

CAN'T CYCLE YOUR Tx BATTERY?

Most radio-control transmitters manufactured today are furnished with a protective device to prevent shorting the charge terminal and either draining or damaging the battery. The device, a simple diode, which acts like a check valve that allows direct current to flow into the battery during charging but blocks the flow of current in the reverse direction. To determine if your transmitter is so equipped, simply plug a digital voltmeter into the charging jack. If the voltage reads zero, chances are that there is a diode in the charging circuit. Attempting to cycle the transmitter with one of the popular cycling-charger devices such as "ACCUCYCLE" will immediately switch to "charge" even if the battery is already fully charged.

Now, this diode is not a bad thing. The manufacturer means well, but the protective device prevents discharging the battery with a normal recycle-charger. Neither can you check the actual battery voltage to determine the degree of charge on the battery other than by relying on the voltage indicator on the transmitter face, an approximation at best.

It is easy to circumvent the protective device if you promise to be careful after doing so not to insert anything into the charging jack that would rapidly discharge or short circuit the battery terminals. It is suggested, however, if you are not adept at soldering in small places, that you ask a more skilled buddy to do the job for you. Usually, the fix only involves soldering a short jumper wire across the two pads or connections to the diode in question, thereby allowing direct current flow in either direction, into or out of the transmitter battery via the charge jack.

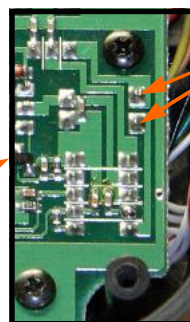
How do you find where to solder the short jumper wire? The Sirius Electronics Home Page (Siriuselectronics.com) has a hot button to a page called "Diode Sheets" where most currently popular R/C Transmitters having these diodes are listed. Selecting one of these transmitter models takes you to an illustrated instruction sheet, which shows exactly where to solder the jumper wire.

If you need help in making this alteration, call Jim Taylor; he has done it dozens of times, and has modified every one of his R/C transmitters in this manner. Remember, it is just as important to periodically cycle the transmitter battery as it is to cycle the airplane receiver battery.

ILLUSTRATION: HITEC PRIZM 7 TRANSMITTER



Interior of Hitec Prizm 7 Transmitter showing the circuit board. Area outlined is shown as enlarged detail at right. (The diode is underneath the board.)



Solder jumper across these two pads using #18 wire, minimum.

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