

---

**AIRWORTHINESS DIRECTIVE**

---

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.1 (1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

---

**Great Lakes Aircraft Company, LLC Model 2T-1A-1 and 2T-1A-2 Aeroplanes****AD/G2T1/1****Induction System Inspection****2/2005**

**Applicability:** Model 2T-1A-1 and 2T-1A-2 aeroplanes that have a Lycoming IO-360-B1F6, AIO-360-B1G6, or AEIO-360-B1G6 engine installed.

**Requirement:**

1. Visually inspect the aircraft induction system drain fitting located in the induction elbow below the fuel injector for blockage or restriction.
2. If the hole is found to be blocked or restricted in the weld area or not drilled through the elbow, as a result of the Requirement 1 inspection, open up the restricted hole or drill a hole in the elbow at the fitting location using a No.10 (0.193 inch) drill.
3. Visually inspect the alternate air door for distortion, heat damage and cracks.
4. If any damage is found as a result of the Requirement 3 inspection, repair or fabricate a new door in accordance with Figure 1, Figure 2 and Figure 3 in this Directive.
5. Visually inspect the aircraft induction system for cleanliness of the air filter, distortion, security and damage from backfire or induction system fire.
6. If the air filter is dirty, if any distortion, damage or lack of security is found as a result of the Requirement 5 inspection, repair, replace or modify all affected components.

*Note: FAA AD 2004-25-22 Amdt 39-13910 refers.*

**Compliance:** For Requirement 1 - Within 25 hours time in service (TIS) after the effective date of this Directive.

For Requirement 2 - Before further flight, after the Requirement 1 inspection.

For Requirement 3 - Within 25 hours TIS after the effective date of this Directive at thereafter at intervals not to exceed 100 hours TIS.

For Requirement 4 - Before further flight, after the Requirement 3 inspection.

For Requirement 5 - Within 25 hours TIS after the effective date of this Directive at thereafter at intervals not to exceed 100 hours TIS.

**Great Lakes Aircraft Company, LLC Model 2T-1A-1 and 2T-1A-2 Aeroplanes**

AD/G2T1/1 (continued)

For Requirement 6 - Before further flight, after the Requirement 5 inspection.

This Airworthiness Directive becomes effective on 17 February 2005.

**Background:** This Directive is issued following advice from the FAA regarding reports of heat distortion, damage and cracks found in the aircraft induction system on Lycoming IO-360-B1F6, AIO- 360-B1G6 and AEIO-360-B1G6 engines. The actions specified in this Directive are intended to prevent the aircraft induction system from becoming blocked or restricted, which could result in engine failure. This failure could lead to loss of control of the aeroplane.

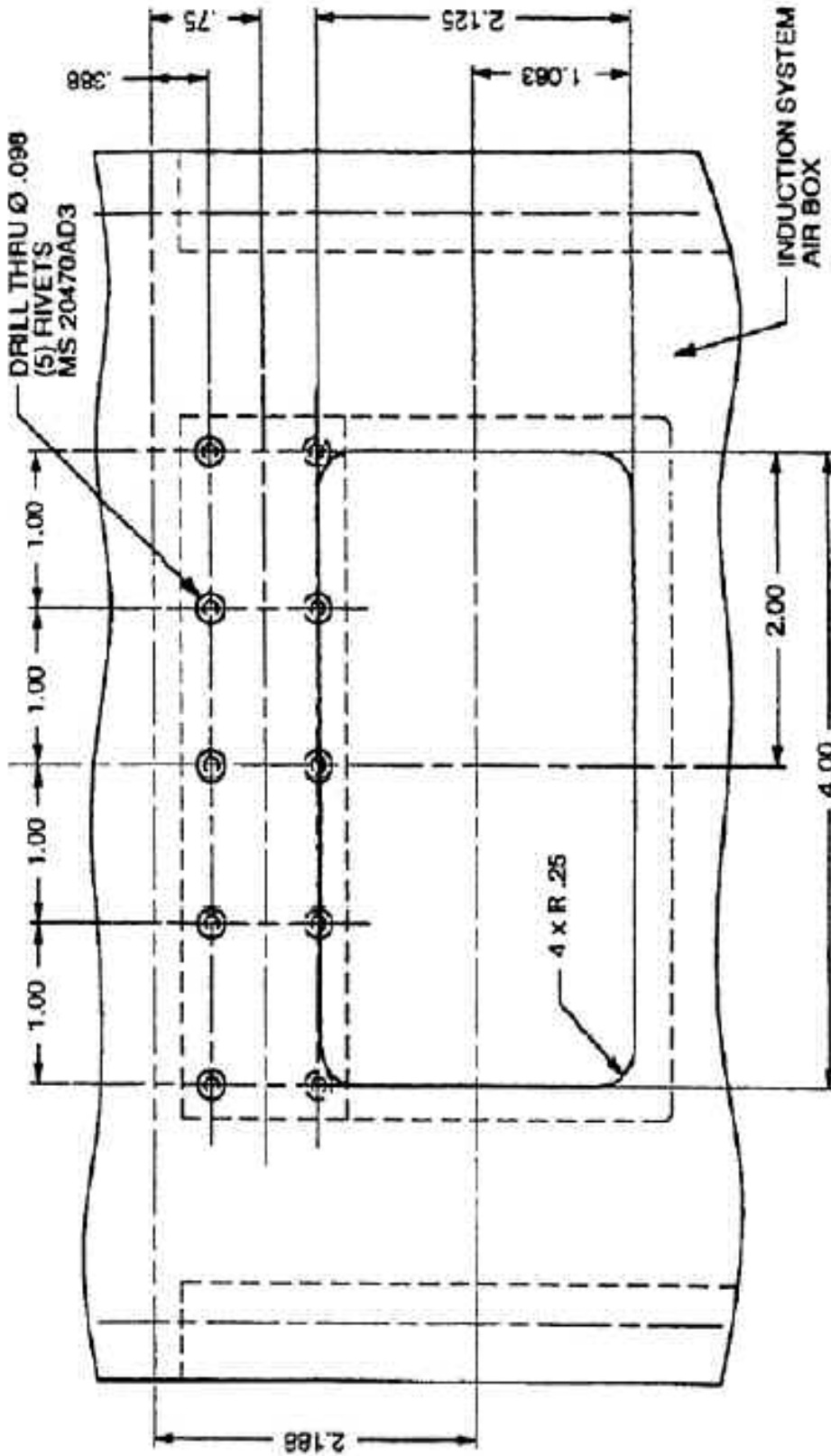


David Punshon  
Delegate of the Civil Aviation Safety Authority

6 January 2005

Great Lakes Aircraft Company, LLC Model 2T-1A-1 and 2T-1A-2 Aeroplanes

AD/G2T1/1 (continued)



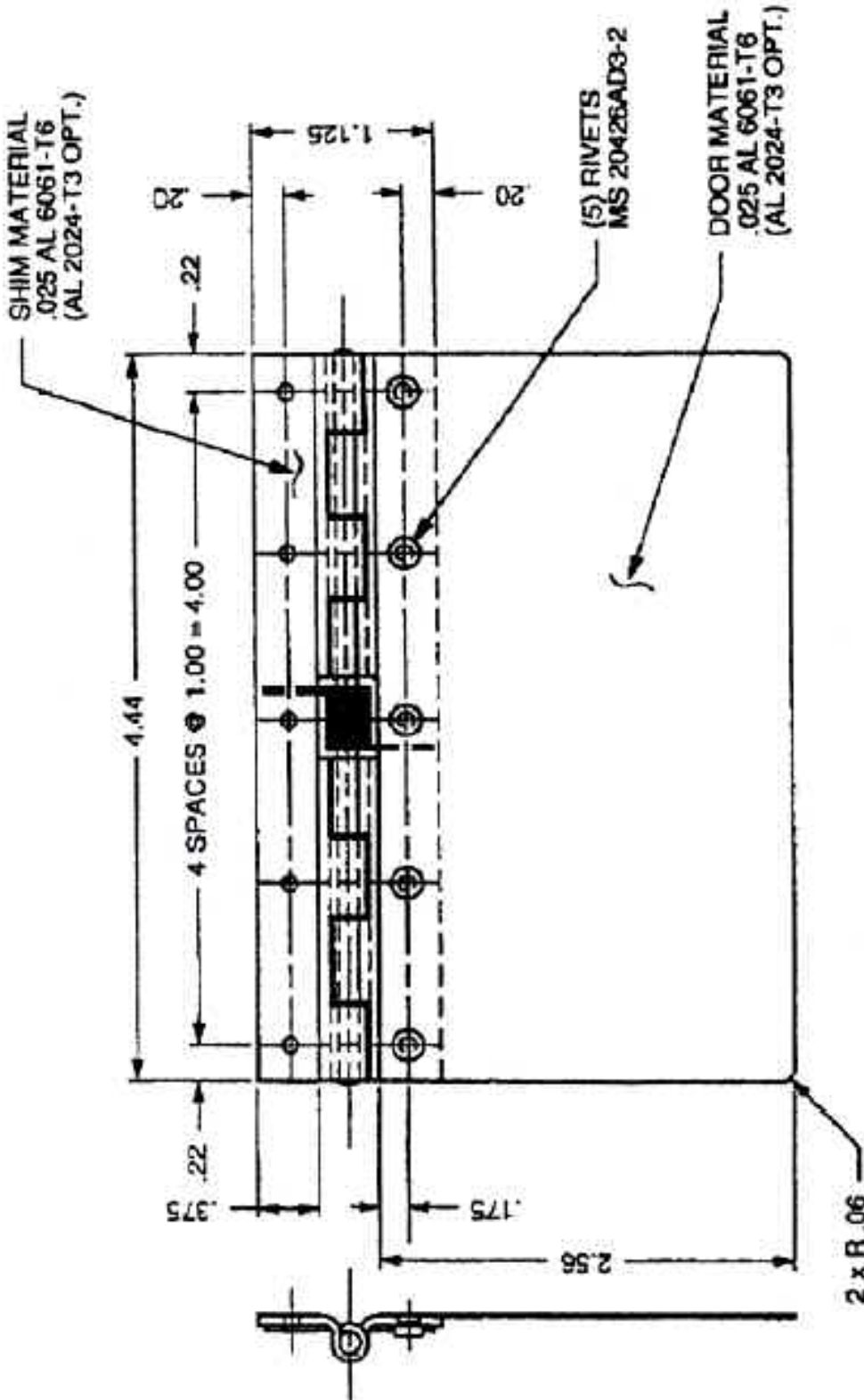
**Fig. 1**

GREAT LAKES AIRCRAFT, TYPES 2T-1A-1 AND 2T-1A-2  
ENGINE INDUCTION SYSTEM AD 79-20-08  
ALTERNATE AIR DOOR INSTALLATION  
FULL SCALE

Figure 1

Great Lakes Aircraft Company, LLC Model 2T-1A-1 and 2T-1A-2 Aeroplanes

AD/G2T1/1 (continued)



**Fig. 2**  
GREAT LAKES AIRCRAFT, TYPES 2T-1A-1 AND 2T-1A-2  
ENGINE INDUCTION SYSTEM AD 79-20-08  
ALTERNATE AIR DOOR FABRICATION DETAIL  
FULL SCALE

Figure 2

Great Lakes Aircraft Company, LLC Model 2T-1A-1 and 2T-1A-2 Aeroplanes

AD/G2T1/1 (continued)

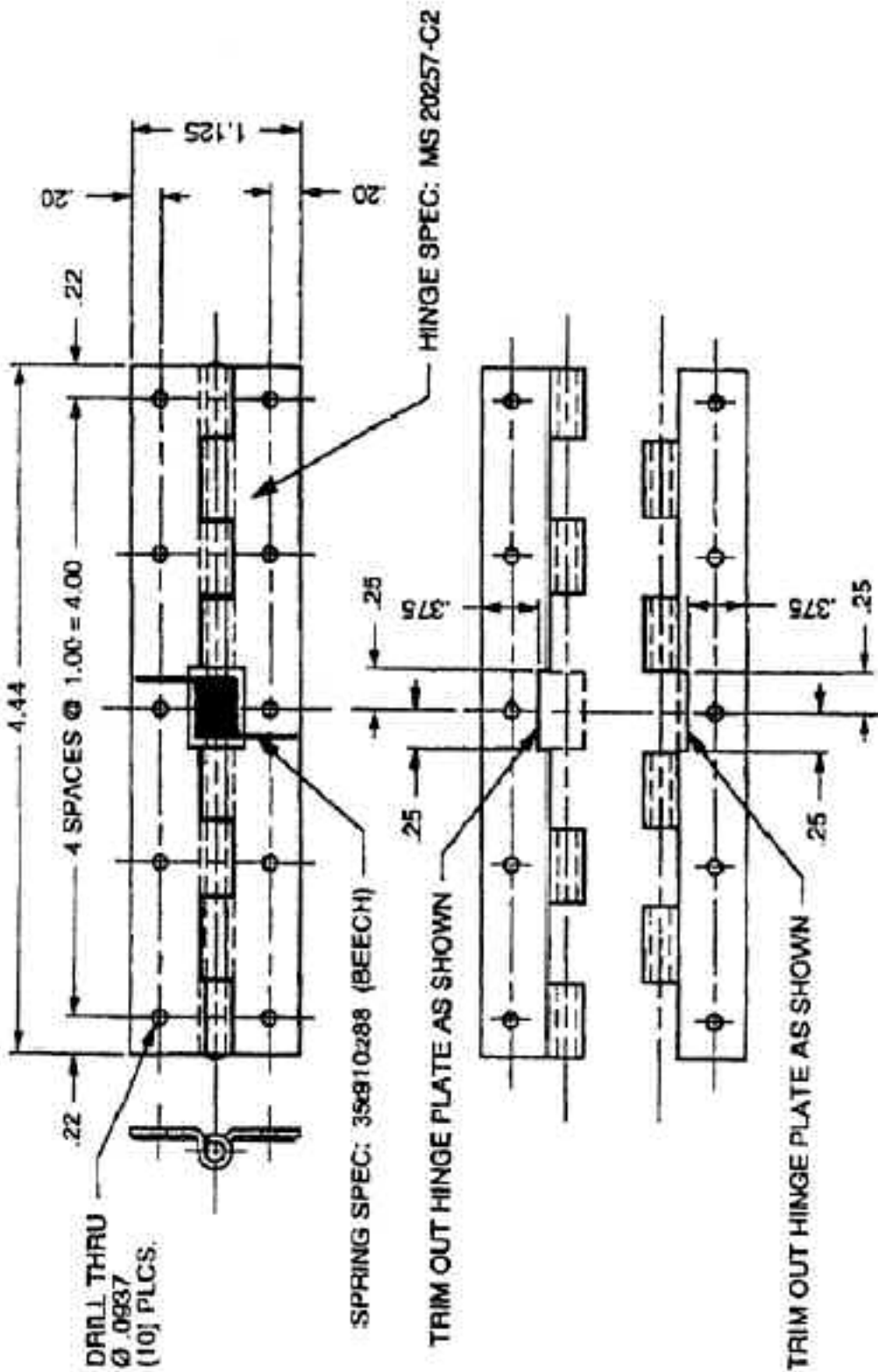


Fig. 3

GREAT LAKES AIRCRAFT, TYPES 2T-1A-1 AND 2T-1A-2  
ENGINE INDUCTION SYSTEM AD 79-20-08  
ALTERNATE AIR DOOR HINGE DETAIL  
FULL SCALE

SHT. 3 of 3

Figure 3