



**GAMMON TECHNICAL PRODUCTS, INC.**  
P.O. BOX 400 - 2300 HWY 34  
MANASQUAN, N.J. 08736

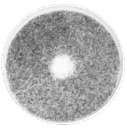
**PHONE** 732-223-4600  
**FAX** 732-223-5778  
**WEBSITE** [www.gammontech.com](http://www.gammontech.com)  
**STORE** [www.gammontechstore.com](http://www.gammontechstore.com)

**MINIMONITOR®  
& MULTI  
MINIMONITOR®  
KITS**

**BULLETIN 8  
(08-19)**

## MINIMONITOR KIT® - MARK II

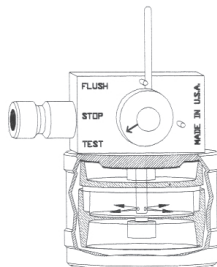
The Mark II version has the unique advantage of eliminating the "white spot." This photograph of a filter membrane shows how all previously manufactured test kits, regardless of the brand, make a white spot in the center if the inlet pressure is high and the fuel sample is contaminated. The jet effect causes the white spot.



In the new Mark II design, the inlet fuel to the plastic monitor is dispersed laterally to ensure a more uniform distribution of particles over the entire surface.

The MiniMonitor® Kit is used to test aviation fuel for particulate contamination using the procedures described in ASTM D2276/IP216. A measured volume of fuel is passed from a flowing pipe directly through a 0.8 micrometer membrane. The plastic monitor holding the membrane is placed in an aluminum housing. Dirt particles are caught on the membrane which can be visually color rated or weighed for a gravimetric rating.

The Mark II's lateral distribution is created by a unique discharge tube that enters the plastic monitor, as shown in this drawing. The large area of the four holes ensures that the flow rate is not affected.



The MiniMonitor® Kit was developed by Gammon Technical Products, Inc. specifically for aircraft fuel testing with standard field monitors. This kit, including the carry case, weighs only 4 pounds.

The new style of carrying case provides a cavity which accepts the assembled kit, eliminating the need to disassemble each time the apparatus is stored.



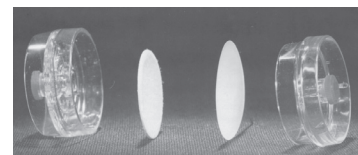
### HOW TO ORDER

#### **GTP-172 Mark II: Complete Test Kit**

Includes: carrying case, MiniMonitor® assembly, syringe, sampling kit #5, tweezers, color rating book, six plastic monitors, fifteen mini envelopes, and a monitor opening key

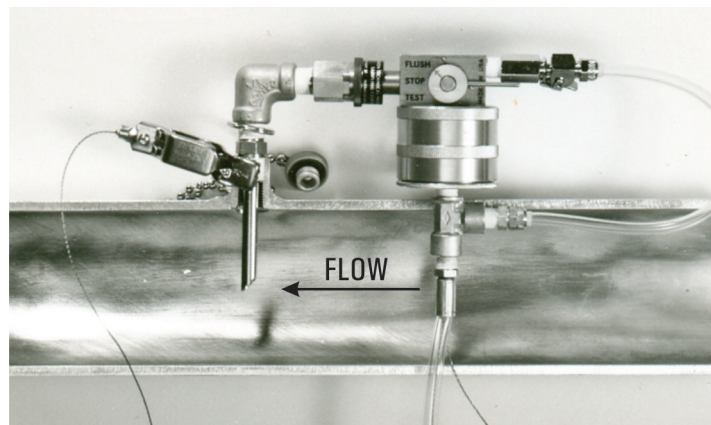
#### **GTP-172-H: MiniMonitor® Assembly Only**

Includes: flushing head valve, monitor body, bonding and grounding hose assembly, bypass tee, and a set of replacement o-rings



MiniMonitor equipment uses standard plastic monitors listed by ASTM for Method D2276/IP-216.

The MiniMonitor® housing includes a flushing valve located on top of the monitor with a bypass hose and fittings. Before flushing the sample connection, move the arrow located on the flushing valve handle to the STOP position. Check the connections of the bypass nose for firm seating. After the connections have been checked, move the arrow to the FLUSH position and allow one gallon (or specified volume) to collect in a measuring container. Then turn the valve to the TEST position to direct flow through the filter membrane. This test volume may be from 1 to 5 gallons depending upon contract provisions. The membrane is then rated as to its color using the color rating booklet included in the kit. The darker the membrane, the dirtier the fuel. Some contracts require the weight of the contaminant to be determined. The same apparatus can be used but arrangements must be made with a laboratory.



Electrical bonding is a safety requirement of ASTM Method D2276/IP216. Our Bonding and Grounding Hose Assembly clips to the metal container (not shown) and also to the pipe fitting as shown in the photo.

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### GTP-1110: BONDING & GROUNDING HOSE ASSEMBLY

Static charges are developed at a very high rate when aviation turbine fuel is passed through a filter membrane. These charges develop at an even higher rate when the fuel contains anti-static additive, but they are easily carried away by electrically bonding and grounding. Our model GTP-1110 is specially designed for this purpose.

|                       |   |
|-----------------------|---|
| <b>CABLE DATA:</b>    | Type 304 stainless steel, 1/32" (0.79mm) diameter, 21 strands |
| <b>CABLE LENGTH:</b>  | 10 feet (3.0 meters)  |
| <b>TUBING LENGTH:</b> | 6 feet (1.8 meters)   |

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### SPECIAL ACCESSORIES DESIGNED FOR THE U.S. MILITARY

#### STAINLESS STEEL HOLDER FOR AQUA-GLO® WATER DETECTOR PADS



|          |   |
|----------|---|
| GTP-3326 | 25mm Water Detector Pads<br>(Army)      |
| GTP-3850 | 37mm Water Detector Pads<br>(Air Force) |

With holders, the Aqua-Glo® test can be performed using the MiniMonitor® housing.

#### GTP-5808: FLEXIBLE EXTENSION TUBE



This tube was made especially for the U.S. Air Force and for customers who have sampling connections in difficult places to reach. The overall length is 10" (250mm). The quick disconnect at the left end connects to the actuator at the inlet of the MiniMonitor® housing. The actuator at the other end has the same dimensions as the one on the MiniMonitor®. The Teflon® tubing is covered by stainless steel wire braid.

# MULTI MINIMONITOR® TEST KIT

IT CONNECTS TO 5 DIFFERENT TYPES OF SAMPLING CONNECTIONS

This version of the test kit is made for operators who have to take samples from sampling points that are equipped with various different types of quick disconnects. See the following page for available fitting types.



Model GTP-1172 Mark II shown

## CONSIDER THESE FEATURES:

- Clearly marked selector valve
- Bypass hose with quick disconnect for flushing
- Static charge bonding and grounding hose assembly
- Uses standard plastic monitors
- Improved sealing system - squeeze controlled - Viton A
- Stainless steel and anodized aluminum wetted parts throughout

## THE KEY FEATURE OF THE MULTI MINIMONITOR® TEST KIT IS THE UNIQUE DOUBLE-ENDED ADAPTER MODEL GTP-988



Our unique double-ended adapters can be inserted into the Multi MiniMonitor® Assembly by either end, allowing them to connect to several different types of samplers. See the following page for details.

## HOW TO ORDER:

### **GTP-1172 Mark II: Complete Multi MiniMonitor® Kit**

Includes: carrying case, Multi MiniMonitor assembly, syringe, sampling kit #5, tweezers, color rating book, six plastic monitors, fifteen mini envelopes, a monitor opening key, and a double-ended adapter.

### **GTP-1172-H: Multi MiniMonitor® Assembly Only**

Includes: flushing head valve, monitor body, bonding and grounding hose assembly, bypass tee, a set of replacement o-rings, and a double-ended adapter.

NOTE: The GTP-988 double-ended adapter is the standard actuator included with the Multi MiniMonitor®.



## MULTI MINIMONITOR® OPTIONAL ADAPTERS

### GTP-988 Double-ended Adapter (standard)

This end connects to:  
Gammon Jet Test QD®



This end connects to:  
Gammon QD, Millipore,  
Snap Tite, etc.

### GTP-988-1 Double-ended Adapter (short)

This end connects to:  
Short (S) or AH models of  
the Gammon Jet Test QD®



This end connects to:  
Gammon QD, Millipore,  
Snap Tite, etc.

### GTP-988-2 Double-ended Adapter (combination)

This end connects to:  
Gammon Jet Test QD®



This end connects to:  
Short (S) or AH models of  
the Gammon Jet Test QD®

### Sampling Adapters



**GTP-1170A**

$\frac{3}{4}$  BSPP threads (no o-ring)



**GTP-1170B**

$\frac{13}{16}$ -16 UN threads



**GTP-1170C**

$\frac{3}{4}$  BSPP threads



**GTP-1170E**

$\frac{1}{2}$  BSPP threads

## MINIMONITOR AND MULTI MINIMONITOR TEST KIT ADDITIONAL ACCESSORIES & REPLACEMENT COMPONENTS

|            |   | Used with<br>MiniMonitor | Used with<br>Multi MiniMonitor |
|------------|---|--------------------------|--------------------------------|
| GTP-9466   | Case for MiniMonitor and Multi MiniMonitor Kits | ✓                        | ✓                              |
| GTP-1074-1 | Color rating book                               | ✓                        | ✓                              |
| GTP-165    | Syringe   | ✓                        | ✓                              |
| GTP-2099   | Tweezer   | ✓                        | ✓                              |
| GTP-1985   | Box of 48 plastic monitors                      | ✓                        | ✓                              |
| GTP-1983   | Box of 100 membranes and support pads           | ✓                        | ✓                              |
| GTP-9182   | Monitor key (opener)                            | ✓                        | ✓                              |
| GTP-5      | Sampling kit #5                                 | ✓                        | ✓                              |
| GTP-1267   | Package of 500 mini-envelopes (plastic bags)    | ✓                        | ✓                              |
| GTP-172H   | MiniMonitor assembly                            | ✓                        |                                |
| GTP-1172-H | Multi MiniMonitor assembly                      |                          | ✓                              |
| GTP-172A   | Flushing head valve and monitor body assembly   | ✓                        |                                |
| GTP-1110   | Bonding and grounding hose assembly             | ✓                        | ✓                              |
| GTP-1250   | Quick disconnect and hose assembly              | ✓                        | ✓                              |
| GTP-302C   | Bypass tee assembly                             | ✓                        | ✓                              |
| GTP-190    | Flushing head valve assembly for MiniMonitor    | ✓                        |                                |
| GTP-232-1  | Monitor housing body                            | ✓                        | ✓                              |
| GTP-232-2  | Monitor housing bottom cap                      | ✓                        | ✓                              |

### SEE ALSO:

Bulletin 3  
Bulletin 14

GTP-992 series quick disconnects  
Jet Test QD®