

ENMET Corporation
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Ann Arbor, MI 48106-0979

Sample Pump Portable Manual

**80021-016
March 2003**

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1.0 Introduction

1.1 The pump assembly

The pump assembly is a fixed flow device used to supply an ambient air sample to portable gas detectors. Air is pulled directly from where the instrument is located to the sensor.

1.2 Intrinsic Safety

The pump is designed to be nonincendive as defined by the National Electrical Code.

WARNING: Do not change electrical components. In particular, do not use a different battery pack or charger than the one designed for use with the pump. Substitutions may affect the nonincendive design of the pump; personal injury, death, and property damage may result from an explosion.

2.0 Features

See Figure 1 for location of features.

Feature	Description
POWER Switch	Controls power from the battery to the pump motor and circuits.
Green LED	Indicates that power is being supplied through the switch.
Red LED and Audio Alarm	Indicates that air flow is insufficient, or a low battery condition.
Air Input Line	Conducts air to the pump assembly.
Fitting, Air Input Line	To Sample Adapter.
Filter	Prevents particulate matter and liquids from entering the pump assembly.
Air Output Line	Conducts air from the pump assembly.
Belt Clip	The pump assembly is equipped with a belt clip, used to attach the pump to a belt, pocket or harness strap.
Charge Jack	Connects with the mating plug on the charger.
Charger	Supplies charging current to the pump assembly battery. (not shown)

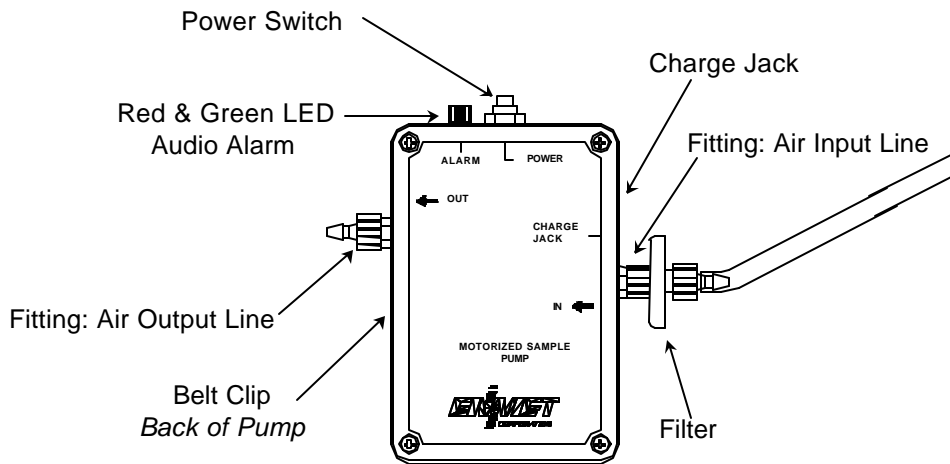


Figure 1: Sample Pump Features

3.0 Operation

3.1 Charging

Charge the pump assembly battery by plugging the charger into an appropriate wall socket and the charger plug into the jack on the pump assembly. Charge for 14 - 16 hours

WARNING: Do not charge in a hazardous atmosphere as defined by the national electrical code. Property damage, injury, or death may result if an explosion occurs.

3.2 Fittings

Attach the air input fitting to the fitting on the instrument or associated sampling cover.

3.3 Turn Pump On

Supply electrical power to the pump motor by pushing the POWER Switch. The Red LED and associated AUDIO ALARM may activate momentarily; this is acceptable.

Observe that the green ON LED is lit, and listen for the noise made by the pump.

3.4 Use

Use the pump assembly as required to supply appropriate sample air to the instrument.

3.5 Alarms

Audio alarm and red LED indicate either an air flow interruption or low battery voltage.

CAUTION: If at anytime during use of the pump the alarms are activated, discontinue use of the pump. If in a confined space or other potentially dangerous location leave immediately

3.6 Shutdown

When use is no longer required, turn the pump off, remove the sensor cover from the.

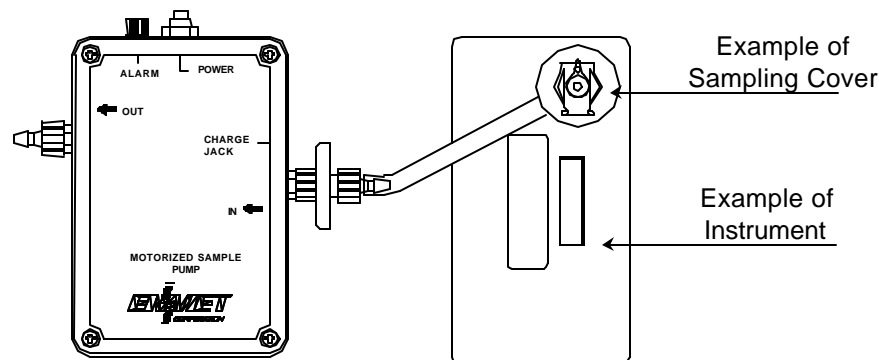


Figure 2: Typical Operation

4.0 Troubleshooting

4.1 Pump won't turn on:

- Put pump on charge (12 – 16 hours).
- Check output of charger.

4.2 Pump running, audio and visual alarms activated:

- Check tubes for obstructions, fluid or particulate.
- Check input filter.
- Charge pump (12 – 16 hours).
- Check output of charger.

If unable to achieve proper operation of pump contact **ENMET** or your local distributor.

5.0 Maintenance

5.1 Storage

Store the pump and associated equipment in a clean, dry location.

5.2 Charging

Do not charge the battery continuously. If the pump is not used for a period of time, exercise the battery by running the pump until the battery reaches "Low Batt" alarm then recharging the battery for 14 – 16 hours.

5.3 Replacement Part Numbers:

ENMET Part Number	Description
73081-101	Input Filter
67019-001	Battery Pack
67051-025	Charger, 110VAC
67051-027	Charger, 220VAC
04805-008	Pump

6.0 Warranty

ENMET warrants new pump assemblies to be free from defects in workmanship and material under normal use for a period of nine months from date of shipment from **ENMET**. The warranty covers both parts and labor. Equipment believed to be defective should be returned to **ENMET** within the warranty period (transportation prepaid) for inspection. If the evaluation by **ENMET** confirms that the product is defective, it will be repaired or replaced at no charge, within the stated limitations, and returned prepaid to any location in the United States. **ENMET** shall not be liable for any loss or damage caused by the improper use of the product. The purchaser indemnifies and saves harmless the company with respect to any loss or damages that may arise through the use by the purchaser or others of this equipment.

Material shipped to **ENMET** for warranty evaluation must be packed so it is not damaged in shipping. Material damaged in shipment is not covered by warranty.

This warranty is expressly given in lieu of all other warranties, either expressed or implied, including that of merchantability, and all other obligations or liabilities of **ENMET** which may arise in connection with this equipment. **ENMET** neither assumes nor authorizes any representative or other person to assume for it any obligation or liability other than that which is set forth herein.

There are Return for Repair Instructions and Form on the last pages of this manual. This Form can be copied or used as needed.



PO Box 979
680 Fairfield Court
Ann Arbor, Michigan 48106-0979
734.761.1270 Fax 734.761.3220

Returning an Instrument for Repair

ENMET instruments may be returned to the factory or any one of our Field Service Centers for regular repair service or calibration. The **ENMET** Repair Department and Field Service Centers also perform warranty service work.

When returning an instrument to the factory or service center for service, paperwork must be included which contains the following information:

- A purchase order number or reference number.
- A contact name with return address, telephone and fax numbers
- Specific instructions regarding desired service or description of the problems being encountered.
- Date of original purchase and copy of packing slip or invoice for warranty consideration.
- If a price estimate is required, please note it accordingly *and be sure to include a fax number.*

Providing the above information assists in the expedient repair and return of your unit.

Failure to provide this information can result in processing delays.

ENMET charges a one hour minimum billing for all approved repairs with additional time billed to the closest tenth of an hour. All instruments sent to **ENMET** are subject to a minimum \$30 evaluation fee, even if returned unrepaired. Unclaimed instruments that **ENMET** has received without appropriate paperwork or attempts to advise repair costs that have been unanswered, after a period of 60 days, may be disposed of or returned unrepaired COD with the evaluation fee.

Service centers may have different rates or terms. Be sure to contact them for this information.

Repaired instruments are returned by UPS/RPS surface and are not insured unless otherwise specified. If expedited shipping methods or insurance is required, it must be stated in your paperwork.

Note: Warranty of customer installed components.

If a component is purchased and installed in the field, and fails within the warranty term, it can be returned to **ENMET** and will be replaced, free of charge, per **ENMET's** returned goods procedure.

If the entire instrument is returned to **ENMET** Corporation with the defective item installed, the item will be replaced at no cost, but the instrument will be subject to labor charges at half of the standard rate.



Repair Return Form

Mailing Address:
ENMET Corporation
PO Box 979
Ann Arbor, Michigan 48106

Shipping Address:
ENMET Corporation
Attn: Repair Department
680 Fairfield Court
Ann Arbor, Michigan 48108

Phone Number: 734.761.1270
FAX Number: 734.761.3220

Your Mailing Address:

Your Shipping Address:

Contact Name: _____ Your Phone: _____
Your PO/Reference Number: _____ Your FAX: _____

Payment Terms: COD
(Check one) VISA / MasterCard _____
Card number Expiration

Return Shipping Method:

- UPS/RPS Surface: 3 day 2nd Day Air Next Day Air
- Federal Express: Next Day Morning Next Day Afternoon Standard
- FedEx Account number: _____

Would you like ENMET to insure the return shipment?

No Yes Insurance Amount: \$ _____

