Piper Aircraft, Inc.
2926 Piper Drive
Vero Beach, Florida, U.S.A. 32960

SERVICE BULLETIN No. 1035A

PIPER CONSIDERS COMPLIANCE MANDATORY

Date: March 22, 2007 (S)(M)

SB 1035A supersedes SB 1035. SB 1035A provides revised AD number, revised visual inspection criteria and revised inspection criteria in Service Bulletin No. 101SB020, Rev. 3.

SUBJECT:

Distribution of Textron Lycoming Service Bulletin 529B, "Reprint of Crane/Lear Romec Service Bulletin No. 101SB020, Rev. 3"

MODELS AFFECTED:	SERIAL NUMBERS AFFECTED:
PA-E23-250 Aztec (w/turbocharger)	27-2505 through 27-4866, 27-7304917 through 27-7405476, and 27-7554001 through 27-8154030
PA-23-250 Aztec (w/turbocharger)	27-2505 through 27-4425, 27-4427 through 27-4573
PA-24-260 Comanche (w/turbocharger)	24-4783, 24-4804 through 24-5034
PA-24-400 Comanche	26-2 through 26-148
PA-31, 31-300, 31-325 Navajo	31-2 through 31-8312019
PA-31-350 Navajo Chieftain	31-5001 through 31-8452021
PA-31-350 T1020	31-8253001 through 31-8553002
PA-31P Pressurized Navajo	31P-1 through 31P-7730012
PA-31P-350 Mojave	31P-8414001 through 31P-8414050
PA-32RT-300T Turbo Lance II	32R-7787001 through 32R-7987126
PA-32-301T Saratoga	32-8024001 through 32-8424002
PA-32R-301T Turbo Saratoga SP	32R-8029001 through 32R-8629006, 3229001 through 3229003
PA-32R-301T Saratoga II TC	3257001 through 3257102
PA-36-375 Brave	36-7802001 through 36-8302025
PA-46-350P Malibu Mirage	4622001 through 4622200, 4636001 through 4636221

COMPLIANCE TIME: Same as required for Service Bulletin 101SB020, Rev 3.

APPROVAL: The technical content of this Service Bulletin has been shown to comply with the applicable Federal Aviation Regulations and is FAA approved.

(OVER)

ATA: 7311

PURPOSE: To provide the revised F.A.A. AD-2003-14-03 number and provide new/revised inspection criteria in the Textron Lycoming Service Bulletin, SB529B and Crane/Lear Romec Service Bulletin 101SB020 Rev 3.

This Service Bulletin provides distribution of Textron Lycoming Service Bulletin 529B and Crane/Lear Romec Service Bulletin 101SB020 Rev. 3.

INSTRUCTIONS: As specified in Textron Lycoming Service Bulletin, SB529B and Crane/Lear Romec Service Bulletin 101SB020 Rev 3.

MATERIAL REQUIRED: As specified in Textron Lycoming Service Bulletin, SB529B and Crane/Lear Romec Service Bulletin 101SB020 Rev 3.

AVAILABILITY OF PARTS: Textron Lycoming. (Check with your Textron Lycoming Authorized Field Service Facility for details.)

EFFECTIVITY DATE: This Service Bulletin is effective upon receipt.

SUMMARY: Refer to the attached Textron Lycoming Service Bulletin 529B for details on applicable factory participation.

Please contact your Textron Lycoming Authorized Field Service Facility to make arrangements for compliance with this Service Bulletin in accordance with the compliance time indicated.

NOTE: If you are no longer in possession of this aircraft, please forward this information to the present owner/operator and notify the factory of address/ownership corrections. Changes should include aircraft model, serial number, current owner's name and address.

Corrections and/or changes should be directed to:

PIPER AIRCRAFT, INC.
Attn: Customer Service
2926 Piper Drive
Vero Beach, FL 32960

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A Textron Company

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MANDATORY

SERVICE BULLETIN

DATE: June 10, 2002

Service Bulletin No. 529B
(Supersedes Service Bulletin No. 529A)
Engineering Aspects are
FAA Approved

SUBJECT: Reprint of Crane/Lear Romec Service Bulletin No. 101SB020, Rev. 3

MODELS AFFECTED: All Lycoming aircraft engines employing new or overhauled "AN" rotary fuel pump model series RG9080, RG9570 and RG17980, including:
IO-320, LIO-320;
IO-360, HIO-360, TIO-360;
GO-435;
GO-480, IGO-480;
IO-540, AEIO-540, HIO-540, TIO-540, LTIO-540, IGO-540, TIVO-540;
TIGO-541;
and IO-720 engine models.
(See Effectivity for Service Bulletin No. 101SB020, Rev. 3.)

NOTE

Pumps with a "/M" suffix after the Lear Romec Part Number are not subject to this Service Bulletin.

TIME OF COMPLIANCE: Same as that required for Service Bulletin No. 101SB020, Rev. 3.

Crane/Lear Romec Service Bulletin No. 101SB020, Rev. 3 is reprinted in its entirety as follows. Lycoming requires compliance with this Service Bulletin.

This reprint was current at the time Service Bulletin No. 529B was issued. However, when complying with this Service Bulletin, insure that this reprint of Crane/Lear Romec Service Bulletin No. 101SB020, Rev. 3 is still current at time of compliance.

NOTE

If the aircraft installation necessitates fuel pump removal for compliance, see latest revision of Service Instruction No. 1420 for lubrication of fuel pump drive shaft prior to reassembly. Consider compliance with Service Bulletin No. 539.

CRANE AEROSPACE LEAR ROMEC A Crane Co. Company

SERVICE BULLETIN

FUEL PUMP – Torquing of Relief Valve Cover Screws.

THIS SERVICE BULLETIN REPLACES SERVICE BULLETIN NO. 101SB018 FOR AFFECTED MODELS

1. Planning Information

NOTE: Pumps with the "/M" suffix added to the Lear Romec part number are not subject to this service bulletin.

A. Effectivity

This bulletin applies to new, in-service and newly overhauled Lear Romec rotary fuel pump models:

Lear Romec P/N	TC Holder P/N's	Eligibility
RG9080F2	Lycoming 68262	GO-435/GO-480 Series
RG9080J4A	Lycoming LW-13909	AEIO-540/IO-540/IO-720/LTIO-540/ TIGO-541/TIO-540/TIO-360 Series
RG9080J6A	Lycoming LW-14444	IO-720/LTIO-540/TIO-540 Series
RG9080J7A	Lycoming LW-13920	IO-540/TIO-540/IGO-540 Series
RG9080J8A	Lycoming LW-15740	IO-720/TIO-540/TIVO-540 Series
RG9570K1	Lycoming 63E22288	AEIO-540 Series
RG9570K1	Bech 50-389141-1	56TC, A56TC, 60, A60 & B60
RG9570K2	Beech 50-389141-3	65-80, 65-A80, 65-B80 & 65-88
RG9570K3	Beech 50-389141-5	65, A65 & 70
RG9570K4	Beech 50-389141-13	B60
RG9570J	Beech 50-389141-7	65
RG9570J1	Beech 50-389141-9	50 Series
RG9570P/P1	Lycoming LW-19012	TIO-540-S1AD
RG17980	Lycoming 74547	IO-540/IO-720/IO-320 Series
RG17980A	Lycoming 76188	IO-320 Series
RG17980D	Lycoming 76486	IO-320/IO-540/TIO-540/ HIO-540 Series
RG17980E	Lycoming 77443	IO-360/TIO-360, IO-540 Series
RG17980J	Lycoming 78993	IO-540/TIO-540 Series
RG17980K	Lycoming LW-11166	LIO-320/TIO-360/HIO-360/IO-540/ AEIO-540 Series
RG17980N	LycomingLW-12533	IGO-480-A1B6/IO-540 Series
RG17980P	Lycoming LW-12534	AEIO-540/IO-540/TIO-540 Series
RG17980R	Lycoming LW-15506	HIO-360 Series
RG17980U	Lycomning 62D21153	TIO-540 Series

B. Reason.

There have been field reports of fuel leakage past the relief valve gasket on several of the above listed fuel pumps. This condition could result in a fire hazard, fuel flow fluctuation, or engine stoppage.

C. Description

This bulletin describes actions to be taken to ensure that valve cover screws are tightened to the correct torque value.

CRANE AEROSPACE LEAR ROMEC A Crane Co. Company

SERVICE BULLETIN

FUEL PUMP – Torquing of Relief Valve Cover Screws.

NOTE: Scheduled and periodic reinspections for torque and gasket extrusion are defined on page 6 of this document, paragraph 2.B.

D. Compliance

(1) Initial inspection after 5 hours but less than 10 hours of operation, or 30 days whichever comes first.

(2) After initial inspection, perform scheduled inspections as follows:

(a) After 20 hours but less than 25 hours of operation, or 3 months whichever comes first.

(b) After 45 hours but less than 50 hours of operation, or 6 months whichever comes first.

(3) After scheduled inspections, perform periodic inspection after every 45 hours but less than 50 hours of operation thereafter.

E. Approval.

Not applicable.

F. Manpower.

Manpower required to accomplish this bulletin varies depending on the pump model, the aircraft pump installation, and the status of the pump (on-aircraft/off-aircraft) at the time of implementation. Actual torquing and safety-wiring will require no more than 0.5 man hours.

G. Material – Cost and Availability .

Not applicable.

H. Tooling - Price and Availability.

Not applicable

I. Weight and Balance.

Not applicable.

J. References

(1) This service bulletin replaces Service Bulletin 101SB018 for affected models.

(2) The following component maintenance manuals are applicable:

(a) RG9080 Series dated Feb 07/85 with Rev 3 dated Jan 06/95
(b) RG9570K1/K2/K3/K4/J/J1/P/P1 dated Mar 15/86 with Rev 1 dated Nov 22/91
(c) RG17980 Series dated Sep 17/86 with Rev 3 dated Sep 18/91

CRANE AEROSPACE LEAR ROMEC A Crane Co. Company

SERVICE BULLETIN

FUEL PUMP – Torquing of Relief Valve Cover Screws.

2. **Accomplishment Instructions**

A. Initial Inspection.

(1) On aircraft.

NOTE: If pump is not accessible on-aircraft such that the following inspection requirements can be fully complied with or is a pump model number RG9080J4A installed on Piper Malibu aircraft, it is mandatory to remove the pump per applicable engine maintenance manual instructions and proceed according to paragraph 2.A.(2) Off Aircraft.

NOTE: Safety-wire need not be removed to perform the following check.

(a) If pump is accessible without removing it from aircraft, the following check shall be performed.

(b) Visually inspect the split lines between the pump housing, relief valve housing and relief valve cover for evidence of fuel leakage or noticeable gasket extrusion adjacent to the pump inlet and outlet ports. If there is evidence of fuel leakage or noticeable extrusion, replace the pump per applicable engine maintenance instructions. (See figures 1,2,3 & 4.)

(c) Check the tightness of relief valve cover attaching screws using a torque indicating screwdriver. Minimum torque shall be 23 inch-pounds. Torque shall be checked in the tightening direction.

(d) If screws are loose, remove safety-wire and tighten screws evenly and progressively in a criss-cross pattern to 23-25 inch-pounds torque in the sequence shown in figures 1 and 2.

NOTE: If screw torque registers greater than 23-25 inch-pounds when inspected per paragraph 2.A.(1)(c) above, the screws need not be backed off and retorqued. This bulletin applies only if screws exhibit preload torque of less than 23 inch-pounds.

(e) Safety-wire screws after torquing in accordance with applicable component maintenance manual.

(2) Off Aircraft

NOTE: Safety-wire need not be removed to perform the following check.

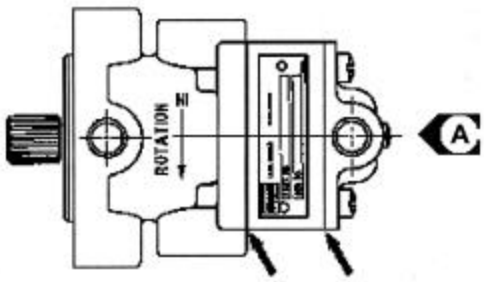
(a) Visually inspect the split lines between the pump housing, relief valve housing and relief valve cover for evidence of fuel leakage or noticeable gasket extrusion adjacent to the pump inlet and outlet ports. If there is evidence of fuel leakage or noticeable extrusion, replace the pump per applicable engine maintenance instructions. (See figures 1,2,3 & 4.)

(b) Check the tightness of relief valve cover attaching screws using a torque indicating screwdriver. Minimum torque shall be 23 inch-pounds. Torque shall be checked in the tightening direction.

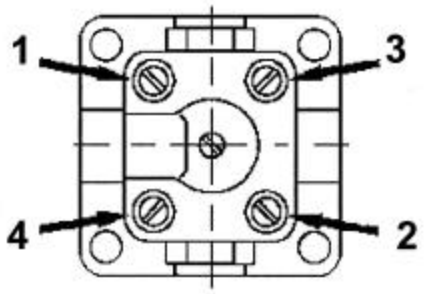
CRANE AEROSPACE | LEAR ROMEC

SERVICE BULLETIN

FUEL PUMP – Torquing of Relief Valve Cover Screws.



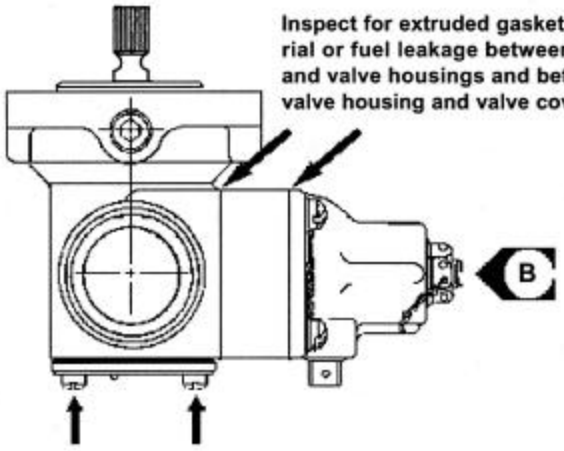
Inspect for extruded gasket material or fuel leakage between pump and valve housings and between valve housing and valve cover.



VIEW A

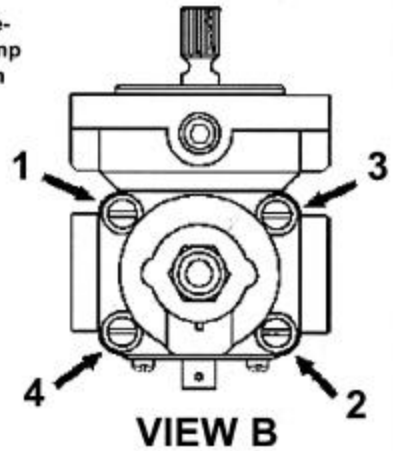
Tighten screws evenly and progressively in the numbered sequence shown.

Torquing Sequence – RG17980 Series
Figure 1



Inspect for extruded gasket material or fuel leakage between pump and valve housings and between valve housing and valve cover.

The instructions of this service bulletin do not apply to the four pump cover screws.



VIEW B

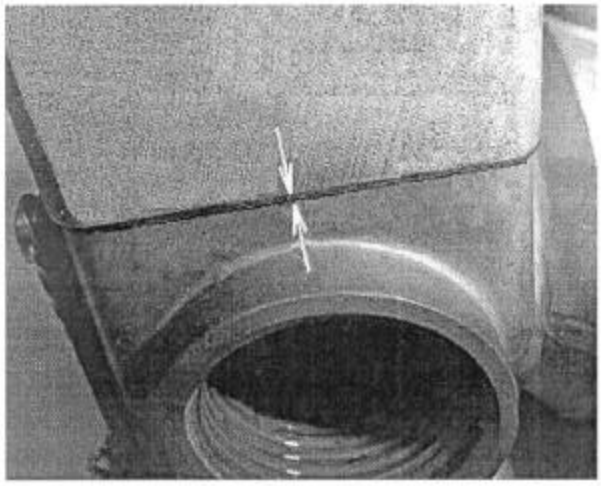
Tighten screws evenly and progressively in the numbered sequence shown.

Torquing Sequence – RG9080 and RG9570 Series
Figure 2

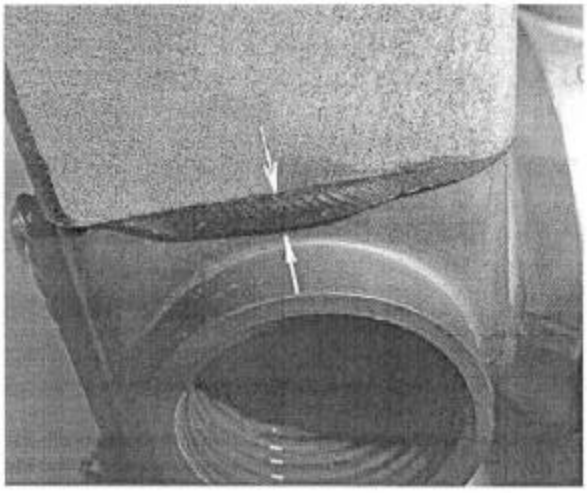
CRANE AEROSPACE LEAR ROMEC A Crane Co. Company

SERVICE BULLETIN

FUEL PUMP – Torquing of Relief Valve Cover Screws.



Normal Extrusion – All Series
Figure 3



Excessive Extrusion – All Series
Figure 4

CRANE AEROSPACE LEAR ROMEC

SERVICE BULLETIN

FUEL PUMP – Torquing of Relief Valve Cover Screws.

(c) If screws are loose, tighten screws evenly and progressively in a criss-cross pattern to 23-25 inch-pounds torque in the sequence shown in figures 1 and 2.

NOTE: If screw torque registers greater than 23-25 inch-pounds when inspected per paragraph 2.A.(2)(b) above, the screws need not be backed off and retorqued. This bulletin applies only if screws exhibit preload torque of less than 23 inch-pounds.

(d) Safety-wire screws after torquing in accordance with applicable component maintenance manual.

(e) If applicable, reinstall per applicable engine maintenance manual instructions.

B. Scheduled Inspections

Scheduled inspections are to be performed in accordance with paragraphs 2.A.(1) and (2).

C. Periodic Inspection.

(1) Periodic inspections are to be performed in accordance with paragraphs 2.A.(1) and (2).

(2) Inspect and verify appropriate torque, retorquing as necessary, until achieving 2 consecutive inspec tions at fifty (50) hour intervals where no retorquing is required.

(3) After achieving two consecutive fifty (50) inspections where no retorquing is required, only visually inspect the split lines between the pump housing, relief valve housing and relief valve cover for any evidence of leakage or noticeable gasket extrusion adjacent to the pump inlet or outlet ports.

3. **Material Information**

Not applicable.