

Service Bulletin

MODEL(S)	TB20, TB30, TB40, TB50, TB60
PART NUMBER(S)	6430020-(), 6430030-(), 6430040-(), 6430050-(), 6431060-()
DESCRIPTION	Advanced Lithium-ion Battery
TOPIC	Software Update Version 1.1.1
PURPOSE	Product and Performance Enhancements
RELEASE DATE	May 28, 2024

APPLICABILITY

This Service Bulletin is applicable to the TBX Series of Advanced Lithium-ion Batteries, part numbers 6430020-(), 6430030-(), 6430040-(), 6430050-(), and 6431060-(), manufactured by Mid-Continent Instrument Co., Inc. (dba True Blue Power and Mid-Continent Instruments and Avionics). These updates are to be performed only by authorized personnel per the instructions as listed in this Service Bulletin. Units with this software upgrade are available for sale from the manufacturer.

PURPOSE

TBX software version 1.1.1 represents improvements to product functionality of the TBX Series Advanced Lithium-ion batteries.

EFFECTIVITY: RECOMMENDED

TBX units in the field can be updated to Software Version 1.1.1 but are not required to do so for continued airworthiness.

True Blue Power is recommending that all TB20, TB30, TB40, TB50 and TB60 units in the field be updated to Software Version 1.1.1 to take advantage of added features, enhancements and resolutions that improve the function and performance of the product.

Following the release date of the updated software, all general availability of TBX units manufactured or serviced by True Blue Power shall be installed with Software Version 1.1.1 or later.

DESCRIPTION

The following list describes the enhancements and resolutions incorporated in Software Version 1.1.1.

ADDED FEATURES

None

ENHANCEMENTS

1. TB50 batteries are prevented from being loaded with previous software versions (1.0.4 and earlier) that were released prior to the introduction of the TB50.

RESOLUTIONS

1. The reporting of Minimum Energy custom programmable parameter is disabled if not programmed (set to zero).
2. Resolved a condition, as a consequence of features added in 1.1.0, that can report a lower than actual state of charge if entering Sleep Mode manually after a full charge (i.e. post-flight). Properly reported SOC recovers after subsequent charge.

ESTIMATED MANPOWER

Software can be downloaded and updated on fielded units in approximately 10 minutes.

WEIGHT AND BALANCE

No change

ELECTRICAL LOAD DATA

No change

CERTIFICATION

This Service Bulletin represents a minor change to the previously approved Technical Standard Order Authorization for the TBX series of Advanced Lithium-ion Batteries. Any changes to software have been completed in accordance with approved developmental and quality processes per the guidelines of RTCA / DO-178C, Software Considerations in Airborne Systems and Equipment Certification.

OTHER PUBLICATIONS AFFECTED

None

ACCOMPLISHMENT INSTRUCTIONS

The action required by this Service Bulletin can be accomplished by returning the unit to True Blue Power or by performing the instructions as listed in this section.

If returning the TB20, TB30, TB40, TB50 or TB60 unit to True Blue Power:

Call True Blue Power sales department for a Return Material Authorization (RMA) at 316-630-0101.

Return address: True Blue Power
9400 E. 34th Street N.
Wichita, KS 67226

If performing this update in the field:

1. Download the approved software update file from: <https://www.truebluepowerusa.com/software-updates/> to the root directory of a standard FAT formatted USB flash drive. If updating from 1.0.1 or 1.0.2, file name must remain “*update.muf*.” If updated from 1.0.3 or later, file name can be renamed as “_____.muf.” Follow the instructions as listed on the website or Section 5 of the Install Manual.

To verify software version (optional):

1. Load the *getcfg.cmd* file to the root directory of a standard FAT formatted USB flash drive.
2. Follow the same instructions for updating the software as listed on the website or Section 5 of the Install Manual.
3. The battery will write a standard text file, *installer.txt*, on the USB flash drive. It can be viewed with any text editor and will display the battery serial number, date and time of download, and software version.

For software version 1.1.0 or later, battery type, installer configuration file ID, and one additional configuration parameter will be included. The file name may also be different than *installer.txt* (based on the installed configuration file name).