

BLUE STAR CONVERSION
INSTALLATION OF CONTINENTAL IO-470-N
BEECH MODEL J35, K35, M35
LWS C-470-N. REVISION 2
September 16, 1992
STC SA5635SW

SAMPLE

BLUE STAR CONVERSION

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LWS C-470-N
Revision 2
September 16, 1992

LIST OF REVISIONS

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SAMPLE

LIST OF FASTENERS

AN515-632

SCREW

SAMPLE

LWS C-470-N
July 19, 1983

LIST OF PARTS

<u>QTY</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
1	SCEET 14, 6" long	Duct	5
4	J-7518-2	Lord Mount	4
2	QS100M-56H	Clamp	4

LWS C-470-N
Revision 1
October 20, 1983

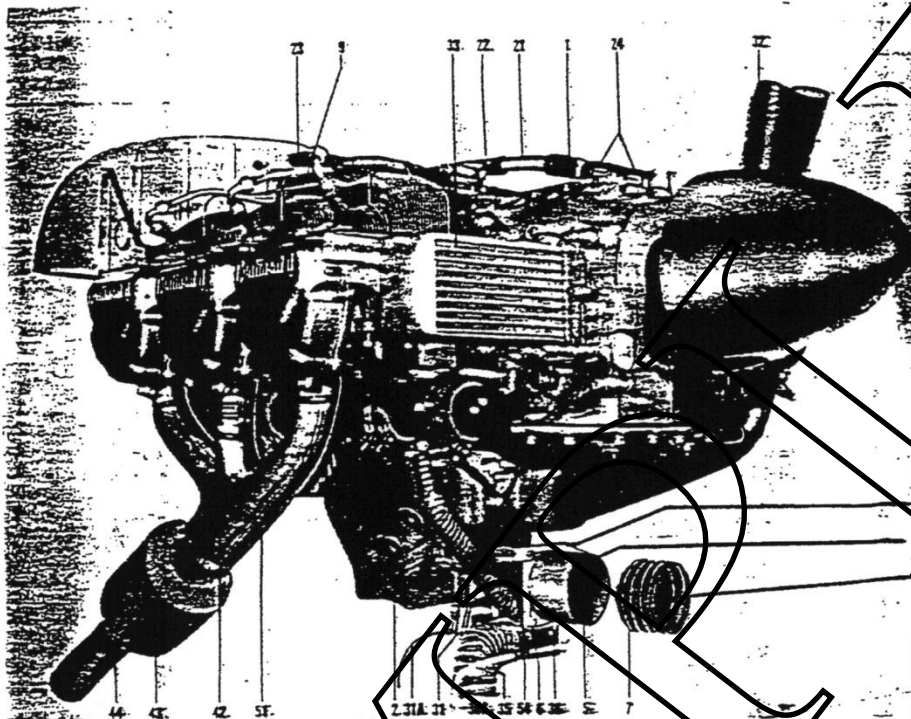
INSTALLATION INSTRUCTIONS AND PROCEDURES

CONTINENTAL IO-470-N

Installing a Continental IO-470-N engine in Beech Model J35, K35 and M35 Bonanza Aircraft.

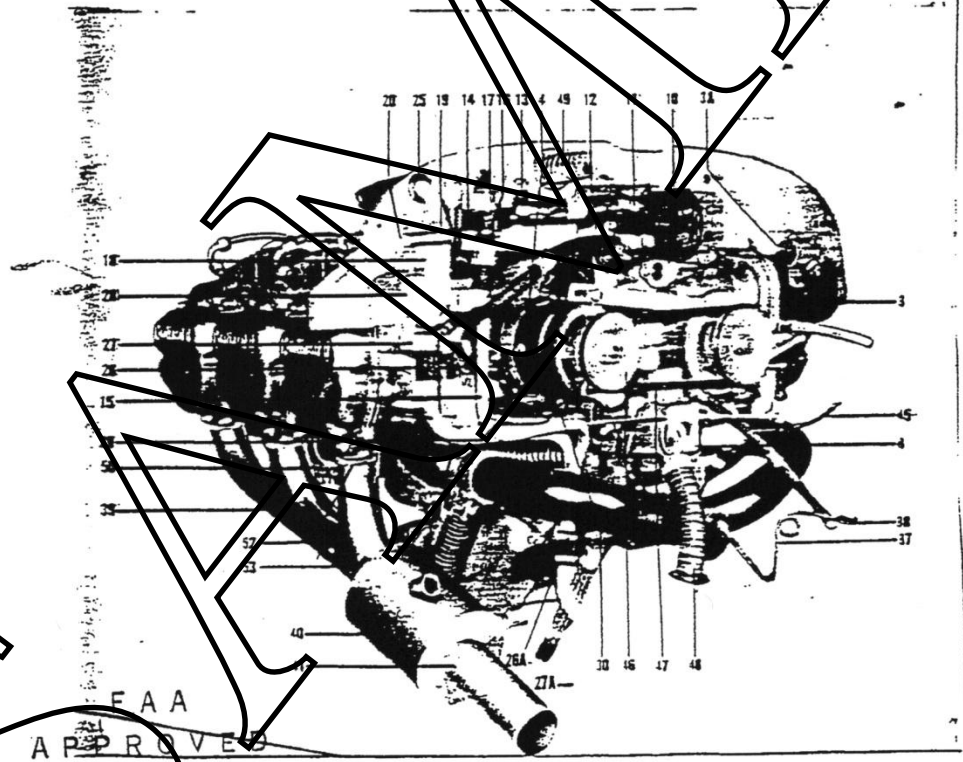
1. Remove the propeller and the existing Continental IO-470-C engine from the aircraft in accordance with Beech Shop Manual 35-590096B, page 4-10B.
2. Remove the starter (if necessary), generator, vacuum pump, propeller governor, exhaust system, baffles and attaching hardware; save for installation on the Continental IO-470-N.
3. Install the accessories, baffles and exhaust system removed from the Continental IO-470-C engine on the IO-470-N engine using the retained hardware. All components should be inspected and deemed airworthy prior to installation. Components deemed not airworthy should be overhauled, repaired or replaced accordingly.
4. Install IO-470-N engine assembly in the aircraft using new J-3518-2 Lord mounts (vibration isolators) in accordance with Beech Shop Manual 35-590096B, page 4-10B.
5. Remove the induction housing assembly P/N 35-91003-95 from Continental IO-470-C fuel air body. Remove induction duct P/N 35-910293 from the air intake box on forward bulkhead, station 12.125. Reverse the housing and reinstall by fitting the flange where the duct flange was located and locating the four (4) screw holes. Attach the box using AN515-632 screws of the proper length. Install the SCEET-14 duct (six inches long) and secure each end with QS100M-56H clamps. Refer to illustrations, pages 8 and 9.

6. Install propeller and governor meeting specifications shown on page 10 through 12.
7. Modify existing instrumentation per applicable FAA approved Flight Manual Supplement. Or install new ones with the appropriate markings.
8. Revise equipment list to show the installation of the Continental IO-470-N engine. Complete FAA Form 337 showing the installation of the Continental IO-470-N engine in accordance with STC SA5635SW. Complete weight and balance revision if necessary. Make an Aircraft Log Book Entry showing the IO-470-N engine installation in accordance with STC SA5635SW, the equipment list revision, weight and balance computation and the date of FAA Form 337.



AN515-632(4)
 15-910003-95
 CCEET-14 Duct
 (installation)
 35-910293 (existi

CONTINENTAL IO-470-N ENGINE



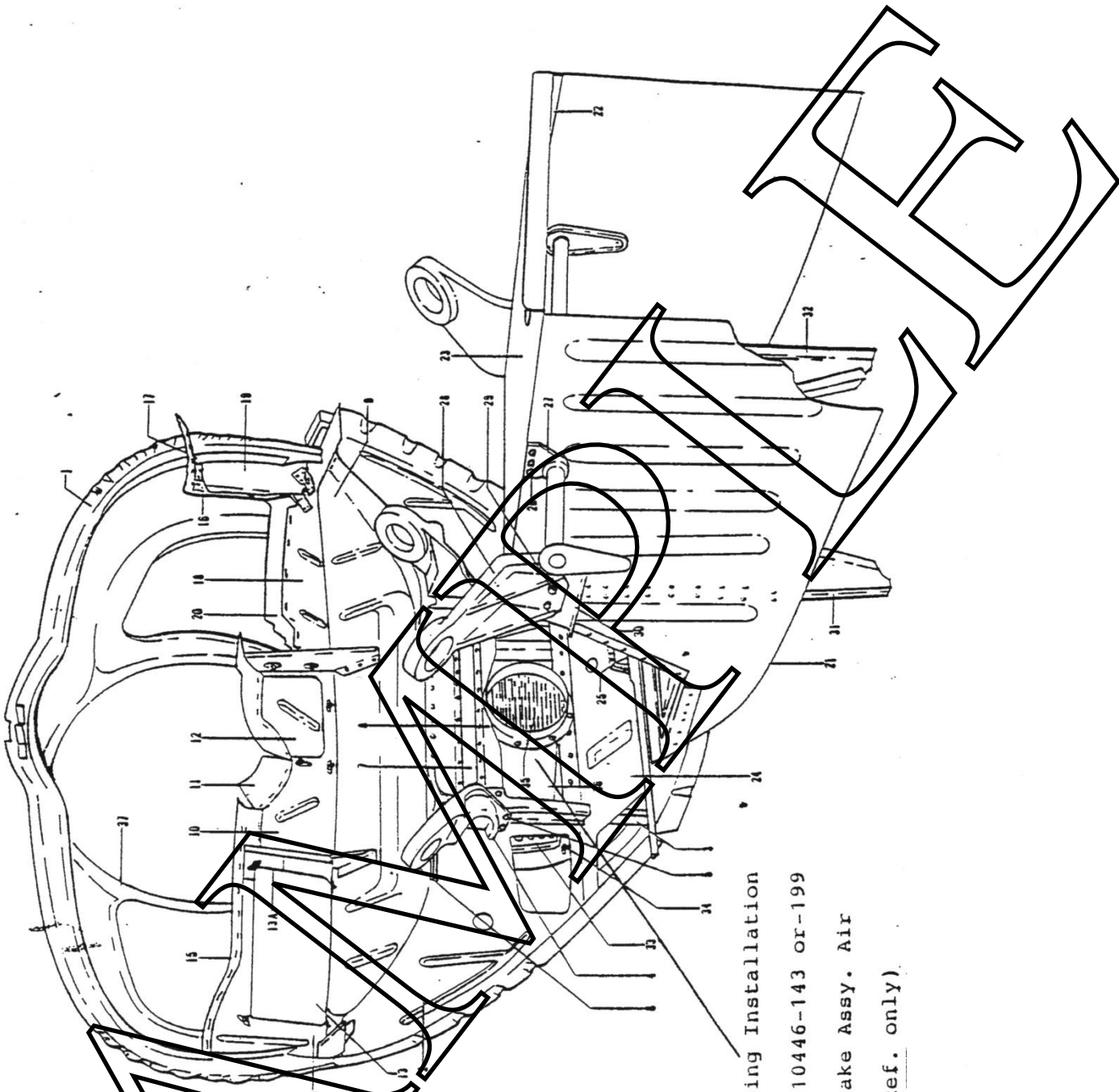
Engine Rear View (reference only)

FAA
 APPROVED

TOP PAGE 140C
 MAY 24 1994

FAA Approved
 Date: CHICAGO AIRCRAFT
 CERTIFICATION OFFICE
 REGION

LWS C-470-N
 Revision 1
 October 20 1983



Existing Installation

35-410446-143 or -199

Intake Assy. Air

(Ref. only)

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FAA Approved
Date: MAY 24 1994

CHICAGO AIRCRAFT
CERTIFICATION OFFICE
CENTRAL REGION

AD
ACE-1002

LWS C-470-N

July 19, 1983

PROPELLER SPECIFICATION from
FAA TYPE CERTIFICATE 3A15

Item

6. Beech constant speed propeller installation
- (a) Beech 278-100-11 or 278-100-13 hub with
278-214-82 blades
Diameter: 82 inches, no cutoff permitted
Pitch settings at 33 inch station
 Low: 13.5 degrees
 High: not under 30.0 degrees
69 lb. (+1)
 - (b) Woodward hydraulic governor
(210235 or 210350) 3 lb. (+10)
9. Flottorp constant speed propeller installation
- (a) Flottorp F12A-3 with 8400-2 blades 65 lb. (+1)
Diameter: Not over or under 82 inches
(no cutoff permitted)
Pitch settings at 33 inch station
 Low: 13.5 degrees
 High: 30.0 degrees minimum
 - (b) Woodward governor (210452) 3 lb. (+10)
 - (c) Flottorp FS 200-1 Spinner Assembly 5 lb. (+1)

11. McCauley constant speed propeller installation

- (a) McCauley 2A36C23 hub with 84-0 blades

Diameter: Not over 84 inches
not under 82 inches

Pitch settings at 30 inch station

Low: 13.3 degrees

High: 29.2 degrees

62 lb. (+1)

- (b) Woodward governor (210452 or A210680)

3 lb. (+10)

- (c) McCauley D3290A spinner assembly

4 lb. (+1)

- McCauley Constant Speed Propeller Installation

- (a) McCauley 2A37C223 Hub with 90RB-6 Blades

62 lb. (+1)

Diameter: Not over 84 inches
not under 82 inches

Pitch settings at 30 inch station

Low: 13.3 degrees

High: 27.7 degrees

- (b) Governor: McCauley C290D3 [x]/T35, Woodward
210452 or A210680 (2625 RPM)

3 lb. (+10)

- (c) McCauley D3290A Spinner Assembly

4 lb. (+1)

- Install propeller per McCauley Manual No. MPC-11

- McCauley Constant Speed Propeller Installation

- (a) McCauley 3A34C423 Hub with 90DFA-10 Blades 70 lb. (+1)

- Install per instructions and specifications set forth in D'Shannon
Products STC SA1691GL dated January 14, 1992.

- Hartzell constant speed propeller installation.

(a) Hartzell PHC-L3YF Hub with F8468A-6R Blades

Diameter: not over 80 inches
not under 78.5 inches

Pitch settings at 30 inch station

Low: 12.0 degrees +/- .1

High: 33.0 degrees +/- 1

(b) Governor: McCauley C290D3[x]/T35, Woodward

210452 or A210680 (2625 RPM) 3 lb. (+10)

(c) Hartzell A-2295-1 Spinner Assembly 5 lb. (+1)

- Install propeller per Hartzell Owners Manual #115N.

75 lb. (+1)