



**HUGHES  
SERVICE INFORMATION  
NOTICE**

NOTICE NO. N-84

DATE Febr. 25, 1971

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SUBJECT: RETROFIT KIT - ALTERNATE BATTERY LOCATION

MODELS AFFECTED: Model 269C Helicopter Serial Nos. 0001 through 0079  
equipped with Exhaust Muffler Installation Kit P/N 269A8801

TIME OF COMPLIANCE: At Owners and Operators Discretion

PREFACE: To provide an alternate battery location for the above affected  
helicopters.

Reference

269 Series - Basic Handbook of Maintenance Instruction, Issued 1 September 1970

Supplement C - 269 Handbook of Maintenance Instruction, Issued 1 September 1970

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MATERIALS

Sealant - Thiokol Type Synthetic Rubber

PR-1221B2 (Products  
Research Co., L.A.  
Calif., or equivalent)  
Commercial

Cement - "Grip"

TOOLS & EQUIPMENT

Drill - portable

Commercial

Drill bit - 0.190/0.204 in. dia.

Commercial

PARTS LIST \*

\* When ordering, specify P/N 269A4902 Retrofit Kit - Alternate Battery Location consisting of the following for Model 269C helicopters:

<u>Nomenclature</u>	<u>Part No.</u>	<u>Quantity</u>
Support tube assembly	269A4902-3	1
Strip	269A4764-5	2
Strip	269A4764-7	1
Nipple	269A4682-1	1
Nipple	269A4682-2	1
Box, battery	269A4119	1
Tube, drain	269A4117-3	1
Relay, battery	269A4113	1
Wire	AN4 (MIL-W-5086 Type III or MIL-W-7139 HiTemp)	A/R
Wire	AN20 (MIL-W-5086 Type I or II)	A/R
Nut	MS20365-1032	4
Bolt	AN3-3A	2
Bolt	AN3-4	2
Bolt	AN4-6A	1
Screw	AN502-10-10	2
Washer	AN960-416	1
Washer	AN960PD10	4
Terminal	7-322010	4
Terminal	322009	2
Terminal	31889	1
Terminal	31882	5
Splice	32445	2
Sta-Strap (Panduit or equivalent)	SST-2	1

### PROCEDURE

- a. Check that all electrical power is OFF.
- b. Remove battery from helicopter, per Section 16 of Basic HMI.
- c. Remove battery from battery box.
- d. Remove wiring from starter relay; remove ground cable from helicopter frame.
- e. Position 269A4902-3 support tube and bracket assembly on center frame support struts, using -7 and -9 clamps as shown in Figure 1; secure clamps with hardware as shown. Relieve side of -9 clamp as necessary to clear 269A2218 strut on installation.
- f. Install 269A4764-5 strips and 269A4764-7 strip on brackets, using Grip cement or equivalent.
- g. Drill two 0.190/0.204 inch diameter (13/64 in.) holes 2.19 inches apart in battery box; install 269A4113 battery relay on box, using AN3-3A bolts, AN960PD10 washers and MS20365-1032 nuts.

### NOTE

Seal over heads of bolts on interior of battery box with PR-1221B2 sealant or equivalent.

- h. Inspect battery, per Section 2 of Basic HMI; install battery in battery box and secure cover.
- i. Position battery box on support tube and bracket assembly; secure box to bracket with AN502-10-10 screws and AN960PD10 washers; safetywire screws.

j. Attach 269A4117-3 drain tube to battery box with Sta-strap; secure tube to aft crossbeam with Koroseal lacing.

k. Wire relocated battery assembly per wiring diagram.

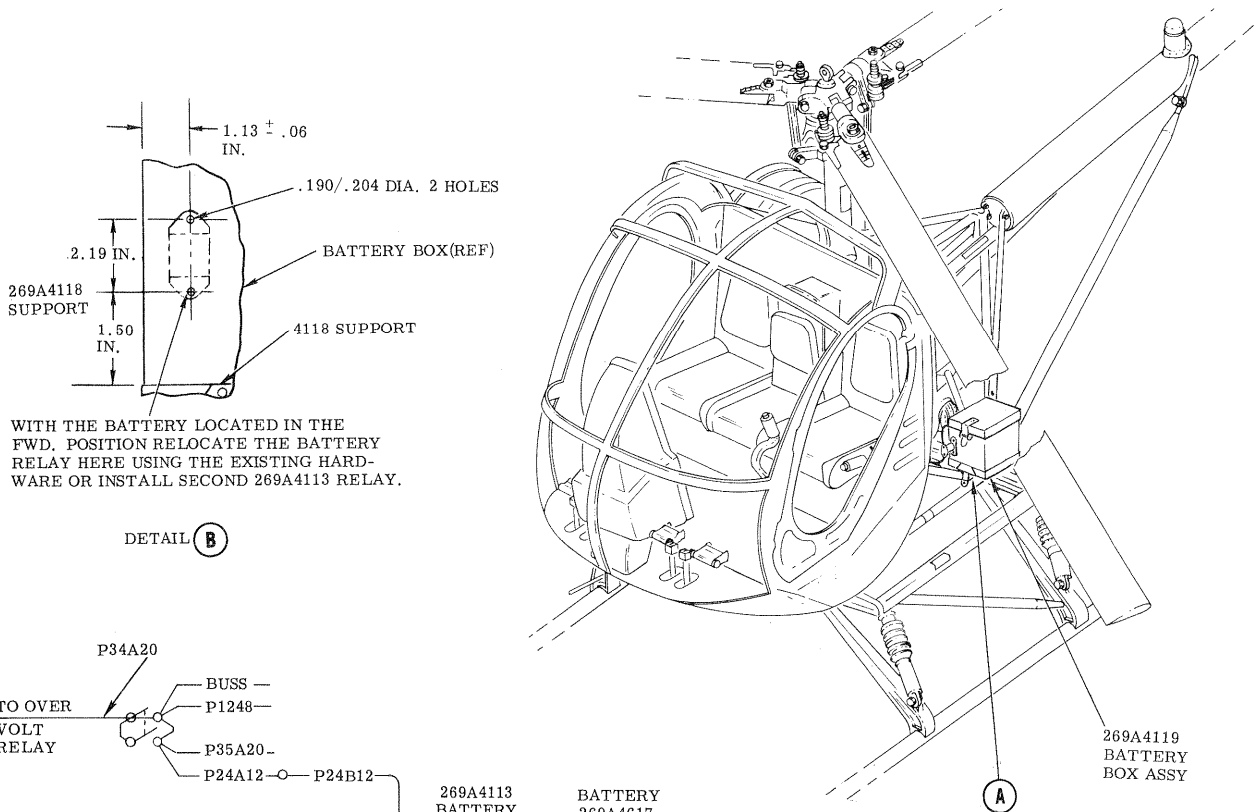
1. Route and secure wiring across aft crossbeam to starter relay.
2. Install ground cable to support strut (to V-belt drive cover) attach lug as shown, using AN4-6A bolt and AN960-416 washer between bolt and terminal. The AN4-6A bolt replaces existing AN4-5A bolt. Clean ground contact surface to bare metal to ensure proper ground.
3. Reverse location of battery switch and alternator switch on instrument console, so that double pole switch is for alternator and single pole switch is for battery; rewire as shown.
4. Install nipples for wiring connection at battery relay terminals.

l. Check relocated battery installation for discrepancies and for security of attachments.

m. Perform operational check of helicopter electrical system.

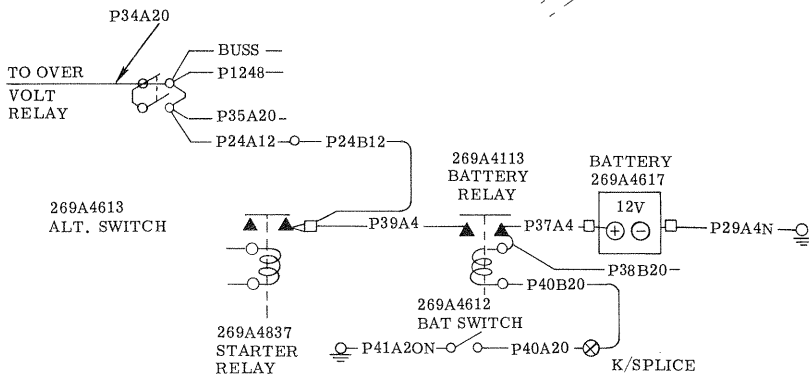
#### WEIGHT & BALANCE DATA

Existing battery installation-Right hand (RH)	20.5 lbs. at 117.0 in. arm
New battery installation-Left hand (LH)	23.2 lbs. at 117.0 in. arm



WITH THE BATTERY LOCATED IN THE FWD. POSITION RELOCATE THE BATTERY RELAY HERE USING THE EXISTING HARDWARE OR INSTALL SECOND 269A4113 RELAY.

DETAIL (B)



WIRING DIAGRAM 269C MODEL ONLY

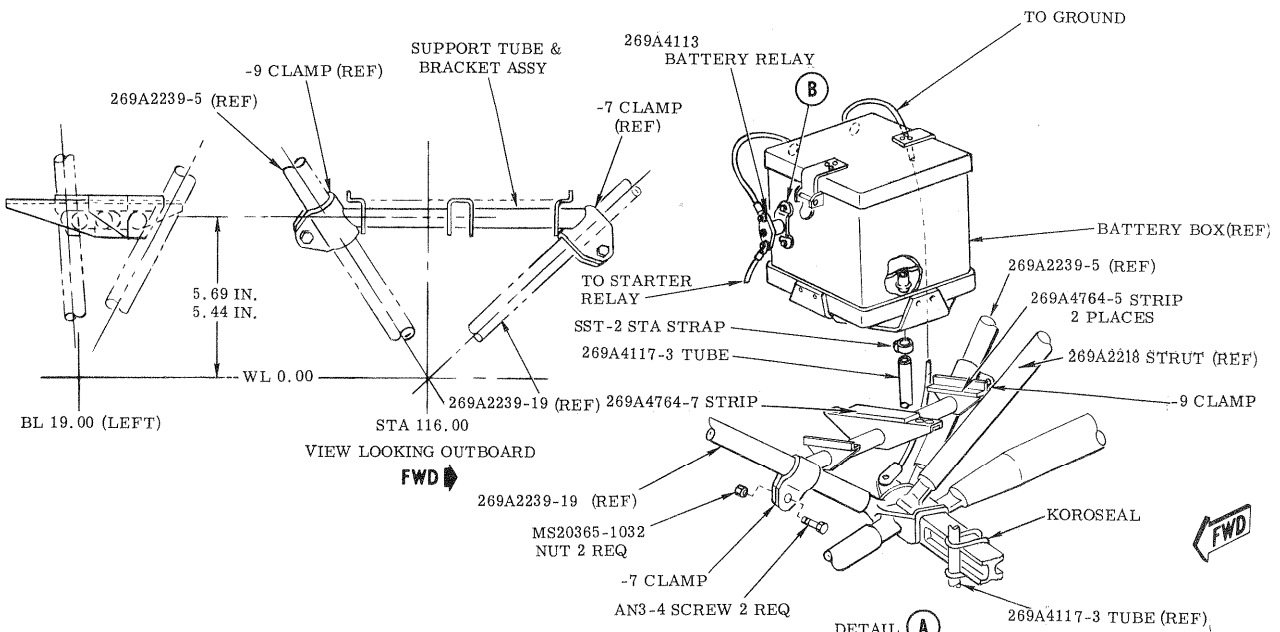


Figure 1. Alternate Battery Location