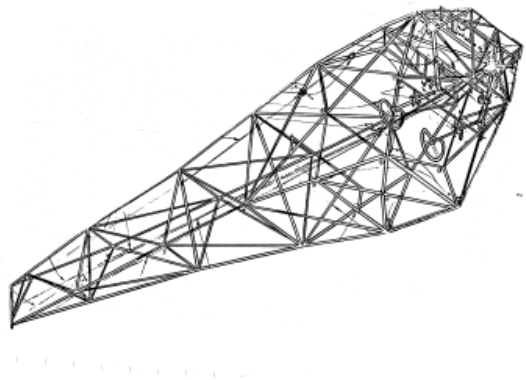
Model B - Maintenance Guide and Critical Inspection Points

The intent of this document is as a guide only outlining critical areas of maintenance and inspection to be included at the annual inspection and maintenance cycle. It is not to be used in lieu of applicable FAA or Manufacturer documents or checklists. It is the responsibility of the owner and mechanic performing the inspections and maintenance to comply with all applicable FARs, airworthiness directives and approved data.

Rev. A **Date: 24October 2010**

Fuselage and Hull Group



❑ Fiberglass / aluminum skin - for deterioration, distortion, other evidence of failure, and defective or insecure attachment of fittings.

Particular to the Taylorcraft B Model is the boot cowl and lower belly area behind the firewall. The belly sheet metal skin is riveted on using blind type fasteners that have the propensity to work loose and fret. The skin itself can 'oil can' and crack at attach points and around rivets.

❑ Systems and components - for improper installation, apparent defects, and unsatisfactory operation.

Many avionics and radio installations have been performed post manufacturing. Pay attention to antenna mounting locations for proper bonding and sealing. Also make sure adequate doublers are positioned behind antennas to prevent stress on the fabric and skin. Proper grounding of the antenna chassisis also important for good radio operation and elimination of noise and static.

Cabin and Cockpit Group

❑ Generally - for uncleanliness and loose equipment that might foul the controls.

❑ Seats and safety belts - for poor condition and apparent defects.

Many post manufacturer seat belt and shoulder harnesses have been installed on these aircraft. Check aircraft paperwork and FAA Form 337 for instructions of continued airworthiness.

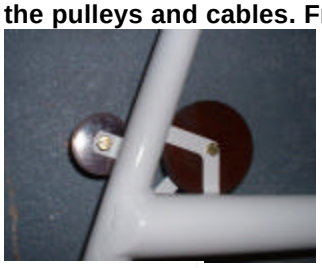
❑ Windows and windshields - for deterioration and breakage.

Crazing on the front windscreen is common directly behind the header tank filler cap. This is often caused by overfilling the header tank with the wing tanks during flight and spraying fuel onto the windshield in this area. The windshield radius's at the wing roots is also a common area for stress fatigue and cracks.

❑ Instruments - for poor condition, mounting, marking, and (where practicable) improper operation.

❑ Flight and engine controls - for improper installation and improper operation.

The aileron pulleys on the control yoke assembly often times are worn and the pulley will be rotating on the bushing. Actuate the ailerons and pay close attention to the pulleys and cables. Frozen pulleys are also quite common.



Check that the aileron stops on the sprocket assembly on the LEFT hand control column are a clevis pin type and protrude approx. ¼ inch. AD 78-20-11 and Taylorcraft SB 78-002 address this issue.

Make sure the Fuel Shutoff Valve Control has the required safety device to prevent inadvertent shut off of fuel during flight. Refer to AD 51-09-03. Pay close attention to the valve itself located at the header tank outlet for leaks and binding. The internal condition of the valve can be determined whilst cleaning the gasculater and noting any seeping or leaking of fuel while the control is pulled to the off position.

Wing transfer fuel vales are a particularly problematic part on the Taylorcraft. They are often found to be leaking from the shaft and/or threads. The valve was assembled using a leather packing that deteriorates over time. Many have successfully repaired these valves by lapping the cone and cup with a VERY fine lapping compound sometimes made of common toothpaste. The leather packing can also be fabricated in the shop. Rib stitching cord has sometimes been used in lieu of the leather packing. Alternative seals as well as valves have also been installed; however this must be researched and possibly approved by the local FAA in the form of a field approval.

❑ Batteries - for improper installation and improper charge.

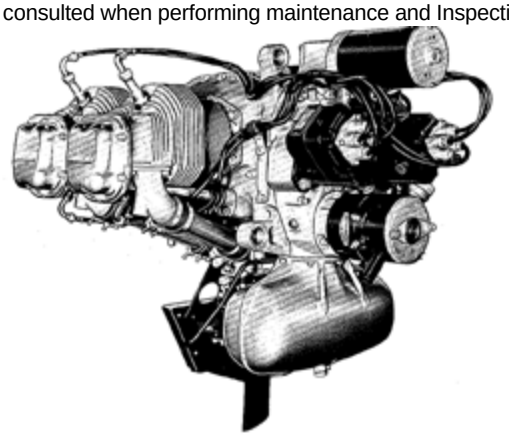
❑ All systems - for improper installation, poor general condition, apparent and obvious defects, and insecurity of attachment.

It should be noted that many repairs and modifications of these aircraft have been done through the years. I thorough review of the Aircraft paperwork;

particularly FAA Forms 337's should be done prior to inspecting the aircraft to prompt the owner and mechanic of the various systems and installations that were not done at the factory. The FAA now requires the Instructions for Continued Airworthiness be included with all STC's and field approvals.

Engine Group

Note: Due to the number of engine's and options that have been installed on the Taylorcraft B model, this portion of the document will only attempt to highlight problematic areas of the most common engines. It needs to be reiterated that FAR 43 AND the manufacturers approved data must always be consulted when performing maintenance and Inspections.



❑ Engine section - for visual evidence of excessive oil, fuel, or hydraulic leaks, and sources of such leaks.