

United States of America
Department of Transportation -- Federal Aviation Administration
Supplemental Type Certificate
Number SE57WE

This certificate issued to RAYJAY Parts LLC
10 Harbor Island Drive
Key Largo, Florida 33037

Certifies that the change in the type design for the following product with the limitations and conditions therefore as specified hereon meets the airworthiness requirements of Part 13 of the Civil Air Regulations. and amendments 13-1 through 13-6

Original Product - Type Certificate Number E8CE
Make : Continental -Teledyne
Model : TSIO-520-D

Description of Type Design Change: Installation of two (2) Roto-Master 3DT5FF10J2, P/N 600572-00 (formerly Rajay Model No. 315F10 P/N RJ0080-100, -101, or -102) turbochargers on Continental-Teledyne Model TSIO-520-D engine in accordance with Roto-Master (formerly Rajay) Drawing List RJ3099, dated July 6, 1972, Revision C, dated November 16, 1978 or later, FAA approved revision.

Limitations and Conditions This approval applies only to turbosupercharger/engine compatibility. The limitations and conditions of FAA Type Certificate Data Sheet E8CE apply, except as supplemented on page 3 of this certificate. This approval should not be extended to other engines of this model on which other previously approved modifications are incorporated unless it is determined by the installer that the interrelationship between this change and any of those other previously approved modifications will produce no adverse affect upon the airworthiness of that engine. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application : March 4, 1971

Date of issuance: July 6, 1972

Date reissued: : Feb. 10, 1982; Oct. 23, 1987;
Sept. 22, 1995; Jan. 16, 2004;
June 26, 2006

Date amended : Oct. 17, 1972; June 23, 1978;
Nov. 17, 1978; July 15, 1983



By direction of the Administrator

(Signature)
Melvin D. Taylor, Manager
Atlanta Aircraft Certification Office

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

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Supplemental Type Certificate
(Continuation Sheet)
Number SE57WE

OPERATING LIMITATIONS WITH TURBOSUPERCHARGER ASSISTANCE

| <u>CONDITION</u> | <u>INTAKE MANIFOLD PRESSURE</u> | <u>ENGINE SPEED</u> |
|------------------|---------------------------------|---------------------|
| T. O. (5 MIN.) | 32.5" Hg A | 2700 RPM |
| M.C. | 32.5" Hg A | 2700 RPM |

NOTES:

1. Maximum air throttle inlet temperature, 250⁰ F.
2. Maximum cylinder exhaust pressure, 39.0" Hg A.
3. Do not operate the turbosuperchargers unless the engine throttle is full open. When increasing power, fully open engine throttle, then slowly close the exhaust wastegate until the desired intake manifold pressure is obtained. When decreasing power, fully open exhaust wastegate, then close engine throttle.

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