



**HUGHES
SERVICE INFORMATION
NOTICE**

NOTICE NO. N-65

DATE Nov. 15, 1968

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SUBJECT: KIT MODIFICATION - AIR INTAKE ASSEMBLY RE:
AMPHIBIOUS FLOAT LANDING INSTALLATION

MODELS AFFECTED: 269A Helicopter Serial Nos. 0011 thru 0314 equipped
with flotation gear.

TIME OF COMPLIANCE: Mandatory within the next 50 hours of operation.

PREFACE:

The information given in this service information notice lists a procedure for
modifying air intake assembly, P/N 269A4304-3, into air intake assembly,
P/N 269A4304-17 configuration.

Reference

269A/A-1/TH-55A Handbook of Maintenance Instruction, Revised 1 June 1968
269A Owners Manual
Supplemental Type Certificate SH69WE

TOOLS AND EQUIPMENT

Drill - Portable	Commercial
Gun - Pop Rivet	Commercial
Drill Bit #30 (0.1285 in. dia.)	Commercial
Drill Bit #15 (0.180 in. dia.)	Commercial

MATERIALS

Adhesive - PR1221 or equivalent	Product Research Co.
Sealant - EP 711	Coast Pro Seal
Alcohol	Commercial
Soft Cloth	Commercial
Scraper - Plastic	Commercial

PARTS LIST

<u>Nomenclature</u>	<u>Part Number</u>	<u>Quantity</u>
Deflector	269A4304-11	1
Cover	269A4304-13	1
Plate-Diverter	269A4304-15	1
Rivet - Pop	AD43ABS	30
Rivet - Pop	AD44ABS	6
Washer	AN960PD4L	16

- a. Remove side fairing assemblies (if installed).
- b. Disconnect carburetor air induction flexible duct from carburetor.
- c. Disconnect carburetor air induction control cable from mixture arm and air filter housing.
- d. Remove lower forward fairing assembly; cover carburetor air intake on engine.
- e. Remove air induction flexible duct from air filter housing assembly.
- f. Remove air induction filter from housing on fairing, by removing safety pin and washer.
- g. Remove pop rivets (28 ea.), securing air intake duct assembly to fairing and carburetor air filter housing assembly.

CAUTION

Extreme care is recommended when removing pop rivets, as rivet holes may easily become enlarged.

NOTE

Retain AN960PD4L washers (56 ea.) for reinstallation purposes.

- h. Using plastic scraper, remove sealant adhering duct to fairing assembly.
- i. Remove 269A4304-9 cover plate assembly from fairing original air intake opening.

- j. Using plastic scraper, remove sealant around fairing air intake opening.
- k. Using alcohol and soft cloth, clean surfaces of remaining sealant and foreign matter.
- l. On fairing, measure in 0.50 inch from duct sides, with third side parallel with carburetor air filter housing assembly flange and fairing bonded area. Measure outboard 3.12 inches for fourth side of new rectangular hole. (Refer to Figure 1, Sheet 2 of 3)
- m. Cut out rectangular hole and radius corners. Smooth the cut edges.

CAUTION

Do not square cut corners; allow them to be rounded.

- n. Position 269A4304-15 diverter plate to air filter housing assembly interior over existing rectangular hole in housing.
- o. Align diverter plate over existing six rivet holes in housing.
- p. Using drill motor and drill bit #30; drill six rivet holes in diverter plate.

NOTE

One side of diverter plate will be without rivets.

- q. Position 269A4304-11 deflector over fairing housing intake opening and new rectangular hole cut in fairing.
- r. Adjust deflector to allow pop rivet holes (2 each) in fairing to be transferred to deflector.
- s. Trim flange of deflector in area of housing assembly cover, to allow 0.10/0.16 inch gap, after deflector and duct alignment has been achieved. (Refer to Figure 1 Sheet 3 of 3, View A-A)
- t. Transfer location of drain hole in deflector and using #15 drill bit, drill drain hole.
- u. Position 269A4304-13 cover to inside of duct, butting cover flange to duct flange.
- v. With pencil, trace cover outline on inside of duct.
- w. Remove cover, measure in 0.47 inch from, and parallel with cover upper diagonal pencil line, as performed by step v.

- x. Measure in 0.30 inch from, and parallel with cover side outline and extend line to diagonal line.
- y. Cut out marked dimensions, smooth cut edges, fair corners of opening.
- z. Trim cover flange at corner area to avoid interference with housing assembly forward bracket.

NOTE

Trim aft housing assembly bracket per illustration requirements as specified in Figure 1, Sheet 1 of 3, Detail B after rework, if not already accomplished.

- aa. Position cover on top of duct and bond in modified area using PR1221 adhesive or equivalent.
- ab. Align duct assembly on fairing interior, aligning duct pop rivet holes with pop rivet holes in fairing.
- ac. Drill two pop rivet holes in cover flange of modified duct.
- ad. Blend sides of new rectangular hole to match duct opening.
- ae. Position diverter plate in air filter housing assembly, aligning it with pop rivet holes and secure in place.
- af. Secure duct and diverter plate to air filter housing assembly using 6 each AD44ABS pop rivets and 12 each AN960PD4L washers.

NOTE

Place one washer under the manufactured head and one under upset head of rivet.

- ag. Install 2 each AD43ABS rivets along upper edge of duct at each corner, securing duct to forward inside facing of fairing.
- ah. Install deflector to fairing using 10 each AD43ABS pop rivets and 20 each AN 960PD4L washers.
- ai. Install remaining 18 each AD43ABS pop rivets and 36 each AN960PD4L washers in duct installation.
- aj. Seal edges of duct, deflector and diverter plate with EP 711 sealant after riveting.

- ak. Inspect fairing modification.
- al. Install air induction filter in housing and secure in place with washer and safety pin.
- am. Remove covering over carburetor opening.
- an. Install lower forward fairing on rotorcraft and air induction system flexible duct to air filter housing assembly and carburetor air intake on engine.
- ao. Connect carburetor air induction control cable to mixture arm and air filter housing.
- ap. Inspect air induction system installation.
- aq. Install side fairing assemblies.
- ar. Perform operational check of modification and installation.
- as. Inspect FAA approved flight supplement in Owner's Manual; thoroughly familiarize yourself with information, and obtain local FAA approval.
- at. Flight test rotorcraft.

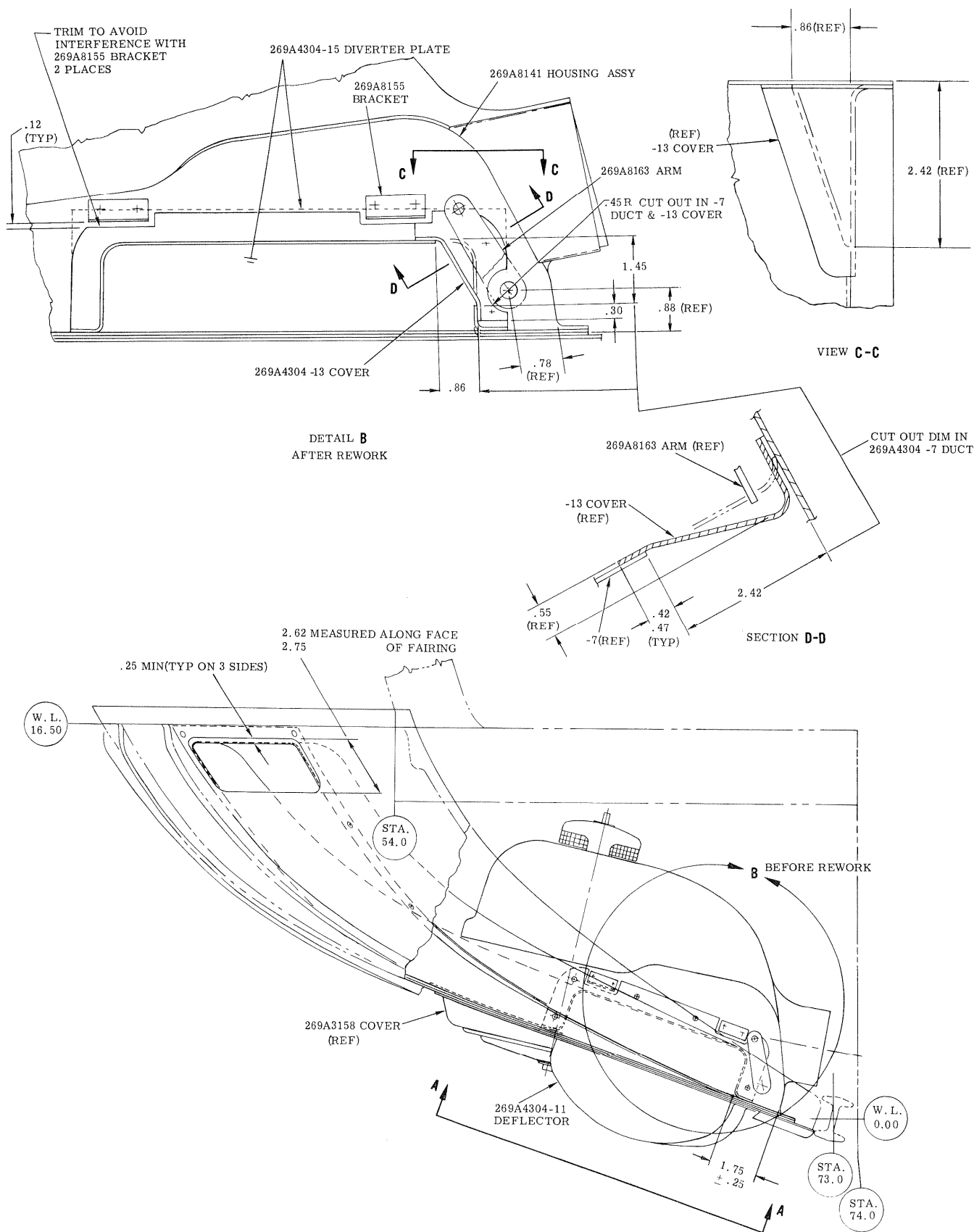
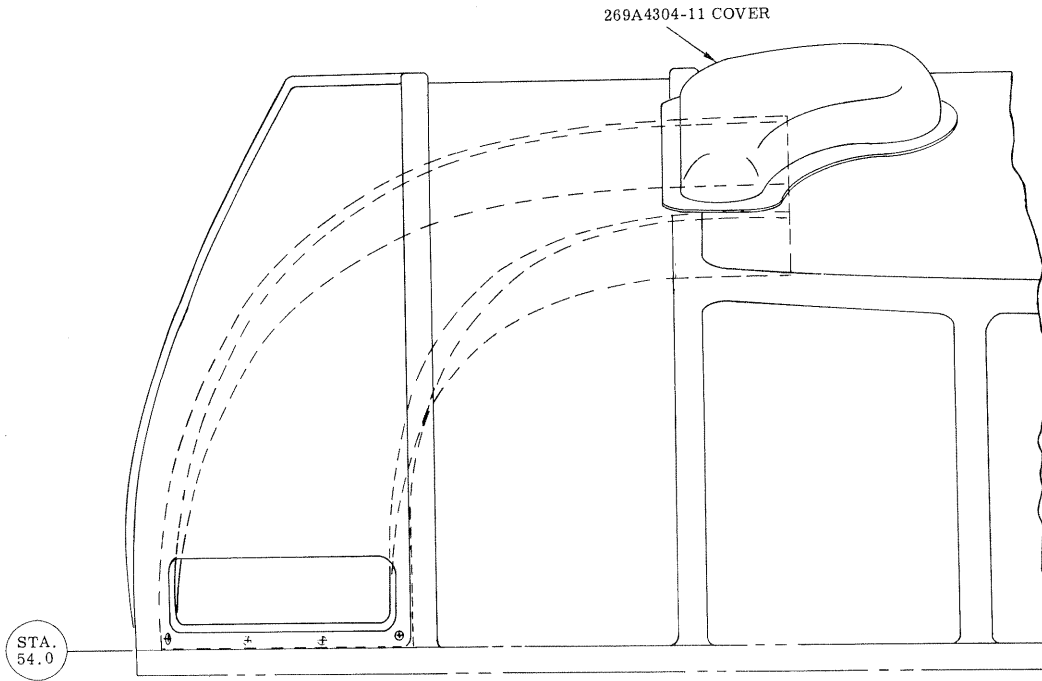


FIGURE 1. LOWER FORWARD FAIRING MODIFICATION (SHEET 1 OF 3)



VIEW E-E ROTATED 90° CLOCKWISE

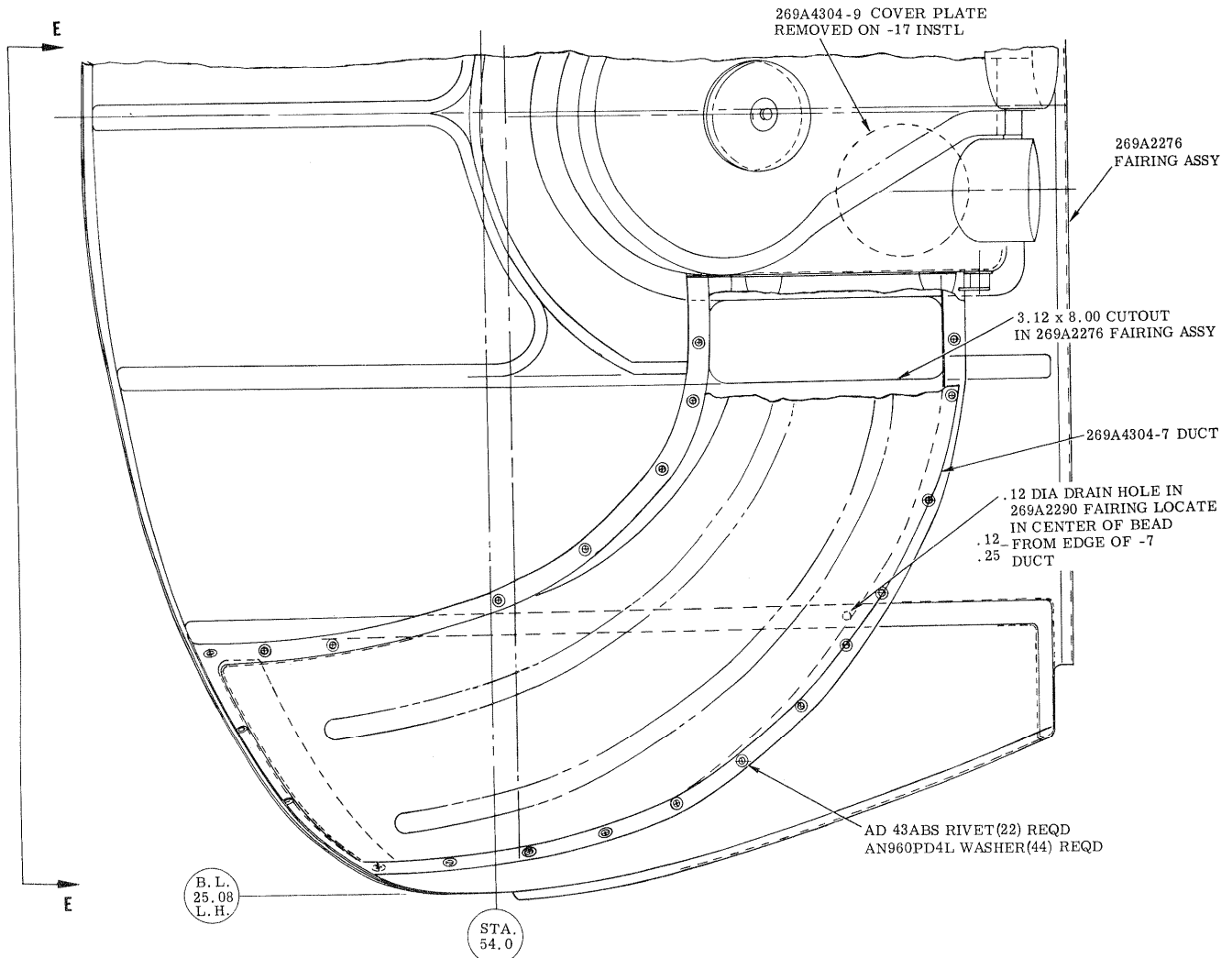


FIGURE 1. LOWER FORWARD FAIRING MODIFICATION (SHEET 2 OF 3)

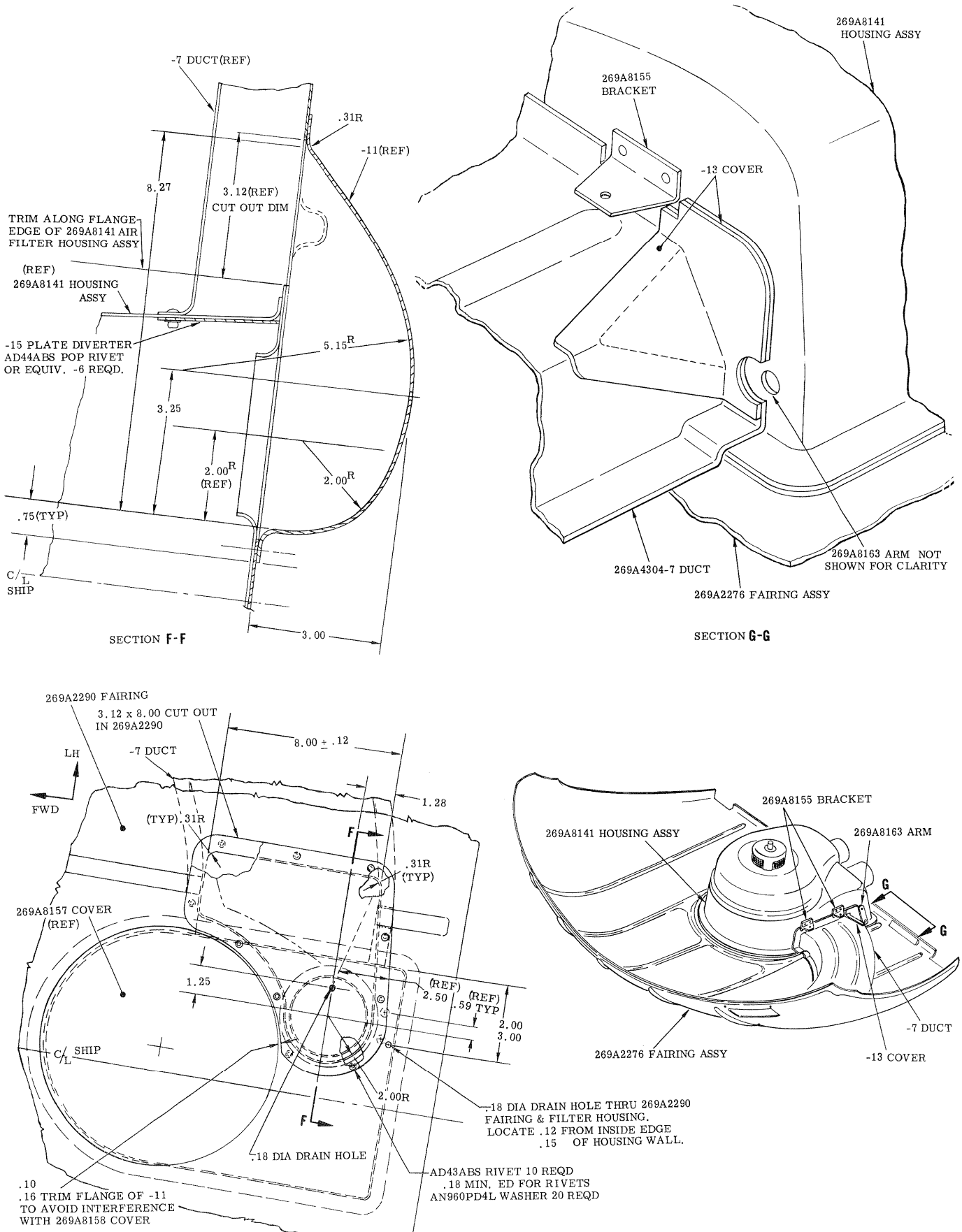


FIGURE 1. LOWER FORWARD FAIRING MODIFICATION (SHEET 3 OF 3)