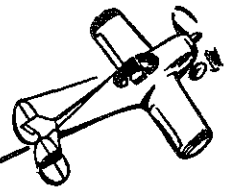


Ercoupe MEMORANDUM

ERCOUPE
SERVICE
MEMORANDUM

No. **25**

**SUBJECT: Box Car Shipments of ERCOUPES,
Serial No. 1623 and up**



REFERENCE: Accompanying Sketches Nos. 1, 2, 3 and 4

All planes with effective serial numbers 1623 and up have the redesigned trim system installed. All planes shipped by rail will be shipped as follows:

1. Fuselages will be complete with all trim units installed. Loose end of cable protruding thru bulkhead at rear of cone will be coiled and inserted into cone thru the stabilizer deck access hole and taped securely to control cables. See Sketch No. 1.
2. Stabilizer is completely assembled with the trim wire guide conduit installed and clamped securely in place. Wire swivel, 415-52276, for use on trim horn, is packaged and placed in glove compartment. Care must be taken not to pivot elevator beyond 80 degrees up, thus kinking wire conduit.

Procedure for assembly of trim units:

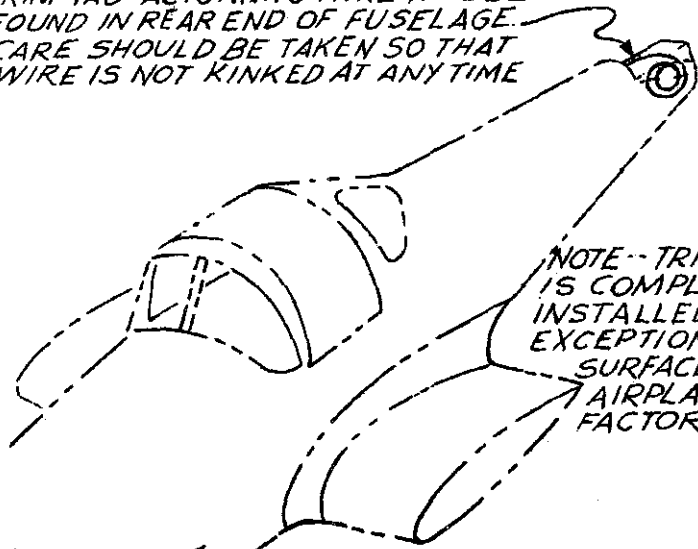
1. Remove trim wire, as shipped, from fuselage. See Sketch No. 2.
 - a. Remove crank handle cover plate located on the left side of cockpit, in front of, and below the lower edge of the instrument panel.
 - b. Disengage trim wire from swivel on end of crank handle.
 - c. Pull trim wire out thru rear end of fuselage.
 - (1) Care must be taken in handling loose wire to prevent kinking.
2. Assemble stabilizer on fuselage. See Sketch No. 2.
 - a. Rig elevator and rudder controls.
 - b. Secure nut, on flexible conduit protruding

from leading edge of stabilizer to fitting on bulkhead.

3. Install Trim Control Wire. See Sketch No. 3.
 - a. Lead wire thru end of flexible conduit protruding from elevator lower skin. Elevator must be in neutral position when wire is being fed thru stabilizer.
 - b. Reassemble swivel on trim handle in cockpit.
 - (1) Extend wire thru swivel approximately 1/2" and fasten securely.
 - (2) Install crank handle cover plate.
4. Rigging Trim Tab. See Sketch No. 4.
 - a. Place trim control handle in cockpit to full forward position.
 - b. With elevator in neutral position place a straight edge along the elevator upper skin longitudinally with one end extending over tab.
 - c. Place swivel (found in glove compartment) on tab horn, and with trailing edge of tab contacting straight edge, secure trim wire to swivel.
 - (1) Wire to be cut off 1/2" beyond swivel and bent over.

With the trim tab set as instructed above and the trim crank handle full forward the ship is trimmed for high speed flying at 130 mph. With the trim crank handle full back the angle the elevator makes with the elevator chord line trims the ship for a glide, power-off, at 58 mph and a 55 mph climb with power on.

TRIM TAB ACTUATING WIRE WILL BE FOUND IN REAR END OF FUSELAGE. CARE SHOULD BE TAKEN SO THAT WIRE IS NOT KINKED AT ANY TIME



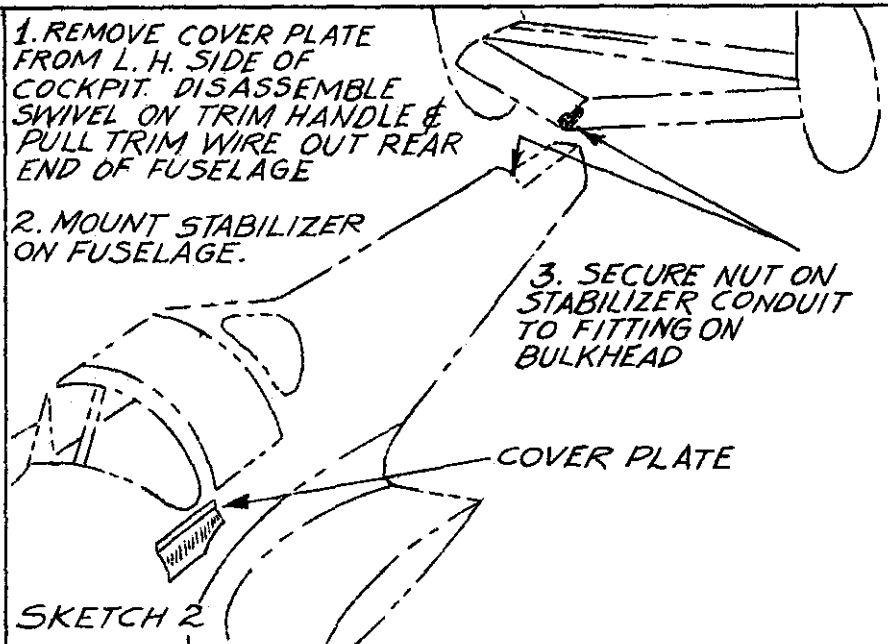
SKETCH-1

NOTE-- TRIM SYSTEM IS COMPLETELY INSTALLED WITH EXCEPTION OF TAIL SURFACES, WHEN AIRPLANE LEAVES FACTORY

1. REMOVE COVER PLATE FROM L. H. SIDE OF COCKPIT. DISASSEMBLE SWIVEL ON TRIM HANDLE & PULL TRIM WIRE OUT REAR END OF FUSELAGE

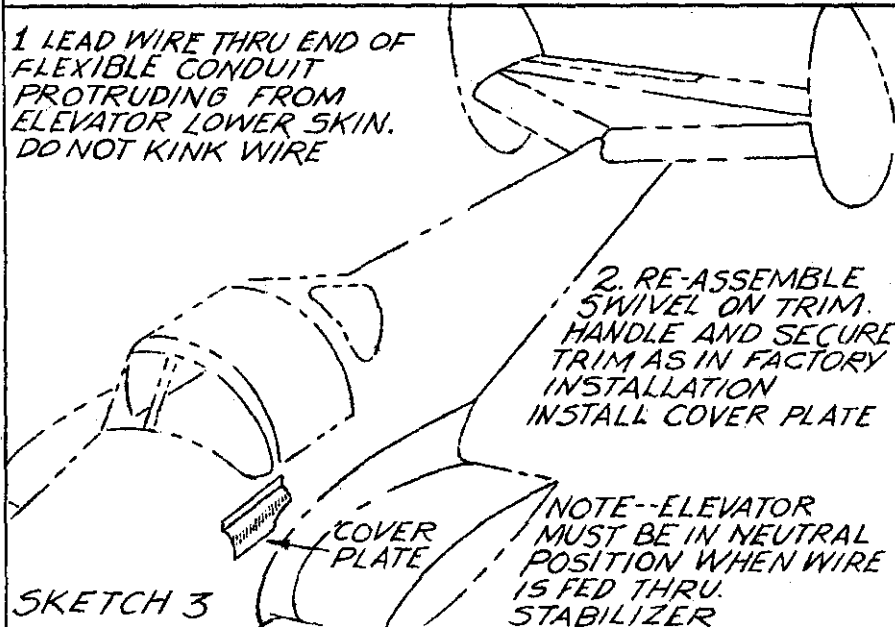
2. MOUNT STABILIZER ON FUSELAGE.

3. SECURE NUT ON STABILIZER CONDUIT TO FITTING ON BULKHEAD



SKETCH 2

1 LEAD WIRE THRU END OF FLEXIBLE CONDUIT PROTRUDING FROM ELEVATOR LOWER SKIN. DO NOT KINK WIRE



SKETCH 3

2. RE-ASSEMBLE SWIVEL ON TRIM HANDLE AND SECURE TRIM AS IN FACTORY INSTALLATION INSTALL COVER PLATE

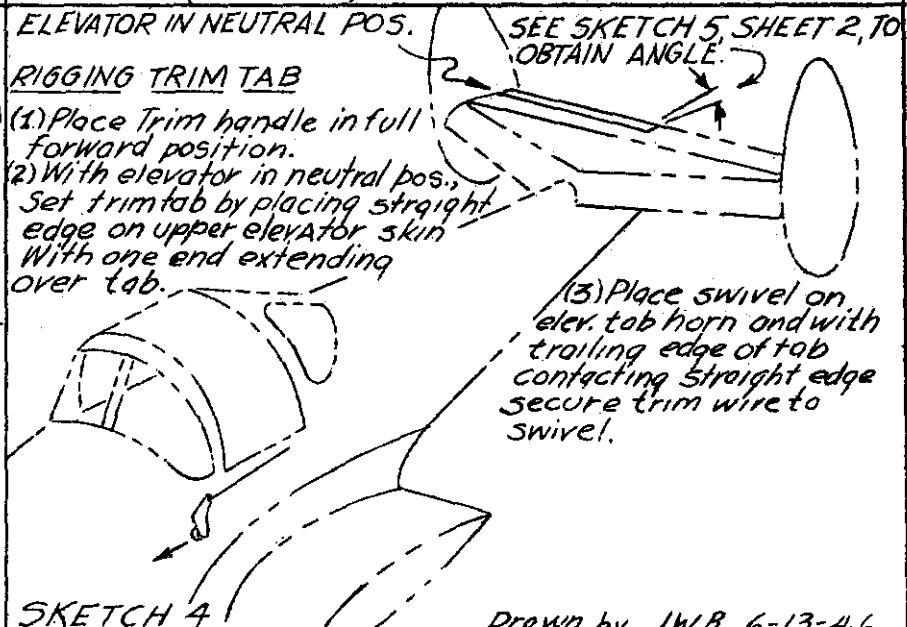
NOTE--ELEVATOR MUST BE IN NEUTRAL POSITION WHEN WIRE IS FED THRU. STABILIZER

ELEVATOR IN NEUTRAL POS.

RIGGING TRIM TAB

(1) Place Trim handle in full forward position.
(2) With elevator in neutral pos., set trim tab by placing straight edge on upper elevator skin with one end extending over tab.

SEE SKETCH 5 SHEET 2, TO OBTAIN ANGLE.



SKETCH 4

(3) Place swivel on elev. tab horn and with trailing edge of tab contacting straight edge secure trim wire to swivel.

Drawn by J.W.B. 6-13-46
SHEET 1 OF 2