 1
- O-Ring Viton Brown .208 ID X .070" Thick (CTS-21523) 2
- O-Ring .750" ID X .093" Thickness (CTS-21569) 2
- Anti-Static Foam Swab-White Large Square Tip 6" (CTS-21595) 20
- TIS Capillary Electrode (33-1034) 1
- Anti-Static Foam Swab-Blue Small Round Tip 6.25" (CTS-21594) 20



MODEL: API 4000, API 5000, 4000 QTRAP

**CTS-21445 KIT**  
OEM 028447  
**PM Kit, 4000 QTRAP, API 4000, API 5000**

- O-Ring Viton Brown .208 ID X .070" (CTS-21523) 2
- PEEK Tubing-Red 1/6" OD X .005" ID X 19.685" (CTS-21592) 1
- Anti-Static Foam Swab-Blue Small Round Tip 6.25" (CTS-21594) 20
- Anti-Static Foam Swab-White Large Square Tip 6" (CTS-21595) 10
- Label, Field Service-Sciencix (CTS-21447) 1
- Air Intake Filter-Yellow (CTS-21444) 1
- Spring, Turbo V Source (CTS-21189) 1
- O-Ring (3/16" ID X 1/16", Viton) (CTS-21173) 1
- 1/16" Union for TIS Probe and APCI (CTS-21137) 1
- 1/16" Short Hex PEEK Fitting (CTS-21134) 1
- Fingertight One Piece 10-32 PEEK Male Nut/Ferrule for 1/16" OD Tubing (CTS-1818) 2
- TIS Capillary Electrode (33-1034) 1

PUMP PARTS



MODEL: LC-6AD, LC-7A,  
LC-10AS, LC-20AR

**CTS-10319**  
OEM 228-17019-93  
**Sapphire Plunger**



MODEL: LC-10ADvp,  
LC-20AB, LC-20AD,  
LC-20ADXR, LC-30AD,  
LC-2010

**11-3897**  
OEM 228-35602-91  
**Plunger Holder**



MODEL: LC-9A,  
LC-10AD, LC-600

**CTS-10320**  
OEM 228-18523-91  
**Sapphire Plunger**



MODEL: LC-10ATvp

**CTS-10584**  
OEM 228-35009-92  
**Ceramic Plunger  
Assembly**



MODEL: LC-10ADvp,  
LC-20AD/AB, LC-20ADXR,  
LC-30ADSF, LC-2010

**CTS-11297**  
OEM 228-35601-93,  
Old# 228-34498-91,  
228-35601-92  
**Sapphire Plunger**



MODEL: LC-20Ai, LC-20AT

**CTS-11425**  
OEM 228-35009-93  
**Sapphire Plunger**



MODEL: LC-10ADvp,  
LC-20AD/AB, LC-20ADXR,  
LC-30ADSF, LC-2010

**11-3795**  
OEM 228-35281-95  
**Sapphire Plunger  
w/Holder**



MODEL: LC-30AD

**11-4073**  
OEM 228-52069-94  
**LC-30AD Plunger Holder  
Assembly, UHP2  
(w/Diaphragm)**



MODEL: LC-10ADvp

**11-4121**  
OEM 228-35281-91  
**Ceramic Plunger Holder  
Assembly, LC-10ADvp**



MODEL: LC-10AD,  
LC-10ADvp, LC-20AD/AB,  
LC-20ADXR, LC-30ADSF,  
LC-2010, LC-2010 HT

**11-2891**  
OEM 228-32784-91,  
Old# 228-24311-01,  
228-31828-00  
**PTFE Diaphragm, 2/pk**



MODEL: LC-10ADvp,  
LC-20AD/AB, LC-20ADvp

**CTS-A138**  
OEM 228-35601-91,  
Old# 228-34498-92  
**Ceramic Plunger  
Assembly**



MODEL: i-Series, LC-30AD

**11-4122**  
OEM 228-55272-41  
**PTFE Diaphragm, LC30AD/  
i-Series, 2/pk**

PUMP PARTS



MODEL: LC-30AD  
**11-4126**  
OEM 228-52711-93,  
Old# 228-52711-92

**Plunger Seal and  
Back Up Ring**



MODEL: LC-7A,  
LC-10Ai, LC-10AS,  
LC-10AT, LC-10ATvp,  
LC-20AR

**CTS-10340**  
OEM 228-21975-00  
**Plunger Seal**



MODEL: LC-30AD

**11-4150**  
OEM 228-53301-41  
**Tubing D-R Assembly**



MODEL: LC-10ATvp, LC-20AT,  
LC-2010 A/C HT, LC-HT,  
SIL-HTa, SIL-HTc, SIL-10ADvp,  
SIL-20A/AC, SIL-20ACHT,  
SIL-20ACXR, SIL-30AC,  
SIL-30ACMP, SIL-2010 A/C HT

**CTS-10694**  
OEM 228-35145-00  
**Plunger Seal**



MODEL: LC-30AD

**11-4152**  
OEM 228-53300-41  
**Tubing D-L Assembly**



MODEL: LC-10Ai, LC-10AS,  
LC-10AT, LC-10ATvp

**CTS-10583**  
OEM 228-28499-00  
**Plunger Rinse Seal**



MODEL: LC-9A, LC-10AD,  
LC-10ADvp, LC-20AD/AB,  
LC-600, LC-2010 A/C HT

**CTS-10693**  
OEM 228-35146-00,  
Old# 228-18745-00  
**Plunger Seal**



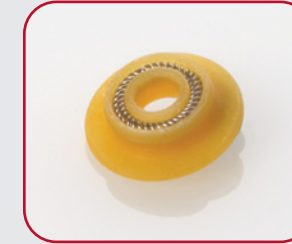
MODEL: LC-20AD, LC-20AT,  
SIL-20A/C

**CTS-21015**  
OEM 228-16000-17,  
Old# 228-16000-10,  
228-16000-84  
**Ferrule, 1/16", SS, 3/pk**



MODEL: LC-10ADvp,  
LC-20AD/AB

**CTS-10963**  
OEM 228-32628-00  
**Gold Plunger Seal**



MODEL: LC-20ADXR,  
LC-30ADSF, Nexera-i

**11-4133**  
OEM 228-32628-91  
**Gold Plunger Seal**

PUMP PARTS



MODEL: LC-9A,  
LC-10AD, LC-600  
**CTS-A102**  
OEM 228-33492-91,  
Old# 228-18522-91  
**Inlet Check Valve**



MODEL: LC-9A, LC-10AD,  
LC-10AT, LC-600  
**CTS-A103**  
OEM 228-32531-92,  
Old# 228-18522-92  
**Outlet Check Valve**



MODEL: LC-10ADvp, LC-10AT,  
LC-10ATvp, LC-20AD/  
AB, LC-20ADXR, LC-20AT,  
LC-20AR, LC-30AD  
**CTS-A11316**  
OEM 228-45707-91  
**Suction Filter,  
Stainless Improved**



MODEL: LC-10AT,  
LC-10ATvp  
**CTS-A117**  
OEM 228-32166-91  
**Inlet Check Valve**



MODEL: LC-10ADvp  
**CTS-A145**  
OEM 228-39093-92  
**Inlet Check Valve**



MODEL: LC-30AD  
**11-4060**  
OEM 228-52964-95,  
Old# 228-52964-91,  
228-52964-93  
**Inlet Check Valve**



MODEL: LC-10ADvp, LC-10AT,  
LC-10ATvp, LC-20AD/AB,  
LC-20ADXR, LC-20AR,  
LC-20AT, LC-30AD, LC-40,  
i-Series  
**CTS-21352**  
OEM 228-45708-91,  
Old # 228-39181-95, 228-12491-91,  
228-45708-93  
**Suction Filter Assembly, SS**



MODEL: LC-20AD  
**CTS-21045**  
OEM 228-45590-91  
**SUS Tubing A**



MODEL: LC-20AD  
**CTS-21044**  
OEM 228-45590-92  
**SUS Tubing B**

PUMP PARTS



MODEL: LC-10ADvp,  
LC-10ATvp  
**CTS-A121**  
OEM 228-34976-91  
**Outlet Check Valve**



MODEL: i-SERIES,  
LC-10ADvp, LC-10ATvp,  
LC-20AD/AB XR,  
LC-30ADSF  
**CTS-A1187**  
OEM 228-45705-91,  
Old# 228-45563-95  
**Outlet Check Valve**



MODEL: LC-20AT  
**CTS-21147**  
OEM 228-48249-42  
Old# 228-45704-92  
**Inlet Check Valve**



MODEL: LC-20AD/AB,  
LC-20ADXR, LC-20AT,  
LC-30ADSF, i-Series  
**CTS-21145**  
OEM 228-48249-96,  
Old# 228-48249-91,  
228-45704-91, 228-45557-91  
**Inlet Check Valve**



MODEL: LC-30AD  
**CTS-21526**  
OEM 228-54852-00  
**Jig, Diaphragm**



MODEL: LC-30AD,  
LC-30ADSF  
**11-4063**  
OEM 228-53334-96  
**Outlet Check Valve**



MODEL: LC-30AD  
**11-4129**  
OEM 228-35871-99  
**SS Line Filter**



MODEL: i-SERIES,  
LC-10ADvp,  
LC-10AT, LC-10ATvp,  
LC-20AD/AB, LC-20ADXR,  
LC-20AR, LC-20AT,  
LC-30ADSF, LC-2010  
**CTS-A11421**  
OEM 228-35871-96  
**Line Filter Assembly**



MODEL: LC-10AD,  
LC-10ADvp, LC-10ATvp,  
LC-20AD/AB, LC-20Ai,  
LC-20AT, LCMS-2020,  
LCMS-8030, LCMS-8040,  
LCMS-8045, LCMS-8050  
**CTS-11305**  
OEM 228-48607-91,  
Old# 228-32744-00  
**PEEK 5µm Filter**



MODEL: LC-2030,  
LC-2030C, LC-2030C 3D,  
Prominence-i  
**CTS-21729**  
OEM 228-59372-46  
**Performance  
Maintenance Kit **KIT****

- Suction Filter, Stainless Improved (CTS-A11316) 5
- Line Filter Assembly (CTS-A11421) 1
- Plunger Seal (CTS-10693) 2
- Needle Seal, PEEK (CTS-21527) 1

AUTOSAMPLER



MODEL: SIL-20 A/C,  
SIL-20ACHT, SIL-HT,  
SIL-HTa, SIL-HTc  
**CTS-11312**  
OEM 228-41310-92  
**PEEK Rotor, HPV**



MODEL: LC-2010,  
LC-2010 HT, SIL-20 A/C,  
SIL-20ACHT, SIL-20ACXR,  
SIL-HT, SIL-20HTa,  
SIL-20HTc  
**CTS-11313**  
OEM 228-36923-00  
**PEEK Rotor, LPV**



MODEL: SIL-20 A/C,  
SIL-20ACHT  
**CTS-11315**  
OEM 228-42325-01  
**Needle Seal,  
PEEK SIL-20**



MODEL: SIL-30AC,  
SIL-30ACMP  
**11-4048**  
OEM 228-53178-91  
**PEEK Needle Seal,  
SIL-30AC, SIL-30ACMP**



MODEL: SIL-30AC,  
SIL-30ACMP  
**11-4052**  
OEM 228-52253-00  
**Needle Seal, SIL-30AC,  
SIL-30ACMP**



MODEL: SIL-30AC  
**CTS-21089**  
OEM 228-57729-41  
**Needle Seal, (For pH  
1-14, for operation up  
to 130 MPa)**



MODEL: SIL-10A,  
SIL-10Ai, SIL-10AXL  
**CTS-10578**  
OEM 228-25237-04  
**Syringe, 500µL**



MODEL: LC-2010,  
SIL-10ADvp, SIL-10AXL  
**CTS-10686**  
OEM 228-33355-04  
**Needle Seal, Vespel**



MODEL: SIL-10ADvp,  
SIL-10AXL/vp, SIL-HT,  
SIL-HTa, SIL-HTc  
**CTS-11435**  
OEM 228-33355-01  
**Seal, Needle PEEK**



MODEL: SIL-30AC,  
SIL-30ACMP  
**11-4179**  
OEM 228-52139-00  
**HPV Rotor, SIL-30AC,  
SIL-30ACMP**



MODEL: SIL-30AC,  
SIL-30ACMP  
**11-4180**  
OEM 228-51922-00  
**LPV Rotor, SIL-30AC,  
SIL-30ACMP**



MODEL: SIL-20A/AC,  
SIL-30AC/ACMP, i-Series  
**CTS-21690**  
OEM 228-48331-92  
**Rinse Port Cap (w/hole),  
10/pk**

AUTOSAMPLER



MODEL: SIL-10ADvp  
**CTS-10942**  
OEM 228-21217-97  
**Rotor Seal**



MODEL: SIL-10A,  
SIL-10Ai, SIL-10AXL  
**CTS-A106**  
OEM 228-21217-91  
**Rotor Seal**



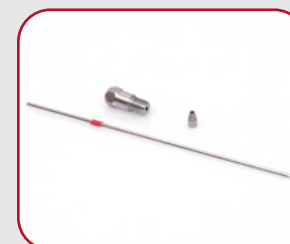
MODEL: LC-2010 A/C HT,  
LC-HT, SIL-10ADvp,  
SIL-20A/AC, SIL-30AC,  
SIL-30ACMP  
**CTS-11434**  
OEM 228-35010-91  
**Sapphire Plunger**



MODEL: LC-10ATvp, LC-20AT,  
LC-2010 A/C HT, LC-HT,  
SIL-HTa, SIL-HTc, SIL-10ADvp,  
SIL-20A/AC, SIL-20ACHT,  
SIL-20ACXR, SIL-30AC,  
SIL-30ACMP, SIL-2010 A/C HT  
**CTS-10694**  
OEM 228-35145-00  
**Plunger Seal**



MODEL: LC-2010  
**CTS-21564**  
OEM 228-41024-91  
**Needle, Uncoated 10 Series**



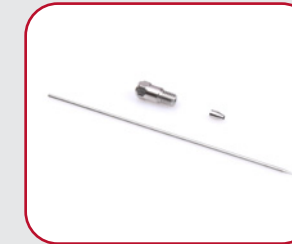
MODEL: SIL-30AC,  
SIL-30ACMP  
**CTS-21261**  
OEM 228-41024-95  
**Pt Coated Needle,  
30 Series**



MODEL: LC-2010,  
SIL-20A/AC, SIL-20ACHT  
**CTS-21262**  
OEM 228-41024-94  
**Needle, Uncoated  
20 Series**



MODEL: SIL-10A,  
SIL-10Ai, SIL-10AXL  
**CTS-A067**  
OEM 228-21220-91  
**Stator Assembly**



MODEL: SIL-20A/C,  
SIL-20A/CXR  
**CTS-21263**  
OEM 228-41024-93  
**Pt Coated Needle,  
20 Series**



MODEL: SIL-30AC,  
SIL-30ACMP  
**CTS-21264**  
OEM 228-41024-96  
**Uncoated Needle Kit**



MODEL: SIL-30AC  
**CTS-21422 KIT**  
OEM 228-52401-92  
**Needle Seal Kit**



MODEL: LC-20AD, LC-20AT,  
SIL-AC  
**CTS-21015**  
OEM 228-16000-17,  
Old# 228-16000-10,  
228-16000-84  
**Ferrule, 1/16", SS, 3/pk**



DETECTOR LAMPS



MODEL: SPD-10A,  
SPD-10AV, SPD-10AVvp,  
SPD-20AV

**CTS-00135**  
OEM 228-34016-02

**Deuterium Lamp (2000 hr)**



MODEL: SPD-M10Avp,  
SPD-M20A

**CTS-21694**  
OEM 228-34016-00

**Deuterium Lamp,  
SPD-M10Avp/M20A  
(2000hr)**

PUMP PARTS



MODEL: 8800, 8810, P1000,  
P2000, P4000

**CTS-3102**  
OEM A3102-010

**Sapphire Plunger**



MODEL: P1000, P2000,  
P4000

**CTS-10396**  
OEM A4848-010

**Washer**



MODEL: 8800, 8810, P1000,  
P2000, P4000

**CTS-2962**  
OEM A2962-010

**Plunger Seal, Gold**



MODEL: CONSTAMETRIC  
I, II, III, CM3000, CM3200,  
CM3500, CM4000, CM4100

**CTS-2061**  
OEM 206156001

**Plunger Seal, Gold**



MODEL: 8800, 8810, P1000,  
P2000, P4000

**CTS-2963**  
OEM A2963-010

**Backup Seal**



MODEL: CONSTAMETRIC  
I, II, III, CM3000, CM3200,  
CM3500, CM4000, CM4100

**CTS-20612**  
OEM 206129001

**Plunger Seal, Black**



MODEL: 8800, 8810, P1000,  
P2000, P4000

**CTS-3495**  
OEM A3495-010

**Inlet Check Valve**



MODEL: ICS-3000,  
ICS-5000

**11-2587**  
OEM 063382

**Piston Seal Wash  
Seal/Priming Valve Seal**



MODEL: P1000, P2000,  
P4000

**CTS-3990**  
OEM A3990-010

**Transducer Check  
Valve Assembly**



MODEL: ICS-3000,  
ICS-5000

**11-2588**  
OEM 064946

**Main Piston Seal**



MODEL: Ultimate 3000  
Series

**CTS-21406**  
OEM 6820.0037

**Peristaltic Pump  
Cartridge, WPS/AC**

PUMP PARTS



MODEL: ISO-3100A

**CTS-21407 KIT**  
OEM 6035.1950

**Performance Maintenance Kit, U3000 Pump**

- |                                    |   |   |   |
|------------------------------------|---|---|---|
| • Piston Seal Ring Kit (CTS-21402) | 2 | • Tubing, Pharmed, 1/16" ID X 1/8" OD (51108) | 1 |
| • Disk Filter (CTS-21298)          | 1 | • Tubing, Silicone (51109)                    | 1 |
| • Check Valve (CTS-21313)          | 1 | • Monojet 412 Syringe (CTS-21400)             | 1 |
| • Or-Ring, PTFE CTS-21305          | 2 | • Ring Filter (CTS-21299)                     | 1 |
| • O-Ring, Silicone CTS-21304       | 2 |   |   |
| • Purge cap (CTS-21294)            | 1 |   |   |



MODEL: ISO-3100SD, ISO-3100BM, HPG-3200SD, HPG-3200RS, HPG-3200BX, HPG-3400SD, HPG-3400RS, LPG-3400SD(N), LPG-3400RS, LPG-3400XRS, DGP-3600SD(N), DGP-3600RS

**CTS-21628 KIT**  
OEM 6040.9502

**Peristaltic Pump Tube Kit, 2G**

AUTOSAMPLER



MODEL: 8800  
**CTS-10517**  
OEM 3301-0100  
**Syringe, 500µL**



MODEL: AS100, AS300, AS1000, AS3000, AS3500, 8875, 8880  
**CTS-A096**  
OEM A3588-020  
**Syringe Assembly, 250µL**



MODEL: AS100, AS300, AS1000, AS3000, AS3500, 8800, 8875, 8880  
**CTS-A083**  
OEM 2508-0360  
**Rotor Seal, Vespel**



MODEL: AS100, AS300, AS1000, AS3000, AS3500, 8800, 8875, 8880  
**CTS-10612**  
OEM 7010-015  
**Isolation Seal, Rheodyne 7010**

AUTOSAMPLER



MODEL: WPS-3000  
**11-3332**  
OEM 6822.0002  
**100µL Syringe for WPS-3000 Series**



MODEL: Ultimate 3000 series, DGP-3600BM, DGP-3600RS, DGP-3600SD, HPG-3200RS, HPG-3200SD, HPG-3400RS, HPG-3400SD, ISO-3100BM, ISO-3100SD, LGP-3400BM, LPG-3400RS, LPG-3400SD, NCS-3500RS, NCP-3200RS, VF-P20

**CTS-21480**  
OEM 6041.2301  
**Valve Cartridge**



MODEL: ICS-1000, ICS-1100, ICS-1500, ICS-1600, ICS-2000, ICS-2100, ICS-3000 DC, ICS-5000 DC, ICS-6000 DC

**11-2654**  
OEM 075973  
**Rebuild Kit, VLV, 6-Port, 6K**

SURVEYOR PLUS SYSTEMS



MODEL: SURVEYOR PLUS  
**11-1596**  
OEM 00950-01-00087  
**Piston Assembly, Sapphire**



MODEL: SURVEYOR PLUS  
**11-1597**  
OEM 00950-30020  
**Piston Assembly, TZP**



MODEL: SURVEYOR PLUS  
**11-1598**  
OEM 00950-30026  
**Check Valve Assembly, Inlet**



MODEL: SURVEYOR PLUS  
**11-1599**  
OEM 00950-30021  
**Check Valve Assembly, Outlet**



MODEL: SURVEYOR PLUS  
**11-1600**  
OEM 00950-01-00085  
**Check Valve, Secondary Inlet**

DETECTOR LAMPS



MODEL: UV6000  
**CTS-A123**  
OEM 108052  
**Lamp Assembly, TSP  
UV6000 Detector (1000 hr)**



MODEL: 200, 201, 203, 204,  
205, 206, 206PH, CE100,  
CE500, CE1000, CE2000,  
SP100, SP200,  
SPECTRACHROM 200, UV100,  
UV150, UV200, UV1000,  
UV2000, UV3000  
**CTS-00246**  
OEM 9551-0023  
**Deuterium Lamp (1000 hr)**

SURVEYOR PLUS SYSTEMS



MODEL: SURVEYOR PLUS  
**11-1601**  
OEM 00107-18008  
**Seal, GFP, High Pressure,  
Piston**



MODEL: SURVEYOR PLUS  
**11-1603**  
OEM 00950-30025  
**Seal, Wash**



MODEL: SURVEYOR PLUS  
**11-1602**  
OEM 00950-30004  
**Seal, Polyethylene, High  
Pressure, Piston**



MODEL: SURVEYOR PLUS  
**11-1604**  
OEM 00950-30009  
**Line Filter Frit**

VICI/VALCO

AUTOSAMPLER



MODEL: C2V  
**CTS-21164**  
OEM C2-10R6  
**Rotor Seal, 6 Port, Rear**



MODEL: C2V  
**CTS-21085**  
OEM C2-10R6-COH  
**Rotor Seal, 6 Port, -COH**



MODEL: C2V/C3V  
**CTS-21171**  
OEM C2-20R6  
**Rotor, H-Assy, 6 Port  
2-Position**

PUMP PARTS

MODEL: 510, 515, 590, 600, 610, 1515, 1525



MODEL: 510, 515, 525, 600,  
610, 1515, 1525  
**CTS-21010**  
OEM 700001108  
**Cartridge Check Valve  
Housing, 2/pk**



MODEL: 510, 590, 600, 610,  
1515, 1525  
**CTS-5656**  
OEM WAT025656, WAT069511  
**Sapphire Plunger**



MODEL: 510, 515, 600, 610,  
1515, 1525, 2690, 2690D,  
2695, 2695D, 2795  
**CTS-10600**  
OEM 700000254 (2 of 289000144)  
**Check Valve Cartridge, 2/pk**



MODEL: 510, 515, 590, 600,  
610, 1515, 1525  
**CTS-1042**  
OEM WAT011042  
**Plunger Insertion Tool**



MODEL: 510, 515, 525,  
600, 610, 1515, 1525, 2690,  
2690D, 2695, 2695D, 2795  
**CTS-21011 KIT**  
OEM 700000253  
**Cartridge Check Valve  
System Kit**  
• Cartridge Check Valve Housing,  
2/pk (CTS-21010) 1  
• Check Valve Cartridge, 2/pk  
(CTS-10600) 1



MODEL: 510, 515, 600, 610,  
1515, 1525, 2690, 2690D,  
2695, 2695D, 2795  
**11-2401**  
OEM 700002399  
**Check Valve Cartridge,  
Ceramic Ball & Seat, 2/pk**

PUMP PARTS

MODEL: 510, 515, 590, 600, 610, 1515, 1525



MODEL: 600, 610

**CTS-10985 KIT**  
OEM WAT052675

**600/610 Performance Maintenance Kit**

- Solvent Reservoir Filter, 10µm (CTS-5531) 4
- PP Check Valve Cartridge, 2/pk (CTS-10600) 2
- Sapphire Plunger (CTS-5656) 2
- Plunger Seal (CTS-2294) 2
- Sparge Diffuser (CTS-10984) 4
- Reference Valve Rebuild Kit (CTS-5746) 1
- Inlet Manifold Kit (CTS-9600) 1



MODEL: 515

**CTS-11010 KIT**  
OEM WAT052587

**515 Performance Maintenance Kit**

- Solvent Reservoir Filter, 10µm (CTS-5531) 1
- PP Check Valve Cartridge, 2/pk (CTS-10600) 2
- Sapphire Plunger Kit (CTS-10475) 2
- Plunger Seal (CTS-2294) 2
- Sparge Diffuser (CTS-10984) 1



MODEL: 1515

**CTS-11294 KIT**  
OEM 201000113

**1515 Performance Maintenance Kit**

- Sapphire Plunger (CTS-10475-1) 2
- PP Check Valve Cartridge, 2/pk (CTS-10600) 2
- Plunger Seal (CTS-2294) 2
- Solvent Reservoir Filter, 10µm (CTS-5531) 1
- Reference Valve Rebuild Kit (CTS-5746) 1



MODEL: 1525

**CTS-11282 KIT**  
OEM 201000114

**1525 Performance Maintenance Kit**

- Sapphire Plunger (CTS-10475-1) 4
- PP Check Valve Cartridge, 2/pk (CTS-10600) 4
- Plunger Seal (CTS-2294) 4
- Solvent Reservoir Filter, 10µm (CTS-5531) 2
- Reference Valve Rebuild Kit (CTS-5746) 1

PUMP PARTS

MODEL: 510, 515, 590, 600, 610, 1515, 1525, 1525EF, 1525 MICRO



MODEL: 515, 1515, 1525

**CTS-10475**  
**Sapphire Plunger Kit**



MODEL: 515, 1515, 1525

**CTS-10475-1**  
OEM WAS207069,  
Old# WAT20769  
**Sapphire Plunger**



MODEL: 510, 515, 600, 610, 1515, 1525

**CTS-2294**  
OEM WAT022934  
**Plunger Seal**



MODEL: 510, 515, 590, 600, 610, 1515, 1525

**CTS-2294-04**  
OEM WAT022946  
**Plunger Seals**



MODEL: 510, 515, 600, 610, 1515, 1525

**CTS-6613**  
OEM WAT026613  
**Plunger Seal, Black**



MODEL: 510, 515, 600, 610, 1515, 1525

**CTS-10548**  
**Gold Plunger Seal, Analytical Heads**



MODEL: 510, 515, 590, 600

**CTS-0037**  
OEM WAT060037  
**Tube, Left Inlet Pigtail**



MODEL: 510, 515, 590, 600

**CTS-0038**  
OEM WAT060038  
**Tube, Right Inlet Pigtail**



MODEL: 510, 515, 600, 610

**CTS-0069**  
OEM WAT060069  
**Tubing, Head to Tee**



MODEL: 510, 590, 600

**CTS-5464**  
OEM WAT025464  
**Clip Ring, Plunger Retainer**



MODEL: 510, 515, 600, 610, 1515, 1525, 1525EF, 1525 MICRO

**CTS-6958**  
OEM WAT069583  
**Indicator Rod Kit**



MODEL: 510, 515, 590, 600, 626, 1515, 1515 MICRO, 1525, 1525EF

**CTS-5669**  
OEM WAT005081,  
Old# WAT025669  
**Oil Seal**

PUMP PARTS

MODEL: 510, 515, 590, 600, 610, 1515, 1525, 1525EF, 1525 MICRO



**11-2610**  
**Tubing Stainless Steel**  
**1/16" OD x 0.50mm (0.020")**  
**ID x 10ft**



**11-2611**  
**Tubing Stainless Steel**  
**1/16" OD x 1mm (0.040")**  
**ID x 10ft**



**11-2612**  
**Tubing Stainless Steel**  
**1/16" OD x 250µm (0.010")**  
**ID x 10ft**



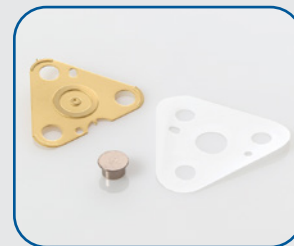
**CTS-6809**  
 OEM WAT026809  
**Mobile Phase Transfer**  
**Line, TFE, 3/16" OD x**  
**1/8" OD x 25'**



MODEL: 510, 515, 590, 600,  
 610, 1515, 1525, 1525 MICRO  
**CTS-5559**  
 OEM WAT025559  
**Priming Syringe Needle**



MODEL: 510, 515, 590,  
 600, 610  
**CTS-5740**  
 OEM WAT060476  
**Draw-Off**  
**Tube Assembly**



MODEL: 500, 515, 600,  
 1515, 1525, 1525EF,  
 1525 MICRO

**CTS-5746 KIT**  
 OEM WAT025746  
**Reference Valve**  
**Rebuild Kit**

- Button, Reference Valve 1
- Spacer, Valve Disk 1
- Diaphragm, Reference Valve 1



MODEL: 510

**CTS-0012 KIT**  
 OEM WAT060012  
**Insert Seal Parts Kit**

- Manifold Insert (CTS-0015) 1
- Insert Seal, PTFE (CTS-0016) 1
- Belleville Washer (CTS-9503) 2
- Flat Washer (CTS-9854) 1



MODEL: 510

**CTS-1106**  
 OEM WAT010106  
**Inlet Tube Assembly**  
**w/Ball & Seat**

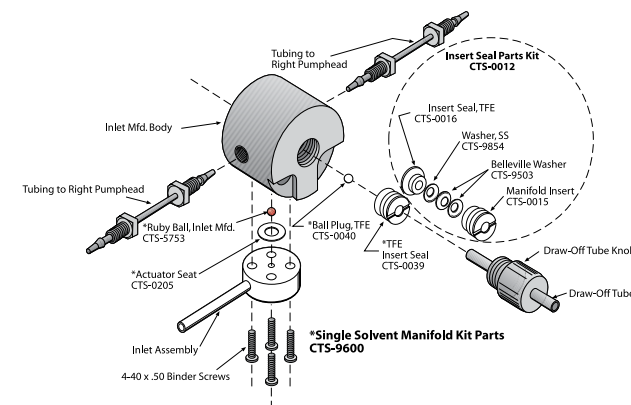


MODEL: 510, 515, 590, 600,  
 610

**CTS-9600 KIT**  
 OEM WAT060448  
**Inlet Manifold Kit**

- Insert Seal Parts Kit, (CTS-0012) 1
- Ball, Plug, TFE (CTS-0040) 1
- Inlet Tube Assembly w/Ball & Seat (CTS-1106) 1

SINGLE SOLVENT MANIFOLD



PUMP PARTS

MODEL: 616, 625, 626, 1525 MICRO



MODEL: 600, 610, 510, 515,  
 1515, 1525, 1525EF, 1525  
 MICRO, 2535, 2545, 2555,  
 2690, 2690D, 2695, 2695D,  
 2700, ACQUITY UPLC BSM

**CTS-5531**  
 OEM WAT025531  
**Solvent Reservoir**  
**Filter, 10µm**



MODEL: 510, 515, 600, 610,  
 1515, 1525, 1525 Micro,  
 1525EF, 2535, 2545, 2555,  
 2690, 2690D, 2695, 2695D,  
 2700, ACQUITY UPLC BSM

**CTS-5531-05**  
 OEM 289003536  
**Solvent Bottle Filter, 5/pk**



MODEL: 616, 625, 626,  
 1525 MICRO

**CTS-10323**  
 OEM WAT031788,  
 Old# WAT030547

**Sapphire Plunger**

**Note:** Does not include compression  
 spring, plunger spring, and indicator rod.

PUMP PARTS

MODEL: 2690, 2690D, 2695, 2695D, 2790, 2795, 2796, ALLIANCE



MODEL: 2690, 2690D, 2695, 2695D, 2790, 2795, 2796  
**CTS-10566**  
 OEM WAT270938, (2 of WAT270789)  
**Head Plunger Seal Kit, Alliance, 2/pk**



MODEL: 2690, 2690D, 2695, 2695D, 2790, 2795, 2796  
**CTS-10711**  
 OEM WAT271066  
**Head Plunger Seal Kit, Black, Alliance, 2/pk**



MODEL: 2690, 2690D, 2695, 2695D, 2790, 2795, 2796  
**CTS-10560**  
 OEM WAT271018, (2 of WAT270160)  
**Seal Wash Plunger Seal, Alliance, 2/pk**



MODEL: 2690, 2690D, 2695, 2695D, 2790, 2795, 2796  
**CTS-10989**  
 OEM WAT270939, (4 of WAT270163)  
**Face Seals, 4/pk**



MODEL: 2690, 2690D, 2695, 2695D, 2790, 2795, 2796  
**CTS-10597**  
 OEM WAT270940, (4 of WAT270668)  
**Wash Tube Seal Kit, 4/pk**



MODEL: 2690, 2690D, 2695, 2695D, 2790, 2795, 2796, 600, 717  
**CTS-10527**  
 OEM WAT035190, Old# WAT084561  
**Precolumn Filter Assembly**



MODEL: 2690, 2690D, 2695, 2695D, 2790, 2795, 2796  
**CTS-10532**  
 OEM WAT271017  
**Seal Wash Face Seal**



MODEL: 2690, 2690D, 2695, 2695D, 2790, 2795, 2796, 515, 600, 610, 626  
**CTS-10984**  
 OEM WAT007272  
**Sparge Diffuser**



MODEL: 2690, 2690D, 2695, 2695D, 2790, 2795, 2796  
**CTS-10476**  
 OEM WAT270959, WAT271067, Old# WAT270488  
**Sapphire Plunger, Alliance**



MODEL: 2690, 2690D, 2695, 2695D, 2790, 2795, 2796, 717, 600  
**CTS-10919**  
 OEM WAT088084  
**2µm Precolumn Filter Insert**



MODEL: 2690, 2690D, 2695, 2695D, 2790, 2795, 2796, 717, 717 PLUS  
**CTS-10919-5**  
 OEM WAT005139  
**2µm Precolumn Filter Insert, 5/pk**



MODEL: 2690, 2609D, 2695, 2695D  
**CTS-10770**  
 OEM 700001229  
**Waste Valve, V3 (2-Way Solenoid Valve)**

PUMP PARTS

MODEL: 2690, 2690D, 2695, 2695D, 2790, 2795, 2796, ALLIANCE



MODEL: 2690, 2690D, 2695, 2695D, 2795, 510, 515, 600, 610, 1515, 1525  
**CTS-10600**  
 OEM 700000254 (2 of 289000144)  
**Check Valve Cartridge, 2/pk**



MODEL: 510, 515, 525, 600, 610, 1515, 1525, 2690, 2690D, 2695, 2695D, 2795  
**CTS-21011 KIT**  
 OEM 700000253  
**Cartridge Check Valve System Kit**  
 • Cartridge Check Valve Housing, 2/pk (CTS-21010) 1  
 • Check Valve Cartridge, 2/pk (CTS-10600) 1



MODEL: 2690, 2690D, 2695, 2695D, 2795, 510, 515, 600, 610, 1515, 1525  
**11-2401**  
 OEM 700002399  
**Check Valve Cartridge, Ceramic Ball & Seat, 2/pk**



MODEL: 2690, 2690D, 2695, 2695D, 2790, 2795, 2796  
**CTS-A094**  
 OEM WAT270941  
**Check Valve Cartridge, 2/pk**



MODEL: 2690, 2690D, 2695, 2695D, 2790, 2795, 2796  
**CTS-A11431-02**  
 OEM 700002332  
**Cartridge Check Valve Housing, 2/pk**



MODEL: 2690, 2690D, 2695, 2695D, 2700, 2535, 2545, 2555, 510, 515, 600, 610, 1515, 1525, 1525EF, 1525 MICRO, ACQUITY UPLC BSM,  
**CTS-5531**  
 OEM WAT025531  
**Solvent Reservoir Filter, 10µm**



MODEL: 2795, 2695D, 2695, 2690, 1525, 1515, 610, 600, 525, 515, 510  
**CTS-21463**  
 OEM 700002761  
**Check Valve Cartridge, Ceramic, 2/pk**



MODEL: 2690, 2690D, 2695, 2695D, 2790, 2795  
**CTS-11080 KIT**  
 OEM 700004073  
**Alliance Solvent Manager Performance Maintenance Kit**

- Sapphire Plunger (CTS-10476) 2
- Seal Wash Plunger Seal Kit, 2/pk (CTS-10560) 1
- Head Plunger Seal Kit, 2/pk (CTS-10566) 1
- Wash Tube Seal Kit, 4/pk (CTS-10597) 1
- 2µm Precolumn Filter Insert (CTS-10919) 1
- Face Seal, 4/pk (CTS-10989) 1
- PP Check Valve Cartridge, 2/pk (CTS-10600) 1
- Seal Wash Face Seal (CTS-10532) 2

PUMP PARTS

MODEL: 2690, 2690D, 2695, 2695D, 2790, 2795, 2796, ALLIANCE



MODEL: 2690, 2690D, 2695, 2695D, 2790, 2795, 717  
**CTS-5313**  
 OEM WAT025313  
**Compression Screw, 1/16", SS**



**11-2610**  
**Tubing Stainless Steel 1/16" OD x 0.50mm (0.020") ID x 10ft**



MODEL: 2690, 2690D, 2695, 2695D, 2790, 2795, 717  
**CTS-12016**  
 OEM WAT005070  
**Compression Screw, 1/16" SS, 10/pk**



**11-2611**  
**Tubing Stainless Steel 1/16" OD x 1mm (0.040") ID x 10ft**



MODEL: 2690, 2690D, 2695, 2695D  
**CTS-2330**  
 OEM WAT022330  
**Ferrule, SS**



**11-2612**  
**Tubing Stainless Steel 1/16" OD x 250µm (0.010") x 10ft**



MODEL: 2690, 2690D, 2695, 2695D  
**11-1239**  
 OEM WAT005063  
**Ferrule, 1/16", SS, 10/pk**



**CTS-6809**  
 OEM WAT026809  
**Mobile Phase Transfer Line, TFE, 3/16" OD x 1/8" OD x 25'**



MODEL: 2690, 2690D, 2695, 2695D, 2790, 2795, 717  
**CTS-21012 KIT**  
 OEM WAT025604  
**Compression Screws & Ferrules, 5/pk**  
 • Ferrule, SS (CTS-2330) 5  
 • Compression Screw, 1/16", SS (CTS-5313) 5



MODEL: 2690, 2690D, 2695, 2695D, 432, nanoACQUITY HDX MGR  
**CTS-9733**  
 OEM WAT097332  
**SS Union, Zero Dead Volume**

PUMP PARTS & AUTOSAMPLER

MODEL: 2690, 2690D, 2695, 2695D, 2790, 2795, 2796, ALLIANCE



MODEL: 2690, 2690D, 2695, 2695D

**CTS-10988 KIT**  
 OEM WAT270944

**2690/2695 Performance Maintenance Kit**

- Sapphire Plunger (CTS-10476) 2
- Seal Wash Plunger Seal Kit, 2/pk (CTS-10560) 1
- Head Plunger Seal Kit, 2/pk (CTS-10566) 1
- Wash Tube Seal Kit, 4/pk (CTS-10597) 1
- Sparge Diffuser (CTS-10984) 1
- Face Seal, 4/pk (CTS-10989) 1
- Solvent Reservoir Filter, 10µm (CTS-5531) 4
- 250µL Syringe (CTS-3109) 1
- 2µm Precolumn Filter Insert (CTS-10919) 1
- Seal Wash Face Seal (CTS-10532) 2
- PP Check Valve Cartridge, 2/pk (CTS-10600) 1
- Seal Pack Rebuild Kit: (CTS-10839) 1
  - Wash Tube Seal (CTS-10598) 1
  - Tube, Seal Wash (CTS-10739) 1
  - PTFE Washer (CTS-10741-01) 1
  - Filter Retainer (CTS-10785) 1
  - Lower Wash Seal Frit (CTS-10788) 1
  - Needle Wash Frit (CTS-2324) 1
  - TFE Washer (CTS-7321) 1
  - Needle Assembly (CTS-7550) 1
  - Gold Injector Seal (CTS-A047) 2
  - Ferrule, SS (CTS-2330) 1
  - Compression Screw, 1/16", SS (CTS-5313) 1



MODEL: 2690, 2690D, 2695, 2695D

**CTS-11380 KIT**

**2690/2695 Performance Maintenance Kit w/Seal Pack**

- Sapphire Plunger (CTS-10476) 2
- Seal Wash Plunger Seal Kit, 2/pk (CTS-10560) 1
- Head Plunger Seal Kit, 2/pk (CTS-10566) 1
- Wash Tube Seal Kit, 4/pk (CTS-10597) 1
- 2µm Precolumn Filter Insert (CTS-10919) 1
- Sparge Diffuser (CTS-10984) 1
- Face Seal, 4/pk (CTS-10989) 1
- Seal Pack Assembly Kit (CTS-11222) 1
- 250µL Syringe (CTS-3109) 1
- Solvent Reservoir Filter, 10µm (CTS-5531) 4
- PP Check Valve Cartridge, 2/pk (CTS-10600) 1

AUTOSAMPLER

**MODEL:** 717, 717 PLUS, 2690, 2690D, 2695, 2695D, 2790, 2795, 2796, ALLIANCE



MODEL: 717, 717 PLUS, 2690, 2690D, 2695, 2695D, 2790, 2795  
**CTS-3109**  
 OEM WAT073109  
**250µL Syringe**



MODEL: 717, 717 PLUS, 2690, 2690D, 2695, 2695D, 2790, 2795  
**CTS-3195**  
 OEM WAT073195  
**250µL Syringe Tip**



MODEL: 717, 2690, 2690D, 2695, 2695D  
**CTS-2324**  
 OEM WAT072324  
**Needle Wash Frit**



MODEL: 717, 717 PLUS, 2690, 2690D, 2695, 2695D, 2790, 2795  
**CTS-3209**  
 OEM WAT077347  
**Syringe Seal, 250µL/2500µL**



MODEL: 2690, 2695, 2690D and 2695D  
**CTS-A047**  
 OEM 700002760, WAT033276  
**Gold Injector Seal, 2/pk**



MODEL: 717, 2690, 2690D  
**CTS-10285**  
 OEM WAT045407, WAT078800  
**TFE 3-Way Valve 4 (V4)**

AUTOSAMPLER

**MODEL:** 717, 717 PLUS, 2690, 2690D, 2695, 2695D, 2790, 2795, 2796, ALLIANCE



MODEL: 2690, 2690D, 2695, 2695D, 2795  
**CTS-10788-5**  
 OEM 70001318, (5 of 415000230)  
**Needle Wash Frit, 5/pk**

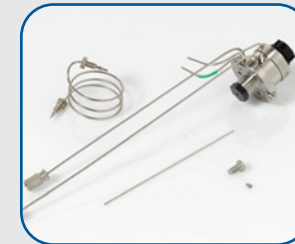


MODEL: 717, 717 PLUS, 2690, 2690D, 2695, 2695D  
**CTS-7550**  
 OEM 700001247, Old# WAT075507, WAT077233  
**Performance Autosampler Needle**



MODEL: 717, 717 PLUS, 2690, 2690D, 2695, 2695D  
**CTS-10761 KIT**  
 OEM WAT045424  
**HPMV 1 & 2 Rebuild Kit w/Spool**

- O-Ring, TFE (CTS-1010T) 1
- HPMV Gold Seals, 2/pk (CTS-10692) 1
- Spool Assembly (CTS-A155) 1
- Bullet, Seal Insertion (CTS-11281) 1



MODEL: 2690, 2690D, 2695, 2695D  
**CTS-11222 KIT**  
 OEM 700002791  
**Seal Pack Assembly Kit**



MODEL: 717, 2690, 2690D, 2695, 2695D  
**CTS-10692**  
 OEM WAT045454  
**HPMV Gold Seals, 2/pk**



MODEL: 717, 2690, 2690D, 2695, 2695D  
**CTS-1010T**  
 OEM WAT097387  
**O-Ring, TFE**



MODEL: 2690, 2690D, 2695, 2695D  
**CTS-10839 KIT**  
 OEM WAT271019  
**Seal Pack Rebuild Kit**

- Wash Tube Seal (CTS-10598) 1
- Tube, Seal Wash (CTS-10739) 1
- PTFE Washer (CTS-10741-01) 1
- Filter Retainer (CTS-10785) 1
- Lower Wash Seal Frit (CTS-10788) 1
- Needle Wash Frit (CTS-2324) 1
- TFE Washer (CTS-7321) 1
- Needle Assembly (CTS-7550) 1
- Gold Injector Seal (CTS-A047) 2
- Ferrule, SS (CTS-2330) 1
- Compression Screw, 1/16" SS (CTS-5313) 1



AUTOSAMPLER

**MODEL:** 717, 717 PLUS, 2690, 2690D, 2695, 2695D, 2790, 2795, 2796, ALLIANCE



MODEL: 717, 717 PLUS

**CTS-10987 KIT**  
OEM WAT052669

**717 Performance Maintenance Kit**

- Seal Pack Kit (CTS-10324S) 1
- 250µL Syringe (CTS-3109) 1
- Filter, Foam 45 Ppi, 2.3x11.5" (CTS-11063-02) 1
- Filter, Foam 45 Ppi, 2x7" (CTS-11063-03) 2



MODEL: 717

**CTS-10324S**

OEM WAT045559

**Seal Pack w/Needle**



MODEL: 717, 600, 2690, 2690D, 2695, 2695D, 2790, 2795, 2796

**CTS-10919**

OEM WAT088084

**2µm Precolumn Filter Insert**



MODEL: 717, 717 PLUS, 2690, 2690D, 2695, 2695D, 2790, 2795, 2796

**CTS-10919-5**

OEM WAT005139

**2µm Precolumn Filter Insert, 5/pk**



MODEL: 717, 600, 2690, 2690D, 2695, 2695D, 2790, 2795, 2796

**CTS-10527**

OEM WAT035190,

Old# WAT084561

**Precolumn Filter Assembly**

PUMP PARTS

**MODEL:** ACQUITY, nanoACQUITY, H-CLASS, I-CLASS, M-CLASS

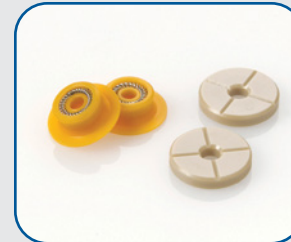


MODEL: ACQUITY H-CLASS QSM, ACQUITY UPLC I2V BSM, ACQUITY UPLC BSM, nanoACQUITY UPLC BSM/ASM

**CTS-11121-02**

OEM 700002598

**Wash Seal, 2/pk**



MODEL: ACQUITY H-CLASS QSM, ACQUITY UPLC I2V BSM, ACQUITY UPLC BSM, nanoACQUITY UPLC BSM/ASM

**CTS-11119-02**

OEM 700002599

**Head Plunger Seal, 2/pk**



MODEL: ACQUITY H-CLASS BIO QSM, ACQUITY H-CLASS QSM, ACQUITY I-CLASS BSM, ACQUITY ISOCRATIC SOLVENT MGR, ACQUITY M-CLASS µASM, ACQUITY M-CLASS µBSM, ACQUITY UPLC I2V BSM, ACQUITY UPLC BSM, nanoACQUITY UPLC BSM/ASM

**CTS-11093-02**

OEM 700002600

**Plunger, 2/pk**



MODEL: ACQUITY M-CLASS µASM, ACQUITY M-CLASS µBSM

**CTS-21095**

OEM 700009839

**Seal Wash (0.0787 ID, Fixed, Bio) 2/pk**



MODEL: ACQUITY UPLC BSM

**CTS-11091 KIT**

OEM 201000173

**ACQUITY BSM Performance Maintenance Kit**

- O-Ring, PTFE (CTS-11092) 4
- Plunger, 2/pk (CTS-11093-02) 2
- UPLC Primary Check Valves, 2/pk (CTS-A11094-02) 1
- UPLC Check Valve, Double Ball & Seat, 2/pk (CTS-A11095-02) 1
- Filter, Air, Pump Handle (CTS-11115) 1
- Filter, Air, ACQUITY Pump (CTS-11116) 1
- Head Plunger Seal, 2/pk (CTS-11119-02) 2
- Wash Seal, 2/pk (CTS-11121-02) 2
- SS Primary Inlet CV Filter (CTS-A11123) 2
- Tube Assy, SSV to In-line Filter (CTS-A11129) 2
- Tube Assembly, Transducer to Check Valve (CTS-A11133) 2
- 50µL Std. Zirconia Mixer (CTS-A11135) 1
- Solvent Bottle Filter, 7/pk (CTS-5531-07) 1



MODEL: ACQUITY UPLC BSM, ACQUITY UPLC I2V BSM

**CTS-11371 KIT**

OEM 201000197

**ACQUITY I2V BSM Performance Maintenance Kit**

- O-Ring, PTFE (CTS-11092) 4
- Plunger, 2/pk (CTS-11093-02) 2
- UPLC Check Valves, Double Ball & Seat, 2/pk (CTS-A11095-02) 1
- Filter, Air, Pump Handle (CTS-11115) 1
- Filter, Air, ACQUITY Pump (CTS-11116) 1
- Head Plunger Seal, 2/pk (CTS-11119-02) 2
- Wash Seal, 2/pk (CTS-11121-02) 2
- SS Filter Frit Replacement Cartridge, 2/pk (CTS-11415) 1
- 50µL Std. Zirconia Mixer (CTS-A11135) 1
- Cartridge, Intelligent Valve, 2/pk (CTS-A11336-02) 1
- Tube Assy, Transducer to Check Vlv, I2V (CTS-A11372) 2
- Tube Assy, SSV to I2V (CTS-A11374) 2
- Solvent Bottle Filter, 7/pk (CTS-5531-07) 1

PUMP PARTS

MODEL: ACQUITY, nanoACQUITY, H-CLASS, I-CLASS, M-CLASS



MODEL: ACQUITY I-CLASS BSM, ACQUITY UPLC BSM  
**CTS-11415**  
 OEM 700002913  
**SS Filter Frit Replacement Cartridge, 2/pk**



MODEL: ACQUITY H-CLASS QSM  
**CTS-A11344**  
 OEM 700005173  
**Filter, GPV, 4/pk**



MODEL: ACQUITY H-CLASS Bio QSM, ACQUITY M-CLASS μASM, ACQUITY M-CLASS μBSM  
**CTS-21192**  
 OEM 700005414  
**Cartridge, BioACQUITY, 12V**



MODEL: ACQUITY I-CLASS BSM, ACQUITY I-CLASS SM-FTN, ACQUITY UPLC I2V BSM, ACQUITY UPLC BSM  
**CTS-5531-07**  
 OEM 700003616  
**Solvent Bottle Filter, 7/pk**



MODEL: ACQUITY H-CLASS QSM, ACQUITY I-CLASS BSM, ACQUITY ISOCRATIC SOLVENT MGR, ACQUITY M-CLASS μASM, ACQUITY M-CLASS μBSM, ACQUITY UPLC I2V BSM, ACQUITY UPLC BSM, nanoACQUITY UPLC BSM/ASM  
**CTS-11092**  
 OEM WAT076152  
**O-Ring, PTFE**



MODEL: ACQUITY H-CLASS QSM

**CTS-11335 KIT**  
 OEM 201000233

**ACQUITY H-Class QSM Performance Maintenance Kit**

- O-Ring, PTFE (CTS-11092) 2
- Plunger, 2/pk (CTS-11093-02) 1
- Check Valve, Double Ball & Seat (CTS-A11095) 1
- Head Plunger Seal, 2/pk (CTS-11119-02) 1
- Wash Seal, 2/pk (CTS-11121-02) 1
- Cartridge, Intelligent Valve (CTS-A11336) 1
- Tube Assembly, Transducer to Check Valve (CTS-A11342) 1
- Filter, GPV, 4/pk (CTS-A11344) 1
- Filter, Air, Door (CTS-11370) 1
- Mixer Assembly, 100μL (CTS-A11376) 1
- Solvent Reservoir Filter, 10μm (CTS-5531) 5



MODEL: ACQUITY ISM

**CTS-21692 KIT**  
 OEM 201000286

**ACQUITY H-Class QSM Performance Maintenance Kit**

- SS Filter Frit Replacement Cartridge, 2/pk (CTS-11415) 1
- ACQUITY H-Class Filter Assy, 22 μL (CTS-21196) 1
- UPLC Check Valve Assy, Spring Loaded (CTS-21100) 1
- Plunger, 2/pk (CTS-11093-02) 1
- O-Ring, PTFE (CTS-11092) 1
- Seal Wash (0.0787 ID, Fixed) 2/pk (11-4181) 1
- Head Plunger Seal, 2/pk (CTS-11119-02) 1
- Tubing, Teflon (CTS-21138) 1
- Check Valve, Double Ball & Seat (CTS-A11095) 1
- Solvent Filter, 10μm (CTS-21256) 2
- Filter, Air, Doo (CTS-11370) 1

PUMP PARTS

MODEL: ACQUITY, nanoACQUITY, H-CLASS, I-CLASS, M-CLASS



MODEL: ACQUITY I-CLASS BSM, ACQUITY ISM  
**11-4181**  
 OEM 700006048  
**Seal Wash (0.0787 ID, Fixed) 2/pk**



MODEL: ACQUITY H-CLASS, ACQUITY APC pISM  
**CTS-21196**  
 OEM 205000731  
**ACQUITY H-Class Filter Assy, 22μL**



MODEL: ACQUITY I-CLASS BSM, ACQUITY UPLC BSM, nanoACQUITY UPLC BSM/ASM  
**CTS-A11094-02**  
 OEM 700002596  
**UPLC Primary Check Valve Assy, 2/pk**



MODEL: ACQUITY H-CLASS QSM  
**CTS-A11095**  
 OEM 700005164  
**Check Valve, Double Ball & Seat**



MODEL: ACQUITY H-CLASS QSM  
**CTS-A11336**  
 OEM 700005165  
**Cartridge, Intelligent Valve**



MODEL: ACQUITY UPLC HIGH TEMPERATURE COLUMN HEATER, ACQUITY UPLC COLUMN HEATER MODULE, ACQUITY UPLC COLUMN HEATER/COOLER, ACQUITY UPLC COLUMN MGR

**11-2414**  
 OEM 700003114  
**PEEK Ferrule, 1/16", 10/pk**



MODEL: ACQUITY ISM  
**CTS-21100**  
 OEM 289001771  
**UPLC Check Valve Assy**



MODEL: ACQUITY H-CLASS BIO QSM, ACQUITY M-CLASS μBSM, ACQUITY M-CLASS ASM.  
**CTS-21129**  
 OEM 700005415  
**Check Valve, TI**



MODEL: ACQUITY UPLC I2V BSM, ACQUITY UPLC BSM  
**CTS-A11135**  
 OEM 700002911  
**50μL Std. Zirconia Mixer**



MODEL: ACQUITY H-CLASS QSM  
**CTS-A11376**  
 OEM 700005119  
**Mixer Assembly, 100μL**

PUMP PARTS

MODEL: ACQUITY, nanoACQUITY, H-CLASS, I-CLASS, M-CLASS



MODEL: ACQUITY H-CLASS BIO QSM, ACQUITY I-CLASS BSM, ACQUITY UPLC I2V BSM, ACQUITY UPLC BSM, nanoACQUITY UPLC BSM/ASM

**CTS-A11095-02**  
OEM 700002968

**UPLC Check Valve, Double Ball & Seat**



MODEL: ACQUITY I-CLASS BSM, ACQUITY UPLC I2V BSM

**CTS-A11336-02**  
OEM 700003563

**Cartridge, Intelligent Valve, 2/pk**



MODEL: ACQUITY I-CLASS BSM, ACQUITY ISOCRATIC SOLVENT MGR, ACQUITY M-CLASS μASM, ACQUITY M-CLASS μBSM, ACQUITY UPLC I2V BSM, ACQUITY UPLC BSM, nanoACQUITY UPLC BSM/ASM

**CTS-A11123**  
OEM 289003547

**SS Primary Inlet Check Valve Filter**



MODEL: ACQUITY H-CLASS QSM, ACQUITY ISOCRATIC SOLVENT MGR, ACQUITY M-CLASS μASM, ACQUITY M-CLASS μBSM

**CTS-A11342**  
OEM 430002357

**Tube Assembly, Transducer to Check Valve**



MODEL: ACQUITY I-CLASS BSM, ACQUITY UPLC BSM, ACQUITY UPLC I2V BSM

**CTS-A11374**  
OEM 430001443

**Tube Assy, SSV to I2V**



MODEL: ACQUITY ISM

**CTS-21256**  
OEM 289009874

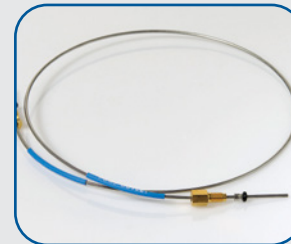
**Solvent Filter, 10μm**



MODEL: ACQUITY I-CLASS BSM, ACQUITY ISOCRATIC SOLVENT MGR, ACQUITY M-CLASS μASM, ACQUITY M-CLASS μBSM, ACQUITY UPLC I2V BSM, ACQUITY UPLC BSM, nanoACQUITY UPLC BSM/ASM

**CTS-A11123-02**  
OEM 700002912

**SS Primary Inlet Check Valve Filter Kit, 2/pk**



MODEL: ACQUITY UPLC BSM, OPEN ARCHITECTURE UPLC, UPLC W/ONLINE SPE TECHNOLOGY

**CTS-A11145**  
OEM 430001486

**Tube Assy, System Outlet, SDS**



MODEL: ACQUITY I-CLASS BSM, ACQUITY UPLC BSM, ACQUITY UPLC I2V BSM

**CTS-A11372**  
OEM 430001773

**Tube Assy, Transducer to Check Valve, I2V**



MODEL: nanoACQUITY UPLC BSM/ASM, nanoACQUITY UPLC w/2D TECHNOLOGY

**CTS-A11129**  
OEM 430001470

**Tube Assy, SSV to In-line Filter**

PUMP PARTS

MODEL: ACQUITY, nanoACQUITY, H-CLASS, I-CLASS, M-CLASS



MODEL: ACQUITY UPLC BSM, nanoACQUITY UPLC BSM/ASM

**CTS-A11133**  
OEM 430001121

**Tube Assembly, Transducer to Check Valve**



MODEL: I-CLASS BSM

**CTS-21075**  
OEM 430002901

**Assy, Tubing, BSM Outlet to SM**



MODEL: ACQUITY H-CLASS BIO QSM, ACQUITY H-CLASS QSM

**CTS-11370**  
OEM 700005167

**Filter, Air, Door**



MODEL: ACQUITY I-CLASS BSM, ACQUITY UPLC I2V BSM, ACQUITY UPLC BSM

**CTS-11115**  
OEM 700002633

**Filter, Air, Pump Handle**



MODEL: ACQUITY I-CLASS BSM, ACQUITY UPC<sup>2</sup> BSM, ACQUITY UPLC I2V BSM, ACQUITY UPLC BSM

**CTS-11116**  
OEM 700002632

**Filter, Air, ACQUITY Pump**

AUTOSAMPLER

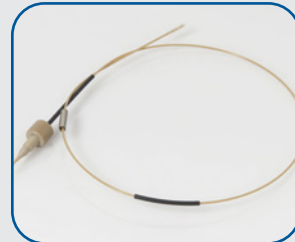
MODEL: ACQUITY, nanoACQUITY, H-CLASS, I-CLASS



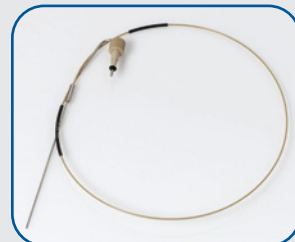
MODEL: ACQUITY UPLC SAMPLE MGR, nanoACQUITY UPLC SAMPLE MGR, ACQUITY UPLC I-CLASS  
**CTS-21471**  
 OEM 430001325  
**Sample Loop, 50µL**



MODEL: ACQUITY I-CLASS SM-FTN  
**CTS-21240 KIT**  
 OEM 289006464, 201000259  
**Performance Maintenance Kit \*Injector Valve Cartridge (289006464) not included \*Rotor Seal & Pod Repair Kit Included**



MODEL: ACQUITY UPLC SAMPLE MGR  
**CTS-A11151**  
 OEM 700002644  
**Needle Assembly, PEEK**



MODEL: ACQUITY UPLC SAMPLE MGR, nanoACQUITY UPLC SAMPLE MGR  
**CTS-A11381**  
 OEM 205000362  
**Needle, SS, 30µL**



MODEL: ACQUITY UPLC SAMPLE MGR, nanoACQUITY UPLC SAMPLE MGR  
**CTS-11149**  
 OEM 700002572  
**Needle Seal O-Ring, 002 Kalrez**



MODEL: ACQUITY UPLC SAMPLE MGR  
**CTS-12015 KIT**  
 OEM ACQUITY Everflow Injector Pod/Cartridge (289006464)  
**Rotor Seal & Pod Repair Kit, Vespel, 3-Groove, 3 pin for ACQUITY Everflow Injector Pod/Cartridge**



MODEL: ACQUITY UPLC SAMPLE MGR, nanoACQUITY UPLC SAMPLE MGR, OPEN ARCHITECTURE UPLC  
**CTS-A11147**  
 OEM 430001326  
**Sample Loop, 10µL**



MODEL: ACQUITY UPLC SAMPLE MGR  
**CTS-11141 KIT**  
 OEM 201000174

**ACQUITY SM Performance Maintenance Kit \*Injector Valve Cartridge (700005236) not included \*Rotor Seal & Pod Repair Kit included**

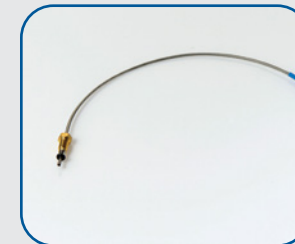
- 2.5mL Wash Syringe (11-3595) 2
- Rotor Seal & Pod Repair Kit, Vespel 3-Groove for ACQUITY Everflow Injector Pod/Cartridge (700002765)(11-4134) 1
- Needle Seal O-Ring, 002 Kalrez (CTS-11149) 1
- Filter, Air Chassis (CTS-11150) 1
- Tube Assy, Inject Outlet (CTS-A11142) 1
- Tube Assy, System Outlet, SDS (CTS-A11145) 1
- Sample Loop, 10µL (CTS-A11147) 1
- Needle Assembly, PEEK (CTS-A11151) 1
- 100µL Sample Metering Syringe, HP (CTS-A11167) 1

AUTOSAMPLER

MODEL: ACQUITY, nanoACQUITY, H-CLASS, I-CLASS



MODEL: ACQUITY UPLC SAMPLE MGR, nanoACQUITY UPLC SAMPLE MGR  
**11-3595**  
 OEM 700002569  
**2.5mL Wash Syringe**



MODEL: ACQUITY UPLC SAMPLE MGR  
**CTS-A11142**  
 OEM 430001084  
**Tube Assy, Inject Outlet**



MODEL: ACQUITY UPLC SAMPLE MGR, ACQUITY H-CLASS BIO SM-FTN, ACQUITY H-CLASS SM-FTN, ACQUITY I-CLASS SM-FTN  
**CTS-21469**  
 OEM 410001347  
**250µL Syringe, High Pressure**

AUTOSAMPLER

MODEL: ACQUITY, nanoACQUITY, H-CLASS, I-CLASS, M-CLASS



MODEL: ACQUITY H-CLASS BIO QSM, ACQUITY H-CLASS SM-FTN, ACQUITY I-CLASS SM-FTN

**11-2570**  
OEM 405011492  
**Needle Seat**



MODEL: ACQUITY H-CLASS SM-FTN, ACQUITY I-CLASS SM-FTN

**11-2591**  
OEM 405008854  
**Needle Guide**



MODEL: ACQUITY UPLC SAMPLE MGR

**11-4134 KIT**  
OEM ACQUITY Everflow Injector Pod/Cartridge (700002765)  
**Rotor Seal & Pod Repair Kit, Vespel, 3-Groove for ACQUITY Everflow Injector Pod/Cartridge (700002765)**



MODEL: ACQUITY H-CLASS BIO SM-FTN, ACQUITY H-CLASS SM-FTN, ACQUITY I-CLASS SM-FL, ACQUITY I-CLASS SM-FTN, ACQUITY M-CLASS µSM, ACQUITY UPC<sup>2</sup> SM-FL, ACQUITY UPLC SAMPLE MGR, nanoACQUITY UPLC SAMPLE MGR

**CTS-A11167**  
OEM 700002570  
**100µL Sample Metering Syringe, HP**



MODEL: ACQUITY I-CLASS SM-FTN

**CTS-21287 KIT**  
OEM 700008977  
**Needle Kit, 15µL with Needle Seat and Needle Guide 18KPSI**



MODEL: ACQUITY H-CLASS

**11-3602**  
OEM 430002452  
**Tubing, Pump Outlet, GP**



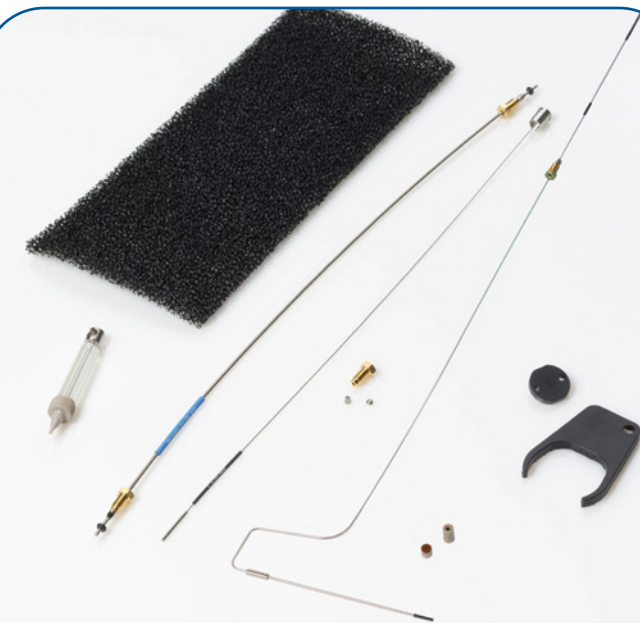
MODEL: ACQUITY H-CLASS SM-FTN

**11-2569 KIT**  
OEM 700005234  
**Seal Extension Tube**



MODEL: ACQUITY H-CLASS SM-FTN

**11-4116 KIT**  
OEM 700005215  
**Sample Needle Kit, 15µL**



MODEL: ACQUITY H-CLASS SM-FTN

**11-3601 KIT**  
OEM 201000234  
**ACQUITY H-Class SM-FTN Performance Maintenance Kit**  
**\*Injector Valve Cartridge (700005236) not included**  
**\*Rotor Seal & Pod Repair Kit included**

- Seal Extension Tube (11-2569) 1
- Tubing, Pump Outlet, GP (11-3602) 1
- Filter, Air, Side Panel (11-3606) 1
- Sample Needle Kit, 15µL (11-4116) 1
- Rotor Seal & Pod Repair Kit, Vespel, 3-Groove for ACQUITY Everflow Injector Pod/Cartridge (700002765) (11-4134) 1
- 100µL Sample Metering Syringe, HP (CTS-A11167) 1

PUMP PARTS & AUTOSAMPLER

MODEL: ACQUITY, nanoACQUITY, H-CLASS, I-CLASS



MODEL: ACQUITY H-CLASS BIO QSM, ACQUITY H-CLASS BIO SM-FTN, ACQUITY I-CLASS BSM, ACQUITY UPLC BSM, OPEN ARCHITECTURE UPLC, nanoACQUITY UPLC SAMPLE MGR

**11-2525**  
OEM 700002634  
**1/4" Short Comp. Screw (Gold-Plated), 10/pk**



MODEL: ACQUITY CM-30S, ACQUITY H-CLASS BIO QSM, ACQUITY H-CLASS BIO SM-FTN, ACQUITY H-CLASS QSM, ACQUITY I-CLASS BSM, ACQUITY UPLC BSM, OPEN ARCHITECTURE UPLC, nanoACQUITY HDX MGR, nanoACQUITY UPLC BSM/ASM

**11-2526**  
OEM 700002635  
**Ferrule Set, 1/16" ID, Two-Piece, 10/pk**



MODEL: ACQUITY H-Class BIO QSM, ACQUITY H-Class Bio SM-FTN, ACQUITY I-Class BSM, ACQUITY UPLC BSM, Open Architecture UPLC, nanoACQUITY UPLC SM

**CTS-21243**  
OEM 410001349  
**1/16" Ferrule Set, 2/pk,**



MODEL: ACQUITY H-CLASS BIO QSM, ACQUITY I-CLASS BSM, ACQUITY UPLC BSM, OPEN ARCHITECTURE UPLC, nanoACQUITY HDX MGR, nanoACQUITY UPLC BSM/ASM

**11-2529**  
OEM 700002645  
**Screw, Comp., 10-32, 304SS, (Gold-Plated), 10/pk**



MODEL: ACQUITY UPLC SAMPLE MGR, nanoACQUITY UPLC SAMPLE MGR

**CTS-11150**  
OEM 401000501  
**Filter, Air, Chassis**



MODEL: ACQUITY H-CLASS BIO SM-FTN, ACQUITY H-CLASS SM-FTN, ACQUITY I-CLASS SM-FTN

**11-3606**  
OEM 401000694  
**Filter, Air, Side Panel**

DETECTOR LAMPS

MODEL: ACQUITY, nanoACQUITY



MODEL: 2489 DUAL WAVELENGTH UV, 2998 PDA, ACQUITY eLAMBDA PDA, ACQUITY UPLC PDA, ACQUITY UPLC TUV  
**11-4143**  
OEM 201000281  
**Lamp, ACQUITY PDA/TUV 2489/2998 Performance Maintenance Kit (2000 hr)**



MODEL: ACQUITY UPC<sup>2</sup> PDA, ACQUITY UPLC PDA, ACQUITY UPLC TUV  
**11-4169**  
OEM 700005269  
**Deuterium Lamp, High Brightness w/Intelligent Chip (2000 hr)**



MODEL: 2487, 2488, ACQUITY UPLC TUV, nanoACQUITY TUV  
**CTS-10465**  
OEM WAS081142  
**Deuterium Lamp (2000 hr)**



MODEL: ACQUITY eLambda PDA, ACQUITY UPLC PDA, ACQUITY UPLC TUV  
**CTS-21065**  
OEM 201000273  
**Deuterium Lamp, PDA/TUV w/Intelligent Chip (2000 hr)**



MODEL: ACQUITY Arc, ACQUITY UPLC PDA, 2998 PDA, 2489 UV/Vis  
**CTS-21280**  
OEM 700009330  
**Lamp, ACQUITY Arc/UPLC PDA Performance Maintenance Kit (2000hr)**

DETECTOR LAMPS

MODEL: 486, 996, 2487, 2488, 2996



MODEL: 486  
**CTS-8068**  
OEM WAT080687  
**Quartz Lens**



MODEL: 486  
**CTS-10328**  
OEM WAT080244  
**Optics Cover Window**



MODEL: 2487, 2488  
**CTS-A11184**  
OEM WAS081341  
**Lamp Housing Window Assembly**



MODEL: 486  
**CTS-10699**  
OEM 700000356  
**Deuterium Lamp, Long Life (2000 hr)**



MODEL: 996, 2996  
**CTS-10268**  
OEM WAT052586  
**Deuterium Lamp (2000 hr)**



MODEL: 2487, 2488, ACQUITY UPLC TUV, nanoACQUITY TUV  
**CTS-10465**  
OEM WAS081142  
**Deuterium Lamp (2000 hr)**

DETECTOR LAMPS

AGILENT



MODEL: 8452A  
**CTS-00128**  
OEM 08452-60104  
**Deuterium Lamp (2000 hr)**



MODEL: 1100, 1200 DAD, G1315A/B, G1365A/B  
**CTS-10473**  
OEM 2140-0590  
**Deuterium Lamp (1000 hr)**



MODEL: 1100, 1120, 1200 VWD, 1220 VWD, G1314A, G1314B, G1314C  
**CTS-10494**  
OEM G1314-60100  
**Long Life Deuterium Lamp (2000 hr)**



MODEL: G1314D, G1314E, G1314F, G7114A/B  
**11-4111**  
OEM G1314-60101  
**Long Life HiS Deuterium Lamp, RFID, VWD (2000 hr)**



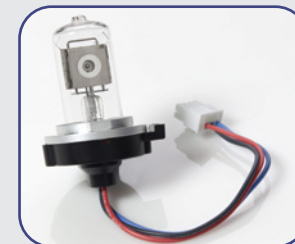
MODEL: 1100, 1200 DAD, G1315A/B, G1365A/B  
**CTS-10827**  
OEM 5181-1530  
**Long Life Deuterium Lamp (2000 hr)**



MODEL: 8453, 8454  
**CTS-10594**  
OEM 2140-0605  
**Deuterium Lamp (1000 hr)**



MODEL: 1260, 1220 DAD, G1315C/D, G1365C/D, G7115A, G7165A  
**11-3984**  
OEM 2140-0820  
**Long Life Deuterium Lamp, RFID (2000 hr)**



MODEL: 1290, G4212A/B, G7117A/B/C/D  
**11-4109**  
OEM 5190-0917  
**Long Life HiS Deuterium Lamp, 8 pin, RFID (2000 hr)**



MODEL: 1100, 1200, 1220, 1260, G1315A/B, G1365A/B  
**CTS-A11218**  
OEM 2140-0813  
**Long Life Deuterium Lamp (2000 hr)**



MODEL: 8453A, G1315A/B/C/D, G1365A/B/C/D  
**CTS-12013**  
OEM G1103-60001  
**Tungsten Lamp (1000 hr)**



MODEL: 1100 DAD, 1200 DAD  
**11-4110**  
OEM 5182-1530  
**Long Life Deuterium Lamp (2000 hr)**

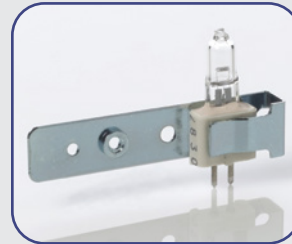
DETECTOR LAMPS

PERKINELMER



MODEL: 5, 7, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 25, 35, 40, 45, 800, 850, 900, 950, 1050, Bio 19, and Lambda 2 UV/Vis

**CTS-10854**  
OEM Old B0160917, L6022728  
**Deuterium Lamp (1500 hr)**



MODEL: 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 25, 35, 40, 45, 550, 551, 552, 552A, 553, 559, 559A, 800, 850, 900, 950, 1050, Lambda 2, Lambda Bio, and LC-480 PDA Spectrometers

**11-3343**  
OEM B0114620  
**Tungsten Lamp**



MODEL: 200 Series, 785A UV/Vis

**CTS-00025**  
OEM N2920149  
**Deuterium Lamp (1000 hr)**

SHIMADZU



MODEL: SPD-10, SPD-10AV, SPD-10AVP, SPD-20A, SPD-20AV

**CTS-00135**  
OEM 228-34016-02  
**Deuterium Lamp (2000 hr)**



MODEL: SPD-M10Avp, SPD-M20A

**CTS-21694**  
OEM 228-34016-00  
**Deuterium Lamp (2000 hr)**

THERMO / DIONEX



MODEL: DSA-1, VDM-1, 200, 201, 203, 204, 205, 206, 206PH, CE100, CE500, CE1000, CE2000, SP100, SP200, SPECTRACHROM 200, UV100, UV150, UV200, UV1000, UV2000, UV3000

**CTS-00246**  
OEM 9551-0023  
**Deuterium Lamp (1000 hr)**



MODEL: UV6000

**CTS-A123**  
OEM 108052  
**Lamp Assembly, TSP UV6000 Detector**

DETECTOR LAMPS

WATERS



MODEL: 486

**CTS-10699**  
OEM 700000356  
**Deuterium Lamp, Long Life (2000 hr)**



MODEL: 2487, 2488, ACQUITY UPLC TUV, nanoACQUITY TUV

**CTS-10465**  
OEM WAS081142  
**Deuterium Lamp (2000 hr)**



MODEL: 2489 DUAL WAVELENGTH UV, 2998 PDA, ACQUITY eLAMBDA PDA, ACQUITY UPLC PDA, ACQUITY UPLC TUV

**11-4143**  
OEM 201000281  
**Lamp, ACQUITY PDA/TUV 2489/2998 Performance Maintenance Kit (2000 hr)**



MODEL: 996, 2996

**CTS-10268**  
OEM WAT052586  
**Deuterium Lamp (2000 hr)**



MODEL: ACQUITY UPC<sup>2</sup> PDA, ACQUITY UPLC PDA, ACQUITY UPLC TUV

**11-4169**  
OEM 700005269  
**Deuterium Lamp, High Brightness w/Intelligent Chip (2000 hr)**



MODEL: ACQUITY eLambda PDA, ACQUITY UPLC PDA, ACQUITY UPLC TUV

**CTS-21065**  
OEM 201000273  
**Deuterium Lamp, PDA/TUV w/Intelligent Chip (2000 hr)**



MODEL: ACQUITY Arc, ACQUITY UPLC PDA, 2998 PDA, 2489 UV/Vis

**CTS-21280**  
OEM 700009330  
**Lamp, ACQUITY Arc/UPLC PDA Performance Maintenance Kit (2000hr)**

# TOOLS

## TOOLS



**CTS-00089**  
5/16" x 3/8" Open End Wrench



**CTS-TT-1001**  
Terry Tool Tubing Cutter



**CTS-00090**  
1/4" x 5/16" Open End Hex Wrench



**CTS-TT-1003**  
Replacement Cutting Wheels, 3/pk



**CTS-00091**  
6" Adjustable Wrench



**11-2574**  
Tubing Cutter for Polymeric  
1/16" to 1/8" OD Tubing



**CTS-1042**  
OEM WAT011042  
Plunger Insertion Tool



**11-2585**  
Tubing Cutter for Polymeric  
3/16" to 5/16" OD Tubing

# FILTERS, FITTINGS & TUBING

## MOBILE PHASE SOLVENT FILTERS & FEP TUBING



**CTS-A11259**  
OEM 01018-60025  
Solvent Filter 10µm SS with 1/16" Stem



**11-1418**  
Solvent Filter 10µm SS with 1/4-28  
Nut/Ferrule for 1/8" OD Tubing



**CTS-5531**  
OEM WAT025531  
Solvent Filter 10µm SS with 1/8" Stem



**11-1419**  
Solvent Filter 20µm SS with 5/16-24  
Nut/Ferrule for 3/16" or 4mm OD Tubing



**11-1414**  
Solvent Filter 10µm SS with 1/16" Stem

# FILTERS, FITTINGS & TUBING

## MOBILE PHASE SOLVENT FILTERS & FEP TUBING



**11-1422**  
Solvent Filter 10µm SS with 1/4-28  
Nut/Ferrule for 3mm OD Tubing



**11-1127**  
Tubing FEP 3mm OD x 2mm ID x 3m



**11-1888**  
Adapter ETFE with 1/4-28 Female Port  
for use with CTS-10843 (adapts glass  
filter for use with Mobile Phase tubing  
1mm to 1/8" OD)



**11-1128**  
Tubing FEP 3mm OD x 2mm ID x 6m



**CTS-10843**  
OEM 5041-2168  
Glass Solvent Filter



**11-1129**  
Tubing FEP 3mm OD x 2mm ID x 15m



**11-1117**  
Tubing FEP 1/16" OD x 0.020" ID x 10ft



**11-1112**  
Tubing FEP 3/16" OD x 1/8" ID x 10ft



**11-1118**  
Tubing FEP 1/16" OD x 0.020" ID x 20ft



**11-1113**  
Tubing FEP 3/16" OD x 1/8" ID x 20ft



**11-1119**  
Tubing FEP 1/16" OD x 0.020" ID x 50ft



**11-1114**  
Tubing FEP 3/16" OD x 1/8" ID x 50ft



**11-2559**  
Tubing FEP 1/16" OD x 0.030" ID x 10ft



**11-1122**  
Tubing FEP 1/4" OD x 0.188" ID x 10ft



**11-1107**  
Tubing FEP 1/8" OD x 1/16" ID x 10ft



**11-1123**  
Tubing FEP 1/4" OD x 0.188" ID x 20ft



**11-1108**  
Tubing FEP 1/8" OD x 1/16" ID x 20ft



**11-1124**  
Tubing FEP 1/4" OD x 0.188" ID x 50ft







**11-1109**  
Tubing FEP 1/8" OD x 1/16" ID x 50ft



# FILTERS, FITTINGS & TUBING

## TUBING

### Stainless Steel Tubing

Part No.	Description
 11-2612	Tubing Stainless Steel 1/16" OD x 250µm (0.010") ID x 10ft
 11-2610	Tubing Stainless Steel 1/16" OD x 0.50mm (0.020") ID x 10ft
 11-1201	Tubing Stainless Steel 1/16" OD x 0.75mm (0.030") ID x 10ft
 11-2611	Tubing Stainless Steel 1/16" OD x 1mm (0.040") ID x 10ft






### PEEK Tubing (Black) – 0.004" ID x 1/16" OD

Part No.	Description
 11-1173	Tubing PEEK Black 1/16" OD x 0.004" ID x 5ft
 11-1174	Tubing PEEK Black 1/16" OD x 0.004" ID x 10ft
 11-1175	Tubing PEEK Black 1/16" OD x 0.004" ID x 20ft
 11-1176	Tubing PEEK Black 1/16" OD x 0.004" ID x 50ft
 11-1177	Tubing PEEK Black 1/16" OD x 0.004" ID x 100ft

### PEEK Tubing (Red) – 0.005" ID x 1/16" OD

Part No.	Description
 11-1151	Tubing PEEK Red 1/16" OD x 0.005" ID x 5ft
 11-1152	Tubing PEEK Red 1/16" OD x 0.005" ID x 10ft
 11-1153	Tubing PEEK Red 1/16" OD x 0.005" ID x 20ft
 11-1154	Tubing PEEK Red 1/16" OD x 0.005" ID x 50ft
 11-1155	Tubing PEEK Red 1/16" OD x 0.005" ID x 100ft


### PEEK Tubing (Yellow) – 0.007" ID x 1/16" OD

Part No.	Description
 11-1156	Tubing PEEK Yellow 1/16" OD x 0.007" ID x 5ft
 11-1157	Tubing PEEK Yellow 1/16" OD x 0.007" ID x 10ft
 11-1158	Tubing PEEK Yellow 1/16" OD x 0.007" ID x 20ft
 11-1159	Tubing PEEK Yellow 1/16" OD x 0.007" ID x 50ft
 11-1160	Tubing PEEK Yellow 1/16" OD x 0.007" ID x 100ft





# FILTERS, FITTINGS & TUBING

## TUBING

### PEEK Tubing (Blue) – 0.010" ID x 1/16" OD

Part No.	Description
 11-1136	Tubing PEEK Blue 1/16" OD x 0.010" ID x 5ft
 11-1137	Tubing PEEK Blue 1/16" OD x 0.010" ID x 10ft
 11-1138	Tubing PEEK Blue 1/16" OD x 0.010" ID x 20ft
 11-1139	Tubing PEEK Blue 1/16" OD x 0.010" ID x 50ft
 11-1140	Tubing PEEK Blue 1/16" OD x 0.010" ID x 100ft






### PEEK Tubing (Orange) – 0.020" ID x 1/16" OD

Part No.	Description
 11-1141	Tubing PEEK Orange 1/16" OD x 0.020" ID x 5ft
 11-1142	Tubing PEEK Orange 1/16" OD x 0.020" ID x 10ft
 11-1143	Tubing PEEK Orange 1/16" OD x 0.020" ID x 20ft
 11-1144	Tubing PEEK Orange 1/16" OD x 0.020" ID x 50ft
 11-1145	Tubing PEEK Orange 1/16" OD x 0.020" ID x 100ft

### PEEK Tubing (Green) – 0.030" ID x 1/16" OD




Part No.	Description
 11-1146	Tubing PEEK Green 1/16" OD x 0.030" ID x 5ft
 11-1147	Tubing PEEK Green 1/16" OD x 0.030" ID x 10ft
 11-1148	Tubing PEEK Green 1/16" OD x 0.030" ID x 20ft
 11-1149	Tubing PEEK Green 1/16" OD x 0.030" ID x 50ft
 11-1150	Tubing PEEK Green 1/16" OD x 0.030" ID x 100ft

### PEEK Tubing (Natural) – 0.040" ID x 1/16" OD

Part No.	Description
 11-1162	Tubing PEEK Natural 1/16" OD x 0.040" ID x 5ft
 11-1163	Tubing PEEK Natural 1/16" OD x 0.040" ID x 10ft
 11-1164	Tubing PEEK Natural 1/16" OD x 0.040" ID x 20ft
 11-1165	Tubing PEEK Natural 1/16" OD x 0.040" ID x 50ft
 11-1166	Tubing PEEK Natural 1/16" OD x 0.040" ID x 100ft

## HIGH PRESSURE FITTINGS

### Stainless Steel Nut/Ferrules

Part No.	Description
 11-1237	<b>Nut 10-32 Stainless Steel Male for 1/16" OD Tubing, 10/pk</b>
 11-1239	<b>Ferrule Stainless Steel for 1/16" OD Tubing, 10/pk</b>
 11-2629	<b>Ferrule 303 Stainless Steel for 1/16" OD Tubing, 10/pk</b>



Part No.	Description
CTS-11016 <b>KIT</b>	<b>Swagelok Style Compression Fitting Kit, 10/pk</b>
	• Nut 10
	• Front Ferrule 10
	• Back Ferrule 10


### Plug 10-32 PEEK

Part No.	Description
 CTS-1820	<b>Grip-tight PEEK 10-32 HPLC Column Plug</b>


### Fingertight One-Piece Nut/Ferrules

Part No.	Description
 11-1240	<b>Fingertight One-Piece 10-32 PEEK Male Nut/Ferrule for 1/16" Tubing, 10/pk</b>


### Fingertight Two-Piece Nut/SealTight Ferrules

Part No.	Description
 11-1269	<b>Ferrule SealTight PEEK for 1/16" OD Tubing, 10/pk</b>

### Fingertight Two-Piece Nut/Ferrules

Part No.	Description
 11-1255	<b>Ferrule PEEK for 1/16" OD Tubing, 10/pk</b>

### Fingertight RheFlex Two-Piece Nut/Split Ferrules

Part No.	Description
 11-1271	<b>Fitting 10-32 RheFlex PEEK Male Nut/Split Ferrule for 1/16" OD Tubing, 10/pk</b>

You can troubleshoot most Waters M6000, 510, 590, 600, and 610 pumping problems in a short time by observing the pressure meter on your pump. The following procedures will show you how.

## RAMP TEST

This is the first test to try, as it involves the least amount of work and disassembly, and it will find most pumping problems.

1. Disconnect the outlet of the pump from the rest of your HPLC system.
2. Connect a short piece of tubing to the pump outlet, and put the other end of this tube into a beaker.
3. Prime the pump thoroughly with methanol. Make sure you have drawn enough methanol through the solvent inlet line to ensure the pump is pumping methanol.
4. Remove the tubing at the pump outlet and install a plug fitting to stop flow.
5. Set the pressure limit for 4000-5000 psi.
6. Set the flow rate for 0.3-1.0 ml/min and observe the psi meter and the indicator rods. With a properly-operating pump, you will see a smooth increase in pressure until the pressure limit is reached.

Below are two examples of the most common symptoms of Ramp Test failure and how to resolve them. The examples use the left and right side to describe the symptoms: interchange the left and right in the text if needed to match your symptoms.

### SYMPTOM #1

While watching the left indicator rod coming out, the pressure increases. When the right indicator rod comes out, the pressure stops increasing and stays about the same. When the left indicator rod again begins coming out, the pressure again begins increasing.

### ANALYSIS

The right inlet check valve is not working. This symptom is fairly easy to understand. The inlet check valve is either stuck open, and the mobile phase is sloshing back and forth as the plunger goes in and out, or it is stuck shut, never allowing mobile phase into the pump head.

Possible Problem	Solution
Check valve dirty	Clean and rebuild
Seat worn out	Clean and rebuild

### SYMPTOM #2

While watching the left indicator rod coming out, the pressure increases. When the right indicator rod comes out, the pressure drops almost back to zero. When the left indicator rod again begins coming out, the pressure again increases.

### ANALYSIS

The left outlet check valve is leaking back. This symptom is more difficult to understand, until you think about where the mobile phase is going. When the left plunger comes out, the pressure increases. When the right plunger comes out, it pumps mobile phase out, into the reference valve or tee fitting, and over to the left side. The left outlet check valve is leaking backwards, allowing what the right side is pumping to enter and fill the left side as the left plunger is going in.

Possible Problem	Solution
Check valve dirty	Clean in ultrasonic cleaner; flush thoroughly with methanol in priming syringe; disassemble and rebuild check valve
Air bubble trapped in check valve	Reprime with methanol

## OTHER SYMPTOMS

If your symptoms differ from these, you may have multiple problems and should use the Modified Ramp Test. This test is also useful if you want to verify your troubleshooting from the above steps or you are unsure of your diagnosis.

## MODIFIED RAMP TEST

(Perform steps 1 - 5 from the standard Ramp Test.)

1. Disconnect the outlet of the pump from the rest of your HPLC system.
2. Connect a short piece of tubing to the pump outlet and put the other end of this tube into a beaker.
3. Prime the pump thoroughly with methanol. Make sure you have drawn enough methanol through the solvent inlet line to ensure the pump is pumping methanol.
4. Remove the tubing at the pump outlet and install a plug fitting, to stop flow.
5. Set the pressure limit for 4000-5000 psi.
6. Disconnect the tube between the outlet check valve and the reference valve or tee fitting, at the reference valve or tee, on the side of the pump not being tested (if you are testing the left side, disconnect the right side).
7. Put a plug fitting into the reference valve or tee where you removed the tube. You may want to put a towel under the open end of the disconnected tube; it will drip a little during the following steps. Do not cap the dripping tube.
8. Set the flow to 1 ml/min, and observe the psi meter and the indicator rod on the side being tested.

### SYMPTOM #1

The pressure increases steadily while the plunger is coming out and holds pressure while the plunger is retracting. Analysis: This pump head is pumping okay.

### SYMPTOM #2

The pressure never increases above 0 psi. Analysis: The inlet check valve is not working. Reprime this pump head and try again. If this fails, see Symptom #1 of the Ramp Test to repair.

### SYMPTOM #3

The pressure increases steadily while the plunger is coming out, but drops abruptly while the plunger is retracting. Analysis: The outlet check valve is leaking back. See symptom #2 of the Ramp Test to repair.

### SYMPTOM #4

The pressure increases steadily during the first plunger out stroke, but increases less during the next out strokes; the pressure holds while the plunger is retracting solution. The plunger seal is beginning to leak, or the inlet check valve is leaking back slightly. To repair, look at the weep hole at the bottom of the support bushing, or between the pump head and the support bushing, and see if the mobile phase has been leaking past the plunger seal. If so, slightly tighten the two allen head screws holding the pump head and retest. If the pump head is tight against the support bushing, it is time to replace the plunger seal. If the inlet check valve is leaking back, see symptom #1 of the Ramp Test to repair.

## OTHER SYMPTOMS

If you need any further assistance, please feel free to call 952.895.8292 or toll-free at 800.682.3295 during the hours of 8 a.m. to 5 p.m. CST. Thanks for calling!

## ACKNOWLEDGMENTS

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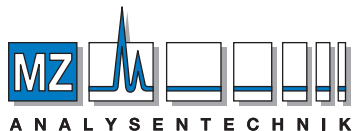
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952.895.8292

800.682.6480

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### AUTHORIZED DISTRIBUTOR

MZ-Analysentechnik GmbH, Barcelona-Allee 17 • D-55129 Mainz

Tel +49 6131 880 96-0, Fax +49 6131 880 96-20

e-mail: info@mz-at.de, www.mz-at.de

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- France:** BGB Analytik France S.A.S. • 81 Vie de l'Etraz • 01630 St. Jean de Gonville • Phone +33 450 488567 • Fax +33 450 562378 • sales.fr@bgb-analytik.com
- Germany:** BGB Analytik Vertrieb GmbH • Mühlestraße 1 • 79539 Lörrach • Phone +49 7621 5884270 • Fax +49 7621 5884289 • sales.de@bgb-analytik.com
- Turkey:** BGB Analytik Laboratuvar Malzemeleri Ticaret A.Ş. • Starport Residence • Yenişehir Mah. Osmanlı Bulvarı. • Sümül Sok. No:10, Daire: 193 • 34912 Kurtköy, Pendik, İstanbul • Phone +90 2169092048 • sales.tr@bgb-analytik.com
- USA:** BGB Analytik USA LLC • 8407 F Richmond Hwy • Alexandria, VA 22309 • Phone 1-703-780-1500 • Fax 1-703-991-9131 • sales.usa@bgb-analytik.com