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SERVICE BULLETIN

GAS TURBINE ENGINE - POWER TURBINE GOVERNOR - Replacement of Bearing Assembly, PN 2544198 in Honeywell Model AL-L4, AL-AA2, AL-AC3, and AL-AD2 Power Turbine Governors Used on Rolls Royce 250 Series Engines

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1. License Grant

7 Mar 2008
Revision 2, 30 Oct 2008

GT-73-344

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Transmittal Information

ATA Number GT-73-344 (Publication Number D200803000057)

Summary

This revision is a FULL replacement. This revision includes the changes that follow:

- Added Model AL-AD2 and the applicable Honeywell and Rolls Royce part numbers
- Added CMM, ATA Number 73-20-16 to References and Other Publications Affected sections
- Added a part to the Required Material table.

The data that is identified with revision bars is given in the Revision History section. Revision bars are not used before Paragraph 1.A. The editorial changes and data that was moved or reformatted are not identified with revision bars.

Revision History

This SB has had two revision(s) as shown in Table 1.

Table 1. Service Bulletin Revisions

Revision	Date of Release
Initial Release	7 Mar 2008
1	11 Apr 2008
2	30 Oct 2008

Highlights

This section issues Revision 2 to Service Bulletin, ATA Number GT-73-344 (Publication Number D200803000057), and contains these changes:

The list of highlights tells the users about the changes that the revision makes. The list has three columns. The "Page" column shows the block of data that the revision changes and the page on which the block begins. The block can be a section, subsection, graphic, table, etc. Revision marks give the location of the change in the block. The "Description" column tells the user about the change or changes in each block. A paragraph, table, or figure reference often comes before the description. The "Effectivity" column tells the user about the part number(s) to which the block of information applies. The default value for this column is "All." "All" means that the block applies to all parts.

Page	Description	Effectivity
7	Paragraph 1.A. Added Model Number AL-AD2 and the applicable Honeywell and Rolls Royce part numbers to the table.	All
8	Paragraph 1.K. Added CMM 73-20-16 to the References.	All
8	Paragraph 1.L. Added CMM 73-20-16 to Other Publications Affected.	All
9	Paragraph 2.C. Added spring pin, PN 909294, to the table and a note.	All
12	Paragraph 3.G. Added AL-AD2 current and new Honeywell and Rolls Royce part numbers to the table.	All

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Page	Description	Effectivity
14	Paragraph 4. Changed wording in Work Record (Appendix) from Customer Name to Operator.	All

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1. Planning Information

A. Effectivity

- (1) Table 2 shows the model and part list numbers of the Power Turbine Governors (PTG)s that are affected.

Table 2. Power Turbine Governors

Model Number	Honeywell PN	Rolls Royce PN
AL-L4	2549169-1 2549175-1	23076416 23076417
AL-AA2	2549170-1 2549176-1 2549178-1	23076061 23076062 23076418
AL-AC3	2549171-1	23076419
AL-AD2	2549172-1 2549173-1 2549174-1 2549177-1	23076063 23076421 23076420 23076064

B. Concurrent Requirements

- (1) None.

C. Reason

- (1) To increase the reliability of the PTG by incorporating a new bearing assembly.

D. Description

- (1) This SB provides instructions for the removal of Bearing Assembly, PN 2544198, and installation of Bearing Assembly, PN 2526146, in Honeywell PTGs.

E. Compliance

- (1) All PTG part numbers listed in Table 2 of this service bulletin must comply with this service bulletin as given in Table 3.

Table 3. Power Turbine Governors Compliance

Operational Hours TSN/TSO	Compliance Time
0-750	No Later Than 750 hours
751-1000	No Later Than 1000 hours
1001-1250	No Later Than 1250 hours
1251-1500	No Later Than 1500 hours
1501-2000	Next Removal for any Reason

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F. Approval

- (1) This SB has been reviewed by the Federal Aviation Administration (FAA). The repairs herein comply with applicable Federal Aviation Regulations and are FAA approved for installation in Rolls Royce 250 series PTGs.

G. Manpower

- (1) Approximately 4.5 manhours are required to accomplish the replacement of the bearing assembly. No additional manhours are required if accomplished at overhaul.

H. Weight and Balance

- (1) Not applicable.

I. Electrical Load Data

- (1) Not applicable.

J. Software Accomplishment Summary

- (1) Not applicable.

K. References

NOTE: To find, see, and download Honeywell Technical Publications, go to <http://portal.honeywell.com/wps/portal/aero/>.

- (1) The documents that follow are necessary to complete this SB. Unless specified differently, you can use subsequent revisions.
 - Component Maintenance Manual (CMM), ATA Number 73-20-17 (Publication Number 15-1125), Model AL-L4 Power Turbine Governor, Revision 0.
 - CMM, ATA Number 73-20-06 (Publication Number 15-1120), Model AL-AA2 Power Turbine Governor, Revision 0 with Temporary Revisions 73-1, 73-2, 73-4 thru 73-11.
 - CMM, ATA Number 73-20-08 (Publication Number 15-1126), Model AL-AC3 Power Turbine Governor, Revision 0.
 - CMM, ATA Number 73-20-16 (Publication Number 15-1124), Model AL-AD2 Power Turbine Governor, Revision 0.

L. Other Publications Affected

- (1) CMM, ATA Number 73-20-17 (Publication Number 15-1125), Model AL-L4 Power Turbine Governor, will be revised because of this SB.
- (2) CMM, ATA Number 73-20-06 (Publication Number 15-1120), Model AL-AA2 Power Turbine Governor, will be revised because of this SB.
- (3) CMM, ATA Number 73-20-08 (Publication Number 15-1126), Model AL-AC3 Power Turbine Governor, will be revised because of this SB.
- (4) CMM, ATA Number 73-20-16 (Publication Number 15-1124), Model AL-AD2 Power Turbine Governor, will be revised because of this SB.
- (5) This SB has no effect on the test procedure.

M. Interchangeability or Intermixability of Parts

- (1) Not applicable.

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2. Material Information

A. Material - Price and Availability

- (1) For a quote on current prices, contact:

Aviall Services
P.O. Box 619048
Dallas, Texas 75261-9048
Telephone: (800) 284-2551
FAX: (972) 586-1361

B. Industry Support Information

- (1) This SB is covered under Honeywell warranty and covers only the parts shown in Table 4 and calibration requirements according to this SB. Other work or repairs performed over and above the requirements of this SB are not covered under this warranty condition.
- (2) Honeywell-authorized warranty and repair stations will submit claims on behalf of the customer. Repair stations should submit the warranty claim to:

Honeywell International Inc
Attn: Warranty Administration
717 N. Bendix Dr.
South Bend, Indiana 46628
U.S.A.

- (3) Refer all warranty questions to the Warranty Claim Administrator.

Telephone: (574) 231-2295
FAX: (574) 231-2702
John.E.Burus@Honeywell.com

- (4) All warranty claims must be completed and filed within 30 days of the work.

C. Material Necessary for Each Component

- (1) The parts identified in Table 4 are necessary to do this SB.

Table 4. Required Material

New PN	Keyword	Old PN	Qty	Unit Price	Instructions/Disposition
2526146	Bearing Assembly	2544198	1	3	1 2
2542371	Identification Plate	2542371 2539517 2544407	1	3	2
953508-8	Preformed Packing	953508-8	1	3	2
2666850-11	Preformed Packing	2666850-11	1	3	2

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Table 4. Required Material (Cont)

New PN	Keyword	Old PN	Qty	Unit Price	Instructions/Disposition
2637654	Self-locking Nut	2637654	1	³	²
909294	Spring Pin	909294	1	³	²

NOTES:

1. PN 2544198, new bearing assemblies, in stock must be returned to place of purchase for credit. Tag and mark "Returned per GT-73-344".
2. Scrap old (used) bearing assemblies, PN 2544198, identification plates, PN 2542371, 2539517, or 2544407, preformed packing, PN 953508-8 and 2666850-11, self locking nut, PN 2637654, and spring pin, PN 909294.
3. Call for price quote. Refer to Paragraph 2.A.

D. Material Necessary for Each Spare

(1) Not applicable.

E. Reidentified Parts

(1) Not applicable.

F. Tooling - Price and Availability

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

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3. Accomplishment Instructions

A. General Notes

CAUTION: ALL WORK MUST BE PERFORMED IN A CLEAN AREA AWAY FROM POSSIBLE CONTAMINATION. FAILURE TO MAINTAIN CLEANLINESS MAY RESULT IN CONTAMINATION AND POSSIBLE COMPONENT MALFUNCTION.

- (1) This SB shall be performed according to the directions of this document.
- (2) A completed paper copy of the Work Record form is a required document to verify the completion of the bearing assembly replacement procedure.
 - (a) Print a paper copy of the blank Work Record form from the Appendix, Paragraph 4, before the start of this procedure.
 - (b) The paper copy of the Work Record form will help expedite those procedural steps that require the recording of various data.
- (3) Follow all instructions, WARNINGS, and CAUTIONS in the applicable CMM related to the PTG, part, and tool contamination. Refer to Paragraph 1.K.
- (4) Tools used to perform the procedures in this SB shall be free of contamination and visual damage. Replace damaged tools. Use of magnetic, or magnetized tools is not allowed.
- (5) If SB procedures are interrupted, protect the PTG and tools with clean plastic sheeting or a clean, lint-free drop cloth.
- (6) All photographs and drawings are for illustrative purposes only and do not reflect all actual hardware configurations.

B. Work Record Information

- (1) Complete the work record in the Appendix, Paragraph 4, and send to Honeywell as indicated.
- (2) Follow all instructions in the applicable CMM related to precautions against contamination for cleaning, disassembly and assembly.
- (3) Refer to the applicable CMM, ILLUSTRATED PARTS LIST (IPL), Detailed Part List (DPL) section for verification and location of replacement parts listed in Table 4. Refer to Paragraph 2.C.
- (4) Test the PTG. Refer to the TESTING AND FAULT ISOLATION section of the applicable CMM for procedures and safety warnings and cautions.

C. Cleaning

- (1) Make sure all components and related installation tools and fixtures have been cleaned. Refer to the CLEANING section of the applicable CMM.
- (2) Clean the exterior of PTG. Refer to the CLEANING section of the applicable CMM.

D. Disassembly

- (1) Disassemble the PTG. Replace all discarded parts with new parts. Make sure to replace any removed 100% replacement items. Refer to the Numeral Index section in the IPL of the applicable CMM.

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E. Testing

- (1) Do a test of the PTG. Refer to the instructions in TESTING AND FAULT ISOLATION section of the applicable CMM for procedures and safety warnings and cautions.
- (2) Safety cable or lockwire the PTG. Refer to TESTING AND FAULT ISOLATION and ASSEMBLY sections of the applicable CMM for procedures and safety warnings and cautions.

F. Assembly

- (1) Install enclosure hardware. Refer to the ASSEMBLY section of the applicable CMM for procedures and safety warnings and cautions.

G. Identification Marking of PTG

CAUTION: DO NOT STAMP IDENTIFICATION MARKINGS ON IDENTIFICATION PLATE WHILE IDENTIFICATION PLATE IS INSTALLED ON THE PTG BODY. FORCE NEEDED TO STAMP MARK ON IDENTIFICATION PLATE CAN CAUSE DAMAGE TO THE PTG BODY OR PLATE.

- (1) Refer to Table 5 to reidentify the modified PTGs to the issue number shown. Refer to the applicable CMM for instructions on marking the new identification plate.

Table 5. Power Turbine Governor Reidentification

Current Honeywell PN	Current Rolls Royce PN	New Honeywell PN	New Rolls Royce PN
2549169-1	23076416	2549169-2	23086771
2549170-1	23076061	2549170-2	23086749
2549171-1	23076419	2549171-2	23086774
2549172-1	23076063	2549172-2	23086751
2549173-1	23076421	2549173-2	23086786
2549174-1	23076420	2549174-2	23086775
2549175-1	23076417	2549175-2	23086772
2549176-1	23076062	2549176-2	23086750
2549177-1	23076064	2549177-2	23086752
2549178-1	23076418	2549178-2	23086773

- (2) Install the identification plate. Refer to the ASSEMBLY section of the applicable CMM for procedures.

H. Work Record Compliance

- (1) Record unit compliance on the Work Record in the Appendix, Paragraph 4.
 - (a) Make sure that the data sent to Honeywell is accurate on the Work Record.

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- (b) Fax or send a copy of the completed Work Record within five days of completion of work to:

Honeywell International Inc.
ATTN: Product Support Engineering
717 North Bendix Drive
South Bend, IN 46628
Telephone: (574) 231-4249 or (574) 231-3304
FAX: (574) 231-4016

- (c) Completion of this SB includes completion and submittal of the Work Record as indicated in the Appendix.

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4. Work Record

Work Record

Send a copy of the completed
Work Record to:

Honeywell International Inc.
Customer & Product Support
717 N. Bendix Drive
South Bend, IN 46628
Fax No.: (574) 231-4016

Date _____

W/O Number _____

******* Store Original Work Record in Work Record File for Traceability. *******

Authorized Warranty & Repair Station:	Operator:
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SN of Unit:	LOA Code:
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HONEYWELL PART NUMBER IN: 		HONEYWELL PART NUMBER OUT:
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	TYPE OF HOURS			
SB NUMBER(S) INCORPORATED:	TIME SINCE OVERHAULED (TSO):		TIME SINCE NEW (TSN):	

REMOVAL REASON

RESULTS / FINDINGS / WORK ACCOMPLISHED

ID-209770

Figure 1. (Sheet 1 of 1) Work Record