

Parker Balston® Compressed Air Microbial Test Unit (CAMTU)

Installation, Operation, and Maintenance Manual



These instructions must be thoroughly read and understood before installing and operating this product. If you have any questions or concerns, please call the Technical Services Department at 800-343-4048, 8AM to 5PM Eastern Time or email at balstontechsupport@parker.com (North America only).

For other locations, please contact your local representative or email at TSGIndustrial.Enquiries@parker.com.

General Description

Regulations in food, medical and other industries require periodic testing of the compressed air supply to ensure it is not harboring microorganisms. Parker Balston CAMTU is designed to quickly and efficiently indicate the presence of microorganisms present in the air system. The CAMTU is a mobile device that can be used throughout the plant at multiple sample points. The Parker Balston CAMTU has been validated by Dr McLandsborough, PhD, Director of the Food Science Department at the University of Massachusetts-Amherst.

Preparing for Operation

Preparing the CAMTU for First Use

1. Open sample tap and purge compressed air until visibly free of moisture and particulates.
2. Assemble the tubing to the shutoff valve, regulator and CAMTU as shown in Figure 1 and connect to a compressed airline (150 psig or less).
3. Open the shutoff valve.
4. Pull up on the regulator knob and adjust the pressure to 40 psi. Push the knob down to lock in the pressure setting.
5. There is no need to repeat this procedure as long as the knob remains locked.



CAMTU storage and carrying case kit

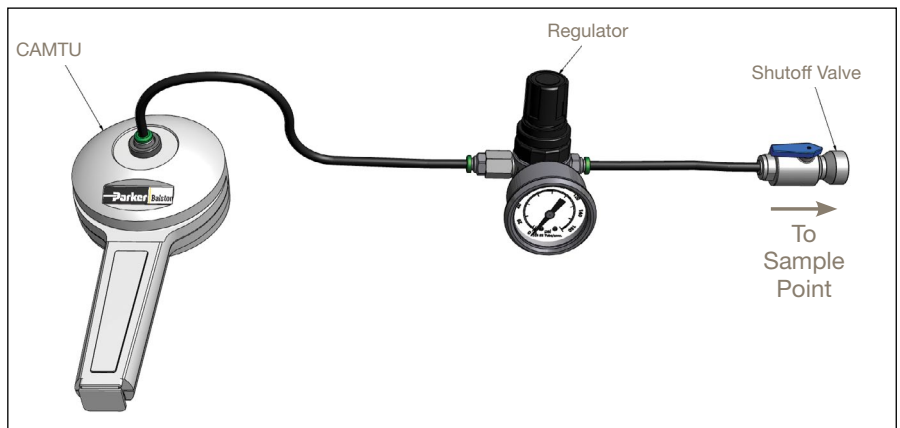


Figure 1: CAMTU Setup

Cleaning Procedure



Prior to beginning a test, it is important that the inside of the CAMTU be cleaned to destroy any microorganisms present that could result in a false positive test result.

1. Don a pair of disposable rubber gloves.
2. Using the spray bottle provided, add 1 teaspoon of bleach and fill the bottle with water. A fresh solution must be prepared before each series of tests. A 70% ethanol solution can also be used.
3. Open the CAMTU cover (see Figure 2), loosen the deflector plate thumb screws and remove the deflector plate.
4. Liberally spray the interior of the CAMTU and wipe dry with a lint-free cloth making sure to also spray and wipe the deflector plate.
5. Reinstall the deflector plate.

Performing a Control Negative Test



Before every test, a control-negative test should be performed. This will indicate if the regulator or tubing is harboring any microorganisms.

It is strongly recommended to use only the agar/petri dish #C01-0127.

1. Open sample tap at same point and purge compressed air until visibly free of moisture and particulates.
2. Assemble the tubing to the shutoff valve, disposable filter, regulator and CAMTU as shown in Figure 3.
3. Connect to the compressed air system.
4. Using a marker write "control negative" and the test location on the cover of the petri dish.
5. Place the petri dish inside the CAMTU and remove the cover. Immediately close the CAMTU and snap the latch closed on the end of the handle.
6. Open the shutoff valve and allow air to flow into the CAMTU for 20 seconds.
7. Close the shutoff valve.
8. Open the CAMTU and immediately place the cover back on the petri dish to minimize exposure to the ambient air. Remove the petri dish and save for incubation.



Figure 2: CAMTU in Open Position

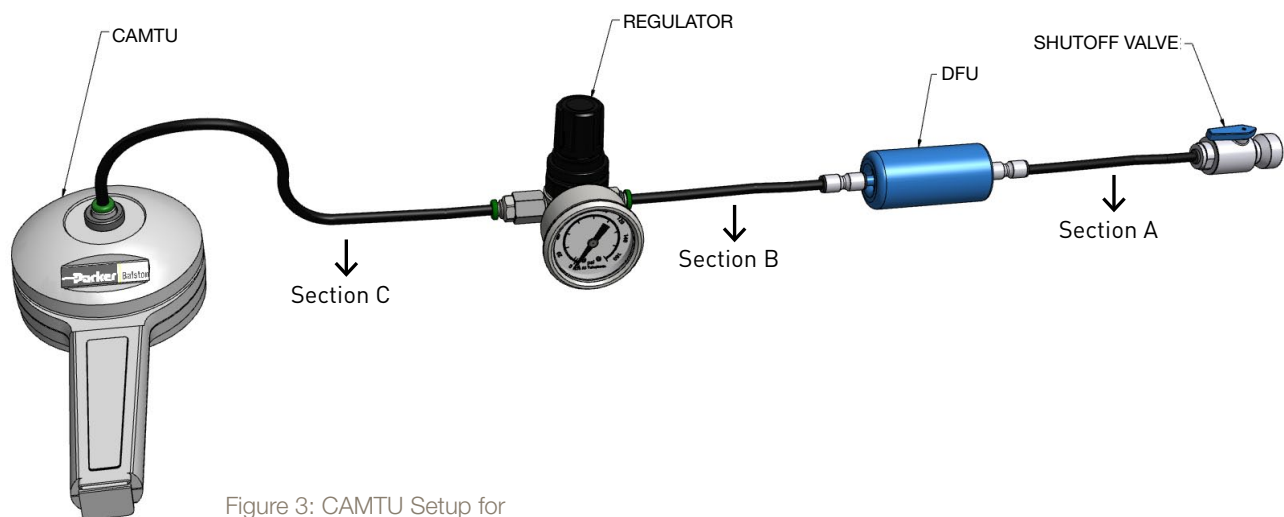


Figure 3: CAMTU Setup for Control Negative Test

Operation



It is strongly recommended to use only the agar/petri dish #C01-0127.

1. Open sample tap and purge compressed air until visibly free of moisture and particulates.
2. Assemble the tubing to the shutoff valve, regulator and CAMTU as shown in Figure 1 and connect to the compressed air system.
3. Using a marker write the test location on the cover of the petri dish.
4. Place the petri dish inside the CAMTU and remove the cover. Immediately close the CAMTU and snap the latch closed on the end of the handle.
5. Open the shutoff valve and allow air to flow into the CAMTU for 20 seconds.
6. Close the shutoff valve.
7. Open the CAMTU and immediately place the cover back on the petri dish to minimize exposure to the ambient air. Remove the petri dish and save for incubation.

Incubation

After exposure, agar plate should be incubated inverted at 95 – 99°F (35 -37°C) for 48 hours or may be incubated at room temperature for up to 7 days.

After incubation it's not uncommon to find a single isolated colony forming unit (CFU) on the agar surface which may be the result of exposure of the agar to microorganisms in the ambient air during transport into or out of the CAMTU.

Due to the air flow pattern inside the CAMTU it is not recommended that CFUs get counted. Rather, the results should be viewed qualitatively. **If there are CFUs present on the petri dish it is an indication that microorganisms are present in the compressed air system.**



Parker Balston manufactures high efficiency sterile air systems designed to remove bacteria and microorganisms. Contact us at 800-343-4048 for more information or visit www.balstonfilters.com.

Dispose of used plates by autoclaving using industry standards as specified by local and state regulations.



If after incubation, colony forming units (CFUs) appear on the agar surface after a control negative test then a thorough cleaning of the tubing and regulator is required.

To clean the tubing and regulator, prepare a fresh bleach/water solution as described above and pour the solution into the tubing and into the regulator through both the inlet and exit ports (see Figure 4). Drain and allow to dry. The drying process can be accelerated by passing compressed air through the components. Make sure the filter (p/n C02-2418) is connected as shown in Figure 3 so as not to recontaminate the tubing and regulator. It is recommended the filter is replaced every six months.

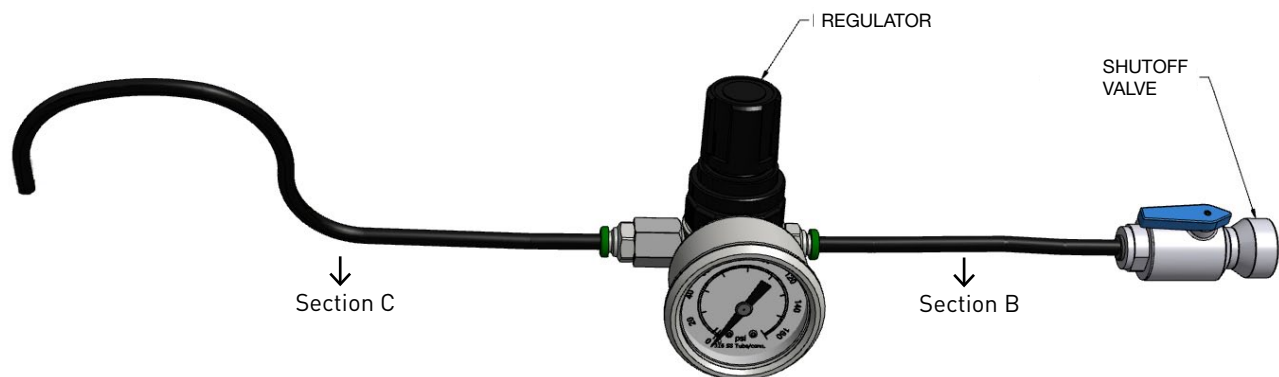


Figure 4

NOTE: Sanitizing solution should be poured through this configuration. Do not re-attach Section A tubing after sanitizing, use only section B/C tubing.

System Parts



CAMTU storage and carrying case - complete kit C01-0128.

| Model Number | C01-0128 |
|--|--|
| Contents of Complete CAMTU Detection Kit: | |
| CAMTU Sampling Device | C01-0122 |
| DFU Assembly | C02-2418 |
| Timer Device | C01-0123 |
| Tubing 1/4" OD | A01-0459 |
| Regulator/Metering Assembly | C01-0125 |
| Sanitizing Spray Bottle | C01-0124 |
| Shutoff Valve | C01-0126 |
| Agar Plates (20 total) | C01-0127 |
| Dimensions | 15 5/8" w x 13 5/8" h x 6 3/8"d (40 cm x 35 cm x 16 cm) |
| Shipping Weight | 7 lbs. (3.2 kg) |

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For other locations, please contact your local representative or email at TSGIndustrial.Enquiries@parker.com.

Explanation of Warning Symbols:

Symbol



Description

Caution, refer to accompanying documents for explanation.

Remember To:

Complete and Mail or Fax in Your Warranty Registration Card.
 Keep your product certification in a safe place.

WARRANTY (NORTH AMERICA ONLY)
(FOR INFORMATION CONTACT YOUR LOCAL REPRESENTATIVE)

Parker Hannifin guarantees to the original purchaser of this product, that if the product fails or is defective within 12 months from the date of purchase, when this product is operated and maintained according to the instructions provided with the product, then Parker guarantees, at Parker's option, to replace the product, repair the product, or refund the original price for the product. This warranty applies only to defects in material or workmanship and does not cover: ring and valve wear on compressors, routine maintenance recommended by the instructions provided with this product, or filter cartridges. Any modification of the product without written approval from Parker will result in voiding this warranty. Complete details of the warranty are available on request. This warranty applies to units purchased and operated in North America.



Parker Hannifin Corporation
 Filtration and Separation Division
 242 Neck Road
 Haverhill, MA 01835
 Tel: 978-858-0505 Fax: 978-478-2501
www.parker.com/balston

Parker Hannifin (UK) Ltd
 Industrial Division
 Suite 42, Kent House, Romney Place
 Maidstone, Kent ME15 6LH United Kingdom
 Tel: +44 (01622) 772440 Fax: +44 (01622) 772446
www.parker.com/pag balstonukinfo@parker.com