

# BAM-1020 BETA MASS MONITOR

## SERVICE MAINTENANCE, REPAIR, SPARE PARTS

Met One Instruments, Inc.; 1600 NW Washington Blvd.; Grants Pass, OR. 97526  
Ph. 541-471-7111; Fax 541-471-7116; E-mail: [service@metone.com](mailto:service@metone.com)

### REPAIR AND FIELD MAINTENANCE

A complete repair and service department is maintained at our factory in Grants Pass, Oregon, and at our regional service facility in Dallas, Texas. Most repairs can be made in the field by a simple substitution of components. Some repairs do require recalibration following the replacement of faulty components. If calibration standards are not available, the instrument can be returned to our service facility. The turn around time is generally less than five (5) working days.

### RETURN AUTHORIZATION

Prior to any product return, please contact the factory for a return authorization number.

### BASIC SERVICE(S)

ORDER #	DESCRIPTION
SVC8001	FULL DYNAMIC CALIBRATION, BAM-1020  * <i>New Calibration Certificate issued for government agency satisfaction</i>

*When ordering parts for BAM-1020, Please specify Serial Number and Firmware Version on order.  
Note: Firmware Version is displayed on Main Screen of BAM-1020 Display.*

### CONSUMABLES

PART #	DESCRIPTION
460130	BAM FILTER TAPE (2 MONTH OPERATION PER TAPE)
720069	REPLACEMENT O-RING, BAM INTAKE HEAD
8965	REPLACEMENT O-RINGS, BX-802, PM-10 HEAD
720097	REPLACEMENT O-RINGS, BX-807 PM2.5 HEAD
720105	REPLACEMENT O-RINGS, BX-808 VSCC
580292	FILTER ELEMENT, VACUUM, IN-LINE
9122	BAM INLET O-RING KIT
590811	FUSE, 3.15A, SLO-BLO (5X20MM)
8150	CORE TUBE, FILTER TAPE, BAM 1020
390044	3 VOLT COIN STYLE BATTERY
960025	CLEAR TUBING, BAM TO PUMP (Price per/ft)

### REPLACEABLE PARTS, SPARES AND REPAIR ASSEMBLIES

2443	RS232 CABLE DB9F to DB9F, NULL MODEM
8069	ASSY, REFERENCE MEMBRANE
9278	INTERNAL RH SENSOR FOR SMART HEATER
9279	INTERNAL TEMP SENSOR FOR SMART HEATER
9304	BOARD STACK ASSY, BAM-1020
9628	BAM COMPLETE DOOR ASSEMBLY
80159	BAM FILTER TAPE SPOOL COVER w/KNOB
80315	POWER SUPPLY MODULE, W/HARNESS, BAM 1020
80324	FLOW SENSOR, BAM 1020, 20SLPM
80355	NOZZLE REBUILD KIT - Incl. Adj. Shims
80679	BAM 1020 REAR PANEL ASSEMBLY
580331	REPLACEMENT WATER COLLECTION JAR FOR PM-10 HEAD
BX-592	OUTSIDE TEMP SENSOR, VOLUMETRIC FLOW
BX-596	AMBIENT TEMP/BARO COMBO SENSOR
BX-961	MASS FLOW CONTROL

## **SERVICE MAINTENANCE TOOLS**

BX-302	ZERO CALIBRATOR, WITH ADAPTERS
460134	REPLACEMENT 0.2 Micron FILTER FOR BX-302
BX-305	INLET ADAPTOR FOR FLOW CALIBRATION
BX-307	VOLUMETRIC FLOW CALIBRATION KIT
BX-308	SERVICE TOOL KIT
BX-308-1	SERVICE TOOL KIT / DISTRIBUTOR
BX-310	NOZZLE ADJUSTMENT SHIMS

## **PUMP MAINTENANCE**



**GAST PUMP**

BX-121	PUMP, GAST, 115 VAC $\pm$ 10%, 50/60 hz
BX-122	PUMP, GAST, 220 VAC $\pm$ 10%, 50 hz
680828	BAM PUMP SERVICE KIT, GAST, USED ON BX-121, 122, 131, 132
680868	FILTER/MUFFLER, GAST PUMP (AK840A)
680854	END CAP ASSY, GAST PUMP (AK526)
680870	FOOT SUPPORT, GAST PUMP (AC136)



**MEDO PUMP**

BX-126	PUMP 115 VAC $\pm$ 10%, 60 hz, MEDO
580293	MUFFLER, PUMP-BY-PASS, for MEDO Pump
8588	PUMP SERVICE KIT, MEDO PUMP
680839	PUMP REBUILD KIT, MEDO PUMP

## PERIODIC MAINTENANCE

<b>Monthly</b>	Nozzle and Vane Cleaning*
	Leak Check*
	Flow Rate Verification
	Clean Capstan Shaft and Pinch Roller Tires*
	Clean PM10 Head
	Clean PM2.5 Inlet
	Check Error Log*
	Download Digital Data Log*
Compare BAM-1020 Data to External Datalogger Data (if used)	
<b>2 Months</b>	Replace Filter Tape
	Run SELF-TEST Function
	Full Flow Audit and Calibration
	Verify BAM-1020 Settings
	Set Real-Time Clock
<b>6 months</b>	Replace or Clean Pump Muffler (if used)
	Test Pump Capacity
	Test Filter RH and Filter Temperature sensors
	Test Smart Heater
<b>Annual</b>	Perform 72 hour BKGD (BX-302 zero filter) test
	Clean Internal Debris Filter
	Check Membrane Span Foil
	Beta Detector Count Rate and Dark Count Test
	Clean Inlet Tube
	Test Analog DAC Output (if used)
<b>2 Year</b>	Rebuild Vacuum Pump*
	Replace Nozzle O-ring (Special tools required)
	Replace Pump Tubing

# TYPICAL INSTALLATION

