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# SERVICE BULLETIN

AUTO FLIGHT - KS 271C ROLL SERVO (KS 271C) - Modification (MOD) 11 to KS 271C Roll Servo, PN 065-00179-0200; Increase Robustness by Removing Current Sense Circuit

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KS 271C

#### **Transmittal Information**

ATA Number KS 271C-22-11 (Publication Number D201110000057)

#### **Summary**

This is the INITIAL release.

### **Revision History**

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

### Table 1. Revision History

| Revision Number | Revision Date |
|-----------------|---------------|
| 0               | 22 Nov 2011   |

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## 1. Planning Information

## A. Effectivity

(1) This service bulletin is applicable to the KS 271C, PN 065-00179-0200, with Serial Number (SN) 13845 and below, without MOD 11 installed.

NOTE: Units with SN 13846 and above, have had MOD 11 incorporated during original manufacturing.

# B. Concurrent Requirements

(1) No other modification must be done before the modification given in this service bulletin.

#### C. Reason

(1) The modification given in this service bulletin is to increase the robustness of the KS 271C by removing the current sense circuit.

### D. Description

- (1) The work necessary to accomplish this modification is specified below:
  - The KS 271C is disassembled and the roll servo board is removed.
  - Transistors Q1 and Q2, resistors R11, R23, and R24 are removed from the roll servo board.
  - Resistor R11 is replaced with an insulated jumper wire.
  - The KS 271C is assembled.
  - The modification is identified on the KS 271C unit serial tag.
  - A test is done on the KS 271C.

### E. Compliance

(1) This modification is optional. The operator can make the decision if this modification is necessary.

#### F. Approval

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

### G. Manpower

- (1) This modification can be completed in the approximate times identified below:
  - 3.5 hour(s) for the labor to do the modification and test of the KS 271C.

### H. Weight and Balance

(1) None.

#### I. Electrical Load Data

(1) Not changed.

# J. Software Accomplishment Summary

(1) Not applicable.

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### 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 modification. Unless specified differently, you can use subsequent revisions.
  - Maintenance Manual (MM), Publication Number 006-15647-0001, KS 271C Servo, Revision 1 with Temporary Revision 1.

#### L. Other Publications Affected

- (1) Not applicable.
- (2) MM, Publication Number 006-15647-0001, KS 271C Servo, will be revised because of this service bulletin.
- (3) This service bulletin has no effect on the test procedure.

# M. Interchangeability or Intermixability of Parts

(1) Not applicable.

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### 2. <u>Material Information</u>

#### A. Material - Price and Availability

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

Honeywell

Global Customer Care Center

Telephone: (800) 601-3099 (Toll Free U.S.A./Canada) Telephone: (602) 365-3099 (International Direct) Telephone: 00-800-601-30999 (EMEA Toll Free)

Telephone: 420-234-625-500 (EMEA Direct)

NOTE:

Identified Global Material System (GMS) users can make an order for the material at http://www.avionicservices.com/gms/login. Customers who are not yet identified GMS users can use the same address to apply for identification.

- (2) This modification can be done at a Honeywell service center or Honeywell-authorized repair location. If the KS 271C is under warranty, there will be no cost to approved customers.
- (3) If the KS 271C is not under warranty, this modification will be done for the price given at the time of the order.
- (4) Honeywell can supply the parts necessary to do this modification. If the KS 271C is under warranty, there is no cost to approved customers. If the KS 271C is not under warranty, the price for parts will be given at the time of the order.
- (5) If there is no charge for parts, send a no-charge purchase order that refers to this Service Bulletin, ATA Number KS 271C-22-11 (Publication Number D201110000057) - free of charge (FOC). The purchase order must include only the applicable parts specified in Table 2 of this service bulletin.
- (6) If there is a charge for parts, send a purchase order that refers to this Service Bulletin, ATA Number KS 271C-22-11 (Publication Number D201110000057). The purchase order must include only the applicable parts specified in Table 2 of this service bulletin.

# B. Industry Support Information

- (1) The maximum labor hours that will be reimbursed by Honeywell to do this modification are given below. Reimbursement will only be given if the KS 271C is under warranty. Reimbursement will not be more than Honeywell's applicable reimbursement labor rate or as specified in the agreement or contract.
  - 3.5 hour(s) for the labor to do the modification and test.
- (2) If the KS 271C is not under warranty, more hours for the labor necessary to prepare, package and inspect the KS 271C can be applicable.
- (3) Warranty claims should be submitted through the Honeywell Warranty Web Portal: https://portal.honeywell.com/wps/portal/aero/serviceprograms/warranty.

#### C. Material Necessary for Each Component

(1) The material identified in Table 2 is necessary to do this service bulletin.

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### Table 2. Operator-Purchased Material

| New PN         | Keyword/<br>Nomenclature | Old PN         | Qty | List<br>Price <sup>1</sup> | Instructions/ Disposition Codes |
|----------------|--------------------------|----------------|-----|----------------------------|---------------------------------|
| 025-00058-0000 | Designated bus wire      | 132-05145-0330 | 1   | iik . Wa                   | В                               |

#### NOTE:

1. Refer to the Honeywell, Global Customer Care Center (Paragraph 2.A.) when you need data about available parts, supply times, or minimum order quantities.

#### Table 3. Instructions/Disposition Codes

| Code               | Description    |
|--------------------|----------------|
| Disposition Code B | Replaced part. |

- (2) No operator-supplied material is necessary to do this service bulletin.
- D. Material Necessary for Each Spare
  - (1) Same as Paragraph 2.C.
- E. Reidentified Parts
  - (1) Not applicable.
- F. Tooling Price and Availability
  - (1) Not applicable.

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# 3. Accomplishment Instructions

# A. General Information

CAUTION:

Ceneral Information

ANY DISASSEMBLY/ASSEMBLY OF THE KS 271C MUST BE DONE AT A STATIC SAFE WORKSTATION. REMOVED MODULES SHOULD BE PLACED IN STATIC-SAFE BAGS WHEN NOT INSTALLED IN THE UNIT, OR NOT IN-WORK.

- (1) Obey the precautions.
- (2) Refer to the KS 271C Servo MM, Publication Number 006-15647-0001, for procedures and precautions. Use all CAUTIONS and WARNINGS. Refer to the IPL in the MM 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 modification of the KS 271C unless specified differently.

# B. Disassembly

NOTE: To complete the work in this section, refer to the instructions in the DISASSEMBLY section of the MM unless specified otherwise.

- (1) Remove the outside cover (8, IPL Figure 6-2) of the servo.
- (2) Remove the roll servo board screws and connectors, taking special care to note the orientation of both J1 and J2 connectors (IPL Figure 6-2). Refer to Figure 1.

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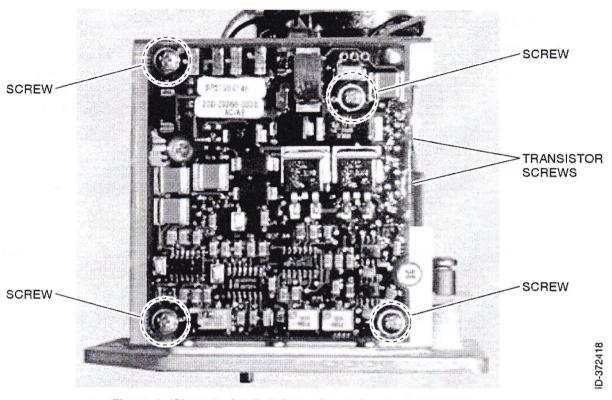


Figure 1. (Sheet 1 of 1) Roll Servo Board Screws and Connectors

#### C. Modification

(1) Remove the motor limit sense components, Q1, Q2, R23, R24, and R11 from the roll servo circuit board. Refer to Figure 2 for the locations of the parts.

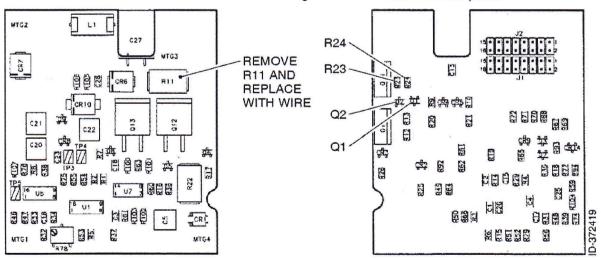


Figure 2. (Sheet 1 of 1) Servo Circuit Board Component Locations

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(2) Replace R11 with a designated bus wire, PN 025-00058-0000, soldered between the pads.

# D. Assembly

(1) Reverse the disassembly procedure to assemble the KS 271C. Use care to properly install the connectors during reassembly. Refer to the instructions in the DISASSEMBLY section of the MM.

# E. Modification Status Marking

(1) Use a permanent procedure to identify MOD 11 on the unit serial tag to indicate MOD 11 is complete.

# F. Testing

(1) Do a test of the KS 271C. Refer to the instructions in TESTING AND TROUBLESHOOTING section of the MM.