

Service Bulletin

MODEL(S)	TB44
PART NUMBER(S)	6430044-()
DESCRIPTION	Advanced Lithium-ion Battery
TOPIC	Modification (“MOD”) 1
PURPOSE	Operational Improvements
RELEASE DATE	January 19, 2015

APPLICABILITY

This Service Bulletin is applicable to the 6430044-() part numbers manufactured by Mid-Continent Instrument Co., Inc. (dba True Blue Power and Mid-Continent Instruments and Avionics). Units with this modification are available for sale from the manufacturer.

PURPOSE

The TB44 MOD 1 hardware update represents an improvement to the product design that addresses fractures that may occur in the soldered joints of the main busbars’ solid thermal links due to fatigue and vibration. With this update, the stress of battery movement is transferred away from and not through the soldered joints.

EFFECTIVITY

All TB44 units manufactured and marked with MOD 1 shall comply with the hardware update associated with this Service Bulletin. MOD 1 changes are not required for continued airworthiness. If fractures occur in existing batteries, the batteries will fail safe.

Existing TB44 units prior to MOD 1 cannot be upgraded in the field. However, contact True Blue Power to inquire about availability of an update performed by the manufacturer

DESCRIPTION

1. Resolved potential for batteries to experience fractures in the soldered joints of the two thermal links of the main busbars.

The existing solid thermal links will incur stresses through their soldered joints from movement of the battery. After time, this movement can cause fractures to form in the soldered joints. If a large enough fracture occurs in a soldered joint, the battery circuit will be interrupted, and there will be no voltage at the main power receptacle.

DESCRIPTION

The hardware update associated with this Service Bulletin and MOD 1 replaces the solid thermal links with flexible thermal links, adds blocks to the busbars for stability, and strengthens the receptacle alignment bracket. With these updates, the stresses from movement of the battery are transferred to the enclosure through the blocks and alignment bracket and not through the soldered joints of the thermal links.

ESTIMATED MANPOWER

None. Not available for field update.

WEIGHT AND BALANCE

No change

ELECTRICAL LOAD DATA

No change

CERTIFICATION

This Service Bulletin represents a minor change and thus maintains all aspects and qualification basis of the previously approved Technical Standard Order Authorization for the TB44 series.

OTHER PUBLICATIONS AFFECTED

None

ACCOMPLISHMENT INSTRUCTIONS

The changes associated with this Service Bulletin apply only to factory-new product provided by True Blue Power and marked accordingly.

To consider whether previously fielded product may be eligible for factory modification, please contact True Blue Power.

Contact information: True Blue Power
9400 E. 34th Street N.
Wichita, KS 67226
(316) 630-0101