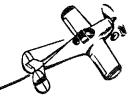


ERCOUPE SERVICE MEMORANDUM

No. 7

SUBJECT: Ercoupe engine exhaust muffler and cabin heater



Effective Serial No. 113 through No. 362

Reference (a) Engineering and Research Corporation letter on same subject dated 11/27/45

- 1. The recurrence of muffler failures has necessitated redesign of the subject part to provide a satisfactory service life and to eliminate the possibility of exhaust gases (carbon monoxide) being introduced into the cabin.
- 2. Parts for the new design are being manufactured as rapidly as our facilities will permit. These parts will be distributed through our Distributor organization for all delivered aircraft on a no-charge basis.
- 3. Pending the accomplishment of this change it is urged that extreme caution be exercised in the operation of aircraft equipped with the original muffler design. It is imperative that the mufflers be inspected frequently. Pilots should be warned to open the cabin windows in any circumstances where there is reason to believe that a failure has occurred in the muffler (exhaust odors, feeling of drowsiness, or a noticeable change in the tone of the exhaust noise).
- **4.** The muffler change may be accomplished in the following manner:
 - 1. Remove the right and left side and bottom engine cowling.
 - 2. Remove the inclined foot board in the cabin.
 - 3. Remove the cabin heater control box.
 - 4. Disconnect flexible hose from muff assembly.
 - 5. Remove muff assembly from muffler.
 - 6. Remove nose wheel steering rod.
 - Loosen clamps holding muffler to exhaust stacks.
 - 8. Remove right side exhaust stack.
 - 9. Remove old muffler.
 - Install heater muff cuffs (part No. 415-40525) on left exhaust as shown on Figure 1.
- 11. Assemble heater muff (part No. 415-40515) as shown on Figure 1.
- 12. Replace cabin heater control box.

- 13. Connect flexible tube (part No. 415-40522) and inlet (part No. 415-40518) from new cabin heater muff to cabin heater control box.
- 14. Install new muffler (part No. 415-40517).
- 15. Replace right hand exhaust stack.
- 16. Tighten clamps between stacks and muffler.
- 17. Connect flexible tube removed in operation four.
- 18. Replace inclined foot board.
- 5. The following removed parts shall be scrapped:
 - 1. Muffler Assembly 415-50437.
 - 2. Lower left hand Muff Assembly 415-40471.
 - 3. Upper Muff Assembly 415-40478.
 - 4. Lower right hand Muff Assembly 415-40489.
 - 5. Flexible Tube 415-40492.
- **6.** The material contained in the change kit is as follows:

Item	Quan- tity	Nomenclature	Part No.
1	4	Screw, round head No. 4 x 3/8"	
2	5	Nut	AC 372-632
3	5	Screw	AN526-632-6
4	1	Heater Cuff Assembly	415-40525
5	1	Flexible Tube	415-40522
6	1	Heater Muff Assembly	415-40515
7	1	Muffler and Carburetor	
		Heater Assy.	415-40517
8	1	Inlet Assembly	415-40518

- 7. In some instances, because of a spliced joint in the left hand exhaust stack, the cabin heater cuffs (part No. 415-40525) can not be installed. Upon request a new exhaust stack will be supplied at no charge in exchange for the old part.
- 8. Your co-operation in effecting an immediate change is urgent and will be appreciated.

ERCOUPE SERVICE DEPARTMENT MEMORANDUM

Number 7

MUFFLER REPLACEMENT

