



## Technical Service Bulletin

**MODEL(S) AFFECTED:** **Tennant T5e Automatic Scrubber w/ On-board Chargers**

Machines manufactured before date code DC1008 (Oct 06, 2008)

**PURPOSE:** **To ensure the user props up the recovery tank for ventilation when charging, a retrofit kit (p/n 9005456) is now available. This kit is designed to prevent the user from charging the batteries if the recovery tank is closed. The kit also relocates the charger AC power cord to the inside of the battery compartment.**

**SUBJECT:** Batteries overheating during charging. The machine's batteries may exhibit any of these issues:

- Reduced run time.
- Inability to "hold a charge"
- Deformation of battery casings
- Water boiling over
- Extreme sulfur gas smells (some off-gassing is normal)
- Battery Charger error codes (E03, SCt), due to battery charger timing out

This is the result of poor battery maintenance and the failure to follow charging instructions during the charging process. Batteries become overheated during the charging process when battery maintenance and charging instructions are not followed. This includes, but not limited to, the failure to open the recovery tank lid during the charging cycle. The result is damage to the batteries, both internally and externally.

**The battery deterioration and the resulting charger error code can often be misinterpreted as a charger malfunction by customers; however, the charger is simply reacting to reduced capacity of the batteries to take a charge.**

In general, there are two key elements that work in conjunction to keep wet batteries at normal charging temperatures:

1. Proper ventilation / air flow around the batteries
  - a. Propping the recovery tank per the label on top of the scrubber and in the operator's manual will provide adequate air flow.
  - b. Installation of retro fit kit (9005456) will also ensure proper ventilation to the battery compartment.
2. Proper battery water levels
  - a. Battery maintenance, check and maintain proper water levels.

The failure to perform one or both of these steps can lead to battery overheating during the charging process.

**NOTES:** We recommend that you perform a specific gravity test on the batteries to determine if they are past their usable life. The retro kit will not improve battery life if batteries are already damaged. It will only prevent further battery deterioration.

**WARRANTY:** Warranty will cover the retro-fit kit only. Labor and travel will be at the customer's expense.

### On-board Battery Charger Retrofit Kit (p/n 9005456)

The kit includes a DC charging connector which prevents the recovery tank from being lowered when charging.



### ATTENTION:

To properly ventilate the batteries when charging, the recovery tank MUST be propped up.

