

Service Bulletin

SB MD421-01

Emergency Power System

MD420 System: MD421 Module

Modification 1

Eliminates potential for pitot/static leaks

1. DESCRIPTION

A. Effectivity:

This service bulletin is applicable to the Battery Module, p/n MD421 of the MD420 Series of Emergency Power Systems manufactured by Mid-Continent Instrument Co., Inc. These updates are installed by the manufacturer and are not eligible to be modified by any entity other than the manufacturer. Units with this modification are available for sale from the manufacturer and field units are eligible for update as of December 1, 2008. All units produced from this date forward will contain the modification. The units are identified by Modification Status 1 as shown on the nameplate.

B. Reason:

This update is intended to enhance the air speed sensing portion of the unit such that potential leaks can be avoided which may have been created either during manufacturing or in the field.

C. Description:

Changed the specification of the air tubing internal to the unit and added features to prevent the twisting of the external air fittings.

D. Compliance: Optional.

E. Approval: TSO approval not affected
RTCA DO-160 environmental qualification not affected

F. Weight and Balance: No change.

G. Electrical load data: No change.

H. Other Publications affected:

MD420 Series, Installation Manual and Operating Instructions (p/n 9016391), Revision H

2. INSTALLATION INSTRUCTIONS: (optional)

I. Planning

A. Manpower:

Approximately 25 minutes plus retest and qualification prior to return to service.

B. Material: (Cost and Availability)

See Section 3. Modification is to be accomplished by the manufacturer, thus cost and availability information is not provided.

C. Tooling:

No special tooling required.

II. Procedure: Refer to MD421 manufacturing instructions. Units must be returned to Mid-Continent Instruments for modification.

A. Remove Batteries from Base Module (if installed).

B. Remove base plate on bottom of Module. (4 pan head screws)

C. Remove exposed PCB Assembly. (4 hex standoffs and 2 pan head screws securing connector)

D. Remove air tubes.

NOTE: Steps E and F shall be omitted if case and air fittings have a 'double-flat' feature to prevent spinning of the fittings.

E. Remove nut that secures the external air fittings. (removal of second PCB assembly may be required (4 hex standoffs))

F. Add lock washer to each air fitting. Then replace the nuts and tighten well.

G. Install new air tubes and re-assemble in reverse order.

H. Perform TDS421 and any other internal procedures determined by the manufacturer in order to return to service.

I. Using permanent black ink, mark out block 1 in the modification section on the unit nameplate.

3. MATERIAL INFORMATION

Parts:

Model	Qty	Description	Old Part Number	Replaced By
MD421	1	Tubing	9016461-040, Rev A	9016461-040, Rev B
MD421	1	Tubing	9016461-080, Rev A	9016461-080, Rev B
MD421	2	Lockwasher	None	9016733