

NOTE: WE CAN SUPPLY #081160 FIREWALL ASSEMBLY FOR \$82.50.

COPY OF LUSCOMBE BULLETIN DATED
August 4, 1947

TO: All Owners of Luscombe Aircraft, Models 8A, B, C and D.

FROM: Service Department, Luscombe Airplane Corporation.

SUBJECT: Method of Effecting Engine Change for Increased Horsepower.

Recent inquiries directed to this Department regarding the modifications necessary to install power plants of increased horsepower have resulted in our establishing the following outline. All modifications as herein stated fall within the requirements as set forth in Civil Aeronautics Authority Aircraft Specification A-694-5, and subsequent.

A. TO CONVERT FROM MODEL 8A, to 8C (A-65 to A-75)(Note 1)

1. Replace engine (Note: if use of fuselage tank only is contemplated engine must be equipped with engine operated fuel pump, and hand operated Chevrolet wobble pump.) use of A-75-9J fuel injector engine eliminates the necessity of using a hand wobble pump.
2. Replace propeller with one within the following limits:
 - (a) Static RMP 2400 Maximum at maximum permissible throttle setting.
 - (b) Maximum diameter 79" - minimum diameter 68.5"
3. If the aircraft falls within serial numbers 833-1803 further modifications necessary are as follows:
 - (a) Add Tail Tray reinforcement 481022.
 - (b) Replace shackle pin number 08311-227 on right upper landing gear leg with our heat treated pin number 18381 heat-treated to 125,000 PSI.
 - (c) Change fluid in oleo shock absorber unit to Univis #90, SAE 20 W, or equivalent and placard with our part number 18365.
 - (d) Recover wings with intermediate or Grade A fabric if needed.
4. Re-rig per new control travel limits.
5. New Weight and Balance Statement.

B. TO CONVERT FROM MODEL 8A to 8C (Alternate Plan) (See Note 1)

1. Replace fuselage tank with two 12.5 gallon wing tanks eliminating the necessity of installing a hand operated wobble pump. (Note 2).
2. Replace engine or modify for increased horsepower in accordance with Continental Motors Corporation Engine Specifications.
3. Install new fuel lines, fittings, fuel selector valve, shaft and control assembly, placard and pressure vent fuel caps.
4. Make cutouts in superstructure upholstery for wing tank gauges.
5. Replace propeller (See Sec. A, pp 2)
6. Comply with Sec. A. pp 3 if aircraft falls within the category noted.
7. Re-rig controls per new control travel limits.
8. Install cover plates on fuselage fuel tank filler neck cutout.
9. New weight and balance statement.

C. TO CONVERT FROM MODEL 8A to 8E (A-65 to C-85-12F) (See Notes 1 and 3)

1. Change engine on same engine mount. (If engine driven starter and generator are included, this will necessitate a firewall assembly to accommodate their accessories.)
2. Install new throttle controls.
3. Install mixture control.
4. Install new carburetor heat control.
5. Install new exhaust system.
6. Uninstall new heater mufflers, ducts, and fittings.
7. Modify cowl to include new intake ducts; one on each side of and beneath propeller hub, for carburetor heat and cabin heat intakes. Attach intake duct flanges.
8. Install new tachometer and shaft for 85 H.P. engine.
9. Drill fresh air inlet hole through firewall and install shut-off disc and manual control.
10. Install new fuel line system and wing tanks per Sec B, pps 1,2,3.

11. (a) Install new propeller; maximum diameter 72" minimum diameter 68.5".
(b) Static RPM at maximum permissible throttle setting, maximum 2205, minimum 2020
12. Re-rig controls for 8E travel limits per CAA Specification A-694-5
13. New Weight and Balance Statement and Form 309.

NOTE 1: Engine limits, C.G. Range, maximum permissible weight are obtainable in CAA Aircraft Specification A-694-5.

NOTE 2: Aircraft Serial Number 1807 and subsequent are eligible when modifications comply with Sec. c Note 1: Serial Numbers 833-1084 inclusive, require full compliance with Sec. A, pp-3, Sec. C, Note 1, and further require the installation of new elevator assembly complete, part number 085052 cable and fittings.

NOTE 3: Conversion to Model 8F (C-90) same as Model 8E except engine and propeller installation.