



**HUGHES
SERVICE INFORMATION
NOTICE**

NOTICE NO. N-103

DATE 14 Nov 1972

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**SUBJECT: UNIVERSITY SOUND SYSTEM KIT INSTALLATION, PN 269A4190-1/-3;
MODIFICATION OF MA-500 AMPLIFIER**

**MODELS AFFECTED: All Model 269B and 269C Helicopters equipped with ATI
and/or University Sound & Siren System (24/28 Vdc)**

TIME OF COMPLIANCE: Recommended at owners and operators earliest convenience

PREFACE: The information given in this Service Information Notice lists a procedure for modifying the MA-500 amplifier incorporated in the subject University Sound System (24/28 Vdc), by replacing the existing PN 72A475 relay with a shorting plug. The modification is designed to improve the operating reliability of the amplifier and sound system installation.

It is noted that removal of the K301 relay eliminates the automatic switching circuitry and voltage sensing capability (12 or 24 Vdc) of the amplifier and control units.

The new shorting plug, together with a decal to identify the reworked unit, will be provided by HTC-AD without cost. Contact HTC Customer Service Department if items are not received within 30 days after date of this Service Information Notice.

Reference

**269 Series - Basic HMI, Revision No. 2, 1 Nov 1972
269 Series - HMI Appendix A, Issued 1 Feb 1972**

Customer Service Department

PARTS LIST

<u>Nomenclature</u>	<u>Part No.</u>	<u>Qty</u>	<u>Mfr</u>
Plug, shorting		1	University Sound
Decal		1	University Sound

Note: The above listed shorting plug and decal will be provided without cost.

MATERIALS

Sealing compound, dielectric/galvanic preventive	RTV731	A/R	General Electric
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MODIFICATION PROCEDURE

- a. Ensure that all electrical power is OFF; disconnect battery.
- b. Remove lower forward fairing.

CAUTION

Do not remove amplifier unless BAT switch, GEN/ALT switch, and MAG switch are in the OFF position.

- c. Disconnect and remove MA-500 amplifier unit from helicopter cabin floor underside.
- d. Remove 14 screws securing upper cover and gasket to amplifier housing; remove upper cover. Remove 14 screws securing outer edge of lower cover and gasket to amplifier housing (the 6 inner screws need not be removed); do not remove lower cover. (See fig. 1.)

NOTE

Use care when removing and handling gaskets. Also be careful when lifting amplifier housing from lower cover, to prevent damage or disconnection of wiring and soldered terminals.

- e. Place amplifier on bench right side up. Carefully lift housing one or two inches from lower cover to gain access to K301 relay. Using needlenose pliers or equivalent, remove spring securing K301 relay to receptacle in housing. Unplug and remove relay from housing.
- f. Using sealing compound, install new shorting plug in receptacle as replacement for relay. Position plug so that pins align; hold or support the power amp board when pressing the shorting plug into the receptacle.
- g. Install decal on smooth surface area on outside of housing.
- h. Install lower cover and gasket on amplifier housing.
- i. Install upper cover and gasket on amplifier housing.
- j. Install and connect amplifier on helicopter; reconnect battery.
- k. Perform operational check of University Sound and Siren System.
- l. Install lower forward fairing.

WEIGHT AND BALANCE DATA

Weight and balance not affected.

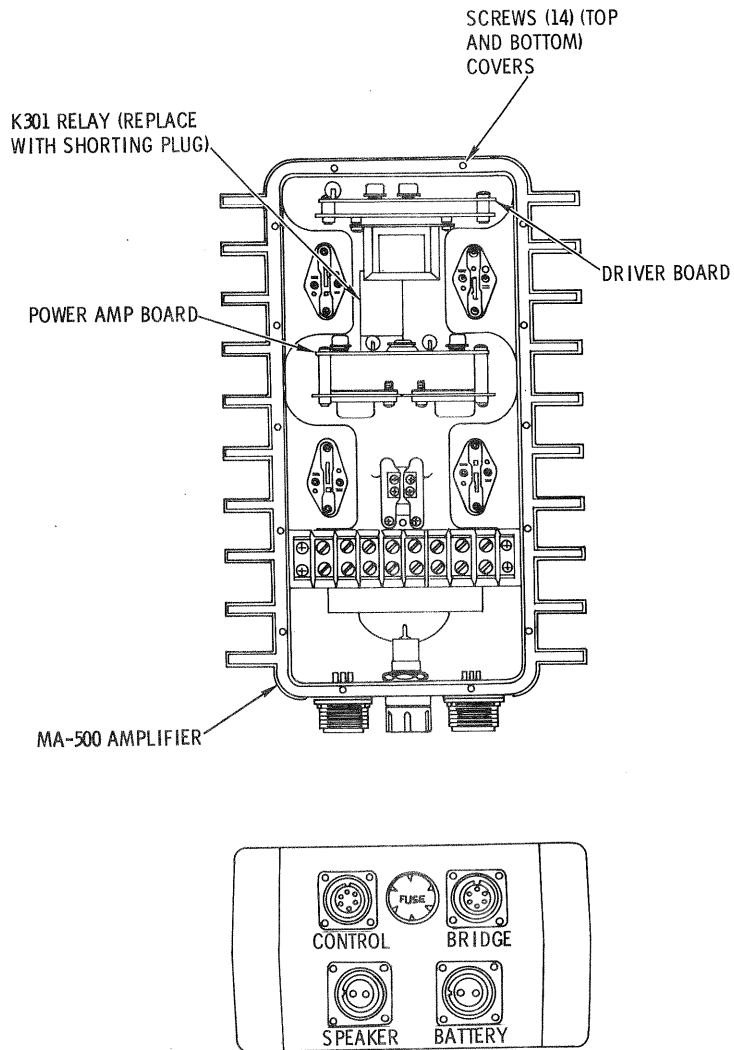


Figure 1. Modification of MA-500 Amplifier