

## ERCOUPE TECH NOTE

### ERCOUPE ELEVATORS

The 415 Series Ercoupe used 3 different Elevators over the course of its production the first was:

22001 This was used on the 415-C up to S/N 1623 (Ref. Svc Memo 19) originally had no moveable trim tab. The whole elevator moved by a crank on the instrument panel.

22017 Superseded the 22001 Elevator. Used on S/N 1624 and up. It had a hinged trim tab  $\frac{3}{4}$ " wide (22027). These were used on aircraft that were originally produced with a 75 hp Continental engine e.g. 415-C, 415-CD, 415-D. (Ref. Svc. Memo 30),

All of the above aircraft that were modified to have an 85 hp Continental engine per the Ercoupe Type Certificate will require the 1 3/8" trim tab (p/n 22031) 38" long.

**Customers who order a complete 22017 elevator must specify which trim tab they have or what engine they have. We can put either trim tab on the assembly, but we need to know which one.**

22037 This is the "Split" elevator that was used on the 415-E & G models. It used a 1 3/8" tab 38" long (p/n 22027). The Split Elevator was never approved on the 415-D. The Split elevator also had a "Stall Warning Cushion".

Forney installed this elevator on a D model with no apparent adverse results. In 1948 the CAA approved it, but this installation is not approved on the Type Certificate. Customers will occasionally request this elevator for the D model. Sales Staff must make customers aware that a FAA 337 Field Approval is required. They need to discuss this matter with their I.A. and local FSDO prior to purchase if they have a D model.

#### Serial Number Applications

415-C	113-4423
415-D	4424-4500
415-CD	4501-4868
415-E	3779, 4869-5011
415-E	5015-5081

## ADDITIONAL TRIM TAB NOTES

415-C 75 hp. Trim Tab Requirements:

See Svc. Memo 19, then Memo 30, then Memo 38.

If a customer wants to put in an 85 hp. and/or convert to D model or has an 85 hp. and wants to know if legally done:

See Svc. Memo 38, TC Data Sheet A718 note 3, TC Data Sheet A787 note 3 & 4.

If you convert a 415-C or 415-CD to a 415-D with an 85 hp. engine, you must have the 1 3/8" trim tab, 22031, and the SK-4 trim lever kit installed.

The Split elevator has a notch cutout in the middle of the elevator to reduce elevator surface. It was designed to improve landing characteristics of the aircraft. The Stall Warning Cushion can only be on the split elevator. There is no actual "cushion", but a spring (aprox. 18" long) makes a cushioning effect. If you start to stall, the spring automatically pushes on the elevator bringing the nose of the aircraft down.