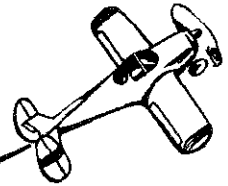


ERCOUPE
SERVICE
BULLETIN
No. 30

Ercoupe BULLETIN

SUBJECT: Mandatory Ercoupe Muffler
Inspection



September 13, 1999

MANDATORY SERVICE BULLETIN

SERVICE BULLETIN NO. 30
ERCOUPE MUFFLER INSPECTION

DATE: September 13, 1999

SUBJECT: Inspection of part number 40511 muffler.

MODELS AFFECTED: All Ercoupe 415-C, 415-CD, 415-D, 415-E and 415-G aircraft and all Forney F-1 and F-1A aircraft with part number 40511 muffler assembly.

COMPLIANCE: Initial inspection of 40511 muffler required within the next twenty five hours of operation or at the next periodic inspection, whichever occurs first. Continued inspections of 40511 muffler at each 50 hours of operation or periodic inspection thereafter, whichever occurs first.

STATEMENT OF DIFFICULTY:

There have been recent field reports of cracks in the Ercoupe mufflers Part Number 40511. A muffler failure may create an unsafe condition for flight. Consequently, this Service Bulletin requires a visual inspection and pressure test of the affected mufflers. Due to the time in service of many of the 40511 mufflers a complete inspection of the muffler is required by this Service Bulletin every fifty hours or at each periodic inspection.

PROCEDURE:

1. Remove cowling as required to gain access to the muffler. Remove muffler and heat shroud.

2. With a bright light and magnifying glass visually inspect the muffler for signs of cracks, corrosion, burn-throughs, heat damage, or weld separations. Pay special attention to muffler ends and weld seams. Light brushing of the muffler ends with a stainless steel brush may be required to clean the area for a better inspection. Accomplish a submerged pressure check of the muffler and tailpipe at 3 to 5 psi air pressure. An alternate pressure check method of inspection is to pressurize the muffler/tailpipe from the pressure end of a shop vacuum cleaner and test all seams and welds with a soap solution to detect any cracks or leakage. Rinse muffler with water and allow to dry.
3. If any cracks, corrosion, burn-throughs, heat damage, or weld separations are found, replace muffler (there is no approved procedure for repairing the Ercoupe muffler). A new design muffler, Part Number 40511-1, is available from Univair Aircraft Corporation to replace the 40511 muffler. The 40511-1 muffler is easily distinguishable from the 40511 muffler. The 40511-1 muffler main body is made from a single piece tube. The 40511 muffler main body is made from two stamped halves welded together.
4. Install undamaged 40511 muffler or new 40511-1 muffler and heat shroud. Replace any cowling removed in Step 1.
5. Make note of compliance with this service bulletin (include inspection methods) in aircraft log book.
6. Repeat Steps 1 through 5 for 40511 muffler every fifty hours time in service or at each periodic inspection, whichever occurs first. The installation of the 40511-1 muffler eliminates the need for the repeated pressure tests of this bulletin, however, it does not eliminate the need for thorough visual inspections of the muffler at each periodic inspection.

OPERATIONAL NOTES –

Prior to each flight, it is recommended that a visual inspection of the exhaust stack gaskets, exhaust stacks, muffler assembly, tailpipe, exhaust system joints, exhaust clamps, and heat muffs for signs of looseness, leakage, or damage. Also check firewall seals for satisfactory condition and assure the engine compartment is free of excessive oil or other combustible materials.

If, during flight, you have reason to suspect an in-flight muffler or exhaust system failure (exhaust odor, feeling of drowsiness, or a noticeable change in the tone of the exhaust noise) immediately discontinue the use of the cabin heater, open the cabin windows and land as soon as practical. After landing, determine the source of the leak for immediate correction. **DO NOT FLY THE AIRPLANE WITH EXHAUST SYSTEM DAMAGE OR LEAKS.**