

Service Bulletin

SB 4200-XX-01

Electric Attitude Indicator

4200 Series

Modification 1

Alteration to lighting characteristics per customer request

1. DESCRIPTION

A. Effectivity:

This service bulletin is applicable only, at the time of this writing, to 4200-21 and 4200-22 Series Electric Attitude Indicators manufactured by Mid-Continent Instrument Co., Inc. It applies, retroactively, to all 4200-21 and 4200-22 units ever produced by the manufacturer. The modification was developed and applied approximately February of 2006. The units are identified by Modification Status 1 as shown on the nameplate.

Note: This service bulletin applies to all 4200 Series versions of the electric attitude indicator in that no other Modification Status 1 shall be created or applied to versions other than the 4200-21 and 4200-22.

B. Reason:

Alter the LED lighting characteristics of these OEM-specific models to better match panel lighting of other standby instruments. These versions accept a direct 28VDC pulse-width-modulated (PWM) lighting voltage.

C. Description:

Replaced internal circuit board with new version containing updated circuitry and components. (9016210-2 PCB Assembly, update from Revision B to Revision C)

D. Compliance:

Units manufactured prior to the modification date noted above must be returned to the manufacturer for compliance. As of this writing, **ALL** 4200-21 and 4200-22 units had been either returned and modified or originally manufactured in compliance with this service bulletin.

E. Approval: TSO approval not affected.

F. Weight and Balance: No change.

G. Electrical load data: No change.

H. Other Publications affected: 4200-21 Outline Drawing updated to Revision C

2. INSTALLATION INSTRUCTIONS: (optional)

I. Planning

A. Manpower:

Approximately 15 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 4200-XX manufacturing instructions. Units must be returned to Mid-Continent Instruments for modification.

A. Remove bezel assembly of the unit. (remove 2 screws and caging knob)

B. Remove Lighting PCB Assembly w/ Flag. (remove 4 screws and loosen airplane nut)

C. Remove Flag from Lighting PCB Assembly. (unsolder 2 wires and remove 1 screw)

D. Re-assembly the unit in reverse order as above using Revision C of 9016210-2 Lighting PCB Assembly.

E. Perform TDS306 and other internal procedures determined by the manufacturer in order to return to service.

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

3. MATERIAL INFORMATION

Parts:

Model	P/N	Qty	Description	Old Revision	New Revision
4200-2X	9016210-2	1	PCB Assy, Lighting	B or before	C or after