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# MANDATORY

# SERVICE BULLETIN

DATE: September 8, 2023 Service Bulletin No. 653  
Engineering Aspects are  
FAA Approved

SUBJECT: Hartzell Engine Tech (HET) Alert Service Bulletin (ASB) No. 098

MODELS AFFECTED: Lycoming engine models using the HET part number 200F or 202F series fuel pumps with less than 100 hours time-in-service for the fuel pump.

TIME OF COMPLIANCE: Next maintenance event not to exceed 25 hours.

**NOTICE:** Incomplete review of all the information in this document can cause errors. Read the entire Service Bulletin to make sure you have a complete understanding of the requirements.

This Mandatory Service Bulletin (MSB) is notification of required action for compliance with Hartzell Engine Technologies Alert Service Bulletin No. 098 dated May 22, 2023, regarding Lycoming engine models using Lycoming fuel pump part numbers which correspond to HET 200F and 202F series fuel pumps approved for use on Lycoming engines (see most current revision of Lycoming Service Instruction No. 1533 - Approved Rotary Vane Fuel Pumps).

Affected fuel pumps may contain a washer and O-ring assembly where the washer for the set screw is not fully seated. This condition may cause a fuel leak from the set screw orifice and result in an accumulation of flammable fuel in the engine cowl.

Lycoming is requiring that all operators follow the Required Action in this MSB, and HET ASB No. 098 to determine if their fuel pump is affected and still in-service or in spares inventory. This Lycoming MSB provides Instructions for Continued Airworthiness (ICA).

Table 1 – Identifies current Lycoming part numbers for affected fuel pumps. Please note the additional Lycoming part numbers\* that do not appear in HET ASB No. 098. These additional pumps are Lycoming proprietary part numbers manufactured for Lycoming by HET using the 200F and 202F series fuel pumps. The Lycoming part numbers in Table 1 of this Lycoming MSB are affected by HET ASB No. 098.

Table 2 – Identifies engine serial numbers shipped from Lycoming that included fuel pumps with serial numbers within the affected serial number range of HET ASB No. 098 at the time the engine left Lycoming. It is the responsibility of the owner/operator to verify whether an affected fuel pump is still installed on the engine.

Table 3 – Identifies fuel pumps with serial numbers within the affected serial number range of HET ASB No. 098 that were sold as replacement parts through the Lycoming Distributor Network.



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**Table 1**  
**Part Numbers for Affected HET Fuel Pump Series**

| Lycoming Part Number | HET Fuel Pump Part Number | Lycoming Engine Models Affected                            |
|----------------------|---------------------------|--|
| 62E23188*            | 200F-5003                 | TIO-540-AAIAD<br>LTIO- 540-J2B, -U2A<br>IO-720-B1BD, -D1CD |
| 62E23189*            | 200F-5005                 | TIO-540-AJ1A, -V2AD, -W2A<br>LTIO-540-V2AD<br>IO-720-A1B   |
| 62E23190             | 200F-5006                 | TIO-540-AJ1A   |
| 62E28150*            | 202F-1002                 | TIO-540-S1AD   |
| 62E28152*            | 202F-1003                 | TIO-540-AJ1A   |

**Required Action**

1. Identify whether you have any of the affected HET fuel pump models in Table 1, installed on your Lycoming engine or in spares inventory. Identify whether you have an affected engine serial number as listed in Table 2. Identify whether you have an affected fuel pump installed on your engine or in spares inventory listed in Table 3.

**NOTICE:** Tables 1, 2, and 3 are for reference only and are not all-inclusive lists of engines or fuel pumps affected by this MSB. It is the responsibility of the owner/operator to verify whether an affected fuel pump is installed on your engine or in your spares inventory.

**NOTICE:** If your fuel pump is not affected by the HET Bulletin, or you have already complied with ASB No. 098, no further action is required.

2. Follow the instructions in the latest revision of HET ASB No. 098 to determine if your fuel pump serial number is affected. Affected fuel pumps are to be inspected, repaired, or replaced in accordance with HET ASB No. 098. Do not send fuel pumps to Lycoming for repair. Doing so will cause unnecessary delays.
3. Removal and reinstallation of the fuel pump (if required) must be performed in accordance with the appropriate engine maintenance manual, overhaul manual, or applicable ICA. Refer to the latest revision of Lycoming Service Instruction No. 1484 - Installation Torque for Fuel Metering Device, Carburetor, Fuel Injector Servo or “AN” Fuel Pump Hold Down Nuts for additional guidance when reinstalling rotary fuel pumps.
4. Record any repair activity and compliance with this MSB in the engine maintenance records.

**Table 2**  
**Affected Engine Serial Numbers and Fuel Pump Serial Numbers**

| Engine Model | Engine S/N | Fuel Pump S/N | Engine Model | Engine S/N | Fuel Pump S/N |
|--------------|------------|---------------|--------------|------------|---------------|
| LTIO-540-J2B | L-1200-68A | H-WEN036FP    | LTIO-540-J2B | L-2484-68A | H-WAN006FP    |
| LTIO-540-J2B | L-1230-68A | H-VKN090FP    | LTIO-540-J2B | L-2611-68A | H-WAN066FP    |
| LTIO-540-J2B | L-1234-68A | H-XBN051FP    | LTIO-540-J2B | L-2803-68A | H-YHN008FP    |
| LTIO-540-J2B | L-1410-68A | H-YJN043FP    | LTIO-540-J2B | L-286-68A  | H-VGN013FP    |
| LTIO-540-J2B | L-1430-68A | H-XDN057FP    | LTIO-540-J2B | L-2873-68A | H-XEN026FP    |
| LTIO-540-J2B | L-1617-68A | H-XDN059FP    | LTIO-540-J2B | L-2962-68A | H-VEN060FP    |
| LTIO-540-J2B | L-1636-68A | H-YHN006FP    | LTIO-540-J2B | L-2970-68A | H-XDN061FP    |
| LTIO-540-J2B | L-2327-68A | H-WAN005FP    | LTIO-540-J2B | L-709-68A  | H-WBN030FP    |
| LTIO-540-J2B | L-2351-68A | H-VKN093FP    | LTIO-540-J2B | L-915-68A  | H-VDN051FP    |

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**Table 2 (Cont.)  
Affected Engine Serial Numbers and Fuel Pump Serial Numbers**

| Engine Model | Engine S/N  | Fuel Pump S/N | Engine Model | Engine S/N  | Fuel Pump S/N |
|--------------|-------------|---------------|--------------|-------------|---------------|
| LTIO-540-J2B | RL-1050-68A | H-YHN020FP    | TIO-540-AJ1A | L-13500-61E | H-ZBN011FP    |
| LTIO-540-J2B | RL-1053-68A | H-VEN059FP    | TIO-540-AJ1A | L-13981-61E | H-ZCN055FP    |
| LTIO-540-J2B | RL-1064-68A | H-YJN042FP    | TIO-540-AJ1A | L-13996-61E | H-YBN020FP    |
| LTIO-540-J2B | RL-1106-68A | H-XBN053FP    | TIO-540-AJ1A | L-14137-61E | H-YHN034FP    |
| LTIO-540-J2B | RL-1127-68A | H-YFN032FP    | TIO-540-AJ1A | L-14140-61E | H-WDN037FP    |
| LTIO-540-J2B | RL-1143-68A | H-XBN049FP    | TIO-540-AJ1A | L-14147-61E | H-YBN046FP    |
| LTIO-540-J2B | RL-1291-68A | H-WAN068FP    | TIO-540-AJ1A | L-14153-61E | H-YAN016FP    |
| LTIO-540-J2B | RL-1370-68A | H-VDN052FP    | TIO-540-AJ1A | L-14154-61E | H-XIN012FP    |
| LTIO-540-J2B | RL-1457-68A | H-XDN060FP    | TIO-540-AJ1A | L-14178-61E | H-WDN050FP    |
| LTIO-540-J2B | RL-1598-68A | H-XDN058FP    | TIO-540-AJ1A | L-14184-61E | H-ZAN048FP    |
| LTIO-540-J2B | RL-1875-68A | H-WEN034FP    | TIO-540-AJ1A | L-14188-61E | H-YHN049FP    |
| LTIO-540-J2B | RL-1929-68A | H-YJN040FP    | TIO-540-AJ1A | L-14189-61E | H-ZBN015FP    |
| LTIO-540-J2B | RL-2098-68A | H-YJN044FP    | TIO-540-AJ1A | L-14191-61E | H-YBN034FP    |
| LTIO-540-J2B | RL-2167-68A | H-VEN058FP    | TIO-540-AJ1A | L-14401-61E | H-VBN062FP    |
| LTIO-540-J2B | RL-2203-68A | H-VKN091FP    | TIO-540-AJ1A | L-14403-61E | H-VBN065FP    |
| LTIO-540-J2B | RL-2216-68A | H-VKN092FP    | TIO-540-AJ1A | L-14406-61E | H-VEN051FP    |
| LTIO-540-J2B | RL-2256-68A | H-WBN031FP    | TIO-540-AJ1A | L-14407-61E | H-VFN020FP    |
| LTIO-540-J2B | RL-2483-68A | H-WEN033FP    | TIO-540-AJ1A | L-14408-61E | H-VFN019FP    |
| LTIO-540-J2B | RL-2809-68A | H-WEN035FP    | TIO-540-AJ1A | L-14413-61E | H-VFN022FP    |
| LTIO-540-J2B | RL-2869-68A | H-WEN037FP    | TIO-540-AJ1A | L-14414-61E | H-VGN051FP    |
| LTIO-540-J2B | RL-2918-68A | H-YHN019FP    | TIO-540-AJ1A | L-14419-61E | H-VGN045FP    |
| LTIO-540-J2B | RL-3005-68A | H-XEN025FP    | TIO-540-AJ1A | L-14420-61E | H-VGN060FP    |
| LTIO-540-J2B | RL-344-68A  | H-YHN007FP    | TIO-540-AJ1A | L-14421-61E | H-VGN059FP    |
| LTIO-540-J2B | RL-358-68A  | H-VGN014FP    | TIO-540-AJ1A | L-14423-61E | H-VGN062FP    |
| LTIO-540-J2B | RL-481-68A  | H-YHN009FP    | TIO-540-AJ1A | L-14424-61E | H-VGN058FP    |
| LTIO-540-J2B | RL-501-68A  | H-WAN067FP    | TIO-540-AJ1A | L-14426-61E | H-VGN061FP    |
| LTIO-540-J2B | RL-542-68A  | H-XBN050FP    | TIO-540-AJ1A | L-14430-61E | H-VGN022FP    |
| LTIO-540-J2B | RL-741-68A  | H-YHN005FP    | TIO-540-AJ1A | L-14431-61E | H-VGN023FP    |
| LTIO-540-J2B | RL-828-68A  | H-VDN050FP    | TIO-540-AJ1A | L-14432-61E | H-VGN048FP    |
| LTIO-540-J2B | RL-855-68A  | H-YFN033FP    | TIO-540-AJ1A | L-14436-61E | H-VHN063FP    |
| LTIO-540-U2A | L-956-68A   | H-VGN012FP    | TIO-540-AJ1A | L-14437-61E | H-VHN068FP    |
| LTIO-540-U2A | RL-1156-68A | H-XBN052FP    | TIO-540-AJ1A | L-14438-61E | H-VHN062FP    |
| LTIO-540-U2A | RL-2340-68A | H-WBN029FP    | TIO-540-AJ1A | L-14444-61E | H-VHN064FP    |
| TIO-540-AJ1A | L-10947-61E | H-XLN003FP    | TIO-540-AJ1A | L-14445-61E | H-VHN060FP    |
| TIO-540-AJ1A | L-12144-61E | H-ZBN014FP    | TIO-540-AJ1A | L-14446-61E | H-VHN059FP    |
| TIO-540-AJ1A | L-12212-61E | H-XKN027FP    | TIO-540-AJ1A | L-14459-61E | H-VHN065FP    |
| TIO-540-AJ1A | L-12307-61E | H-YBN048FP    | TIO-540-AJ1A | L-14460-61E | H-VHN067FP    |
| TIO-540-AJ1A | L-12428-61E | H-YIN058FP    | TIO-540-AJ1A | L-14461-61E | H-VHN061FP    |
| TIO-540-AJ1A | L-13174-61E | H-XLN018FP    | TIO-540-AJ1A | L-14462-61E | H-VIN039FP    |
| TIO-540-AJ1A | L-13215-61E | H-XHN017FP    | TIO-540-AJ1A | L-14466-61E | H-VIN076FP    |
| TIO-540-AJ1A | L-13218-61E | H-VBN067FP    | TIO-540-AJ1A | L-14467-61E | H-VIN038FP    |
| TIO-540-AJ1A | L-13287-61E | H-VGN026FP    | TIO-540-AJ1A | L-14468-61E | H-VIN079FP    |
| TIO-540-AJ1A | L-13498-61E | H-YCN035FP    | TIO-540-AJ1A | L-14470-61E | H-VIN041FP    |

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**Table 2 (Cont.)**  
**Affected Engine Serial Numbers and Fuel Pump Serial Numbers**

| Engine Model | Engine S/N  | Fuel Pump S/N | Engine Model | Engine S/N  | Fuel Pump S/N |
|--------------|-------------|---------------|--------------|-------------|---------------|
| TIO-540-AJ1A | L-14471-61E | H-VIN034FP    | TIO-540-AJ1A | L-14540-61E | H-XDN052FP    |
| TIO-540-AJ1A | L-14472-61E | H-VIN077FP    | TIO-540-AJ1A | L-14542-61E | H-XHN019FP    |
| TIO-540-AJ1A | L-14477-61E | H-VIN078FP    | TIO-540-AJ1A | L-14543-61E | H-XHN016FP    |
| TIO-540-AJ1A | L-14478-61E | H-VHN051FP    | TIO-540-AJ1A | L-14545-61E | H-XHN028FP    |
| TIO-540-AJ1A | L-14480-61E | H-VIN081FP    | TIO-540-AJ1A | L-14547-61E | H-XHN024FP    |
| TIO-540-AJ1A | L-14481-61E | H-VJN004FP    | TIO-540-AJ1A | L-14548-61E | H-XHN030FP    |
| TIO-540-AJ1A | L-14482-61E | H-VIN032FP    | TIO-540-AJ1A | L-14549-61E | H-XHN026FP    |
| TIO-540-AJ1A | L-14483-61E | H-VJN009FP    | TIO-540-AJ1A | L-14550-61E | H-XHN027FP    |
| TIO-540-AJ1A | L-14486-61E | H-VJN006FP    | TIO-540-AJ1A | L-14553-61E | H-XIN011FP    |
| TIO-540-AJ1A | L-14487-61E | H-VJN005FP    | TIO-540-AJ1A | L-14554-61E | H-XHN029FP    |
| TIO-540-AJ1A | L-14488-61E | H-VHN048FP    | TIO-540-AJ1A | L-14555-61E | H-XIN014FP    |
| TIO-540-AJ1A | L-14490-61E | H-VKN099FP    | TIO-540-AJ1A | L-14557-61E | H-XKN008FP    |
| TIO-540-AJ1A | L-14491-61E | H-VJN002FP    | TIO-540-AJ1A | L-14559-61E | H-XKN025FP    |
| TIO-540-AJ1A | L-14493-61E | H-VKN103FP    | TIO-540-AJ1A | L-14560-61E | H-XKN022FP    |
| TIO-540-AJ1A | L-14494-61E | H-VKN102FP    | TIO-540-AJ1A | L-14561-61E | H-XKN024FP    |
| TIO-540-AJ1A | L-14495-61E | H-VJN003FP    | TIO-540-AJ1A | L-14562-61E | H-XKN021FP    |
| TIO-540-AJ1A | L-14497-61E | H-VKN097FP    | TIO-540-AJ1A | L-14563-61E | H-XLN021FP    |
| TIO-540-AJ1A | L-14498-61E | H-VKN096FP    | TIO-540-AJ1A | L-14564-61E | H-XLN019FP    |
| TIO-540-AJ1A | L-14499-61E | H-VKN095FP    | TIO-540-AJ1A | L-14566-61E | H-XLN002FP    |
| TIO-540-AJ1A | L-14500-61E | H-WDN053FP    | TIO-540-AJ1A | L-14567-61E | H-YAN003FP    |
| TIO-540-AJ1A | L-14502-61E | H-VKN098FP    | TIO-540-AJ1A | L-14569-61E | H-YAN013FP    |
| TIO-540-AJ1A | L-14503-61E | H-WDN046FP    | TIO-540-AJ1A | L-14570-61E | H-YAN015FP    |
| TIO-540-AJ1A | L-14504-61E | H-VKN101FP    | TIO-540-AJ1A | L-14571-61E | H-YCN005FP    |
| TIO-540-AJ1A | L-14505-61E | H-WDN045FP    | TIO-540-AJ1A | L-14573-61E | H-YCN004FP    |
| TIO-540-AJ1A | L-14506-61E | H-WDN049FP    | TIO-540-AJ1A | L-14574-61E | H-YAN005FP    |
| TIO-540-AJ1A | L-14507-61E | H-WGN054FP    | TIO-540-AJ1A | L-14576-61E | H-YBN050FP    |
| TIO-540-AJ1A | L-14508-61E | H-WDN051FP    | TIO-540-AJ1A | L-14577-61E | H-YBN047FP    |
| TIO-540-AJ1A | L-14509-61E | H-WDN041FP    | TIO-540-AJ1A | L-14578-61E | H-YBN049FP    |
| TIO-540-AJ1A | L-14510-61E | H-WGN056FP    | TIO-540-AJ1A | L-14579-61E | H-YCN016FP    |
| TIO-540-AJ1A | L-14514-61E | H-WGN057FP    | TIO-540-AJ1A | L-14580-61E | H-YBN045FP    |
| TIO-540-AJ1A | L-14515-61E | H-WGN058FP    | TIO-540-AJ1A | L-14584-61E | H-YEN023FP    |
| TIO-540-AJ1A | L-14516-61E | H-WDN047FP    | TIO-540-AJ1A | L-14588-61E | H-YDN020FP    |
| TIO-540-AJ1A | L-14523-61E | H-WFN013FP    | TIO-540-AJ1A | L-14589-61E | H-YDN022FP    |
| TIO-540-AJ1A | L-14524-61E | H-XBN035FP    | TIO-540-AJ1A | L-14590-61E | H-YFN005FP    |
| TIO-540-AJ1A | L-14525-61E | H-WGN055FP    | TIO-540-AJ1A | L-14591-61E | H-YBN044FP    |
| TIO-540-AJ1A | L-14526-61E | H-WKN035FP    | TIO-540-AJ1A | L-14592-61E | H-YDN023FP    |
| TIO-540-AJ1A | L-14527-61E | H-WKN036FP    | TIO-540-AJ1A | L-14594-61E | H-YFN004FP    |
| TIO-540-AJ1A | L-14528-61E | H-XBN030FP    | TIO-540-AJ1A | L-14595-61E | H-YFN003FP    |
| TIO-540-AJ1A | L-14529-61E | H-XBN029FP    | TIO-540-AJ1A | L-14596-61E | H-YFN006FP    |
| TIO-540-AJ1A | L-14530-61E | H-XCN038FP    | TIO-540-AJ1A | L-14597-61E | H-YCN045FP    |
| TIO-540-AJ1A | L-14531-61E | H-XBN034FP    | TIO-540-AJ1A | L-14598-61E | H-YCN029FP    |
| TIO-540-AJ1A | L-14535-61E | H-XDN053FP    | TIO-540-AJ1A | L-14601-61E | H-YDN049FP    |
| TIO-540-AJ1A | L-14539-61E | H-XDN056FP    | TIO-540-AJ1A | L-14602-61E | H-YHN051FP    |

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**Table 2 (Cont.)**  
**Affected Engine Serial Numbers and Fuel Pump Serial Numbers**

| Engine Model | Engine S/N  | Fuel Pump S/N | Engine Model | Engine S/N   | Fuel Pump S/N |
|--------------|-------------|---------------|--------------|--------------|---------------|
| TIO-540-AJ1A | L-14604-61E | H-YDN047FP    | TIO-540-AJ1A | L-14663-61E  | H-ZCN024FP    |
| TIO-540-AJ1A | L-14605-61E | H-YCN028FP    | TIO-540-AJ1A | L-14664-61E  | H-ZBN020FP    |
| TIO-540-AJ1A | L-14606-61E | H-YCN030FP    | TIO-540-AJ1A | L-14665-61E  | H-ZCN052FP    |
| TIO-540-AJ1A | L-14607-61E | H-YCN031FP    | TIO-540-AJ1A | L-14666-61E  | H-ZDN006FP    |
| TIO-540-AJ1A | L-14610-61E | H-YHN050FP    | TIO-540-AJ1A | L-14667-61E  | H-ZDN009FP    |
| TIO-540-AJ1A | L-14611-61E | H-YHN035FP    | TIO-540-AJ1A | L-14668-61E  | H-ZDN015FP    |
| TIO-540-AJ1A | L-14614-61E | H-YHN065FP    | TIO-540-AJ1A | L-14669-61E  | H-ZDN013FP    |
| TIO-540-AJ1A | L-14616-61E | H-YIN009FP    | TIO-540-AJ1A | L-14670-61E  | H-ZDN010FP    |
| TIO-540-AJ1A | L-14617-61E | H-YIN007FP    | TIO-540-AJ1A | L-14673-61E  | H-ZDN003FP    |
| TIO-540-AJ1A | L-14618-61E | H-YHN047FP    | TIO-540-AJ1A | L-14676-61E  | H-ZDN012FP    |
| TIO-540-AJ1A | L-14619-61E | H-YHN033FP    | TIO-540-AJ1A | L-14678-61E  | H-ZCN059FP    |
| TIO-540-AJ1A | L-14620-61E | H-YHN064FP    | TIO-540-AJ1A | L-14681-61E  | H-ZDN007FP    |
| TIO-540-AJ1A | L-14621-61E | H-YHN046FP    | TIO-540-AJ1A | L-14682-61E  | H-ZDN004FP    |
| TIO-540-AJ1A | L-14622-61E | H-YEN026FP    | TIO-540-AJ1A | L-14683-61E  | H-ZDN008FP    |
| TIO-540-AJ1A | L-14623-61E | H-YFN027FP    | TIO-540-AJ1A | L-14708-61E  | H-ZCN074FP    |
| TIO-540-AJ1A | L-14624-61E | H-YCN032FP    | TIO-540-AJ1A | L-8725-61E   | H-XEN037FP    |
| TIO-540-AJ1A | L-14625-61E | H-YHN018FP    | TIO-540-AJ1A | L-9091-61E   | H-XGN017FP    |
| TIO-540-AJ1A | L-14626-61E | H-YFN029FP    | TIO-540-AJ1A | RL-10160-61E | H-WDN040FP    |
| TIO-540-AJ1A | L-14627-61E | H-YHN062FP    | TIO-540-AJ1A | RL-10231-61E | H-VGN063FP    |
| TIO-540-AJ1A | L-14629-61E | H-YJN024FP    | TIO-540-AJ1A | RL-10289-61E | H-YAN004FP    |
| TIO-540-AJ1A | L-14630-61E | H-YJN027FP    | TIO-540-AJ1A | RL-10444-61E | H-VGN047FP    |
| TIO-540-AJ1A | L-14631-61E | H-YJN022FP    | TIO-540-AJ1A | RL-10615-61E | H-YCN003FP    |
| TIO-540-AJ1A | L-14632-61E | H-YJN038FP    | TIO-540-AJ1A | RL-10686-61E | H-YCN015FP    |
| TIO-540-AJ1A | L-14633-61E | H-YLN019FP    | TIO-540-AJ1A | RL-10709-61E | H-XCN037FP    |
| TIO-540-AJ1A | L-14634-61E | H-YJN035FP    | TIO-540-AJ1A | RL-10749-61E | H-VIN037FP    |
| TIO-540-AJ1A | L-14635-61E | H-YJN031FP    | TIO-540-AJ1A | RL-10768-61E | H-VGN025FP    |
| TIO-540-AJ1A | L-14638-61E | H-YLN015FP    | TIO-540-AJ1A | RL-10776-61E | H-VCN007FP    |
| TIO-540-AJ1A | L-14640-61E | H-YLN016FP    | TIO-540-AJ1A | RL-11061-61E | H-WFN055FP    |
| TIO-540-AJ1A | L-14641-61E | H-YLN024FP    | TIO-540-AJ1A | RL-11099-61E | H-VFN023FP    |
| TIO-540-AJ1A | L-14642-61E | H-YLN025FP    | TIO-540-AJ1A | RL-11200-61E | H-XCN097FP    |
| TIO-540-AJ1A | L-14643-61E | H-YLN020FP    | TIO-540-AJ1A | RL-11390-61E | H-ZAN047FP    |
| TIO-540-AJ1A | L-14644-61E | H-YLN023FP    | TIO-540-AJ1A | RL-11407-61E | H-YDN021FP    |
| TIO-540-AJ1A | L-14645-61E | H-YLN027FP    | TIO-540-AJ1A | RL-11429-61E | H-ZCN081FP    |
| TIO-540-AJ1A | L-14648-61E | H-ZAN046FP    | TIO-540-AJ1A | RL-11539-61E | H-XAN039FP    |
| TIO-540-AJ1A | L-14649-61E | H-ZAN044FP    | TIO-540-AJ1A | RL-11601-61E | H-WFN054FP    |
| TIO-540-AJ1A | L-14650-61E | H-ZBN012FP    | TIO-540-AJ1A | RL-11629-61E | H-XCN096FP    |
| TIO-540-AJ1A | L-14651-61E | H-ZBN013FP    | TIO-540-AJ1A | RL-11856-61E | H-VJN001FP    |
| TIO-540-AJ1A | L-14654-61E | H-ZAN045FP    | TIO-540-AJ1A | RL-11906-61E | H-ZDN014FP    |
| TIO-540-AJ1A | L-14655-61E | H-ZAN043FP    | TIO-540-AJ1A | RL-12015-61E | H-WDN044FP    |
| TIO-540-AJ1A | L-14656-61E | H-ZCN032FP    | TIO-540-AJ1A | RL-12026-61E | H-XLN020FP    |
| TIO-540-AJ1A | L-14657-61E | H-ZCN023FP    | TIO-540-AJ1A | RL-12121-61E | H-YEN022FP    |
| TIO-540-AJ1A | L-14660-61E | H-ZCN029FP    | TIO-540-AJ1A | RL-12163-61E | H-ZAN049FP    |
| TIO-540-AJ1A | L-14661-61E | H-ZCN033FP    | TIO-540-AJ1A | RL-12320-61E | H-VGN065FP    |

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**Table 2 (Cont.)  
Affected Engine Serial Numbers and Fuel Pump Serial Numbers**

| Engine Model | Engine S/N   | Fuel Pump S/N | Engine Model | Engine S/N   | Fuel Pump S/N |
|--------------|--------------|---------------|--------------|--------------|---------------|
| TIO-540-AJ1A | RL-12343-61E | H-YBN021FP    | TIO-540-AJ1A | RL-7503-61E  | H-WFN009FP    |
| TIO-540-AJ1A | RL-12640-61E | H-WFN011FP    | TIO-540-AJ1A | RL-7524-61E  | H-YJN021FP    |
| TIO-540-AJ1A | RL-12738-61E | H-VJN008FP    | TIO-540-AJ1A | RL-7538-61E  | H-YHN063FP    |
| TIO-540-AJ1A | RL-12797-61E | H-WDN048FP    | TIO-540-AJ1A | RL-7606-61E  | H-WFN008FP    |
| TIO-540-AJ1A | RL-12868-61E | H-XCN040FP    | TIO-540-AJ1A | RL-7612-61E  | H-YBN050FP    |
| TIO-540-AJ1A | RL-12873-61E | H-ZBN018FP    | TIO-540-AJ1A | RL-7676-61E  | H-WFN056FP    |
| TIO-540-AJ1A | RL-12885-61E | H-ZAN053FP    | TIO-540-AJ1A | RL-7745-61E  | H-WFN053FP    |
| TIO-540-AJ1A | RL-13217-61E | H-VCN008FP    | TIO-540-AJ1A | RL-8239-61E  | H-XCN036FP    |
| TIO-540-AJ1A | RL-13468-61E | H-WFN052FP    | TIO-540-AJ1A | RL-8261-61E  | H-XDN055FP    |
| TIO-540-AJ1A | RL-13479-61E | H-VHN047FP    | TIO-540-AJ1A | RL-8283-61E  | H-XCN039FP    |
| TIO-540-AJ1A | RL-13661-61E | H-ZCN054FP    | TIO-540-AJ1A | RL-8663-61E  | H-XEN039FP    |
| TIO-540-AJ1A | RL-13673-61E | H-VIN080FP    | TIO-540-AJ1A | RL-8691-61E  | H-XDN054FP    |
| TIO-540-AJ1A | RL-13984-61E | H-VJN007FP    | TIO-540-AJ1A | RL-8890-61E  | H-YIN052FP    |
| TIO-540-AJ1A | RL-1398-61E  | H-XKN007FP    | TIO-540-AJ1A | RL-8934-61E  | H-YIN010FP    |
| TIO-540-AJ1A | RL-1998-61E  | H-VHN050FP    | TIO-540-AJ1A | RL-8990-61E  | H-XHN015FP    |
| TIO-540-AJ1A | RL-2551-61E  | H-ZCN051FP    | TIO-540-AJ1A | RL-9093-61E  | H-XHN031FP    |
| TIO-540-AJ1A | RL-2726-61E  | H-VIN033FP    | TIO-540-AJ1A | RL-9184-61E  | H-XIN013FP    |
| TIO-540-AJ1A | RL-3224-61E  | H-ZDN005FP    | TIO-540-AJ1A | RL-9222-61E  | H-YHN032FP    |
| TIO-540-AJ1A | RL-4412-61E  | H-VGN050FP    | TIO-540-AJ1A | RL-9230-61E  | H-XHN025FP    |
| TIO-540-AJ1A | RL-4439-61E  | H-VGN046FP    | TIO-540-AJ1A | RL-9301-61E  | H-WDN039FP    |
| TIO-540-AJ1A | RL-4818-61E  | H-XIN015FP    | TIO-540-AJ1A | RL-9399-61E  | H-YDN048FP    |
| TIO-540-AJ1A | RL-5411-61E  | H-VCN016FP    | TIO-540-AJ1A | RL-9468-61E  | H-YBN019FP    |
| TIO-540-AJ1A | RL-5544-61E  | H-VGN064FP    | TIO-540-AJ1A | RL-9521-61E  | H-YCN027FP    |
| TIO-540-AJ1A | RL-5567-61E  | H-VGN049FP    | TIO-540-S1AD | L-12252-61A  | H-XCN070FP    |
| TIO-540-AJ1A | RL-5809-61E  | H-VHN066FP    | TIO-540-S1AD | RL-10791-61A | H-XEN043FP    |
| TIO-540-AJ1A | RL-604-61E   | H-XCN095FP    | TIO-540-S1AD | RL-11210-61A | H-YFN002FP    |
| TIO-540-AJ1A | RL-6250-61E  | H-VKN100FP    | TIO-540-S1AD | RL-12892-61A | H-WCN026FP    |
| TIO-540-AJ1A | RL-6591-61E  | H-VHN046FP    | TIO-540-S1AD | RL-13103-61A | H-VIN082FP    |
| TIO-540-AJ1A | RL-6601-61E  | H-VHN052FP    | TIO-540-S1AD | RL-3918-61A  | H-YKN069FP    |
| TIO-540-AJ1A | RL-6735-61E  | H-VIN036FP    | TIO-540-S1AD | RL-4962-61A  | H-ZBN049FP    |
| TIO-540-AJ1A | RL-6754-61E  | H-VHN045FP    | TIO-540-S1AD | RL-5548-61A  | H-YKN-068FP   |
| TIO-540-AJ1A | RL-6905-61E  | H-VHN049FP    | TIO-540-S1AD | RL-5862-61A  | H-ZBN048FP    |
| TIO-540-AJ1A | RL-7043-61E  | H-VBN046FP    | TIO-540-S1AD | RL-6152-61A  | H-XCN071FP    |
| TIO-540-AJ1A | RL-7157-61E  | H-YBN018FP    | TIO-540-S1AD | RL-7266-61A  | H-YHN054FP    |
| TIO-540-AJ1A | RL-7161-61E  | H-WFN012FP    | TIO-540-S1AD | RL-7968-61A  | H-VKN013FP    |
| TIO-540-AJ1A | RL-7162-61E  | H-WDN043FP    | TIO-540-S1AD | RL-8111-61A  | H-WAN047FP    |
| TIO-540-AJ1A | RL-7387-61E  | H-WDN042FP    | TIO-540-S1AD | RL-9366-61A  | H-XBN054FP    |

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**Table 3**  
**Affected Fuel Pump Part Numbers and Serial Numbers**

| Fuel Pump P/N | Fuel Pump S/N | Fuel Pump P/N | Fuel Pump S/N | Fuel Pump P/N | Fuel Pump S/N |
|---------------|---------------|---------------|---------------|---------------|---------------|
| 62E23188      | H-WAN004FP    | 62E23190      | H-XAN040FP    | 62E23190      | H-YHN015FP    |
| 62E23189      | H-VBN045FP    | 62E23190      | H-XBN031FP    | 62E23190      | H-YHN016FP    |
| 62E23189      | H-VBN047FP    | 62E23190      | H-XBN032FP    | 62E23190      | H-YHN018FP    |
| 62E23189      | H-VBN048FP    | 62E23190      | H-XBN033FP    | 62E23190      | H-YHN031FP    |
| 62E23189      | H-VDN048FP    | 62E23190      | H-XBN036FP    | 62E23190      | H-YHN034FP    |
| 62E23189      | H-WBN040FP    | 62E23190      | H-XBN037FP    | 62E23190      | H-YHN048FP    |
| 62E23189      | H-WFN015FP    | 62E23190      | H-XBN038FP    | 62E23190      | H-YHN061FP    |
| 62E23189      | H-WJN021FP    | 62E23190      | H-XDN051FP    | 62E23190      | H-YHN062FP    |
| 62E23189      | H-XBN055FP    | 62E23190      | H-XEN035FP    | 62E23190      | H-YHN066FP    |
| 62E23189      | H-YCN038FP    | 62E23190      | H-XEN036FP    | 62E23190      | H-YIN006FP    |
| 62E23189      | H-YFN036FP    | 62E23190      | H-XEN038FP    | 62E23190      | H-YIN008FP    |
| 62E23189      | H-YJN066FP    | 62E23190      | H-XJN001FP    | 62E23190      | H-YIN049FP    |
| 62E23189      | H-ZAN032FP    | 62E23190      | H-XKN006FP    | 62E23190      | H-YIN050FP    |
| 62E23189      | H-ZAN033FP    | 62E23190      | H-XKN023FP    | 62E23190      | H-YIN051FP    |
| 62E23190      | H-VBN061FP    | 62E23190      | H-XKN026FP    | 62E23190      | H-YIN053FP    |
| 62E23190      | H-VBN063FP    | 62E23190      | H-YAN014FP    | 62E23190      | H-YIN057FP    |
| 62E23190      | H-VBN064FP    | 62E23190      | H-YAN017FP    | 62E23190      | H-YJN023FP    |
| 62E23190      | H-VBN066FP    | 62E23190      | H-YBN022FP    | 62E23190      | H-YJN025FP    |
| 62E23190      | H-VBN068FP    | 62E23190      | H-YBN035FP    | 62E23190      | H-YJN026FP    |
| 62E23190      | H-VBN069FP    | 62E23190      | H-YBN047FP    | 62E23190      | H-YJN028FP    |
| 62E23190      | H-VBN070FP    | 62E23190      | H-YCN017FP    | 62E23190      | H-YJN029FP    |
| 62E23190      | H-VBN071FP    | 62E23190      | H-YCN028FP    | 62E23190      | H-YJN030FP    |
| 62E23190      | H-VCN009FP    | 62E23190      | H-YCN032FP    | 62E23190      | H-YJN032FP    |
| 62E23190      | H-VCN010FP    | 62E23190      | H-YCN033FP    | 62E23190      | H-YJN033FP    |
| 62E23190      | H-VCN011FP    | 62E23190      | H-YCN034FP    | 62E23190      | H-YJN034FP    |
| 62E23190      | H-VCN012FP    | 62E23190      | H-YCN036FP    | 62E23190      | H-YJN036FP    |
| 62E23190      | H-VCN013FP    | 62E23190      | H-YDN050FP    | 62E23190      | H-YJN037FP    |
| 62E23190      | H-VEN052FP    | 62E23190      | H-YEN024FP    | 62E23190      | H-YJN039FP    |
| 62E23190      | H-VEN053FP    | 62E23190      | H-YEN025FP    | 62E23190      | H-YLN010FP    |
| 62E23190      | H-VEN054FP    | 62E23190      | H-YEN026FP    | 62E23190      | H-YLN011FP    |
| 62E23190      | H-VEN055FP    | 62E23190      | H-YEN027FP    | 62E23190      | H-YLN012FP    |
| 62E23190      | H-VEN056FP    | 62E23190      | H-YEN028FP    | 62E23190      | H-YLN013FP    |
| 62E23190      | H-VEN057FP    | 62E23190      | H-YFN007FP    | 62E23190      | H-YLN014FP    |
| 62E23190      | H-VFN021FP    | 62E23190      | H-YFN026FP    | 62E23190      | H-YLN017FP    |
| 62E23190      | H-VGN044FP    | 62E23190      | H-YFN027FP    | 62E23190      | H-YLN018FP    |
| 62E23190      | H-VIN035FP    | 62E23190      | H-YFN028FP    | 62E23190      | H-YLN021FP    |
| 62E23190      | H-WDN038FP    | 62E23190      | H-YFN029FP    | 62E23190      | H-YLN022FP    |
| 62E23190      | H-WKN033FP    | 62E23190      | H-YFN030FP    | 62E23190      | H-YLN026FP    |
| 62E23190      | H-WKN037FP    | 62E23190      | H-YFN031FP    | 62E23190      | H-YLN028FP    |


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**Table 3 (Cont.)  
Affected Fuel Pump Part Numbers and Serial Numbers**

|          |            |          |            |          |            |
|----------|------------|----------|------------|----------|------------|
| 62E23190 | H-ZAN050FP | 62E23190 | H-ZCN022FP | 62E23190 | H-ZCN073FP |
| 62E23190 | H-ZAN051FP | 62E23190 | H-ZCN025FP | 62E23190 | H-ZCN076FP |
| 62E23190 | H-ZAN052FP | 62E23190 | H-ZCN026FP | 62E23190 | H-ZCN078FP |
| 62E23190 | H-ZBN016FP | 62E23190 | H-ZCN027FP | 62E23190 | H-ZCN079FP |
| 62E23190 | H-ZBN017FP | 62E23190 | H-ZCN028FP | 62E23190 | H-ZCN080FP |
| 62E23190 | H-ZBN019FP | 62E23190 | H-ZCN030FP | 62E23190 | H-ZCN082FP |
| 62E23190 | H-ZCN019FP | 62E23190 | H-ZCN031FP | 62E28152 | H-ZDN011FP |
| 62E23190 | H-ZCN020FP | 62E23190 | H-ZCN053FP | 62E28152 | H-ZDN019FP |
| 62E23190 | H-ZCN021FP |          |            |          |            |

**Warranty Consideration**

After complying with HET Alert Service Bulletin No. ASB 098, please complete and submit the ASB 098 CLAIM FORM as specified in Appendix I of HET ASB No. 098.

** WARNING:** WARNING: REFER TO THE INTERNET LINK [HTTPS://FUELCRAFT.AERO/AIRCRAFT-FUEL-PUMPS-SUPPORT/SERVICE-INFORMATION/](https://fuelcraft.aero/aircraft-fuel-pumps-support/service-information/) TO BE SURE YOU HAVE THE LATEST VERSION OF HET’S ALERT SERVICE BULLETIN NO. 098. FAILURE TO COMPLY WITH THIS WARNING COULD CREATE AN UNSAFE CONDITION THAT CAN RESULT IN DEATH, SERIOUS BODILY INJURY, AND/OR PROPERTY DAMAGE. PROCEDURES IN HET’S BULLETIN MUST BE COMPLETED BY COMPETENT QUALIFIED PERSONNEL FAMILIAR WITH THE SUBJECT ENGINES AND ASSOCIATED AIRFRAMES, SPECIFICALLY THE ENGINE FUEL SYSTEM. FAILURE TO DO SO COULD RESULT IN ECONOMIC LOSS, EQUIPMENT DAMAGE, AND/OR PHYSICAL INJURY. USE ALL APPLICABLE LYCOMING ENGINES’ MAINTENANCE MANUALS AND/OR SERVICE DOCUMENTS IN CONJUNCTION WITH THIS HET BULLETIN AND THE APPLICABLE AIRFRAME MAINTENANCE MANUAL AND PILOT’S OPERATING HANDBOOK

**Hartzell Engine Technologies Alert Service Bulletin No. 098 dated May 22, 2023 is reprinted in its entirety as follows and is current at the time Lycoming Service Bulletin No. 653 is issued. However, compliance with this Service Bulletin is to be in accordance with the latest revision of the Hartzell Engine Technologies Service Bulletin ASB 098.**

If you have any questions, contact Lycoming Technical Support by phone at 570-327-7222 or 877-839-7878 or by email to [Technicalsupport@lycoming.com](mailto:Technicalsupport@lycoming.com).

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# Alert Service Bulletin

## Alert Service Bulletin No. 098

### 200F & 202F Fuel Pump Leak Inspection

#### 1. Planning Information

##### A. Effectivity

- (1) Fuelcraft 200F-5003, -5005, -5006, and 202F-1002 fuel pump assemblies manufactured new, or overhauled by Hartzell Engine Tech LLC (HET) between 4/17/18 and 4/19/2022 are affected by this Alert Service Bulletin (ASB).
  - (a) Fuel pump serial numbers H-VDN047FP thru H-ZCN082FP are affected by this ASB.
- (2) Fuel pump S/Ns overhauled by HET between 4/20/2022 and the effective date of this ASB are affected:

| Fuel Pump P/Ns | Fuel Pump S/Ns |            |
|----------------|----------------|------------|
| 200F-5003R     | H-ZEN011FP     | H-ZEN012FP |
| 200F-5005R     | H-ZEN005FP     | H-ZEN006FP |
| 200F-5006R     | H-ZEN013FP     | H-ZEN014FP |

**Table 1 - HET Overhauled FP Effectivity**

- (3) Fuelcraft 200F-5003, -5005, -5006, and 202F-1002 fuel pump assemblies overhauled with washer assembly (1) P/N 070F-5002 sold by HET as a spare between 7/30/2018 and the effective date of this Alert Service bulletin are affected.
- (4) Table 2 contains fuel pump PN/engine effectivity.

**NOTE:** Table 2 is for reference only and is not an all-inclusive list of engines affected by this ASB. It is the responsibility of the owner/operator to verify whether an affected fuel pump may be installed.

**WARNING:** DO NOT USE OBSOLETE OR OUTDATED INFORMATION. PERFORM ALL INSPECTIONS OR WORK IN ACCORDANCE WITH THE MOST RECENT REVISION OF THIS SERVICE BULLETIN. INFORMATION CONTAINED HEREIN MAY BE SIGNIFICANTLY CHANGED FROM EARLIER REVISIONS. FAILURE TO COMPLY WITH THIS SERVICE BULLETIN OR THE USE OF OBSOLETE INFORMATION MAY CREATE AN UNSAFE CONDITION THAT MAY RESULT IN DEATH, SERIOUS BODILY INJURY, AND/OR SUBSTANTIAL PROPERTY DAMAGE. REFER TO [WWW.FUELCRAFT.AERO](http://WWW.FUELCRAFT.AERO) FOR THE MOST RECENT REVISION LEVEL OF THIS SERVICE BULLETIN.

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# **ALERT SERVICE BULLETIN**

## **Alert Service Bulletin No. 098**

### **200F & 202F Fuel Pump Leak Inspection**

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B. Concurrent Requirements

- (1) None

C. Reason

- (1) Affected 200F and 202F series fuel pumps may contain a washer and O-ring assembly (1) where the sealing washer for the set screw (2) is not fully seated, potentially resulting in a leak.
  - (a) This condition may cause a fuel leak from the set screw (2) orifice and could result in an accumulation of flammable fuel in the engine cowl.

D. Description

- (1) This ASB provides Instructions for Continued Airworthiness (ICA).
- (2) This ASB is to advise the field of a known condition, supply inspection criteria to identify affected fuel pumps, and provide corrective actions for affected fuel pumps.

E. Compliance

- (1) Fuel Pumps with less than 100 hours time-in-service:
  - (a) Immediately perform a one-time inspection of the affected fuel pump in accordance with the Accomplishment Instructions of this ASB.
- (2) Fuel Pumps with more than 100 hours time-in-service:
  - (a) Compliance with this ASB is not required.
- (3) One-Time-Flight
  - (a) It is permissible to complete one (1) flight up to six (6) hours in duration to reach a qualified repair station capable of the Accomplishment Instructions of this ASB.
- (4) Compliance with Accomplishment Instructions of this ASB is the terminating action for this ASB.

F. Approval

- (1) FAA acceptance has been obtained on technical data in this publication that affects type design.

G. Manpower

- (1) Labor is negligible for identification and inspection when performed in conjunction with regularly scheduled maintenance required by the engine/aircraft manufacturer or by aircraft documentation review.
- (2) Up to one-half (.5) hour to perform a one-time inspection of the affected fuel pump.
- (3) Up to one and a half (1.5) hours labor required for removal and installation of the fuel pump.

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# ALERT SERVICE BULLETIN

## Alert Service Bulletin No. 098

### 200F & 202F Fuel Pump Leak Inspection

#### H. References

- (1) Applicable aircraft POH or AFM.
- (2) Aircraft maintenance manual (as applicable).
- (3) Engine Service Instructions or maintenance manual (as applicable).
- (4) *HET Fuel Pump Overhaul Manual, PIN 200201-0000 Rev. K* or latest FAA approved revision.

#### I. Other Publications Affected

- (1) None

#### J. Weight and Balance

- (1) No Change

| Part Number<br>HET Fuel Pump | Part Number<br>Lycoming<br>(Ref. Only)* | Part Number<br>Lear Romec<br>(Ref. Only)* | Lycoming Engine Installation<br>Eligibility              |
|------------------------------|---|---|--|
| 200F-5003                    | 62E22583                                | RG9080J6A/M                               | TIO-540- ABIAD, AAIAD, LTIO-540-U2A, -J2B                |
| 200F-5005                    | 62E22584                                | RG9080J8A/M                               | LTIO-540- V2AD, TIO-540- W2A, -AHIA, - AJIA, IO-720- AIB |
| 200F-5006                    | 62E23190                                | -   | TIO-540-AJ1A   |
| 202F-1002                    | 62E22585,<br>LW-19012                   | RG9570P1,<br>RG9570P1/M                   | TIO-540-S1AD   |

\* The information in Table 2 is provided for reference only. The applicable engine manufacturer's Type Certification information should be consulted as the official source.

**Table 2 - Part Number/Engine Effectivity**

## 2. Material Required

#### A. Fuel pump repair

- (1) One O-ring and washer assembly (1) P/N NAS1523-08E
- (2) One set screw (2) P/N 090F-0001
- (3) Safety wire, DMC Safe-T-Cable, .032 in. or .032 in. stainless safety wire
- (4) Chemplex 710 Lubricant or equivalent

#### B. Fuel pump replacement

- (1) One fuel pump of the same part number removed not affected by this ASB.

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# ALERT SERVICE BULLETIN

## Alert Service Bulletin No. 098

### 200F & 202F Fuel Pump Leak Inspection

#### 3. Accomplishment Instructions

**WARNING:**

THIS PROCEDURE MUST BE PERFORMED BY COMPETENT AND QUALIFIED PERSONNEL WHO ARE FAMILIAR WITH ENGINE AND AIRFRAME MAINTENANCE THAT IS SPECIFIC TO THE ENGINE FUEL SYSTEM. FAILURE TO DO SO MAY RESULT IN ECONOMIC LOSS, EQUIPMENT DAMAGE, AND/OR PHYSICAL INJURY.

**CAUTION 1:**

DO NOT USE OBSOLETE OR OUTDATED INFORMATION. PERFORM ALL INSPECTIONS OR WORK IN ACCORDANCE WITH THE MOST RECENT REVISION OF THIS SERVICE BULLETIN AND THE APPLICABLE AIRCRAFT, ENGINE AND/OR THE HET P/N 200201-0000 MAINTENANCE MANUAL. INFORMATION CONTAINED IN THESE MANUALS OR THIS SERVICE BULLETIN MAY BE SIGNIFICANTLY CHANGED FROM EARLIER REVISIONS. FAILURE TO COMPLY WITH THE SERVICE BULLETIN OR THE USE OF OBSOLETE INFORMATION MAY CREATE AN UNSAFE CONDITION THAT MAY RESULT IN DEATH, SERIOUS BODILY INJURY, AND/OR SUBSTANTIAL PROPERTY DAMAGE. REFER TO THE FUEL CRAFT WEBSITE (WWW.FUELCRAFT.AERO) FOR THE MOST RECENT REVISION OF THE 200201-0000 MANUAL.

**CAUTION 2:**

DO NOT DEPEND ON THIS SERVICE BULLETIN FOR GAINING ACCESS TO THE ENGINE OR FUEL PUMP. ACCESS REQUIRES THE USE OF THE APPLICABLE MANUFACTURER'S MAINTENANCE MANUALS OR SERVICE INSTRUCTIONS. IN ADDITION, ANY PREFLIGHT OR IN FLIGHT OPERATIONAL CHECKS REQUIRE USE OF THE APPROPRIATE AFM OR POH.

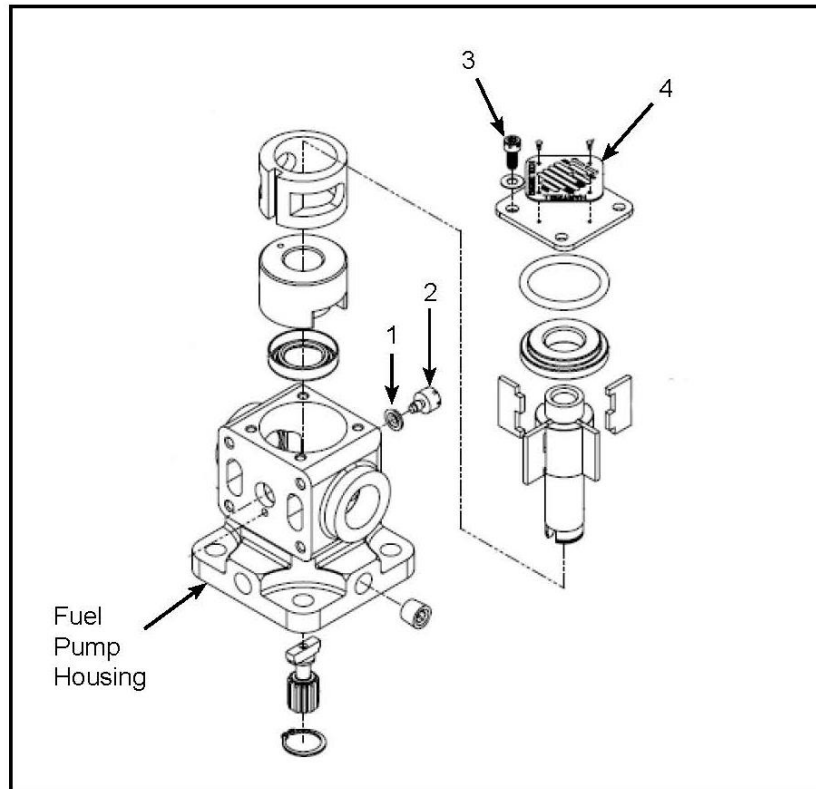


Figure 1 - Pump Housing

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### 200F & 202F Fuel Pump Leak Inspection

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#### A. Fuel Pump Identification

- (1) If positive identification of the fuel pump model and serial number can be made through the engine or aircraft documentation, and the fuel pump **is** affected per 1.A, continue to 3.B, Set Screw Inspection. If the fuel pump is **not** affected, continue to 3.E, Maintenance Record.
- (2) If positive identification cannot be made through engine or aircraft documentation, use engine/airframe service instructions or maintenance manual to gain access to the fuel pump to verify the fuel pump effectivity by inspecting the pump data tag (4).
  - (a) If the unit **is** affected, proceed to section 3.B., Set Screw Inspection.
  - (b) If the unit is **not** affected, install any components removed to gain access in accordance with the latest engine/airframe service instructions or maintenance manual. Continue to 3.E, Maintenance Record.

#### B. Set Screw Inspection

- (1) Perform the following inspection of the fuel pump set screw (2).
  - (a) Gain access to the fuel pump, remove cooling shroud, if required.
  - (b) Perform a detailed visual inspection of the set screw (2) for washer and O-ring assembly (1) displacement as shown in Figure 2. Inspect immediate and surrounding areas for signs of fuel leakage, such as blue staining.

**NOTE:** The washer (1) OD must rest within the perimeter of the spotface relief and must **NOT** bridge the perimeter of the spotface relief at any point. See Figures 3 & 4.

- 1) If indication of washer and O-ring assembly (1) displacement and evidence of a fuel leak is **not** found, install any components removed to gain access to the fuel pump in accordance with the latest engine/airframe service instructions or maintenance manual. Continue to 3.E., Maintenance Record.
- 2) If indication of washer and O-ring assembly (1) displacement and/or evidence of a fuel leak **is** found, continue to 3.C, Corrective Action.

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### 200F & 202F Fuel Pump Leak Inspection



Figure 2 - Displaced Washer and O-ring Assembly

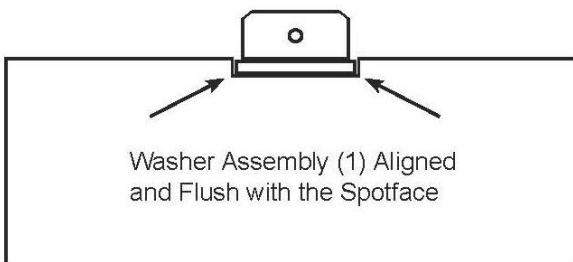


Figure 3 - **Acceptable** Set Screw and Washer Assembly Alignment

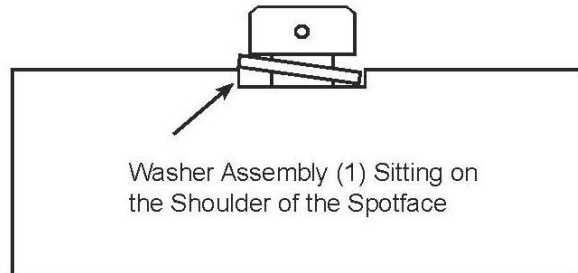


Figure 4 - **Non-Acceptable** Set Screw and Washer Assembly Alignment

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### **200F & 202F Fuel Pump Leak Inspection**

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#### C. Corrective Action

##### (1) Fuel Pump Factory Repair

- (a) Forward the affected fuel pump to an approved HET service facility per the instructions contained in Appendix I, Commercial Assistance, found at the end of this Alert Service Bulletin.

**NOTE:** Retain all engine or aircraft supplied fittings from the fuel pump prior to return. **(HET CANNOT RETURN FITTINGS TO THE CUSTOMER.)**

- (b) Install factory repaired pump onto engine in accordance with applicable engine/airframe maintenance manual and service instructions. Continue to 3.D, Return to Service.

##### (2) Fuel Pump Field Repair

**NOTE:** Refer to the HET overhaul manual P/N 200201-0000 Rev. K or latest FAA approved revision for the following steps necessary to replace the set screw and washer assembly in the applicable model and part number fuel pump.

See 200201-0000 Section 3 for disassembly and Section 7 for installation.

- (a) Remove cooling shroud (if required) and fuel pump from engine in accordance with engine and airframe service instructions.
- (b) Take note of safety wire routing and then remove safety wire and discard. Remove the set screw and washer assembly from the fuel pump and discard.
- (c) Obtain a new set screw and washer assembly. See Section 2, Materials Required.
- (d) Apply Chemplex 710 to both sides of the washer and inner diameter. Carefully insert set screw into washer bore, ensuring no damage occurs to the washer elastomer.
- (e) Verify the liner indexing notch is centered with the threaded hole. A non-marring tool may be used to adjust the centering of the liner, taking care to avoid damage to the threaded hole.
- (f) Insert set screw into threaded hole and hand tighten until washer has made contact with housing spot face. Inspect to ensure washer edge is not overlapping spotface shoulder. If any resistance or bottoming out is observed during set screw installation, back out the set screw and inspect screw threads and housing threads for damage and inspect for liner alignment.
- (g) If installation is acceptable, torque set screw to 10-12 in-lbs.
- (h) Safety wire following the original pattern using .032 safety wire or Daniels .032 Safe-T- Cable.
- ##### (3) Fuel Pump Replacement
- (a) Replace the fuel pump with one not affected by this ASB in accordance with the engine airframe maintenance manual and service instructions and continue to 3.D, Return to Service.

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### **200F & 202F Fuel Pump Leak Inspection**

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#### D. Return to Service

- (1) Perform the recommended fuel pump/fuel system set up and functional tests in accordance with the appropriate aircraft maintenance manual, engine service instructions, and operational tests in the AFM or POH.
- (2) Inspect the fuel pump installation for security and leaks.
- (3) Clean area around and beneath the pump of fuel staining (blue-green tinted staining).

#### E. Maintenance Record

- (1) For terminating action, make an engine logbook entry to indicate compliance with this Service Bulletin.

#### Contact Information

#### A. Contact HET Product Support for all communications regarding the technical content of this Service Bulletin.

- (1) Phone +1.334.386.5400 (Option 2)
- (2) Fax +1.334.386.5450.
- (3) E-mail at techsupport@Hartzell.aero
- (4) Address

Hartzell Engine Tech LLC  
2900 Selma Highway,  
Montgomery, AL 36108  
USA

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# Alert Service Bulletin Appendix

## Alert Service Bulletin No. 098

### 200F & 202F Fuel Pump Leak Inspection

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#### 1. ELIGIBILITY:

- (1) Fuelcraft 200F-5003, -5005, -5006, and 202F-1002 fuel pump assemblies manufactured new, or overhauled by Hartzell Engine Tech LLC (HET) between 4/17/18 and 4/19/2022.
- (2) Fuelcraft 200F-5003, -5005, -5006, and 202F-1002 fuel pump assemblies overhauled with washer assembly (1) P/N 070F-5002 sold by HET as a spare between 7/30/2018 and the effective date of Alert Service Bulletin 098.

#### 2. COMMERCIAL ASSISTANCE PROGRAM:

The following will be provided with the submission of a completed Alert Service Bulletin 098 Claim Form, copies of invoices showing breakdown of material and labor charges, and log book entries. **Any commercial assistance or other consideration shall expire twelve (12) calendar months from the original published date of ASB 098.**

##### A. Initial Inspection

- (1) One half (0.5) hour labor to gain access to the pump and perform inspection paid at a shop rate of up to \$85 per hour.

##### B. Pump Repair or Replacement

- (1) For field replacement of the rotor in an eligible fuel pump (refer to Appendix section 6 for a listing of potential service facilities), HET will provide:
  - (a) Materials Required can be found in ASB 098 section 2.
  - (b) Labor for Corrective Action for affected fuel pumps will be paid at a shop rate of \$85 per hour up to the amount specified below:
    - 1) Up to one and a half (1.5) hours labor for removal and installation of the fuel pump.
- (2) If returning an eligible fuel pump, HET will repair and return the unit.
  - (a) Customer **must** obtain an **RMA approval number** from HET before returning the fuel pump to HET for factory repair.
  - (b) Up to one and a half (1.5) hours labor for removal and installation of the fuel pump.

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# Alert Service Bulletin Appendix

## Alert Service Bulletin No. 098

### 200F & 202F Fuel Pump Leak Inspection

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#### 3. COMMERCIAL ASSISTANCE ADMINISTRATION:

- A. Complete the Alert Service Bulletin Claim Form attached to this appendix.
- (1) Mail, e-mail, or fax the Alert Service Bulletin 098 Claim Form to the attention of Product Support as indicated on the Claim Form.
- B. Upon receipt of the Alert Service Bulletin Claim Form, HET will:
- (1) If required by the Alert Service Bulletin, ship the material required by section 2.A and 2.B, to the service provider indicated.
- (2) The service provider must return proof of service within thirty (30) days or the service provider shall be invoiced for the HET supplied materials.
- C. For repair and removal/reinstallation charges:
- (1) Aircraft/engine service facility must submit an invoice up to the amount specified in section 2, copies of logbook entries, and a completed Alert Service Bulletin 098 Claim Form for reimbursement.

#### 4. WARRANTY STATEMENT:

- A. The sole warranty for the actions of Alert Service Bulletin 098 are contained in the HET Limited Warranty Policy issued with the purchase of each new/overhauled fuel pumps (see terms and conditions therein).
- B. Commercial assistance may apply as stated in this Appendix.
- C. Issuance of Alert Service Bulletin 098 in no way constitutes an implied or expressed warranty of any kind.
- D. This publication does not imply or state any responsibility for the workmanship of any person or entity performing work or maintenance on the engine or aircraft fuel system.

#### 5. CONTACT INFORMATION:

- A. Contact **HET Product Support** for all communications regarding the technical content of Alert Service Bulletin 098.

- (1) Phone +1.334.386.5400 (Option 2)  
(2) Fax +1.334.386.5450.  
(3) E-mail at [techsupport@Hartzell.aero](mailto:techsupport@Hartzell.aero)  
(4) Address

Hartzell Engine Tech LLC  
2900 Selma Highway,  
Montgomery, AL 36108  
USA

**ASB 098**

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# Alert Service Bulletin Appendix

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### 200F & 202F Fuel Pump Leak Inspection

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#### 6. SERVICE FACILITIES:

- A. The following service facilities have the capability of servicing the HET P/N 200F and 202F fuel pumps and may provide a method of compliance with this Alert Service Bulletin.

**Aero Recip**

540 Marjorie Street  
Winnipeg, Manitoba R3H 0S9  
CANADA  
Phone: +1.800.561.5541  
Email: info@aerorecip.com

**Nicholson McLaren**

12 Ivanhoe Road  
Hogwood Industrial Estate  
WOKINGHAM Berkshire RG40 4QQ  
United Kingdom  
Phone: +44.(0)118.973.8000  
Email: aviation.sales@n-mclaren.co.uk

**Aircraft Accessories of Oklahoma**

2740 N. Sheridan Rd.  
Tulsa, Oklahoma 74115  
Phone: 800.255.9924  
Email: airacc1@airacc.com

**Professional Aircraft Accessories, Inc.**

14 East Main Street  
Amelia, OH 45102  
Phone: +1.513.732.3361  
Fax: +1.513.752.1332  
Email: mlg188@aol.com

**AMETEK B&S Aircraft Parts & Accessories**

1414 South Mosley  
Wichita, KS 67211  
Phone: +1.316.264.2397  
Web Site: www.bsaircraft.com  
Email: sales.bsaircraft@ametek.com

**Quality Aircraft Accessories, Inc.**

5746 Apache St.  
Tulsa, OK 74115  
Phone: 877.833.6948  
Email: sales@qaa.com

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# Alert Service Bulletin Appendix

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### 200F & 202F Fuel Pump Leak Inspection

#### ASB 098 CLAIM FORM

##### Owner information

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Tel: \_\_\_\_\_ Fax: \_\_\_\_\_  
Company Name: \_\_\_\_\_ E-mail: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Postal Code: \_\_\_\_\_  
Country: \_\_\_\_\_

##### Aircraft/Engine Service Facility information

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Tel: \_\_\_\_\_ Fax: \_\_\_\_\_  
Company Name: \_\_\_\_\_ E-mail: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Postal Code: \_\_\_\_\_  
Country: \_\_\_\_\_  
Aircraft Mfg: \_\_\_\_\_ Model: \_\_\_\_\_ Time in Service: \_\_\_\_\_ S/N: \_\_\_\_\_  
Engine: \_\_\_\_\_ Model: \_\_\_\_\_ Time in Service: \_\_\_\_\_ S/N: \_\_\_\_\_

##### Payment Information

Same as Owner:  Same as Facility:  Other:  \_\_\_\_\_ Name  
\_\_\_\_\_ Address

##### Component Information

Nomenclature: \_\_\_\_\_ Part Number: \_\_\_\_\_  
Serial Number: \_\_\_\_\_ (Fuel Pump) Date Removed: \_\_\_\_\_  
Part Time in Service: \_\_\_\_\_ (Fuel Pump) Original Date Installed: \_\_\_\_\_

##### For RMA Number

Send this ASB 098 Claim Form to:

Hartzell Engine Tech Product Support

Fax: +1.334.386.5450

E-mail: techsupport@hartzell.aero

**Hartzell Use Only - do not write below this line.**

##### RMA Number:

(write in HET assigned RMA number)

Warranty No: \_\_\_\_\_ Authorized by: \_\_\_\_\_

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