



SPECIAL AIRWORTHINESS INFORMATION BULLETIN

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**Federal Aviation
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<http://www.faa.gov/aircraft/safety/alerts/SAIB>

This is information only. Recommendations aren't mandatory.

Introduction

In order to enhance the inspection and maintenance of **Schweizer Tow Hook Models 1D112-15 and 1D112-16**, this Special Airworthiness Information Bulletin alerts you, owners and operators of aircraft with these installed mechanisms, of specific details to review when evaluating their condition. These tow hooks may be installed on, but not limited to the following aircraft models:

have similar functionality. Our recommendations apply to these prior units.

Recommendation

We recommend that all owners and operators of aircraft with these Schweizer tow hook models 1D112-15 and 1D112-16 installed implement the following course of actions prior to the next tow operation and at each subsequent 100-hour/annual inspection, unless otherwise stated:

Manufacturer	Models	STC
Cessna	120, 140, 140A, 170, 170A, 170B, 305A through 305C airplanes	SA268CE
	180, 180A through 180F, 185, 185A, 185B, and 321	SA65CE
Piper	PA-18 and PA- 18A	SA1-349

1. Inspect the entire tow hook system for loose or worn pivot pins, damaged fasteners, elongated holes, cracks, corrosion, surface damage, excessive wear, deformed parts, frayed rope/cable, rubber block damage, and freedom of operation. **Note that ozone and heat can have detrimental effects on rubber.** Look for excessive hardness of the material as well as permanent indentation created by contact with the hook lever.
2. Perform a Closing Check by verifying a sufficient force is required to compress the rubber block with the pivot hook and the pivot hook applies sufficient locking load against the latch arm after the latch arm is engaged. Verify that the movement of the latch arm toward the release position causes additional compression of the rubber block (original shape of rubber block is maintained).

Background

We have received requests from the gliding community to establish specific instructions for evaluating and maintaining these specified tow hooks. There are no standards of airworthiness for these units. Schweizer no longer produces these tow hooks or stocks spare parts.

Schweizer produced several predecessors and variants to the 1D112-15 and 1D112-16 that

3. Perform a no-load Pull Test at the release arm to verify 4 to 10 lbs of pull load is required for release, per Schweizer Form F-236, Rev. 9-18-84. If the release load cannot be obtained within the specified range, the rubber block is worn or deformed and should be replaced with a similar rubber block.
4. For a periodic inspection, you should perform the Closing Check during **each** hookup of the tow rope/ring. You should perform the Closing Check and Pull Test with a standard tow ring in the hook.

NOTE: There is concern about the inability to release the towline from the tow plane when the glider operates above a certain angle to the tow plane. FAA Advisory Circular 43.13-2A, Chapter 8, Section 2, Figure 8.1 recommends a 20-degree cone of displacement for towing operation. In addition, the FAA Glider Flying Handbook, document number FAA-H-8083-13, specifies recommended launch and recovery procedures. **All tow plane and glider pilots should review these operations on a recurring basis.**

For Further Information Contact

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Schweizer Form F-236, Rev. 9-18-84, "Installation Notes and Safety Instructions" is available on Schweizer's web site at: <http://www.sacusa.com/support/ServiceLetter/F-236.pdf>