NOTICE NO. N-140 DATE 1 Sep 1976

SUBJECT: FIELD MODIFICATION - FUSELAGE FRAME ASSEMBLY

MODELS AFFECTED:

All Model 269A/TH-55A/A-1/B Helicopters:

Model 269C Helicopter Serial No. 0004 thru 0539

TIME OF COMPLIANCE: At Owners and Operators discretion at removal of

engine from helicopter

PREFACE: The information given in this Service Information Notice lists a procedure for a field modification to increase the energy absorption characteristics of the fuselage frame in the event of severe vertical impact. The rework

consists primarily of removing the existing 269A2239-45 vertical support frame tube on the left-hand side of the fuselage frame, and welding support gussets in place at each end of the adjacent longitudinal frame tubes to accommodate the resulting bending loads. The field modification is recommended at removal of engine from helicopter. It is to be noted that there is no reduction of payload (with or without the cargo hook) with the

modification.

Reference

269 Series - Basic HMI, Issued 1 April 1973; Revision No. 3, 15 March 1975 FAA Advisory Circular 43.13-1A Aircraft Inspection and Repair

Customer Service Department

Hughes Helicopters

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PARTS LIST

Nomenclature	Part No.	Qty	Description	Mfr
Gusset	269A2230-19	1	0.040 x 1.50 x 1.50 4130 steel sheet	HH or
			MIL-S-18729 Cond N	Field fabricate*
Gusset	269A2230-21	1	$0.040 \times 1.50 \times 1.50$ 4130 steel sheet	HH or
			MIL-S-18729 Cond N	Field fabricate*

*See Figure 1, detail -19 and -21 for field fabrication

TOOLS AND EQUIPMENT

Saw-metal cutting	Commercial
Welding equipment	Commercial
Rod, welding	Oxweld #1 or equivalent

MODIFICATION PROCEDURE

NOTE

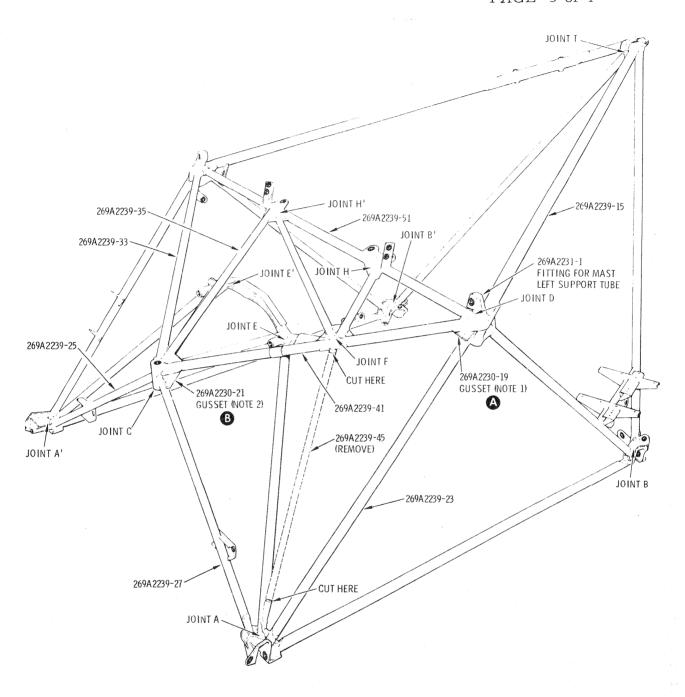
Removal of engine is required for modification of frame assembly.

- a. Using metal cutting saw, remove 269A2239-45 vertical support frame tube as close as possible at Joint A and Joint F. (See Figure 1; also refer to Basic HMI for center frame section jig points.)
- b. Clean and treat exposed ends of tube and touch up with primer and paint for corrosion protection, per Section 2 of Basic HMI.
- c. Weld 269A2230-19 gusset in place at Joint D as shown in Figure 1; weld 269A2230-21 gusset in place at Joint C as shown. (Heliarc Welding Process preferred. Reference FAA AC 43.13-1A.)
 - d. Prime and paint gussets as required, per Section 2 of Basic HMI.

WEIGHT AND BALANCE DATA

Weight and balance not affected.

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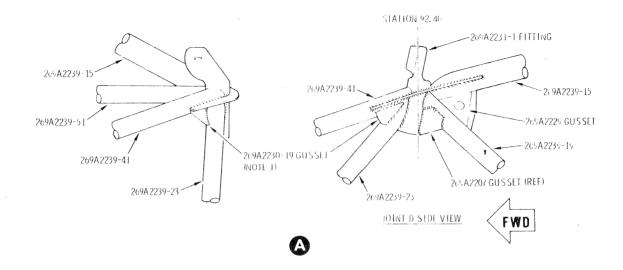
NOTES:

- 1. GUSSET TO BE IN PLANE OF CENTERLINES OF 269A2239-41 AND 269A2239-23 FRAME TUBES.
- 2. GUSSET TO BE IN PLANE OF CENTERLINES OF 269A2239-41 AND 269A2239-27 FRAME TUBES.

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Figure 1. Modification - Fuselage Frame Assembly (Sheet 1 of 2)

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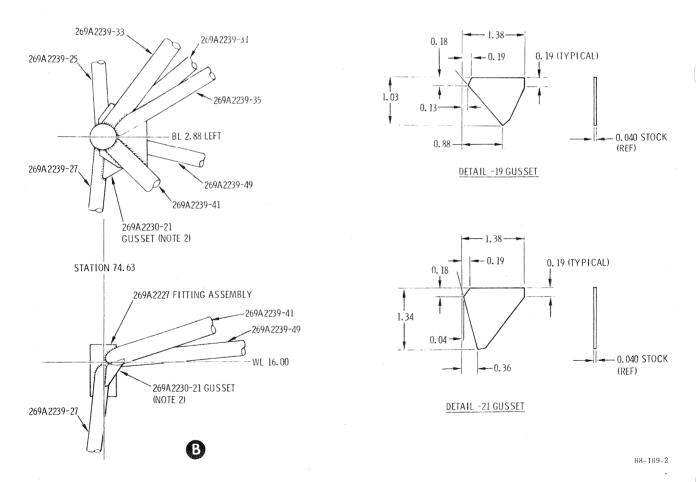


Figure 1. Modification - Fuselage Frame Assembly (Sheet 2 of 2)