SB# 061902-26

# 1. Summary

The purpose of this service bulletin is to define a required modification to the BP-95 to ensure that the Marathon battery pack unit will provide a continuous 24 volt boost. This boost will occur 100% of the time when the internal battery is installed in a charged state. The battery must be serviced per MPTC CMM 24-34-01

This change will not affect the airworthiness status of the BP-95

# 2. Planning Information

### A. Effectivity

The Marathon Battery Pack in section (D) shall be modified at MPTC or and approved repair station at an interval determined by Boeing.

### **B.** Concurrent Requirements

None

### C. Reason

### i. Problem

The BP-95 was designed to provide boost to 24 volts when a load of 20 watts was detected, or when the loss of DC power on the aircraft was detected. However, due to the aircraft electrical architecture as related to the IRU, Boeing has discovered that in the event of loss of AC power the IRU may reach a shut down voltage prior to the BP-95 detecting DC bus failure or a 20 watt load.

Due to the criticality of the IRU remaining powered during flight, Boeing has requested MPTC to modify the BP-95 to continuously boost at 24 volts. **CAUTION:** Approximately 48 hours of boosting without applying power to the BP-95 will cause the internal battery that is 100% charged to completely discharge. In this event the unit must be removed from the aircraft and serviced per the CMM.

#### ii. Cause

Battery pack was designed to boost with a 20 watt load or at loss of DC power. There is no input of A/C detection provided to the battery pack. The current configuration will prevent discharge of the battery pack when no power is applied to the unit. Such as in the battery shop or with power off on the aircraft.

### iii. Solution

Re-adjust the calibration potentiometer in the battery back to full on which puts the BP-95 in continuous boost mode. This requires the potentiometer indicated on the schematic control board 500137 to be adjusted fully counter clockwise.

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### **D.** Description

BP-95 installation on all Boeing 717 and MD-90 aircraft.

### i. Models

B-717 and MD-90 Aircraft

MPTC Model	MPTC P/N	Boeing P/N	MPTC Manual
BP95	200595	BP95	24-34-01

# E. Compliance

BP-95 to be modified to Mod A as soon as possible at Marathon Power Technologies facility or an approved repair facility

# F. Approval

This service bulletin has been reviewed and approved by the Boeing 717 program office.

# G. Manpower

Standard manpower for installation and removal of unit.

# H. Weight and Balance

No impact.

# I. Electrical Load Data

N/A

# J. Software Accomplishment Summary

N/A

# K. Reference

N/A

### L. Other Publications

Marathon Maintenance Manual 24-34-01

### M. Intermixability or Interchangeability of Parts

N/A

### 3. Material Information

### A. Material Availability

Marathon Maintenance/Instruction manuals can be obtained directly from Marathon Power Technologies Company:

### **B.** Industry Support Information

N/A

# C. Re-Identify Parts

Mod A on the nameplate

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 $\begin{array}{cc} \textbf{D. Tooling} \\ N/A \end{array}$ 

Marathon Power Technologies

# 4. Instructions

Follow standard battery pack servicing procedures as specified in 24-34-01 for the BP-95. The battery pack must meet the minimum requirements specified in the manual prior to return to service.

David Ginder Date
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