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SERVICE BULLETIN

NAVIGATION - ART 2000 COLOR WEATHER RADAR ANTENNA/RECEIVER/TRANSMITTER (ART 2000) - ART 2000, PN 071-01519-0101; Instability of the Automatic Frequency Control (AFC) Alignment

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ART 2000

Transmittal Information

ATA Number ART 2000-34-17 (Publication Number D201404000067)

Summary

This is the INITIAL release.

Refer to Paragraph 1.N. for a list of the acronyms and abbreviations used in this service bulletin.

Revision History

This service bulletin has had no revision(s) as shown in Table 1.

Table 1. Revision History

Revision Number	Revision Date
0	25 Jun 2014

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ART 2000

1. Planning Information

A. Effectivity

- (1) This service bulletin is applicable to the ART 2000, PN 071-01519-0101, SN ART2000-13651 thru SN ART2000-14514.

B. Concurrent Requirements

- (1) No other modification must be done before this service bulletin is performed.

C. Reason

- (1) This purpose of this service bulletin is to allow the replacement of an ART 2000 receiver module that has experienced a change of the AFC calibration voltage, after short term use.
- (2) Replacement of the receiver module is recommended only if the following criteria are met.
 - (a) A unit is exhibiting one or more of the following symptoms.
 - 1 Unable to receive radar returns that result in an inability to display weather.
 - 2 Unable to receive radar returns that result in an inability to display ground clutter.
 - 3 Unable to accurately receive radar returns that result in a weather display with spoking.
 - (b) And an AFC recalibration is the only action necessary to correct the symptom.
 - (c) And the receiver module is installed in a unit that is within the serial number range specified in Paragraph 1.A.(1).

D. Description

- (1) A summary of the work necessary to do this repair is given below.
 - (a) The ART 2000 is recalibrated to determine if it is eligible for this repair.
 - 1 If the ART 2000 is eligible for this repair:
 - a The ART 2000 is disassembled and the receiver module is replaced.
 - b The ART 2000 is assembled.
 - c A test is done on the ART 2000.
 - 2 If the ART 2000 is not eligible for this repair:
 - a Alignment procedures and functional test procedures are performed on the ART 2000. Repairs are made as determined necessary.

E. Compliance

- (1) It is recommended that this repair be done as each ART 2000 is sent back to the shop for a repair when a replacement of the receiver module is suspected and the LRU meets the effectivity of this service bulletin.

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F. Approval

(1) This service bulletin includes approved instructions from the manufacturer. The configuration created by this repair is approved by the applicable regulatory agency.

G. Manpower

(1) This repair can be completed in the approximate times that follow:

- 3.0 hour(s) for the labor to do the repair and test of the ART 2000.

H. Weight and Balance

(1) None.

I. Electrical Load Data

(1) Not changed.

J. Software Accomplishment Summary

(1) Not applicable.

K. References

- (1) To find, see, and download Honeywell Technical Publications, go to www.myaerospace.com.
- (2) The document(s) that follow(s) is/are necessary to complete this repair. Unless specified differently, you can use subsequent revisions.
- CMM, ATA Number 34-40-11 (Publication Number 006-05332-0003), Revision 4 with Temporary Revision 34-1, ART 2000 Color Weather Radar Antenna/Receiver/Transmitter.

L. Other Publications Affected

- (1) CMM, ATA Number 34-40-11 (Publication Number 006-05332-0003), Revision 4 with Temporary Revision 34-1, ART 2000 Color Weather Radar Antenna/Receiver/Transmitter, will be revised because of this service bulletin.
- (2) This service bulletin has no effect on the test procedure.

M. Interchangeability or Intermixability of Parts

(1) Not applicable.

N. Acronyms and Abbreviations

(1) Refer to Table 2 for a list of the acronyms and abbreviations used in this service bulletin.

Table 2. Acronyms and Abbreviations

Term	Full Term
AFC	Automatic Frequency Control
ATA	Air Transport Association
CMM	component maintenance manual
ECCN	Export Control Classification Number
FAA	Federal Aviation Administration

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Table 2. Acronyms and Abbreviations (Cont)

Term	Full Term
ID	identification
IPL	illustrated parts list
LRU	line replaceable unit
OSHA	Occupational Safety and Health Administration
PN	part number
Qty	quantity
SFAR	Special Federal Aviation Regulation
SN	serial number

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2. Material Information

A. Material - Price and Availability

- (1) Speak to BendixKing personnel at the location identified below for the necessary documentation, applicable material and labor prices, available parts, and supply times.

BendixKing
Aerospace Contact Team
Telephone: 855-250-7027 (Toll Free U.S.A./Canada)
Telephone: 602-365-7027 (International Direct)

NOTE: To order parts or materials, go to <http://www.myaerospace.com>. Registered users can enter their Honeywell ID and password. New users must register to create a Honeywell ID.

- (2) This repair can be done at a Honeywell authorized repair center. There is no cost to approved customers if, in accordance with the criteria of this service bulletin, the repair is eligible.

B. Industry Support Information

- (1) This repair is installed free of charge by Honeywell International, Inc. in Olathe, Kansas, or by a service center specifically authorized by Honeywell.
- (2) 1.0 hour(s) for the labor for removal and installation can be requested for an ART 2000 modified by an appropriately rated Honeywell service center.
- (3) Warranty claims should be sent by email to AerospaceWarranty@honeywell.com.

C. Material Necessary for Each Component

- (1) The parts identified in Table 3 are necessary to do this service bulletin.

Table 3. Operator-Purchased Material

New PN	Keyword/ Nomenclature	Old PN	Qty	List Price	Instructions/ Disposition Codes
015-00238-0001	Receiver module	015-00238-0001	1	¹	²
076-02817-0001	Insert	076-02817-0001	4	¹	

NOTES:

- 1. The price for parts will be given at the time of the order.
- 2. The customer or local regulatory authority can make decisions about what to do with the used parts.

D. Material Necessary for Each Spare

- (1) Same as Paragraph 2.C.

E. Reidentified Parts

- (1) Not applicable.

F. Tooling - Price and Availability

- (1) The equipment that is necessary to do this repair is specified in the documents given in Paragraph 1.K. of this service bulletin.

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3. Accomplishment Instructions

A. General Information

WARNING: TO AVOID INJURY TO PERSONNEL, BE AWARE THAT VOLTAGES ARE PRESENT IN THE UNIT AND IN THE TEST EQUIPMENT. VOLTAGES AS LOW AS 28 VOLTS CAN CAUSE SERIOUS INJURY UNDER SOME CONDITIONS. DO NOT BE MISLED BY THE TERM "LOW VOLTAGE."

CAUTION: THE ART 2000 COLOR WEATHER RADAR ANTENNA/RECEIVER/TRANSMITTER CONTAINS ELECTROSTATIC DISCHARGE SENSITIVE ITEMS. USE INDUSTRY APPROVED PRECAUTIONS.

CAUTION: THIS EQUIPMENT CONTAINS MOISTURE-SENSITIVE PARTS. SPECIAL HANDLING IS NECESSARY.

- (1) Obey the precautions.
- (2) Refer to the ART 2000 Color Weather Radar Antenna/Receiver/Transmitter CMM, ATA Number 34-40-11 (Publication Number 006-05332-0003), for procedures and precautions. Use all CAUTIONS and WARNINGS. Refer to the IPL in the CMM for the location of the parts, unless specified differently.
- (3) Keep all hardware for use in assembly unless specified differently.
- (4) Obey standard established shop practices during repair of the ART 2000 unless specified differently.

B. Eligibility Test

- (1) Perform the AFC calibration procedure to determine if AFC recalibration is the only action necessary to correct the symptom. Refer to the procedure in the Alignment Procedures section of the CMM.
 - (a) If the ART 2000 eligible for this repair:
 - 1 Go to Paragraph 3.C.
 - (b) If the ART 2000 not eligible for this repair:
 - 1 No work is necessary.
 - 2 Go to Paragraph 3.F.

C. Disassembly

- (1) Disassemble the ART 2000 and remove the receiver module. Refer to the instructions in the DISASSEMBLY section of the CMM.

D. Repair

- (1) Install the new receiver module, PN 015-00238-0001. Use four new inserts, PN 076-02817-0001.

E. Assembly

- (1) Assemble the ART 2000. Refer to the instructions in the ASSEMBLY section of the CMM.

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F. Testing

- (1) Perform the Alignment Procedures and Functional Test Procedures of the ART 2000. Refer to the instructions in the TESTING AND FAULT ISOLATION section of the CMM.