# AIRWORTHINESS LIMITATIONS

## 1. GENERAL

The Airworthiness Limitations Section is FAA approved and specifies inspection and maintenance required under paragraphs 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

This chapter outlines the maximum replacement intervals and/or maintenance requirements for aircraft components, systems, and structures determined to be life limited and/or require monitoring through scheduled maintenance.

**Note:** All time limits and requirements listed in this section are also covered in Chapter 5, Time Limits and Maintenance Checks.

The following airworthiness limitations and requirements are separated into groups as described below.

**A. Maintenance Limitations**

Component and system checks required to be performed during airplane scheduled maintenance.

**B. Replacement Limitations**

Listing of time limits for replacement of specific components.

**C. Structural Limitations**

Damage Tolerant Limitations required by Federal Aviation Regulations for certification.

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## 2. DESCRIPTION

### A. Maintenance Limitations

The scheduled maintenance requirements listed below are also included in AMM 5-20 (Scheduled Maintenance Checks). The following criteria must be adhered to:

- Paint Finish

  To ensure that the temperature of the composite structure is kept below 150 degrees Fahrenheit, the maximum allowable paint on the wing will have an absorptivity not greater than 0.4, with an emissivity of at least 0.9. The maximum allowable paint on the fuselage will have an absorptivity not greater than 0.6, with an emissivity of at least 0.7. (Refer to 51-20)

- Cirrus Airframe Parachute System (CAPS)

  CAPS must be serviced and maintained by Cirrus Design trained and authorized parachute system technicians only. Airframe and Powerplant license alone is not sufficient credentials for performing maintenance on CAPS. Licensed Airframe and Powerplant mechanics may visually inspect the parachute installation and activation handle installation only as specified in 5-20. (Refer to 05-20)

### B. Replacement Limitations

The replacement items under this section are also included in AMM 5-10 (Time Limits and Maintenance Checks - Overhaul and Replacement Schedule). Unless otherwise specified, the following components must be replaced with new components, overhauled components, or components which have life remaining, at the intervals specified.

| Item | | Replacement Limits |
|---|---|---|
| 1. | Engine | There are no life limits on the engine or its components. Refer to Chapter 5, Time Limits and Maintenance Checks, for recommended overhaul schedule. |
| 2. | Propeller | There are no life limits on the propeller or its components. Refer to Chapter 5, Time Limits and Maintenance Checks, for recommended overhaul schedule. |
| 3. | Cirrus Airframe Parachute System (CAPS) Rocket Motor | Replace with new or recharged unit every 10 years. Refer to Chapter 95, Special Purpose Equipment. |
| 4. | Cirrus Airframe Parachute System (CAPS) Parachute | Replace with new or repacked (inspected/ repaired/repacked) unit every 10 years. Refer to Chapter 95, Special Purpose Equipment. |
| 5. | Cirrus Airframe Parachute System (CAPS) Reefing Line Cutters | Replace with new line cutters every 6 years. Refer to Chapter 95, Special Purpose Equipment. |
| 6. | Inflatable Restraint System Electronic Module Assembly | Refurbish unit every 7 years.<br>Replace with new unit every 14 years.<br>Refer to Chapter 25, Equipment and Furnishings. |
| 7. | Inflatable Restraint System Inflator Assembly | Refurbish unit every 7 years.<br>Replace with new unit every 14 years.<br>Refer to Chapter 25, Equipment and Furnishings. |

**C. Structural Limitations**

The certification requirements of 14 CFR 23.573 require that the composite airframe structure, cabin, wing, empennage their carry thru, and attaching structure whose failure would be catastrophic must be designed to damage tolerant criteria. Damage tolerant certification for the selected airframe life of 12,000 flight hours has been established for all of the affected parts with no special structural limitations or inspections.

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