

**HUGHES
SERVICE INFORMATION
NOTICE**

NOTICE NO. HN-77

DATE 30 September 1974

PAGE 1 OF 4

SUBJECT: RELOCATION - MAGNETIC COMPASS, PN 369H4508

MODELS AFFECTED: Model 369HE Helicopter Serial No. 0101E thru 0215E
Model 369HS Helicopter Serial No. 0101S thru 0625S
Model 369HM Helicopter Serial No. 0101M thru 0200M;
0214M thru 0247M

TIME OF COMPLIANCE: At owners and operators discretion.

PREFACE: The information given in this Service Information Notice lists a procedure for relocating the magnetic compass assembly from its existing location on the instrument panel assembly to a new support bracket installed on the heat duct/trim assembly on the center canopy frame. The purpose of the relocation is to isolate the compass and minimize compass error due to external magnetic interference.

Field modification to relocate the compass may be accomplished in part by (1) replacing the existing heat duct/trim assembly with a new 369H92475-101 heat duct/trim assembly which incorporates a compass support bracket, or (2) installing a new compass support bracket on the existing 369H92475-31 heat duct/trim assembly.

Reference

500 Series - Basic HMI, Issued 1 October 1972; Revision #3, 1 January 1974

500 Series - HMI Appendix A. Issued 1 October 1972; Revision #3, 1 August 1974

Customer Service Department - Hughes Helicopters - Culver City, California

PARTS LIST

<u>Nomenclature</u>	<u>Part No.</u>	<u>Qty</u>	<u>Mfr</u>
*Heating Duct Assembly	369H92475-101	1	Hughes
**Compass Bracket	369H6403	1	Hughes
**Pop Rivet	AK42AH	6	Commercial
**Washer	AN960PD4	6	Commercial
**Strap Mount	TC102	1	Commercial
† Wire, 22GA	MIL-W-5086 Type II	AR	Commercial

*Not required if existing 369H92475-31 heating duct assembly reworked to new -101 configuration incorporating compass bracket.

**Not required if new 369H92475-101 heating duct assembly installed.

† Required if optional night lighting system installed on helicopter.

TOOLS AND EQUIPMENT

Rivet gun	Commercial
Drill motor, portable	Commercial
Drill bit - #30	Commercial

PROCEDURE

a. Check that all electrical power is OFF; disconnect battery and external power.

b. Remove instrument panel fairings.

c. Remove magnetic compass assembly from instrument panel; as applicable, disconnect compass lamp wiring. Retain attaching hardware and insulators.

d. Remove lower forward 369H92475-31 heating duct/trim from canopy center frame. Refer to HMI Appendix A.

NOTE

Perform step e only if existing 369H92475-31 heat duct/trim assembly is to be reworked to new -101 configuration.

Use extra care when riveting compass bracket to prevent cracking or damaging the heat duct/trim assembly.

e. Using 369H6403 compass bracket as template, mark and drill six #30 holes in the -31 duct/trim at dimensions shown in Figure 1. Install bracket and strap mount on duct/trim using rivets and washers.

NOTE

Ensure that fixed vertical line (lubber line) on face of compass is in line and at a right angle to the longitudinal axis (G) of helicopter.

f. Install compass and compass card on 369H6403 bracket on heating duct/trim assembly, using existing attaching hardware and insulators.

g. As applicable, install additional 22GA lamp wiring to provide sufficient length for routing to instrument panel.

h. Install new or reworked heat duct/trim assembly to canopy center frame. As applicable, route lamp wiring with existing wiring and connect at instrument panel. Refer to night lighting system wiring diagram in HMI Appendix A.

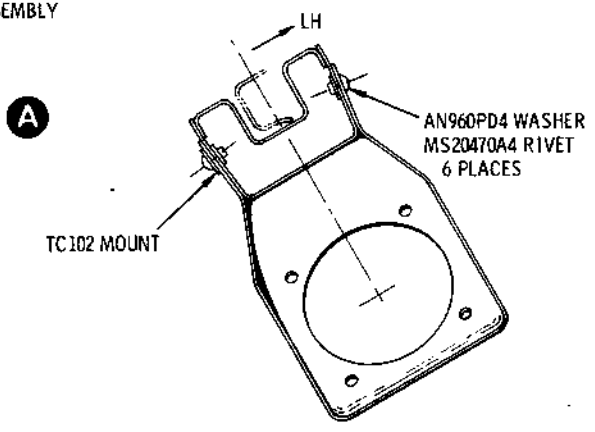
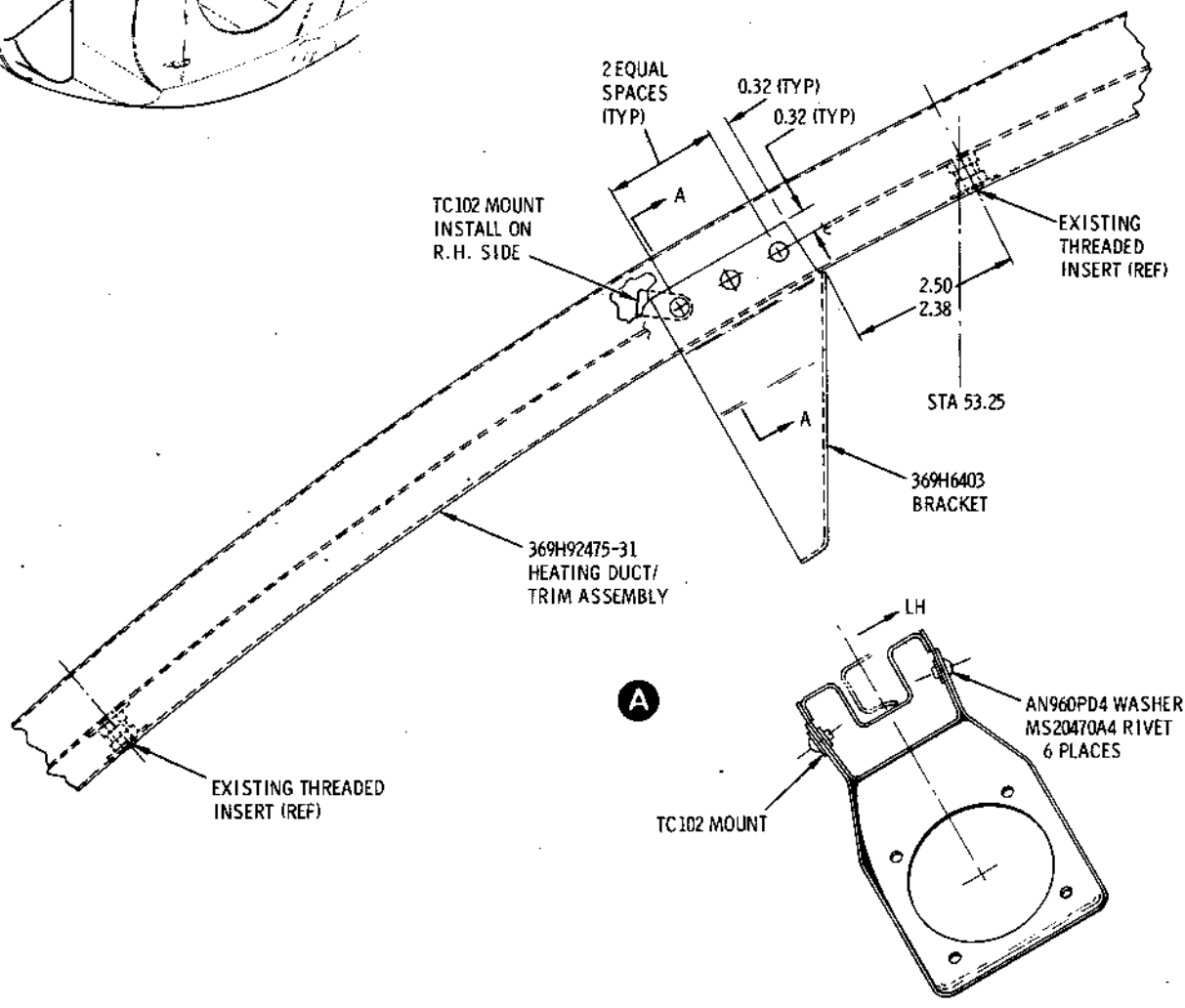
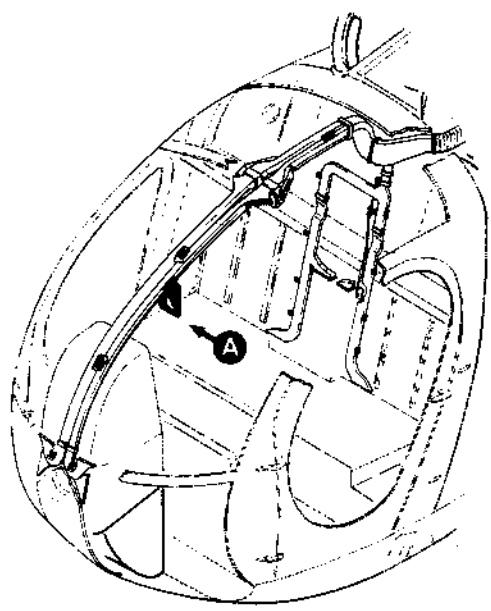
NOTE

If desired, fabricate and install cover plate on instrument panel at original location of magnetic compass.

- i. Replace instrument panel fairings.
- j. Reconnect battery.
- k. Swing compass.

WEIGHT AND BALANCE DATA

Weight and Balance not affected.



VIEW A-A

Figure 1. Compass Relocation - Modification of 369H92475-31 Duct Assembly