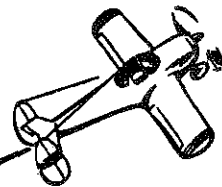


# Ercoupe MEMORANDUM

ERCOUPE  
SERVICE  
MEMORANDUM

No. **18**

**SUBJECT: Engine Side Cowls  
Reinforcement of**



1. This memorandum affects Ercoupe airplanes serial numbers 113 to 1122 inclusive. It is recommended that the distributor/dealer organization effect this change immediately on all airplanes delivered by them in the interest of affording the customer with maximum serviceability. It is presumed that the distributor/dealer organization will perform this labor on a no charge basis as a good will policy. Our time studies indicate that this change requires less than one man hour of labor.

2. The change has been found necessary to prevent cracks occurring in the region of the uppermost rivet used to attach the stiffener to the side cowl. The cracks occur, we believe, as a result of the loads imposed when the cowl is opened and left to rest in the open position. The change is being made on current production, having started on Ercoupe airplane serial number 1123.

3. Kits containing all parts required for making the installation to both engine side cowls are now being prepared and will be shipped direct to each distributor.

The following parts are supplied in each kit:

Quantity	Item	Part No.
2	Gusset Plate	40090-1
2	Aluminum Washer (large)	40090-2
2	Nut (self-locking)	AN365-632
2	Bolt	AN526C632
2	Washer	AN960-A6L
6	Rivets	GLM25-2-AD-3-4

The procedure for making installation is as follows:

A. Remove engine side cowling (right and left).

1. Release Dzus fasteners.
2. Withdraw hinge pins.

4. For clearer understanding, the following instructions describe procedure for making additions to one flap as the operation is the same for both sides.

B. Drill out four rivets. Use No. 40 drill.

1. Drill out two rivets, holding hinge, immediately above stiffener.
2. Drill out first two rivets in top of stiffener.

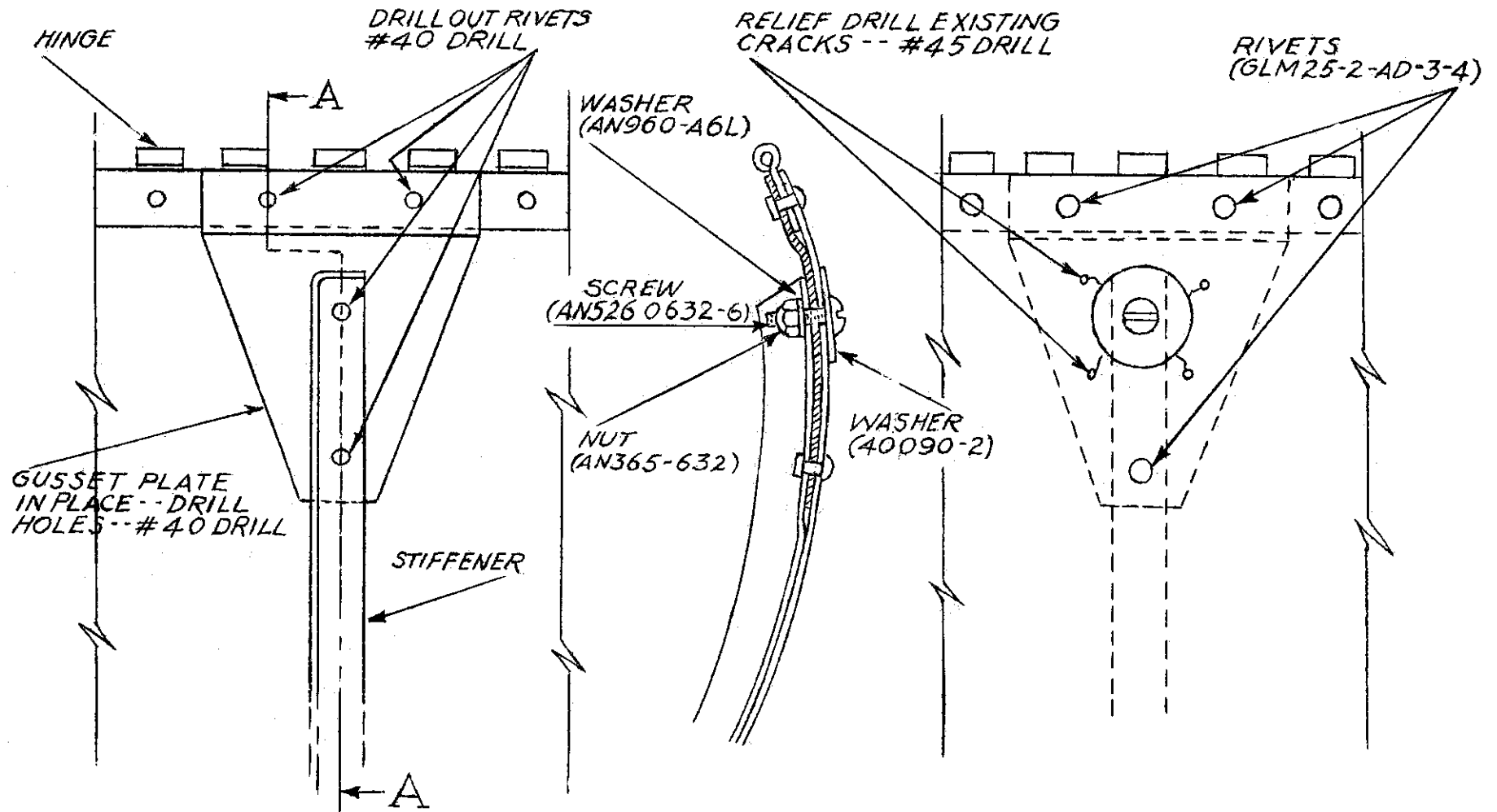
C. Existing cracks should be relief drilled to prevent further cracking.

1. Drill holes at ends of cracks with a No. 45 drill.

D. Locate gusset plate and rivet in place.

1. Slide gusset plate under stiffener with wide end over hinge.
2. Drill holes in plate at points where rivets were removed from hinge and stiffener. Use No. 40 drill.
3. Rivet gusset plate, on hinge (two rivets) and at second hole from top of stiffener (1 rivet).
4. Install large washer, bolt, small washer and self-locking nut, over first hole in top of stiffener. Large washer on outside of cowl. Draw nut tight to assure lock.
5. Shape large washer to fit flush against surface of cowl flap.

Your co-operation in the incorporation of this change is anticipated and will be appreciated.



INSIDE VIEW

SECTION A-A

OUTSIDE VIEW

INSTALLATION OF GUSSET PLATE AND WASHER  
ON ENGINE SIDE COWL