

September 23, 1946

AIRWORTHINESS DIRECTIVE

Compliance with the "MANDATORY NOTES" contained in this Directive is necessary for safeguarding the airworthiness of your airplane. It will be checked for conformity with these NOTES.

Compliance with the "SERVICE NOTES" contained in this Directive also is necessary to safeguard the airworthiness of your aircraft. The inspections listed under "SERVICE NOTES" should be carefully carried out at the stated intervals, and will be checked by the CAA representative at each annual inspection.

Recommendations contained in Manufacturers' Service Bulletins should always be given careful consideration because compliance with them will add to the ultimate safety of your airplane.

This paper should be placed in your airplane of the above model with the airworthiness certificate or in the log book. The superseded issue (if any) may then be discarded.

If you have sold your airplane of this model, please forward this list to the new owner.

MANDATORY NOTE 1. (September 23, 1946) (Identical to Special Note 1 dated March 1, 1943, of AD-343).

Examine the flexible fuel lines to determine whether the code marking (representing the month and year of manufacture) indicates that the hose was made during the period from May 1941 to August 1942. The code mark will be found on one of the end fittings of the flexible fuel line hose. If the code mark is between 5-41 and 8-42 inclusive, the hose should be replaced by hose furnished on an exchange basis by Resistoflex Corporation, Belleville, N. J. (Taylorcraft Service Bulletin No. 39 covers this same subject.)

MANDATORY NOTE 2. (September 23, 1946) (Supersedes Special Note 2 dated April 30, 1943, of AD-343) (Applies only to serial numbers up to and including 4199).

Remove the link from the pulley in the wing and the fitting on the aileron control point and install parts D-8020, D-8054, D-8512 and D-8513, furnished by the manufacturer. (Taylorcraft Service Bulletins Nos. 32 and 45 cover this same subject.)

MANDATORY NOTE 3. (September 23, 1946) (Supersedes Special Note 4 dated January 10, 1944, of AD-343).

Check to make sure that the front seat stop bolts on the seat adjustment slides are installed with their heads on the outside of the slides and that there is no possibility of the rear rudder pedals catching on these bolts.

MANDATORY NOTE 4. (September 23, 1946) (Identical to Special Note 5 dated January 10, 1944, of AD-343).

Examine the end fittings of the flexible fuel line, Part No. D-98 or D-909, connecting the carburetor and the fuel strainer, to determine whether the nut on the swivel end is made of plated steel or brass (distinguishable by the characteristic color of each metal). Fittings having plated steel nuts incorporate a brazed, two-piece body that is susceptible to early failure in service. Fittings with a brass swivel nut have a one-piece body. Therefore, if the swivel nut is made of plated steel the flexible line should be replaced with a line that has a brass swivel nut. (Taylorcraft Service Bulletin No. 53 covers this same subject.)

MANDATORY NOTE 5. (September 23, 1946) (Identical to Special Note 6 dated September 30, 1944, of AD-343) (Applies only to model DF-65, Army L-2E).

Shot blast the cheeks and crankpin fillets on the crankshafts of all Franklin 4AC-176 Series engines. This should be accomplished as soon as practicable on shafts which incorporate crankpin fillets smaller than 1/8 inch in radius, and on other shafts at the regular major overhaul. All shot blasting should be done by the engine manufacturer or in accordance with the manufacturer's instructions. All shafts which have been in the factory since December 15, 1943, have been shot blasted. (Aircooled Motors Bulletin No. 24 covers this same subject.)

MANDATORY NOTE 6. (September 23, 1946) (Supersedes Special Note 7 dated September 30, 1944, of AD-343).

A 2-5/8 inch diameter, .049 inch thick plate of SAE 1025 steel should be welded to each end plate of the muffler, after the porcelain coating has been removed by sand blasting. The weld should be gas tight. If a rattling noise can be heard when the muffler is shaken, the muffler should be replaced since such a noise indicates a broken tube. (Taylorcraft Service Bulletin No. 55 covers this same subject).

MANDATORY NOTE 7. (September 23, 1946) (Applies only to Army L-2 series airplanes)
COMPLIANCE REQUIRED AT ORIGINAL CERTIFICATION OR, FOR AIRPLANES ALREADY CERTIFICATED, NOT LATER THAN DECEMBER 1, 1946.

The swivel type rear seats with folding backs should be bolted or welded in place and the seat should be permanently locked in the forward facing position so that there is no possibility of interference with the rear control stick.

MANDATORY NOTE 8. (September 23, 1946) (Applies only to models DC-65, Army L-2, L-2C and DCO-65, Army L-2A, L-2B, L-2M having Continental A-65 series engines with serial numbers from 3456658 to 4109568 inclusive, or Continental A-65 series engines which have had A-21422 piston pins or new three-ring pistons installed since September 25, 1945).

COMPLIANCE REQUIRED IMMEDIATELY IF POSSIBLE BUT IN ANY EVENT NOT LATER THAN 50 HOURS OF ENGINE OPERATION AFTER AUGUST 27, 1946.

A certain percentage of piston pins installed in engines of the above numbers and distributed as replacement parts are subject to failure without warning. The weakness of these pins cannot be detected by normal inspection methods. Piston pin breakage can result in complete engine failure. It is the owner's responsibility to avoid this risk by making the changes outlined in (A) and (B) below at the earliest possible time.

(A) Replace piston pin part No. A-21422 (.626 inch inside diameter) with thick wall piston pin No. A-25127 (.5945 inch inside diameter). The engine manufacturer has given assurance that every possible effort will be made to supply the required quantity of replacement piston pins.

(B) Simultaneously with (A) above, all pistons should be examined for skirt cracks and the necessity for rework of the bottom rib. This rework involves reducing the height of the rib until it is at least 1/16 inch wide and rounding all sharp corners.

(C) As an acceptable alternate to (A) and (B) above, cam ground pistons, part No. 40731, which necessitate using piston pins of greater outside diameter, may be installed. This change will likewise remove the possibility of piston pin failure and piston skirt cracking. (Continental Motors Service Bulletin M46-6 covers this same subject).

SERVICE NOTE 1. (September 23, 1946) (Identical to Inspection Note 2 dated September 30, 1944, of AD-343) (Applies only to model DF-65, Army L-2E).

Inspect the external copper oil lines near the end fittings on Franklin 4AC-176 Series engines for cracks resulting from vibration. If oil line support clamps have not been used on your engine, inspection should be conducted at first opportunity and oil lines should be annealed or replaced, and clamps should be installed. If clamps are already installed, the oil lines should either be annealed or replaced at each overhaul. (These difficulties are also discussed in Aircooled Motors Bulletin No. 20).

SERVICE NOTE 2. (September 23, 1946) (Identical to Inspection Note 3 dated September 30, 1944, of AD-343) (Applies only to model DF-65, Army L-2E).

Ascertain that the proper valve spring and washer assemblies are installed in Franklin 4AC-176 Series engines to preclude valve rocker breakage from spring bottoming and interference between the spring damper and upper washer. This inspection should be accomplished at the first opportunity and whenever any valve spring assemblies are replaced or interchanged. For the cylinder head with 25/32 inch deep spring recess, use washer No. 10730 and spring No. 10188, and shorten the damper prongs 1/8 inch. For the 27/32 inch recess, use either the above parts with two spring spacers, or washer No. 10825 and spring No. 10824. (Rocker difficulties are also discussed in Aircooled Motors Bulletin No. 23.)


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Copies of this directive may be obtained upon application to:

Office of Aviation Information
Civil Aeronautics Administration
Department of Commerce
Washington 25, D. C.