

300 Old Pretoria Road Albany, GA 31721
Phone: 229.883.1440 Fax:229.439.9790
www.thrushaircraft.com

SERVICE LETTER

SL-AG-127

Initial Release: 09/13/2018

AIRCRAFT SERVICING AND FUEL SYSTEM BEST PRACTICES

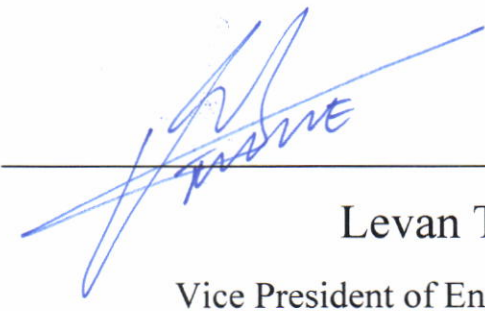
AIRPLANES AFFECTED:

MODEL

ALL

SERIAL NUMBERS

ALL



Levan Tabidze
Vice President of Engineering

LOG OF REVISIONS

NOTE: Re-formatting and correction of typographical errors is not considered revision. True revisions are indicated by a dark vertical line at the right margin of the lines revised.

Rev.	Page	Description of Revision	By:
IR	All	New Document Initial Release.	K. Sheppard 09/13/2018

1. PURPOSE/REASON FOR PUBLICATION:

It has come to the attention of Thrush Aircraft, that some maintenance and operational practices are not coinciding with OEM published data. Adherence to procedures on a scheduled basis can save many hours of maintenance and aircraft downtime.

2. ACCOMPLISHMENT INSTRUCTIONS:

It is imperative to follow OEM data pertaining to the aircraft. This includes the Aircraft Flight Manuals and Aircraft Maintenance Manuals for all Thrush Aircraft models.

INSPECTION CHECKLIST

Inspection intervals are greatly influenced by operational priorities, operating conditions, environment, and routine inspection results.

- a) Movable parts are to be checked for lubrication, servicing, security of attachment, binding, excessive wear, Safety, proper operation, proper adjustment, correct travel, cracked fittings, security of hinges, defective bearings, cleanliness, corrosion, deformation, sealing, and tension.
- b) Fluid lines and hoses are to be checked for leaks, cracks, dents, kinks, chafing, proper radius, security, corrosion, deterioration, obstructions, and foreign matter.
- c) Metal parts are to be checked for security of attachment, cracks, and metal distortion, broken welds, corrosion, condition of paint, and any apparent damage.
- d) Wiring is to be checked for security, chafing, burning, defective insulation, loose or broken terminals, heat deterioration, and corroded terminals.
- e) Bolts in critical areas are to be checked for correct torque, or when visual inspection indicates the need for a torque check.
- f) Filters, screens, and fluids are to be checked for cleanliness, contamination and/or replacement at specified intervals.

CORROSION CONTROL

A regular and thorough cleaning of both the interior and exterior of the aircraft is a major part of corrosion control. Wash all exterior surfaces, FWD fuselage, and engine compartment of the aircraft with plain potable water and any commercial soap or detergent. Detach all removable panels from the aircraft. Wash down the rear fuselage aft of the wing trailing edge. Tube joints, skin bends, and so forth should receive particular attention. Remove excess moisture after flushing. Soap and detergent are organic chemicals, and it is important that all traces be removed by flushing with plain water. Hopper cleaning should be accomplished at the end of each working day. Leave the hopper door and gate open for thorough drying. **Do not use pressure washing equipment near any electronic equipment. Cover all pitot static drains prior to washing and ensure they are uncovered after washing.**

LUBRICATION

Before adding grease to fittings, wipe the fittings clean. Lubricate the fittings and wipe off the excess lubricant. Lubricate the hinges with a squirt can or a brush moistened with oil. Wipe off the excess oil to prevent accumulation of dirt and grit. For the lubrication requirements, refer to Aircraft Maintenance Manual.

INDUCTION

The prime difference between the agricultural application and a normal installation is the air cleaning system incorporated in the engine air intake system. The lower cowl forms the inlet to the engine. The air filter panel is a K & N cleanable barrier filter. The barrier filter unit is made of a cotton mesh with a light coat of K&N special red oil to assist in collecting dust.

The filter can be removed, cleaned and reserviced IAW cleaning instructions from K & N P/N 99-5000 (aerosol) or P/N 99-5050 Recharger filter care service kit obtained locally.

STORAGE

The aircraft preservation procedure depends on the length of the break in operation. If the break in operation is shorter than 30 days, the engine can be left unpreserved. Of course, the fuel system must be filled with fuel and the fuel shut-off valve must be closed. If the break in operation lasts from 30 days to three months, inner preservation of the fuel system must be carried out. The oil system remains unpreserved; there is just the operational charge of oil. During the preservation/depreservation procedure the preservation agent must not penetrate the engine. Otherwise the deposits of burnt preservation agent can cause worsening of engine parameters. Reference appropriate engine manual for further details of short term, intermediate and long-term storage.

FUEL SYSTEM

Fuel system best practices will help lengthen equipment life and improve safety margins while reducing aircraft down time. shown in Figures 127-1, 127-2, 127-3, and 127-4 in the following pages.

Water or Condensation can be introduced into the fuel system in many different scenarios:

- From rain (aircraft parked outside) or aircraft washing due to worn, damaged, or missing fuel tank cap o-rings.
- Condensation from tanks that are not keep full of fuel
- Condensation from fuel transfer tanks or transport tanks and fuel farm storage that sit empty during off season.
- During high volume filling of farm fuel storage tanks and transfer tanks, water and other contaminants get stirred up.

To avoid water contamination:

- On-site fuel storage or delivered fuel shall be free of water.
- Fuel storage systems should have fuel/water separators and high-quality fuel filters to help reduce contamination.
- Fuel tank cap o-rings should be in serviceable condition. If not, replace.
- **All fuel drains shall be drained prior to the first flight of the day.** Four fuel drain points are provided to allow fuel draining to extract the moisture and sediment entrapped in the system. The drains are located at the bottom of each wing tank, the header tank, and firewall fuel filter. **H80 Only: Fuel pump shall be on when draining the fuel filter. PT6 Only: Drain the EPA tank after every shutdown.** Drain a small quantity of fuel into a transparent container to permit inspection for the presence of moisture or sediment. The fuel should be drained until all evidence of moisture or sediment disappears.
- Fuel tanks should be serviced after the last flight of each day to reduce condensation and

allow any entrapped water accumulation to settle to the fuel system drains, to be removed, prior to the next flight.

Two fuel vent drains are located on each side of fuselage under the wings. The fuel vent is located on the fuselage under LH wing. Always check for clogged fuel vents. The fuel tank must breathe, so it must have a vent that relieves both vacuum and pressure.

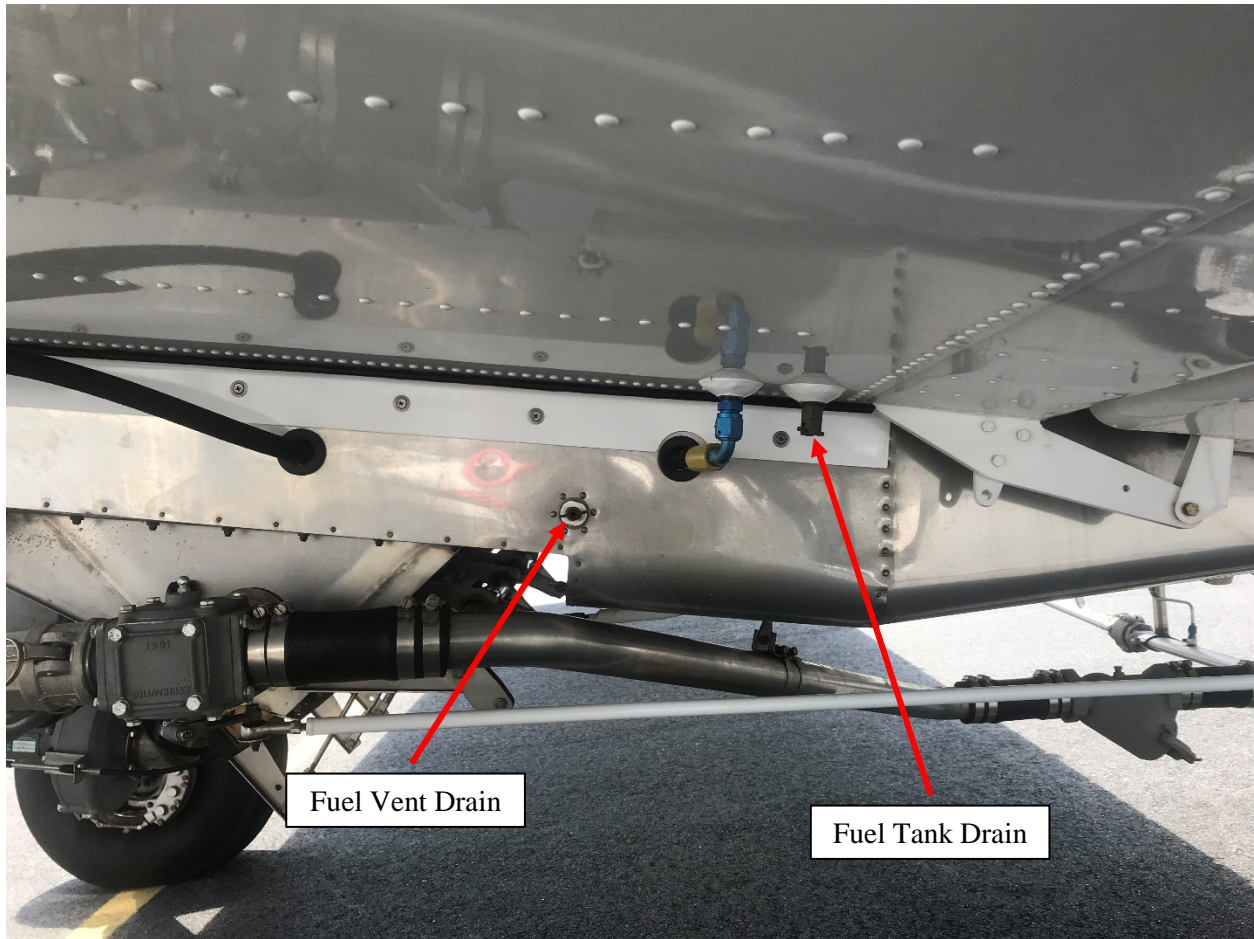


Figure 127-1
Fuel Vent Drain & Fuel Tank Drain
H80 model shown; other models may vary

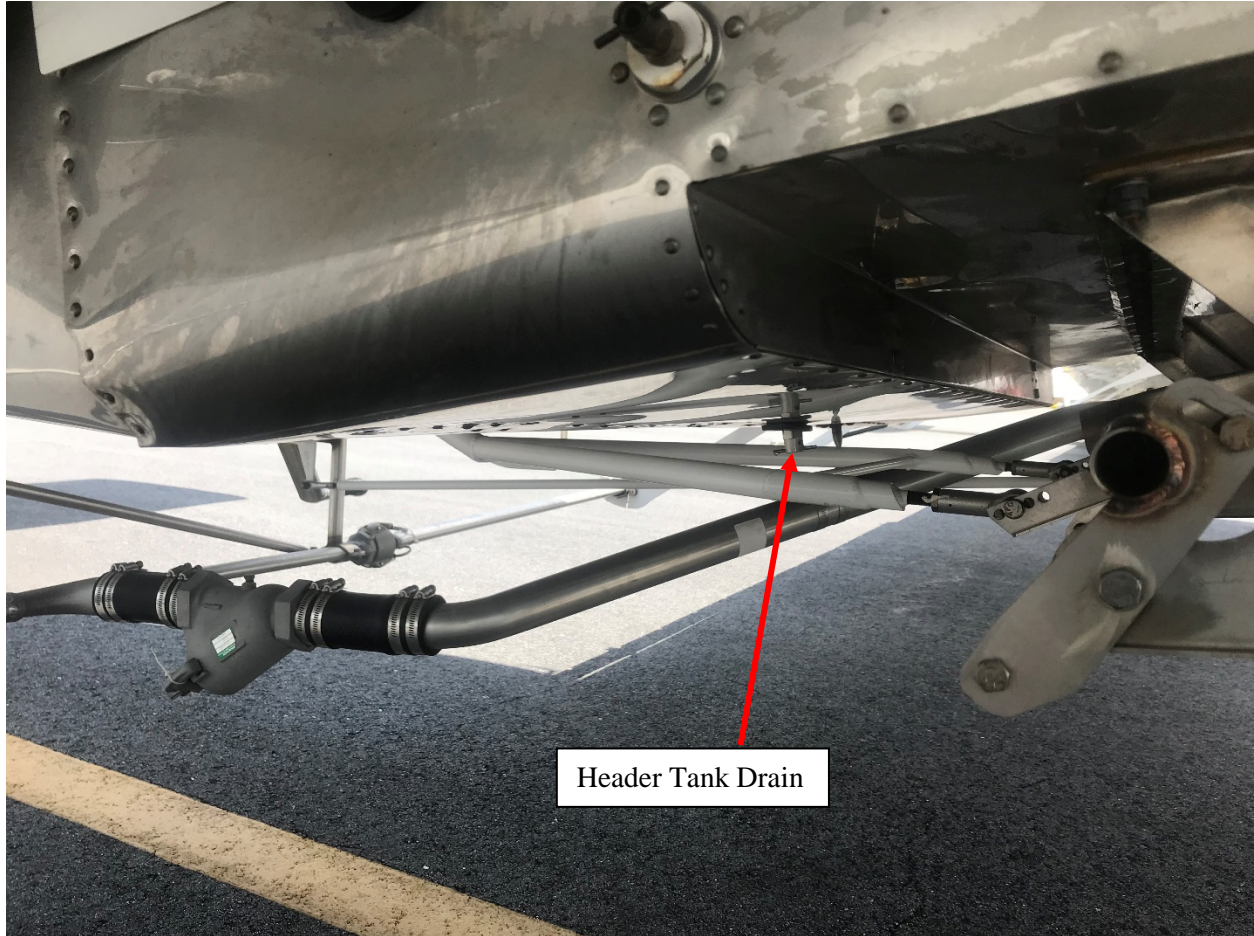


Figure 127-2
Header Tank Drain
H80 model shown; other models may vary

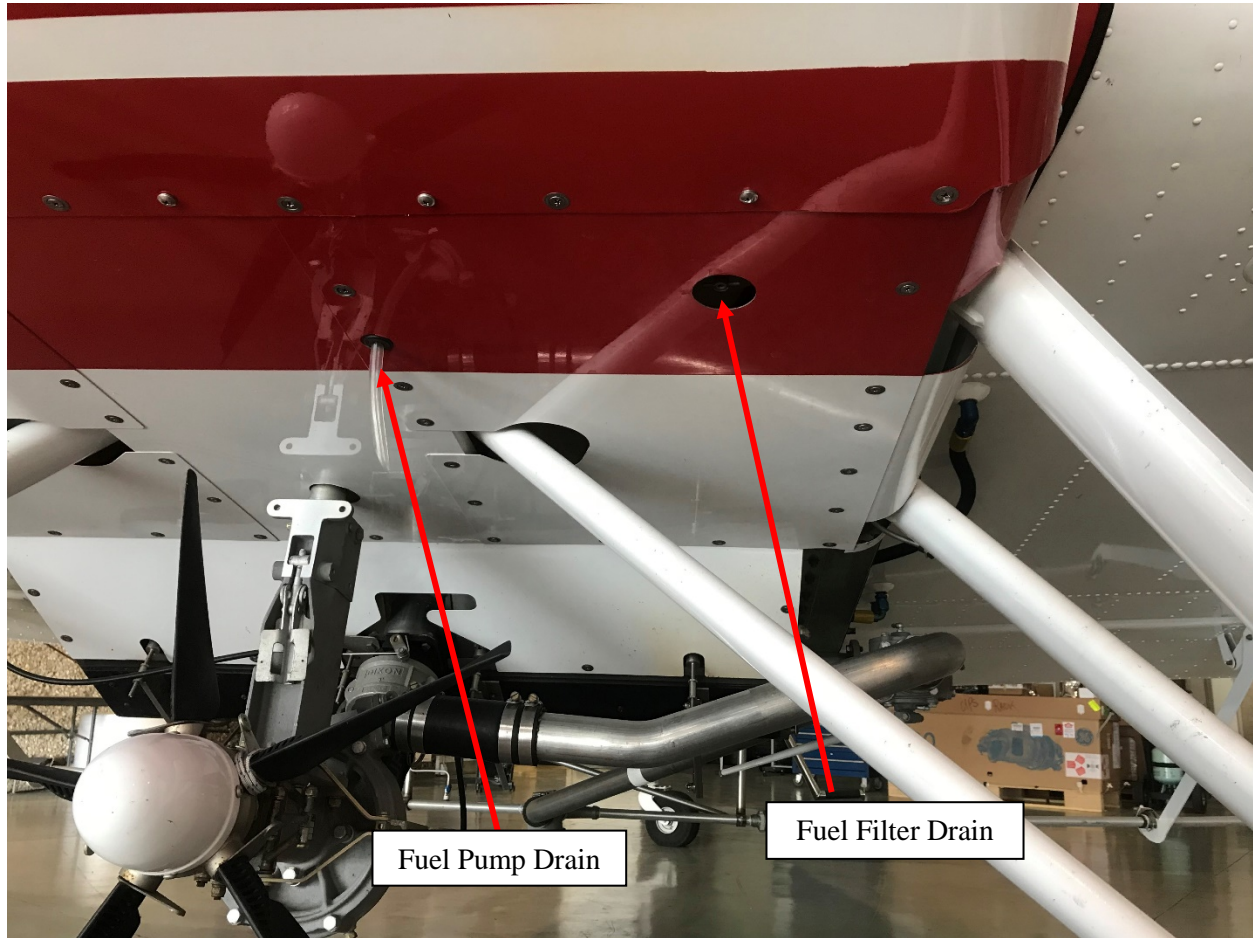


Figure 127-3
Fuel Filter Drain & Fuel Pump Drain
H80 model shown; other models may vary

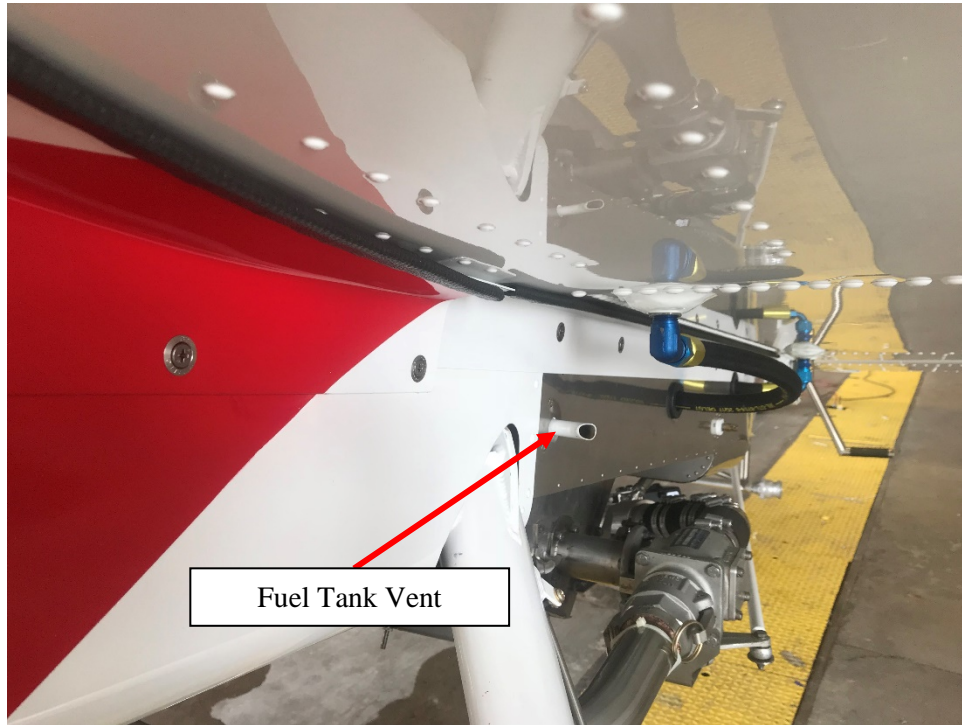


Figure 127-4
Fuel Tank Vent Line
Under LH Wing on Fuselage
H80 model shown; other models may vary

RESPONSE CARD

The final step in compliance with this Service Letter is to complete and return the compliance card on the next page. It may be mailed, Faxed, or scanned and e-mailed.

FAX to: Ed Rusk 229-439-9790

E-mail to: Ed Rusk erusk@thrushaircraft.com

Service Letter SL-AG-127 Rev. IR Compliance Report

Aircraft S/N:	_____	Aircraft Owner:	_____
Aircraft Registration #	_____	Address of Owner:	_____
Airframe total time:	_____	City & State:	_____
Engine total time:	_____	Physical location:	_____
Date of Compliance	_____		_____
Complied with by:	_____	Certificate #:	_____
Signature:	_____		_____

PLEASE RETURN THIS REPORT ONLY AFTER COMPLIANCE IS MADE

This response card may be mailed, faxed to (229) 439-9790, or e-mailed to erusk@thrushaircraft.com.

fold, tape & mail (Do Not Staple) **Don't forget postage**

Return Address

THRUSH AIRCRAFT INC.

Attn: Ed Rusk
300 Old Pretoria Road
Albany, GA 31721