
Technical Note
TrueCharge 10
(clip-lead)

512-0025-01-01 Rev 1

**Firmware Error Prevents
Transition from Absorption
to Float Stage**

Overview

The August 2001 firmware code revision 2.0 for the TrueCharge 10 clip-lead charger contained an error. As a result, the three-step charge algorithm may not properly exit the absorption stage to float, and the battery may become overcharged.

Xantrex has corrected the error with firmware revision 2.1 and has removed all unsold units from its distribution system for the firmware upgrade. However, the units that have been sold and are with distributors and customers need to be returned for the firmware upgrade.

This Technical Note lists the part number and serial numbers of the affected chargers, explains the problem, states what precautions to take, and tells how to contact Xantrex Customer Service.

Applicability

This bulletin applies only to TrueCharge 10 models with 120 VAC input, 12 V output, and the DC clip-leads, firmware revision 2.0. The part number and serial numbers of the affected units are as follows:

Part number 804-0100	21516401 - 21516800
	21533507 - 21534806
	21557242 - 21557441

Affected units have a serial number in one of these ranges and do *not* have a label on them indicating "Firmware rev. 2.1".

Explanation

The battery charging algorithm in the TC10 clip-lead charger is controlled by firmware code in the product's microprocessor. This code controls the progression of charging cycle from bulk to absorption and into the final Float stage, where the Ready LED turns on to tell the user that the charge cycle is complete.

The error in code revision 2.0 interrupts the three-step charge algorithm during the absorption stage, so that the charge cycle may not properly proceed to the float stage. If this occurs, the battery will be exposed to the higher absorption voltage for a longer time than intended, and could be overcharged.

What to do if your TrueCharge 10 is affected

If your unit has one of the serial numbers listed above, and has not yet been upgraded to firmware revision 2.1 or higher, you should stop using the charger and contact Xantrex for instructions as to how to return the unit for repair. If you need to continue using the unit for any reason, be sure to supervise the charge cycle and manually terminate it by removing AC power from the charger and taking the clip-leads off the battery. The charge cycle has done most of its work by the time the bulk stage is complete. During the bulk charge on a significantly discharged battery, the current should be steady at 10 A. Once the current starts dropping you can terminate the charge. Following this procedure will replace most, but not all, of the charge in the battery. This is a temporary procedure only —be sure to contact us for the firmware upgrade.

Contact Information

If you determine that your TrueCharge 10 is one of the affected units, please contact Customer Service in one of the following ways:

Phone: 1-800-670-0707, press “1”

Fax: 1-800-994-7828

Email: CustomerService@xantrex.com

Web: www.xantrex.com

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