

SPECIAL AIRWORTHINESS INFORMATION BULLETIN



U.S. Department
of Transportation

**Federal Aviation
Administration**

NE-05-05
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Aircraft Certification Service
Washington, DC

www.faa.gov/certification/aircraft

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) advises you, owners and operators of **Schweizer Aircraft Corporation (SAC) Models 269C and 269C-1**, of failure of the throttle bellcrank support, P/N 269A8460, and availability of *attached* Schweizer Service Bulletins (SBs), **C1B-16.1 and B282.1**.

Background

SAC has received reports of three Throttle Bellcrank Support (P/N 269A8460-1) failures resulting from fatigue cracks just below the throttle control bellcrank attach lug. A review of the blueprint part subjected to the design loads has confirmed structural adequacy. A possible source of the problem could be due to

excessive surface grinding at the critical area of the casting. The referenced SBs call for inspections at the critical section to identify cracks, corrosion and undersized sections. The SBs also call for the installation of a new kit, SA-269K-115-1 or -3 that will prevent failure of the support bracket.

Although the bracket failures have been limited to Model 269C-1, since certain Model 269C helicopters use a similar bracket, inspection and modification is also called for in these models.

Recommendation

We recommend you make inspections and modifications for the following models in accordance with the listed service bulletins below:

Model	Serial Number	Aircraft Condition	Service Bulletin
269C-1	1 through 138	Equipped with carbureted engines incorporating the 269A8460-1 support bracket that have not been modified by installation of SA-269K-115-1 or -3 Kit	C1B-16.1 dated September 24, 2004
269C	4 through S1729	Equipped with optional throttle governor system 269A4995 that have the 269A8460-3 support bracket installed as a spare, and have not been modified by the installation of SA-269K-115-1 or -3 Kit	B282.1 dated September 24, 2004
269C	S1730 and subsequent	Equipped with optional throttle governor system 269A4995 incorporating the 269A8460-3 support bracket that have not been modified by the installation of SA-269K-115-1 or -3 Kit	B282.1 dated September 24, 2004

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SCHWEIZER SERVICE BULLETIN

C1B-016.1*
24 Sep 2004

MANDATORY

MANDATORY

MANDATORY

SUBJECT: SUPPORT BRACKET (269A8460-1) THROTTLE BELLCRANK, INSPECTION FOR CRACKS

MODELS AFFECTED: All 269C-1 Helicopters equipped with carbureted engines incorporating the 269A8460-1 support bracket, that have not been modified by installation of SA-269K-115-1 or -3 Kit.

NOTE

Fuel injected aircraft are not subject to this Service Bulletin. Serial numbers 0139 and subsequent were factory built with fuel injected engines.

TIME OF COMPLIANCE:

- PART I**
- Within 10 hours of flight time or the next Annual Inspection, whichever occurs first.
- PART II**
- Within 100 hours of flight time or within three months from issue date of this Service Bulletin, whichever occurs first.

REFERENCE: Model 269C-1 Basic HMI (Issued 14 July 1995; Revised: 20 Nov 2003)

- PREFACE:**
- There have been reports of failures resulting from fatigue cracks in the 269A8460-1 support, just below the throttle control bellcrank attach lug. Part I of this Service Bulletin requires an inspection for cracks and to identify those 269A8460-1 supports that may be unserviceable and remove them from service. Part II of this Service Bulletin requires installation of Field Modification Kit; SA-269K-115-1 or -3.
 - Failure to comply with this Service Bulletin may lead to loss of control of the helicopter and subsequent injury, death and/or property damage.

FAA APPROVAL: The engineering aspects of this Service Bulletin (C1B-016.1) are FAA approved.

PARTS REQUIRED:

SA-269K-115-1 or -3 Field Modification Kit (The -1 Kit includes all necessary parts; the -3 Kit requires local fabrication of 269A8460-15 angle.)

PROCEDURE:

PART I:

- a. Remove lower cowling to gain access to the front of the engine.

(|) Denotes portion of text added or revised

*Supersedes C1B-016, dated 06 Apr 2004

NOTE

Two versions of support may be in service.

- b. Determine which version of the support is installed. This may require removal of the bellcrank.
- (1) 269A8452-1 or -13 is a welded support used with a separate 269A8453-15 tube to which the inlet hose is attached. This installation is not subject to this Service Bulletin.
 - (2) 269A8460-1 a one-piece casting, which is subject to this Service Bulletin.
- c. Inspect the 269A8460-1 support as follows:
- (1) Remove the bellcrank.

CAUTION

Do not bend throttle extension to cable housing more than 5° or damage to the swaged joint may result requiring cable replacement.

- (2) Clean the upper web area below the bellcrank attachment lug.
 - (3) Measure the web thickness in the area between the bellcrank lug and the body of the support. Minimum thickness is .090 inch.
 - (4) Using a 10X glass and bright light, inspect for cracks in the webs between the bellcrank lug and the body of the support for cracks, missing paint or corrosion in the magnesium.
 - (5) Remove any corrosion and re-inspect for cracks.
 - (6) If determination of condition is not conclusive; remove support, strip paint and dye check in accordance with Basic HMI, Section 2.
- d. Remove from service any cracked or excessively corroded parts, or parts that measure below minimum dimension.
- e. Install serviceable support and new gasket.
- f. Record compliance with Part I of this Service Bulletin in the aircraft records.

PART II:

- a. Inspect the 269A8460-1 support in accordance with Part I. Modify serviceable parts by installation of Field Modification Kit; SA-269K-115-1 or -3.
- b. No further action is required by this bulletin after the SA-269K-115-1 or -3 Field Modification Kit is installed.
- c. Record compliance with Part II of this Service Bulletin in the aircraft records.

WEIGHT AND BALANCE

Weight and balance are not affected.



SCHWEIZER SERVICE BULLETIN

B-282.1*
24 Sep 2004

MANDATORY

MANDATORY

MANDATORY

SUBJECT: SUPPORT BRACKET (269A8460-3) THROTTLE BELLCRANK, INSPECTION FOR CRACKS

- MODELS AFFECTED:**
- Model 269C Helicopters, serial numbers S1730 and subsequent, equipped with optional throttle governor system 269A4995 incorporating a 269A8460-3 support bracket, and have not been modified by installation of SA-269K-115-1 or -3 Kit.
 - Model 269C Helicopters, serial numbers 0004 thru S1729, equipped with optional throttle governor system 269A4995 that have had the 269A8460-3 support installed as a spare, and have not been modified by installation of SA-269K-115-1 or -3 Kit.

TIME OF COMPLIANCE:

PART I ● Within 10 hours of flight time or the next Annual Inspection, whichever occurs first.

PART II ● Within 100 hours of flight time or within three months from issue date of this Service Bulletin, whichever occurs first.

REFERENCE: 269A, TH-55A, A-1, B & C Basic HMI (Issued: 15 Mar 1982; Revised: 20 Nov 2003)
269C 1809 & Subs. Basic HMI (Issued: 03 Oct 2003; Revised: 20 Nov 2003)
Service Notice N-180 (18 Jan 1982)

PREFACE: ● There have been reports of failure resulting from fatigue cracks in the 269A8460-1 Throttle Bellcrank Support used on some Model 269C-1 Helicopters. Although there have been no reports of cracks or failures on the 269A8460-3 Throttle Bellcrank Support used on certain Model 269C helicopters, an inspection and modification of these support brackets is appropriate due to their similarity. Part I of this Service Bulletin requires an inspection for cracks and to identify those 269A8460-3 supports that may be unserviceable and remove them from service. Part II of this Service Bulletin requires installation of Field Modification Kit; SA-269K-115-1 or -3.

- Failure to comply with this Service Bulletin may lead to loss of control of the helicopter and subsequent injury, death and/or property damage.

FAA APPROVAL: The engineering aspects of this Service Bulletin (B-282.1) are FAA approved.

PARTS REQUIRED: SA-269K-115-1 or -3 Field Modification Kit (The -1 Kit includes all necessary parts; the -3 Kit requires local fabrication of 269A8460-15 angle.)

(|) Denotes portion of text added or revised

*Supersedes B-282, dated 06 Apr 2004

PROCEDURE:

PART I:

- a. Remove lower cowling to gain access to the front of the engine.

NOTE

Three versions of the support may be in service.

- b. Determine which version of the support is installed. This may require removal of the bellcrank. (There may not be any part numbers visible.)
- (1) 269A8419-7 is a one-piece support that has the ear for the lug welded to the mounting plate, installed on early aircraft and kits; not subject to this Service Bulletin.
 - (2) 269A8419 -9 is a machined plate, incorporating the lug, which is used with a separate 269A8428-11 tube to which the inlet hose clamps; not subject to this Service Bulletin.
 - (3) 269A8460-3 is a one piece casting and is subject to this Service Bulletin.
- c. Inspect the 269A8460-3 support as follows:
- (1) Remove the bellcrank.

CAUTION

Do not bend throttle extension to cable housing more than 5° or damage to the swaged joint may result requiring cable replacement.

- (2) Clean the upper web area below the bellcrank attachment lug.
 - (3) Measure the thickness of the webs between the bellcrank lug and the body of the support. Minimum thickness is .090 inch.
 - (4) Using a 10X glass and bright light, inspect the webs between the bellcrank lug and the body of the support for cracks, missing paint or corrosion in the magnesium.
 - (5) Remove any corrosion and re-inspect for cracks.
 - (6) If determination of condition is not conclusive; remove support, strip paint and dye check in accordance with Basic HMI, Section 2.
- d. Remove from service any cracked or excessively corroded parts, or parts that measure below minimum dimension.
- e. Install serviceable support and new gasket.
- f. Record compliance with Part I of this Service Bulletin in the aircraft records.

PART II

- a. Inspect the 269A8460-3 support in accordance with Part I. Modify brackets by installation of Field Modification Kit; SA-269K-115-1 or -3.
- b. No further action is required by this bulletin after the SA-269K-115-1 or -3 Field Modification Kit is installed.
- c. Record compliance with Part II of this Service Bulletin in the aircraft records.

WEIGHT AND BALANCE

Weight and balance are not affected.

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