

ALERT SERVICE BULLETIN
Bell Helicopter **TEXTRON**

A Subsidiary of Textron Inc.

NO. 222-04-98

DATE 06-08-04

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DATE
REV

MODEL AFFECTED: 222/222B

SUBJECT: HONEYWELL LTS 101 ENGINE, REMOVAL AND REPLACEMENT OF FUEL CONTROL SPOOL BEARING P/N 2523973 REV. M

HELICOPTERS AFFECTED: All Model 222 and 222B helicopters

COMPLIANCE: In accordance with Honeywell Service Bulletin LT 101-73-20-A0236

DESCRIPTION:

Honeywell has advised Bell Helicopter Textron that inspection of several fuel controls returned for Ng speed limitation and/or uncommanded engine power reduction disclosed distress to the spool bearing assembly.

Honeywell has since released Service Bulletin LT 101-73-20-A0236 which provides instructions for the removal and return of the fuel control to an authorized fuel system repair station for spool bearing replacement.

APPROVAL:

Not required

MANPOWER:

Refer to Honeywell Service Bulletin LT 101-73-20-A0236 for manpower estimate.

MATERIAL:

Refer to Honeywell Service Bulletin LT 101-73-20-A0236

SPECIAL TOOLS:

Refer to Honeywell Service Bulletin LT 101-73-20-A0236

WEIGHT AND BALANCE:

Not affected

ELECTRICAL LOAD DATA:

Not affected

REFERENCES:

Refer to Honeywell Service Bulletin LT 101-73-20-A0236

PUBLICATIONS AFFECTED:

None affected

ACCOMPLISHMENT INSTRUCTIONS:

1. Comply with Honeywell Service Bulletin LT 101-73-20-A0236

Honeywell **SERVICE BULLETIN**

Engines, Systems & Services

LETTER OF TRANSMITTAL

GENERAL

This page transmits Revision 1 to Service Bulletin No. LTS LT 101-73-20-A0236.

REASON FOR REVISION

To revise the compliance date for spare part fuel controls.

LIST OF EFFECTIVE PAGES

Page Nos. Date

1 - 7 May 14/04

LIST OF REVISIONS

Initial Issue Apr 5/04

INSTRUCTIONS FOR INCORPORATING THIS REVISION

This service bulletin is a complete revision. This service bulletin has been reprinted in its entirety. Please remove and discard all pages of prior issues and replace with pages of this revision.

Honeywell SERVICE BULLETIN

Engines, Systems & Services

ALERT

Category 1: Safety

ENGINE - FUEL SYSTEM - REMOVAL AND REPLACEMENT OF FUEL CONTROL SPOOL BEARING
PART NO. 2523973 REV. M

1. Planning Information

A. Effectivity

<u>Part No.</u>	<u>Engine Model No.</u>	<u>Serial No.</u>	<u>Application</u>
4-001-000-12	LTS101-650B-1	All	MBB BK117
4-001-000-25	LTS101-750B-1	All	MBB BK117
4-002-000-04	LTS101-650C-2	All	Bell 222
4-002-000-05	LTS101-650C-3	All	Bell 222
4-002-000-07	LTS101-650C-3A	All	Bell 222
4-002-000-06	LTS101-750C-1	All	Bell 2222
4-003-000-04	LTP101-700A-1A	All	Piaggio P.166-DL3 Riley International R421
4-003-000-05	LTP101-600A-1A	All	Piaggio P.166-DL3

NOTE: Controls stamped with the letter "N" on the identification plate have already complied with the requirements of this service bulletin and are not subject to the compliance requirements stated below.

All Honeywell twin engine model LTS/LTP 101 gas turbine engines with Fuel Control Part Nos. 4-301-211-XX, 4-301-283-XX, 4-301-413-XX, 4-302-023-XX, 4-301-098-XX, 4-303-023-XX, and 4-303-033-XX.

All spare Fuel Control Part Nos. 4-301-211-XX, 4-301-283-XX, 4-301-413-XX, 4-302-023-XX, 4-301-098-XX, 4-303-023-XX, and 4-303-033-XX.

Contact names for Fuel Systems, Authorized Warranty and Repair Stations (AWARS) are listed in Attachment 1.

B. Concurrent Requirements

None.

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C. Reason

WARNING: FAILURE TO COMPLY WITH THIS SERVICE BULLETIN COULD RESULT IN DISTRESS TO THE FUEL CONTROL SPOOL BEARING. IF LEFT UNCORRECTED, THIS DISTRESS COULD RESULT IN A POTENTIAL LOSS OF ENGINE POWER AND COULD CAUSE SERIOUS INJURY OR DEATH TO PERSONNEL AND DAMAGE TO THE AIRCRAFT.

Inspections of several fuel controls returned for Ng speed limitation and/or uncommanded engine power reduction disclosed distress to the spool bearing assembly. To avoid such distress, removal of suspect fuel controls and installation of fuel controls with a known, acceptable spool bearing assembly is required.

D. Description

This service bulletin provides instruction for returning the fuel control to an authorized fuel system repair station for spool bearing replacement.

E. Compliance

Compliance addresses a safety issue.

- (1) To be accomplished per the compliance schedule in Table 1, or step (2).

Table 1. Compliance Schedule for Fuel Controls Installed on Engines

Time Since New/Time Since Last Overhaul	
0 to 1000 hours	Comply with before 1200 hours
1001 to 1400 hours	Comply within 200 hours
1401 to 1800 hours	Comply within 100 hours
1801 hours and up	Comply within 50 hours

- (2) Spare part fuel controls must comply with this service bulletin prior to installing on an engine or prior to April 30, 2005, whichever results in the earliest compliance with this service bulletin.

F. Approval

The accomplishment instructions section of this service bulletin has been FAA approved.

G. Manpower

Approximately 2.5 manhours are required to remove and replace the fuel control.

H. Weight and Balance

No change.

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I. Electrical Load Data

No change.

J. Software Accomplishment Summary

Does not apply.

K. References

The data used to prepare this service bulletin include Honeywell Engines, Systems & Services engineering documents and the publications listed below:

(1) Publications

<u>Engine Model No.</u>	<u>Maintenance Manual No.</u>	<u>Overhaul Manual No.</u>	<u>Illustrated Parts Catalog No.</u>
LTS101-650B-1	LTS101-2.3	LTS101-3	LTS101-4.7
LTS101-750B-1	LTS101-2.4	LTS101-3	LTS101-4.8
LTS101-650C-2	LTS101-2.2	LTS101-3	LTS101-4.2
LTS101-650C-3	LTS101-2.2	LTS101-3	LTS101-4.2
LTS101-650C-3A	LTS101-2.2	LTS101-3	LTS101-4.2
LTS101-750C-1	LTS101-2.2	LTS101-3	LTS101-4.4
LTP101-700A-1A	LTP101-2	LTP101-3	LTP101-4
LTP101-600A-1A	LTP101-2	LTP101-3	LTP101-4

(2) Service bulletin references

Honeywell Engines, Systems & Services, South Bend Service Bulletin GT336.

L. Other Publications Affected

Does not apply.

M. Interchangeability or Intermixability of Parts

Does not apply.

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2. Material Information

A. Material - Price and Availability

<u>New Part No.</u>	<u>Key Word</u>	<u>Old Part No.</u>	<u>Qty.</u>	<u>Unit Price</u>	<u>Special Instructions/ Disposition</u>
4-301-211-06 (LTS101-650B-1)	Fuel Control	4-301-211-XX	1	*	T
4-301-098-18 (LTS101-650C-2, LTS101-650C-3, LTS101-650C-3A)	Fuel Control	4-301-098- XX	1	*	T
4-301-283-08 (LTS101-750B-1)	Fuel Control	4-301-283- XX	1	*	T
4-301-413-04 (LTS101-750B-1)	Fuel Control	4-301-413- XX	1	*	T
4-302-023-07 (LTS101-750C-1)	Fuel Control	4-302-023- XX	1	*	T
4-303-023-05 (LTP101-600A-1A)	Fuel Control	4-303-023- XX	1	*	T
4-303-033-05 (LTP101-700A-1A)	Fuel Control	4-303-033- XX	1	*	T

*Contact Honeywell Engines, Systems & Services or a Honeywell Engines, Systems & Services authorized service center for price and availability. (See Attachment 1.)

Disposition Code T: Return affected fuel control to an authorized Honeywell Engines, Systems & Services AWARS for rework.

Refer to Customer Service Letter CSL LT101-147 for additional information.

B. Industry Support Information

None.

C. Material Necessary for Each Engine

None.

D. Material Necessary for Each Spare

None.

E. Reidentification of Parts

None.

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- F. Tooling Price and Availability
 - No special tools required.
- 3. Accomplishment Instructions
 - NOTE: Refer to the applicable engine manuals listed in paragraph 1.K. when accomplishing the following instructions.
 - A. Inspect the fuel control data plate for a letter "N" marking. If found, the fuel control is in compliance with this service bulletin. Proceed to paragraph F.
 - B. If the marking letter "N" is not marked on the fuel control data plate, refer to Table 2. If the fuel control serial number is contained in Table 2, the fuel control is in compliance with this service bulletin. Proceed to paragraph F.
 - C. If the fuel control was repaired or overhauled on or after April 1, 2003, contact the repair station that performed the repair or overhaul to determine if the spool bearing was replaced with Spool Bearing Part No. 2523973 Rev. N. If the repair station verifies Spool Bearing Part No. 2523973 Rev. N was installed, request written confirmation of installation for your serial numbered fuel control. Proceed to paragraph F.
 - D. If the fuel control does not meet any of the above criteria, remove and return the affected fuel control to an authorized Honeywell AWARS for installation of an acceptable spool bearing.
 - E. Install compliant fuel control on the engine in accordance with the engine maintenance manual.
 - F. Record compliance with this service bulletin in the Engine Logbook, on the Engine and Module Maintenance Record, and on the Service Bulletin Compliance Record and Module/Component Service Record Card. If applicable, affix the written confirmation from the repair station in the Engine Logbook.
 - G. Complete and return the Notice of Service Bulletin Compliance.

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Table 2. Fuel Control Serial Numbers (S/N)

S/N	S/N	S/N	S/N	S/N	S/N	S/N	S/N	S/N	S/N
33296	54925	324154	329020	334005	335777	337171	337905	84370001	85480230
50211	55224	324156	329023	334594	335784	337565	337906	84370002	86010293
50214	56075	324167	329027	334595	335787	337572	337907	84370008	86010294
50216	56080	325477	329650	334626	335795	337598	337908	84370010	86010296
50219	56099	325480	329652	334704	335797	337599	337914	84450002	86160456
50497	56140	326187	329657	334705	335799	337600	338007	84450005	86160459
50501	56207	326803	329673	334717	335808	337601	338012	84450007	86360625
50524	56216	327180	329674	334722	335879	337602	338014	84490001	86360641
50529	56219	327582	329675	334734	335964	337604	338018	84490011	86430823
50536	56270	327592	329718	334742	335990	337606	338028	84490012	86470864
50598	56296	327600	330696	334756	335996	337609	338047	84490016	86470868
50605	56321	328039	330699	334758	336167	337610	503213	84490020	86470872
50732	238938	328044	330713	334759	336255	337614	8437004	84490021	86500873
50749	318681	328046	330716	334765	336347	337615	8445001	84490023	86500874
50885	318785	328056	330719	334770	336713	337617	84010004	84490025	86500879
51728	318788	328063	330722	335177	336994	337618	84010007	84490030	86500880
51912	319683	328068	330731	335207	337033	337619	84010010	84490031	86500881
51914	321983	328078	330735	335227	337037	337622	84010012	84490038	87251261
51927	322030	328080	332811	335267	337045	337623	84180003	84490039	87410022
52329	322035	328235	333068	335299	337047	337624	84180008	85060017	87410032
52834	322039	328698	333506	335304	337049	337625	84180012	85060018	87410033
52865	322733	328920	333515	335309	337051	337627	84180019	85060019	88031480
52966	323738	328960	333916	335603	337153	337629	84330002	85060024	88031495
52968	323739	328963	333937	335606	337154	337631	84330003	85180001	88031499
53093	323740	328981	333956	335608	337156	337632	84330004	85220011	88031497BR
53461	324124	328989	333961	335610	337158	337689	84330007	85220013	
53751	324126	328990	333963	335611	337159	337895	84330008	85220014	
53762	324129	328998	333978	335614	337161	337899	84330010	85220016	
53764	324138	329005	334001	335619	337167	337903	84330016	85480226	
53902	324145	329011	334003	335765	337168	337904	84330017	85480228	

4. Appendix

A. None.

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Attachment 1. Authorized Warranty and Repair Stations (AWARS)

Facility Name	Contact Person	Contact Information
Greystones Aviation Components P.O. Box 22034 Glenashley 4022 Durban, South Africa	Glenn Mouritzen	Tel.: (703) 288-3400
Masling Industries Airport Hanger 3 P.O. Box 511 Cootamundra, N.S.W. Australia 2590	John Hill	Tel.: 612-6942-3155 Fax: 612 69423250 Email: masind@dragnet.com.au
Goodrich Controls Systems GmbH Postfach 10 02 61, D-41402 Neuss Bataverstrasse 80, Germany	Ewald Schulz	Tel.: (0 21 31) 953-362
Precision Engines 3220, 100th Street Southwest Building E Everett, Washington 98204 USA	Pam Tumminello	Tel.: (425) 347-2800 Email: pamt@precisionengines.com
Sabreliner Corporation Airport Industrial Park 101 Freedom Drive Independence, Kansas 67301 USA	Cindy Blakemore	Tel.: (620) 331-8180 Email: cblakemore@sabreliner.com
ACRO Aerospace, Inc. 4551 Agar Drive Richmond, British Columbia Canada V7B 1A4	Jack Gardner	Tel.: (604) 276-7662

Honeywell Control Systems Administrative Assistance

Facility Name	Contact Name	Contact Information
Honeywell Engines, Systems & Services Customer Support Engineering 717 North Bendix Drive South Bend, IN 46620 USA	Bob Terry	(574) 231-4017
Honeywell Engines, Systems & Services Product Integrity 717 North Bendix Drive South Bend, IN 46620 USA	Linda Gray	(574) 231-3304

NOTICE OF SERVICE BULLETIN COMPLIANCE

Honeywell Engines & Systems
111 S. 34th Street
P.O. Box 52181
Phoenix, AZ , 85072-2181 USA

Attention: Manager, Customer Support Engineering (LT 101)
Mail Stop 404-246

Dear Sir:

This is to inform you that the Service Bulletin has been complied with as indicated below:

SERVICE BULLETIN _____ REVISION _____ DATE _____

Engine Model _____ Serial # _____ Hours _____ Cycles _____

FOLD

HERE

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Fan Model _____ Serial # _____ Hour _____ Cycles _____

GP Module _____ Serial # _____ Hour _____ Cycles _____

CT Module _____ Serial # _____ Hour _____ Cycles _____

AGB Module _____ Serial # _____ Hour _____ Cycles _____

Components Removed:

Part Number _____ Serial # _____ Hour _____ Cycles _____

Aircraft Type _____ Serial # _____ Hour _____ Cycles _____

FOLD

HERE

FOLD

HERE

Very truly yours,

Signed: _____

Operator: _____

Location: _____

Date: _____

PLACE
STAMP
HERE

Honeywell Engines & Systems
111 S. 34th Street
P.O. Box 52181
Phoenix, AZ 85072-2181, USA

Attention: Manager, Customer Support Engineering (LT 101)
Mail Stop: 404-246