

REPLACEMENT PARTS & SUPPLIES



Replacement Parts & Supplies

Replacement Parts & Supplies Table of Contents

Sample Preparation 77

Gas Chromatography Analytical Systems 81

GC Sample Introduction 87

GC Detectors 115

GC Monitoring Systems 131

Flow Analyzers 149

General Index 167

Parts Index 173

Applications and Methods Guide 179

Service and Support 181

How to order:

OI Analytical has made ordering easier than ever. You can now submit your order by mail, telephone, fax, or e-mail.*

Mail: OI Analytical
Order Entry Department
P.O. Box 9010
College Station, TX 77842-9010

Phone: (800) 673-3750
(409) 690-1711

Fax: (409) 690-0440

E-mail: orders@oico.com

Sample Preparation

Digestion Vessel Modules	78
Gel Permeation Chromatogr. Cleanup ...	80
Columns	80
Supplies	80
Extraction System	80

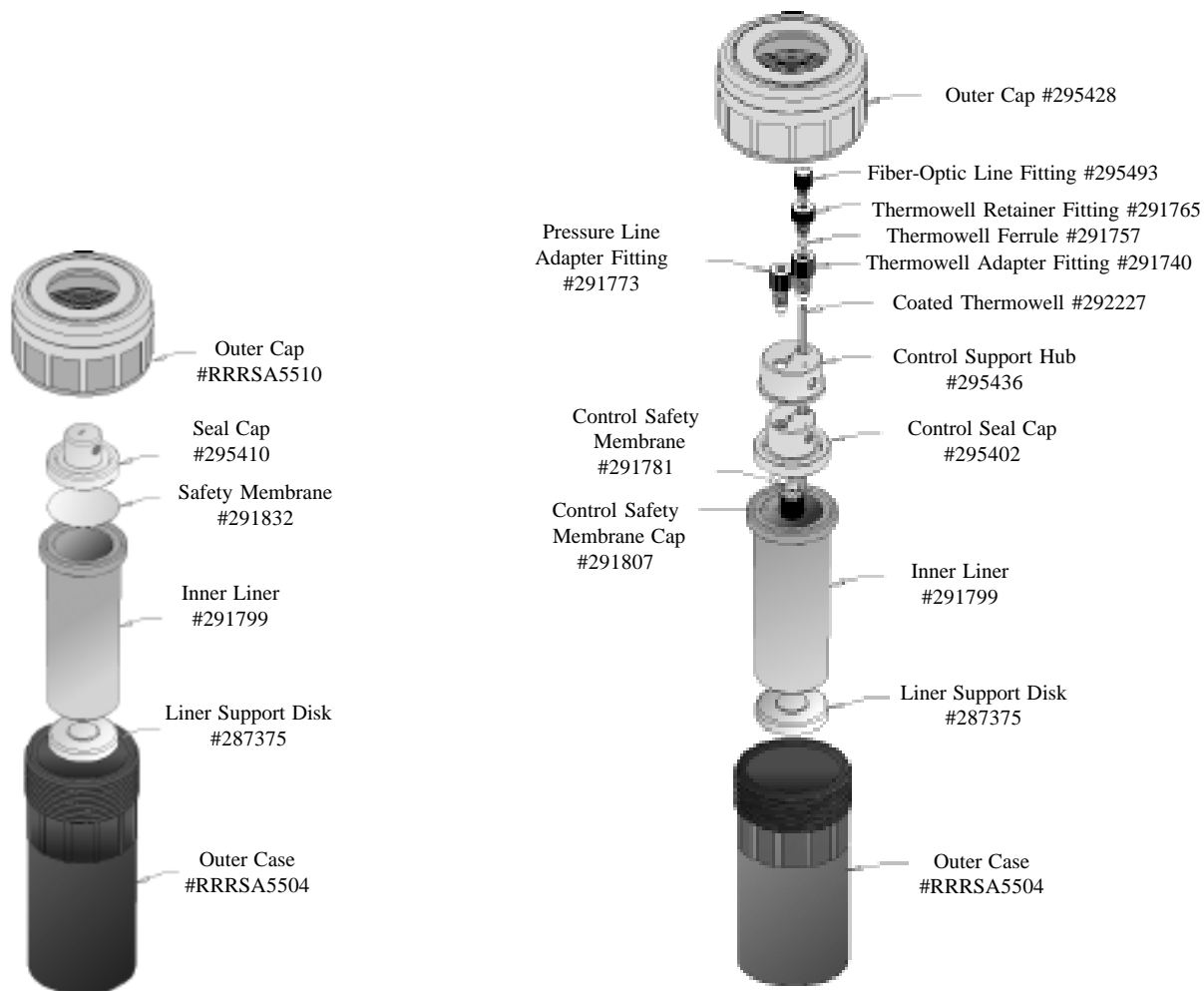
When ordering please provide:

- Contact name, company name, account number, shipping and billing addresses, and telephone number(s).
- Your company's purchase order number or credit card number. (Visa, MasterCard, AMEX). *Credit cards cannot be accepted as form of payment from international customers.*
- OI Analytical part number, description, and quantity of item(s) ordered.
- Tax exempt number (if applicable).

* International customers should contact the OI Analytical distributor in their area. If the distributor is unknown, they should contact OI Analytical International Sales directly at (409) 690-1711 for distributor information.



Digestion Vessel Modules and Supplies Analytical Microwave System



Moderate Pressure Standard Vessel

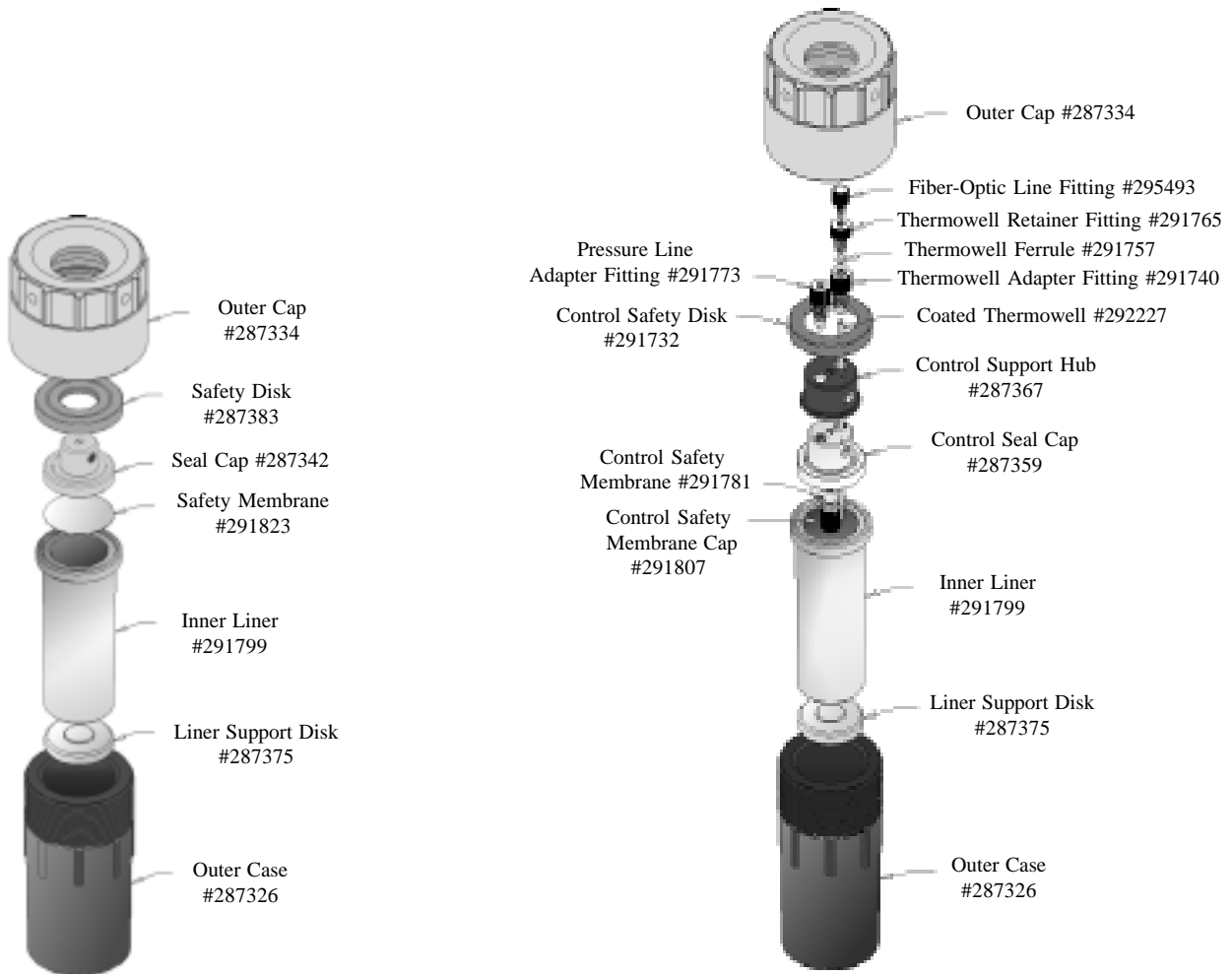
Moderate Pressure Control Vessel



To order call 1-800-653-1711 (USA/Canada) or 409-690-1711



Digestion Vessel Modules and Supplies Analytical Microwave System



High Pressure Standard Vessel

High Pressure Control Vessel

Gel Permeation Chromatography Cleanup and Extraction System

Envirobeads S-X3 Columns and Supplies

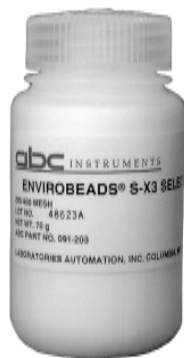
			Part #
Column	100% MeCl ₂	700 mm	624-116
Column	50/50 MeCl ₂ /Cyclohexane	700 mm	624-117
Column	15/85 Hexane/MeCl ₂	700 mm	624-121
Column	Glass with Teflon Fittings, Unpacked	700 mm	624-110
Column	Special Pack	700 mm	624-118
Envirobeads	S-X3 Select	70 g bottle	091-203
Mesh	Nylon Bed Support, 1 3/8" O.D.		268-514
Screen	Teflon Bed Support, 7/8" O.D. 27 µm		268-502

Envirosep-ABC GPC Columns

			Part #
Column	Standard Guard	350 x 21.2 mm	417-250
Column	Standard Preparative Cleanup	350 x 21.2 mm	417-150
Filter	Stainless Steel, Semi-Prep High Pressure In-Line	2 µm frit	239-920
Frit	Stainless Steel, Replacement for In-Line Filter (10/pk)	2 µm	239-921

Optima PTFE Columns

		Part #
	100% MeCl ₂	624-122
	70/30 Ethyl Acetate/Cyclopentene	624-123
	70/30 Ethyl Acetate/Cyclohexane	624-124
	50/50 Ethyl Acetate/Cyclohexane	624-125
	Special Pack	624-126



Envirobeads

Miscellaneous (GPC)

			Part #
Cap	Crimp-on for 10-mL Vials		236-720
Cap	Crimp-on for 10-mL Vials	500/pk	236-721
Cap	Crimp-on for 1-mL Autosampler Vials	144/pk	236-811
Flask	Pear-Shaped Storage (Evaporation Only) 250 mL		236-650
Septum	For 10-mL Vials		236-820
Septa	For 10-mL Vials	500/pk	236-825
Tube	15-mL Sample Storage, Clear		236-660
Tube	15-mL Sample Storage, Amber		236-661
Vial	10-mL		236-710
Vial	10-mL	96/pk	236-711
Vial	1-mL Autosampler	144/pk	236-701



Envirosep-ABC GPC Columns

Soxtherm Supplies

			Part #
Beaker	Extraction, 46-mm diameter		419-129
Beakers	Extraction, 54-mm diameter	each	419-101
Glass Thimbles	38 mm x 102 mm		419-103
Thimble	Extraction, 33 mm x 94 mm	25/pk	419-102
Thimble Clip Holder	For 25-mm diameter		419-104
Thimble Clip Holder	For 33-mm diameter	each	419-105



To order call 1-800-653-1711 (USA/Canada) or 409-690-1711



How to order:

OI Analytical has made ordering easier than ever. You can now submit your order by mail, telephone, fax, or e-mail.*

Mail: OI Analytical
Order Entry Department
P.O. Box 9010
College Station, TX 77842-9010

Phone: (800) 673-3750
(409) 690-1711

Fax: (409) 690-0440

E-mail: orders@oico.com

When ordering please provide:

- Contact name, company name, account number, shipping and billing addresses, and telephone number(s).
- Your company's purchase order number or credit card number. (Visa, MasterCard, AMEX). *Credit cards cannot be accepted as form of payment from international customers.*
- OI Analytical part number, description, and quantity of item(s) ordered.
- Tax exempt number (if applicable).

* International customers should contact the OI Analytical distributor in their area. If the distributor is unknown, they should contact OI Analytical International Sales directly at (409) 690-1711 for distributor information.

GC Analytical System Supplies

Cables - Power Cords	82
Chemicals and Standards	82
Columns and Column Supplies	82
Electrometers	83
Fuses	83
Gas Flow Modules	83
Glassware (Spargers)	83
Leak Detection	84
Publications	84
Regulators	84
Scrubbers	84
Syringes	84
Tools	85
Tubing	85



Analytical Supplies

Cables - Power Cords

		Part #
Australia	220/230 VAC	249276
China	220 VAC	249276
Denmark	220/230 VAC	249300
European Continent	220/230 VAC	249284
Greenland	220 VAC	249300
India	220-250 VAC	249318
Ireland	220 VAC	249268
Israel	230 VAC	249342
Italy	220/230 VAC	249359
Japan	100 VAC 50/60 Hz	249326
New Zealand	230 VAC	249276
North America	120 VAC	116038
South Africa	220-250 VAC	249318
Switzerland	220/230 VAC	249292
United Kingdom	240 VAC	249268

Chemicals and Standards

		Part #
502.2	100 ppm/MEOH	222919
502.2 Gas/Non-Gas	100 ppm/MEOH	222901
BTEX	100 ppm/MEOH	222885
Pesticide (b-BHC, Chlorpyrifos, Diazinon, Thimet, Atrazine)		222893











Cleaner

		Part #
Micro All Purpose Cleaner		259945
PID Lamp Cleaning Kit		214924

Columns and Column Supplies*

		Part #
BTEX Column Kit	30 m x 0.53 mm I.D. x 1.5 µm (RTX-5) 30 m x 0.53 mm I.D. x 1.5 µm (Stabilwax) Column Splitter	187765
Column Cutters	Ceramic (3/pk)	206888
Column Splitter	Stainless Steel 0.8 mm	193847
DB 624 Column	30 m x 0.53 mm I.D. x 3.0 µm	203059
DB 624 Column	75 m x 0.53 mm I.D. x 3.0 µm	203067
DB VRX Column	75 m x 0.45 mm I.D. x 2.55 µm	259986
USEPA 502.2 Column	105 m x 0.53 mm I.D. x 3.0 µm	186874
Pesticide Column Kit	30 m x 0.32 mm I.D. x 0.25 µm (RTX-5) 30 m x 0.32 mm I.D. x 0.25 µm (RTX-35) Column Fittings	192831
RTX-1 Column	105 m x 0.53 mm I.D. x 3.0 µm	236240
RTX-5 Column	30 m x 0.32 mm I.D. x 0.25 µm	193318
RTX-5 Column	30 m x 0.53 mm I.D. x 1.5 µm	188193
RTX-35 Column	30 m x 0.32 mm I.D. x 0.25 µm	193326
RTX-VT Column	60 m x 0.53 mm I.D. x 3.0 µm	186122
Stabilwax	30 m x 0.53 mm I.D. x 1.5 µm	188201
VOCOL Column	60 m x 0.75 mm I.D. x 1.5 µm	187377

*Columns may be substituted for exact replacement from other vendors without notice

			
Continental Europe	Australia, New Zealand, China	United Kingdom, Ireland	North America
			
Denmark, Greenland	India, South Africa	Israel	
			
Italy	Japan	Switzerland	

Power Cord Plugs

OI Analytical's Standards Policy: OI Analytical sells reference standards prepared in the production laboratory using standard laboratory techniques. Certification of these standards is not implied.



To order call 1-800-653-1711 (USA/Canada) or 409-690-1711



Analytical Supplies

Electrometers Part

Dual Channel Electrometer	194910
Single Channel Electrometer	194720
PID or FID Electrometer Card HP 6890 (may require 274878)	274860
PID or FID Interface Card HP 6890	274878
PID or FID Electrometer Card HP 5890	187344
HP Analog Input Board (AIB) HP 6890	274886
HP Analog Input Board (AIB) HP 5890	187716

Fuses Part

0.5 amp	115469
2 amp	115493
2 amp GMA	177453
2 amp Slo Blo	211441
3.15 amp	257329
4 amp Slo Blo	119339
5 amp	115451
5 amp Fas Blo	247957
6 amp Slo Blo	170449
8 amp Slo Blo	176851

Gas Flow Modules - HP 6890 Part

PCM (EPC) Pneumatics Control Module Kit - Inlet	285015
OIM EPC Gas Flow Module	285049
Auxiliary - EPC Flow Module	275974
HP 6890 FID Manual Gas Flow Module (may require 275040)	275016
Pressure Regulator, Manual FID	275040

Gas Flow Modules - HP 5890 Part

ELCD Model 5320 for HP 5890	1-Line	225037
ELCD/ELCD Model 5320 for HP 5890	2-Line	232371
PID/ELCD Models 4440, 5350 for HP 5890	2-Line	187302
PID/FID Model 4450 for HP 5890	2-Line	192013
Inlet Pressure Control Panel (IPCP) (3 gas control)		204776

Glassware† (Spargers) Set Part # #/Set

Caps	40 mL	28 mm	-----	296079	72
Frit	5 mL	6 mm	197632	-----	---
Frit*	5 mL	6 mm	175655	-----	---
Frit	5 mL	12 mm	196626	187914	16
Frit	5 mL	18 mm	209015	232199	16
Frit	5 mL	18 mm	209015	247916	16
Frit*	25 mL	6 mm	175663	-----	---
Frit	25 mL	12 mm	196469	187906	16
Frit (MPM)	25 mL	18 mm	209031	247932	16
Frit (DPM)	25 mL	18 mm	209031	232215	16
Needle	5 mL	12 mm	187484	187898	16
Needle	5 mL	18 mm	225623	232207	16
Needle	25 mL	12 mm	188508	187880	16
Needle	25 mL	18 mm	225631	232223	16
Needle**	10 mL	18 mm	-----	199521	125
Septa	40 mL	28 mm	-----	296061	72
Vial Kit***	40 mL	28 mm	-----	296053	72
Vials****	40 mL	28 mm	-----	296087	72

*Septum-Style Purge Inlet **Disposable ***Includes Caps and Septa ****Vials Without Caps or Septa
 ***Vials without caps and septa

† For glassware for specific instrument configurations, see page 113.

Analytical Supplies

Leak Detection		Part #
Leak Hunter	Portable, Detects Nonflammable Gases	258418
Snoop	8 oz Squirt Bottle	129767

Publications		Part #
Cryo-Focusing Module Operator's Manual		202879
DPM-16/MHC-16 Operator's Manual		248393
Dual Channel Electrometer Operator's Manual		206839
Fluorinated By-Products Operator's Manual		301119
Guide to Environmental Analytical Methods		259929
Low-Dead-Volume (LDV) Interface Installation/Maintenance Guide		222760
Low-Dead-Volume Injector (LDVI) Installation/Maintenance Guide		236414
Model 4410 Flame-Ionization Detector Operator's Manual		192229
Model 4420 Electrolytic Conductivity Detector Operator's Manual		165846
Model 4430 Photoionization Detector Operator's Manual		186678
Model 4460A Sample Concentrator Operator's Manual		177354
Model 4560 Sample Concentrator Operator's Manual		227959
Model 4551 Vial Autosampler Operator's Manual		235895
Model 5220 Electrolytic Conductivity Detector Operator's Manual (HP 5890)		224923
Model 5220 Electrolytic Conductivity Detector Operator's Manual (Varian)		255778
Model 5230 Photoionization Detector Operator's Manual (HP 5890)		234286
Model 5230 Photoionization Detector Operator's Manual (Varian)		255893
Model 5320 Electrolytic Conductivity Detector Operator's Manual		274969
Model 5360 Halogen Specific Detector Operator's Manual		246140
Model 5380 Pulsed Flame Photometric Detector Operator's Manual		283101
Model 4552 W/S Autosampler Operator's Manual		285007
Model 4632 Headspace Autosampler Operator's Manual		238444
MPM-16/MHC-16 Operator's Manual		206862
OI Analytical Quick Reference Method Sheet (Laminated)		260091
PATTI Purge And Trap Total Interface Operator's Manual		206854
PATTI II Purge And Trap Total Interface Operator's Manual		236273
VOST Installation and Maintenance Guide		255687
WinTrap Operator's Manual		264416

Regulators		Part #
Compressed Air Reg., Stainless Steel Diaphragm, 1/8" Tube Fitting		174714
Helium Reg., Stainless Steel Diaphragm, 1/8" Tube Fitting		174730
Helium/Nitrogen Reg., Plastic Diaphragm, 1/8" Tube Fitting		144585
Hydrogen Reg., Stainless Steel Diaphragm, 1/8" Tube Fitting		174722
Oxygen Reg., Plastic Diaphragm, 1/8" Tube Fitting		150326
Single Stage, In-Line Reg., Elastomer Diaphragm, 1/8" Tube Fittings		260414

Scrubbers		Part #
Scrubber	In-Line Molecular Sieve	258897
Trap	GC Ambersorb/Carbon Molecular Sieve (ELCD)	196816
Trap	GC S-shaped 30/60 Mesh Charcoal	196782
Trap	GC S-shaped 45/60 Mesh Molecular Sieve	196790
Trap	Hydrocarbon Canister 1/8"	197848

Syringes		Part #
10.0 μ L	2" Needle	167545
10.0 μ L	2" Needle Gas Tight	188003
2.5 mL	2" Needle	137051
5.0 mL	2" Needle	169327
5.0 mL	Sample with Luer	177659
10.0 mL	2" Needle	169335
10.0 mL	Sample with Luer	182006
25.0 mL	Sample with Luer	172461



To order call 1-800-653-1711 (USA/Canada) or 409-690-1711



Analytical Supplies

Tools		Part #
Extractor	Ferrule and Septum	231167
Nut Driver	1/4" Hollow	223917
Reamer	Small	258368
Reamer	Medium	258376
Reamer	Large	258384
Wrench	1-1/8" Sparge	227975

Tubing		Part #
Copper	1/8" x 0.070 mm I.D.	111427
DB-1	Precolumn 0.53 mm I.D. (5/pk)	226134
Deactivated Fused Silica	Precolumn 0.53 mm I.D. (5/pk)	202754
Nickel	1/16" x 0.020 mm I.D.	165531
PEEK	1/16" x 0.020 mm I.D.	197194
PEEK	1/16" x 0.030 mm I.D.	197202
Silicone	1/8" x 1/16" I.D. Clear	179812
Silicone	3/16" x 1/16" I.D. Clear	197087
Silicone	1/4" x 1/8" I.D. Clear	179085
Stainless Steel	1/16" x 0.030 mm I.D.	193409
Stainless Steel	1/16" x 0.040 mm I.D.	111864
Stainless Steel/Silicone	1/16" x 0.030 mm I.D.	175928
Stainless Steel/Silicone	1/16" x 0.020 mm I.D.	184978
Teflon	0.07 mm x 0.047 mm I.D.	111302
Teflon	1/16" x 0.010 mm I.D.	139065
Teflon	1/16" x 0.020 mm I.D.	165896
Teflon	1/16" x 0.031 mm I.D.	145591
Teflon	1/8" x 0.063 mm I.D.	147901
Tygon	0.09 mm x 0.050 mm I.D.	111260
Urethane	1/8" x 1/16" I.D. Clear	166224

How to order:

OI Analytical has made ordering easier than ever. You can now submit your order by mail, telephone, fax, or e-mail.*

Mail: OI Analytical
Order Entry Department
P.O. Box 9010
College Station, TX 77842-9010

Phone: (800) 673-3750
(409) 690-1711

Fax: (409) 690-0440

E-mail: orders@oico.com

When ordering please provide:

- Contact name, company name, account number, shipping and billing addresses, and telephone number(s).
- Your company's purchase order number or credit card number. (Visa, MasterCard, AMEX). *Credit cards cannot be accepted as form of payment from international customers.*
- OI Analytical part number, description, and quantity of item(s) ordered.
- Tax exempt number (if applicable).

* International customers should contact the OI Analytical distributor in their area. If the distributor is unknown, they should contact OI Analytical International Sales directly at (409) 690-1711 for distributor information.

GC Sample Introduction Replacement Parts and Supplies

Model 4560 Sample Concentrator	88
Model 4460A Sample Concentrator	91
Model 4551 Vial Autosampler	93
SAM and SIM/Spiker Options	95
Model 4552 W/S Autosampler	96
DPM-16 and MPM-16 Autosamplers .	101
Air-Analysis Products	104
Cryo-Focusing Module	105
Low-Dead-Volume Injector	106
Model 4460A Autosampling and SIM	109
Model 4632 Headspace Autosampler .	110
Model 4105 GC Autosampler	111
Cable Selection Guide	112
Glassware Selection Guide	112
Purge Needle Selection Guide	113



Fax 409-690-0440

Replacement Parts and Supplies

Model 4560 Sample Concentrator

Air Sampling Tubes and Containers					Part #
4.5" L	1/4" O.D.	Air-Tube Shipping Container			260299
4.5" L	1/4" O.D.	Trap	Blank	Stnls. Steel	260174
4.5" L	1/4" O.D.	Trap	Carbon Molecular Sieve	Stnls. Steel	260190
4.5" L	1/4" O.D.	Trap	Tenax	Stnls. Steel	260182
4.5" L	6 mm O.D.	Air-Tube Shipping Container			260307
4.5" L	6 mm O.D.	Trap	Blank	Glass	260208
4.5" L	6 mm O.D.	Trap	Carbon Molecular Sieve	Glass	260224
4.5" L	6 mm O.D.	Trap	Tenax	Glass	260216

Cables*	Part #
Handshake Pigtail HP 6890	252213
Handshake Pigtail HP 5890 (MSD Interface Below)	185868
Handshake Pigtail Varian 3400	188409
Handshake Pigtail to Spade Lugs	285924
Shimadzu 17A GC	244483
Model 4560 to Any Handshake Pigtail	226530
Model 4560 to CFM	226548
Model 4560 to DPM-16, MPM-16, or MHC-16	226605
RS-232-C (PATTI II)	226621
Power Cord - 110 V North America	116038

Cables - MSD Interface	Part #
Handshake Pigtail HP 5971 or 5972 (DOS or UNIX)	209874
Handshake Pigtail HP 5971 (PASCAL)	209866
Handshake Pigtail HP 5970 (RTE-A)	209882

Ferrules	Part #
Teflon 1/16" Tube (5/pk)	196220
Teflon 1/16" Tube Set (10/pk)	198432
Teflon 6 mm Tube (Sparger Inlet Arm)	224337
Teflon 18 mm Tube (10/pk)	224352

Fittings			Part #
Adapter	KEL-F Female Luer 10-32	Syringe Port	224584
Fitting	Water Management		252874
Union	Brass 1/4"-1/16" Male	Sparge Inlet Arm	227223
Sparge Filter Assembly			209254

Heater Jackets (Single)**			Part #
Frit Sparger	5 or 25 mL	110/220 V	218669
Needle Sparger	5 mL	110/220 V	198739
Needle Sparger	25 mL	110/220 V	199406

Needles***			Part #
Frit Sparger (6 mm neck)	20.3 cm		185108
Frit Sparger	22.9 cm		209114
Frit/Needle Sparger	19.6 cm		203042
Needle/Disposable Sparger	19.5 cm	(side hole)	232348
Needle/Disposable Sparger	21 cm	(side hole)	203018
Needle/Disposable Sparger	22.9 cm	(side hole)	227371

Needle Lengths (with Fittings)	
185108	20.3 cm
203018	21.0 cm
203042	19.6 cm
209114	22.9 cm
227371	22.9 cm
232348	19.5 cm

* For appropriate cables for various instrument configurations, see page 112.

** For heater jacket kits (16/kit), see page 102.

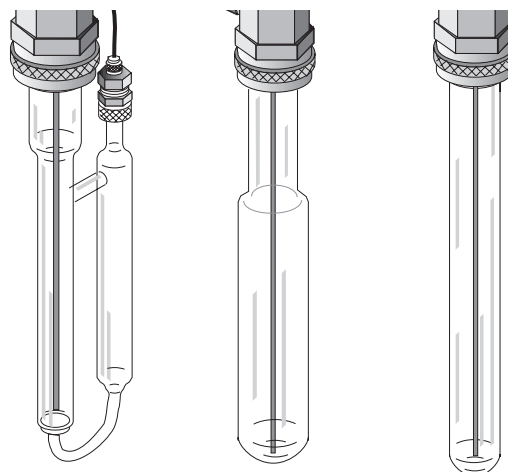
*** For appropriate needles for Model 4460A configurations, see page 113.

Replacement Parts and Supplies Model 4560 Sample Concentrators

Sample Heater Parts, Infra-Sparge		Part #
Lamp Cover Assembly		230060
Lamp - Sample Heater 4560		225656
Sparge Door Assembly		230052
Thermocouple - Assembly - Sample Heater		234112

Spargers* and Accessories		Part #
Frit	18 mm Neck O.D. 5 mL Swage Inlet	209015
Frit	18 mm Neck O.D. 25 mL Swage Inlet	209031
Needle	18 mm Neck O.D. 5 mL Swage Inlet	225623
Needle	18 mm Neck O.D. 10 mL Displ. 125/case	199521
Needle	18 mm Neck O.D. 25 mL Swage Inlet	225631
Needle Sparge Hardware Kit (No Glassware)		227397

Syringes		Part #
10 L x 2 in. Needle		167545
5 mL Sample with Luer		177659
5 mL Sample with Luer Kit (inc. 2 Syringes and 2 Valves)		177634
10 mL Sample with Luer		182006
25 mL Sample with Luer		172461
Syringe Valve - Teflon with Luer		177642



**Frit Sparger
(Swage Inlet)**

**Needle Sparger
(Reusable)**

**Needle Sparger
(Disposable)**

Traps		Part #
#0	Blank (No Sorbent)	228114
#7	Tenax Only	227348
#8	Tenax/Silica Gel	227363
#9	Tenax/Silica Gel/Charcoal	219972
#10	Tenax/Silica Gel/Carbon Molecular Sieve	228122
#11	Vocarb 3000	258830
#12	BTEX (Carbopack B/Carbopack C)	258848
MicroTrap "A" Carboxen 1000 Kit		291435
MicroTrap "B" Carbosieve Kit		291443
MicroTrap "A" Carboxen 1000 Replacement Trap		283549
MicroTrap "B" Carbosieve Replacement Trap		287649

* For sparger kits, see page 103.

Replacement Parts and Supplies

Model 4560 Sample Concentrator

Tubing		Part #
Purge Gas Tube Assembly - Frit Sparger		227652
Purge Gas Tube Assembly - Needle Sparger		227389
Purge Gas Tube Assy. with Scrubber - Frit Sparger		249565
Purge Gas Tube Assy. with Scrubber - Needle Sparger		249557
Copper (Pre-cleaned)	1/8" x 0.070 mm I.D.	111427
Silicone	1/8" x 1/16" I.D. Clear	179812
Stainless Steel, Fused Silica Lined 48" (110 V)		249185
Stainless Steel, Fused Silica Lined 48" (220 V)		249466
Stainless Steel, Fused Silica Lined 60" (110 V)		249490
Stainless Steel, Fused Silica Lined 60" (220 V)		249508

Valves		Part #
KEL-F	3-Port Sample 10-32	218982
KEL-F	4-Port Sample	237180
Stainless Steel	6-Port with Linkage (No Actuator)	248575

Miscellaneous Parts		Part #
Battery	3.6 V Backup	211953
Board	CPU Board for 4560	228098
Firmware	EPROM with Instructions - 4560	254870
Fitting	Water Management Fitting	252874
Fuse	8 Amp Slo Blo	176851
Manual	Model 4560 Operator's Manual	227959
Sparge Filter	Assembly	209254
Thermocouple	Type K with Plug 48"	169749
Wrench	Sparger 1-1/8" Open-end	227975



To order call 1-800-653-1711 (USA/Canada) or 409-690-1711



Replacement Parts and Supplies

Model 4460A Sample Concentrator

Cables*	Part #
Handshake Pigtail HP 6890	252213
Handshake Pigtail HP 5890 (MSD Interface Below)	185868
Handshake Pigtail Varian 3400	188409
Model 4460A to any Handshake Pigtail	185827
Model 4460A to CFM	212530
Model 4460A to DPM-16, MPM-16, or MHC-16 (Rev B)	230656
Model 4460A to MHC-16 (Rev A)	192435
RS-232-C (PATTI II)	226621
Power Cord - 110 V North America	116038
Purge and Trap/External Heater Adapter	198259

Cables - MSD Interface	Part #
Handshake Pigtail HP 5971 or 5972 (DOS or UNIX)	209874
Handshake Pigtail HP 5971 (PASCAL)	209866
Handshake Pigtail HP 5970 (RTE-A)	209882

Ferrules	Part #
Brass, Gold Plated 1/4" Tube Front	200055
KEL-F 1/4-28, 1/16" x 0.8 mm	187203
Teflon 1/16" Tube (5/pk)	196220
Teflon 1/16" Tube Set (10/pk)	198432
Teflon 6 mm Tube (Sparger Inlet Arm)	224337
Teflon 12 mm Tube (10/pk)	223164
Teflon 18 mm Tube (10/pk)	224352

Fittings			Part #
Adapter	KEL-F Female Luer 1/4-28	Syringe Port	169468
Tee	Stainless Steel, Gold Plated	Sparge Mount	176398
Union	Brass 1/4"-1/16" Male	Sparge Inlet Arm	227223
Union	Brass, Gold Plated 1/2"-1/4" Tube Male		187245
Union	Brass, Gold Plated 3/4"-1/4" Tube Male		198531
Union	Stainless Steel 1/16" Tube Male With Ferrules		165747

Heater Jackets (Single)**			Part #
Frit Sparger	5 or 25 mL	110/220 V	218669
Needle Sparger	5 mL	110/220 V	198739
Needle Sparger	25 mL	110/220 V	199406

Needles***			Part #
Frit Spargers	19.6 cm		203042
Frit (6 mm Neck) Spargers	20.3 cm		185108
Needle (inc. Disposable) Spargers	21.0 cm	(Side Hole)	203018

* For appropriate cables for various instrument configurations, see page 112.

** For heater jacket kits (16/kit), see page 102.

*** For appropriate needles for Model 4460A configurations, see page 113.

Replacement Parts and Supplies

Model 4460A Sample Concentrator

Spargers* and Accessories

				Part #
Frit	6 mm Neck O.D.	5 mL	Swage Inlet	197632
Frit	6 mm Neck O.D.	5 mL	Septum Inlet	175655
Frit	6 mm Neck O.D.	25 mL	Septum Inlet	175663
Frit	12 mm Neck O.D.	5 mL	Swage Inlet	196626
Frit	12 mm Neck O.D.	25 mL	Swage Inlet	196469
Frit	18 mm Neck O.D.	5 mL	Swage Inlet	209015
Frit	18 mm Neck O.D.	25 mL	Swage Inlet	209031
Needle	12 mm Neck O.D.	5 mL	Swage Inlet	187484
Needle	12 mm Neck O.D.	25 mL	Swage Inlet	188508
Needle	18 mm Neck O.D.	5 mL	Swage Inlet	225623
Needle	18 mm Neck O.D.	10 mL	Displ. 125/case	199521
Needle	18 mm Neck O.D.	25 mL	Swage Inlet	225631
Septa - Purge Inlet 6 mm x 8 mm (3/pk)				196345

Syringes

		Part #
10 µL x 2 in. Needle		167545
5 mL Sample with Luer		177659
5 mL Sample with Luer Kit (inc. 2 Syringes and 2 Valves)		177634
10 mL Sample with Luer		182006
25 mL Sample with Luer		172461
Syringe Valve - Teflon with Luer		177642

Traps

		Part #
#0	Blank (No Sorbent)	169509
#1	Tenax Only	169559
#2	OV-1/Tenax	169567
#3	OV-1/Tenax/Silica Gel	169517
#4	OV-1/Tenax/Silica Gel/Charcoal	169525
#5	Tenax/Silica Gel	206227
#6	Tenax/Silica Gel/Charcoal	206235
#6M	Tenax/Silica Gel/Carbon Molecular Sieve	248567

Tubing

		Part #
Copper (Prcleaned)	1/8" x 0.070 mm I.D.	111427
Silicone	1/8" x 1/16" I.D. Clear	179812
Stainless Steel, Fused Silica Lined 48" (110 V)		249185
Stainless Steel, Fused Silica Lined 48" (220 V)		249466
Stainless Steel, Fused Silica Lined 60" (110 V)		249490
Stainless Steel, Fused Silica Lined 60" (220 V)		249508

Valves

		Part #
KEL-F	3-Port Sample 1/4-28	169484
Stainless Steel	6-Port with Pneumatic Actuator	175225
Stainless Steel	6-Port (Valve Only)	164236

Miscellaneous Parts

		Part #
Board	Processor Board for 4460A	169806
Firmware	EPROM - 4460A	192534
Fuse	8 Amp Slo Blo	176851
Kit	4460A Hook-up Kit	177592
Manual	Model 4460A Operator's Manual	177354
Scrubber	Hydrocarbon 1/8"	169765
Serial Port	Add RS-232-C Kit	200758
Sparge Mount	Conversion Kit 1/4" to 12 mm	199992
Sparge Mount	Conversion Kit 1/4"/12 mm to 18 mm	199893
Thermocouple	Type K with Plug 48"	169749

* For sparger kits, see page 103.



To order call 1-800-653-1711 (USA/Canada) or 409-690-1711

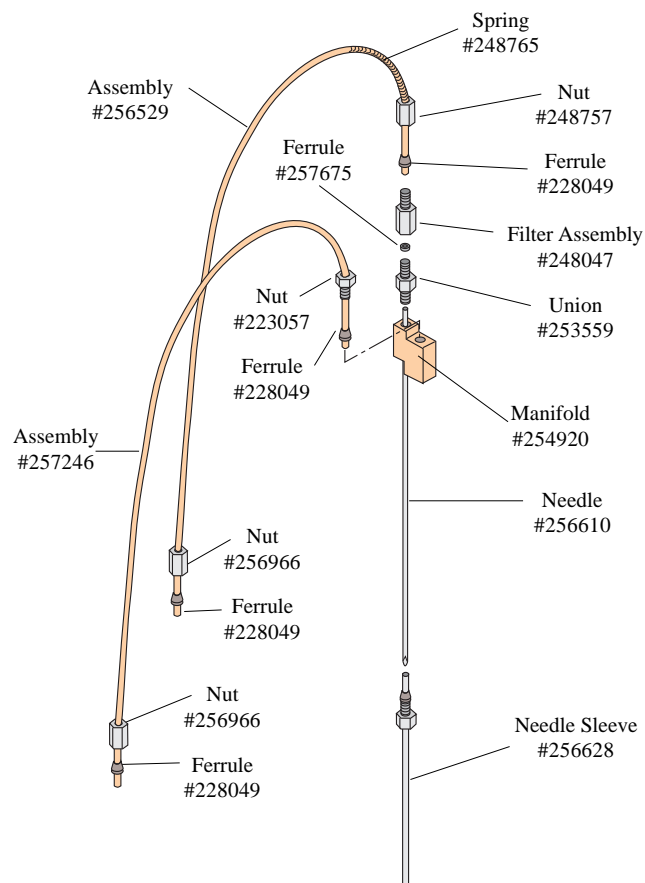


Replacement Parts and Supplies

Model 4551 Vial Autosampler

Glassware		Part #
Assembly	Reagent Water Bottle	248915
Bottle	1 Gallon Amber	257360
Caps	Open Hole for 40 mL Vials	72/pack 296079
Septa	Silicon, Teflon-Faced for 40 mL Vials	72/pack 296061
Vials	40 mL VOA	72/case 296087
Vial Kit	40 mL VOA Vials with Caps and Septa	72/kit 296053
Vial	Wash/Waste Station	232801
Miscellaneous Parts		Part #
Battery	3.6 V Back-up	211953
Cable	BNC to BNC - 5 ft.	235515
Cord	Power Cord - 110 V North America	116038
Cover	Carousel	257436
Cover	Loop	257451
Cover	Needle Drive	253518
Ferrule	1/16" Tube Brass	228049
Ferrule	1/8" Tube Tefzel	263756
Filter Assembly	Sample Filter Assembly	248047
Firmware	Model 4551 (Latest Revision)	257147
Fitting Nut	Polypr 1/4-28, 1/8" Tube	263764
Fuse	2 Amp 250 V Slo Blo	211441
Fuse	3.15 Amp 5 mm x 20 mm	257329
Manual	Model 4551 Operator's Manual	235895
Needle	Septum Piercing with Ferrule Attached	256610
Needle	Transfer Gas Sleeve, Nut & Ferrule Attached	256628
Nut	1/16" Stainless Steel Female	256966
Nut	1/16" Stainless Steel Male	223057
Nut	1/16" Stainless Steel Spring	248757
Regulator	In-Line, 1/8" Female Fittings, 0-60 psi Gauge	260414
Sample Loop	5 mL	235911
Sample Loop	25 mL with Clip	263772
Sample Loop	25 mL without Clip	259507
Tray	Sample Tray Assembly	234815
Union	Stainless Steel 1/16" Male DSF	253559
Upgrade Kit		264150
Valve Assembly	6-Port	263673

Needle Drive Assembly Parts (see drawing)		Part #
Assembly	PEEK Sample Transfer	256529
Assembly	PEEK Transfer Gas	257246
Ferrule	1/16" Brass Tube	228049
Ferrule	1/16" PEEK Tube Ring	257675
Filter Assembly	Sample Filter Assembly	248047
Needle	Septum Piercing with Ferrule Attached	256610
Needle	Transfer Gas Sleeve, Nut & Ferrule Attached	256628
Nut	1/16" Stainless Steel Female	256966
Nut	1/16" Stainless Steel Male	223057
Nut	1/16" Stainless Steel Spring	248757
Union	Stainless Steel 1/16" Male DSF	253559



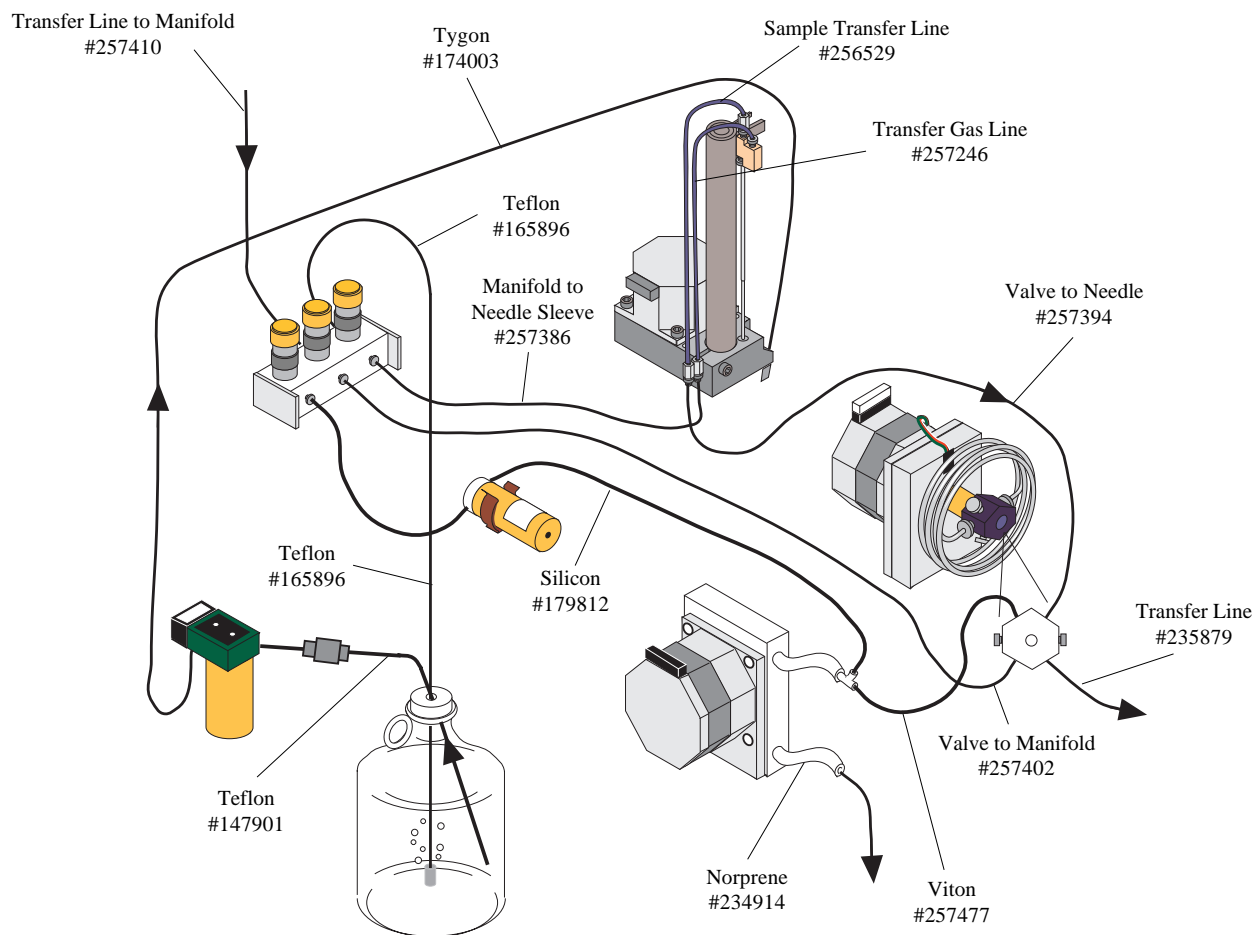
Needle Drive Assembly

Replacement Parts and Supplies

Model 4551 Vial Autosampler

Tube Assemblies (see drawing)	Part #
Manifold to Needle Sleeve	257386
PEEK Sample Transfer	256529
PEEK Transfer Gas	257246
Transfer Line to Manifold	257410
Transfer Line to Model 4560/Transfer Line to SIM A	235879
Valve to Manifold	257402
Valve to Needle	257394

Tubing (see drawing)		Part #
Copper	1/8" x 0.070 mm I.D. Cleaned	111427
Norprene	1/8" x 3/8" I.D. x 9"	234914
Silicon	1/8" x 1/16" I.D. Clear	179812
Teflon	1/16" x 0.020 mm I.D.	165896
Teflon	1/8" x 0.063 mm I.D.	147901
Tygon	3/16" x 1/16" I.D.	174003
Tygon	1/4" x 1/8" I.D. Clear	257469
Urethane	1/8" x 1/16" I.D. Brown	257550
Viton	1/4" x 1/8" I.D. Black	257477



Model 4551 Tubing Schematic

Replacement Parts and Supplies

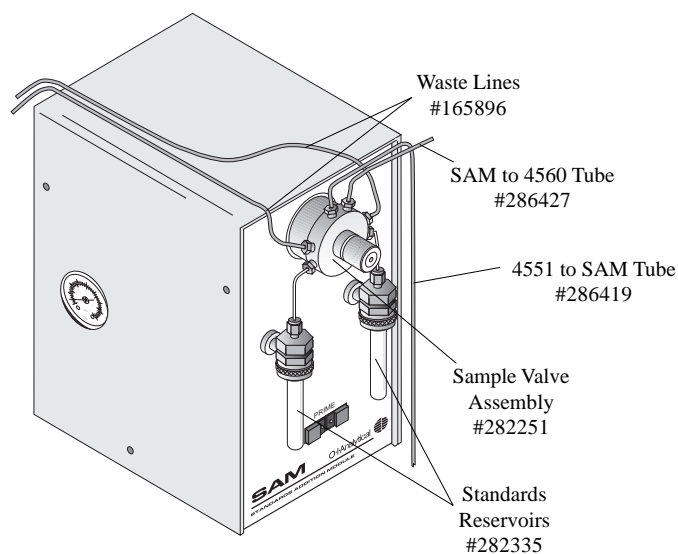
SAM and SIM/Spiker Options - Model 4551

SAM Parts - Model 4551

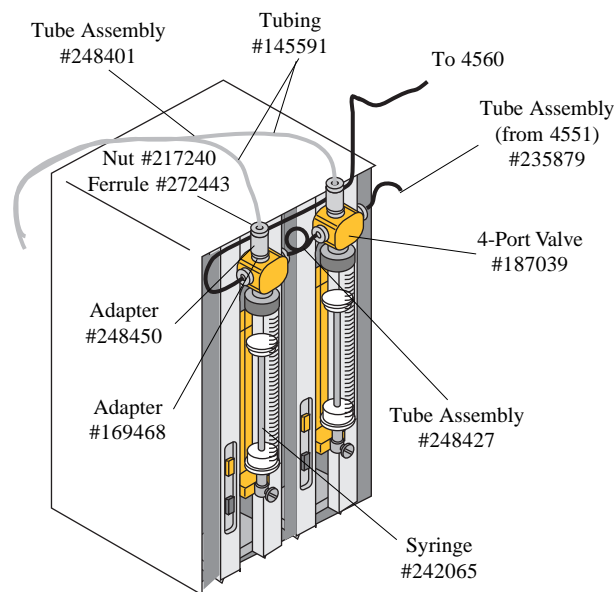
		Part #
Cable	Interface Model 4551 to SAM	282293
Ferrule	Teflon 12 mm (10/pk)	223164
Regulator	0-60 psi	282251
Standard Reservoir	SAM	282335
Tube Assembly	SAM Drain	165896
Tube Assembly	Model 4551 to SAM	286419
Tube Assembly	SAM to Model 4560	286427
Valve	6-port	282350

SIM/Spiker Parts - Model 4551

		Part #
Adapter	Brass, Nickel-Plated Female 10-32 Male Luer	248450
Adapter	KEL-F Female Luer 1/4-28	169468
Cable	Interface Model 4551 to SIM	257683
Ferrule	Teflon 1/16" Tube (5/pk)	272443
Nut	Stainless Steel 1/16" Male Knurled	217240
Syringe	10 mL Sample with Luer 1/4-28	242065
Tube Assembly	Model 4551 to SIM A	235879
Tube Assembly	SIM A to Model 4560	248419
Tube Assembly	SIM A to SIM B	248427
Tube Assembly	SIM B to Model 4560	248435
Tube Assembly	SIM Waste with Fittings	248401
Tubing	Teflon 1/16" x 0.031 mm I.D.	145591
Valve	4-port, Hamilton	187039



SAM Option



**SIM/Spiker Option with
SIM A and SIM B**

Replacement Parts and Supplies

Model 4552 W/S Autosampler

Model 4552 W/S Autosampler		Part #
Bar Code Reader		276709
Bath	Recirculating for Cooling of Sample Vials	261909
Cable	to OI 4460A/4560 to Varian 3400/3700	251694
Kit	Needle Sparge Conversion to SoilVial	276717
Kit	Rinse Water - for Interfacing Direct Water Line to Model 4552 W/S	276725
Kit	SoilVial Conversion to Needle Sparge	276733

Gas Controllers	Part #
Helium Flow Controller	03-504156-00
Purge Gas Pressure Gauge	03-500339-00
Purge Gas Regulator	03-502772-00

Interface Cables	Part #
Handshake Pigtail to HP 6890	252213
Handshake Pigtail to HP 5890	185868
Handshake Pigtail to Varian 3400	188409
Handshake Pigtail to Shamadzu 17A	244483
To OI 4460/4560 or Tekmar LSC-2 to HP 5890	284935
To OI 4560 to HP 6890	03-505789-00
To OI 4460/4560 to Varian 3400/3700	03-505638-00
To OI 4460/4560 to HP 5890, RTE HP 1000 GC/MS software, HP 5970 MSD, or HP 5988 MS	03-505639-00
To Tekmar LSC-2000/3000	03-505633-00
To Tekmar LSC-2000/3000 to HP 5890	03-505634-00
To Tekmar LSC-2000/3000 to Varian 3400/3700	03-505635-00
To Tekmar 2000/3000 with HP 6890	03-505697-00
To Tekmar 2000/3000 with HP 5890 with 5970/71/72 MSD and Unix-B or MS-DOS, and HP 5890/5989 MS Engine	03-505698-00
To Tekmar LSC-2000/3000 with HP 5995/85/87/88/92	03-505876-00

Internal Standard Parts		Part #
Ferrule	3/8" Teflon, for Reservoir Vial	03-694637-00
Rotor Loop	1 µL for Standards Valve	03-505726-00
Valve	Valco 6-Port, Internal Standard	03-505478-00
Valve	Valco 6-Port with Motor, Internal Standard	03-505879-00
Vial	5 mL, Standard Reservoir	03-505484-00

Lines/Fittings	Part #	
Ferrule	1/16" Valco (5/pk)	196246
Ferrule	1/16" Stainless Steel (5/pk)	178277
Ferrule	1/16" Tefzel Flangeless	03-211533-00
Fitting	1/16" Blue Aluminum Nut	03-211504-00
Line	Standard #1 Pick-up	03-505507-00
Nut	1/16" Stainless Steel (5/pk)	169715
Transfer Line	Soil-Purge-Gas (Ni tubing only)	03-505745-00
Transfer Line	w/Heater Assembly, Tekmar 2000/3000	03-700001-01
Transfer Line	w/Heater Assembly, Model 4560	03-700001-02
Transfer Line	w/Heater Assembly and Bracket/Clamp, Tekmar 2000/3000	03-700025-90
Transfer Line	w/Heater Assembly and Bracket/Clamp, Model 4560	03-700025-91
Transfer Line	.062" x 0.40" x 60" Stainless Steel	03-505514-00

Miscellaneous	Part #
Magnetic Stirrers	03-505461-00
Reservoir Bottle, Safety Coated 80 oz.	03-503906-00
Wash Bottle Plug Assembly	03-505816-00
Water Cup	03-505451-00
Water/Elevator Plate	03-505433-00
Water Probe Screen, 10 µL	03-505598-00



To order call 1-800-653-1711 (USA/Canada) or 409-690-1711



Replacement Parts and Supplies

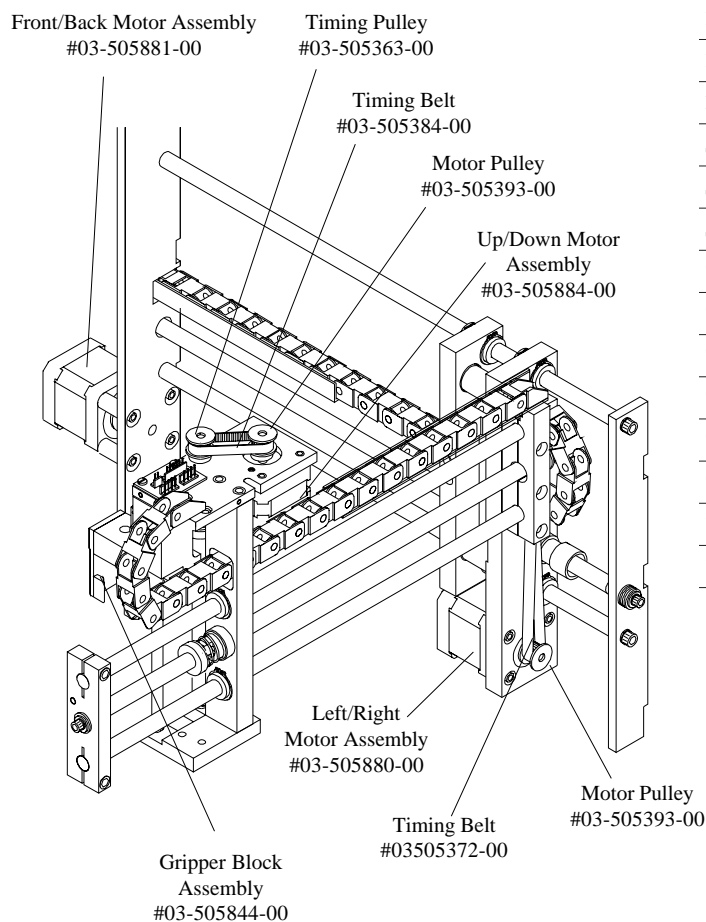
Model 4552 W/S Autosampler

Probe Assemblies

	Part #
Needle Sparge Probe Assembly	03-505741-00
Soil Probe Assembly	03-505490-00
Soil Purge Gas Needle Assembly	03-505463-00
Water Probe Assembly	03-505739-00

Robotic Mechanism Parts

	Part #
Elevator Motor Assembly	03-505729-00
External Ground Wire	03-504235-00
Fuse, 6 amp 250 V	170449
Microswitch	03-500223-00
Motor Assembly, Front/Back	03-505881-00
Motor Assembly, Left/Right	03-505880-00
Motor Assembly, Up/Down	03-505884-00
Motor Assembly, Stir	03-505272-00
Motor Pulley, 1/4" for Elevator and Syringe	03-505429-00
Motor Pulley, Front/Back, Left/Right, and Up/Down	03-505393-00
Probe Block Heater Assembly	03-505724-00
Sensor Assembly, No Vial	03-505269-00
Soil/Vial and Upper Soil Heater Assembly	03-505725-00
Syringe and Elevator Limit Switch Assembly	03-505273-00
Timing Belt, Front/Back Motor	03-505362-00
Timing Belt, Left/Right Motor	03-505372-00
Timing Belt, Up/Down Motor	03-505384-00
Timing Belt, Vial Elevator and Syringe Motors	03-505477-00
Timing Pulley, Leadscrew	03-505363-00
Transfer Line Heater Assembly	03-505722-00
Vial Gripper Block Assembly	03-505844-00
Vial Gripper Piston and O-ring	03-505389-00
Water Heater Assembly	03-505596-00

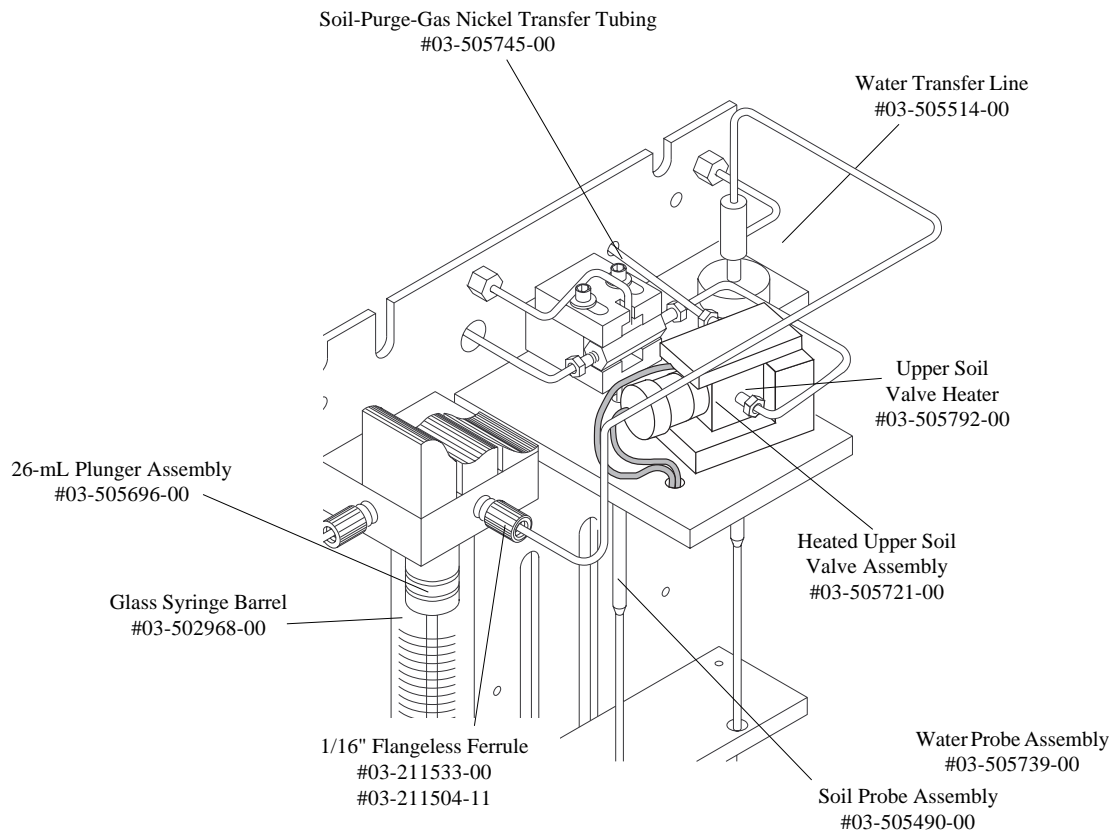


Replacement Parts and Supplies

Model 4552 W/S Autosampler

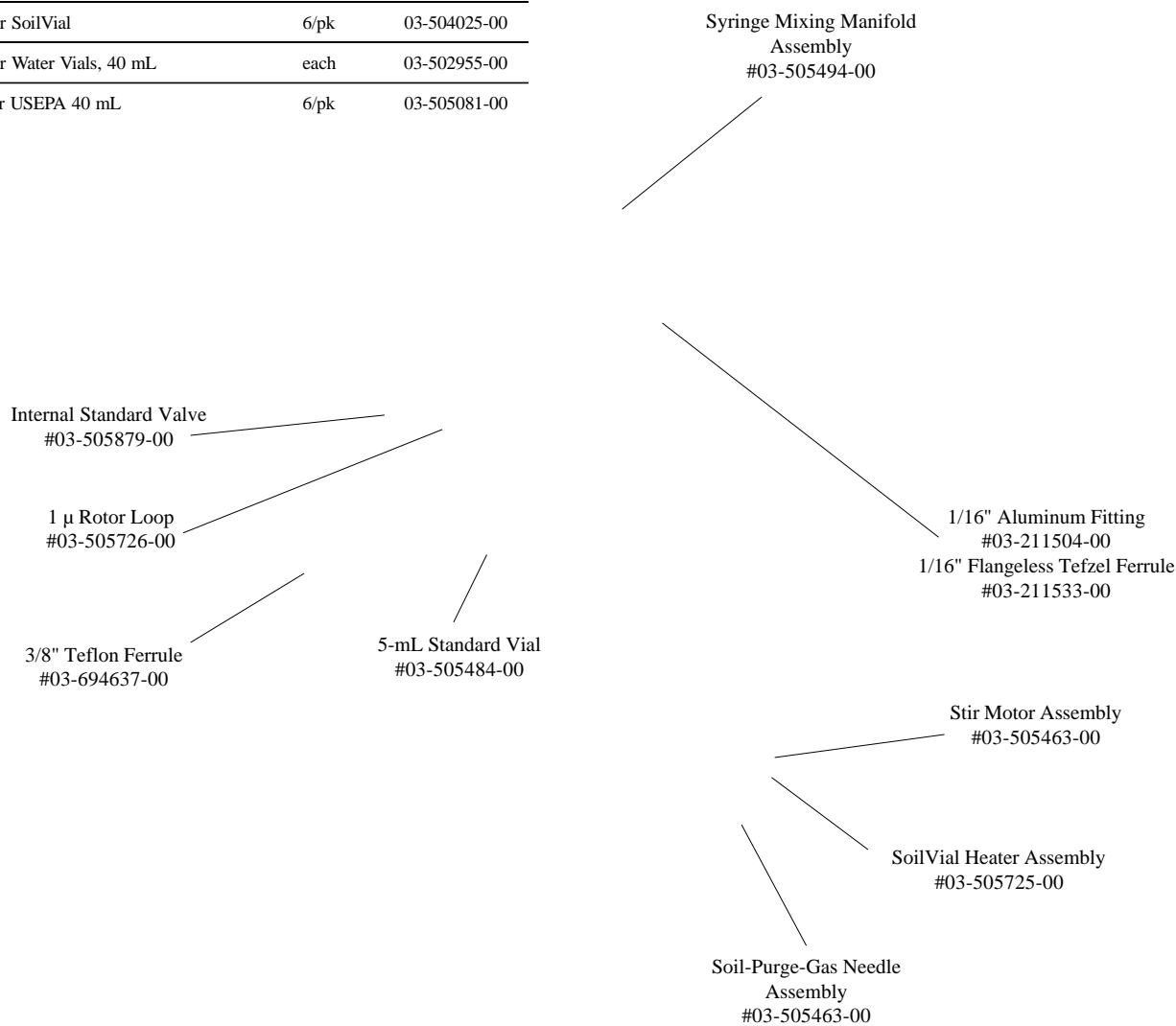
Syringe Parts	Part #
O-ring	03-505495-00
Plunger Assembly, 26 mL	03-505696-00
Plunger (no O-ring)	03-505460-00
Plunger Rod	03-502959-00
Plunger Drive Bracket	03-505439-00
Syringe, Luer Lock 5 mL	290320
Syringe, Luer Lock 10 mL	290338
Syringe Glass Barrel	03-502968-00
Syringe Mixing Manifold Assembly	03-505494-00
Syringe Mount	03-505450-00
Syringe Packing	03-505441-00

Valves	Part #
Heater Assembly for Upper Soil Valve	03-505792-00
Purge Gas Cut-off Valve Assembly	03-505791-00
Solenoid Mixing Manifold Assembly	03-505497-00
Valve Assembly, 2-Way Gripper Solenoid	03-505194-00
Valve Assembly, 3-Way Soil Purge Gas Solenoid	03-505166-00
Valve Assembly, Burkert Solenoid	03-505720-00
Valve, Heated 3-Way, Upper Soil	03-505721-00



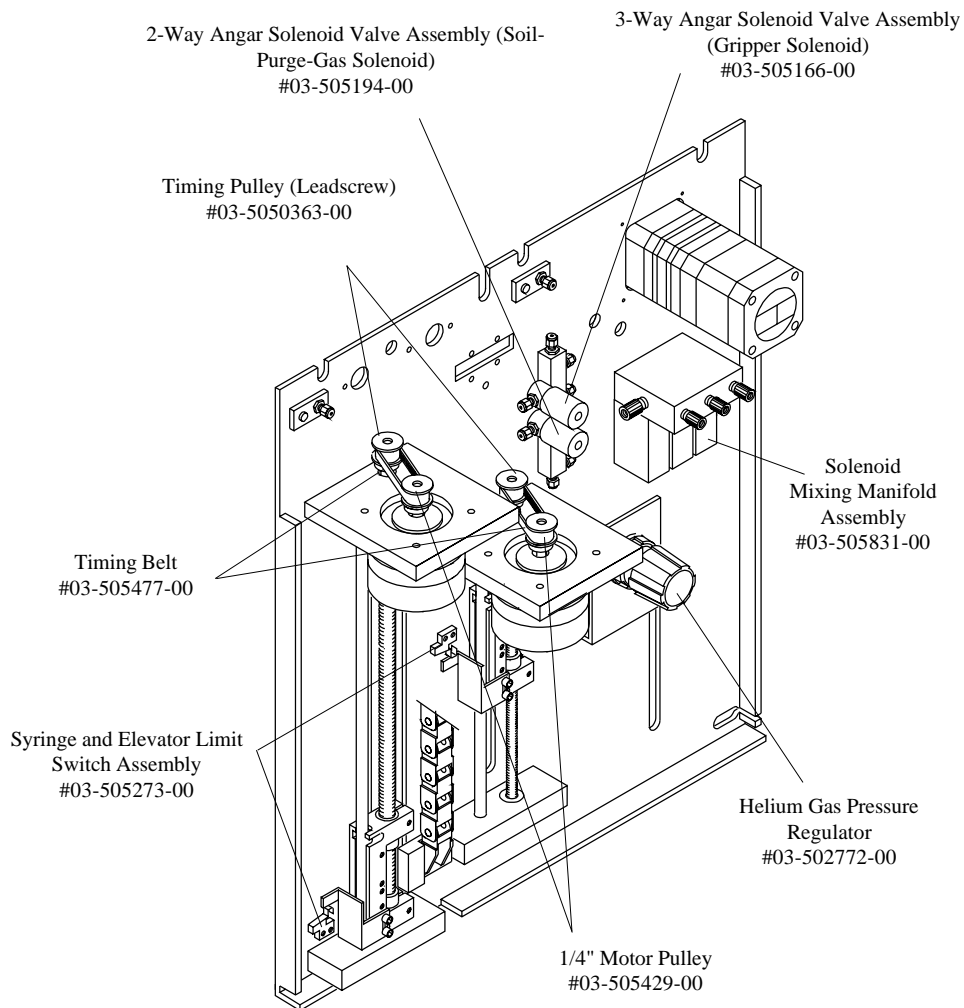
Replacement Parts and Supplies Model 4552 W/S Autosampler

Vials/Septa		Part #
Screw Cap Vials, 40 mL (with caps and septa)	72/pk	296053
Septa, Teflon/Silica Water Vial	72/pk	296061
Soil Septa, Low Bleed	300/pk	03-504104-00
Soil Vial, 40 mL	6/pk	03-504099-00
Soil Vial, 40 mL	72/pk	03-505019-00
Soil Vial, 40 mL	144/pk	03-505020-00
Stir Bars for Soil Vial	6/pk	03-504025-00
Stir Bars for Water Vials, 40 mL	each	03-502955-00
Vials, Water USEPA 40 mL	6/pk	03-505081-00



Replacement Parts and Supplies

Model 4552 W/S Autosampler



To order call 1-800-653-1711 (USA/Canada) or 409-690-1711

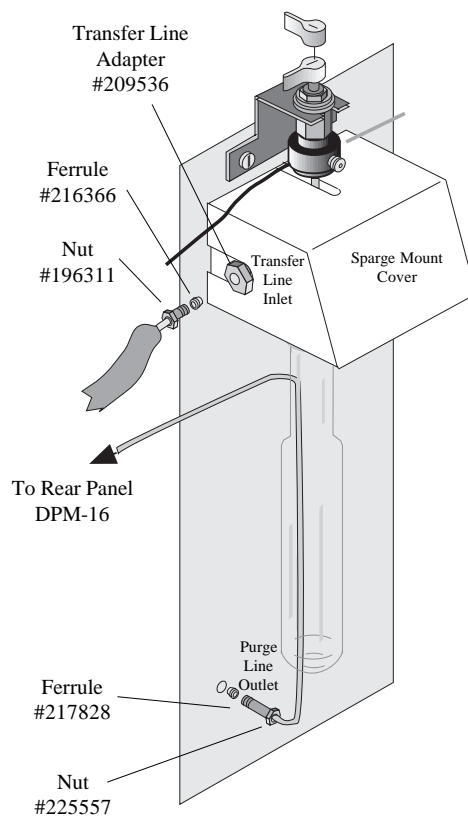


Replacement Parts and Supplies DPM-16 and MPM-16 Autosamplers

DPM	MPM	Ferrules		Part #
■		Brass	1/16" Tube Reverse	228049
	●	Brass, Gold-Plated	1/4" Tube Front	200055
■		Graphite/Vespel	1/16" Tube	10/pk 216366
■	●	KEL-F 1/4-28	1/16" x 0.8 mm	5/pk 196204
■		Stainless Steel, Gold-Plated	1/16" Tube	5/pk 217828
■	●	Stainless Steel	1/16" Tube	5/pk 196246
■	●	Teflon	1/16" Tube	5/pk 196220
	●	Teflon	1/16" Tube Set	10/pk 198432
■	●	Teflon	6 mm Tube	224337
	●	Teflon	12 mm Tube	10/pk 223164
■	●	Teflon	18 mm Tube	10/pk 224352

DPM	MPM	Fittings		Part #
■		Adapter	Transfer Line Adapter 4560	209536
■	●	Luer	KEL-F Female Luer 1/4-28	169468
■	●	Nut	Aluminum 1/4-28, 1/16" (5/pk)	196287
	●	Nut	Brass 1/2" Tube Female Knurled	198408
■		Nut	Stainless Steel 1/16" x 1" Male	225557
■	●	Nut	Stainless Steel 1/16" Male (5/pk)	196311
■		Nut	Stainless Steel 1/16" Male Knurled	217240
■	●	Nut	Stainless Steel 18 mm Female Knurled	224675
	●	Nut	Stainless Steel, Gold-Plated 1/4" Male	188979
	●	Tee	Stainless Steel, Gold-Plated 1/4" Sparge Mount	176398
■	●	Union	Brass 1/4"-1/16" Male	197251
	●	Union	Brass, Gold-Plated 1/4"-1/2" Tube Male	187245
	●	Union	Brass, Gold-Plated 1/4"-3/4" Tube Male	198531
	●	Union	Stainless Steel 1/16" Tube Female	187161
	●	Union	Stainless Steel Bulkhead 1/16" Tube Female	175829
■		Union	Stainless Steel, Gold-Plated 18 mm (w/o Nut)	271809

DPM	MPM	Gas Line Connections (see drawing)		Part #
■		Adapter	Transfer Line 4560 Adapter Fitting	209536
■		Ferrule	Graphite/Vespel 1/16" Tube (10/pk)	216366
■		Ferrule	Stainless Steel, Gold-Plated 1/16" Tube (5/pk)	217828
■		Nut	Stainless Steel 1/16" x 1" Male	225557
■	●	Nut	Stainless Steel 1/16" Male (5/pk)	196311



**DPM-16 to Model 4560
Gas Line Connections**

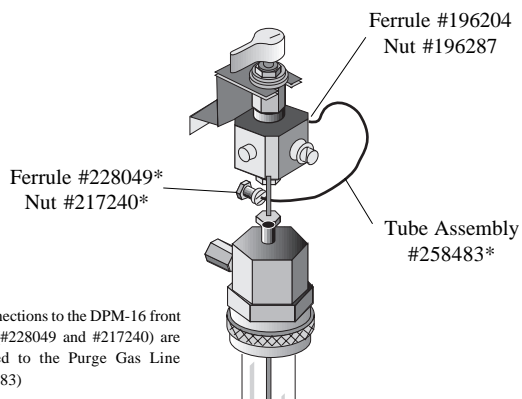
Replacement Parts and Supplies DPM-16 and MPM-16 Autosamplers

DPM	MPM	Heater Jacket Kits**				Part #
■	●	Needle Sparger	5 mL	110/220 V	16/kit	198689
■	●	Needle Sparger	10/25 mL	110/220 V	16/kit	198697
■	●	Frit Sparger	5/25 mL	110/220 V	16/kit	218651

DPM	MPM	Miscellaneous Parts		Part #
■		Bracket	Sample Valve Mounting Bracket	252049
■		Fuse	5 Amp Fas Blo	247957
■		Heater Line	Heated Transfer Line 48"	247783
	●	Heater Line	Heated Transfer Line 60"	188896
■		Manual	DPM-16/MHC-16 Operator's Manual	248393
	●	Manual	MPM-16/MHC-16 Operator's Manual	206862
■	●	Mud-Dawgs	Mud-Dawgs (50/pack)	215061

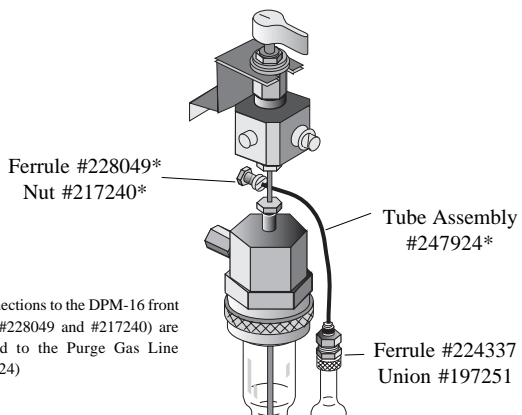
DPM	MPM	Needles***		Part #
	●	Frit or Needle Spargers	19.6 cm	203042
■	●	Needle (inc. Disposable) Spargers	19.5 cm (Side Hole)	232348
■	●	Needle (inc. Disposable) Spargers	21.0 cm (Side Hole)	203018

DPM	MPM	Purge Tube Connections (see drawing)		Part #
■		Ferrule	Brass 1/16" Tube Reverse	228049
■	●	Ferrule	KEL-F 1/4-28 1/16" x 0.8 mm (5/pk)	196204
■	●	Ferrule	Teflon 6 mm Tube	224337
■	●	Nut	Aluminum 1/4-28, 1/16" (5/pk)	196287
■		Nut	Stainless Steel 1/16" Male Knurled	217240
■		Tube Assembly	DPM-16 Frit Sparging Purge	247924
■		Tube Assembly	DPM-16 Needle Sparging Purge	258483
■	●	Union	Brass 1/4" - 1/16" Male	197251



* Connections to the DPM-16 front panel (#228049 and #217240) are attached to the Purge Gas Line (#258483)

DPM-16 Purge Tube Connections for Needle Sparging



* Connections to the DPM-16 front panel (#228049 and #217240) are attached to the Purge Gas Line (#247924)

DPM-16 Purge Tube Connections for Frit Sparging

Replacement Parts and Supplies DPM-16 and MPM-16 Autosamplers

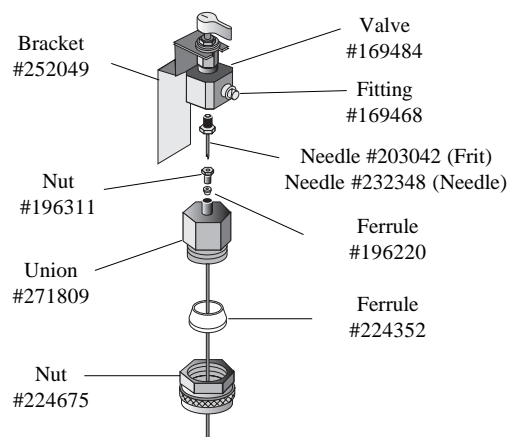
DPM	MPM	Sparger Kits*				Part #
●		Frit	12 mm Neck O.D.	5 mL	16/kit	187914
●		Frit	12 mm Neck O.D.	25 mL	16/kit	187906
■		Frit	18 mm Neck O.D.	5 mL	16/kit	247916
●		Frit	18 mm Neck O.D.	5 mL	16/kit	232199
■		Frit	18 mm Neck O.D.	25 mL	16/kit	247932
●		Frit	18 mm Neck O.D.	25 mL	16/kit	232215
●		Needle	12 mm Neck O.D.	5 mL	16/kit	187898
●		Needle	12 mm Neck O.D.	25 mL	16/kit	187880
■ ●		Needle	18 mm Neck O.D.	5 mL	16/kit	232207
■ ●		Needle	18 mm Neck O.D.	10 mL	Dispbl. 125/case	199521
■ ●		Needle	18 mm Neck O.D.	25 mL	16/kit	232223

DPM	MPM	Syringes	Part #
■ ●		10 µL x 2" Needle	167545
■ ●		5 mL Sample with Luer	177659
■ ●		5 mL Sample with Luer Kit (inc. 2 Syringes and 2 Valves)	177634
■ ●		10 mL Sample with Luer	182006
■ ●		25 mL Sample with Luer	172461
■ ●		Syringe Valve - Teflon with Luer	177642

DPM	MPM	Tube Assemblies	Part #
■		DPM-16 Frit Sparging Purge Tube Assembly	247924
■		DPM-16 Needle Sparging Purge Tube Assembly	258483
■		PEEK Purge Line Kit (16/kit)	222729
●		Stainless Steel 4460A to MPM-16 Purge Gas Tube	188623

DPM	MPM	Valves	Part #
■		KEL-F 3-Port Sample Valve 1/4-28	169484
■ ●		Stainless Steel 34-Port with Electric Actuator (110 V)	187179
■ ●		Stainless Steel 34-Port with Electric Actuator (220 V)	233023

DPM	MPM	Sample Valve and Sparge Mount Assemblies (see drawing)		Part #
■		Bracket	Sample Valve Mounting Bracket	252049
■ ●		Ferrule	1/16" Tube Teflon (5/pk)	196220
■ ●		Ferrule	18 mm Tube Teflon (10/pk)	224352
■ ●		Fitting	KEL-F Female Luer 1/4-28	169468
●		Needle	Frit or Needle Spargers 19.6 cm	203042
■ ●		Needle	Needle Spargers 19.5 cm (Side Hole)	232348
■ ●		Nut	Stainless Steel 1/16" Male (5/pk)	196311
■ ●		Nut	Stainless Steel 18 mm Female Knurled	224675
■		Union	18 mm Stainless Steel Gold-Plated (w/o Nut)	271809
■		Valve	KEL-F 3-Port Sample Valve 1/4-28	169484



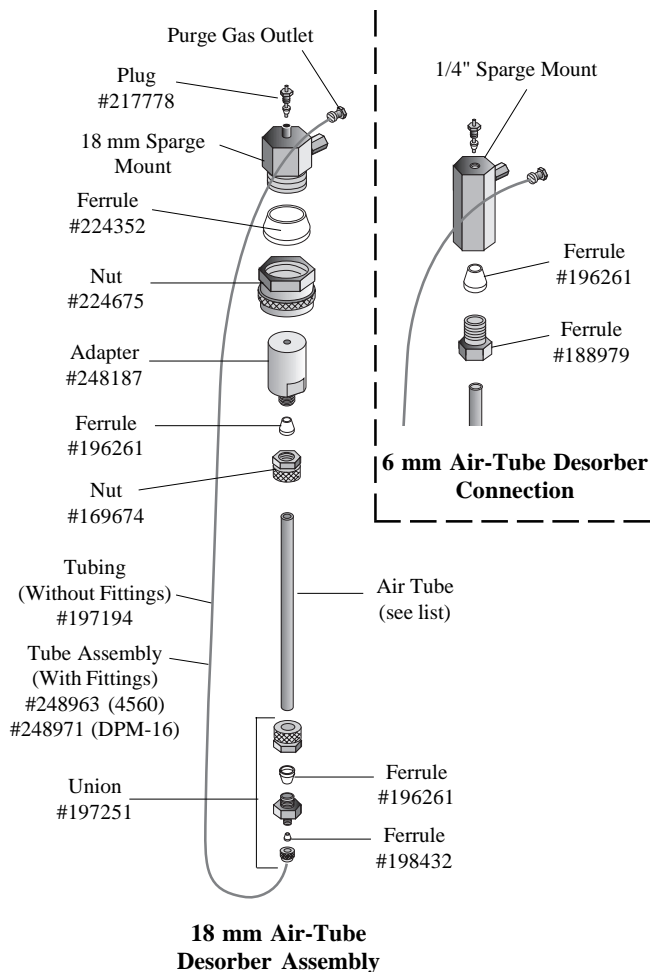
Sample Valve and Sparge Mount Assemblies

* For individual spargers, see page 89, 92, or 112.

Replacement Parts and Supplies Air Analysis Products

Air-Tube Desorber Accessory (see drawings)			Part #
Adapter	18 mm-1/4" Stainless Steel, Gold-Plated		248187
Air Tube	1/4" O.D. x 4.75" Stainless Steel, Glass-Lined		197319
Ferrule	1/16" Tube Set Teflon (10/pk)		198432
Ferrule	1/4" Tube Teflon (5/pk)		196261
Ferrule	18 mm Tube Teflon (10/pk)		224352
Nut	1/4" Female Knurled Stainless Steel		169674
Nut	1/4" Male Stainless Steel, Gold-Plated		188979
Nut	18 mm Stainless Steel Female Knurled		224675
Plug	1/16" Tube Male Stainless Steel (with Ferrule)		217778
Tube Assembly	4560 Purge to Air Tube		248963
Tube Assembly	DPM Purge to Air Tube		248971
Tubing	1/16" x 0.020 mm I.D. PEEK (w/o Attachments)		197194
Union Assembly	1/4" x 1/16" Male Brass (with Ferrules)		197251

Air Sampling Tubes and Containers				Part #
4.5" L	1/4" O.D.	Air-Tube Shipping Container		260299
4.5" L	1/4" O.D.	Trap	Blank	Stnls. Steel 260174
4.5" L	1/4" O.D.	Trap	Carbon Molecular Sieve	Stnls. Steel 260190
4.5" L	1/4" O.D.	Trap	Tenax	Stnls. Steel 260182
4.5" L	6 mm O.D.	Air-Tube Shipping Container		260307
4.5" L	6 mm O.D.	Trap	Blank	Glass 260208
4.5" L	6 mm O.D.	Trap	Carbon Molecular Sieve	Glass 260224
4.5" L	6 mm O.D.	Trap	Tenax	Glass 260216



VOST Desorber Accessory				Part #
Ferrule	1/4" Tube	Teflon	(5/pk)	196261
Ferrule	1/16" Tube	Teflon	(5/pk)	196220
Nut	1/16" Male	Stainless Steel	(5/pk)	196311
Tube	VOST	Glass		229716
Tubing	1/16" x 0.020 mm I.D.	PEEK	(/foot)	197194
Union	1/4"-1/16" Tube Male	Stainless Steel		229880
Union	1/4" Tube Male	Stainless Steel		229872

Replacement Parts and Supplies Cryo-Focusing Module (CFM)

Boards	Part #
Backplane Board	203661
Front Panel LED	203596
Front Panel Thumbwheel	203604
Microprocessor Board	203810
Power Supply	203802

Cables	Part #
Handshake Pigtail HP 5890/6890	185868
CFM to Injector HP 5890	204024
Model 4560 to CFM	226548
CFM Injector to Ground	229401
Probe-Thermocouple	216838

Ferrules	Part #
Graphite/Vespel 1/16" x 0.8 mm Tube	10/pk 196105
Graphite/Vespel 1/16" x 0.5 mm Tube	10/pk 196113
Graphite/Vespel 1/16" Tube	10/pk 216366
Graphite/Vespel Adapter 1/16" x 0.5 mm	5/pk 217679
Graphite/Vespel Adapter 1/16" x 0.4 mm	5/pk 217687
Graphite/Vespel Adapter 1/16" x 0.8 mm	5/pk 216416
Graphite/Vespel Adapter 1/16" x 0.2 mm	5/pk 217695

Fittings	Part #
Adapter 1/16" Tee LDVI	217851
Nut 1/16" Female Extended	218024
Nut Stainless Steel Injector 10-32 x 26 Gauge	187104
Union Brass 1/4-1/8 Female	208785
Union Stainless Steel 1/16" Male Blank	208157
Union Stainless Steel Injector End	202671

Miscellaneous	Part #
Ceramic Column Cutter (3/pk)	206888
CFM Operator's Manual	202879
CFM Valve Assembly	203554
Cryo Focusing Control Module	203836
Fuse, 2 amp	115493
Heater Assembly - CFM Injector (115 V)	205708
Injector Assembly (115 V) HP 5890	202580
Locking Ring, Aluminum 1.25 x .75	206409
Power Cord (110 V)	116038
Septa, Silicone 3.3 mm x .125 (10/pk)	217984
Syringe, 10 L x 2"	167545
Thermocouple - Type K with Plug 10"	202846
Thermocouple - Type K 0.20 Stainless Steel	208314
Tube Assembly - Exhaust CFM	218123

Tubing	Part #
Alumina 1/16" x 0.031 x 6.5	206557
Cryogen Supply Line	208256
Fused Silica DB-1 Precolumn 0.53 mm I.D. (5/pk)	226134
Teflon 1/16" x 0.20 x 1.0" (5/pk)	217901
Uncoated Fused Silica Precolumn 0.53 mm I.D. (5/pk)	02754

Replacement Parts and Supplies

Low-Dead-Volume Injector

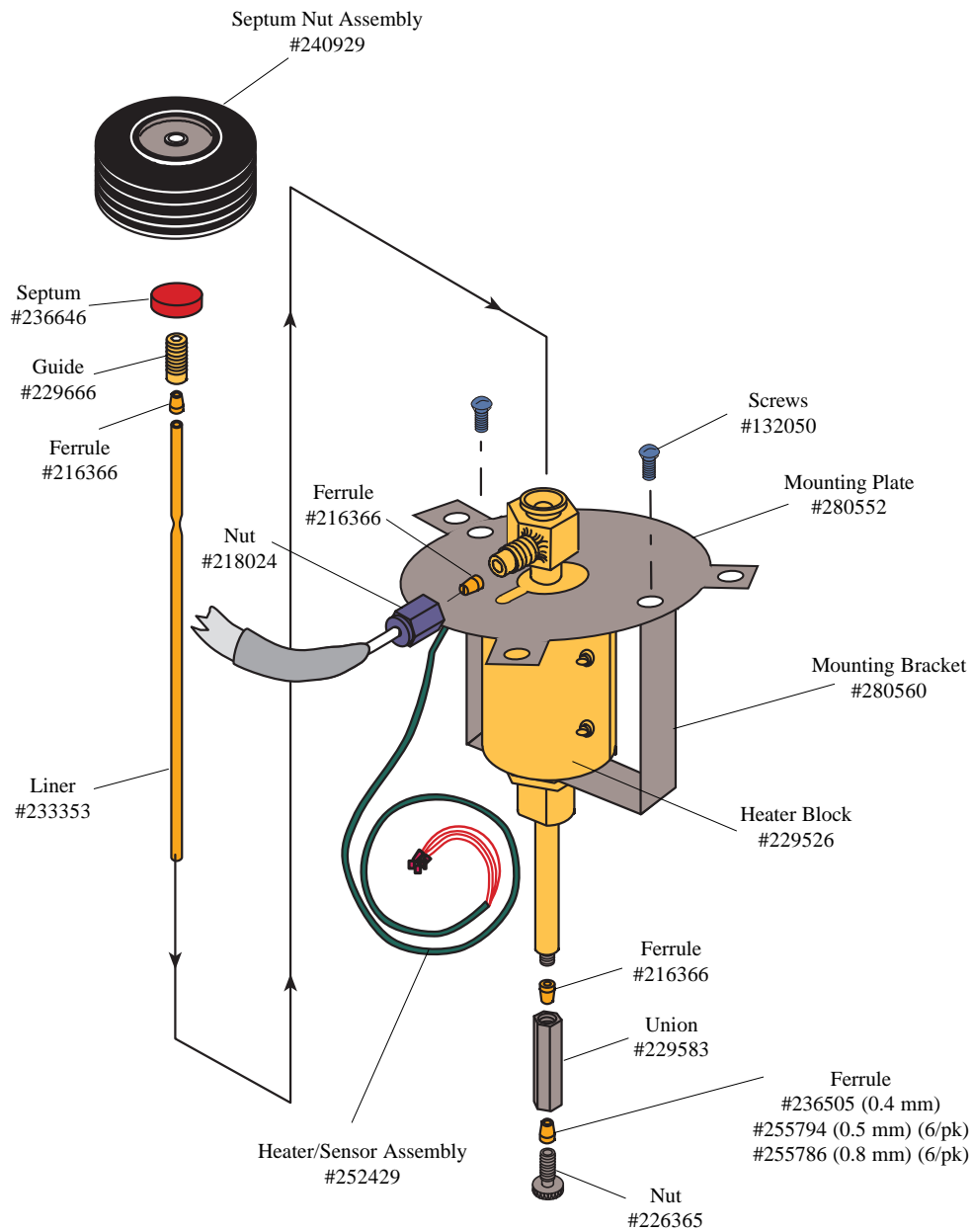
6890	5890	Low-Dead Volume Injector		Part #
■		Bracket	Injector Mounting	280560
■	●	Ferrule	Graphite/Vespel 1/32" x 0.4 mm	236505
■	●	Ferrule	Graphite/Vespel 1/16" Tube (10/pk)	216366
■	●	Ferrule	Graphite/Vespel 1/32" x 0.5 mm (6/pk)	255794
■	●	Ferrule	Graphite/Vespel 1/32" x 0.8 mm (6/pk)	255786
■	●	Guide	Secondary Needle Guide, 26 gauge	229666
■		Heater and Sensor Cable Assembly		252429
■		Heater Block		229526
■	●	Injector Body	Stainless Steel, Gold-Plated LDVI Body	242586
■		Manual	Installation and Maintenance Guide	280586
	●	Manual	Installation and Maintenance Guide	236414
■		Nut	Locking Hex	214817
■	●	Nut	Septum Nut Assembly, 26 Gauge	240929
■	●	Nut	Stainless Steel 1/32" Knurled Male	226365
■	●	Nut	Stainless Steel 1/16" Female Extended	218024
■		Plate	Injector Mounting	280552
■		Screws	Injector Mounting Bracket	132050
■		Screws	Mounting, TORX M4X10	252585
■	●	Septum	Septum 1/4" x 0.125" (5/pk)	236646
■		Tool	Allen Wrench 3/32	233346
■		Tube	LDVI Liner	233353
	●	Tube	Carrier Outlet Line Tube Assembly (ICM)	229302
■	●	Union	Stainless Steel 1/32" x 1/16" Female	229583



To order call 1-800-653-1711 (USA/Canada) or 409-690-1711



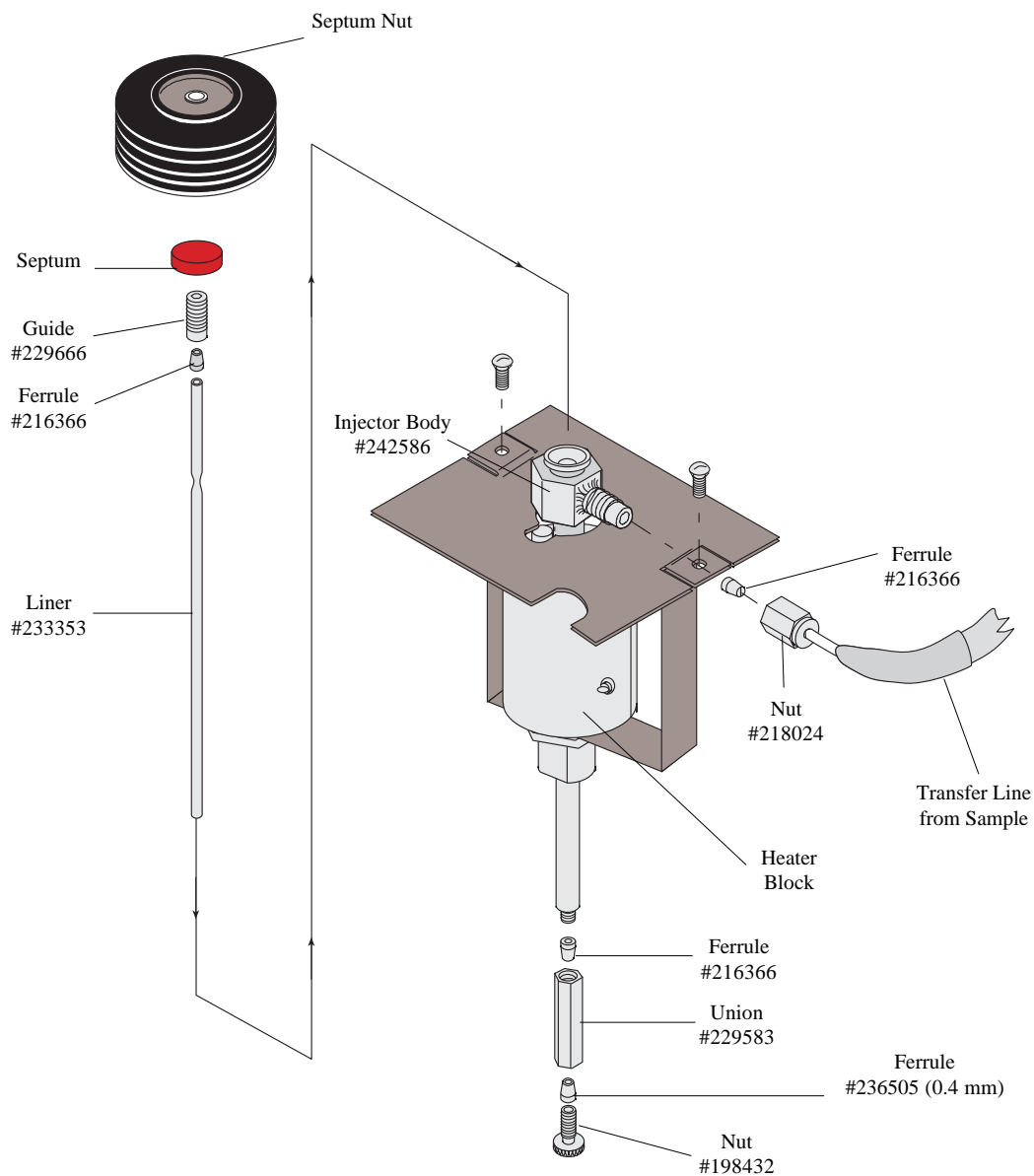
Replacement Parts and Supplies Low-Dead-Volume Injector



**Low-Dead-Volume Injector
For HP 6890 GC**

Replacement Parts and Supplies

Low-Dead-Volume Injector



**Low-Dead-Volume Injector
For HP 5890 GC**



To order call 1-800-653-1711 (USA/Canada) or 409-690-1711



Replacement Parts and Supplies

Model 4460A Autosampling and SIM

Autosampling System Parts		Part #
Cable Assembly	Model 4460A to LSM Interface	175457
Cable Assembly	LSM to ASM Interface	175473
Caps	Open Hole for 40 mL Vials (72/pk)	296079
Fitting	Tee - Stainless Steel 1/4-28, 1.9 mm I.D.	189373
Septa	Silicon, Teflon-Faced for 40 mL Vials (100/pk)	258566
Tubing	Teflon 1/16" x 0.010 mm I.D.	139065
Tubing	Teflon 1/16" x 0.031 mm I.D.	145591
Tubing	Teflon 1/8" x 0.063 mm I.D.	147901
Vials	40 mL VOA (72/box)	296087
Vial Kit	40 mL VOA Vials with Caps and Septa (100/case)	296053

SIM Parts - Model 4460A		Part #
Cable	4460A to SIM	186809
Drain Line	SIM Drain Line	193342
Ferrule	Stainless Steel 1/16" Tube (5/pk)	196246
Nut	Stainless Steel 1/16" Male (5/pk)	196311
Syringe	10 mL Luer-Lok SIM Syringe	182006
Tube Assembly	SIM to 4460A	187427

Replacement Parts and Supplies

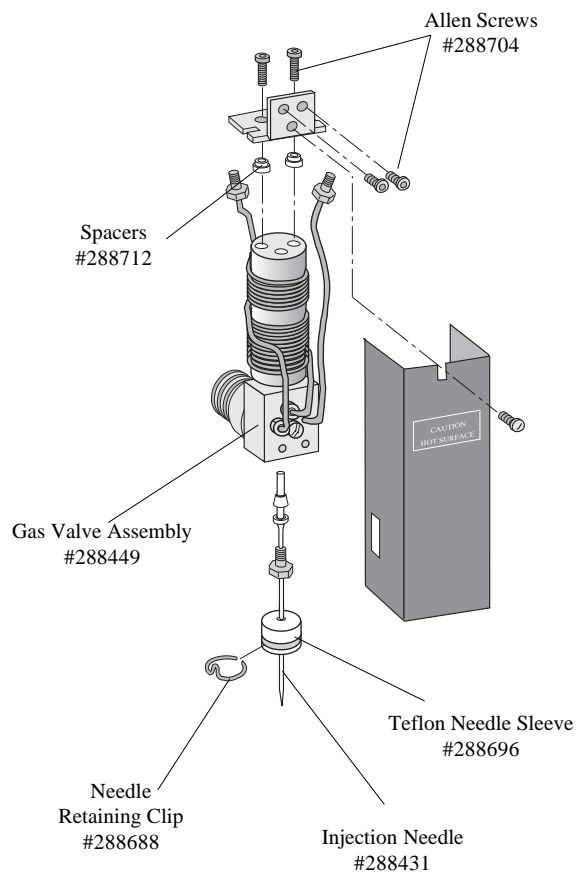
Model 4632 Headspace Autosampler

Boards	Part #
Injection Board #1	288860
Injection Board #2	288878
Injection Board #3	288886
Main Board	288845
Slave Board	288852

Loop/Needle/Valve	Part #
Bearings For 4-port Valve	288639
Cartridge 24 VDC Heater for 4-port Valve	288720
Clip For Needle-Guide	288688
Gas Valve Assembly	288449
Loop 1.5 mL Injection Valve	288423
Loop 1 mL Injection Valve	288407
Loop 0.5 mL Injection Valve	288415
Needle 0.7 mm with Ferrule	288431
Needle Nonassembled	288753
Rotor Teflon for Valve with Support	288563
Screws Allen, Valve Mounting	288704
Sleeve Teflon, for Needle	288696
Spacers Valve Mounting	288712
Valve Body 4-Port w/Tubing and Optic Polishing	288597

Miscellaneous	Part #
Bellows Left and Right	288555
Cable 9-pin Serial for PC Connection	288456
Display Keyboard Assembly	288787
Filter AC Line	289660
Heating Block Valve and Loop w/Heater and Sensor	288571
Transformer 2 x 12V 40VA	289652
Tray 32 Position	289694
Tray Insulated For Cooling	288654
Tubing Teflon, Arm w/Connector	288589
Tubing Teflon, Injection Head	288795
Valve Clippard	288761

Oven	Part #
Belt Agitation Motor	288621
Cartridge 110 VAC Heat for Oven	288738
Cartridge 220 VAC Heat for Oven	288746
Motor DC Gear	288647
Sensor Temperature PT100	288829
Wheel Rubber	288613



Replacement Parts and Supplies Model 4632 and Model 4105

Robotic Arm Components Part

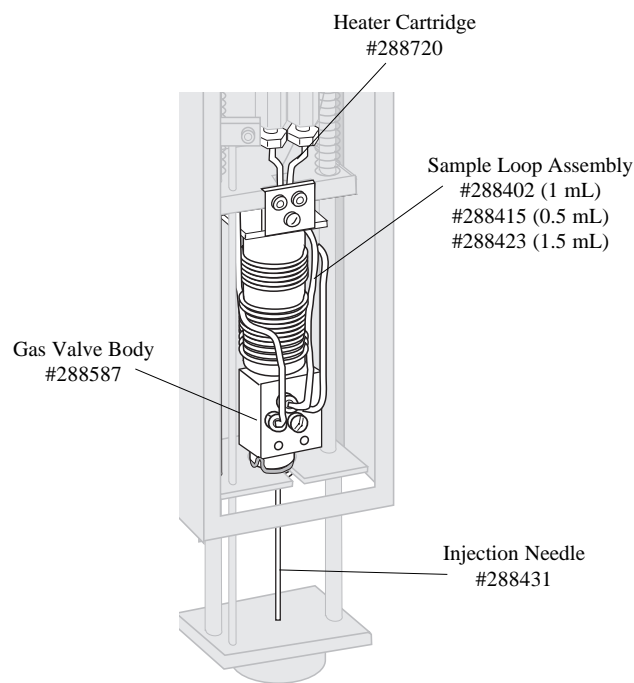
Belt	1032 mm X-axis	288514
Belt	335 mm Y-axis	288803
Belt	Z-axis	288811
Microswitch	Oven Limit	288837
Motor	Stepper	288522
Motor	Stepper, X-axis	288530
Motor	Stepper, Y-axis	288779
Motor	Stepper, Injection Head	288548
Pulley	15 Cog	288464
Pulley	12 or 40 Cog	288472
Pulley	20 or 40 Cog	288480
Pulley	7.3 mm	288506
Pinon	90 Teeth	288498
Sensor	Arm Left Limit	288662
Sensor	Arm Right Limit	288670
X-Carriage Assembly		289678
Y-Carriage Assembly		289686

Vials Part

Crimper	For 20 mm Seals	276360
Liners	20 mm Teflon Coated (Vial Septa) (100/pk)	284919
Seals	20 mm with Liner for Headspace Vials (144/pk)	276352
Seals	20 mm Headspace Al (100/pk)	284901
Vials	10 mL Headspace, Clear (144/pk)	276345

Model 4105 GC Liquid Autosampler Part

Crimper	For 11 mm Seals	276394
Seals	11 mm with Liner	276386
Syringe	5 µL	276402
Syringe	10 µL	276614
Vial	2 mL, Clear (100/pk)	276378



Cable Selection Guide & Glassware Selection Guide

Cable Connections	4560	4460A	4551	4552 to 4560	DPM-16 or MPM-16
4460A	---	---	----		230656
4560	---	---	181750		226605
HP 6890 GC				284935, 226530, & 252213	
HP 5890 GC (No MSD)	185868 & 226530	185868 & 185827	----	284935, 226530, & 185868	----
HP 5890/5971 or 5972 (DOS or UNIX)	209874 & 226530**	209874 & 185827**	----	----	----
HP 5890/5970* (PASCAL)	209866 & 226530	209866 & 185827	----	----	----
HP 5890/5970* (RTE-A)	209882 & 226530	209882 & 185827	----	----	----
MHC-16 (Rev. A)	226605	192435	----	----	192443
MHC-16 (Rev. B)	226605	230656	----	----	229450
DPM-16 or MPM-16	226605	230656	----	----	----
CFM	226548	212530	----	----	----

* Requires MSD cable in addition to those listed ** Also HP 35900-60700 (included with HP 5971 and HP 5972)

Sparger	Size	Neck	4560	4460A	4551	DPM	MPM	ASM	4552	4105	4632	Part # (1)	Kit Part #	#/kit
Frit	5 mL	6 mm**		✓								197632	----	--
Frit*	5 mL	6 mm**		✓								175655	----	--
Frit	5 mL	12 mm		✓			✓					196626	187914	16
Frit	5 mL	18 mm	✓	★			✓					209015	232199	16
Frit	5 mL	18 mm	✓	★		✓						209015	247916	16
Frit*	25 mL	6 mm**		✓								175663	----	--
Frit	25 mL	12 mm		✓		✓						196469	187906	16
Frit	25 mL	18 mm	✓	★		✓						209031	247932	16
Frit	25 mL	18 mm	✓	★			✓					209031	232215	16
Needle	5 mL	12 mm		✓		✓						187484	187898	16
Needle	5 mL	18 mm	✓	★		✓	✓					225623	232207	16
Needle	25 mL	12 mm		✓		✓						188508	187880	16
Needle	25 mL	18 mm	✓	★		✓	✓					225631	232223	16
Disposable	10 mL	18 mm	✓	★		✓	✓					----	199521	125
Vial Kit***	40 mL	28 mm			✓			✓	✓			----	296053	72
Vials	2 mL									✓		----	276378	100
Vials	10 mL										✓	----	276352	100
Vials	40 mL	28 mm			✓			✓				----	296087	72
SoilVials												03-505019-00 03-504098-00	----	72 6
Wash Vessel								✓				178731	----	--
Wash/Waste Station Vial				✓								232801	----	--

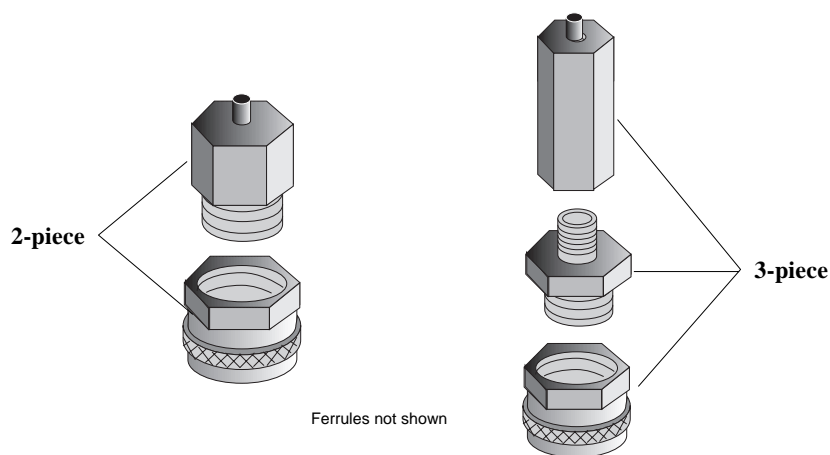
* Frit sparger has septum-style purge inlet ** For 4460As with existing 6 mm mount only *** Includes caps and septa ★ Requires Conversion Kit (Part #199893)

Purge Needle Selection Guide

Purge Needles			4560	4460A			DPM-16	MPM-16		
			Sparge Mount: Number of Pieces (see drawing) - Size (Neck O.D. of Sparger)							
Sparger	Size	Neck	18 mm	18 mm	12 mm	6 mm	2 - 18 mm	2 - 18 mm	3 - 12 mm	3 - 18 mm
Frit	5 mL	12 mm	-----	-----	203042	-----	-----	-----	203042	Ñ-
Frit	5 mL	18 mm	209114	-----	-----	-----	203042	203042	-----	Ñ-
Frit	25 mL	6 mm	-----	-----	-----	185108	-----	-----	-----	Ñ-
Frit	25 mL	12 mm	-----	-----	203042	-----	-----	-----	203042	Ñ-
Frit	25 mL	18 mm	209114	-----	-----	-----	203042	203042	-----	Ñ-
Needle	5 mL	12 mm	-----	-----	203018*	-----	-----	-----	203042	Ñ-
Needle	5 mL	18 mm	227371*	203018*	-----	-----	232348*	232348*	-----	203018*
Needle	25 mL	12 mm	-----	-----	203018*	-----	-----	-----	203042	Ñ-
Needle	25 mL	18 mm	227371*	203018*	-----	-----	232348*	232348*	-----	203018*
Disposable	10 mL	18 mm	227371*	203018*	-----	-----	232348*	232348*	-----	203018*

* Side hole Standard instrument configuration in bold print.

Needle Lengths (with Fittings)	
185108	20.3 cm
203018	21.0 cm
203042	19.6 cm
209114	22.9 cm
227371	22.9 cm
232348	19.5 cm



DPM-16 and MPM-16 Sparge Mounts

How to order:

OI Analytical has made ordering easier than ever. You can now submit your order by mail, telephone, fax, or e-mail.*

Mail: OI Analytical
Order Entry Department
P.O. Box 9010
College Station, TX 77842-9010

Phone: (800) 673-3750
(409) 690-1711

Fax: (409) 690-0440

E-mail: orders@oico.com

When ordering please provide:

- Contact name, company name, account number, shipping and billing addresses, and telephone number(s).
- Your company's purchase order number or credit card number. (Visa, MasterCard, AMEX). *Credit cards cannot be accepted as form of payment from international customers.*
- OI Analytical part number, description, and quantity of item(s) ordered.
- Tax exempt number (if applicable).

* International customers should contact the OI Analytical distributor in their area. If the distributor is unknown, they should contact OI Analytical International Sales directly at (409) 690-1711 for distributor information.

GC Detectors**Replacement Parts and Supplies**

Photoionization Detector	116
Electrolytic Conductivity Detector	118
Halogen Specific Detector	123
PID/ELCD and PID/XSD	125
Pulsed Flame Photometric Detector ..	126
Flame-Ionization Detector	129



Fax 409-690-0440

OI Analytical 

Replacement Parts and Supplies

Photoionization Detector (PID)

Cables	Part #
Analog Signal Cable (0-1 V) (HP 5890)	185850
Analog Signal Cable (0-10 V) (HP 6890)	252551
Electrometer Cable 3.7" (HP 5890)	206094
Electrometer Cable 5.0" (HP 6890)	252544
Electrometer Cable 6.5" (HP 5890)	206110
Electrometer Cable 14.0" (HP 5890)	206102
Enternal Event (HP 6890)	252569
Lamp High Voltage Cable	181750
PID Vent Valve Cable (all GCs except HP 6890)	187476
Power Cord (110 VAC)	116038
Remote Start Lamp Cable, Model 4430 PID	185843
Vent Valve Cable, Model 4430 PID (from 187476 to HP 5890)	185967
Vent Valve Cable, Model 4430 PID	187476
Vent Valve Cable, Model 5230 PID	242062

Ferrules	Part #
Brass 1/16" Tube Back 5/pk	196162
Brass 1/16" Tube Front 5/pk	196170
Brass 1/16" Tube 6/pk	223776
Brass 1/8" Tube Set 10/pk	196089
Graphite 1/8" x 1/16" Tube 5/pk	196196
Graphite 1/16" Tube 10/pk	204693
Graphite 1/16" x 0.8" Tube 10/pk	196097
Graphite/Vespel 1/16" Tube 10/pk	216366
Graphite/Vespel 1/4" Tube 10/pk	222794
Graphite/Vespel 1/16" x .8 mm Tube 10/pk	196105
Graphite/Vespel 1/16" x .5 mm Tube 10/pk	196113
Graphite/Vespel 1/16" x .4 mm Tube 10/pk	208330
Stainless Steel 1/16" Tube 5/pk	196246

Fittings - Nuts	Part #
Brass, Nickel Plated 1/16" Male 5/pk	196303
Stainless Steel 1/4" Female	169682
Stainless Steel 1/8" Male	112458
Stainless Steel 1/16" Male	223057
Stainless Steel 1/16" Male 5/pk	196311
Stainless Steel Outlet Restrictor	188490

Lamp Supplies (see drawing)	Part #
Lamp - 9.6 eV	189423
Lamp - 10.0 eV	181180
Lamp - 11.8 eV	189431
Lamp Polishing Kit	214924
Lamp Sealing O-ring (5/pk)	255679
Lamp Sealing Spring	180901
Lamp Sealing Washer	188417
Lamp Support Ring	180919

Tubes	Part #
Copper 1/8" x 0.070 mm I.D.	111427
Stainless Steel 1/16" x 0.020 mm I.D.	111732
Stainless Steel Outlet Restrictor Tube	188482

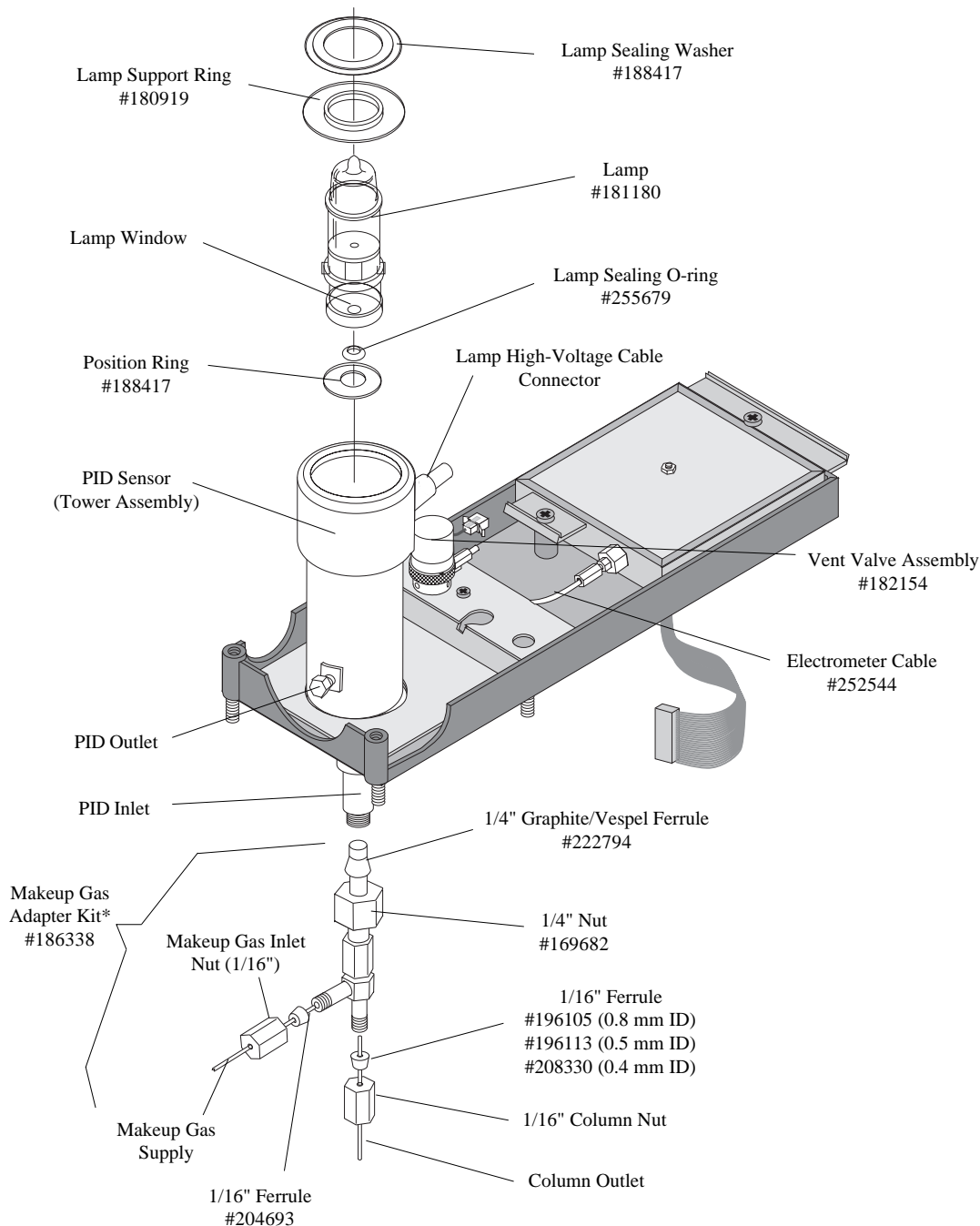
Vent Supplies	Part #
Vent Valve Assembly (HP 6890) (24 V)	182154
Vent Valve, Brass/Nickel 2-way 24 VAC	183939
Vent Outlet Restrictor	168220
Vent Outlet Tube (Stainless Steel)	181826
Vent Valve Needle Valve	195461



To order call 1-800-653-1711 (USA/Canada) or 409-690-1711



Replacement Parts and Supplies Photoionization Detector (PID)



* Kit includes all parts as indicated except 1/4" Nut #169682

**Reactor Base Assembly and Makeup Gas Adapter - HP 6890
(Model 4430 PID)**

Replacement Parts and Supplies

Electrolytic Conductivity Detector (ELCD)

5320	5220	4420	Cables	Part #
■			Cell to Reactor Interface Cable	216010
▲			Detector Controller to Cell Interface Cable	247007
▲			External Events Cable (HP 6890)	252569
■			Remote Start Cable	229658
■			Reactor Interface Cable	231365
▲			Reactor Power Cable	245506
■	★		Signal Out BNC to HP 5890 AIB	229641
■	★		Signal Out BNC to HP 6890 AIB	274852
■	★		Signal Out BNC to HP Integrator	229633
■	★		Signal Out BNC to Spades	215962
▲			Signal Out From CAB to Spades	246405
▲			Signal Out Cable from CAB to HP Integrator	246397
▲			Signal Out Cable from CAB to HP 6890 AIB	246389
▲			Signal Out Cable from CAB to HP 5890 AIB	246371
■			Vent Valve Cable - 5220	214890
▲			Vent Valve Cable - 5320 (HP 5890)	242062
▲			Vent Valve Cable - 5320 (HP 6890)	187476

5320	5220	4420	Fittings	Part #
▲	■	★	Nut Stainless Steel 1/32" Male Knurled	226365
▲	■		Nut Stainless Steel 1/16" Female Knurled	226357
▲	■		Nut Stainless Steel 1/16" Male Knurled	217240
▲	■		Nut Stainless Steel 1/16" Reactor Top	227462
	●		Nut Stainless Steel 1/4" Female	169682
	■		Nut Stainless Steel 1/4" Male	178574
	●		Nut Stainless Steel Reactor Top	164004
▲	■	★	Nut Reactor Assembly	272369
▲			Nut Reactor Base Adapter	223743
▲	■	●	Union Stainless Steel 1/16" Tube Female	204735
	●		Union Stainless Steel 1/16" Tube Male	165747
▲	■	★	Union Assembly 1/16" Reactor Top	226464

5320	5220	4420	Ferrules	Part #
▲	■	★	Brass 1/16" Tube	6/pk 223776
	■		Brass 1/8" Tube Set	10/pk 196089
▲	●		Brass 1/16" Tube Back	5/pk 196162
▲	●		Brass 1/16" Tube Front	5/pk 196170
	●		Brass 1/8" Tube Set	10/pk 196089
	●		Graphite 1/16" Tube	10/pk 204693
	●		Graphite 1/8" x 1/16" Tube	5/pk 196196
▲	■		Graphite/Vespel 1/16" x 0.8 mm	10/pk 196105
▲	■		Graphite/Vespel 1/16" x 0.5 mm	10/pk 196113
▲	■		Graphite/Vespel 1/16" x 0.4 mm	10/pk 208330
	■		Graphite/Vespel 1/32" x 0.5 mm Tube	6/pk 255794
	■		Graphite/Vespel 1/32" x 0.4 mm Tube	1/pk 236505
	■		Graphite/Vespel 1/32" x 0.8 mm Tube	6/pk 255786
▲	■		Graphite/Vespel 1/16" Tube	10/pk 216366
	●		Graphite/Vespel 1/16" Ring	10/pk 208322
	●		Graphite/Vespel 1/4" Tube	10/pk 222794
▲	■	●	Stainless Steel 1/16" Tube	5/pk 196246
▲	■	★	Teflon 1/16" Tube	5/pk 272443
	●		Teflon 1/8" Tube Set	10/pk 196147
	●		Teflon 1/8" Tube	5/pk 196238
	●		Teflon 1/16" Tube	5/pk 196220

★ Model 4420 ELCD Reactor Upgrade

5320	5220	4420	Mode Kits	Part #
▲	■		Halogen Mode Kit	219402
	●		Halogen Mode Kit	165705
▲	■		Nitrogen Mode Kit	224972
	●		Nitrogen Mode Kit	165680
▲	■		Sulfur Mode Kit	224980
	●		Sulfur Mode Kit	165698



To order call 1-800-653-1711 (USA/Canada) or 409-690-1711

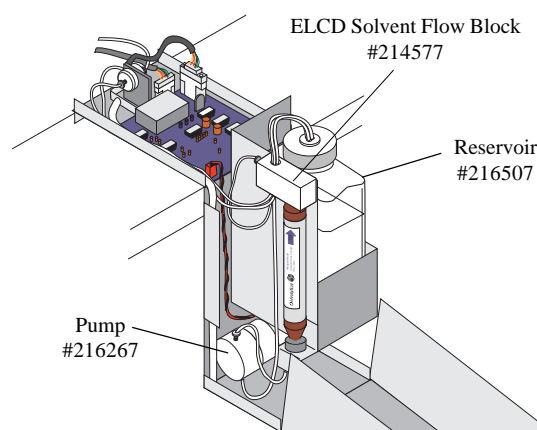


Replacement Parts and Supplies Electrolytic Conductivity Detector (ELCD)

5320	5220	4420	Resin	Part #
▲	■		Disposable Resin Cartridge - Halogen Mode	213579
▲	■		Disposable Resin Cartridge - Nitrogen Mode	230524
▲	■		Disposable Resin Cartridge - Sulfur Mode	225003
		●	Resin - Halogen and Nitrogen Mode	170712
		●	Resin - Sulfur Mode	170572

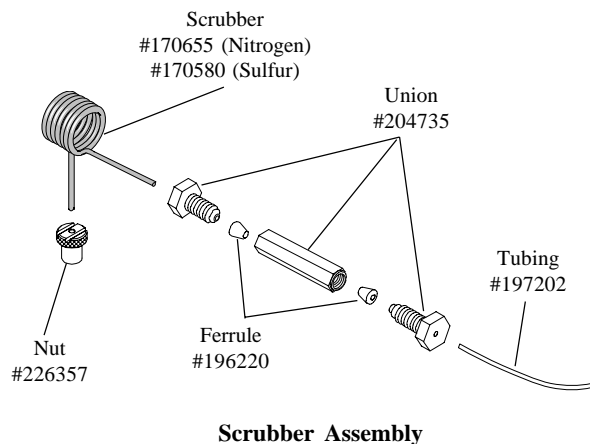


5320	5220	4420	Solvent System Parts (see drawing)	Part #
		■	Solvent Flow Assembly	224519
		●	Solvent Flow Filter (7 µg)	165656
▲	■		Solvent Pump Assembly	216267
		●	Solvent Pump Assembly	166000
▲	■		Solvent Reservoir (500 mL)	216507
		●	Solvent Reservoir (32 oz)	165953



Model 5220 Solvent Flow Assembly

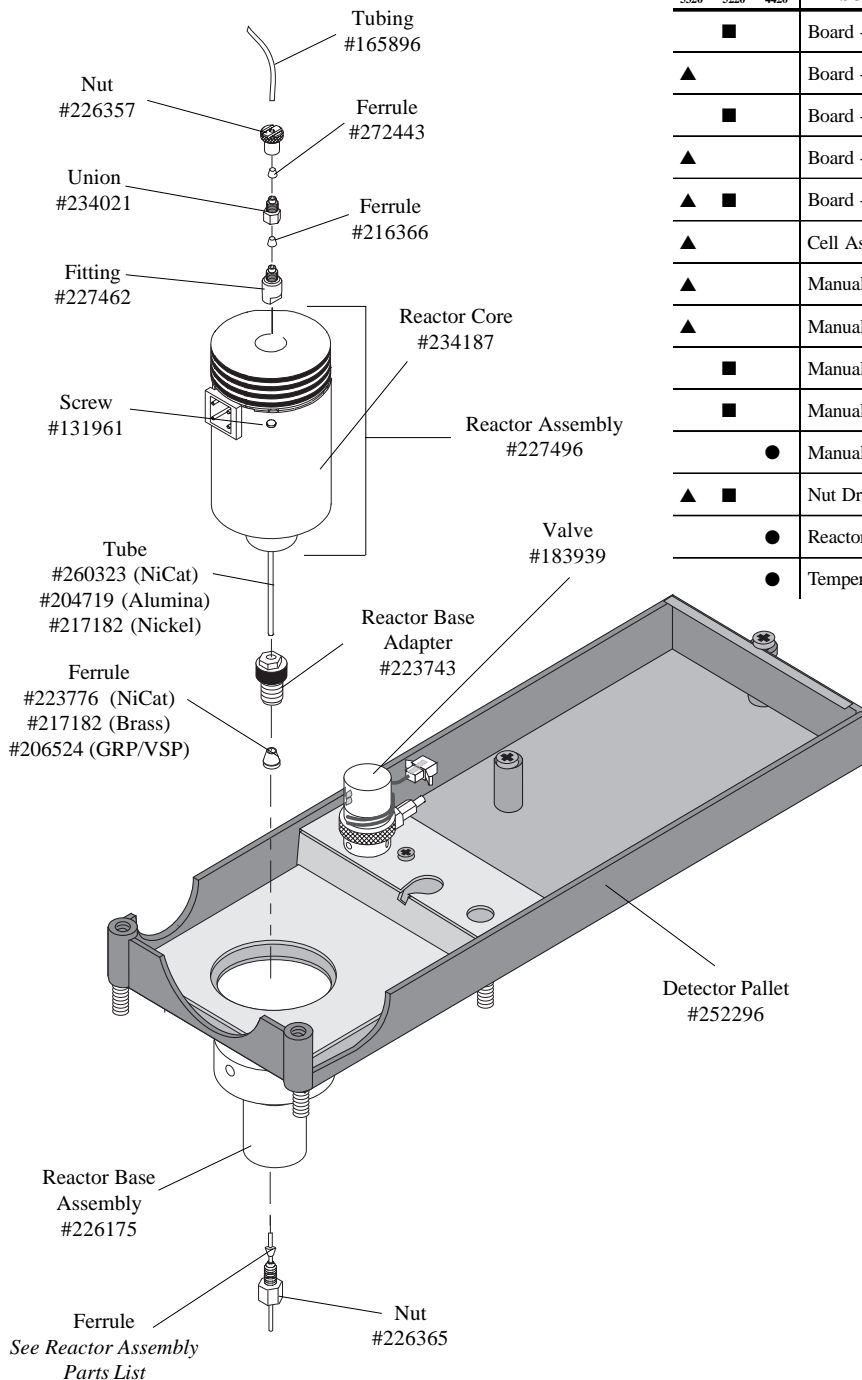
5320	5220	4420	Scrubber Parts (see drawing)	Part #
▲	■		Ferrule - Teflon 1/16" Tube (5/pk)	196220
		●	Nitrogen Mode Scrubber	170655
▲	■		Nut - Stainless Steel 1/16" Female Knurled (Reactor)	226357
		●	Sulfur Mode Scrubber	170580
▲	■	●	Tubing-PEEK 1/16" x 0.030 mm I.D. (N & S Modes)	197202
▲	■		Union - Stainless Steel 1/16" Tube Female with Nuts	204735



5320	5220	4420	Tubing	Part #
		●	Copper 1/8" x 0.070 mm I.D.	111427
▲	■		PEEK 1/16" x 0.030 mm I.D.	197202
▲	■	●	Silicone 1/4" x 1/8" I.D. Clear	179085
▲	■		Stainless Steel 1/16" x 0.030 mm I.D.	193409
▲	■		Teflon 1/16" x 0.007 mm I.D.	272542
		●	Teflon 1/16" x 0.010 mm I.D.	139065
▲	■	●	Teflon 1/16" x 0.020 mm I.D.	165896
▲	■	●	Teflon 1/16" x 0.031 mm I.D.	145591
		●	Teflon 1/8" x 0.063 mm I.D.	147901
		●	Teflon 1/8" x 0.085 mm I.D.	147919
		●	Teflon 1/8" x 0.095 mm I.D.	160929
▲	■		Teflon 1/16" x 0.047 mm I.D.	231068
▲			Teflon 1/16" x 0.28 mm I.D.	234401

Replacement Parts and Supplies

Electrolytic Conductivity Detector (ELCD)



**Reactor Base Assembly - HP 6890
(Models 5320 ELCD)**

5320	5220	4420	Miscellaneous Parts	Part #
	■		Board - PCA - Model 5220 CPU	230565
▲			Board - PCA - Model 5300 Controller Board	266833
	■		Board - PCA - Model 5220 Cell Interface	223222
▲			Board - PCA - Model 5320 Cell Interface	274266
▲	■		Board - Analog Input (HP 6890)	274886
▲			Cell Assembly - Model 5320	234237
▲			Manual - Model 5320 ELCD (HP 5890)	274966
▲			Manual - Model 5320 ELCD (HP 6890)	278846
	■		Manual - Model 5220 ELCD (HP)	224923
	■		Manual - Model 5220 ELCD (Varian)	255778
	●		Manual - Model 4420 ELCD	165846
▲	■		Nut Driver Tool	223917
	●		Reactor Assembly - Model 4420	169955
	●		Temperature Sensor	170093

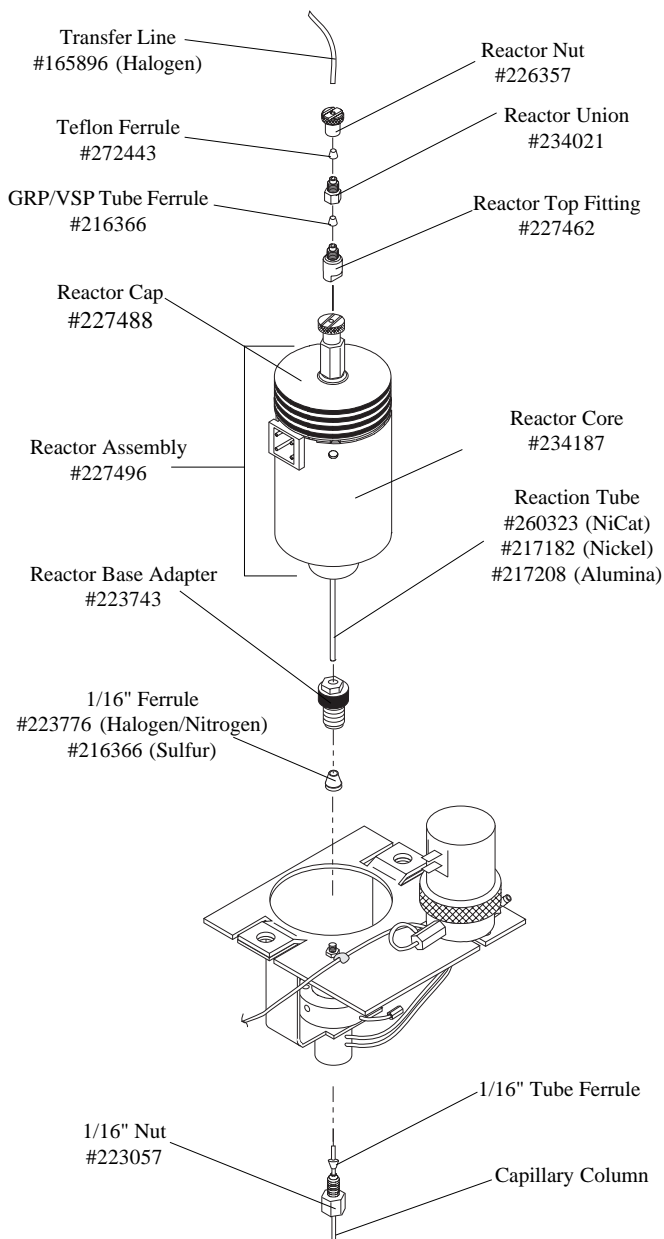


To order call 1-800-653-1711 (USA/Canada) or 409-690-1711



Replacement Parts and Supplies Electrolytic Conductivity Detector (ELCD)

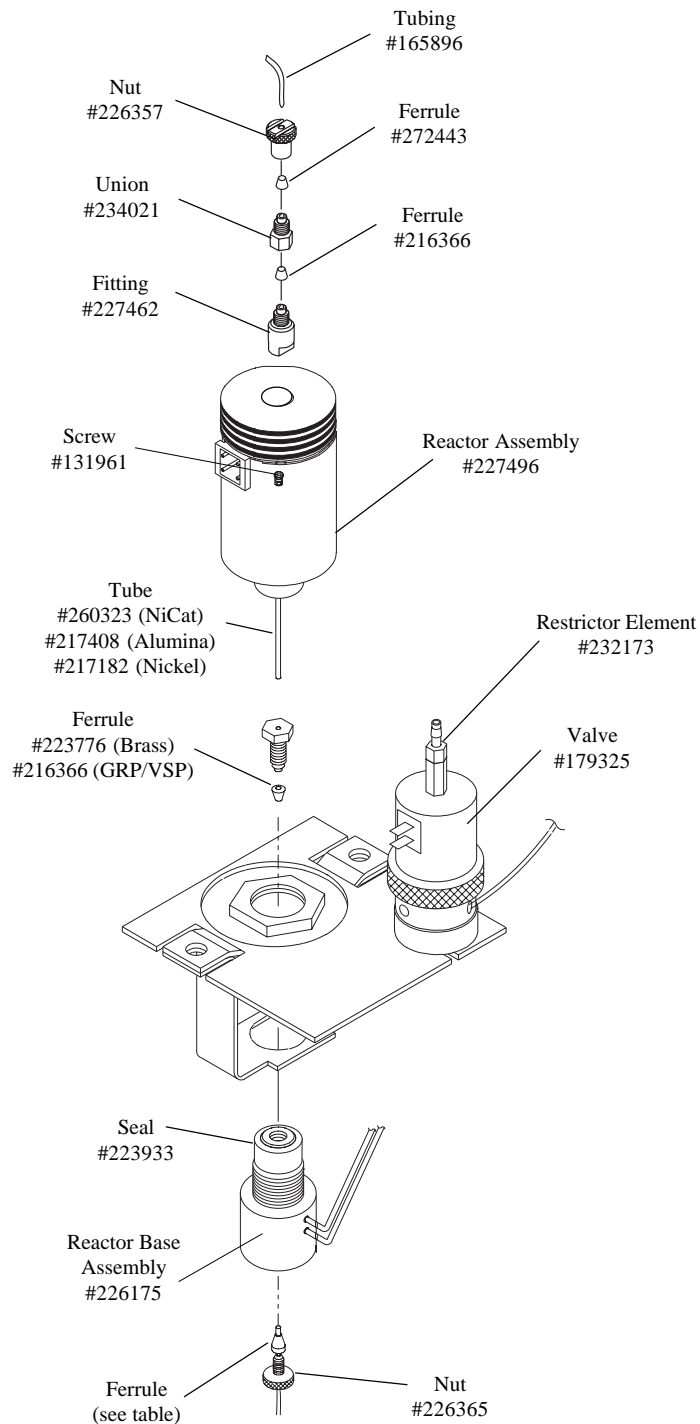
5320	5220	Reactor Assembly Parts	Part #
▲		Adapter Reactor Base	223743
▲	■	Ferrule 1/32" Tube Graphite/VespeI (6/pk)	255786
▲	■	Ferrule 1/16" Tube Brass (H and N Modes) (6/pk)	223776
▲	■	Ferrule 1/16" Tube GRP/VSP (S Mode) (10/pk)	216366
▲	■	Ferrule 1/16" Tube Teflon (5/pk)	272443
▲		Ferrule 1/16" GRP/VSP 0.8 mm I.D. (10/pk)	196105
▲		Ferrule 1/16" GRP/VSP 0.5 mm I.D. (10/pk)	196113
▲		Ferrule 1/16" GRP/VSP 0.4 mm I.D. (10/pk)	208330
▲	■	Nut 1/16" Reactor Base	272369
▲	■	Nut 1/32" Stainless Steel Male Knurled	226365
▲	■	Nut 1/16" Stainless Steel (Reactor Top Fitting)	227462
▲		Nut 1/16" Stainless Steel Male	223057
▲	■	Nut 1/16" Stainless Steel Female Knurled	226357
▲	■	Reactor Assembly - Models 5220/5320	227496
▲	■	Reactor Core - Models 5220/5320	234187
▲	■	Screw Allen Set 6-32, 1/8"	131961
▲	■	Seal Graphite/Meldin Reactor Base Seal	223933
▲	■	Tube Alumina Reaction Tube (S Mode)(3/pk)	217208
▲	■	Tube NiCat Reaction 3.45"(Halogen)(12/pk)	260323
▲	■	Tube Nickel Reaction Tube (Nitrogen) (6/pk)	217182
▲	■	Tubing 1/16" x 0.020 mm I.D. Teflon	165896
▲	■	Union 1/16" Stainless Steel Male Female Tapered	234021
	■	Valve Brass, Nickel 3-way, 12 V Vent	179325
▲		Valve Brass, Nickel 2-way, 12 V Vent (HP 5890)	252221
▲		Valve Brass, Nickel 2-way, 24 V Vent (HP 6890)	183939
▲	■	Valve Vent Valve Restrictor Element 500 mL	232173



**Reactor Base Assembly-HP 5890
(Model 5320 ELCD)**

Replacement Parts and Supplies

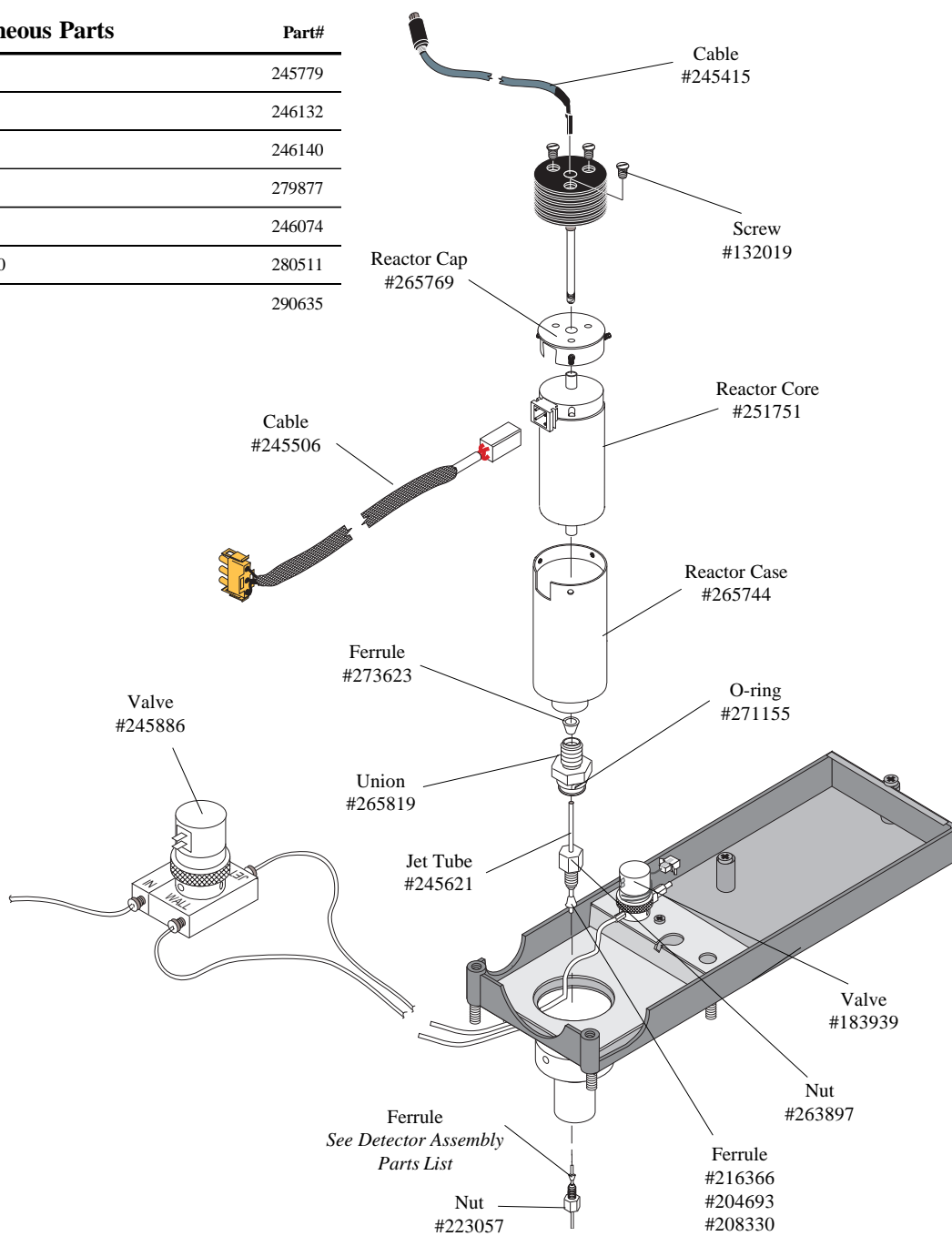
Electrolytic Conductivity Detector (ELCD)



**Reactor Base Assembly - HP 5890
(Model 5220 ELCD)**

Replacement Parts and Supplies Halogen Specific Detector (XSD)

Adapters and Miscellaneous Parts	Part#
Flow Measurement Adapter	245779
Jet Removal Tool	246132
Operator's Manual	246140
Venting Option - HP 6890	279877
Venting Option - HP 5890	246074
Venting Option - Varian 3400/3600	280511
Venting Option - Shimadzu 17A	290635

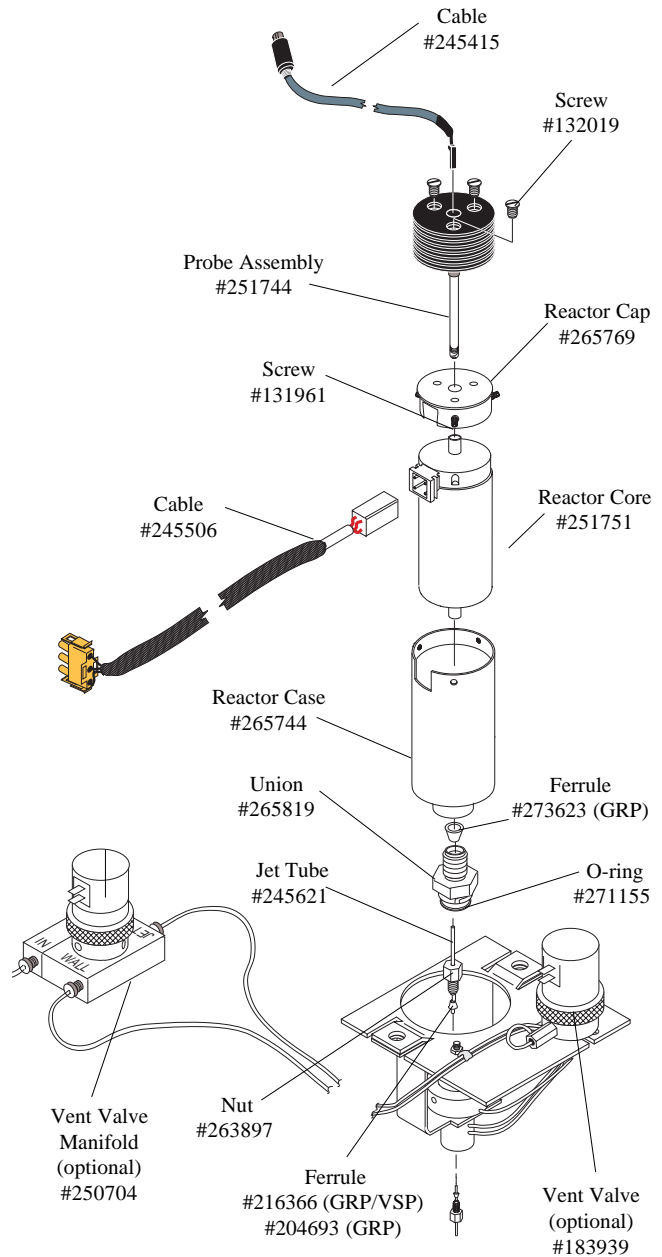


**Reactor Base Assembly - HP 6890
(Model 5360 XSD)**

Replacement Parts and Supplies Halogen Specific Detector (XSD)

Cables	Part#
Dual Vent Valve Cable (also requires #252569)	264234
External Events Cable (also requires #264234) - HP 6890	252569
Reactor to Controller Power Cable	245506
Signal Probe to Controller Cable	245415
Vent Valve Power Cable - HP 5890	185967

Detector Assembly Parts (see drawing)		Part #
Bracket Base Assembly - HP 6890		251678
Bracket Base Assembly - HP 5890		265827
Bracket Base Assembly - Varian 3400/3600		278861
Bracket Base Assembly - Shimadzu 17A		290627
Detector Pallet - HP 6890		274860
Ferrule	1/4" Tube Graphite (10/pk)	274985
Ferrule	1/16" Tube Graphite (10/pk)	204693
Ferrule	1/16" Tube Graphite/Vespel (10/pk)	216366
Ferrule	1/16" x 0.4 mm I.D. (10/pk)	208330
Ferrule	1/16" x 0.5 mm I.D. (10/pk)	196113
Ferrule	1/16" x 0.8 mm I.D. (10/pk)	196105
Jet Tube	1/16" Glass Lined	245621
Nut	5/16" Jet Connector	263897
Nut	1/16" Stainless Steel Male	223057
O-ring	Kalrez O-ring	271155
Probe Assembly		251744
Reactor Assembly (includes Reactor Cap, Case, and Core)		273615
Reactor Cap		265769
Reactor Case		265744
Reactor Core		251751
Screw	Allen Set 6-32, 1/8"	131961
Screw	Stainless Steel, Machine	132019
Tube	1/16" Glass Lined Stainless Steel Jet Tube	245621
Union	Bayonet to XSD Reactor	265819
Valve	Brass, Nickel 2-way, 24 V Vent Boost	245886
Valve	Brass, Nickel 2-way, 24 Vent Exit	183939
Vent Valve Manifold		250704



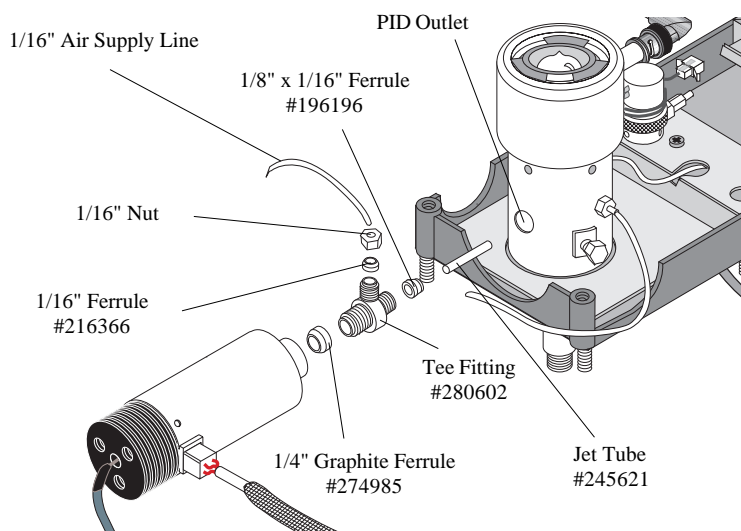
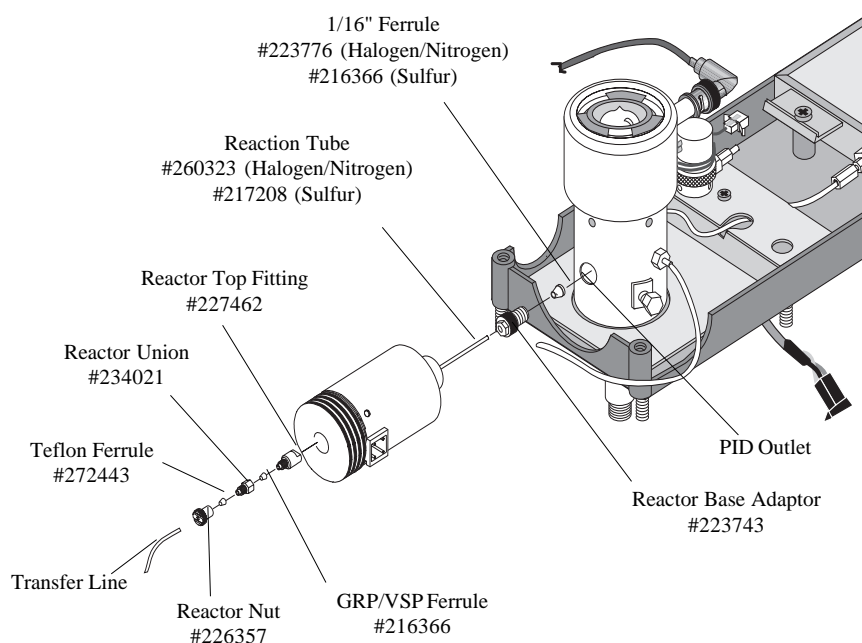
XSD Detector Assembly - HP 5890



To order call 1-800-653-1711 (USA/Canada) or 409-690-1711



Replacement Parts and Supplies Tandem PID/ELCD and Tandem PID/XSD



Replacement Parts and Supplies

Pulsed Flame Photometric Detector (PFPD)

Cables	Part#
Analog Out Signal Cable - HP 6890	252551
External Event for HP 6890	252569
Handshake for HP 5890	185868
Heater Assembly for HP 5890	178954
Heater Assembly for HP 6890	252429
Heater Assembly for Shimadzu 17A	244814
Ignitor Assembly	282624
PFPD Remote Start for HP 6890 and HP 5890	288902
PFPD Remote Start for Shimadzu 17A	288977
Power Cord - 110 V for North America	116038
RS-232 9-pin to 9-pin Serial (for WinPulse software)	226621
Signal Output to HP Integrator	215962
Signal Output to HP 6890 AIB	274852
Signal Output to HP 5890 AIB	229641
Signal Output to Spade Lugs	274852
Temperature Sensor Assembly for HP 5890	170093

Ferrules				Part #
Graphite/Vespel	1/16" x 0.0 mm	Tube	10/pk	197079
Graphite/Vespel	1/16" x 0.4 mm	Tube	10/pk	208330
Graphite/Vespel	1/16" x 0.5 mm	Tube	10/pk	196113
Graphite/Vespel	1/16" x 0.8 mm	Tube	10/pk	196105
Graphite/Vespel	1/16" x 1/16"	Tube	10/pk	216366
Stainless Steel	1/8"	Tube	5/pk	210591

Fittings				Part #
Barbed Adapter	10-32 x 1/16"	Hose		202077
Fitting	1/16"	Column Nut		223057
Fitting	1/16"	Male Tee		282509
Fitting	Stainless Steel 1/8"	Male Nut		112458

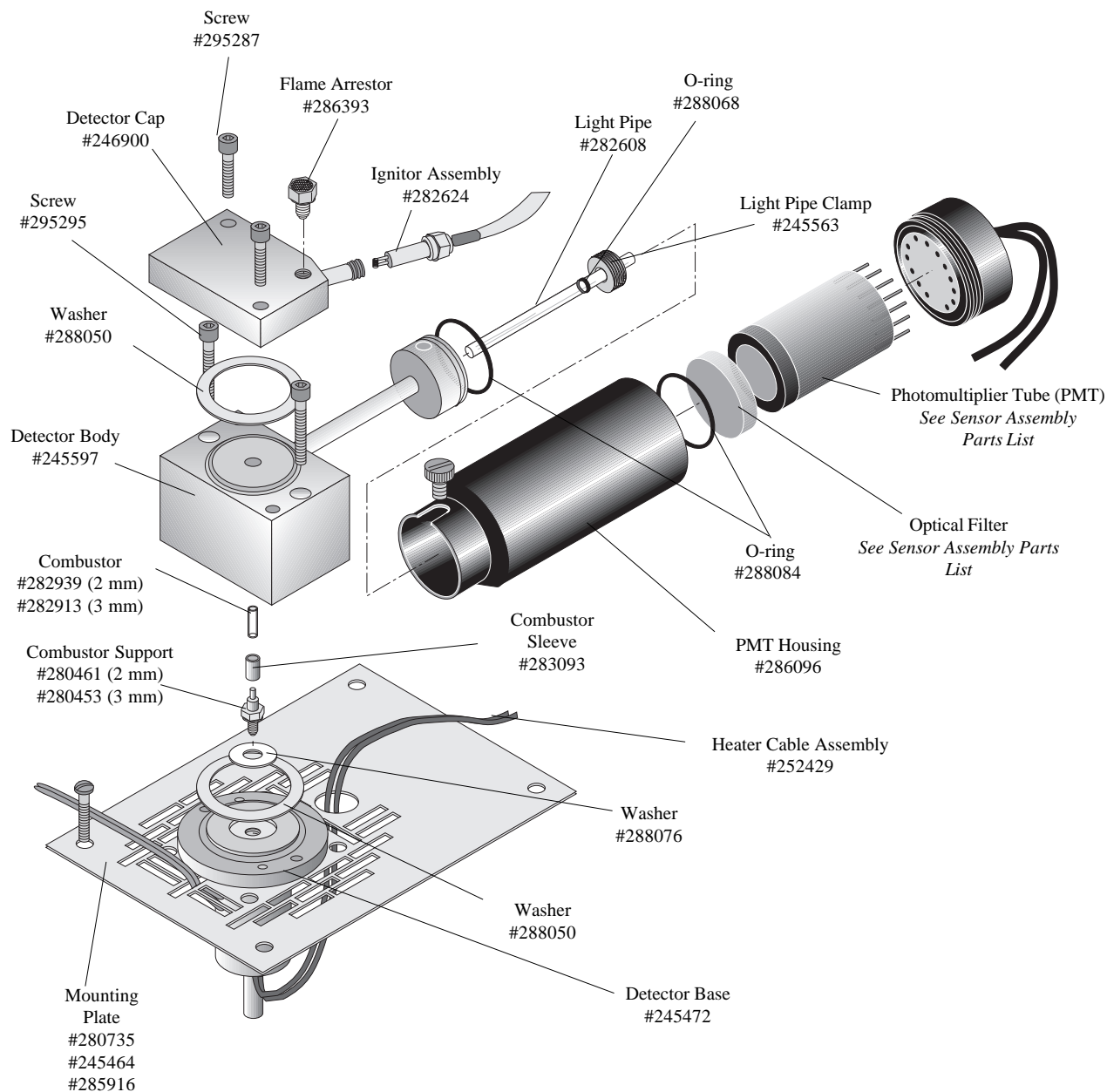
Gas Flow Control			Part #
Gas Flow Controller	25 mL Hydrogen		282483
Gas Flow Controller	60 mL Air		282475
Gas Flow Module	AUX EPC for HP 6890		275974
Gas Flow Module Kit, PFPD	HP 6890 (used with #275974)		286344
Needle Valve	Nupro		282491



To order call 1-800-653-1711 (USA/Canada) or 409-690-1711



Replacement Parts and Supplies Pulsed Flame Photometric Detector (PFPD)



Model 5380 Detector Assembly

Replacement Parts and Supplies

Pulsed Flame Photometric Detector (PFPD)

Miscellaneous		Part #
Fuse	0.5 amp	282426
Fuse	1 amp	282434
LED	Green with Cable	284414
LED	Red with Cable	245894
Manual	Operator's	283101
Permeation Device	Sulfur Kit, incl Permeation Tube	290411
Permeation Device	Phosphorus Kit, incl Permeation Tube	290429
Permeation Tube	Dimethyl Disulfide	290452
Permeation Tube	Dimethyl Methyl Phosphonate	290460
Tool	2 mm Combustor Extractor	280719
Tool	3 mm Combustor Extractor	280727
Tool	Allen Wrench	284539
Tool	Teflon-Coated Forceps	283051
WinPulse Software Kit		286302

PFPD Sensor Assembly		Part #
Combustor	2 mm	282939
Combustor	3 mm	282913
Combustor Sleeve		283093
Combustor Support	2 mm	280461
Combustor Support	3 mm	280453
Detector Base		245472
Detector Body		245597
Detector Cap		246900
Light Pipe		282608
Light Pipe Clamp		245563
Mounting Plate	HP 5890	245464
Mounting Plate	HP 6890	280735
Mounting Plate	Shimadzu 17A	285916
O-ring	Large Viton (5/pk)	288084
O-ring	Light Pipe Viton (5/pk)	288068
Optical Filter	BG-12	282947
Optical Filter	BG39	290015
Optical Filter	GG-495	282921
Optical Filter	RG-695	290007
Optical Filter	WG345	290031
Photomultiplier Housing Assembly		286096
Photomultiplier Tube	R1924	284364
Photomultiplier Tube	R1925	290049
Photomultiplier Tube	R5070	290106
Screw	6-32 x 1"	295295
Screw	6-32 x 3/4"	295287
Screw	6-32 x 1/4"	207621
Screw	Torx	252585
Screw	Stainless Steel M4-0.7 x 8 mm	169963
Thumbscrew	6-32 x 1/4" PMT	177065
Washer	Aluminum Combustor Support (10/pk)	288076
Washer	Aluminum, Large (10/pk)	288050

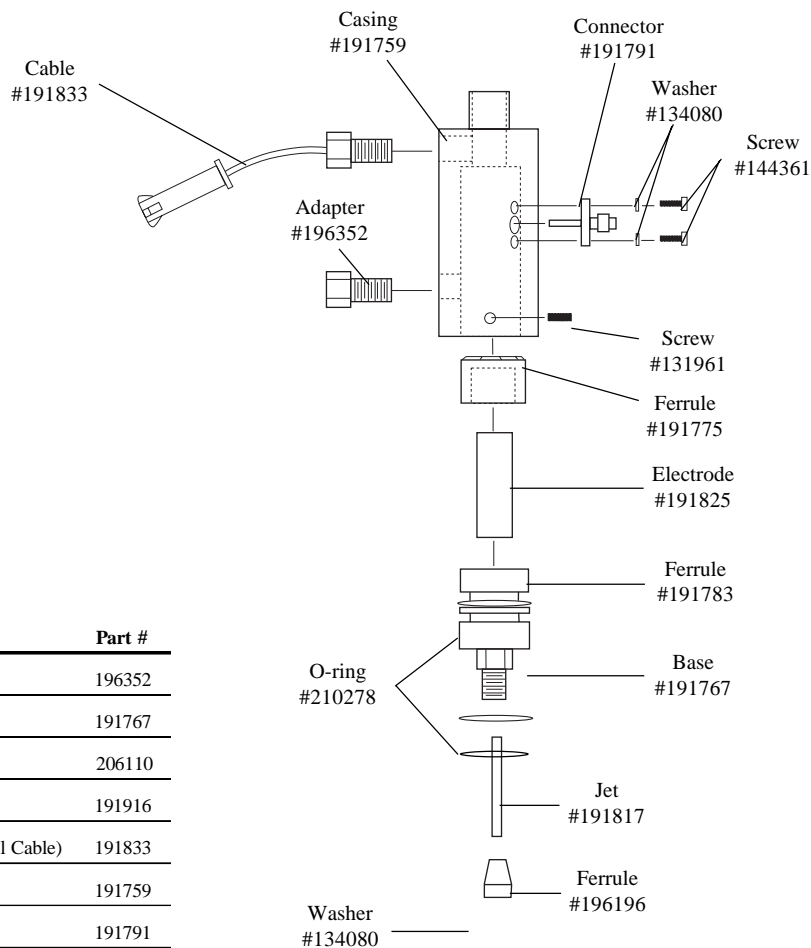


To order call 1-800-653-1711 (USA/Canada) or 409-690-1711



Replacement Parts and Supplies

Model 4410 Flame-Ionization Detector (FID)



Model 4410 FID Assembly

Model 4410 FID Assembly Parts

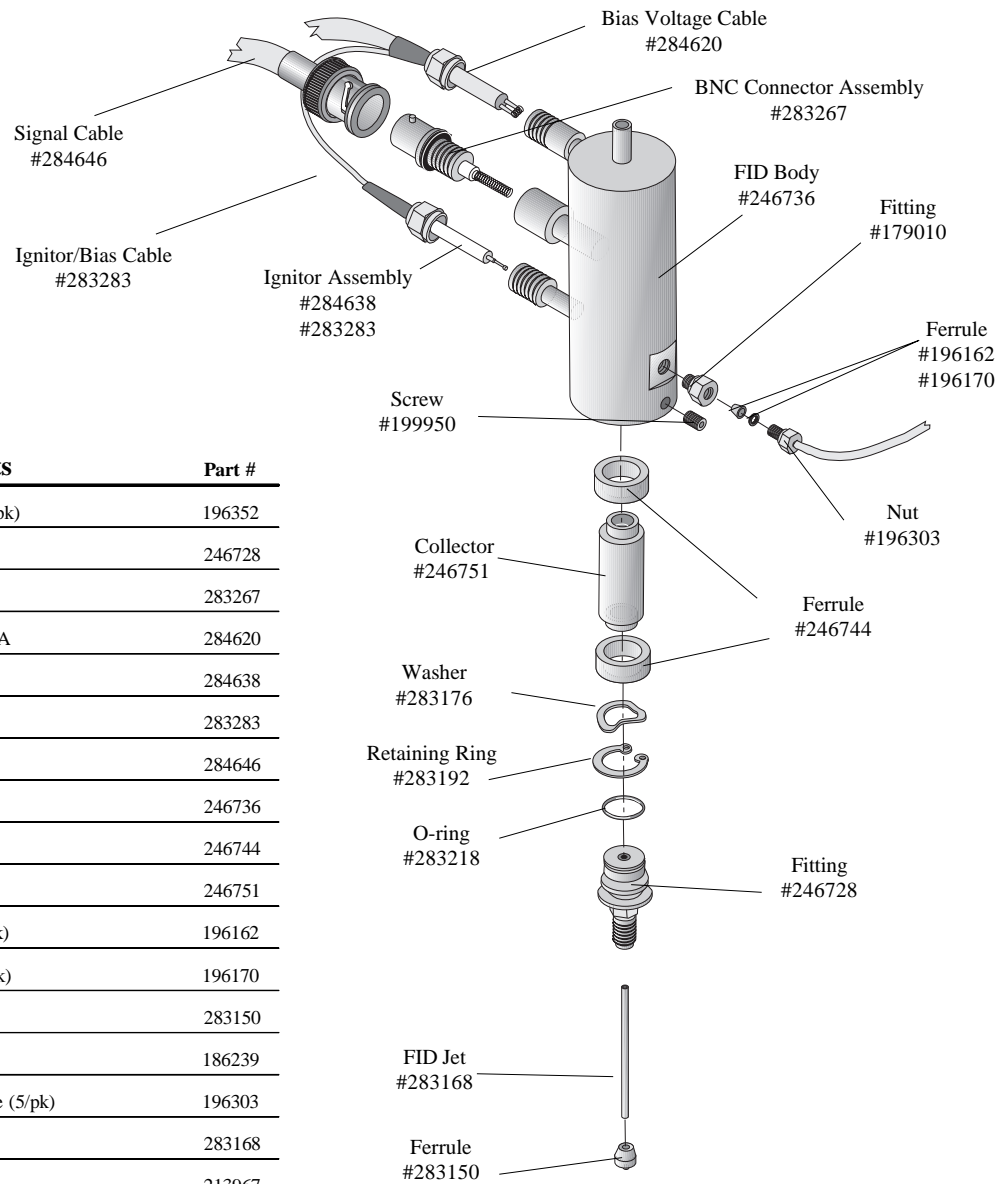
		Part #
Adapter	1/16" Brass, Nickel Tube (5/pk)	196352
Base	FID Base	191767
Cable	Coaxial Electrometer Cable 6.5 inch	206110
Cable	Gas Module to Ignitor Cable	191916
Cable	Glow Plug Assembly Cable (Ignitor Pigtail Cable)	191833
Casing	FID Body Casing	191759
Connector	Coaxial Cable	191791
Electrode	Collector	191825
Ferrule	1/16" Brass Tube Back (5/pk)	196162
Ferrule	1/16" Brass Tube Front (5/pk)	196170
Ferrule	1/8" x 1/16" Graphite Tube (5/pk)	196196
Ferrule	Vespel Upper FID Body	191775
Ferrule	Vespel Lower FID Body	191783
Jet	1/16" O.D. x 0.3 mm I.D. Flame Jet	191817
Nut	1/16" Brass, Nickel Male (5/pk)	196303
O-ring	Viton Base (5/pk)	210278
Screw	Allen Set 6-32, 1/8"	131961
Screw	Machine 2-56, 3/16" Stainless Steel	144361
Tube	Stainless Steel Gas Module Output	188474
Washer	Lock Split Stainless Steel #2	134080

Model 4410 Miscellaneous Parts

		Part #
Cable	Analog Signal Cable (0-1 V)	185850
Cable	Ignitor Power Cable - Mother Board Gas Module	191866
Connector Assembly	Electrometer - HP 5890	193797
Kit	Gas Module PID/FID 2-line - HP 5890	192013
O-ring	Viton Manifold (12/pk)	185116
Standard	Detector 100 ppm	222919
Sub Assembly	FID	191742
Tube	Copper 1/8" x 0.070 mm I.D.	111427

Replacement Parts and Supplies

Model 4415 Flame-Ionization Detector (FID)



Model 4415 FID Assembly

Model 4415 FID Assembly Parts		Part #
Adapter	1/16" Brass/Nickel Tube (5/pk)	196352
Base	FID Fitting	246728
BNC Signal Assembly		283267
Cable	Bias Voltage - Shimadzu 17A	284620
Cable	Ignitor - Shimadzu 17A	284638
Cable	Ignitor/Bias - Varian	283283
Cable	Signal BNC to BNC	284646
Casing	FID Body	246736
Collector Insulator		246744
Electrode	Collector	246751
Ferrule	1/16" Brass Tube Back (5/pk)	196162
Ferrule	1/16" Brass Tube Front (5/pk)	196170
Ferrule	Vespel FID Jet	283150
Fitting	1/8" Brass Cross Tube Male	186239
Fitting	1/16" Brass/Nickel Nut Male (5/pk)	196303
Jet	0.3 mm I.D.	283168
O-ring	Silicone BNC Connector	213967
O-ring	Silicone FID Base 0.364 x 0.70	283218
Retaining Ring	Stainless Steel	283192
Screw	Allen Set 8-32 x 1/4	199950
Spring Contact Waffletip		283325
Tubing	Copper 1/8 x 0.070 I.D.	111427
Tubing	Stainless Steel 1/16"	111732
Washer	Curved Spring	283176

Model 4415 Miscellaneous Parts		Part #
Standard	Detector 100 ppm	222919
Sub Assembly	FID 4415	283226
Tool	Allen Wrench 5/64"	284521
Tool	Retaining Ring Pliers	283200

How to order:

OI Analytical has made ordering easier than ever. You can now submit your order by mail, telephone, fax, or e-mail.*

Mail: OI Analytical
 Order Entry Department
 P.O. Box 9010
 College Station, TX 77842-9010

Phone: (800) 673-3750
 (409) 690-1711

Fax: (409) 690-0440

E-mail: orders@oico.com

Flow Analyzers

Flow Analyzers

Flow Solution 3000	132
Flow Solution 300	136
Flow Solution IV	137
Flow Solution III	143
Cyanide Analyzers	
CNSolution 3000	144
CNLab 3202	144

When ordering please provide:

- Contact name, company name, account number, shipping and billing addresses, and telephone number(s).
- Your company's purchase order number or credit card number. (Visa, MasterCard, AMEX). *Credit cards cannot be accepted as form of payment from international customers.*
- OI Analytical part number, description, and quantity of item(s) ordered.
- Tax exempt number (if applicable).

* International customers should contact the OI Analytical distributor in their area. If the distributor is unknown, they should contact OI Analytical International Sales directly at (409) 690-1711 for distributor information.



Fax 409-690-0440

Flow Solution 3000

Assemblies		Part #
Cadmium Coil Assembly	OTCR, 24 inch	A000897
Flowcell Assembly	ER Detector	A000684
Heater Assembly	37°C, 4 mL	A001732
Heater Assembly	50°C, 2 mL	A001733
Lamp Assembly	Digital Detector	A001185
Pillow Assembly	Complete	A000811

Bottles		Part #
15-mL	Dropper w/ Cap	A001393
250-mL	Reagent Assembly, Amber Glass	5/pk A000102
500-mL	Reagent Assembly, Clear Plastic	5/pk A000104
1000-mL	Wash/Dil Assembly	A000113
2000-mL	Waste Assembly	A000115
3.8-L	Waste Cubetainer	A001126

Cables		Part #
Amperometric (PAD)		A002299
Std. Serial	9 M/9 F (System to PC)	A001644
Std. Serial	25 M/25 F (120-Place Sampler to 3000 Chassis)	A001736
Universal AC Power	10 A	A381-4000-00

Caps		Part #
1-L	Cap Assembly w/ Luer	A001506
250-mL	Cap Assembly w/ Luer Connector	A001100
500-mL	Cap Assembly w/ Luer Connector	A001105
1000-mL	Cap Assembly w/ Luer Connectors	A001107
2000-mL	Cap Assembly w/ Luer Connectors	A001109

Filters	Part #
400 nm	A305-1400-00
405 nm	A305-1405-00
410 nm	A305-1410-00
420 nm	A305-1420-00
440 nm	A305-1440-00
450 nm	A305-1450-00
460 nm	A305-1460-00
480 nm	A305-1480-00
505 nm	A305-1505-00
510 nm	A305-1510-00
520 nm	A305-1520-00
530 nm	A305-1530-00
540 nm	A305-1540-00
550 nm	A305-1550-00
560 nm	A305-1560-00
580 nm	A305-1580-00
590 nm	A305-1590-00
600 nm	A305-1600-00
610 nm	A305-1610-00
620 nm	A305-1620-00
630 nm	A305-1630-00
640 nm	A305-1640-00
660 nm	A305-1660-00
690 nm	A305-1690-00
750 nm	A305-1750-00
810 nm	A305-1810-00
815 nm	A305-1815-00
820 nm	A305-1820-00
880 nm	A305-1880-00
Filter Holder, ER Detector	A001819
In-Line Regent, 5 mm	3/pk A001770
Syringe, 0.45 mm	10/pk A001408



To order call 1-800-653-1711 (USA/Canada) or 409-690-1711



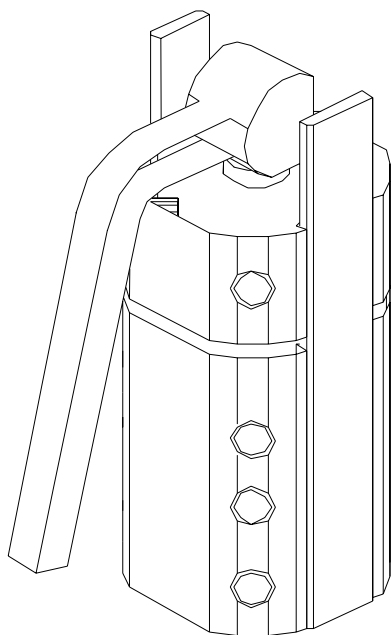
Flow Solution 3000

Fuses

	Part #
0.5 Amp Slo-Blo	A000097
3 Amp Slo-Blo, 5 mm x 20 mm	A002038
3.2 Amp Slo-Blo	A381-3004-00

Membranes

	Part #
Gas Diffusion, Polypropylene	5/pk A001520
Gas Diffusion, Teflon	25/pk A002040
Type C, 25 mm (Dialysis)	12/pk A000397



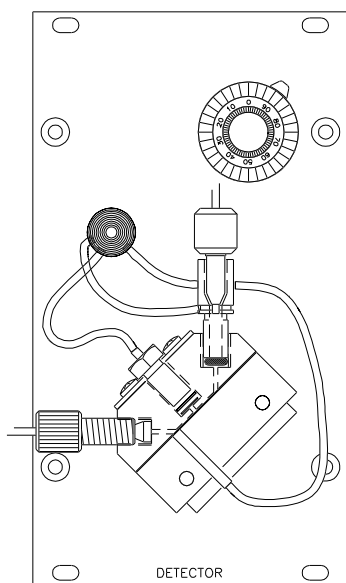
TPX Membrane Module
(Part #A001494)

Miscellaneous

		Part #
Bulkhead	Panel (Black ABS Port Bulkheads)	A001493
Clip	Press-On	10/pk A002945
Clip	Pump Tube	6/pk A001789
Column	For Packed Cadmium or Ion Exchange Resin	A001729
Connector	Gray Nipple w/ 1/4-28 end	A001264
Cover	Flowcell	A002099
Debubbler	Acrylic	A000172
Ferrule	Tefzel 1/4-28 x 0.063" I.D.	6/pk A001759
Fitting	1/16" Tee	A000301
Frits	1/8" O.D. 4-mm Polypropylene (For A001759)	25/pk A000947
Holder	Pumptube, 4-Place (Peristaltic Pump)	A001055
Lamp	Ultraviolet 4 Watt (UV Digester)	A001959
Latch	Pressure Handle (Peristaltic Pump)	A001052
Luer	Female 1/4-28, P-618	3/pk A002666
Luer	Male 1/16", Polypropylene	10/pk A001769
Luer	Male 3/32" I.D. Polypropylene (For Grn/Grn Pumputube)	10/pk A002778
Manifold	5-Port	A001730
Manual	Operating, Flow Solution 3000	A001702
Manual	Operating, WinFLOW Software	A002940
Membrane Module	25-mm Acrylic w/ Mix T	A002848
Membrane Module	25-mm TPX	A000819
Membrane Module	25-mm TPX w/ Mix T	A001494
Nut	1/4-28 x 0.076" I.D. TPX	A000528
O-ring	0.208" I.D. x 0.07" O.D., 70 V.T. (Peek Flowcell)	A000689
O-ring	Spacer 1/4-28 Viton (Use With A001264)	10/pk A002671
Plug	Tapered Luer	A001142
Probe	6" Peek	A001887
Sidecutter	Flush	A000056
Silicone Oil	10 mL	A001283
Tray Assembly	5027 Sampler	A002272
Union	1/4-28 P620	A000263
Window	Sapphire 2 mm x 6.35 mm (Peek Flowcell)	A000688

Flow Solution 3000

Modules		Part #
A/D Converter	Plug-In	A002104
Chassis	3000 Model	A001604
Detector	Amperometric (With Flowcell), Plug-In	A001067
Detector	Amperometric (Without Flowcell), Plug-In	A002525
Detector	Photometric, Plug-In (With FlowCell)	A001821
Digester	UV Supports Gas Diffusion (Total CN, Amperometric Finish)	A001958
Digester	UV With Gas Diffusion (Total CN, Amperometric Finish)	A002111
Digester	UV Without Gas Diffusion (Total CN, Amperometric Finish)	A001121
MIDI Still	EnviroPrep 4-Place, 110 V	A000954
MIDI Still	EnviroPrep, 10-Place, 110 V	A000935
Panel	Front Blank	A001962
Pump Module	Plug-In	A001049
Sampler	120-Place (Random Access)	A000989
Valve Module	Plug-In (For Amperometric Detection)	A002037
Valve Module	Plug-In (For Photometric Detection)	A001449



Amperometric Detector with Flowcell
(Part #A001067)

Nipples		Part #
N5	6/pk	A116-0002P01
N7	6/pk	A116-0005P01
N8	6/pk	A116-0003P01
N13	6/pk	A116-0061P01

Pump Tubes		Part #
Asst. Pkg.	2/each size	A903-1000P00
Blk/Blk	12/pk	A903-1030P01
Grn/Grn	12/pk	A903-1072P01
Gry/Gry	12/pk	A903-1051P01
Orn/Blu	12/pk	A903-1010P01
Orn/Grn	12/pk	A903-1015P01
Orn/Orn	12/pk	A903-1035P01
Orn/Wht	12/pk	A903-1025P01
Orn/Yel	12/pk	A903-1020P01
Red/Red	12/pk	A903-1045P01
Wht/Wht	12/pk	A903-1040P01
Wht/Wht	Silicone	12/pk A002894
Yel/Blu	12/pk	A903-1060P01
Yel/Yel	12/pk	A903-1056P01

Sample Cups		Part #
2 mL	1000/pk	A127-0090P01
4 mL	1000/pk	A127-0018P01
12 mL (tubes)	2000/pk	A001293

Software		Part #
WinFLOW	CD-ROM	A002877
WinFLOW	CD-ROM and Firmware	A002878
WinFLOW	3.5" Floppy Diskettes	A002938
WinFLOW	3.5" Floppy Diskettes and Firmware	A002939

Flow Solution 3000

Solutions		Part #
Brij 35	30% 125 mL	A21-0110-33
Dowfax 2A1	125 mL	A000080
Reagent	Kleenflow Acidic, 1000 mL	A001251
Reagent	Kleenflow Basic, 1000 mL	A001252

Splitters		Part #
Sample 3-Port		A303-0110-00
Stream 3-Port, 0.023 I.D.		A303-0112-00
Stream 3-Port, 0.033 I.D.		A303-0114-00
Sample 4-Port		A303-0111-00
Stream 4-Port, 0.023 I.D.		A303-0113-00
Stream 4-Port, 0.033 I.D.		A303-0115-00

Tools		Part #
Allen Wrench	0.05" (Flowcell)	A001298
Allen Wrench	3/16" (Filter Holder/Lamp Housing)	A001938
Awl	6"	A000368
Scissors	5 1/2"	A000078
Screwdriver	#2 Phillips 33-mm	A001911
Screwdriver	Xcelite	A383-0903-00
Syringe	10 cc (Luer Lock)	A000344

Tubing		Part #
Assembly	Bypass Loop Wht/Wht 0.3 mm I.D. Teflon	A001309
Assembly	Heatsrink 15 cm (Flowcell Inlet and Outlet)	A002052
Assembly	Injection Loop 20 µL	A001936
Assembly	Injection Loop 50 µL	A000924
Assembly	Injection Loop 100 µL	A001311
Assembly	Injection Loop 200 µL	A001310
Assembly	Injection Loop 250 µL	A000926
Assembly	Injection Loop 500 µL	A000927
Assembly	Sample Line Dual	A001886
Assembly	Sample Line Single	A001885
Assembly	25-cm Coil 0.034 I.D.	A002062
Assembly	50-cm Coil 0.034 I.D.	A002063
Assembly	12-cm Flanged (0.5 mm I.D. Teflon)	A001483
Assembly	15-cm Flanged (0.5 mm I.D. Teflon)	A001524
Assembly	30-cm Flanged (0.5 mm I.D. Teflon)	A001817
Assembly	60-cm Flanged (0.5 mm I.D. Teflon)	A001968
Tubing	EVA 0.020" I.D.	10 ft/pk A001764
Tubing	PE 0.034" x 0.060 I.D.	10 ft/pk A002243
Tubing	PVC 0.030" I.D.	10 ft/pk A001746
Tubing	Teflon 0.5 mm I.D.	10 ft/pk A001754

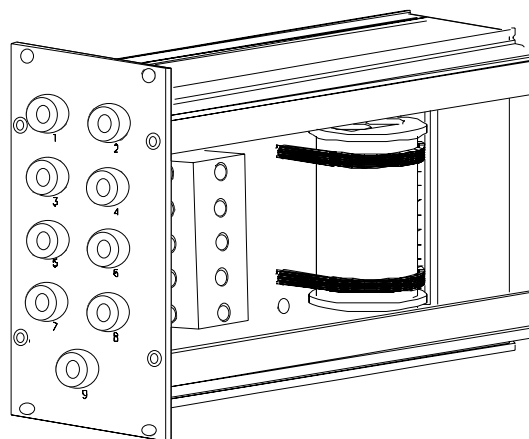


WinFLOW Windows-based Software
(Part #A002877)

Flow Solution 3000 and Flow Solution 300

Flow Solution 3000/300 Cartridges		Part #
Alkalinity	Water, Plug-In	A002745
Ammonia	Phenate, USEPA, (Does Not Include TKN), Water, Plug-In	A002053
Chloride	Water, Plug-In	A001568
Chromium (IV)	Water, Plug-In	A002831
Cyanide	Post-Distillation (Requires Off-Line Distillation), Water, Plug-In	A002113
Cyanide	Total, Amperometric (Includes Detector), Water, Plug-In	A002683
Cyanide	Upgrade From WAD to Total, Amperometric, Water, Plug-In	A001471
Fluoride by ISE	Plug-in Meter, Electrodes, and Flowcell	A002832
Hardness	Water, Plug-In	A002746
Nitrate/Nitrite	Cd Reduction, USEPA, Water, Plug-In	A001559
Nitrate/Nitrite	Soil Extracts, Plug-In	A002423
Ortho-Phosphate/ Total Phosphorus	USEPA, Water, Plug-In	A001558
pH	Plug-In Meter, Electrodes and Flowcell	A002833
Phenol	Post Distillation (Requires Off-Line Distillation), Water, Plug-In	A002164
Research 1	5-Port Acrylic Manifold	A002898
Research 2	5-Port Acrylic Manifold plus Heater	A002899
Research 3	Gas Diffusion	A002900
Research 4	Gas Diffusion plus Heater	A002901
Silica	Water, Plug-In	A002581
Sulfate	(Per Std. Methods 450-S042-F), Water, Plug-In	A001569
TKN	Gas Diffusion, USEPA, Water, Plug-In	A002380
TKN (Salicylate)	USEPA, (NH ₄ Not Included), Water, Plug-In	A002054

Flow Solution 3000/300 Seawater Chemistries	Part #
Ammonia	A002904
Nitrite-Nitrate	A002837
Orthophosphate	A002907
Silica	A002905



Plug-In Cartridge



To order call 1-800-653-1711 (USA/Canada) or 409-690-1711



Flow Solution IV

Assemblies Part

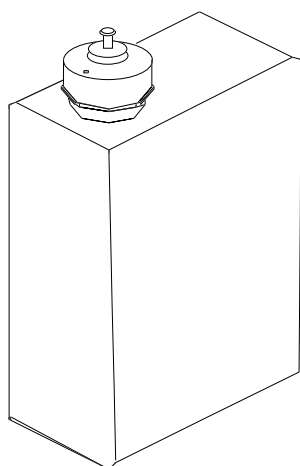
Cadmium Coil Assembly	OTCR, 24 inch	A000897
Cadmium Coil Assembly	OTCR, 12 inch	A000327
Helper Line Assembly		A000303

Bottles Part

15-mL	Dropper w/ Cap		A001393
250-mL	Reagent Assembly, Amber Glass	5/pk	A000102
500-mL	Reagent Assembly, Clear Plastic	5/pk	A000104
1000-mL	Wash/Dil Assembly		A000113
2000-mL	Waste Assembly		A000115
3.8-L	Waste Cubetainer		A001126

Cap Assemblies Part

1-L	Cap Assembly w/o Luer Cubetainer	A001506
250-mL	Cap Assembly w/o Luer Connector	A001100
500-mL	Cap Assembly w/o Luer Connector	A001105
1000-mL	Cap Assembly w/o Luer Connectors	A001107
2000-mL	Cap Assembly w/o Luer Connectors	A001109



Reagent Bottle, 500 mL
(Part #A000104)

Cartridges Part

Acidity	(Requires A002392, Power Base With FIA) Water	A002701
Alkalinity	BCG - Methylred (Requires A002392, Power Base With FIA) Water	A002607
Alkalinity	With Chloride (Requires A002392, Power Base With FIA) Water	A002595
Aluminum	Total Reactive, Soil/Plant/Water	A002702
Amino Nitrogen	Soil/Plant	A002703
Ammonia	(Phenate)/TKN (Salicylate), USEPA, Water	A002597
Ammonia	Seawater	A002602
Ammonia/TKN	Soil/Plant	A002617
Ammonium-N DIN	Salicylate, Water	A002704
Amylose in Rice		A002852
Anionic Surfactants (ABS)	(Single Extraction), Water	A002705
Bromide	Water	A002706
Calcium	Water	A002707
Carbonate - Bicarbonate as CO ₂	Water	A002708
Chloride	Glass, Water	A002609
Chloride	Water	A002601
Conductivity	(Requires A002104, Plug-In A/D Converter and A002392, Power Base With FIA), Water	A002709
Cyanide	Post-Distillation (Requires Off-Line Distillation), Water	A002692
Cyanide w/ UV Digestion	On-Line Distillation (Requires A515000 Distillation Bath), Water	A002599
Environmental 1	(NO ₂ /NO ₃ /TP/OP), Water	A002593
Environmental 2	(Alk/TKN/NH ₄ /Cl), Water	A002594
Flame Photometry	K, Na, Li, or Ca (Requires A002104 A/D Converter and A001261 Photometer), Water	A002739
Fluoride by ISE	(Requires A002104, Plug-In A/D Converter for WinFLOW), Water	A002677
Hardness	Water	A002711
Hexavalent Chromium	Water	A002679
Iron	Total, Water	A002712
Magnesium	Water	A002713
Nicotine	Soil/Plant	A002714
Nitrate/Nitrite	Cd Reduction, USEPA, Water	A002670

Flow Solution IV

Cartridges (cont.)		Part #
Nitrate/Nitrite	Cd Reduction, Seawater	A002603
Nitrate/Nitrite	Cd Reduction, Soil/Plant	A002690
Organic Nitrogen/UV	Water/Soil	A002715
Ortho-Phosphate	Glass, Water	A002608
Ortho-Phosphate	Seawater	A002604
Ortho-Phosphate/ Total Phosphorus	Soil/Plant	A002678
Ortho-Phosphate/ Total Phosphorus	Water	A002596
pH	(Requires A002104, Plug-In A/D Converter and A002392, Power Base With FIA), Water	A002716
Phenol 5-500 ppb	On-Line Distillation (Requires A515000 Distillation Bath), Water	A002606
Phenol	Post Distillation (Requires Off-Line Distillation), Water	A002692
Pre Dilution Jr.	Water	A002718
Reducing Sugar	Plant/Tobacco	A002719
Research 1 Jr.	5-pt Acrylic Manifold	A002920
Research 2 Jr.	5-pt Acrylic Manifold plus Heater	A002921
Research 3 Jr.	Membrane Module	A002922
Research 4 Jr.	Membrane Module plus Heater	A002923
Research 5	(Wavelength Filters Not Included)	A002720
Research 5 Jr.	(Wavelength Filters Not Included)	A002721
Research 6	(Wavelength Filters Not Included)	A002722
Research 6 Jr.	(Wavelength Filters Not Included)	A002723
Silica	Seawater	A002605
Silica	Water	A002600
Sulfate	(Per Std. Methods 450-S042-F)	A002598
Sulfide	Seawater/Water	A002724
Sulfite	Water	A002725
Total Nitrogen (Protein)	Salicylate, Soil/Plant/Feed	A002726
Total Organic Carbon	Water	A002727

Ferrules		Part #
Tefzel 1/4-28 0.063" I.D.	6/pk	A001759
Tefzel 1/4-28 0.100" I.D.	6/pk	A001760
Tefzel 1/4-28 0.125" I.D.	6/pk	A001761

Filters		Part #
Filter	400 nm	A305-1400-00
Filter	405 nm	A305-1405-00
Filter	410 nm	A305-1410-00
Filter	420 nm	A305-1420-00
Filter	440 nm	A305-1440-00
Filter	450 nm	A305-1450-00
Filter	460 nm	A305-1460-00
Filter	480 nm	A305-1480-00
Filter	505 nm	A305-1505-00
Filter	510 nm	A305-1510-00
Filter	520 nm	A305-1520-00
Filter	530 nm	A305-1530-00
Filter	540 nm	A305-1540-00
Filter	550 nm	A305-1550-00
Filter	560 nm	A305-1560-00
Filter	580 nm	A305-1580-00
Filter	590 nm	A305-1590-00
Filter	600 nm	A305-1600-00
Filter	610 nm	A305-1610-00
Filter	620 nm	A305-1620-00
Filter	630 nm	A305-1630-00
Filter	640 nm	A305-1640-00
Filter	660 nm	A305-1660-00
Filter	690 nm	A305-1690-00
Filter	750 nm	A305-1750-00
Filter	810 nm	A305-1810-00
Filter	815 nm	A305-1815-00
Filter	820 nm	A305-1820-00
Filter	880 nm	A305-1880-00
Filter	In-Line Regent, 5 mm	3/pk A001770
Filter	Syringe, 0.45 mm	10/pk A001408

Flow Solution IV

Luers		Part #
Female 1/4"-28, P-618	3/pk	A002666
Male 1/16, Polypropylene	10/pk	A001769
Male 3/32" I.D. Polypropylene (For Grn/Grn Pump Tube)		A000562

Membranes		Part #
Gas Diffusion, Polypropylene	5/pk	A001520
Gas Diffusion, Teflon	25/pk	A002040
Type C, 25 mm (Dialysis)	12/pk	A000397
Type C, 47 mm (Dialysis)	12/pk	A000395
Type H, 25 mm	12/pk	A000643
Type H, 47 mm	12/pk	A000645

Miscellaneous		Part #
Column	For Packed Cadmium or Ion Exchange Resin	A001729
Connector	Gray Nipple w/ 1/4"-28 end	A001264
Debubbler	Acrylic	A000172
Debubbler Assembly	ER Detector w/ Tubing	A001913
Frits	1/8 O.D. 4-mm Polypropylene (For A001759)	25/pk A000947
Fuse	3.2 Amp Slo-Blo	A381-3004-00
Manual	Operating, Flow Solution IV	A002570
Manual	Operating, WinFLOW Software	A002940
O-ring	Spacer 1/4"-28 Viton (Use with A001264), P-1410	10/pk A002671
Plug	1/4"-28 Tefzel	A000267
Plug	Tapered Luer	A001142
Sample Cups	2 mL	1000/pk A127-0090P01
Sid cutter	Flush	A000056
Silicone Oil	10 mL	A001283
Union	1/4"-28 P620	A000263

Modules		Part #
A/D Converter	Plug-In	A002104
AutoDilutor	For Use With RA Sampler, A002466	A002700
Detector	Expanded Range, 1 Channel (Main Unit)	A001637
Detector	Expanded Range, 2 Channels (Main Unit)	A001551
Detector	Expanded Range, 3 Channels (Main Unit)	A001639
Detector	Expanded Range, 1 Channel (Auxiliary Unit) Requires a Main Unit	A001984
Detector	Expanded Range, 2 Channels (Auxiliary Unit) Requires a Main Unit	A001985
Detector	Expanded Range, 3 Channels (Auxiliary Unit) Requires a Main Unit	A001986
Detector	Photometric, Plug-In	A001821
Digestor	UV Bench	A000878
Distillation Module		A515000
Flame Photometer		A002885
Power Base Module	With FIA	A002392
Power Base Module	Without FIA	A002393
Pump	Peristaltic, 24 Channel	A502000
Sampler	RA (Random Access)	A002466
Software	WinFLOW - Flow Solution IV (CD-ROM)	A002877
Software	WinFLOW - Flow Solution IV (CD-ROM and Firmware)	A002878
Software	WinFLOW - Flow Solution IV (3.5" Floppy Disk)	A002938
Software	WinFLOW - Flow Solution IV (3.5" Floppy Disk and Firmware)	A002939
Timed Events Module	(110 VAC) for Automatic Start-Up and Shut Down Capability	A002127
Timed Events Module	(220 VAC) for Automatic Start-Up and Shut Down Capability	A002128

Flow Solution IV

Nipples		Part #
N5	6/pk	A116-0002P01
N7	6/pk	A116-0005P01
N8	6/pk	A116-0003P01
N13	6/pk	A116-0061P01

Nuts	Part #
1/4-28 x 0.100 I.D. Peek	A001224
1/4-28 x 0.076 I.D. TPX	A000528
1/4-28 x 0.125 I.D. TPX	A001757

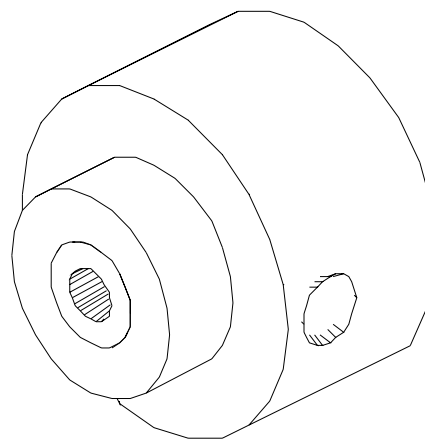
Pump Tubes		Part #
Asst. Pkg.	2 Each Size	A000362
Blk/Blk, 0.030 I.D.	12/pk	A000348
Blk/Blk, 0.030 I.D.	Silicone 6/pk	A116-0497P08
Blu/Blu, 0.065 I.D.	12/pk	A000355
Blu/Blu, 0.065 I.D.	Silicone 6/pk	A116-0497P15
Grn/Grn, 0.073 I.D.	12/pk	A000356
Grn/Grn, 0.073 I.D.	Silicone 6/pk	A116-0497P16
Gry/Gry, 0.051 I.D.	12/pk	A000352
Gry/Gry, 0.051 I.D.	Silicone 6/pk	A116-0497P12
Orn/Blu, 0.01 I.D.	12/pk	A000200
Orn/Grn, 0.015 I.D.	12/pk	A000345
Orn/Orn, 0.035 I.D.	12/pk	A000349
Orn/Orn, 0.035 I.D.	Silicone 6/pk	A116-0497P09
Orn/Wht, 0.025 I.D.	12/pk	A000347
Orn/Wht, 0.025 I.D.	Silicone 6/pk	A116-0497P07
Orn/Yel, 0.020 I.D.	12/pk	A000346
Pur/Blk, 0.090 I.D.	12/pk	A000358
Pur/Blk, 0.090 I.D.	Silicone 6/pk	A116-0497P18
Pur/Orn, 0.100 I.D.	12/pk	A000359
Pur/Orn, 0.100 I.D.	Silicone 6/pk	A116-0497P19
Pur/Pur, 0.081 I.D.	12/pk	A000357
Pur/Pur, 0.081 I.D.	Silicone 6/pk	A116-0497P17
Pur/Wht, 0.110 I.D.	12/pk	A000360
Pur/Wht, 0.110 I.D.	Silicone 6/pk	A116-0497P20
Red/Red, 0.045 I.D.	12/pk	A000351
Red/Red, 0.045 I.D.	Silicone 6/pk	A116-0497P11
Wht/Wht, 0.040 I.D.	12/pk	A000350
Wht/Wht, 0.040 I.D.	Silicone 6/pk	A116-0497P10
Yel/Blu, 0.060 I.D.	12/pk	A000354
Yel/Blu, 0.060 I.D.	Silicone 6/pk	A116-0497P14
Yel/Yel, 0.056 I.D.	12/pk	A000353
Yel/Yel, 0.056 I.D.	Silicone 6/pk	A116-0497P13

Flow Solution IV

Replacement Parts		Part #
Cable	9 M/9 F Std. Serial	A001644
Cable	Universal AC Power 10 A	A381-4000-00
Cover	Flowcell	A002099
Distillation Head Assembly	515 Distillation Module	A000677
Filter Holder	ER Detector	A001819
Flowcell Assembly	ER Detector	A000684
Flowcell Assembly	Low RI, ER Detector	A000754
Fuse	3.2 Amp Slo-Blo, 550 Chassis 110 V	A381-3004-00
Fuse	3A Slo-Blo, 5 x 20 mm, 550 Chassis 220 V	A002038
Heater Spindle Assembly	Tubing Included	A002412
Heater Spool	Distillation Assembly	A515017
Lamp Assembly	ER Detector	A001185
Manual	WinFLOW Operating	A001965
Manual	Flow Solution IV Operating	A002570
Membrane Module	25-mm Acrylic w/ Mix T	A002848
Pillow Assembly	Complete	A000811
Platen	502 Pump	A000166
Platen Extender	502 Pump	A000167
O-ring	0.208 I.D. x 0.07 O.D., 70 VT, Peek Flowcell	A000689
Window	Sapphire 2 mm x 6.35 mm, Peek Flowcell	A000688

Solutions		Part #
Brij 35	30% 125 mL	A21-0110-33
Brij 35	30% 1 L	A21-0110-37
Dowfax 2A1	125 mL	A000080
Reagent	Kleenflow Acidic 1000 mL	A001251
Reagent	Kleenflow Basic 1000 mL	A001252

Splitters		Part #
Air 1/16" Tee Fitting (Poly)		A000301
Sample 3-Port		A303-0110-00
Sample 4-Port		A303-0111-00
Stream 3-Port, 0.023 I.D.		A303-0112-00
Stream 3-Port, 0.033 I.D.		A303-0114-00
Stream 4-Port, 0.023 I.D.		A303-0113-00
Stream 4-Port, 0.033 I.D.		A303-0115-00

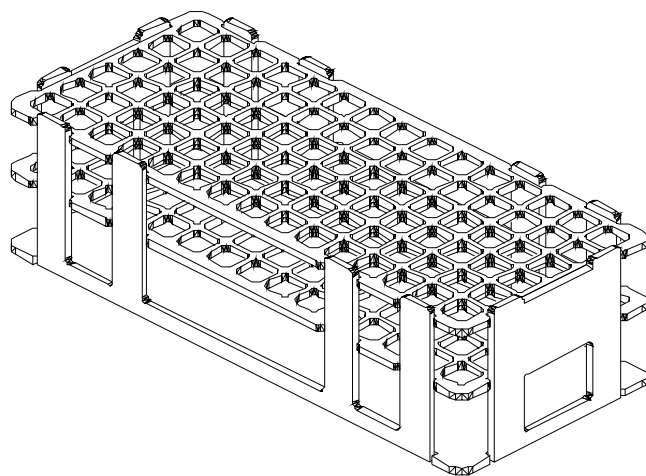


ER Detector Flowcell Assembly
(Part #A000684)

Flow Solution IV

Tools		Part #
Allen Wrench	0.05" (Flowcell)	A001298
Allen Wrench	3/16" (Filter Holder/Lamp Housing)	A001938
Awl	6"	A000368
Scissors	5 1/2"	A000078
Screwdriver	#2 Phillips, 33-mm	A001911
Screwdriver	Xcelite	A383-0903-00
Syringe	10 cc (Luer Lock)	A000344

Trays	Part #
40-Position, Sample (RA Sampler)	A002542
60-Position, Sample (RA Sampler)	A002541
90-Position, Sample (RA Sampler)	A002540



RA Sampler Tray, 90-Position
(Part #A002540)

Tubes		Part #	
Assembly	Bypass Loop, Wht/Wht, 0.3 mm I.D., Teflon	A001309	
Assembly	Coil, 50 cm, 0.020" I.D. EVA	A000801	
Assembly	Coil, 50 cm, 0.040" I.D. EVA	A000324	
Assembly	Connector, 20 cm, 0.040" I.D. EVA	A000323	
Assembly	Heatshrink, 15 cm (Flowcell Inlet and Outlet)	A002052	
Assembly	Injection Loop, 50 µL	A000924	
Assembly	Injection Loop, 250 µL	A000926	
Assembly	Injection Loop, 500 µL	A000927	
Tube	Sample, 13 mm x 100 mm	A002547	
Tube	Sample, 17 mm x 100 mm	A002548	
Tubing	EVA 0.020" I.D.	10 ft/pk	A001764
Tubing	EVA 0.030" I.D.	10 ft/pk	A001765
Tubing	EVA 0.040" I.D.	10 ft/pk	A001763
Tubing	PE 0.015" I.D.	10 ft/pk	A001777
Tubing	PE 0.034" x 0.060 I.D.	10 ft/pk	A002243
Tubing	PVC 0.030" I.D.	10 ft/pk	A001746
Tubing	0.5 mm I.D., Teflon	10 ft/pk	A001754

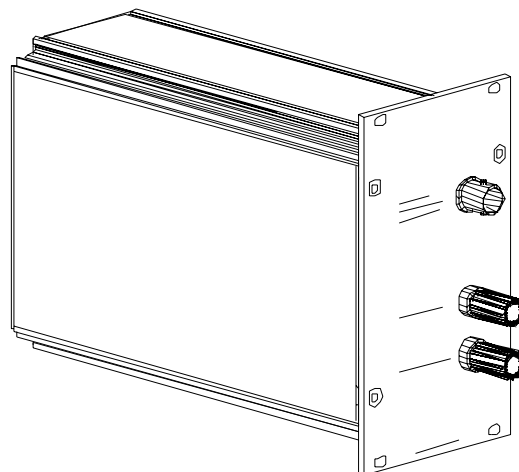


To order call 1-800-653-1711 (USA/Canada) or 409-690-1711

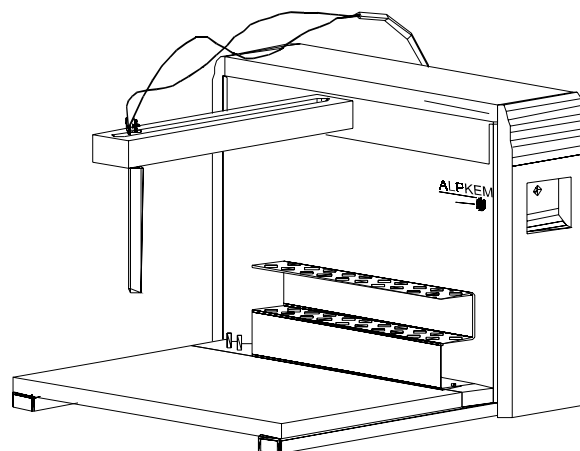


Flow Solution III

Flow Solution III Modules		Part #
A/D Converter	Plug-In	A002104
AutoDilutor	For Use With RA Sampler, A002466	A002700
Cartridge Base	With Two Heater Controllers, Four Position	A503000
Detector	Expanded Range, 1 Channel (Main Unit)	A001637
Detector	Expanded Range, 2 Channels (Main Unit)	A001551
Detector	Expanded Range, 3 Channels (Main Unit)	A001639
Detector	Expanded Range, 1 Channel (Auxiliary Unit) Requires a Main Unit	A001984
Detector	Expanded Range, 2 Channels (Auxiliary Unit) Requires a Main Unit	A001985
Detector	Expanded Range, 3 Channels (Auxiliary Unit) Requires a Main Unit	A001986
Detector	Photometric, Plug-In	A001821
Distillation Module		A515000
Flame Photometer		A002885
Manual	Operating - Flow Solution III	A001964
Power Distribution Module		A509000
Pump	Peristaltic, 24 Channel	A502000
Sampler	RA (Random Access)	A002466
Software	WinFLOW - Flow Solution III (CD-ROM)	A002877
Software	WinFLOW - Flow Solution III (CD-ROM and Firmware)	A002878
Software	WinFLOW - Flow Solution III (3.5" Diskettes)	A002938
Software	WinFLOW - Flow Solution III (3.5" Diskettes and Firmware)	A002939
Timed Events Module	(110 VAC) for Automatic Start-Up and Shut Down Capability	A002127
Timed Events Module	(220 VAC) for Automatic Start-Up and Shut Down Capability	A002128
Valve Injection Module, 512		A512000



A/D Converter
(Part #A002104)



Random Access Sampler
(Part #A002466)

CNSolution Model 3000 and CNLab Model 3202

Bottles	Part #
15-mL Dropper w/ Cap	A001393
Wash/Dil 1000-mL Assembly w/Cap	A000113
Waste 2000-mL Assembly w/Cap	A000115
Waste 3.8-L Cubetainer w/Cap	A001126

Cables	Part #
Amperometric (PAD)	A002299
9M/9F Std. Serial	A001644
25M/25F Std. Serial	A001736
Universal AC Power 10A	A381-4000-00

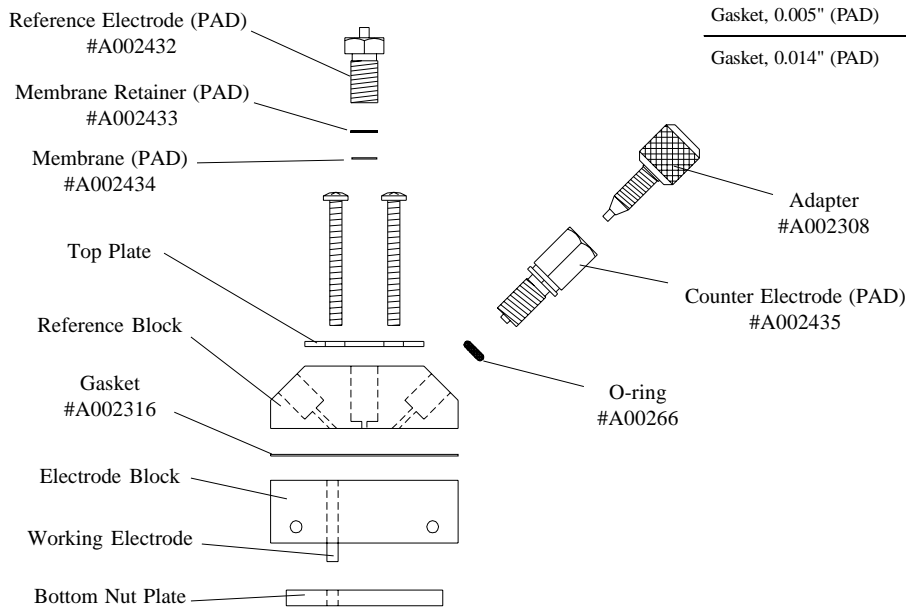
Cap Assemblies	Part #
1000-mL w/o Leur Connectors	A001107
2000-mL w/o Leur Connectors	A001109
1-L w/o Leur Cubetainer	A001506

Cartridges	Part #
Total, Amperometric/Gas Diffusion, Plug-In	A002682
Total/WAD, Amperometric/Gas Diffusion, Plug-In	A002654
Upgrade From WAD to Total, Amperometric, Plug-In	A001471
WAD, Amperometric/Gas Diffusion, Plug-In	A001982

Electrodes	Part #
Auxiliary Electrode Pt. Wire	A001074
Counter Electrode Adapter, 10-32 to 1/4-28	A002308
Counter Electrode O-ring	A001266
Counter Electrode (PAD)	A002435
Reference Electrode (PAD)	A002432

Filters	Part #
In-Line Reagent, 5 mm 3/pk	A001770
Syringe, 0.45 mm 10/pk	A001408

Flowcells	Part #
Amperometric (PAD)	A002298
Gasket, 0.005" (PAD)	A002316
Gasket, 0.014" (PAD)	A002315



Amperometric Flowcell
(Part #A002298)

CNSolution Model 3000 and CNLab Model 3202

Injection Valve Coil Replacement Set (A001626)

	Part #
100- μ L Injection Loop	A001311
200- μ L Injection Loop	A001310
Sample Inlet Tube	A001523

Luers

			Part #
Luer	Female 1/4-28, P-618	3/pk	A002666
Luer	Male 1/16, Polypropylene	10/pk	A001769
Luer	Male 3/32 I.D., Polypropylene (for Grn/Grn Pumptube)	10/pk	A002778
Luer Fittings	For Reagent/Waste Bottles	10/pk	A001769

Manuals

	Part #
Operating - CNLab 3202	A001462
Operating - CNSolution 3000	A002370
Operating - WinFLOW	A002940

Autosampler, 120-Place
(Part #A00989)

Membranes

		Part #
Gas Diffusion, Polypropylene	5/pk	A001520
Gas Diffusion, Teflon	25/pk	A002040
Gore-Tex, 1 mm, 0.5" Length	5/pk	A001671
Membrane Retainer (PAD)		A002433
Reference Electrode	10/pk	A001528
Reference Electrode (PAD)	2/pk	A002434

Miscellaneous

		Part #
Autosampler	120 Place	A000989
Brij 35	30% Solution 125 mL	A21-0110-33
Bulkhead	Panel (Black ABS Port Bulkheads)	A001493
Cart	Gas Diffusion CN	A001982
Coil	UV Digestor, Teflon	A001526
Connector	Gray Nipple w/ 1/4-28 End	A001264
Filling Solution	Reference Electrode 15 mL	A001628
Fitting	1/16" Tee	A000301
Fuse	3.2 Amp Slo-Blo	A381-3004-00
Fuse	3A Slo-Blo, 5 mm x 20 mm	A002038
Holder	Pumptube (Peristaltic Pump)	A001055
Lamp	Ultraviolet 4 W (UV Digestor)	A001959
Latch	Pressure Handle (Peristaltic Pump)	A001052
Needle Tip	For Reference Electrode Filling	A001522
O-ring	Spacer 1/4-28 Viton (Use w/ A001264)	10/pk A002671
O-ring Spacer	For Reference Electrode	2/pk A002433
Plug	Tapered Luer	A001142
Probe	6" Peek	A001887
Screwdriver	Small Flathead	A381-0903-00
Sidecutter	Flush	A000056
Silicone Oil	10 mL Bottle	A001283
Stopcock	Wasteline	A002586
Tray Assembly	5027 Sampler	A002272
Union	1/4-28 P620	A000263
Working Electrode	Ag Wire, Long	A001072

CNSolution Model 3000 and CNLab Model 3202

Mixing Coil Replacement Set (A001625) Part

Acid Donor Stream Waste Line	A001484
Backpressure Coil on Flowcell Waste Line	A001415
Cartridge to Detector Flow Cell Coil	A001485
Mixing Coil, 30-cm/0.5 mm Flanged for FIA	A001817
Mixing Coil, 50-cm length	A001488
Short Coil From Acid to Air Addition	A001525
Valve to Cartridge Coil, 12-cm length	A001483

Nipples Part

N5	6/pk	A116-0002P01
N7	6/pk	A116-0005P01
N8	6/pk	A116-0003P01
N13	6/pk	A116-0061P01

Pump Tubes Part

Pump Tube	Asst. Pkg.	2/each size	A903-1000P00
Pump Tube	Blk/Blk	12/pk	A903-1030P01
Pump Tube	Gm/Grn	12/pk	A903-1072P01
Pump Tube	Gry/Gry	12/pk	A903-1051P01
Pump Tube	Orn/Blu	12/pk	A903-1010P01
Pump Tube	Orn/Grn	12/pk	A903-1015P01
Pump Tube	Orn/Orn	12/pk	A903-1035P01
Pump Tube	Orn/Wht	12/pk	A903-1025P01
Pump Tube	Orn/Yel	12/pk	A903-1020P01
Pump Tube	Red/Red	12/pk	A903-1045P01
Pump Tube	Wht/Wht	12/pk	A903-1040P01
Pump Tube	Yel/Blu	12/pk	A903-1060P01
Pump Tube	Yel/Yel	12/pk	A903-1056P01
Pump Tube Labels		32 of each	A001816

Reagents Part

Ascorbic Acid	Reagent Grade Powder	5 g	A001403
Brij 35	30%	125 mL	A21-0110-33
Lead Carbonate	Reagent Grade Powder	10 g	A001436
Reagent	WAD, Part A	0.1 g	A001416
Reagent	WAD, Part B	5 g	A001417
Reagent Refill Kit	Total (Acid 1 & 2, Base, Carrier)	3.5 L	A001459
Reagent Refill Kit	WAD (Acid, Base, Carrier)	3 L	A001813
Sodium Hydroxide	Reagent Grade Pellets	5 g	A001437
Sulfamic Acid	Reagent Grade Powder	5 g	A001438

Sample Cups Part

2 mL	1000/pk	A127-0090P01
4 mL	1000/pk	A127-0018P01
12 mL	2000/pk	A001293

Splitters Part

Sample 3 Port	A303-0110-00
Stream, 3 Port, 0.033 I.D.	A303-0114-00
Sample 4 Port	A303-0111-00
Stream, 4 Port, 0.023 I.D.	A303-0112-00
Stream, 4 Port, 0.033 I.D.	A303-0115-00

Test Paper Part

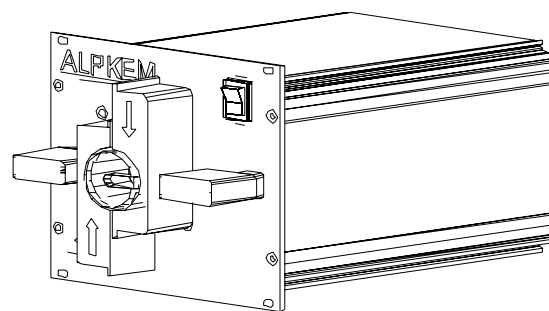
Lead Acetate, For Sulfide	Vial of 100	A001400
pH (1-14 pH Units)	100/pk	A001407
Starch Iodine, For Chlorine	Vial of 100	A001399

CNSolution Model 3000 and CNLab Model 3202

Tools		Part #
Awl	6"	A000368
Microspatula		A001410
Scissors	5 1/2"	A000078
Screwdriver	Xcelite	A383-0903-00
Syringe	10 cc (Luer Lock)	A000344
Syringe	For Reference Electrode Filling	A001521

Tubing		Part #	
Assembly	Bypass Loop Wht/Wht (0.33 mm I.D. Teflon)	A001309	
Assembly	Flanged, 12 cm (0.5 mm I.D. Teflon)	A001483	
Assembly	Flanged, 15 cm (0.5 mm I.D. Teflon)	A001524	
Assembly	Flanged, 30 cm (0.5 mm I.D. Teflon)	A001817	
Assembly	Flanged, 60 cm (0.5 mm I.D. Teflon)	A001968	
Assembly	Injection Loop	20 µL	A001936
Assembly	Injection Loop	50 µL	A000924
Assembly	Injection Loop	100 µL	A001311
Assembly	Injection Loop	200 µL	A001310
Assembly	Injection Loop	250 µL	A000926
Assembly	Injection Loop	500 µL	A000927
Assembly	Sample Line Dual	A001886	
Assembly	Sample Line Single	A001885	
Tubing	PVC 0.030" I.D.	10 ft/pk	A001746
Tubing	Teflon 0.5 mm I.D.	10 ft/pk	A001754

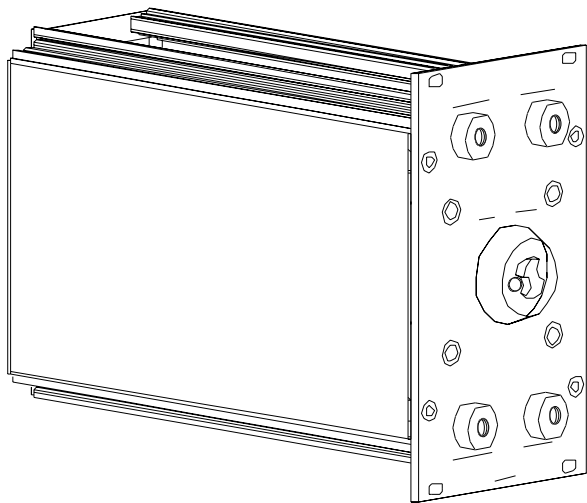
CNSolution 3000 Modules		Part #
Chassis	3000 Model	A001604
Detector	Amperometric (With Flowcell), Plug-In	A001067
Detector	Amperometric (Without Flowcell), Plug-In	A002525
Manual	Operating - CNSolution 3000	A002370
Pump Module	Plug-In	A001049
Sampler	120-Place (Random Access)	A000989
Software	WinFLOW (CD-ROM)	A002877
Software	WinFLOW (CD-ROM and Firmware)	A002878
Software	WinFLOW (3.5" Diskettes)	A002938
Software	WinFLOW (3.5" Diskettes and Firmware)	A002939
UV Module	Supports Gas Diffusion Addition, Plug-In	A001958
UV Module	With Gas Diffusion, Plug-In	A002111
UV Module	Without Gas Diffusion, Plug-In	A001121
Valve Module	Plug-In	A002037



Plug In Pump Module
(Part #A001049)

CNLab Model 3202

CNLab 3202 Modules		Part #
Chassis	3202 Model	A001029
Detector	Amperometric (With Flowcell), Plug-In	A001067
Detector	Amperometric (Without Flowcell), Plug-In	A002525
Manual	Operating - CNLab 3202	A001462
Pump Module	Plug-In	A001049
Sampler	120-Place (Random Access)	A002372
Software	CNLab 3202	A001881
UV Module	With Gas Diffusion, Plug-In	A002111
UV Module	Without Gas Diffusion, Plug-In	A001121
Valve Module	Plug-In	A002037



Plug-In Valve Module
(Part #A002037)



To order call 1-800-653-1711 (USA/Canada) or 409-690-1711



TOC and Water Analyzers

How to order:

OI Analytical has made ordering easier than ever. You can now submit your order by mail, telephone, fax, or e-mail.*

Mail: OI Analytical
 Order Entry Department
 P.O. Box 9010
 College Station, TX 77842-9010

Phone: (800) 673-3750
 (409) 690-1711

Fax: (409) 690-0440

E-mail: orders@oico.com

When ordering please provide:

- Contact name, company name, account number, shipping and billing addresses, and telephone number(s).
- Your company's purchase order number or credit card number. (Visa, MasterCard, AMEX). *Credit cards cannot be accepted as form of payment from international customers.*
- OI Analytical part number, description, and quantity of item(s) ordered.
- Tax exempt number (if applicable).

* International customers should contact the OI Analytical distributor in their area. If the distributor is unknown, they should contact OI Analytical International Sales directly at (409) 690-1711 for distributor information.

Total Organic Carbon and Water Analyzers

TOC Analyzers

Model 1010	150
Model 1020	155, 157
Model 700	154, 161
Software	156
Solids Module	159

Water Analyzers

Aqua-Check	166
Triple Check	166

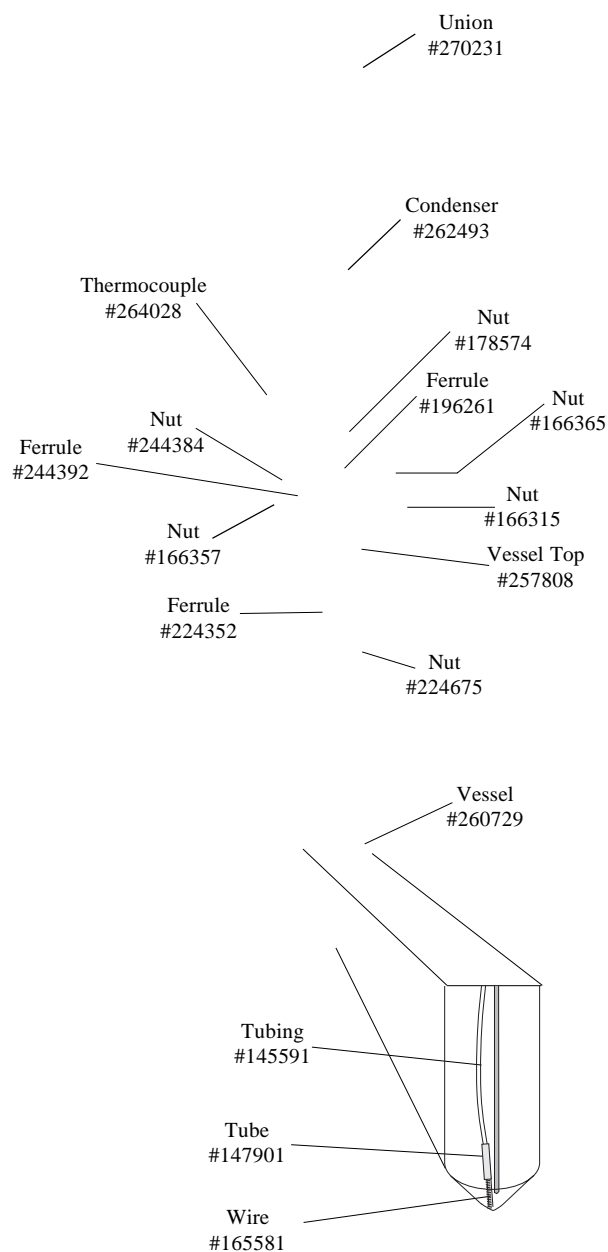


Fax 409-690-0440

Model 1010 TOC Analyzer

Boards		Part #
Infrared Detector Assembly		286922
Interface		265477
Floppy Controller/Serial Interface		281428
Motherboard		293852
Parallel Interface		296327
RAM		273581
VGA Card		274506

Digestion Vessel Assembly (see drawing)				Part #
Assembly	Digestion Vessel			262105
Clamp	Condenser Mounting			180604
Condenser	Digestion Vessel			262493
Ferrule	1/4" Teflon Tube	5/pk		196261
Ferrule	18-mm Teflon Tube	10/pk		224352
Ferrule	Kel-F 0.089			244392
Nut	Green Tube End Fitting 1/8"			166357
Nut	Red Tube End Fitting 1/8"			166365
Nut	Yellow Tube End Fitting 1/16"			166315
Nut	1/4" Stainless Steel			178574
Nut	18-mm Stainless Steel			224675
Nut	1/4-28, 0.089			244384
Thermocouple	Digestion Vessel			264028
Tube	(Drain Line Support) Teflon	per foot		147901
Tubing	Teflon 1/16" x 0.031 I.D.	per foot		145591
Union	1/4"- 1/8" Polypropylene			270231
Vessel	Digestion Vessel, 25 mL			260729
Vessel Top	Digestion Vessel Top			257808
Wire	Platinum Wire, 0.008" diameter	per foot		165581



**Digestion Vessel Assembly
Model 1010 TOC Analyzer**



To order call 1-800-653-1711 (USA/Canada) or 409-690-1711



Model 1010 TOC Analyzer

Electronics Part

Block	Heater Block	260703
Drive	Floppy Drive (3.5")	266080
Fan Assembly	Radial Cooling Fan	262147
Filter	In-Line 6A	242941
Heater	Cartridge Heater for Heater Block	263046
Keyboard	83-key Keyboard	273557
Monitor	9" Monochrome	273540
Power Cord	North America, 110 V	116038
Power Supply	25 W, 15 V (PCA)	266742
Power Supply	50 W, 12 V	266114
Power Supply	120 W	266106
Relay	Heater Block	272138
Thermocouple	Type K 24"	262980

Ferrules Part

Brass	1/8" Swagelok	10/pk	196089
Brass	1/16" Swagelok Back	5/pk	196162
Brass	1/16" Swagelok Front	5/pk	196170
Kel-F	0.089 Thru	each	244392
Stainless Steel	1/8" Swagelok	5/pk	210591
Teflon	1/4" Tube	5/pk	196261
Teflon	18 mm	10/pk	224352

Fittings - Adapters Part

1/16" Barb	Kynar	Luer	Female	196386
1/16" Barb	Kynar	Luer	Male	194415
1/16" Bulkhead	Kynar	Luer		197798
1/16" to 2(1/16) Barb	Kynar			270496
1/8" MNPT-F10-32	Brass		Male-Female	166208
1/8" Tube-32	Brass/Nickel			196600
10-32 x 1/16" Hose	Brass			166191

Fittings Part

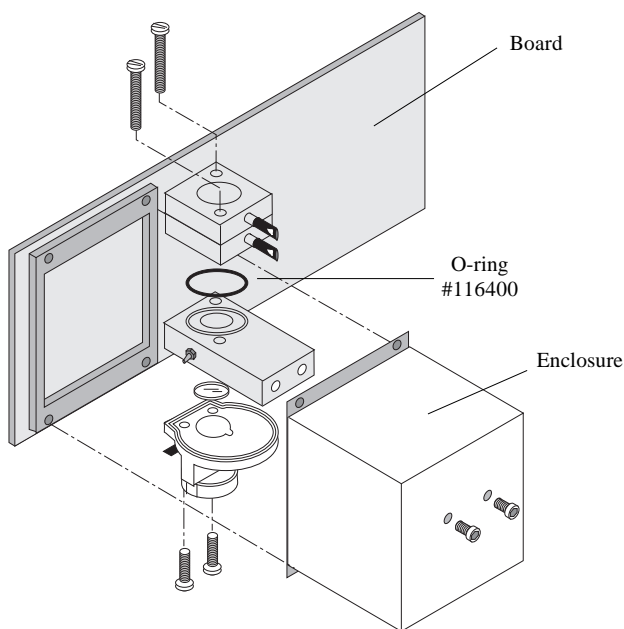
Coupling	1/4-28	Polypropylene	166274
Injection Port	1/4-28, 22 Gauge	Kel-F	270777
Nut	1/4" Male	Stainless Steel	178574
Nut	1/4-28	Nylon	197806
Nut	1/4-28 0.089	Aluminum	244384
Nut	1/8"	Polypropylene	274613
Nut	1/8" Female	Brass	128108
Nut	1/16" Male (5/pk)	Brass/Nickel	196303
Nut	18-mm Female	Stainless Steel	224675
Plug	1/16" Male	Stainless Steel	233924
Plug	1/4-28	Tefzel	166430
Port	1/8"	Brass	117721
Tee	1/8" Tube Male	Brass	124750
Tee	1/16"-1/8", 1/16"	Kynar	270504
Tee	NDIR Manifold	Kel-F	260885
Union	1/4"-1/8" Tube Male	Stainless Steel	124735
Union	1/8"	Brass	124420
Union	1/8" Hose	Brass/Nickel	225565
Union	1/8"-1/16"	Stainless Steel	178178
Union	18"-1/8"	Plastic	281436
Union	1/16" Bulkhead	Brass	175803

Fittings - Tube End Nuts Part

1/4-28 x 1/16"	Polypropylene	Black	166323
1/4-28 x 1/16"	Polypropylene	Blue	166331
1/4-28 x 1/16"	Polypropylene	Clear	166282
1/4-28 x 1/16"	Polypropylene	Red	166307
1/4-28 x 1/16"	Polypropylene	Yellow	166315
1/4-28 x 1/8"	Polypropylene	Black	166399
1/4-28 x 1/8"	Polypropylene	Blue	166381
1/4-28 x 1/8"	Polypropylene	Clear	165862
1/4-28 x 1/8"	Polypropylene	Green	166357
1/4-28 x 1/8"	Polypropylene	Red	166365
1/4-28 x 1/8"	Polypropylene	Yellow	166373

Model 1010 TOC Analyzer

Infrared Detector Assembly (see drawing)		Part #
Assembly	Linearized NDIR Assembly	286922
O-ring	Sealing O-ring, NDIR	116400



Infrared Detector Assembly

O-rings		Part #
Buna-N	Infrared Detector, NDIR	116400
Viton	Manifold 0.042 x 0.042	236604
Viton	Manifold 0.156 x 0.070	5/pk 288068
Viton	Reagent Bottle Reservoir Lid	5/pk 210310
Viton	Reagent Pump	5/pk 210286
Viton	Reagent Pump Rebuild Kit	178806
Viton	Reagent Pump Seal	5/pk 210302

Plumbing		Part #
Acid/Oxidant Reagent Bottle Assembly		262030
Acid/Oxidant Reagent Metering Pump		182550
Check Valve - Polypropylene		182238
Drying Tube, Indicating		273417
Filter - In-Line 10- μ Reagent Bottle		182246
Filter - Teflon In-Line (Filter Disk)		192120
Injector, Block		260919
Injector, Block Assembly		263384
Permeation Tube Assembly		264119
Sample Pump		263442
Septum - Teflon-faced Silicone, 5 mm x 0.125"	50/pk	174566

Printer Options		Part #
Paper	9-1/2" x 11", 400 Sheets	138546
Paper	9-1/2" x 11", 2500 Sheets	138554
Printer Cable		273227
Ribbon Cartridge		178871

Model 1010 TOC Analyzer

Tubing and Tube Assemblies Part

Tube	Norprene	Sample Pump 1/4" I.D.	277319
Tube Assembly		Ascarite Scrubber	169145
Tube Assembly		Permeation	264119
Tubing	Polypropylene	1/8" x 3/32" I.D. Clear	189738
Tubing	Teflon	1/16" x 0.007" I.D.	272542
Tubing	Teflon	1/16" x 0.031" I.D.	145591
Tubing	Teflon	1/8" x 0.063" I.D.	147901
Tubing	Tygon	1/4" x 1/8" I.D. Clear	257469

Valves and Valve Assemblies Part

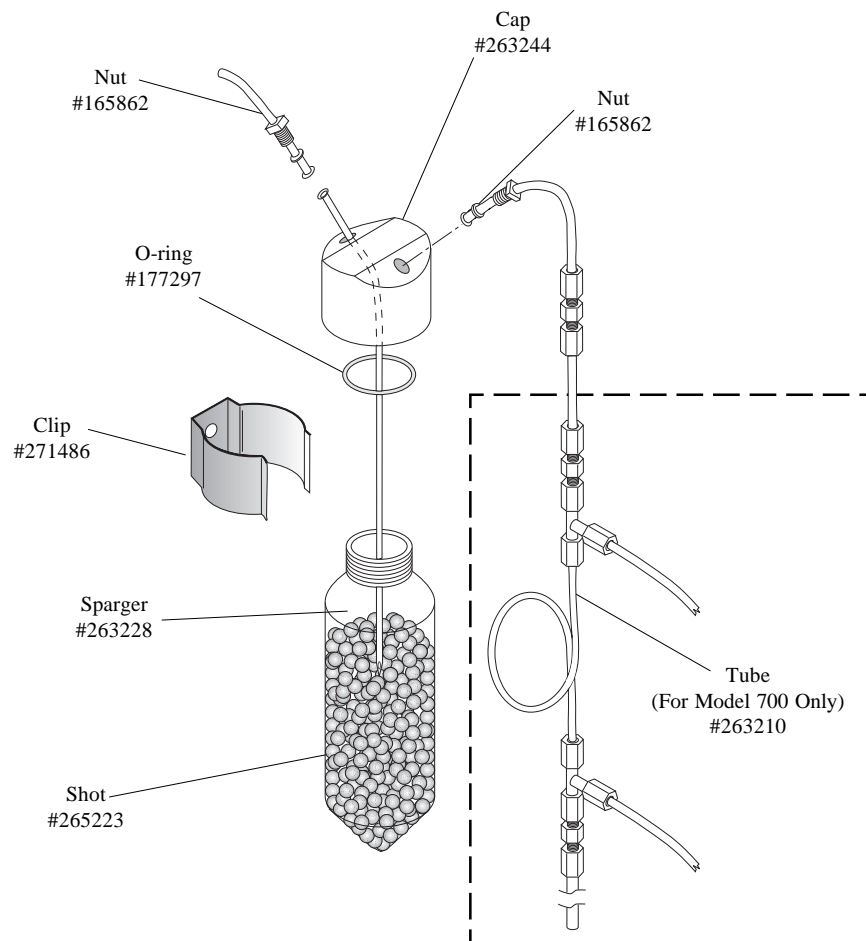
Assembly	8-port, DC Actuator	271429
Assembly	Drain 2-way Diaphragm	263111
Assembly	Manifold Valving	270215
Assembly	Solenoid 3-way	263129
Clip	Mounting Clip - Drain Valve	271486
Valve	3-way Solenoid	175671
Valve	8-port Valve Assembly	296699
Valve	Polypropylene Check Valve	182238

Analyzer Kits Part

Flaring Tip	1/16"	169137
Flaring Tip	1/8"	169129
Flaring Tool	Heats 1/16" and 1/8" Flaring Tips	168808
Gas Cylinder Regulator	Helium/Nitrogen, Plastic Diaphragm, 1/8" Tube Fitting	144585
Gas Cylinder Regulator	Oxygen, Plastic Diaphragm, 1/8" Tube Fitting	150326
Kit	Accessory	278408
Kit	Install	250605
Kit	Reagent Pump Rebuild	178806

Model 1010 and 700 TOC Analyzer

Halide Scrubber Parts		Part #
Cap	Halide Scrubber Vial Cap	263244
Clip	Mounting	271486
Nut	Polypropylene 1/4-28 x 1/8" Tube Clear	165862
O-ring	Silicone 3/4" x 3/32"	177297
Permeation Tube	Halide Scrubber (Model 700 Only)	263210
Shot	Copper, 2-4 mm, 100 g	265223
Sparger	25 mL for Halide Scrubber	263228
Union	1/8"-1/8" Plastic	281436



Halide Scrubber Option

TOC Analyzers

<small>1010/ 1020</small>	<small>700</small>	Autosampler Parts	Part #
●		Cable ASM Interface Cable	198317
■		Cable ASM Interface Cable	277236
●		Collet ASM Collet Assembly (Sipper Tube)	179283
●		Shuttle Tray Replacement for Gear-Driven Shuttle Trays	179002
●		Spacer ASM Wash Station	178707
●		Wash Vessel With Inlet and Outlet for Rinse Water	178731

<small>1010/ 1020</small>	<small>700</small>	Autosampler Supplies - 14 mL Vials	Part #
■ ●		Caps Open-Hole Screw Caps for 14-mL Vials 100/pk	174558
■		Rack 14-mL Rack	284323
●		Racks Autosampler Rack Set (28 mm) 10 racks	173170
■ ●		Septa Teflon-Faced for 14-mL Vials (0.065 mm) 50/pk	169054
■ ●		Vials 14-mL Autosampler Vials 250/box	210070

<small>1010/ 1020</small>	<small>700</small>	Autosampler Supplies - 40 mL Vials	Part #
■ ●		Caps Open-Hole Screw Caps for 40-mL Vials 72/pk	296079
■		Rack Autosampler 40-mL	278473
●		Racks Autosampler Rack Set (28 mm) 10 racks	173162
■ ●		Septa Teflon-Faced for 40-mL Vials (0.065 mm) 50/pk	173211
■ ●		Septa Teflon-Faced for 40-mL Vials (0.065 mm) 100/pk	258566
■ ●		Vials 40-mL VOA Autosampler Vials 72/box	296087

<small>1010</small>		Autosampler Supplies - 100 mL Vials	Part #
■		Caps Open Hole 1000/pk	295857
■		Septa 20 mm 100/pk	295865
■		Tray 12-position	295832
■		Vials 100-mL Autosampler Vials 1000/box	295840

<small>1010</small>	<small>700</small>	Miscellaneous Parts	Part #
■ ●		CheckValve/Filter Kit - Reagent Pump	182253
●		Flowmeter Assembly	161571
■		Reagent Bottle Caps, 53-mm, Screw Closure	265157
■ ●		Scrubber Tube, Ascarite	169145
■ ●		Snoop, 8-oz Squir Bottle	129767

<small>1010/ 1020</small>	<small>700</small>	Printer Supplies	Part #
●		Interface Cable Parallel/Centronics Type	168923
■		Interface Cable Parallel/Centronics Type	273227
■ ●		Ribbon Cartridge Dot Matrix	178871
■ ●		Paper 9-1/2" x 11", 400 Sheets	138546
■ ●		Paper 9-1/2" x 11", 2500 Sheets	138554

<small>1010</small>	<small>700</small>	Process Sampling Option Parts	Part #
●		Adapter Polypropylene 1/4-28 x 1/4" Barb (Hose)	170994
●		Assembly Pump Assembly, Peristaltic 75 mL/min	184051
■		Assembly Sample Pump Assembly	263442
●		Plate Sample Pump Adapter (for Older Model 700s)	178764
■		Tube Norprene 1/4" I.D. Sample Pump	277319
●		Tube Silicone, 3/16" I.D. Sample Pump	177247

TOC Analyzers

Chemicals (Models 1010 and 700) Part

Ascarite	Gas Filter	500 g	110122
Phosphoric Acid	85%	500 mL	110080
POC Catalyst	POC Analysis	10 g	154740
Potassium Biphthalate (KHP)	Crystals	500 g	136954
Sodium Carbonate	Anhydrous	500 g	136962
Sodium Persulfate	Crystals	500 g	178848

Reagents (Models 1010 and 700) Part

Phosphoric Acid Solution	5%	Cleaned	1 L	169244
Sodium Persulfate Solution	100 g/L	Cleaned	1 L	169236

Solids	1010	1020	Software/Firmware Upgrades	Part #
■	■		Model 1010 Firmware Upgrade	280941
■	■		Model 1010 WinTOC Upgrade	280933
		●	Model 1020 Firmware Upgrade	Please Inquire
		●	Model 1020 WinTOC Upgrade	Please Inquire
■			Solids Firmware Upgrade	Please Inquire
■			Solids WinTOC Upgrade	Please Inquire

Standard Solutions (Models 1010 and 700) Part

Potassium Biphthalate (KHP)	1000 ppmC	10 mL	169252
Sodium Carbonate	1000 ppmC	10 mL	169294

Syringes (Models 1010 and 700) Part

10 µL	2" Needle	167545
25 µL	2" Needle	110205
50 µL	2" Needle	110171
100 µL	2" Needle	110221
500 µL	2" Needle	137069
2.5 mL	2" Needle	137051
5.0 mL	2" Needle	169327
10.0 mL	2" Needle	169335

Solids	1010	1020	WinTOC Parts	Part #
■	■	●	WinTOC Cable	278416
■	■	●	WinTOC Cable Adapter (9 pin to 25 pin)	278424
		●	1010 WinTOC Manual	252536
		■	1020 WinTOC Manual	303461
■			Solids WinTOC Manual	297887

Model 1020 TOC Analyzer

Fans Part

Fan	Cooling	296954
Fingerguard	for Fan	280164
Screen	for Fan	281188

Furnace Part

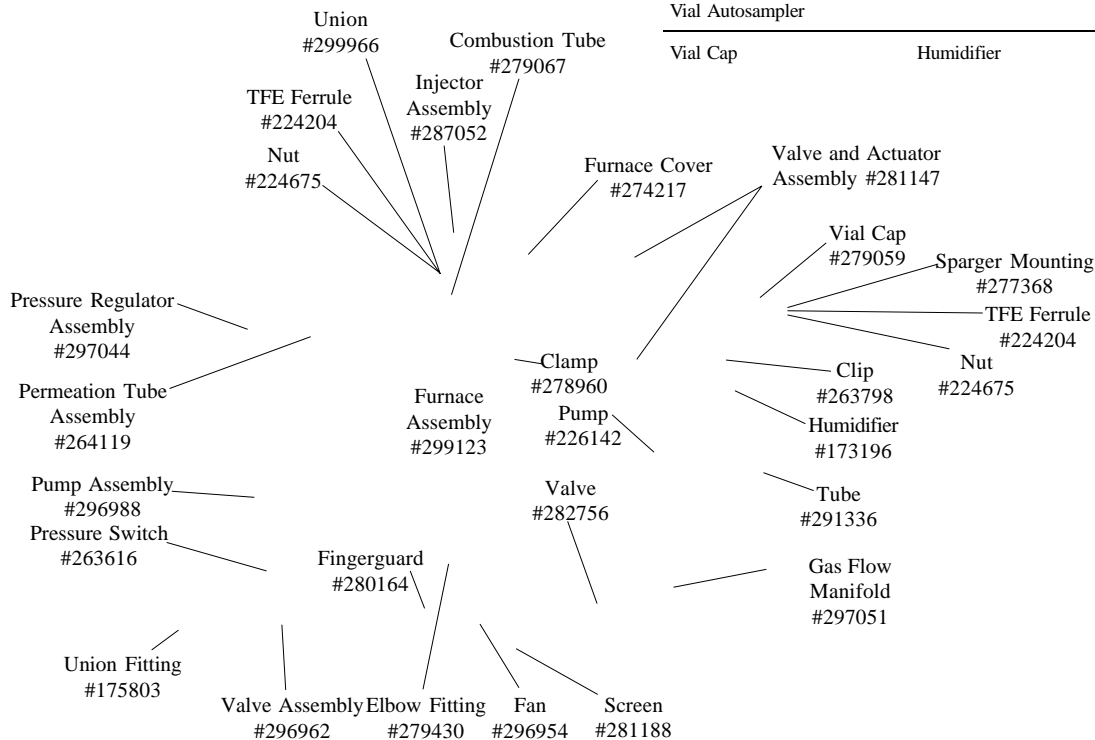
Catalyst		286997
Clamp	Furnace Mounting	278960
Combustion Tube		279067
Ferrule	Combustion Tube	10/pk 224352
Fitting	Furnace Elbow 1/4" x 1/4"	279430
Furnace Assembly		299123
Furnace Cover		274217
Nut	Combustion Tube	224675
Quartz Piece		287011
Union	Combustion Tube	299966

Gas Flows Part

Assembly	Pressure Regulator	297044
Fitting	Oxygen Inlet	175803
Gas Flow Manifold		297051
Pressure Switch		263616

Plumbing Part

Acid Pump		182550
Clip	Glass Loop	263798
Drain Assembly	3-way Drain Valve	296962
Injector Assembly		287052
Permeation Tube Assembly		264119
Pump Assembly	Sample Pump	296988
Sparger Mounting		277368
Tube	IC Chamber, Pyrex, 18 mm x 105 mm	291336
Valve	Autosampler, 3-way Solenoid, 12 VDC	282756
Valve and Actuator	Injection Valve	281147
Vial Autosampler		72/box 296087
Vial Cap	Humidifier	279059



Model 1020 Left Interior

Model 1020 TOC Analyzer

Combustion Chamber Part

Catalyst Fill Kit	680°C Operation	303497
Combustion Tube		279067
Gauze		281121
Injector Needle Assembly		287052
Quartz Fill Kit	900°C Operation	303487

Computer Boards Part

Floppy Drive	3.5", 1.44 MB	266080
PCA Parallel I/O Card		296327
PCA-SVGA Video Card	1 MB	290833
System Board	5 x 86	294066

Flow Components Part

Humidifier Cap		279059	
Humidifier Vessel		173336	
Teflon Ferrule	6 mm	10/pk	198564
Teflon Ferrule	18 mm	10/pk	224352
Permeation Tube		264119	
Pump Tubing	Gorman Rupp	177247	
Pump Tubing	Proflex	287045	

NDIR Cell (see drawing) Part

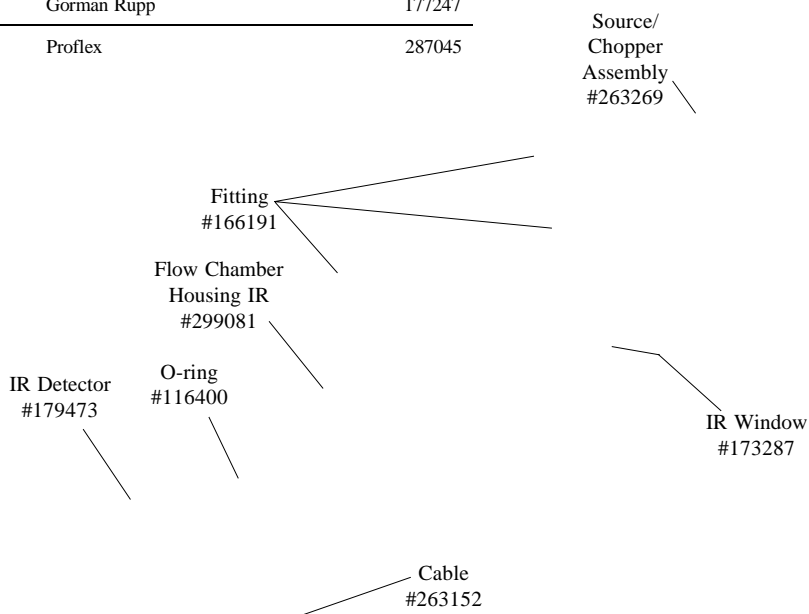
Cable		263152
Fittings	Purge	166191
IR Detector Assembly		179473
O-ring		116400
Source/Chopper Assembly	Fuji Chopper Motor	263269

Power Components Part

Power Input Module	280354
Power Supply	266742
Power Supply Module	296939
Valve Actuators	281147

Sample Loops Part

50 µL	285668
100 µL	285676
200 µL	285684



Model 1020 IR Cell

Solids Module

Electronics

		Part #
Fan	Axial 3.15 110 VAC	290668
Fan	Axial 3.15 220 VAC	290676
Fan	Radial Cooling 110 VAC	289140
Fan	Radial Cooling 220 VAC	290650
Furnace Assembly	100 VAC	296665
Furnace Assembly	110/220 VAC	296517
NDIR Lamp	Solids	285478
Power Cord	110 V North America	116038
Power Supply	12 V, 65 W	286898
Quartz Wool	3.5 g, Fiber	144501
Valve	Check Valve	286831

Fittings

		Part #
Adapter	Brass/Nickle 1/16" Tube	5/pk 196352
Adapter	Brass/Nickle 10-32 x 1/16" Hose	202077
Adapter	Kynar F-Luer 1/16" Barb	196386
Cheminert	Red 1/8" (Fitting, Ferrule, Bushing)	284745
Stainless Steel	18-mm Taper Plug (Middle)	283473
Stainless Steel	O-ring, 18-mm (Upper)	286070
Union Bulkhead	Stainless Steel 1/16"	175829

Humidifier Supplies

		Part #
Cap	Water Trap	288985
Check Valve		182238
Tee	Humidifier, Polypropylene, 1/8"	279125
Vials	Autosampler, 40-mL VOA	72/box 296087

Miscellaneous

		Part #
Assembly	Expansion Tube	283861
Assembly	Rod Slide Reed Switches	285221
Assembly	Solid State NDIR Detector	286849
Cable	Interface 1051/1010 and 1020	290510
Catalyst	KCO on Quartz Wool	294991
Kit	Accessory	287987
Manual	Operation and Users	287243
PCA	Solids Interface Card	286435
PCA	Solids TC Amp	282186
Regulator	0-60 psi, 1/8" Nitrile	282251
Spring	Loader	285312
Standard	Sucrose, 30% Carbon, 5 mL	285643
Stem	Quartz 6 mm	283838
Thermocouple	Furnace (Modified)	295733
Tool	Forceps, Stainless Steel 5"	295741

Solids Module

O-rings Part

Combustion Tube Bottom/Top	Silicone, 11/16" x 3/32"	283770
Loader-Seal Taper	Silicone, 9/16" x 1/16"	283739
Pedestal Seal	Silicone, 7/32" x 1/16"	283747

Plumbing Part

Filter	20, 10-32 Fitting	238865
Filter Disc		192120
Restrictor Element	0.0012 (Standby Line) Brown	290916
Restrictor Element	0.0035 (Nitrogen Line) Red	280180
Restrictor Element	0.0040 (Carrier Line) White	285296

Sample Cups Part

Cups	Quartz, Closed	5 pk	290932
Cups	Quartz, Open	5 pk	283812
Fiber	Quartz Wool	3.5 g	144501
Rod	Quartz, 6-mm		283838

Tubing and Tube Assemblies Part

Tube	Packed Combustion, 10" Catalyst Section	286799
Tube	Combustion, Quartz	283846
Tube	Permeation Subassembly 48"	189829
Tubing	Teflon 1/8" x 0.063 I.D.	147901
Tubing	Urethane 1/8" OD Blue	282863
Tubing	Urethane 1/8" OD Green	282855
Tubing	Urethane 1/8" OD Red	282848

Valves Part

3-way Solenoid 12 VDC	282756
-----------------------	--------



To order call 1-800-653-1711 (USA/Canada) or 409-690-1711



Model 700 TOC Analyzer

Electronics Part

Beeper	Beeper Assembly for I/O Board	217331
Block	Heater Block	161539
Fan Assembly	Radial Cooling Fan	199232
Firmware	EPROM	197756
Fuse	0.5 Amp - Infrared Detector	115469
Fuse	A/C Power Board (F1) 4 Amp Slo Blo	119339
Fuse	A/C Power Board (F2) 6 Amp Slo Blo	170449
Heater	Cartridge Heater for Heater Block	171497
Power Cord	North America, 110 V	116038
Power Supply	12 V, 3.4 A	166547
Power Supply	5 V, 6 A	166539
Thermocouple	Type K 20 Gauge 33" (Heater Block)	168238

Fittings Part

Coupling	1/4-28	Polypropylene	166274
Cross	10-32 Swivel	Brass/Nickel-Plated	179499
Injection Nut	1/4-28 x 22" Gauge	Polyethylene	166828
Nut	1/4" Male	Stainless Steel	178574
Plug	1/4-28	Tefzel	166430
Tee	1/8" Tube Male	Brass	124750
Tee	1/4-28, 1.9 mm I.D.	Stainless Steel	189373
Union	1/4"-1/8" Tube Male	Stainless Steel	124735

Fittings - Adapters Part

1/16" Barb	Kynar	Luer	Female	196386
1/16" Barb	Kynar	Luer	Male	194415
1/8" MNPT-F10-32	Brass		Male-Female	166208
1/4" MNPT x 1/8"	Brass	Tube	Male	152215
1/4-28	Tefzel	Luer	Female	166266
1/4-28	Tefzel	Luer	Male	166258
10-32 x 1/16" Hose	Brass			166191

Fittings - Tube End Nuts Part

1/4-28 x 1/16"	Polypropylene	Black	166323
1/4-28 x 1/16"	Polypropylene	Blue	166331
1/4-28 x 1/16"	Polypropylene	Clear	166282
1/4-28 x 1/16"	Polypropylene	Red	166307
1/4-28 x 1/16"	Polypropylene	Yellow	166315
1/4-28 x 1/8"	Polypropylene	Black	166399
1/4-28 x 1/8"	Polypropylene	Blue	166381
1/4-28 x 1/8"	Polypropylene	Clear	165862
1/4-28 x 1/8"	Polypropylene	Green	166357
1/4-28 x 1/8"	Polypropylene	Red	166365
1/4-28 x 1/8"	Polypropylene	Yellow	166373

O-rings Part

Buna-N	Infrared Detector	116400
Silicone	Digestion Vessel (Top) 3/4" x 1/16"	5/pk 210252
Silicone	Digestion Vessel - Old (Condenser) 3/8" x 1/16"	5/pk 210260
Silicone	Digestion Vessel - Old (Top) 3/16" x 1/16"	5/pk 210245
Viton	Reagent Pump	5/pk 210286
Viton	Reagent Pump Rebuild Kit	178806
Viton	Reagent Pump Seal	5/pk 210302

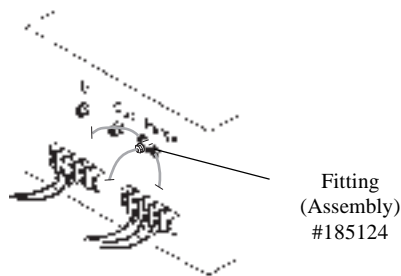
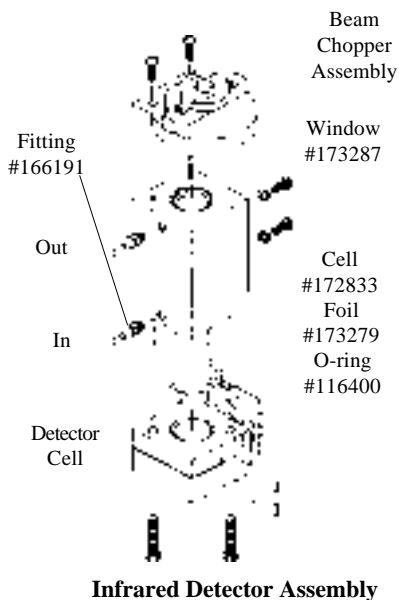
Model 700 TOC Analyzer

Infrared Detector Assembly (see drawing)		Part #
Assembly	Cell Assembly (Cell, Barb Fitting, Foil, O-ring, Window)	178749
Assembly	Complete Assembly, Detector and Enclosure-50 Hz	234245
Assembly	Complete Assembly, Detector and Enclosure-60 Hz	233007
Assembly	Fitting	185124
Cell	25 mm O.D. x 85 mm	172833
Fitting	Barb Fitting, 10-32 x 1/16" Hose, Brass	166191
Foil	Gold Foil	173279
Fuse	0.5 Amp	115469
O-ring	Sealing O-ring	116400
Window	IR Cell 20 mm	173287

Plumbing		Part #
Acid/Oxidant Reagent Bottle, 250 mL		169153
Acid/Oxidant Reagent Metering Pump		182550
Check Valve - Polypropylene		182238
Filter Assembly - 5 µm Disk		263301
Filter Assembly - 5 µm NDIR		263319
Filter - In-Line 10 µ Reagent Bottle		182246
Filter - In-Line Gas/Liquid Separator, Teflon		192120
Injection Block		166232
NDIR Gas Filter, 5 µm		263301
Permeation Tube Assembly		189829
Sample Pump Assembly		184051
Septum - Teflon-faced Silicone, 5 mm x 0.125"	50/pk	174566

Sample Loops (Uncalibrated)		Part #
1 mL		166498
5 mL		166505
10 mL		166513
40 µL		172726
100 µL		172734
500 µL		172718

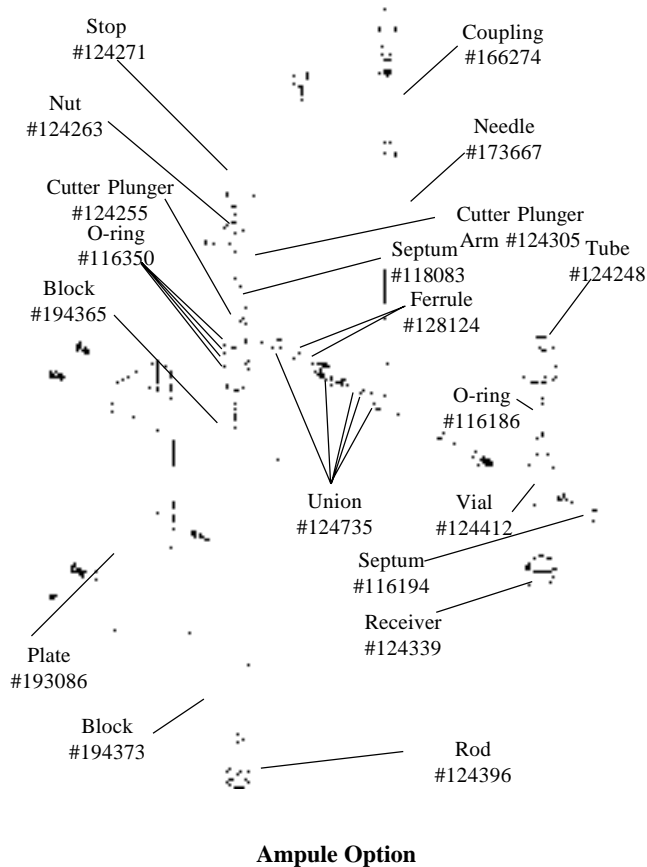
Traps		Part #
Charcoal Trap with Fittings		258236
Molecular Sieve Trap (NPOC)	TIC/TOC	167149
Purgeable Organic Carbon/Halides Trap	POC/POX	168197



Model 700 TOC Analyzer

Ampule Option Parts (Model 700)

		Part #
Adapter	Ampule Collar Support	124453
Arm	Cutter Plunger	124305
Assembly	Ampule Breaking Kit (Includes All Parts Below)	169210
Block	Breaking Assembly, Lower	194373
Block	Breaking Assembly, Upper	194365
Cutter Plunger		124255
Ferrule	Brass, 1/4" Tube Front	200055
Fitting	Coupling, 1/4-28, Polypropylene	166274
Manual	Purging and Sealing Unit	176653
Needle	21.6 cm, 16 Gauge	173667
Nut	Cutter Plunger	124263
O-ring	Cutter Plunger, Ampule Breaking Seal	116350
O-ring	Latex Ampule Mounting Seal	116186
Plate	Breaking Assembly Mounting	193086
Receiver	Ampule Breaking Assembly	124339
Rod	Threaded Breaking Assembly	124396
Septum	Orange Septum, Silicone	116194
Septum	Silicone, 6 mm x 8 mm, Blue	118083
Stop	Purge Tube, Stainless Steel	124271
Tube	Glass Cutter Plunger Barrel	124248
Union	Stainless Steel, 1/4"-1/8", Cutter Plunger	124735
Vial	Standardization Vial	124412



Ampule Option

Tubing and Tube Assemblies

		Part #
Tube Assembly	Digestion Vessel 2"	180208
Tube Assembly	Digestion Vessel 4"	180216
Tubing	Teflon 1/16" x 0.010" I.D.	139065
Tubing	Teflon 1/16" x 0.031" I.D.	145591
Tubing	Teflon 1/8" x 0.063" I.D.	147901
Tubing	Tygon 0.090" x 0.50" I.D.	111260
Tubing	Urethane 1/8" x 1/16" I.D. Clear	166224

Valves and Valve Assemblies

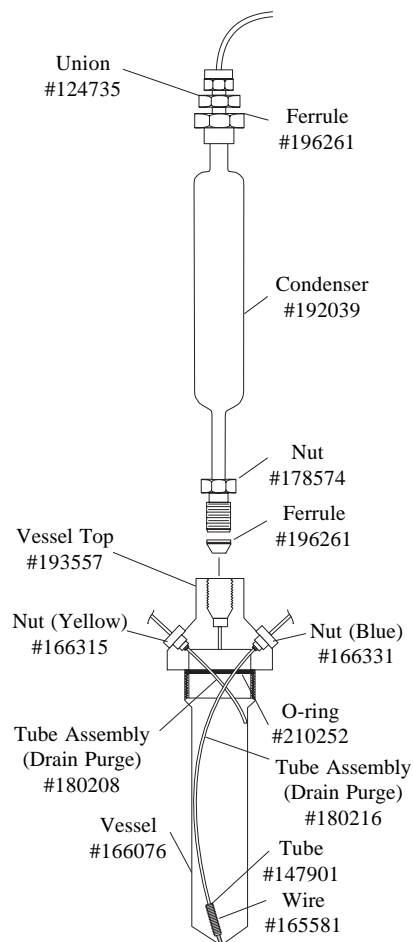
		Part #
Filter	Check Valve/Filter Kit	182253
Stator	6-port Rotary Valve 1/16"	172750
Stator	6-port Rotary Valve 1/8"	172700
Valve	2-way Solenoid	165797
Valve	3-way Manifold	166349
Valve	6-port Teflon, 1/8" Tube (Calibrated)	230979
Valve	6-port Teflon with Actuator, 1/8" Tube	161498
Valve	Polypropylene Check Valve	182238

Model 700 TOC Analyzer Accessories

Boards		Part #
Floppy Controller		281428
Infrared Detector Assembly		286922
Interface		265477
Motherboard (Kit Upgrade)		293852
Parallel Interface		296327
RAM		273581
Serial Interface		281428

Digestion Vessel Assembly (see drawing)			Part #
Assembly	Digestion Vessel		192062
Condenser	Digestion Vessel Condenser		192039
Ferrule	1/4" Teflon Tube	5/pk	196261
Nut	Blue Tube End Fitting		166331
Nut	Yellow Tube End Fitting		166315
Nut	1/4" Stainless Steel		178574
O-ring	Digestion Vessel	5/pk	210252
Tube	(Drain Line Support) Teflon		147901
Tube Assembly	Drain/Purge 4"		180216
Tube Assembly	Oxidant 2"		180208
Union	1/4"-1/8", Stainless Steel		124735
Vessel	Digestion Vessel		166076
Vessel Top	Digestion Vessel Top		193557
Wire	Platinum Wire, 0.008" Diameter		165581

Ferrules			Part #
Brass	1/8" Swagelok	10/pk	196089
Stainless Steel	1/8" Swagelok	5/pk	210591
Teflon	1/4" Tube	5/pk	196261



Model 700 TOC Analyzer Digestion Vessel Assembly

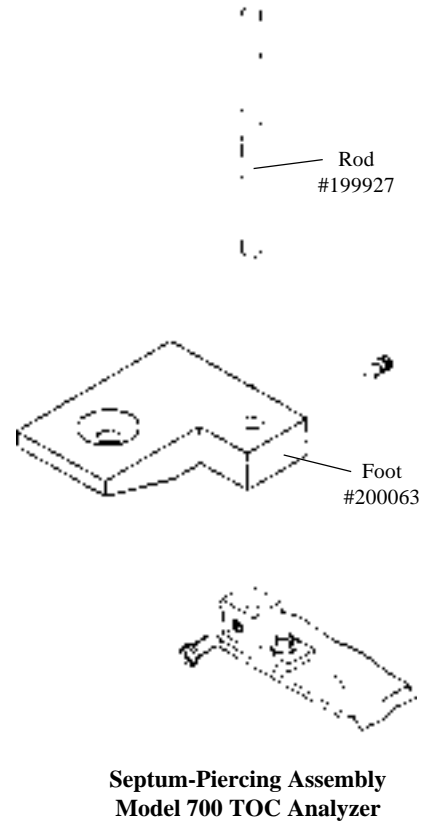
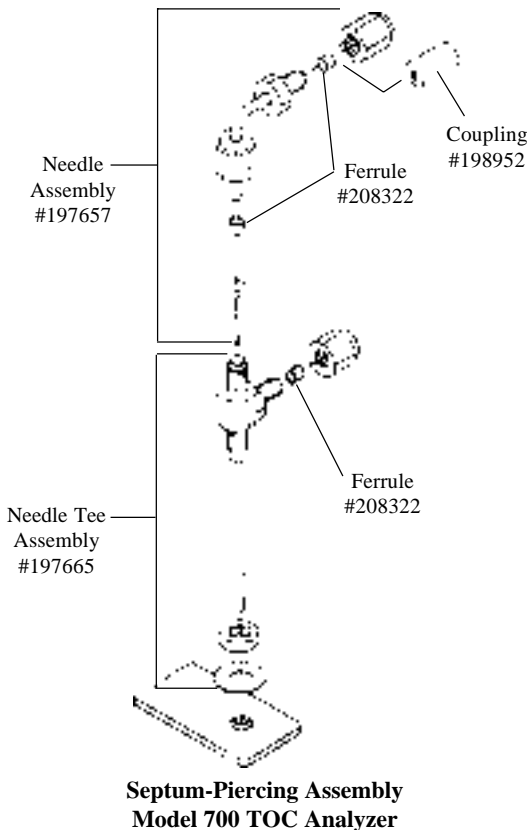


To order call 1-800-653-1711 (USA/Canada) or 409-690-1711



Model 700 TOC Analyzer Accessories

Septum-Piercing Assembly Parts (Model 700)			Part #
ASM Kit	Septum-Piercing Kit (Includes Parts Listed Below)		197608
Coupling	Polypropylene, 10-32 x 1/4-28		198952
Ferrule	Graphite/Vespel 1/16" Ring	10/pk	208322
Foot	Hold Down, Needle Guide		200063
Needle Assembly	Septum Piercing		197657
Needle Tee Assembly	Septum Piercing		197665
Rod	Stainless Steel Hold Down Rod		199927



POC and POX Parts (Model 700)				Part #
Chemical	POC Furnace Catalyst	10 g		154740
Ferrule	Teflon 1/4" - POC Furnace Tube	10/pk		198556
Fiber	Quartz Wool POC Furnace Tube	3.5 g		144501
Reactor	Model 4420 - POX			169955
Tube	Nickel Reaction Tube - POX	12/pk		260323
Tube	Quartz Furnace Packed, 6 mm			168189
Tube	Quartz Furnace Unpacked, 6 mm			111773
Union	1/8"-1/4" SW - POC Furnace Tube			124768

Strip Chart Recorder Supplies (Model 700)				Part #
Input Cable				116020
Recorder Paper		6 rolls/pk		172502
Recorder Pens		6/pk		172510

Aqua-Check and Triple Check Water Analyzers

Conductivity Standards † ‡		Part #
74 µS	1 pint	A7007
74 µS	1 gallon	A7107
718 µS	1 pint	A7017
718 µS	1 gallon	A7117
1,000 µS	1 pint	A7020
1,000 µS	1 gallon	A7120
6.668 ms	1 pint	A7027
6.668 ms	1 gallon	A7127
10.0 ms	1 pint	A7030
10.0 ms	1 gallon	A7130
58.7 ms	1 pint	A7036
58.7 ms	1 gallon	A7136

Aqua-Check	Triple Check	Miscellaneous Supplies	Part #
■	●	Cable - RS-232 for Models 51501, 51601, 52201	A9232
■	●	Case - for Meter only, Black Plastic	A526-2585-00
■	●	Cigarette Lighter Adapter, 10-ft cable	A9006
■	●	Field Case, Black Vinyl w/Strap	A001472
■	●	Field Pack	A5900
■	●	Oxygen Filling Solution, 1.25 oz	A3502
■	●	Oxygen Filling Solution, 1 pint	A3507
■	●	Power Pack Adaptor (110 VAC, 9 VDC, 0.2A)	A9011
■	●	Power Pack Adaptor (220 VAC, 9 VDC, 0.5A)	A9021
■		Probe Guard	A532-0021-00

Aqua-Check	Triple Check	pH Solutions	Part #
■	●	Boot Solution	1.25 oz A4215
■	●	Boot Solution	1 pint A5311
■	●	Buffer Pack	1 pint A4120
■	●	Buffer 4 *	1 pint A4104
■	●	Buffer 4 *	1 gallon A4204
■	●	Buffer 7 *	1 pint A4107
■	●	Buffer 7 *	1 gallon A4207
■	●	Buffer 10 **	1 pint A4110
■	●	Buffer 10 **	1 gallon A4210

Aqua-Check	Triple Check	Sensors	Part #
■		Conductivity	290890
	●	Conductivity/Temperature	A7520
■		DO Sensor/Membrane Cap	297853
■		ORP	A5545
■		Oxygen	A5530
■		pH - Double Junction	A5541
	●	pH - Single Junction	AH105

† NIST Traceable. Traceability statement available upon request.

‡ Shelf life is 12 months from date of manufacture.

* Shelf life is 24 months from date of manufacture.

** Shelf life is 18 months from date of manufacture.

A

- Accounts, Customer (inside back cover)
- Adapters *See replacement parts in product listings*
- Air Sampling Tubes 88
- Air-Analysis Products 33
 - Replacement Parts 104
- Air-Tube Desorber 33
 - Accessories 33
 - Replacement Parts 104
- Alarm Relay for TOC Analyzers 71
- Ampules, Precombusted 72
- Analytical Microwave Systems 2
 - Accessories 5
- Analytical Supplies 82 *See also individual listings*
- Analyzers
 - Cyanide 63
 - Flow 60
 - Fluorinated By-Products 19
 - Total Organic Carbon 68
 - Water 73
- Applications 184
 - Guide to Catalog 179
 - Support 182
- Aqua-Check Water Analyzer 73
 - Replacement Parts and Supplies 166
- Automated Ion Analysis *See Flow Analyzers*
- Autoprep 1000 or 500 Systems 9
- Autosampler, Model 1051 70
- Autosamplers
 - Accessories 32
 - Discrete Purging Multisampler (DPM-16) 31
 - GC Liquid Autosampler, Model 4105 34
 - Purge-and-Trap Water and Soil 31
 - Purge-and-Trap Water/Soil 30
 - Vial Autosampler, Model 4551 29
 - Water/Soil Autosampler 30 *See also Model 4552 W/S Autosampler*
 - Waters Only Autosampler 30
- Autosampling System
 - Replacement Parts 109
- Autovap, Model AS-2000 8

B

- Boards *See replacement parts in product listings*
- BTEX *See System BTEX*

C

- Cable Selection Guide 112
- Cables 82
 - Cryo-Focusing Module 105
 - Cyanide Analyzers 144
 - Electrolytic Conductivity Detector 118
 - Flow Solution 3000 132
 - GC Detectors, HP GCs 47
 - GC Detectors, Varian GCs 48
 - Halogen Specific Detector 124
 - Model 4552 W/S Autosampler 96
 - Photoionization Detector 116
 - Pulsed Flame Photometric Detector 126
 - Sample Concentrator 88, 91*See also replacement parts in product listings*
- Cables, MSD 88, 91
- Calibration Kit
 - Aqua-Check 74
 - Triple Check 74
- Cartridges
 - Cyanide Analyzers 144
 - Flow Analyzers 136, 137
- Catalog Information 184
- CFM *See Cryo-Focusing Module*
- Chemicals 82
- Chiller, Recirculating 11
- Cleaner 82
- CNLab 3202 63
 - Replacement Parts 144
- CNSolution 3000 63
 - Replacement Parts 144
- Columns 82
 - Envirobeads S-X3 10, 80
 - Envirosep-ABC 10, 80
 - Mounting Kit 10
 - Optima PTFE 10, 80
- Conductivity Standard Kit for Water Analyzers 74
- Cryo-Focusing Module 26
 - Replacement Parts 105
- Customer Accounts (inside back cover)
- Cyanide Analyzers 63
 - Accessories 64
 - CNLab 3202 63
 - CNSolution 3000 63
 - EnviroPrep, 10-Place 64
 - EnviroPrep, 4-Place 64
 - Glassware Set 64
 - Replacement Parts 144

D

- Damages or Loss in Shipment 183
- Delivery, Parts 182
- Detectors *See* GC Detectors
- Digestion Vessels, Microwave 6
 - Replacement Parts 78
- Discontinued Products 184
- Discrete Purging Multisampler (DPM-16) 31
 - Replacement Parts 101
- Distillation System *See* EnviroPrep
- DPM-16 *See* Discrete Purging Multisampler

E

- ELCD *See* Electrolytic Conductivity Detector
- Electrical 184
- Electrolytic Conductivity Detectors 41
 - Mode Kits 118
 - Model 5320 ELCD 41
 - Model 5322 ELCD 42
 - Replacement Parts and Supplies 118
 - Scrubber 119
- Electrometers 47, 83
- Envirobeads S-X3 10, 80
- EnviroPrep MIDI-Distillation System 64
- Envirosep-ABC Columns 10, 80
- Exhaust Module 5
- Extractor, Solids *See* Soxtherm

F

- FBA *See* Fluorinated By-Products Analyzer
- Ferrules
 - Cryo-Focusing Module 105
 - Discrete Purging Multisampler 101
 - Electrolytic Conductivity Detector 118, 121
 - Flow Solution IV 138
 - Halogen Specific Detector 124
 - Model 1010 TOC Analyzer 151
 - Model 700 TOC Analyzer 164
 - Multiple Purging Multisampler 101
 - Photoionization Detector 116
 - Pulsed Flame Photometric Detector 126
 - Sample Concentrator 88, 91
- FID *See* Flame-Ionization Detector
- Filters
 - Cyanide Analyzers 144
 - Flow Analyzers 132, 138
- Financing (inside front cover)

Fittings

- Cryo-Focusing Module 105
- Discrete Purging Multisampler 101
- Electrolytic Conductivity Detector 118
- Halogen Specific Detector 124
- Model 1010 TOC Analyzer 151
- Model 700 TOC Analyzer 161
- Model 4552 W/S Autosampler 96
- Multiple Purging Multisampler 101
- Photoionization Detector 116
- Pulsed Flame Photometric Detector 126
- Sample Concentrator 88, 91
- Solids Module 159
- Flame-Ionization Detector
 - Model 4410 FID 46
 - Model 4415 FID 46
 - Replacement Parts and Supplies 129
- Flow Analyzers 59
 - Flow Solution 300 62
 - Flow Solution 3000 60
 - Flow Solution IV 61
 - Replacement Parts and Supplies 131
 - Software 62
- Flow Solution 300 62
 - Replacement Parts and Supplies 136
- Flow Solution 3000 60
 - Replacement Parts and Supplies 132
- Flow Solution III
 - Replacement Parts and Supplies 143
- Flow Solution IV 61
 - Replacement Parts and Supplies 137
- Fluorinated By-Products Analyzer 19
- FM-2000 51
 - Accessories 53
 - Detectors 52
 - Software 55
 - Supplies 55
- Fuses 83 *See also individual product listings*

G

- Gas Chromatograph *See* GC Systems
- Gas Controllers, Model 4552 96
- Gas Flow Control, Pulsed Flame Photometric Detector 126
- Gas Flow Modules 47, 83
- GC Components Diagram 20, 21
- GC Detectors 37
 - Accessories, HP GCs 47
 - Accessories, Varian GCs 48
 - Replacement Parts and Supplies 115
- GC Liquid Autosampler 34
 - Replacement Parts 111



To order call 1-800-653-1711 (USA/Canada) or 409-690-1711



GC Systems
 Customized, Diagram 20
 Pesticides Analysis System 18
 System BTEX Analysis System 17
 System VOC Analysis System 16
 Gel Permeation Chromatography Cleanup 8
 Accessories 10
 Columns
 Envirobeads S-X3 10, 80
 Envirosep-ABC 10, 80
 Mounting Kit 10
 Optima PTFE 10, 80
 Model AS-2000 Autovap 8
 Replacement Parts and Supplies 80
 Glassware 83
 EnviroPrep-MIDI Distillation System 64
 Model 4551 93
See also individual product listings
 Glassware Selection Guide 112

H

Halide Scrubber 71, 72
 Halogen Specific Detector 43
 Cables 124
 Replacement Parts and Supplies 123
 Venting Option 43, 123
 Headspace Sampler, Model 4632 34
 Replacement Parts 110
 Heater Blocks 48
 Heater Jacket Kits 32
 Heater Jackets 88, 91, 102

I

ICM *See* Internal Carrier Module
 Infra-Sparge Sample Heater 25
 Replacement Parts 89
 Installation 182, 184
 Internal Carrier Flow Control 27
 Internal Carrier Module (ICM) 27
 International
 Electrical 184
 Repairs 182
 Shipments 183
 Technical Support 182

L

Lamp Supplies, Photoionization Detector 116
 LDVI *See* Low-Dead-Volume Injector
 Leak Detector 84
 Leak Detector, Microwave 5

Leasing 184
 Loaner Program 182
 Loss in Shipment 183
 Low-Dead-Volume Injector (LDVI) 25
 Replacement Parts 106

M

Mailing Address (inside front cover)
 Manuals *See individual product listings*
 Methods 184
 Guide to Catalog 179
 MicroTrap 24, 89
 Microwave Systems, Analytical 2
 Accessories 5
 Mode Kits, Electrolytic Conductivity Detector 118
 Model 1010 TOC Analyzer 68
 Replacement Parts and Supplies 150, 155
 Model 1020 TOC Analyzer 69
 Replacement Parts and Supplies 155, 157
 Model 1051 Autosampler 70
 Model 4105 GC Liquid Autosampler 34
 Model 4410 FID 46 *See also* Flame-Ionization
 Detector
 Model 4415 FID 46 *See also* Flame-Ionization
 Detector
 Model 4430 PID 40 *See also* Photoionization
 Detector
 Model 4450 PID/FID 46
 Model 4551 Vial Autosampler 29
 Replacement Parts and Supplies 93
 Model 4552 W/S Autosampler 30
 Replacement Parts 96
 Model 4560 Sample Concentrator 24
 Model 4632 Headspace Sampler 34
 Model 5320 ELCD 41 *See also* Electrolytic Conduc-
 tivity Detector
 Model 5322 Dual ELCD 42 *See also* Electrolytic
 Conductivity Detector
 Model 5350 PID/ELCD 44
 Model 5360 XSD 43 *See also* Halogen Specific
 Detector
 Model 5380 PFPD 38 *See also* Pulsed Flame Photo-
 metric Detector
 Model 5390 PID/XSD 45
 Model 700 TOC Analyzer
 Replacement Parts and Supplies 154, 155, 161
 Model AS-2000 Autovap *See* Autovap
 Model Autoprep 1000 *See* Autoprep
 Model Autoprep 500 *See* Autoprep
 Model SP-1000 GPC Sample Processor 10
 Monitoring System *See* FM-2000

MPM-16 *See* Multiple Purging Module
 Multiple Heater Controller (MHC-16) 32
 Heater Jacket Kits 32
 Multiple Purging Module
 Replacement Parts 101

N

Needle Drive Assembly 93
 Needle Sparge Hardware Kit, Model 4560 26
 Needle Selection Guide, Purge 113
 Needles
 Sample Concentrator 88, 91
 Nuts *See* Fittings

O

Operators's Manuals *See individual product listings*
 Optima PTFE Columns 10, 80
 Orders
 How to Place (inside front cover)
 Shipment (inside back cover)

P

Parts *See* Replacement Parts and Supplies
 Index by Part Number 173
 PATTI II 28
 Pesticides Analysis System 18
 PFPD *See* Pulsed Flame Photometric Detector
 Photoionization Detector 40
 Lamp Supplies 116
 Replacement Parts and Supplies 116
 Vent Supplies 116
 PID *See* Photoionization Detector
 PID/ELCD *See* Tandem Detectors
 PID/FID *See* Tandem Detectors
 PID/XSD *See* Tandem Detectors
 Power Supply
 Smart-UPS Uninterruptible 10
 Preacidification Module for Model 1010 71
 Pressure Control for Microwave Systems 4
 Price Quotations (inside back cover)
 Printer
 for Model 700 TOC Analyzer 72
 for TOC Analyzers 71
 See also individual product listings
 Probes for Aqua-Check 73
 Process Sampling Module (PSM) 31
 Products
 Discontinued 184
 Returns 183
 Upgrades 182

PSM *See* Process Sampling Module
 Publications 84
 Pulsed Flame Photometric Detector 38
 Gas Flow Control 126
 Replacement Parts and Supplies 126
 PulseScan 39
 Purge and Trap *See* Sample Concentrator
 Purge Needle Selection Guide 113

Q

Quotations, Price (inside back cover)

R

Reactor Bases 47
 Recirculating Chiller 11
 Regulators 84
 Renting 184
 Repairs 182
 Replacement Parts and Supplies *See also individual product listings*
 Cyanide Analyzers
 CNLab Model 3202 144
 CNSolution Model 3000 144
 Delivery 182
 Flow Analyzers
 Flow Solution 300 136
 Flow Solution 3000 132
 Flow Solution III 143
 Flow Solution IV 137
 GC Detectors
 Electrolytic Conductivity (ELCD) 118
 Flame-Ionization Detector (FID) 129
 Halogen Specific (XSD) 123
 Photoionization (PID) 116
 Pulsed Flame Photometric Detector (PFPD) 126
 Tandem PID/ELCD 125
 Tandem PID/XSD 125
 GC Systems 81
 Index by Part Number 173
 Sample Introduction
 Air Analysis Products 104
 Cable Selection Guide 112
 Cryo-Focusing Module (CFM) 105
 DPM-16 Autosampler 101
 Glassware Selection Guide 112
 Low-Dead-Volume Injector 106
 Model 4105 111
 Model 4460A Autosampling 109
 Model 4460A Sample Concentrator 91
 Model 4551 Vial Autosampler 93
 Model 4552 W/S Autosampler 96



Model 4560 Sample Concentrator 88
 Model 4632 Headspace Autosampler 110
 MPM-16 Autosampler 101
 Purge Needle Selection Guide 113
 SAM and SIM/Spiker Options 95
 SIM 109
 Sample Preparation
 Columns 80
 Digestion Vessel Modules 78
 Model AutoPrep 1000 80
 Model AutoPrep 500 80
 Soxtherm 80
 TOC Analyzers
 Model 1010 150, 155
 Model 1020 155, 157
 Model 700 154, 155, 161
 Solids Module 159
 Water Analyzers
 Aqua-Check 166
 Triple Check 166
 Resin, Electrolytic Conductivity Detector 119
 Returns 183

S

SAM *See* Standard Additions Module
 Sample Concentrator 24
 Accessories 26
 Flow Options 27
 Replacement Parts and Supplies
 Model 4460A 91
 Model 4560 88
 Software 28
 Traps 89
 Sample Heater Parts, Infra-Sparge 89
 Sample Preparation
 Analytical Microwave Systems 2
 Accessories 5
 Gel Permeation Chromatography 8
 Extraction System 11
 Replacement Parts 77
 Sample Processor, Model SP-1000 10
 Scrubbers 84
 Electrolytic Conductivity Detector 119
 Seminars 183
 Septa
 Model 4552 W/S Autosampler 99
 Septum-Piercing Assembly 72
 Service 181
 Contracts 182, (inside front cover)
 Products 182

Shipment
 Damage or Loss in 183
 International 183
 of Orders (inside back cover)
 SIM/Spiker
 Replacement Parts 95, 109
 Software
 PATTI II 28
 PFPDView 39
 Purge-and-Trap Total Interface 28
 WinFLOW 62
 WinTOC 71
 Supplies 156
 WinTrap 28
 WinWave 5
 Solids Extractor *See* Soxtherm
 Solids Module 70, 71
 Replacement Parts and Supplies 159
 Solvent Recovery System 10
 Soxtherm - Solids Extractor 11
 Replacement Parts 80
 Sparger Kits 102
 Spargers 83, 89, 92
 SRS-1000 10
 Standard Additions Module 29
 Replacement Parts 95
 Standards 82
 Standards Policy 184
 Supplies *See* Replacement Parts and Supplies
 Support
 Applications 182
 System Support 182
 Technical Support Hotline 182
 Syringes 84
 Sample Concentrator 89, 92
 System BTEX 17
 System Support 182
 System VOC 16

T

Table of Contents i
 Tandem Detectors
 Model 4450 PID/FID 46
 Model 5350 PID/ELCD 44
 Replacement Parts and Supplies 125
 Model 5390 PID/XSD 45
 Replacement Parts and Supplies 125
 Tandem Multisampler Control Interface
 (TMCI) 32 *See also* Discrete Purging
 Multisampler
 Technical Support Hotline 182

Temperature Control, Microwave Systems 4
 Terms of Sale (inside back cover)
 Tools 85
 Total Organic Carbon Analyzers 68
 Accessories 71
 Model 1010 68
 Halide Scrubber 71
 Preacidification Module 71
 Model 1020 69
 Model 1051 Autosampler 70
 Model 700 Accessories 72
 Halide Scrubber 72
 Septum-Piercing Assembly 72
 Replacement Parts 150
 Solids Module 70, 71
 WinTOC Control Software 71
 Tracking System, Computerized 182
 Trademarks 184
 Training 182
 Traps 89, 92, 162
 Triple Check Water Analyzer 74
 Replacement Parts and Supplies 166
 Tubes
 Cyanide Analyzers 146
 Flow Solution IV 140, 142
 Photoionization Detector 116
 Tubing 85
 Cryo-Focusing Module 105
 Cyanide Analyzers 147
 Electrolytic Conductivity Detector 119
 Flow Solution 3000 135
 Model 700 163
 Model 1010 153
 Model 4551 Vial Autosampler 94
 Sample Concentrator 90, 92
 Solids Module 160

U

Unions *See* Fittings
 Upgrading Products 182
 UVD-1000 10

V

Vacuum Pump 64
 Valves
 Model 4552 W/S Autosampler 98
 Sample Concentrator 90, 92
 Vent Supplies
 Photoionization Detector 116

Vessels, Microwave Digestion 6
 Replacement Parts 78
 Vial Rack (for Model 1010) 70
 Vials
 Model 4552 W/S Autosampler 99
 VOC *See* System VOC
 VOST Desorber Accessory 33
 Replacement Parts 104

W

Warranties 183
 Extended 182
 Information 183
 Water Analyzers 73
 Accessories 74
 Aqua-Check 73
 Replacement Parts and Supplies 166
 Triple Check 74
 WinFLOW 62
 WinTOC 71
 Supplies 156
 WinTrap 28
 WinWave Microwave Software 5

X

XSD *See* Halogen Specific Detector



110000	150000	169210..... 163	177065..... 128	187203..... 91
110080..... 156	150326..... 84, 153	169236..... 156	177247..... 155, 158	187245..... 91, 101
110122..... 156	152215..... 161	169244..... 156	177297..... 154	187302..... 47, 83
110171..... 156	154740..... 156	169252..... 156	177354..... 84, 92	187310..... 40
110205..... 156	157740..... 165	169294..... 156	177453..... 83	187344..... 47, 83
110221..... 156	160000	169327..... 156	177592..... 92	187377..... 82
111260..... 85, 163	160929..... 119	169335..... 84, 156	177634..... 89, 92, 103	187427..... 109
111302..... 85	161498..... 163	169468..... 95, 101, 103	177642..... 89, 92, 103	187476..... 116, 118
111427..... 85, 90, 92, 94, 116, 119, 129, 130	161539..... 161	169484..... 92, 103	177659..... 89, 92, 103	187484..... 83, 92
111732..... 116, 130	161571..... 155	169509..... 92	178178..... 151	187716..... 47, 83
111773..... 165	164004..... 118	169517..... 92	178277..... 96	187765..... 82
111864..... 85	164236..... 92	169525..... 92	178574..... 118	187872..... 33
112458..... 116, 126	165531..... 85	169559..... 92	178574 . 150, 151, 161, 164	187880..... 83, 103
115451..... 83	165581..... 150, 164	169567..... 92	178707..... 155	187898..... 83, 103
115469..... 83, 161, 162	165656..... 119	169674..... 104	178731..... 155	187906..... 83, 103
115493..... 83, 105	165680..... 118	169682..... 116, 117, 118	178749..... 162	187914..... 83, 103
116020..... 165	165698..... 118	169715..... 96	178764..... 155	188003..... 84
116038..... 82, 116, 126, 88, 91, 93, 105, 151, 159, 161	165705..... 118	169749..... 90, 92	178803..... 151	188193..... 82
116186..... 163	165747..... 91, 118	169765..... 92	178806..... 152, 153, 161	188201..... 82
116194..... 163	165797..... 163	169806..... 92	178848..... 156	188409..... 30, 88, 91, 96
116350..... 163	165846..... 84, 120	169955..... 120	178871..... 72, 152, 155	188417..... 116, 117
116400..... 152, 158, 161, 162	165862..... 151, 154, 161	169963..... 128	178954..... 126	188474..... 129
117721..... 151	165896..... 85, 119, 121, 94, 95	169995..... 165	179002..... 155	188482..... 116
118083..... 163	165953..... 119	170000	179085..... 85, 119	188490..... 116
119339..... 83, 161	166000..... 119	170093..... 120, 126	179283..... 155	188508..... 83, 92
120000	166076..... 164	170449..... 83, 97, 161	179325..... 121	188623..... 103
124248..... 163	166191 .. 151, 158, 161, 162	170572..... 119	179473..... 158	188896..... 102
124255..... 163	166208..... 151, 161	170580..... 119	179499..... 161	188979..... 101, 104
124263..... 163	166224..... 85, 163	170655..... 119	179812..... 85, 90, 92, 94	189373..... 109, 161
124271..... 163	166232..... 162	170712..... 119	180000	189423..... 116
124305..... 163	166258..... 161	170994..... 155	180208..... 163, 164	189431..... 116
124339..... 163	166266..... 161	171497..... 161	180216..... 163, 164	189738..... 153
124396..... 163	166274..... 151, 161, 163	172461..... 84, 89, 92, 103	180604..... 150	189829..... 160, 162
124412..... 163	166282..... 151, 161	172502..... 165	180901..... 116	190000
124420..... 151	166282..... 151, 161	172510..... 165	180919..... 116, 117	191742..... 129
124453..... 163	166307..... 151, 161	172700..... 163	181180..... 116, 117	191759..... 129
124735 .. 151, 161, 163, 164	166315 .. 150, 151, 161, 164	172718..... 162	181750..... 116	191767..... 129
124750..... 151, 161	166323..... 151, 161	172726..... 162	181826..... 116	191775..... 129
124768..... 165	166331..... 151, 161, 164	172734..... 162	182006..... 84, 89, 92, 109	191783..... 129
128108..... 151	166349..... 163	172750..... 163	182154..... 116, 117	191791..... 129
129767..... 84, 155	166357..... 150, 151, 161	172833..... 162	182238..... 152, 153, 159, 162, 163	191817..... 129
130000	166365..... 150, 151, 161	173162..... 155	182246..... 152, 162	191825..... 129
130021..... 72	166373..... 151, 161	173170..... 155	182253..... 155, 163	191833..... 129
131961..... 121, 124, 129	166381..... 151, 161	173211..... 155	182550..... 152, 157, 162	191866..... 129
132019..... 124	166399..... 151, 161	173279..... 162	183939..... 116, 121, 124	191916..... 129
132050..... 106	166430..... 151, 161	173287..... 162	184051..... 155, 162	192013..... 47, 83, 129
134080..... 129	166498..... 162	173328-16..... 72	184978..... 85	192039..... 164
136954..... 156	166505..... 162	173328-28..... 72	185006..... 103	192062..... 164
136962..... 156	166513..... 162	173336..... 158	185108..... 88, 91	192120..... 152, 160, 162
137051..... 84, 156	166539..... 161	173667..... 163	185116..... 129	192138..... 46
137069..... 156	166547..... 161	174003..... 94	185124..... 162	192229..... 84
138546..... 72, 152, 155	166828..... 161	174558..... 155	185827..... 91	192435..... 91
138554..... 72, 152, 155	167149..... 162	174566..... 152, 162	185843..... 116	192450..... 32
139065 .. 85, 109, 119, 163	167545..... 84, 89, 92, 103, 105, 156	174714..... 84	185850..... 116, 129	192534..... 92
140000	168189..... 165	174722..... 84	185868..... 30, 88, 91, 96, 105, 126	192831..... 82
144361..... 129	168197..... 162	174730..... 84	185967..... 116, 124	193086..... 163
144501..... 159, 160, 165	168220..... 116	175225..... 92	186122..... 82	193136..... 26
144585..... 84, 153	168238..... 161	175457..... 109	186239..... 130	193318..... 82
145591..... 85, 119, 95, 109, 150, 153, 163	168808..... 153	175473..... 109	186338..... 117	193326..... 81
147901..... 85, 94, 109, 119, 150, 153, 160, 163, 164	168923..... 155	175655..... 83, 92	186678..... 84	193343..... 109
147919..... 119	169004..... 72	175663..... 83, 92	186809..... 109	193409..... 85, 119
	169012-16..... 72	175671..... 153	186874..... 82	193417..... 48
	169012-28..... 72	175803..... 157	186973..... 48	193524..... 40
	169054..... 155	175829..... 101, 159	187039..... 95	193557..... 164
	169129..... 153	175928..... 85	187104..... 105	193797..... 129
	169137..... 153	176398..... 91, 101	187161..... 101	193847..... 82
	169145..... 153, 155	176581..... 92	187179..... 103	194365..... 163
	169153..... 162	176653..... 163		194373..... 163
		176851..... 83, 90		194415..... 151, 161

194720	47, 83	199950	130	211953	90, 93	225623	83, 89, 92	233924	151
194910	47, 83	199992	92	212530	91	225631	83, 89, 92	234021	121, 125
195354	46	200000		213579	119	225649	25	234112	89
195461	116	200055	91, 101, 163	213967	130	225656	89	234187	121
196089	116, 118, 151, 164	200063	165	214817	106	225987	72	234237	120
196097	116	200758	92	214890	118	226134	85, 105	234245	162
196105	105, 116, 117, 118, 121, 124, 126	202077	126, 159	214924	82, 116	226175	47	234286	84
196113	105, 116, 117, 118, 121, 124, 126	202580	105	215962	47, 48, 118, 126	226357	118, 119, 121, 125	234336	40
196147	118	202671	105	216010	118	226365	106, 118, 121	234401	119
196162	116, 118, 129, 130, 151	202754	85, 105	216267	119	226464	118	234815	93
196170	116, 118, 129, 130, 151	202846	105	216366	101, 105, 106, 116, 118, 121, 124, 125, 126	226530	88	234914	94
196196	116, 118, 125, 129	202879	84, 105	216416	105	226548	88, 105	235515	93
196204	101, 102	203018	88, 91, 102	216507	119	226605	88	235671	29
196220	118, 119, 88, 91, 101, 103, 104	203042	88, 91, 102, 103	216838	105	226621	88, 91, 126	235879	94, 95
196238	118	203059	82	217182	121	227223	88, 91	235895	84, 93
196246	96, 101, 109, 116, 118	203067	82	217208	121, 125	227348	89	235911	93
196261	104, 150, 151, 164	203604	105	217240	95, 101, 102, 118	227363	89	236240	82
196287	101, 102	203661	105	217331	161	227371	88	236273	84
196303	116, 129, 130, 151	203802	105	217679	105	227389	90	236414	84, 106
196311	101, 103, 104, 109, 116	203810	105	217687	105	227397	26, 89	236422	25
196345	92	203836	105	217695	105	227462	118, 121, 125	236505	106, 118
196352	129, 130, 159	204024	105	217778	104	227496	121	236604	152
196386	151, 159, 161	204693	116, 117, 118, 124	217828	101	227652	90	236646	106
196469	83, 92	204735	118, 119	217851	105	227934	27	236-650	80
196600	151	204776	47, 83	217869	26	227959	84, 90	236653	33
196626	83, 92	205708	105	217901	105	227975	85, 90	236-660	80
196782	84	206094	116	217984	105	228049	93, 101, 102	236-661	80
196790	84	206102	116	218024	105, 106	228056	26	236-701	80
196816	84	206110	116, 129	218123	105	228098	90	236-710	80
196949	72	206227	92	218651	32	228114	89	236-711	80
197079	126	206235	92	218669	88, 91, 102	228122	89	236-720	80
197087	85	206554	105	218982	90	229195	25	236-721	80
197194	85, 104	206557	105	219402	118	229237	25	236-811	80
197202	85, 119	206839	84	219972	89	229286	27	236-820	80
197251	101, 102, 104	206854	84	220000		229302	106	236-825	80
197319	104	206862	84, 102	222729	32, 103	229526	106	237180	90
197608	165	206888	82, 105	222760	84	229583	106	237495	29, 31
197632	83, 92	207621	128	222794	116, 117, 118	229633	47, 118	238444	84
197657	165	208157	105	222885	82	229641	47, 118, 126	238865	160
197665	165	208256	105	222893	82	229658	118	239-920	80
197756	161	208314	105	222901	82	229666	106	239-921	80
197798	151	208322	118	222919	82, 129, 130	229716	104	240000	
197806	151	208322	165	223057	93, 116, 121, 124, 126	229872	104	240929	106
197848	84	208330	116, 117, 118, 121, 124, 126	223077	126	229880	104	241182	32
197871	33	208785	105	223164	91, 95, 101	230000		242062	116, 118
198259	91	209015	83, 89, 92	223222	120	230052	89	242065	95
198317	155	209031	83, 89, 92	223743	118, 121, 125	230060	89	242487	25
198408	101	209114	88	223776	116, 118, 121, 125	230524	119	242586	106
198432	88, 91, 101, 104	209254	88, 90	223917	85, 120	230565	120	242941	151
198531	91, 101	209254	90	223933	121	230596	105	243089	31
198556	165	209401	105	224337	88, 91, 101, 102	230656	91	244384	150, 151
198564	158	209536	101	224352	88, 91, 101, 103, 104, 150, 151, 157, 158	230979	163	244392	150, 151
198689	32	209866	88, 91	224519	119	231068	119	244483	30, 88, 96
198697	32	209874	88, 91	224584	88	231167	85	244814	126
198739	88, 91, 102	209882	88, 91	224675	101, 103, 104, 150, 151, 157	231365	118	245415	124
198952	165	210000		224923	84, 120	232173	121	245464	128
199232	161	210070	155	224972	118	232199	83, 103	245472	128
199406	88, 91, 102	210120	26	224980	118	232207	83, 103	245472	128
199521	83, 89, 92, 103	210245	161	225003	119	232215	83, 103	245506	118, 124
199893	92	210252	161, 164	225037	47, 83	232223	83, 103	245597	128
199927	165	210260	161	225433	24	232348	88, 102, 103	245621	124, 125
		210278	129	225557	101	232371	47, 83	245779	123
		210286	152, 161	225565	151	232389	28	245886	124
		210302	152, 161			232801	93	245894	128
		210310	152			233007	162	246066	47
		210591	126, 151, 164			233023	103	246074	43, 123
		211441	83, 93			233346	106	246132	123
						233353	106	246140	84
								246140	123

246371.....	47, 118	250902.....	5	260000	270256.....	3	276352.....	111
246389.....	47, 118	250910.....	5	260091.....	270272.....	3	276386.....	111
246397.....	47, 118	251678.....	124	260174.....	270280.....	3	276394.....	111
246405.....	47, 118	251694.....	96	260182.....	270298.....	3	276402.....	111
246728.....	130	251744.....	124	260190.....	270389.....	3	276469.....	34
246736.....	130	251751.....	124	260208.....	270397.....	25	276477.....	34
246744.....	130	252049.....	102, 103	260216.....	270496.....	151	276485.....	34
246751.....	130	252213.....	30, 88, 91, 96	260224.....	270504.....	151	276493.....	34
246900.....	128	252221.....	121	260299.....	270777.....	151	276501.....	34
247007.....	118	252429.....	106, 126	260307.....	271155.....	124	276519.....	34
247734.....	31	252536.....	156	260323.....	271429.....	153	276527.....	34
247783.....	102	252544.....	116, 117	260409.....	271486.....	153, 154	276535.....	34
247916.....	83, 103	252551.....	47, 116, 126	260414.....	271494.....	29	276543.....	34
247924.....	102, 103	252569.....	47, 116, 118, 124, 126	260703.....	271502.....	29	276550.....	34
247932.....	83, 103	252585.....	106, 128	260729.....	271809.....	101, 103	276568.....	30
247957.....	83, 102	252874.....	88, 90	260885.....	272138.....	151	276576.....	30
247981.....	33	252908.....	26	260919.....	272369.....	118, 121	276584.....	30
247999.....	33	253070.....	48	261677.....	272443.....	118	276592.....	30
248047.....	93	253088.....	48	261909.....	272443.....	121	276614.....	111
248187.....	104	253518.....	93	262030.....	272443.....	125	276709.....	30, 96
248326.....	82	253559.....	93	262105.....	272542.....	119, 153	276717.....	30, 96
248336.....	32	254463.....	128	262147.....	272542.....	152, 155	276725.....	30, 96
248393.....	84, 102	254714.....	26	262493.....	273227.....	71	276733.....	30, 96
248401.....	95	254870.....	90	262980.....	273235.....	71	276766.....	40
248419.....	95	255679.....	116, 117	263046.....	273243.....	71	276816.....	3
248427.....	95	255687.....	84	263111.....	273334.....	25	277236.....	155
248435.....	95	255778.....	84, 120	263129.....	273417.....	152	277319.....	153, 155
248450.....	95	255786.....	106, 118, 121	263152.....	273540.....	151	277368.....	157
248567.....	92	255794.....	106, 118	263194.....	273557.....	151	278408.....	153
248575.....	90	255893.....	84	263210.....	273581.....	150, 164	278416.....	156
248609.....	31	256529.....	93, 94	263228.....	273615.....	124	278424.....	156
248617.....	32	256610.....	93	263244.....	274217.....	157	278473.....	155
248625.....	31	256628.....	93	263269.....	274266.....	120	278556.....	71
248633.....	29	256966.....	93	263301.....	274415.....	40	278846.....	120
248682.....	33	257147.....	93	263319.....	274456.....	68	278861.....	124
248757.....	93	257246.....	93, 94	263384.....	274464.....	68	278960.....	157
248799.....	24	257329.....	83, 93	263442.....	274472.....	71	279059.....	157, 158
248915.....	93	257360.....	93	263616.....	274480.....	5	279067.....	157, 158
248963.....	104	257386.....	94	263673.....	274506.....	150	279125.....	159
248971.....	104	257394.....	94	263756.....	274613.....	151	279430.....	157
249185.....	90, 92	257402.....	94	263764.....	274621.....	71	279661.....	43
249268.....	82	257410.....	94	263772.....	274654.....	40	279828.....	47
249276.....	82	257436.....	93	263798.....	274662.....	40	279869.....	47
249284.....	82	257451.....	93	263897.....	274738.....	41	279877.....	43
249292.....	82	257469.....	94, 153	264028.....	274746.....	41	279877.....	123
249300.....	82	257477.....	94	264119.....	274779.....	43	279885.....	47
249318.....	82	257550.....	94	264150.....	274787.....	43	279968.....	4, 7
249342.....	82	257675.....	93	264168.....	274811.....	44	279976.....	4, 6
249359.....	82	257683.....	95	264184.....	274829.....	44	280000	
249466.....	90	257808.....	150	264234.....	274837.....	46	280081.....	3
249490.....	90, 92	258236.....	162	264416.....	274845.....	46	280164.....	157
249508.....	90, 92	258368.....	85	265157.....	274852.....	47	280180.....	160
249557.....	90	258376.....	85	265223.....	274852.....	118, 126	280354.....	158
249565.....	90	258384.....	85	265477.....	274860.....	47, 83, 124	280453.....	128
250000		258418.....	84	265744.....	274878.....	47, 83	280461.....	128
250100.....	24	258483.....	102, 103	265769.....	274886.....	47, 83, 120	280511.....	43, 123
250191.....	28	258566.....	109, 155	265819.....	274894.....	43	280552.....	106
250225.....	24	258749.....	46	265827.....	274910.....	41	280560.....	106
250605.....	153	258830.....	89	266080.....	274928.....	41	280578.....	25
250613.....	71	258848.....	89	266106.....	274936.....	44	280586.....	106
250621.....	68	258897.....	84	266114.....	274944.....	44	280602.....	125
250639.....	68	259424.....	48	266742.....	274966.....	120	280636.....	45
250647.....	70	259432.....	48	266833.....	274969.....	84	280644.....	45
250662.....	43	259440.....	48	268-502.....	274985.....	124, 125	280719.....	128
250704.....	124	259507.....	93	268-514.....	275016.....	47, 83	280727.....	128
250720.....	40	259929.....	84	270000	275040.....	47, 83	280735.....	128
250746.....	71	259945.....	82	270215.....	275065.....	45	280933.....	71, 156
250878.....	33	259986.....	82	270231.....	275974.....	47, 83, 126	280941.....	156
				270249.....	276345.....	111	281121.....	158

281147	157, 158	284901	111	288464	111	290460	128	295865	155
281188	157	284919	111	288472	111	290510	159	296053	83, 93, 99, 109
281428	150, 164	284935	30	288480	111	290627	124	296061	93, 99
281436	151, 154	284935	96	288498	111	290635	43	296067	83
282186	159	284943	18	288506	111	290635	123	296079	83, 93, 109, 155
282244	29	284950	18	288514	111	290643	43	296087	83, 93, 109, 155, 157, 159
282251	95, 159	284992	47	288522	111	290650	159	296129	71
282293	95	285007	84	288530	111	290668	159	296145	71
282335	95	285015	27	288548	111	290676	159	296327	150, 158, 164
282350	95	285015	47	288555	110	290833	158	296384	39
282426	128	285015	83	288563	110	290890	166	296392	39
282434	128	285031	27	288571	110	290916	160	296400	39
282475	126	285049	47	288589	110	290932	160	296418	39
282483	126	285049	83	288597	110	291278	41	296512	34
282491	126	285072	38	288613	110	291310	41	296517	159
282509	126	285080	38	288621	110	291336	157	296665	159
282608	128	285098	38	288639	110	291435	24, 89	296699	153
282624	126	285122	42	288647	110	291443	24, 89	296707	69
282756	157, 160	285130	16	288654	110	291575	4	296715	69
282848	160	285221	159	288662	111	291625	25	296723	68
282855	160	285296	160	288670	111	291732	79	296731	68
282863	160	285312	159	288688	110	291740	78, 79	296749	68
282913	128	285478	159	288696	110	291757	78, 79	296756	68
282921	128	285643	159	288704	110	291765	78, 79	296764	69
282939	128	285668	158	288712	110	291773	78, 79	296772	69
282947	128	285676	158	288720	110	291781	78, 79	296939	158
283051	128	285684	158	288738	110	291799	78, 79	296954	157
283093	128	285809	43, 45	288746	110	291807	78, 79	296962	157
283101	84, 128	285916	128	288753	110	291823	79	296988	157
283127	38	285924	88	288761	110	291832	78	297044	157
283150	130	286070	159	288779	111	291906	43	297051	157
283168	130	286096	128	288787	110	291951	44	297598	26
283176	130	286278	38	288795	110	292227	78, 79	297739	70
283192	130	286302	128	288803	111	292946	16	297747	70
283200	130	286344	126	288811	111	292953	16	297853	166
283218	130	286419	95	288829	110	292961	17	297861	74
283226	130	286427	95	288837	111	292979	17	297879	74
283267	130	286435	159	288845	110	292987	17	297887	156
283283	130	286799	160	288852	110	292995	18	299123	157
283325	130	286831	159	288860	110	293001	19	299966	157
283341	46	286849	159	288878	110	293027	44	300000	
283473	159	286898	159	288886	110	293035	44	300772	74
283549	24, 89	286922	150, 152, 164	288902	126	293043	30	300822	71
283713	70, 71	286997	157	288977	126	293118	39	300988	19
283739	160	287011	157	288985	159	293126	30	301036	40
283747	160	287045	158	289140	159	293134	30	301036	41
283770	160	287052	157, 158	289280	70	293852	150, 164	301044	40, 41
283812	160	287243	71, 159	289330	31	294066	158	301077	43
283838	159, 160	287326	79	289603	38	294199	42	301085	44
283846	160	287334	79	289611	38	294207	42	301093	44
283861	159	287342	79	289637	68	294215	44	301101	46
284257	69	287359	79	289645	68	294223	44	301119	84
284265	69	287367	79	289652	110	294231	42	302968	7
284273	69	287375	78, 79	289660	110	294249	42	303461	156
284281	69	287383	79	289678	111	294470	34	303487	158
284299	70	287649	24, 89	289686	111	294526	42	303497	158
284323	155	287656	38	289694	110	294991	159	410000	
284364	128	287912	7	290000		295287	128	416-102	10
284414	128	287987	159	290007	128	295295	128	417-150	80
284521	130	288050	128	290015	128	295402	78	417-250	80
284539	128	288068	128, 152	290031	128	295410	78	418-005	11
284612	46	288076	128	290049	128	295428	78	419-101	80
284620	130	288084	128	290106	128	295436	78	419-102	80
284638	130	288407	110	290320	98	295493	78	419-103	80
284646	130	288415	110	290331	71	295733	159	419-104	80
284745	159	288423	110	290338	98	295741	159	419-105	80
284851	70	288431	110	290411	128	295832	70, 155	419-129	80
284869	70	288449	110	290429	128	295840	70, 155		
284877	6	288456	110	290452	128	295857	155		

620000	03-505450-00	98	A000113	132, 137, 144	A001121	134, 147, 148	A001733	132
624-110	03-505451-00	96	A000115	132, 137, 144	A001126	132, 137, 144	A001736	132, 144
624-116	03-505460-00	98	A000166	141	A001142	133, 139, 145	A001746	135, 142, 147
624-117	03-505461-00	96	A000167	141	A001185	132, 141	A001754	135, 142, 147
624-118	03-505463-00	97	A000172	133, 139	A001224	140	A001757	140
624-121	03-505477-00	97	A000200	140	A001251	135, 141	A001759	133, 138
624-122	03-505478-00	96	A000263	133, 139, 145	A001252	135, 141	A001760	138
624-123	03-505484-00	96	A000267	139	A001261	137	A001761	138
624-124	03-505490-00	97	A000301	133, 141, 145	A001264	133, 139, 145	A001763	142
624-125	03-505494-00	98	A000303	137	A001266	144	A001764	135, 142
624-126	03-505495-00	98	A000323	142	A001283	133, 139, 145	A001765	142
624-340	03-505497-00	98	A000324	142	A001293	134, 146	A001769	133, 139, 145
624-341	03-505507-00	96	A000327	137	A001298	135, 142	A001770	132, 138, 144
624-342	03-505514-00	96	A000344	135, 142, 147	A001309	135, 142, 147	A001777	142
624-343	03-505596-00	97	A000345	140	A001310	135, 145, 147	A001789	133
624-344	03-505598-00	96	A000346	140	A001311	135, 145, 147	A001813	146
624-345	03-505629-00	30	A000347	140	A001393	132, 137, 144	A001816	146
624-346	03-505633-00	30	A000348	140	A001399	146	A001817	135, 146, 147
626-321	03-505633-00	96	A000349	140	A001400	146	A001819	132, 141
626-330	03-505634-00	30	A000350	140	A001403	146	A001821	134, 139, 143
626-331	03-505634-00	96	A000351	140	A001407	146	A001834	73
626-332	03-505635-00	30	A000352	140	A001408	132, 138, 144	A001835	73
626-333	03-505635-00	96	A000353	140	A001410	147	A001836	73
626-334	03-505638-00	30	A000354	140	A001415	146	A001837	73
626-335	03-505638-00	96	A000355	140	A001416	146	A001838	74
627-400	03-505639-00	30	A000356	140	A001417	146	A001839	74
627-401	03-505639-00	96	A000357	140	A001436	146	A001840	73
980000	03-505696-00	98	A000358	140	A001437	146	A001881	148
981-004	03-505697-00	30	A000359	140	A001438	146	A001885	135, 147
981-005	03-505697-00	96	A000360	140	A001444	63	A001886	135, 147
981-006	03-505698-00	30	A000362	140	A001449	134	A001887	133, 145
981-007	03-505698-00	96	A000368	135, 142, 147	A001459	146	A001911	135, 142
981-012	03-505720-00	98	A000395	139	A001462	145, 148	A001913	139
981-017	03-505721-00	98	A000397	133, 139	A001471	136, 144	A001936	135, 147
981-020	03-505722-00	97	A000528	133, 140	A001472	166	A001938	135, 142
03-0000-00	03-505724-00	97	A000562	139	A001479	74	A001958	134, 147
03-211504-00	03-505725-00	97	A000643	139	A001483	135, 146, 147	A001959	133, 145
03-211533-00	03-505726-00	96	A000645	139	A001484	146	A001962	134
03-500223-00	03-505729-00	97	A000677	141	A001485	146	A001964	143
03-500339-00	03-505739-00	97	A000684	132, 141	A001488	146	A001965	141
03-502772-00	03-505741-00	97	A000688	133, 141	A001493	133, 145	A001968	135, 147
03-502955-00	03-505745-00	96	A000689	133, 141	A001494	133	A001982	144, 145
03-502959-00	03-505789-00	30	A000754	141	A001506	132, 137, 144	A001984	139, 143
03-502968-00	03-505789-00	96	A000801	142	A001520	133, 139, 145	A001985	139, 143
03-503906-00	03-505791-00	98	A000811	132, 141	A001521	147	A001986	139, 143
03-504025-00	03-505792-00	98	A000819	133	A001522	145	A002037	134, 147, 148
03-504099-00	03-505816-00	96	A000878	139	A001523	145	A002038	133, 141, 145
03-504104-00	03-505844-00	97	A000897	132, 137	A001524	135, 147	A002040	133, 139, 145
03-504156-00	03-505876-00	30	A000924	135, 142, 147	A001525	146	A002052	135, 142
03-504235-00	03-505876-00	96	A000926	135, 142, 147	A001526	145	A002053	136
03-505019-00	03-505879-00	96	A000927	135, 142, 147	A001528	145	A002054	136
03-505020-00	03-505880-00	97	A000935	64, 134	A001551	139, 143	A002062	135
03-505081-00	03-505881-00	97	A000947	133, 139	A001558	136	A002063	135
03-505166-00	03-505884-00	97	A000954	64, 134	A001559	136	A002099	133, 141
03-505194-00	03-505897-00	96	A000960	64	A001561	60	A002104	134, 137, 139, 143
03-505223-00	03-694637-00	96	A000969	64	A001567	73		
03-505269-00	03-700001-01	96	A000986	64	A001568	136	A002111	134, 147, 148
03-505272-00	03-700001-02	96	A000989	134, 145, 147	A001569	136	A002113	136
03-505273-00	03-700025-90	96	A001029	148	A001570	60	A002127	139, 143
03-505362-00	03-700025-91	96	A001049	134, 147, 148	A001604	134, 147	A002128	139, 143
03-505372-00	06-505363-00	97	A001052	133, 145	A001628	145	A002164	136
03-505384-00	091-203	80	A001055	133, 145	A001637	139, 143	A002243	135, 142
03-505389-00	A00000		A001067	134, 147, 148	A001639	139, 143	A002272	133, 145
03-505393-00	A000056	133, 139, 145	A001072	145	A001644	132, 141, 144	A002298	144
03-505419-90	A000078	135, 142, 147	A001074	144	A001671	145	A002299	132, 144
03-505429-00	A000080	135, 141	A001100	132, 137	A001702	133	A002308	144
03-505433-00	A000097	133	A001105	132, 137	A001729	133, 139	A002315	144
03-505439-00	A000102	132, 137	A001107	132, 137, 144	A001730	133	A002316	144
03-505441-00	A000104	132, 137	A001109	132, 137, 144	A001732	132	A002359	62

A002360 62	A002671 133, 139, 145	A10000	A305-1815-00 132, 138	A903-1020P01 134, 146
A002362 62	A002677 137	A116-0002P01 ... 134, 140,	A305-1820-00 132, 138	A903-1025P01 134, 146
A002363 62	A002678 138	146	A305-1880-00 132, 138	A903-1030P01 134, 146
A002364 62	A002679 137	A116-0003P01 ... 134, 140,	A3502 166	A903-1035P01 134, 146
A002365 62	A002682 144	146	A3507 166	A903-1040P01 134, 146
A002368 63	A002683 136	A116-0005P01 ... 134, 140,	A381-0903-00 145	A903-1045P01 134, 146
A002369 63	A002690 138	146	A381-3004-00 133, 139,	A903-1051P01 134, 146
A002370 145, 147	A002692 137, 138	A116-0061P01 ... 134, 140,	141, 145	A903-1056P01 134, 146
A002372 148	A002700 139, 143	146	A381-4000-00 132, 141,	A903-1060P01 134, 146
A002380 136	A002701 137	A116-0497P07 140	144	A903-1072P01 134, 146
A002392 137, 139	A002702 137	A116-0497P08 140	A383-0903-00 135, 141,	A9055 74
A002393 139	A002703 137	A116-0497P09 140	147	A9232 166
A002412 141	A002704 137	A116-0497P10 140	A4104 166	Alpha
A002423 136	A002705 137	A116-0497P11 140	A4107 166	AH105 166
A002426 62	A002706 137	A116-0497P12 140	A4110 166	DBN-200 55
A002427 62	A002707 137	A116-0497P13 140	A4120 166	DBN-500 55
A002428 62	A002708 137	A116-0497P14 140	A4204 166	DMP-050R 55
A002429 62	A002709 137	A116-0497P15 140	A4207 166	DPR-100 55
A002430 62	A002711 137	A116-0497P16 140	A4210 166	ENV-100 55
A002431 62	A002712 137	A116-0497P17 140	A4215 166	ESK-200 54
A002432 144	A002713 137	A116-0497P18 140	A50000	FDD-400 55
A002433 145	A002714 137	A116-0497P19 140	A502000 139, 143	FID-510 52
A002434 145	A002715 138	A116-0497P20 140	A503000 143	FIO-100 52
A002435 144	A002716 138	A127-0018P01 134, 146	A509000 143	FM-2000FID 52
A002466 139, 143	A002718 138	A127-0090P01 ... 134, 139,	A512000 143	FM-2000FPD 52
A002470 61	A002719 138	146	A51500 73	FM-2000PID 52
A002471 61	A002720 138	A20000	A515000 137, 139, 143	FM-2000XSD 52
A002472 61	A002721 138	A21-0110-33 135, 141, 145,	A51501 73	FPD-500 52
A002525 134, 147, 148	A002722 138	146	A515017 141	GCF-100A 53
A002540 142	A002723 138	A21-0110-37 141	A51600 73	GCI-510 53
A002541 142	A002724 138	A20000	A51601 73	GCP-530 53
A002542 142	A002725 138	A300-0005-00 74	A52200 74	GCP-540 53
A002547 142	A002726 138	A303-0110-00 135, 141,	A526-2585-00 166	GCS-100 53
A002548 142	A002727 138	146	A5311 166	GPK-100 55
A002560 74	A002739 137	A303-0111-00 135, 141,	A532-0021-00 166	INJ-100 54
A002570 139, 141	A002745 136	146	A5350 74	LMF-010 54
A002572 61	A002746 136	A303-0112-00 135, 141,	A5351 74	LOP-100 54
A002573 61	A002758 60	146	A5501 73	LVS-001 54
A002574 61	A002759 60	A303-0113-00 135, 141	A5502 73	M272765 5
A002575 61	A002778 133, 145	A303-0114-00 135, 141,	A5505 73	MLS-100 55
A002576 61	A002831 136	146	A5510 73	MNB-100 55
A002577 61	A002832 136	A303-0115-00 135, 141,	A5515 73	MSL-100 55
A002578 61	A002833 136	146	A5520 73	RGA-100 55
A002579 61	A002837 136	A305-1400-00 132, 138	A55201 74	RGH-100 55
A002580 61	A002848 133, 141	A305-1405-00 132, 138	A5530 166	RGN-100 55
A002581 136	A002852 137	A305-1410-00 132, 138	A5541 166	RRRSA09035 5
A002586 145	A002877 62, 134, 139,	A305-1420-00 132, 138	A5545 166	RRRSA5504 78
A002593 137	143, 147	A305-1440-00 132, 138	A5900 166	RRRSA5510 78
A002594 137	A002878 62, 134, 139,	A305-1450-00 132, 138	A70000	SAS-002 54
A002595 137	143, 147	A305-1460-00 132, 138	A7007 166	SFC-002 54
A002596 138	A002885 139, 143	A305-1480-00 132, 138	A7017 166	SFC-010 54
A002597 137	A002894 134	A305-1505-00 132, 138	A7020 166	SPU-100 55
A002598 138	A002898 136	A305-1510-00 132, 138	A7027 166	SRM-100 55
A002599 137	A002899 136	A305-1520-00 132, 138	A7030 166	SSA-050 54
A002600 138	A002900 136	A305-1530-00 132, 138	A7036 166	SSS-040 54
A002601 137	A002901 136	A305-1540-00 132, 138	A7107 166	SSS-120 54
A002602 137	A002904 136	A305-1550-00 132, 138	A7117 166	STD-100 54
A002603 138	A002905 136	A305-1560-00 132, 138	A7120 166	XSD-101 53
A002604 138	A002907 136	A305-1580-00 132, 138	A7127 166	XSD-560 52
A002605 138	A002920 138	A305-1590-00 132, 138	A7130 166	
A002606 138	A002921 138	A305-1600-00 132, 138	A7136 166	
A002607 137	A002922 138	A305-1610-00 132, 138	A7520 166	
A002608 138	A002923 138	A305-1620-00 132, 138	A90000	
A002609 137	A002938 62, 134, 139, 143,	A305-1630-00 132, 138	A9006 166	
A002617 137	147	A305-1640-00 132, 138	A9011 166	
A002654 144	A002939 62, 134, 139, 143,	A305-1660-00 132, 138	A9021 166	
A002666 133, 139, 145	147	A305-1690-00 132, 138	A903-1000P00 134, 146	
A002670 137	A002940 133, 139, 145	A305-1750-00 132, 138	A903-1010P01 134, 146	
	A002945 133	A305-1810-00 132, 138	A903-1015P01 134, 146	

Our Customers Come First.

OI Analytical has a continuously growing network of support services designed to provide high quality service to our customers. Our goal is to provide the highest quality instruments available, backed by a commitment to quality, service, and support.

At OI Analytical we are always looking for ways to improve the service and value we provide to our customers. We welcome comments and suggestions. *Please call (800) 336-1911 (U.S.A.) or (409) 690-1711 (international locations) and ask for the Technical Support Manager.*

Service and Support

Service Products

- Installation 182
- Domestic Toll-Free
 - Technical Support Hotline 182
- On-Site Repair 182
- Return to Factory for Repair 182
- Loaner Program 182
- 24-Hour Parts Delivery 182
- Extended Warranties
 - and Service Contracts 182
- Upgrade Products 182
- Computerized Tracking Systems 182
- Applications Support 182
- System Support and Training 182
- Hands-On Seminars 183

Warranty Information

- Warranties 183
- Damages or Loss in Shipment 183
- Returns 183

Catalog Information

- Methods and Applications 184
- Electrical 184
- OI Analytical's Standards Policy 184
- Renting and Leasing 184
- Discontinued Products 184
- Catalog 184
- Installation 184

Trademarks 184

Terms

- U.S.A. and Canada 185
- Outside U.S.A. and Canada 185

Price Quotations 185

Order Shipment 185

Customer Accounts 185

Service Products

Installation

Installation may be purchased for all of our products and is included with our GC systems delivered in the U.S.A. Our service representative will install and verify operation to factory specifications as well as provide basic operation and maintenance familiarization. Please contact the International Sales Department regarding international installations.

Domestic Toll-Free Technical Support Hotline



Toll-free technical assistance is available at **(800)-336-1911**. *For best service, please use our 800 number for technical support only.* Support specialists are available from 7:30 A.M. to 5:30 P.M. CT, Monday–Friday (excluding holidays). The hotline is available to take messages 24 hours a day, 7 days a week. When calling from international locations, please call (409) 690-1711.

On-Site Repair

For equipment maintenance and repair, we offer on-site service at your lab. *Please call (800) 336-1911 or contact your area representative to arrange for an on-site visit.*

Return to Factory for Repair

For equipment maintenance and repair, we offer in-house repair at our Service Repair Center. *Please call (800) 336-1911 to arrange to ship your equipment to the factory for repair.*

For international repairs: All return-to-factory repairs must be coordinated through the Customer Service Department and an Authorization Number must be assigned prior to shipment. Shipments must be shipped to OI Analytical in the following manner: door to door with all customs clearances, duty free, and delivery charges prepaid. Please request broker information to expedite customs clearances.

Loaner Program

To minimize your down time, loaner equipment is available for a nominal fee while your unit is being repaired. Loaner instruments can be shipped overnight, upon receipt of a valid purchase order, and may be used for up to 28 days. *Request our Loaner Agreement for details.*

24-Hour Parts Delivery

We can provide same-day shipping of orders for most routine parts and expendables received before 3:30 P.M. CT. *Call our Order Entry Department at (800) 673-3750 to order.* 800-ORDER-50

Extended Warranties and Service Contracts

We offer a wide range of extended warranties and service contracts designed to meet your specific needs. *Request our Maintenance Agreement for details.*

Upgrade Products

Call for more information on upgrading existing OI Analytical equipment.

Computerized Tracking System

Some services are automatic and free of charge—like our customer tracking system. We keep your company and equipment information on file to help when you call for any reason: parts, repairs, or troubleshooting.

Applications Support

Technical support for customers interested in specialized applications is also available. When purchased as an option, a support chemist provides specific applications training on-site. *Request our Applications Package for details.* Free application/technical notes are available. Call (800) 653-1711 for information.

System Support and Training

All instruments receive performance verification with installation. Training is available, as a purchase option, in instrument familiarization and operation, maintenance, and minor repairs. An operator's manual is included with all instrument shipments. *Call for information on additional training.*

Hands-On Seminars

Hands-on seminars are available at our headquarters in College Station, Texas. These seminars cover operation, maintenance, troubleshooting, and repair of OI Analytical equipment. Classes are small for personalized attention and are highly rated by our customers. *Call for more information and a registration form.*

Warranty Information

Warranties

OI Analytical warrants each instrument and its optional accessories against defects in materials and workmanship under normal use and service. Warranty periods vary by product; see quotations and product literature for time periods. Equipment installed by OI Analytical is warranted from the installation date; all other equipment is warranted from the ship date. If the purchaser schedules or delays installation for more than 90 days after delivery, the warranty period starts on the 91st day from the ship date. This warranty extends only to the original purchaser. OI Analytical will, at its option, repair or replace equipment that proves to be defective during the warranty period, if the equipment is returned to OI Analytical at the purchaser's expense. Parts, labor, and return shipment to the customer shall be at OI Analytical's expense.

Software and firmware designed by OI Analytical for use with a CPU will execute its programming instructions when properly installed on that CPU. OI Analytical does not warrant that the operation of the CPU, software, or firmware will be uninterrupted or error-free.

Consumables, columns, lamps, and high temperature furnaces are warranted for 30 days (parts only) and are not available for coverage under extended warranties or service contracts.

This warranty shall not apply to defects originating from:

- Improper maintenance or operation by purchaser.
- Purchaser-supplied accessories or consumables.
- Modification or misuse by purchaser.

- Operation outside of the environmental and electrical product specifications.
- Improper or inadequate site preparation.
- Purchaser-induced contamination or leaks.

The foregoing warranty is in lieu of all other warranties, expressed or implied, including, but not limited to, any warranty of merchantability, fitness, or adequacy for any particular purpose or use. OI Analytical shall not be liable for any special, incidental, or consequential damages, whether in contract, tort, or otherwise.

Damages or Loss in Shipment

Inspect all shipments for damage before signing the carrier's bill of lading. If damage is found after unpacking the shipment, immediately contact the carrier to return and inspect the damage. Freight carriers are liable for damages only when the damage is promptly reported and a claim is filed with the carrier. Retain all packaging for carrier inspection. Call OI Analytical within five days of shipment receipt if any part of the purchase will be returned. The customer may be subject to a restocking charge if OI Analytical is not notified of damages within the allotted five days. (UPS and Federal Express are liable for damages up to \$100 and freight up to \$50.)

For international shipments: If damage is obvious upon receipt, refuse to accept the order. If damage is found after unpacking, immediately contact OI Analytical and keep all packing materials. Do not send shipment back to OI Analytical until directed to do so. A return material authorization (RMA) number must be issued by OI Analytical before sending any equipment back.

Returns

If, after shipment inspection, defective material is found, contact the Customer Service Department for correction. Obtain a return material authorization (RMA) number and mark it clearly on the return packaging. On all returned items not defective or damaged by shipping, contact the Order Entry Department at (800) 673-3750 or (409) 690-1711. A 25% restocking charge will apply.

Catalog Information

Methods and Applications

The method and application information contained herein is intended only as a reference for this catalog and is not intended to define method requirements. Complete method information is available in the *Annual Book of ASTM Standards*, *Federal Register*, *Standard Methods*, and *USP XXII*.

Electrical

OI Analytical instruments are designed for use with 100/110 ($\pm 10\%$) volts alternating current (VAC) and/or 220 ($\pm 10\%$) VAC. In the catalog text, all voltages are listed as 100 V, 110 V, or 220 V and $\pm 10\%$ applies. If the voltage is not stated, the product is 110 ($\pm 10\%$) VAC.

Power cords are available for both voltage options and for various countries. See "Cables - Power Cords" in the Gas Chromatography Analytical Systems and Supplies section of this catalog for a list of these cables.

OI Analytical's Standards Policy

Certification of standards sold by OI Analytical, unless specifically stated, is not implied. Standards for which no certification is stated are prepared in the production laboratory using standard laboratory techniques.

Renting and Leasing

OI Analytical offers a number of ways to help you get the equipment you need, for as long as you need it. If a capital equipment purchase is not in your plans, you can lease or rent any product we carry. Renting is an ideal solution for short-term projects, or choose our rent-to-own or lease plans if you want to keep your option to buy.

Discontinued Products

Several OI Analytical products, including the Models 4420 ELCD, 4440 PID/ELCD, 4460A Sample Concentrator, 5220 ELCD, 5222 ELCD, 5232 PID, 5240 PID/ELCD, 5320 PID, MPM-16 Autosampler, Model

700 TOC Analyzer are no longer available for purchase. These and other products will be supported with replacement parts and supplies for at least five years from the last date of production.

Catalog

The information in this catalog and related documents supersedes all previous information and may be revised without notice. OI Analytical reserves the right to correct errors and to change prices and/or specifications without notice. OI Analytical shall not be liable for errors contained herein, nor for incidental or consequential damages in connection with the furnishing, performance, or use of this material. No part of this document may be reproduced or photocopied, or translated to another language, without the prior written consent of OI Analytical.

Installation

Installation may be purchased for all of our products and is included with our GC systems delivered in the U.S.A. Please contact the International Sales Department at (409) 690-1711 to obtain information regarding international installations.

Trademarks

Analytical Microwave Systems, Aqua-Check, Autovap, CNLab, CNSolution, Cryo-Focusing Module (CFM), Cyclone Water Management, ER Detector, Infra-Sparge, LabFLOW, MicroTrap, MINI-LINK, MINI-NET, Mud-Dawg, NiCat, OI+NET, RA Sampler, Soxtherm, Triple Check, Window Sweep, WinFLOW, WinSpace, WinTOC, WinTrap, WinWave, and XSD are trademarks; and ALPKEM, Envirobeads, The Flow Solution, and PATTI are registered trademarks of O.I. Corporation dba OI Analytical.

Ambersorb is a registered trademark of Rohm and Haas Co.
 Carboxen, Vocarb, and Vocol are registered trademarks of Supelco Inc.
 Carboxen is a trademark of Supelco.
 ChemStation is a trademark of Hewlett-Packard Corp.
 Cyclouniliner and Uniliner are registered trademarks of Hewlett-Packard Company.
 DB is a trademark of J&W Scientific, Division of Curtin Matheson Scientific, Inc.
 Envirosep-ABC is a trademark of Phenomenix Inc.
 Florisil is a registered trademark of Floridin Co.
 KEL-F is a registered trademark of 3M Co., Chemical Div.
 Kynar is a registered trademark of Atochem North America, Inc.
 Luer-Lok is a trademark of Becton-Dickinson & Co.
 Matheson is a registered trademark and Leak Hunter is a trademark of Matheson Gas Products.
 Micro is a registered trademark of International Products Corp.
 Microsoft, MS-DOS, and Windows are registered trademarks of Microsoft Corp.
 Nalgene is a trademark of Nalge.
 OV is a registered trademark of Ohio Valley Specialty Chemicals Co.
 Snoop is a registered trademark of Nupro Company.
 SoilVials is a trademark of Dynatech Precision Sampling Inc.
 Swagelok is a registered trademark of Crawford Fittings Co.
 Teflon, Tefzel, Viton, and Vespel are registered trademarks of E.I. duPont de Nemours & Co., Inc.
 Tenax is a registered trademark of Enka Research Institute Arnhem.
 Tygon is a registered trademark of Norton Co.
 Varian is a registered trademark of Varian Associates Inc.



To order call 1-800-653-1711 (USA/Canada) or 409-690-1711

