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INSTRUCTIONS
for
CONTINUED AIRWORTHINESS
for
PRE-FLIGHT STEP/HANDLE™

STC: SH1366SO
407-531-001 (SINGLE STEP KIT)
407-531-002 (SINGLE SIDE, TWO STEP KIT)

for
BELL HELICOPTER TEXTRON
MODEL 407 HELICOPTERS

Report Number AA-00123

Revision A

March 4, 2011

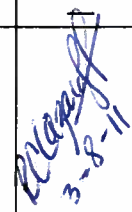


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**INSTRUCTIONS for CONTINUED AIRWORTHINESS
PRE-FLIGHT STEP/HANDLE****LOG OF REVISIONS**

Date	Revision	Description	Affected Pages	Approved / Date	Accepted / Date
10/09/00	NR	Original Release	All	—	—
03/04/11	A	Revised format of Document Added STC number applicability Revised Section 10.0 to reflect Installation Instructions report revision level applicability Revised Parts Breakdown, Table 3 to add alternate Pre-flight Step/Handle part numbers	All All 9 10	 18 MARCH 2011	 3-8-11

LIST OF EFFECTIVE PAGES

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1.0 INTRODUCTION

These instructions contain the information necessary to inspect and maintain the AERONAUTICAL ACCESSORIES PRE-FLIGHT STEP/HANDLE™ (407-531-001 SINGLE STEP KIT) or (407-531-002 SINGLE SIDE TWO STEP KIT) installed on Bell Helicopter Textron model 407 helicopters in accordance with STC SH1366SO.

1.1 DISTRIBUTION

These instructions are provided with each Pre-Flight Step/Handle™ Kit. Any airworthiness or flight safety revisions will be immediately made available to all affected owners.

2.0 DESCRIPTION

The Aeronautical Accessories Pre-Flight Step/Handle™ provides an extra measure of safety during pre-flight and maintenance operations. The Pre-Flight Step/Handle™ provides a sturdy handhold and allows the pilot or mechanic to more safely stand on the aircraft roof during inspection.

3.0 MAINTENANCE INSTRUCTIONS**3.1 PRE-FLIGHT INSPECTION**

The Pre-Flight Step/Handle™ shall receive a Pre-flight visual inspection. Inspect for proper installation of hardware, any unusual wear patterns, corrosion and/or damage (scratches, nicks, dents, cracks). Ensure the damage limits presented in Table 1 are not exceeded for the Pre-Flight Step/Handle™. Replace parts as required.

NOTE

Removal of Pre-Flight Step/Handle™ from helicopter is not required for inspection. If any damage is noted during the Pre-flight Inspection, refer to Section 3.3 Repair or Section 4.0 Troubleshooting Information.

The Pre-flight inspection consists of the following items:

1. Inspect the Step/Handle for nicks, scratches, dents, corrosion, and cracks.

NOTE

The indications of corrosion are 1) corrosion deposits (a white or gray powder on aluminum or rust colored deposits on steel), 2) pits in the aluminum or steel surface, 3) blisters, bulging or flaking of protective coatings.

2. Inspect the attaching fasteners for security.

TABLE 1. DAMAGE AND REPAIR LIMITS

Component	Maximum Allowable Damage And Repair Limits Damage and corrosion may be repaired as noted in Section 3.3 Repair, if it does not exceed these limits. For damage exceeding these limits, replace components.	
	Scratches / Nicks / Dents	Cracks
Pre-Flight Step/Handle™	To a depth of .050 inch	None

3.2 ANNUAL INSPECTION

The Pre-Flight Step/Handle™ shall receive an Annual Inspection consisting of the following items:

1. Complete the Pre-flight inspection listed above.
2. Check the torque value on the Step/Handle attaching hardware and adjust as required to 50-70 in/lbs.
3. Utilize the Inspection Record provided in Appendix A to document Inspection completion.

3.3 REPAIR

Repair scratches, nicks, dents and corrosion as follows:

1. Lightly polish the affected area using Scotch-Brite pads. Ensure the limits presented in Table 1 are not exceeded. Take care to remove as little of the component protective coatings as possible.
2. For the aluminum components, after corrosion or damage repair: Clean repaired area with isopropyl alcohol, brush Alodine bare aluminum areas per MIL-C-5541 or equivalent, and paint area to match existing finish.
3. For the Steel components, after corrosion or damage repair: Prime with a rust prohibitive primer and paint area to match existing finish.

4.0 TROUBLESHOOTING INFORMATION

See Figure 1.

TABLE 2. TROUBLESHOOTING GUIDE

PROBLEM	PROBABLE CAUSE	REMEDY
Pre-Flight Step/Handle is loose or vibrates	Fasteners loose/missing	Check Step/Handle fastening hardware for security, replace as necessary
	Screw bottomed-out in insert	Check torque on fasteners, if loose may require additional washers
	Sealant deteriorated	Remove Step/Handle and replace sealant (MIL-S-8802 or equivalent) and reinstall Step/Handle
	Cracks in Step/Handle around fasteners	Check Step/Handle condition with damage and repair limits. Repair or replace if necessary

5.0 REMOVAL AND REPLACEMENT INFORMATION

(Refer to Table 3 and Figure 1 for part identification.)

5.1 REMOVAL – PRE-FLIGHT STEP/HANDLE™

1. Remove the two screws (3), and the four washers (4 or 5). Retain hardware for reinstallation.
2. Remove the Step/Handle (1).

NOTE

Use of a heatgun to soften sealant may facilitate removal.

5.2 INSTALLATION – PRE-FLIGHT STEP/HANDLE™

1. Coat under side of Step/Handle (1) with sealant (MIL-S-8802 or equivalent).
2. Install the Step/Handle (1) with the two screws (3) and two washers (4 or 5). Torque screws to 50-70 in/lbs.

NOTE

It may be necessary to use optional NAS1149D0463J washers or a combination of the NAS1149D0416J washers and the NAS1149D0463J washers to obtain optimum fit

6.0 STRUCTURAL FASTENER DATA

For hardware identification see Table 3 and Figure 1.

7.0 SPECIAL TOOLS NEEDED

Torque wrench

8.0 RECOMMENDED OVERHAUL PERIODS

No component overhaul required for this type design change.

9.0 AIRWORTHINESS LIMITATIONS

No airworthiness limitations associated with this type design change.

10.0 WEIGHT AND BALANCE**10.1 PRE-FLIGHT STEP/HANDLE KITS INSTALLED IN ACCORDANCE WITH
INSTALLATION INSTRUCTIONS REPORT AA-96089
REVISIONS H AND I ONLY**

- Weight Change: 1.0 lb (0.45 kg) (each, 407-532-101)
0.75 lb (0.34 kg) (each, 407-532-103 / 407-532-105)
- Station: 103.63 (first Step/Handle™)
141.25 (second Step/Handle™)
- Lateral Arm: ±18.5 (one side only)
0.00 (both sides)

**10.2 PRE-FLIGHT STEP/HANDLE KITS INSTALLED IN ACCORDANCE WITH
REPORT AA-96089 REVISIONS NR THRU G, J AND SUBSEQUENT**

- Weight Change: 1.0 lb (0.45 kg) (each, 407-532-101)
0.75 lb (0.34 kg) (each, 407-532-103 / 407-532-105)
- Station: 137.88 (first Step/Handle™)
108.88 (second Step/Handle™)
- Lateral Arm: ±18.5 (one side only)
0.00 (both sides)

11.0 PARTS BREAKDOWN

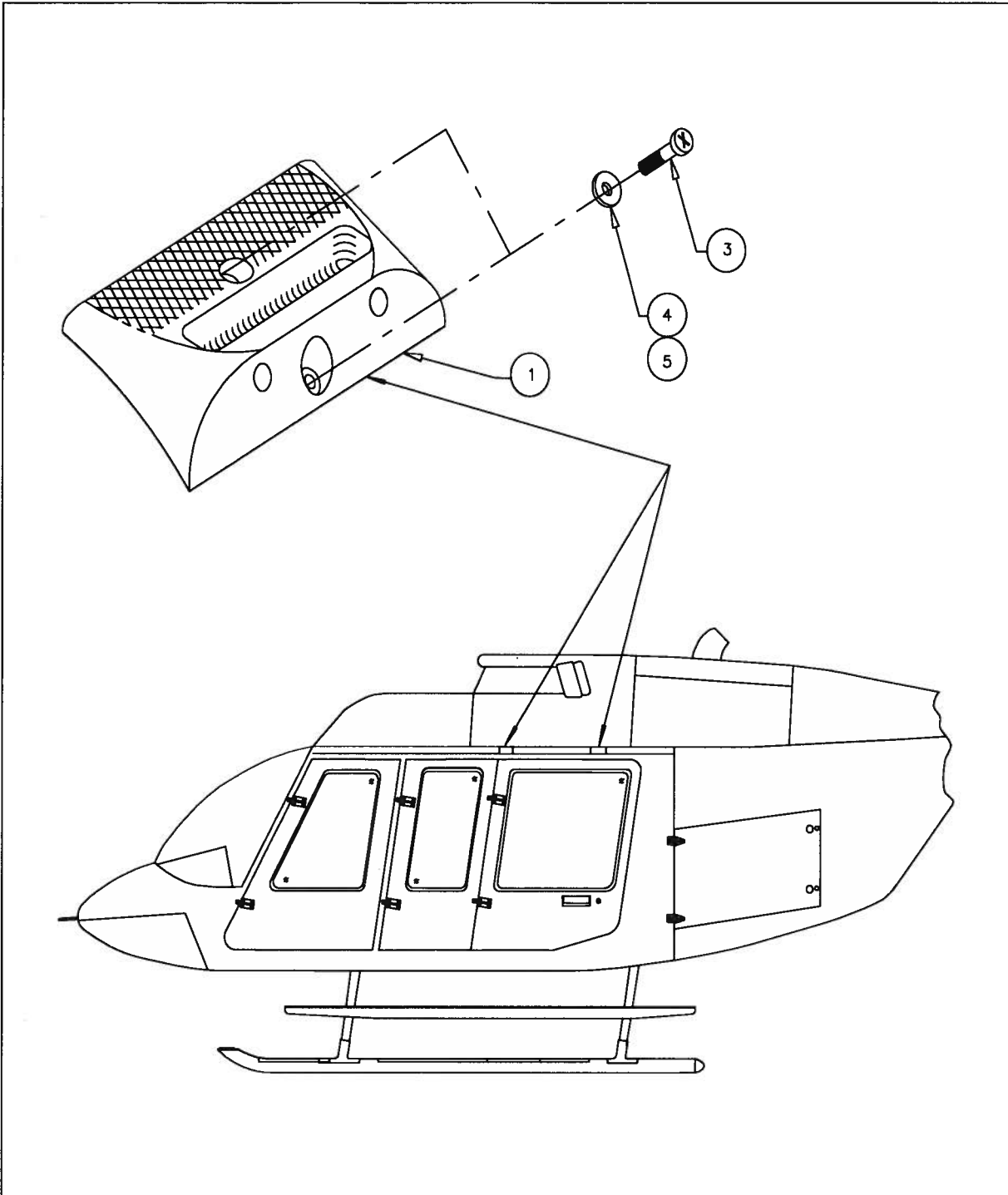
Table 3 contains Parts Breakdown data for the Pre-Flight Step/Handle™ Kit as illustrated in Figure 1.

The column Availability Code (AV Code) specifies the procurement status for each part. The codes to identify if a part is procurable, procedure details to get an assembly or local manufacture code are as follows:

AV Code	Details
0	Nonprocurable part
1	Procurable part
2	Procure as detail parts only
3	Procurable as Next Higher Assembly
4	Local manufacture. Contact AAI Product Support Engineering (PSE)
5	Part replacement requires a fixture or special equipment. Contact AAI PSE
6	Non-stock procurable part

**TABLE 3. PARTS BREAKDOWN,
407-531-001 / 407-531-002 PRE-FLIGHT STEP/HANDLE™**

Figure Index No.	Qty -001	Qty -002	Part Number	Description	AV Code
1	1	2	407-532-105	Pre-Flight Step/Handle (Alt: 407-532-101 / 407-532-103)	1
2*	2	4	80-005-3-8	Insert	1
3	2	4	MS27039-4-11	Screw	1
4	2	4	NAS1149D0416J	Washer Alt.: AN960JD416L	1
5	2	4	NAS1149D0463J	Washer Alt.: AN960JD416	1
* Not Shown					

**FIGURE 1. PRE-FLIGHT STEP/HANDLE™**

**APPENDIX A,
INSPECTION RECORD**

**INSTRUCTIONS for CONTINUED AIRWORTHINESS
PRE-FLIGHT STEP/HANDLE****Work Order Number:** _____**Registration Number:** _____**Serial Number:** _____**Total Time:** _____**Date:** _____

Inspect in accordance with Section 3.2, Annual Inspection.

1. Inspect the Step/Handle for nicks, scratches, dents, corrosion, and cracks.

NOTE

The indications of corrosion are 1) corrosion deposits (a white or gray powder on aluminum or rust colored deposits on steel), 2) pits in the aluminum or steel surface, 3) blisters, bulging or flaking of protective coatings.

2. Inspect the attaching fasteners for security.
3. Check the torque value on the attaching hardware and adjust as required to 50-70 in/lbs.

Signature _____ **A & P No.** _____**Signature** _____ **Inspector** _____