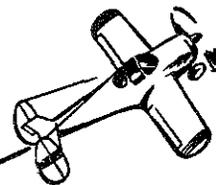


Ercoupe MEMORANDUM

ERCOUPE
SERVICE
MEMORANDUM

No. **20**

**SUBJECT: Oil Cooler—Installation
of Continental Engine**



1. All Ercoupe airplanes serial number 233 and subsequent have been delivered without oil coolers. This action was taken after a careful engineering survey which disclosed that the oil cooler was not necessary except in exceptionally hot climates and the reduction of weight and engine warming-up time were considered an advantage. It appears, however, that some owners will be operating at outside air temperatures where the engine oil temperature will not stabilize before reaching the maximum allowable oil temperature of 220°F.

2. In order not to deprive the owners, of that case, of the use of their airplanes we propose to make the installation of the oil cooler available to them. Oil Cooler Kits are available at cost to the distributor upon request. The request or order should indicate the airplane for which the oil cooler is to be installed. It will be necessary for the repair station making the installation to correct the airplane weight statement and placard the baggage compartment.

Each kit contains the following items:

- 1 ea. Continental C-75 oil cooler
- 1 ea. Left rear baffle 415-40473

The change may be accomplished as follows:

1. Remove engine cowling (top and sides).
2. Disconnect high tension wire from spark plugs (left cylinders).
3. Force rubber grommet from hole in upper, left rear engine cooling baffle and slide wires through hole to back of engine.
4. Disconnect flexible tubing to muffler by removing PK screws from connection on engine cooling baffle.
5. Remove upper, left rear engine cooling baffle.
6. Remove cooler cover plate; located on left side of engine just forward of magneto mount. Cover plate may be identified by embossed number, 35033.
7. Clean face of mounting flange, to provide proper gasket seal. (A new gasket should be used when cooler is installed to insure positive seal.)
8. Install cooler, tighten nuts and lock with Pal-nuts.
9. Remove left cowling longitudinal support.
10. Install new engine oil cooling baffle (part no. 415-40473; replaces upper left rear engine cooling baffle). Rectangular baffle tube fits down over fins on cooler.
11. Drill two No. 29 holes through vertical baffle plates to make connection between engine oil cooling baffle and left horizontal cooling baffle.
12. Insert mounting screws and tighten nuts.
13. Connect flexible tubing, from muffler, to baffle.
14. Drill two No. 41 holes in flexible tube connection at cooling baffle (top and bottom).
15. Insert P.K. screws and tighten.
16. Remount left engine cowling longitudinal support.
17. Pass ignition wires through holes in engine cooling baffle and seat rubber grommet. Connect ignition wires to plugs.
18. Run engine approximately five (5) minutes at 1500 R.P.M. checking oil pressure and oil temperature gauges for abnormalities.
19. Cut off engine and check cooler for any indication of leaks.

3. Permission to make the above installation is granted to authorized personnel of Ercoupe repair stations only.

4. It is requested that we be furnished with a duplicate copy of the revised weight statement and a report of the engine operating temperatures obtained subsequent to the installation.

5. Your co-operation in making this change, where required, is anticipated and will be appreciated.