Honeywell

Honeywell International Inc. 111 S. 34th Street

Phoenix, Arizona 85034-2802

U.S.A.

CAGE: 99193

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

Website: www.myaerospace.com

SERVICE BULLETIN

ALERT

ENGINE - FUEL PUMP ASSEMBLY - Inspect Certain Fuel Pump Assemblies for High Pressure Gearset Spur-Matched, PN 893614-1, Manufactured with Material Discrepancies, and Inspect for Fuel System Contamination in Assembled Engines

Legal Notice

NOTICE: This is a CATEGORY 1, SAFETY service bulletin.

Export Control

This document contains technical data and is subject to U.S. export regulations. These commodities, technology, or software were exported from the United States in accordance with the export administration regulations. Diversion contrary to U.S. law is prohibited.

ECCN: EAR99.

Proprietary Information

Honeywell - Confidential

THIS DOCUMENT AND ALL INFORMATION AND EXPRESSION CONTAINED HEREIN ARE THE PROPERTY OF HONEYWELL INTERNATIONAL INC., ARE PROVIDED IN CONFIDENCE, AND MAY BE USED BY PERSONS REQUIRED BY FEDERAL AVIATION REGULATION PART 21.50 TO COMPLY WITH ANY OF THE TERMS OF THESE INSTRUCTIONS. EXCEPT AS SET FORTH ABOVE, NO PERSON MAY, IN WHOLE OR IN PART, USE, DUPLICATE OR DISCLOSE THIS INFORMATION FOR ANY PURPOSE WITHOUT THE PRIOR WRITTEN PERMISSION OF HONEYWELL INTERNATIONAL INC.

TPE331

Honeywell Materials License Agreement

The documents and information contained herein ("the Materials") are the proprietary data of Honeywell International Inc. These Materials are provided for the exclusive use of Honeywell Service Centers; Honeywell-authorized repair facilities; operators of Honeywell aerospace products subject to an applicable product support agreement, their wholly owned-subsidiaries or a formally designated third party service provider; and direct recipients of Materials from Honeywell's Aerospace Technical Publication Distribution. The terms and conditions of this License Agreement govern your use of these Materials, except to the extent that any terms and conditions of another applicable agreement with Honeywell regarding the operation, maintenance, or repair of Honeywell aerospace products conflict with the terms and conditions of this License Agreement, in which case the terms and conditions of the other agreement will govern. However, this License Agreement will govern in the event of a conflict between its terms and conditions and those of a purchase order or acknowledgement.

1. License Grant - If you are a party to an applicable product support agreement, a Honeywell Service Center agreement, or an authorized repair facility agreement, Honeywell hereby grants you a limited, non-exclusive license to use these Materials to operate, maintain, or repair Honeywell aerospace products only in accordance with that agreement.

If you are a direct recipient of these Materials from Honeywell's Aerospace Technical Publication Distribution and are not a party to an agreement related to the operation, maintenance or repair of Honeywell aerospace products, Honeywell hereby grants you a limited, non-exclusive license to use these Materials to maintain or repair the subject Honeywell aerospace products only at the facility to which these Materials have been shipped ("the Licensed Facility"). Transfer of the Materials to another facility owned by you is permitted only if the original Licensed Facility retains no copies of the Materials and you provide prior written notice to Honeywell.

- 2. Rights In Materials Honeywell retains all rights in these Materials and in any copies thereof that are not expressly granted to you, including all rights in patents, copyrights, trademarks, and trade secrets. No license to use any Honeywell trademarks or patents is granted under this License Agreement.
- 3. Confidentiality You acknowledge that these Materials contain information that is confidential and proprietary to Honeywell. You agree to take all reasonable efforts to maintain the confidentiality of these Materials.
- 4. Assignment And Transfer This License Agreement may be assigned to a formally designated service designee or transferred to a subsequent owner or operator of an aircraft containing the subject Honeywell aerospace products. However, the recipient of any such assignment or transfer must assume all of your obligations under this License Agreement. No assignment or transfer shall relieve any party of any obligation that such party then has hereunder.
- 5. Copies of Materials Unless you have the express written permission of Honeywell, you may not make or permit making of copies of the Materials. Notwithstanding the foregoing, you may make copies of only portions of the Material for your internal use. You agree to return the Materials and any copies thereof to Honeywell upon the request of Honeywell.
- 6. Term This License Agreement is effective until terminated as set forth herein. This License Agreement will terminate immediately, without notice from Honeywell, if you fail to comply with any provision of this License Agreement or will terminate simultaneously with the termination or expiration of your applicable product support agreement, authorized repair facility agreement, or your formal designation as a third party service provider. Upon termination of this License Agreement, you will return these Materials to Honeywell without retaining any copies and will have one of your authorized officers certify that all Materials have been returned with no copies retained.
- 7. Remedies Honeywell reserves the right to pursue all available remedies and damages resulting from a breach of this License Agreement.
- 8. Limitation of Liability Honeywell does not make any representation regarding the use or sufficiency of the Materials. THERE ARE NO OTHER WARRANTIES, WHETHER WRITTEN OR ORAL, EXPRESS, IMPLIED OR STATUTORY, INCLUDING, BUT NOT LIMITED TO, (i) WARRANTIES ARISING FROM COURSE OF

TPE331

PERFORMANCE, DEALING, USAGE, OR TRADE, WHICH ARE HEREBY EXPRESSLY DISCLAIMED, OR (ii) WARRANTIES AGAINST INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS OF THIRD PARTIES, EVEN IF HONEYWELL HAS BEEN ADVISED OF ANY SUCH INFRINGEMENT. IN NO EVENT WILL HONEYWELL BE LIABLE FOR ANY INCIDENTAL DAMAGES, CONSEQUENTIAL DAMAGES, SPECIAL DAMAGES, INDIRECT DAMAGES, LOSS OF PROFITS, LOSS OF REVENUES, OR LOSS OF USE, EVEN IF INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THESE LIMITATIONS AND EXCLUSIONS WILL APPLY REGARDLESS OF WHETHER LIABILITY ARISES FROM BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING BUT NOT LIMITED TO NEGLIGENCE), BY OPERATION OF LAW, OR OTHERWISE.

9. Controlling Law - This License shall be governed and construed in accordance with the laws of the State of New York without regard to the conflicts of laws provisions thereof. This license sets forth the entire agreement between you and Honeywell and may only be modified by a writing duly executed by the duly authorized representatives of the parties.

Safety Advisory

WARNING: BEFORE THE MATERIALS CALLED OUT IN THIS PUBLICATION ARE USED, KNOW THE HANDLING, STORAGE AND DISPOSAL PRECAUTIONS RECOMMENDED BY THE MANUFACTURER OR SUPPLIER. FAILURE TO OBEY THE MANUFACTURERS' OR SUPPLIERS' RECOMMENDATIONS CAN RESULT IN PERSONAL INJURY OR DISEASE.

This publication describes physical and chemical processes which can make it necessary to use chemicals, solvents, paints, and other commercially available materials. The user of this publication must get the Material Safety Data Sheets (OSHA Form 174 or equivalent) from the manufacturers or suppliers of the materials to be used. The user must know the manufacturer/supplier data and obey the procedures, recommendations, warnings and cautions set forth for the safe use, handling, storage, and disposal of the materials.

Warranty/Liability Advisory

WARNING: HONEYWELL ASSUMES NO RESPONSIBILITY FOR ANY HONEYWELL EQUIPMENT WHICH IS NOT MAINTAINED AND/OR REPAIRED IN ACCORDANCE WITH HONEYWELL'S PUBLISHED INSTRUCTIONS AND/OR HONEYWELL'S FAA/SFAR 36 REPAIR AUTHORIZATION. NEITHER DOES HONEYWELL ASSUME RESPONSIBILITY FOR SPECIAL TOOLS AND TEST EQUIPMENT FABRICATED BY COMPANIES OTHER THAN HONEYWELL.

WARNING: INCORRECTLY REPAIRED COMPONENTS CAN AFFECT AIRWORTHINESS OR DECREASE THE LIFE OF THE COMPONENTS. INCORRECTLY FABRICATED SPECIAL TOOLING OR TEST EQUIPMENT CAN RESULT IN DAMAGE TO THE PRODUCT COMPONENTS OR GIVE UNSATISFACTORY RESULTS.

Copyright - Notice

Copyright 2015 Honeywell International Inc. All rights reserved.

Honeywell is a registered trademark of Honeywell International Inc.

All other marks are owned by their respective companies.

TPE331

Transmittal Information

ATA Number TPE331-72-A2255 (Publication Number D201506000011)

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	9 Jun 2015

TPE331

1. Planning Information

A. Effectivity

(1) This is a CATEGORY 1, SAFETY service bulletin.

NOTE:

CATEGORY 1 service bulletins address safety issues. Typically, they require urgent action and are often, but not always, referred to by an FAA Airworthiness Directive. Category 1 service bulletins may be issued as an ALERT service bulletin when immediate attention is required. ALERT service bulletins are printed on light blue paper. The compliance schedule stated in this service bulletin provides a reasonable reduction in risk while minimizing engine downtime.

(2) This service bulletin is applicable to the gearset spur-matched (high pressure pump gear set) shown in Table 2.

Table 2. Affected High Pressure Pump Gear Sets

PN	Serial Number (Matched Set)	
893614-1	13-169019-All Dash Numbers	
	14-169019-All Dash Numbers	
	15-169019-All Dash Numbers	

(3) The component listed in Table 2 is used in the fuel pump assemblies listed in Table 3.

Table 3. Affected Fuel Pump Assemblies

PN	Serial Number
869151-1, -3, -4, -5 895413-9, -12 893573-7 897380-1, -5, -6, -8, -9, -10 897390-1, -2, -3, -5, -6, -7, -8 897400-1, -2, -4, -5, -7	All

(4) The fuel pump assemblies listed in Table 3 are used on turboprop aircraft engines listed in Table 4.

Table 4. Affected Turboprop Aircraft Engines

PN	Model Number	Serial Number	Application
893400-1-1, -2	TPE331-1-101B	All	Turbo 18/Turboliner
894120-1-1, -2	TPE331-1-101E	All	Jetliner 600 (Dove)
896760-1 thru -4	TPE331-1-101F	All	Peacemaker
3101850-1	TPE331-1-101Z	All	S2R Turbo Thrush/Turbo AgCat
893250-1-1, -2	TPE331-1-151A	All	Mitsubishi MU-2DP/-2F/-2G
869595-1-1, -2	TPE331-1-151G	All	Merlin IIB

TPE331

Table 4. Affected Turboprop Aircraft Engines (Cont)

	Tuble 4: Allected Talbeprop Allectat Engines (cont.)			
PN	Model Number	Serial Number	Application	
3101260-1, -2	TPE331-1-151K	All	Century Turbo Commander	
869480-1-1, -2	TPE331-2-201A	All	Skyvan	
894980-1, -2	TPE331-2UA-203D	All	Goose	
894040-1, -2	TPE331-3U-303G	All	MerlinIII/IIIA/IV/IVA/Metro/MetroII/Metro IIA	
3102550-1 thru -4	TPE331-3U-304G	All	MerlinIII/IIIA/IV/IVA/Metro/MetroII/Metro IIA	
895880-1, -2	TPE331-3UW-303G	All	Merlin III/IIIA/IV/IVA/Metro/Metro II/Metro IIA	
3103860-1	TPE331-5-252C	All	CASA 212-100	
3102200-1	TPE331-5-252D	All	Dornier 228	
3102520-1	TPE331-5-252K	All	Jetprop Commander 690A/690B	
3101840-1	TPE331-5-252M	All	Mitsubishi MU-2N/-2P	
3102520-2, -3	TPE331-5-254K	All	Jetprop Commander 690C/690D	
3103330-1	TPE331-5A-252D	All	Dornier 228	
3103330-2	TPE331-5AB-252D	All	Dornier 228	
3102200-3	TPE331-5B-252D	All	Dornier 228	
3101630-1	TPE331-6-252B	All	Beechcraft B100	
3103300-1	TPE331-6-252L	All	Merlin IIB	
3101300-2	TPE331-6-252M	All	Mitsubishi MU-2J/-2K/-2L/-2M	
3103340-1	TPE331-6-252T	All	Skyvan	
3101630-2	TPE331-6-253B	All	Beechcraft B100	
3101470-1, -3	TPE331-8-401S	All	Conquest II	
3102510-1, -8	TPE331-8-402S	All	Conquest II	
3102510-2, -9	TPE331-8-403S	All	Conquest II	
3101470-2, -4	TPE331-8-404S	All	Conquest II	
3102510-4	TPE331-8-406S	All	Conquest II	
3102510-10, -11	TPE331-8-422S	All	Conquest II	
3102510-12, -13	TPE331-8-423S	All	Conquest II	
3102510-14	TPE331-8-426S	All	Conquest II	
3102190-1	TPE331-10-501K	All	Jetprop Commander 695/695A/695B	
3102180-1	TPE331-10-501M	All	Mitsubishi Marquise/Solitaire	
3102190-2	TPE331-10-511K	All	Jetprop Commander 695/695A/695B	

TPE331

Table 4. Affected Turboprop Aircraft Engines (Cont)

		Serial	
PN	Model Number	Number	Application
3102180-2	TPE331-10-511M	All	Mitsubishi Marquise/Solitaire
3108150-1	TPE331-10AV-511B	All	Beech B100
3108200-1	TPE331-10AV-511M	All	Mitsubishi MU-2J/-2K/-2L/-2M
3108240-1	TPE331-10AV-511KA	All	Beechcraft C90, E90
3108140-2	TPE331-10GP-511D	All	Dornier 228
3108140-1	TPE331-10GT-511D	All	Dornier 228
3108130-2	TPE331-10P-511D	All	Dornier 228
3103700-1	TPE331-10N-511S	All	Conquest II
3103700-2	TPE331-10N-512S	All	Conquest II
3103700-3	TPE331-10N-513S	All	Conquest II
3103700-4	TPE331-10N-514S	All	Conquest II
3103700-5	TPE331-10N-515S	All	Conquest II
3103700-6	TPE331-10N-531S	All	Conquest II
3103700-7	TPE331-10N-532S	All	Conquest II
3103700-8	TPE331-10N-533S	All	Conquest II
3103700-9	TPE331-10N-534S	All	Conquest II
3103700-10	TPE331-10N-535S	All	Conquest II
3108130-1	TPE331-10T-511D	All	Dornier 228
3108110-1	TPE331-10T-511K	All	Jetprop Commander 690C/690D
3108190-1	TPE331-10T-511M	All	Mitsubishi MU-2N/-2P
3108110-2	TPE331-10T-512K	All	Jetprop Commander 690B
3108110-3	TPE331-10T-513K	All	Jetprop Commander 690C/690D
3102050-1, -2	TPE331-10U-501G	All	Merlin IIIB
3102050-3	TPE331-10U-502G	All	Merlin IIIB
3102940-1	TPE331-10U-503G	All	Merlin IIIC
3102050-4	TPE331-10U-511G	All	Merlin IIIB
3102050-5	TPE331-10U-512G	All	Merlin IIIB
3102940-2	TPE331-10U-513G	All	Merlin IIIC
3103230-1	TPE331-10UA-511G	All	Merlin III/IIIA/IV/IVA/Metro/MetroII/Metro IIA
3102600-1	TPE331-10UF-501H	All	Jetstream 31

TPE331

Table 4. Affected Turboprop Aircraft Engines (Cont)

Coviet				
PN	Model Number	Serial Number	Application	
3102600-2	TPE331-10UF-511H	All	Jetstream 31	
3102600-5	TPE331-10UF-512H	All	Jetstream 31	
3102600-6	TPE331-10UF-513H	All	Jetstream 31	
3102600-9	TPE331-10UF-514H	All	Jetstream 31	
3102600-10	TPE331-10UF-515H	All	Jetstream 31	
3102600-11	TPE331-10UF-516H	All	Jetstream 31	
3103310-1	TPE331-10UG-513H	All	Jetstream 31	
3103310-3	TPE331-10UG-514H	All	Jetstream 31	
3103310-5	TPE331-10UG-515H	All	Jetstream 31	
3103310-7	TPE331-10UG-516H	All	Jetstream 31	
3103310-2	TPE331-10UGR-513H	All	Jetstream 31	
3103310-4	TPE331-10UGR-514H	All	Jetstream 31	
3103310-6	TPE331-10UGR-515H	All	Jetstream 31	
3103310-8	TPE331-10UGR-516H	All	Jetstream 31	
3102600-7	TPE331-10UR-513H	All	Jetstream 31	
3102600-12	TPE331-10UR-516H	All	Jetstream 31	
3102540-1, -5, -9	TPE331-11U-601G	All	Metro III/23/Merlin IVC	
3102540-2	TPE331-11U-602G	All	Metro III/23/Merlin IVC	
3102540-3, -6, -7, -10	TPE331-11U-611G	All	Metro III/23/Merlin IVC	
3102540-4, -8, -11	TPE331-11U-612G	All	Metro III/23/Merlin IVC	
3108170-1, -3	TPE331-12JR-701C	All	CASA 212-400	
3108250-1	TPE331-12JR-701S	All	AeroTwin Inc Caravan	
3108250-3	TPE331-12JR-702AT	All	AeroTwin Inc Caravan	
3108170-2, -4	TPE331-12JR-702C	All	CASA 212-400	
3108250-2	TPE331-12JR-702TT	All	Texas Turbines Inc Caravan	
3108250-5	TPE331-12JR-703AT	All	AeroTwin Inc Caravan	
3108250-4	TPE331-12JR-703TT	All	Texas Turbines Inc Caravan	
3103870-1	TPE331-12UA-701G	All	Metro III/23	
70100140-1	TPE331-12UAN-701E	All	Antonov AN2	
3103870-3, -4, -8, -9	TPE331-12UAR-701G	All	Metro III/23	

TPE331

Table 4. Affected Turboprop Aircraft Engines (Cont)

PN	Model Number	Serial Number	Application
3103380-4, -12, -32, -40	TPE331-12UAR-701H	All	Jetstream 32
3103380-5, -13, -33, -41	TPE331-12UAR-702H	All	Jetstream 32
3103380-6, -14, -34, -42	TPE331-12UAR-703H	All	Jetstream 32
3103380-7, -15, -35, -43	TPE331-12UAR-704H	All	Jetstream 32
3103380-8, -16, -36, -44	TPE331-12UAR-705H	All	Jetstream 32
3103380-9, -17, -37, -45	TPE331-12UAR-706H	All	Jetstream 32
3103380-10, -18, -38, -46	TPE331-12UAR-707H	All	Jetstream 32
3103380-11, -19, -39, -47	TPE331-12UAR-708H	All	Jetstream 32
3103870-6, -7, -11, -12	TPE331-12UHR-701G	All	Metro 23
3103380-20, -24, -48, -52	TPE331-12UHR-701H	All	Jetstream 32
3103380-21, -25, -49, -53	TPE331-12UHR-702H	All	Jetstream 32
3103380-22, -26, -50, -54	TPE331-12UHR-703H	All	Jetstream 32
3103380-23, -27, -51, -55	TPE331-12UHR-704H	All	Jetstream 32

B. Concurrent Requirements

(1) Not applicable.

C. Reason

WARNING:

FAILURE TO COMPLY WITH THIS SERVICE BULLETIN COULD CAUSE DISTRESS OF THE FUEL PUMP ASSEMBLY. IF LEFT UNCORRECTED, THE DISTRESS COULD CAUSE REDUCED FUEL FLOW TO THE ENGINE AND/OR CONTAMINATION OF THE FUEL SYSTEM, AND COULD CAUSE AN ENGINE IN-FLIGHT SHUTDOWN WHICH MAY RESULT IN SERIOUS INJURY OR DEATH TO PERSONNEL AND DAMAGE TO, OR LOSS OF, THE AIRCRAFT.

- (1) A gearset spur-matched, (high pressure pump gear set), PN 893614-1, used in a fuel pump assembly, PN 897390-8, has been found to have been manufactured with nonconforming material. This same high pressure pump gear set is also used in other fuel pump assemblies. Refer to Table 3.
- (2) The nonconforming material used is substantially less durable than required. Nonconforming material may have been used starting from approximately January 2013 to present.

TPE331

- (3) Operation of a fuel pump assembly which contains the nonconforming high pressure pump gear set will cause rapid degradation of the gear set. Subsequent deterioration of the fuel pump assembly performance and/or complete loss of fuel pump function will occur. Contamination of the engine fuel system may also occur.
- (4) A failure of one fuel pump assembly, which had a discrepant high pressure pump gear set installed, has occurred. This failure occurred in approximately 9 hours TSN.

D. Description

(1) This service bulletin provides instructions to inspect for and disposition nonconforming high pressure pump gear sets, installed or uninstalled in fuel pump assemblies which may be installed or uninstalled on engines.

E. Compliance

- (1) Compliance addresses a safety issue.
- (2) Honeywell recommends that:
 - (a) The requirements of Paragraph 3.B. are to be accomplished prior to installation of the high pressure pump gear set into a fuel pump assembly,
 - (b) For any fuel pump assembly that has less than 25 hours TSN, or less than 25 hours since last repair, or last overhaul, and received after January 01, 2013. The requirements of Paragraph 3.C. are to be accomplished prior to installation of a fuel pump assembly on to an engine,
 - (c) The requirements of Paragraph 3.D. are to be accomplished,
 - For engines with fuel pump assemblies which have less than 25 hours TSN, or 25 hours since repair, or 25 hours TSO, the requirements of Paragraph 3.D. are to be accomplished prior to each flight, initiating upon receipt of this service bulletin. Maintain inspections in accordance with Paragraph 3.D. until 25 hours time in this installation is accumulated.
 - For engines with fuel pump assemblies which have greater than 25 hours TSN, or 25 hours since repair, or 25 hours TSO, perform fuel system inspections in accordance with the applicable standard maintenance instructions.

F. Approval

(1) The accomplishment instructions in Paragraph 3 are FAA approved.

G. Manpower

- (1) Paragraph 3.B. An estimated 1 man-hour is required for this change when accomplished at the maintenance level.
- (2) Paragraph 3.C. An estimated 1 man-hour is required for this change when accomplished at the maintenance level.
- (3) Paragraph 3.D. An estimated 2 man-hours are required for this change when accomplished at the maintenance level.

TPE331

- H. Weight and Balance
 - (1) None.
- I. Electrical Load Data
 - (1) Not applicable.
- J. Software Accomplishment Summary
 - (1) Not applicable.
- K. References
 - (1) The sources of information used in the preparation of this service bulletin include Honeywell engineering documentation and the documents listed in Table 5.

Table 5. Reference Documents

Part/Model Number	Engine Overhaul Manual	Engine Maintenance Manual	Illustrated Parts Catalog
TPE331-1-101B	NA	72-00-92	72-00-91
TPE331-1-101E	NA	72-00-92	72-00-91
TPE331-1-101F	NA	72-00-92	72-00-91
TPE331-1-101Z	NA	72-00-92	72-00-91
TPE331-1-151A	NA	72-00-92	72-00-91
TPE331-1-151G	NA	72-00-92	72-00-91
TPE331-1-151K	NA	72-00-92	72-00-91
TPE331-2-201A	NA	72-00-92	72-00-91
TPE331-2UA-203D	NA	72-00-92	72-00-91
TPE331-3U-303G	NA	72-00-98	72-00-97
TPE331-3U-304G	NA	72-00-98	72-00-97
TPE331-3UW-303G	NA	72-00-98	72-00-97
TPE331-5-252C	NA	72-01-27	72-01-25
TPE331-5-252D	NA	72-01-22	72-01-20
TPE331-5-252K	NA	72-01-27	72-01-25
TPE331-5-252M	NA	72-01-27	72-01-25
TPE331-5-254K	NA	72-01-27	72-01-25
TPE331-5-255K	NA	72-01-27	72-01-25
TPE331-5A-252D	NA	72-01-22	72-01-20
TPE331-5AB-252D	NA	72-01-22	72-01-20
TPE331-5B-252D	NA	72-01-22	72-01-20
TPE331-6-252B	NA	72-01-32	72-01-30

TPE331

Table 5. Reference Documents (Cont)

Part/Model Number	Engine Overhaul Manual	Engine Maintenance Manual	Illustrated Parts Catalog
TPE331-6-252L	NA	72-01-95	72-01-94
TPE331-6-252M	NA	72-01-32	72-01-30
TPE331-6-252T	NA	72-01-95	72-01-94
TPE331-6-253B	NA	72-01-32	72-01-30
TPE331-8-401S	NA	72-00-13	72-00-11
TPE331-8-402S	NA	72-00-13	72-00-11
TPE331-8-403S	NA	72-00-13	72-00-11
TPE331-8-404S	NA	72-00-13	72-00-11
TPE331-8-406S	NA	72-00-13	72-00-11
TPE331-8-422S	NA	72-00-13	72-00-11
TPE331-8-423S	NA	72-00-13	72-00-11
TPE331-8-426S	NA	72-00-13	72-00-11
TPE331-10-501K	NA	72-00-29	72-01-18
TPE331-10-501M	NA	72-00-27	72-01-16
TPE331-10-511K	NA	72-00-29	72-01-18
TPE331-10-511M	NA	72-00-27	72-01-16
TPE331-10AV-511B	NA	72-01-32	72-01-30
TPE331-10AV-511M	NA	72-01-32	72-01-30
TPE331-10AV-511KA	NA	72-01-46	72-01-45
TPE331-10GP-511D	NA	72-01-22	72-01-20
TPE331-10GT-511D	NA	72-01-22	72-01-20
TPE331-10N-511S	NA	72-00-13	72-00-11
TPE331-10N-512S	NA	72-00-13	72-00-11
TPE331-10N-513S	NA	72-00-13	72-00-11
TPE331-10N-514S	NA	72-00-13	72-00-11
TPE331-10N-515S	NA	72-00-13	72-00-11
TPE331-10N-531S	NA	72-00-13	72-00-11
TPE331-10N-532S	NA	72-00-13	72-00-11
TPE331-10N-533S	NA	72-00-13	72-00-11
TPE331-10N-534S	NA	72-00-13	72-00-11

TPE331

Table 5. Reference Documents (Cont)

Part/Model Number	Engine Overhaul Manual	Engine Maintenance Manual	Illustrated Parts Catalog
TPE331-10N-535S	NA	72-00-13	72-00-11
TPE331-10P-511D	NA	72-01-22	72-01-20
TPE331-10T-511D	NA	72-01-22	72-01-20
TPE331-10T-511K	NA	72-00-29	72-01-18
TPE331-10T-511M	NA	72-00-27	72-01-16
TPE331-10T-512K	NA	72-00-29	72-01-18
TPE331-10T-513K	NA	72-00-29	72-01-18
TPE331-10U-501G	NA	72-00-23	72-01-15
TPE331-10U-502G	NA	72-00-23	72-01-15
TPE331-10U-503G	NA	72-00-30	72-01-19
TPE331-10U-511G	NA	72-00-23	72-01-15
TPE331-10U-512G	NA	72-00-23	72-01-15
TPE331-10U-513G	NA	72-00-30	72-01-19
TPE331-10UA-511G	NA	72-00-45	72-00-44
TPE331-10UF-501H	NA	72-00-42	72-00-41
TPE331-10UF-511H	NA	72-00-42	72-00-41
TPE331-10UF-512H	NA	72-00-42	72-00-41
TPE331-10UF-513H	NA	72-00-42	72-00-41
TPE331-10UF-514H	NA	72-00-42	72-00-41
TPE331-10UF-515H	NA	72-00-42	72-00-41
TPE331-10UF-516H	NA	72-00-42	72-00-41
TPE331-10UG-513H	NA	72-00-42	720041
TPE331-10UG-514H	NA	72-00-42	72-00-41
TPE331-10UG-515H	NA	72-00-42	72-00-41
TPE331-10UG-516H	NA	72-00-42	72-00-41
TPE331-10UGR-513H	NA	72-00-42	72-00-41
TPE331-10UGR-514H	NA	72-00-42	72-00-41
TPE331-10UGR-515H	NA	72-00-42	72-00-41
TPE331-10UGR-516H	NA	72-00-42	72-00-41
TPE331-10UR-513H	NA	72-00-42	72-00-41

TPE331

Table 5. Reference Documents (Cont)

Part/Model Number	Engine Overhaul Manual	Engine Maintenance Manual	Illustrated Parts Catalog
TPE331-10UR-516H	NA	72-00-42	72-00-41
TPE331-11U-601G	NA	72-00-25	72-00-24
TPE331-11U-602G	NA	72-00-25	72-00-24
TPE331-11U-611G	NA	72-00-25	72-00-24
TPE331-11U-612G	NA	72-00-25	72-00-24
TPE331-12JR-701C	NA	72-01-40	72-01-38
TPE331-12JR-702C	NA	72-01-40	72-01-38
TPE331-12JR-701S	NA	72-01-40	72-01-38
TPE331-12JR-702TT	NA	72-01-40	72-01-38
TPE331-12JR-702AT	NA	72-01-40	72-01-38
TPE331-12JR-703TT	NA	72-01-40	NA
TPE331-12JR-703AT	NA	72-01-40	NA
TPE331-12UA-701G	NA	72-01-36	72-01-34
TPE331-12UAR-701G	NA	72-01-36	72-01-34
TPE331-12UAR-701H	NA	72-00-79	72-00-78
TPE331-12UAR-702H	NA	72-00-79	72-00-78
TPE331-12UAR-703H	NA	72-00-79	72-00-78
TPE331-12UAR-704H	NA	72-00-79	72-00-78
TPE331-12UAR-705H	NA	72-00-79	72-00-78
TPE331-12UAR-706H	NA	72-00-79	72-00-78
TPE331-12UAR-707H	NA	72-00-79	72-00-78
TPE331-12UAR-708H	NA	72-00-79	72-00-78
TPE331-12UHR-701G	NA	72-01-36	72-01-34
TPE331-12UHR-701H	NA	72-00-79	72-00-78
TPE331-12UHR-702H	NA	72-00-79	72-00-78
TPE331-12UHR-703H	NA	72-00-79	72-00-78
TPE331-12UHR-704H	NA	72-00-79	72-00-78

L. Other Publications Affected

(1) Not applicable.

TPE331

M. Interchangeability or Intermixability of Parts

(1) Not applicable.

N. Acronyms and Abbreviations

(1) Refer to Table 6 for a list of the acronyms and abbreviations used in this service bulletin.

Table 6. List of Acronyms and Abbreviations

Term	Full Term
ATA	Air Transport Association
ECCN	Export Control Classification Number
EMM	engine maintenance manual
FAA	Federal Aviation Administration
Inc.	Incorporated
MSP	maintenance service program
ОНМ	overhaul manual
OSHA	Occupational Safety and Health Administration
PN	part number
Qty	quantity
SFAR	Special Federal Aviation Regulation
SIL	service information letter
TSN	time since new
TSO	time since overhaul

TPE331

2. Material Information

A. Material - Price and Availability

- (1) Information regarding availability of parts may be obtained from a Honeywell-authorized service facility. (Refer to SIL P331-27.) You can also use the "Dealer and Service Center Locator" tool at https://myaerospace.honeywell.com/wps/myportal to find approved service locations. Get the availability of parts from the Honeywell Product Catalog at https://myaerospace.honeywell.com/wps/myportal. If the part is not in the catalog, go to Honeywell, Aerospace Contact Team, Telephone: 800-601-3099 (Toll Free U.S.A./Canada), 602-365-3099 (International Direct).
- (2) Information regarding price and availability of parts may be obtained from a Honeywell-authorized service facility. (Refer to SIL P331-27.) You can also use the "Dealer and Service Center Locator" tool at https://myaerospace.honeywell.com/wps/myportal to find approved service locations. Get the price and availability of parts from the Honeywell Product Catalog at https://myaerospace.honeywell.com/wps/myportal. If the part is not in the catalog, go to Honeywell, Aerospace Contact Team, Telephone: 800-601-3099 (Toll Free U.S.A./Canada), 602-365-3099 (International Direct).

B. Industry Support Information

- (1) Send claims through the Honeywell MyAerospace web portal (www.myaerospace.com). Select the Maintenance Plans tab and use the Claims-Maintenance Programs sub-option.
- (2) A special/warranty program may be available for this modification, under certain conditions, provided compliance recommendations of Paragraph 1.E. are met. Information on special/warranty program and availability of parts may be obtained from a Honeywell-authorized service facility. (Refer to SIL P331-27.) You can also use the "Dealer and Service Center Locator" tool at https://myaerospace.honeywell.com/wps/myportal to find approved service locations.
- (3) The warranty/program data is listed in Table 7.

NOTE: The procedures outlined in this service bulletin may be accomplished at the Line level or greater.

TPE331

Table 7. Warranty/Program Data

Warranty/Program	Yes 1 2	No
Warranty/Special Program	Χ	

NOTES:

- 1. The costs of compliance with this service bulletin may be covered by Warranty, MSP, or other Programs marked with an "X" in the "Yes" column, subject to the terms and conditions of the applicable Warranty, MSP, or other Programs contracts. This service bulletin in no way alters, modifies, or extends the terms of any Warranty, MSP, or other Programs contract. For clarification or questions, contact Honeywell Warranty Department at 800-601-3099, Domestic or 602-365-3099, International and select Option 2.
- 2. Send claims through the Honeywell MyAerospace web portal (www.myaerospace.com). Select the Maintenance Plans tab and use the Claims-Maintenance Programs sub-option.

C. Material Necessary for Each Engine

NOTE:

- (1) The parts required to accomplish the instructions outlined in this service bulletin are shown in Table 8. Refer to Table 9 for the Instructions/Disposition Codes.
 - NOTE: Applicable illustrated parts catalogs and spare parts bulletins, dated later than the original issue date of this service bulletin, may introduce different parts for installation. Refer to these documents before ordering parts.
 - NOTE: Expendable parts, discarded in gaining access to the affected area of the equipment, are not included.
 - The inclusion of vendor names/addresses and part numbers in the following parts listing shall not be construed as an authorization of the vendor, pursuant to FAA regulations, to ship directly to the user. Neither shall it be construed as a certification by Honeywell that parts shipped by vendors directly to users will conform to the type design or that such parts are airworthy or safe for installation.

Table 8. Operator-Purchased Material

New PN	Keyword/ Nomenclature	Old PN	Qty	Unit Price ¹	Instructions/ Disposition Codes
893614-1	Gearset Spur- Matched	893614-1	1		S
869151-1, -3, -4, -5	Fuel Pump Assembly	869151-1, -3, -4, -5	1		S
893573-7	Fuel Pump Assembly	893573-7	1		S
895413-9, -12	Fuel Pump Assembly	895413-9, -12	1		S
897380-1, -5, -6, -8, -9, -10	Fuel Pump Assembly	897380-1, -5, -6, -8, -9, -10	1		S

TPE331

Table 8. Operator-Purchased Material (Cont)

New PN	Keyword/ Nomenclature	Old PN	Qty	Unit Price ¹	Instructions/ Disposition Codes
897390-1, -2, -3, -5, -6, -7, -8	Fuel Pump Assembly	897390-1, -2, -3, -5, -6, -7, -8	1		S
897400-1, -2, -4, -5, -7	Fuel Pump Assembly	897400-1, -2, -4, -5, -7	1		S

NOTE:

1. Refer to Paragraph 2.A. for information regarding price and availability of parts.

Table 9. Instructions/Disposition Codes

Code	Description
Disposition Code S	Send the old part to Honeywell International Inc., Material Receiving, 1944 E. Sky Harbor Circle, Phoenix, AZ 85034-3440 for rework.

D. Material Necessary for Each Spare

(1) Not applicable.

E. Reidentified Parts

(1) Not applicable.

F. Tooling - Price and Availability

(1) No special tooling is required except that already listed in publications referenced in Paragraph 1.K.(1).

TPE331

3. Accomplishment Instructions

A. General Information

(1) Obey the precautions.

NOTE: Publications listed in Paragraph 1.K.(1) provide applicable disassembly, cleaning, inspection, reassembly, and testing instructions and shall be referred to during the accomplishment of the following instructions.

B. Inspect Gearset Spur-Matched, (High Pressure Pump Gear Set), PN 893614-1, (Shelf-Stock)

- (1) Inspect high pressure pump gear set(s), PN 893614-1, in shelf stock. Verify that the serial number of the high pressure pump gear set, PN 893614-1, does not correspond to any serial number listed in Table 2. Do not install a high pressure pump gear set which has a serial number corresponding to the serial numbers listed in Table 2 into a fuel pump assembly.
- (2) Return any high pressure pump gear set, PN 893614-1 with a serial number corresponding to those in Table 2 to Honeywell.

C. Inspect Fuel Pump Assembly, (Shelf Stock)

NOTE: Refer to Table 3 for a list of applicable fuel pump assembly part numbers.

- (1) Inspect applicable fuel pump assemblies in shelf stock.
 - (a) Contact Honeywell or overhaul repair facility, as applicable, to check the fuel pump assembly manufacturing or maintenance records and verify that the high pressure pump gear set, PN 893614-1, installed does not correspond to any serial number listed in Table 2.
 - (b) Return any fuel pump assembly containing a high pressure pump gear set with a serial number corresponding to any serial number listed in Table 2 to Honeywell. Do not install a fuel pump assembly which meets these criteria on to an engine.
 - (c) Return any fuel pump assembly containing a high pressure pump gear set that cannot be verified to Honeywell. Do not install a fuel pump assembly which meets these criteria on to an engine.
 - (d) For fuel pump assemblies that have been verified as not having a serial number corresponding to those listed in Table 2. Make an entry in the fuel pump assembly component maintenance record card noting date of compliance, serial number of installed high pressure pump gear set, and compliance with this service bulletin (and service bulletin revision number, if applicable).

D. Inspect Engines with Applicable Fuel Pump Assemblies Installed

NOTE: Refer to Table 3 for a list of applicable fuel pump assembly part numbers.

(1) Using the instructions in Paragraph 3.C.(1)(a), verify that the installed fuel pump assembly does not have a gearset spur-matched, PN 893614-1, installed which corresponds to any serial number listed in Table 2.

TPE331

- (2) If the installed fuel pump assembly is verified to not have a gearset spur-matched, PN 893614-1, installed which corresponds to any serial number listed in Table 2. Make an entry in the fuel pump assembly component maintenance record card noting date of compliance, serial number of installed high pressure pump gear set, and compliance with this service bulletin (and service bulletin revision number, if applicable). No further action is required. Proceed to Paragraph 3.D.(3)(k).
- (3) If the installed fuel pump assembly has a gearset spur-matched, PN 893614-1, installed which has a serial number that corresponds to any of those listed in Table 2.
 - (a) Gain access to the fuel filter element located in the flow divider assembly in accordance with the EMM.
 - (b) Remove and examine the fuel filter element for evidence of metal contamination.
 - If no contamination if present, reinstall the fuel filter element. Install components removed to gain access to the fuel filter element and proceed to Paragraph 3.D.(3)(c).
 - 2 If contamination is present, proceed to Paragraph 3.D.(3)(c).
 - (c) Gain access to the fuel pump filter element.
 - (d) Remove and examine the fuel filter element for evidence of metal contamination.
 - If no contamination is present and no contamination was found in Paragraph 3.D.(3)(b), reinstall the fuel filter element. Install components removed to gain access to the fuel filter element and test the engine in accordance with the engine test instructions. Proceed to Paragraph 3.D.(3)(k).
 - If contamination is present, and/or if contamination was found in Paragraph 3.D.(3)(b), proceed to Paragraph 3.D.(3)(e).
 - (e) Gain access to and remove the fuel pump assembly and return it to Honeywell.
 - NOTE: Refer to the documents listed in Table 5 as applicable, to determine component manuals to be used in the following step, as necessary.
 - (f) Gain access, as necessary, to and:
 - 1 Remove the fuel control assembly. Overhaul the fuel control assembly.
 - Remove the flow divider assembly. Overhaul the flow divider assembly.
 - 3 Remove the fuel shutoff valve. Overhaul the fuel shutoff valve.
 - 4 Remove the oil to fuel cooler, if applicable. Overhaul the oil to fuel cooler.
 - 5 Remove the fuel nozzle assemblies. Functionally check fuel nozzle assemblies.
 - Remove and clean all other fuel system components and plumbing to remove fuel system contamination.

TPE331

- (g) Install serviceable components in place of those removed in Paragraph 3.D.(3)(f), as necessary, in accordance with the EMM.
- (h) Using the instructions in Paragraph 3.C.(1)(a), verify that the replacement fuel pump assembly to be installed does not have a gearset spur-matched, PN 893614-1, installed which corresponds to any serial number listed in Table 2.
- (i) Install other engine components removed to gain access to the components removed in Paragraph 3.D.(3)(e) thru Paragraph 3.D.(3)(f).
- (j) Test the engine in accordance with the engine test instructions.
- (k) Make an entry in the engine log book noting date of compliance, engine operating time, part number(s) and serial number(s) of installed component(s) (as applicable), and compliance with this service bulletin (and service bulletin revision number, if applicable).
- (I) Reidentification of equipment is not required.
- (m) Complete the Certificate of Compliance form in Paragraph 4.A. and send to Honeywell.

TPE331

Blank Page

TPE331

4. Appendix

A. Appendix A, Certificate of Compliance

To: Operator or Service Center Performing Modification

Upon modification of equipment, please fill in the information requested below, then mail or email the completed Certificate of Compliance (refer to Figure 1) to:

Honeywell International Inc.

111 S 34th Street, Mail Stop 503-320

Phoenix, AZ 85034-2802

Email: engine.reliability@honeywell.com

Owner/Operator

Aircraft Model Aircraft Serial Number

I certify that the following engine/equipment has been modified in accordance with the listed service bulletins.

ENGINE/EQUIPMENT

			LITGIITE/E	QUII III EITT				
NUMBER 1		NUMBER 2		NUMBER 3		NUMBER 4		
PART NUME	JMBER PART NUMBER		PART NUMBER		PART NUMBER			
MODEL NUMBER		MODEL NUMBER		MODEL NUMBER		MODEL NUMBER		
SERIAL NUN	SERIAL NUMBER		SERIAL NUMBER		SERIAL NUMBER		SERIAL NUMBER	
TSN/TSO		TSN/TSO		TSN/TSO		TSN/TSO		
CYCLES		CYCLES		CYCLES		CYCLES		
SERVICE BULLETIN NUMBER	REV. NUMBER	SERVICE BULLETIN NUMBER	REV. NUMBER	SERVICE BULLETIN NUMBER	REV. NUMBER	SERVICE BULLETIN NUMBER	REV. NUMBER	
NUMBER 1		NUMBER 2		NUMBER 3		NUMBER 4		
<u>Signature</u> Date								
Repair Facility								

Figure 1. (Sheet 1 of 1) Certificate of Compliance

TPE331

EMAIL TO

engine.reliability@honeywell.com