

Technical Bulletin # 45

To: Coulometrics Support Personnel
From: Applications and Engineering Departments
Date: January 14, 2003
Subject: Preparing CM5240 for Shipping

Purpose:

This bulletin describes the procedure for cleaning and preparing the CM5240 TIC for customer return shipping to UIC, Inc.

Procedure:

Return the unit under **URA Number** _____ **clearly marked on the exterior of the shipping container.**

1. Disconnect the acid and rinse pick-up lines from the reservoir bottles.
2. Remove the bottles and rack from the compartment.
3. Place a one-liter beaker under the waste discharge chute in the bottle rack compartment. Raise the beaker up as close as possible to the waste discharge chute to minimize splashing during the next steps.
4. Remove the post scrubber and replace with a clean, dry post scrubber assembly.
5. Disconnect the check valve from the tubing connected to the fitting labeled 'To Analyzer'. Place the end of the tubing disconnected from the check valve into a suitably sized beaker and secure the line to the beaker to keep it in place.
6. Fill a one-liter beaker with about 500 mLs of distilled water and place in the bottle rack compartment.
7. Immerse the acid and rinse pickup lines in the distilled water beaker and secure them to the distilled water beaker to keep them immersed in the distilled water.
8. Make sure the 10 mL acid dispensing LED on the CM5240 is lit. Press the 'Clear/Init.' button. The slider will move to the reaction area under the condenser and about 40 seconds later will dispense 10 mLs of liquid.
9. After several minutes press the 'Clear/Init.' Again to rinse the system with distilled water.
10. Repeat steps 8 and 9 two more times.
11. After step 10 is completed remove the acid and distilled water pick-up lines from the beaker in the bottle rack compartment.
12. Perform steps 8 and 9 above. This empties the liquid lines.

13. Clean the CM5240 exterior and interior as well as you can before placing in the shipping carton.

Once the unit is cleared of liquids as much as possible prepare for shipping and send only the following items:

1. Base CM5240
2. CM5240 carousel.

Do not send the following:

1. Heated condenser.
2. Post-scrubber assembly.
3. Solid CO₂ pre-scrubber. The pre-scrubber contains hygroscopic Ascarite™ II which picks up atmospheric moisture and will plug the cartridge openings. Upon removal immediately seal the solid CO₂ scrubber with a long piece of Teflon™ tubing to connect both fittings on the cartridge. Secure the tubing in the fittings with 1/8" Swagelok or Parker Hanifin tubing nuts and ferrules. Caution: Do not over tighten the tubing nuts. Doing so will damage the scrubber fittings.
4. Bottles and bottle rack.
5. Carousel cover.

Upon receipt of the unit by UIC, Inc., estimated turn around time is 7 business days.