

United States of America
Department of Transportation -- Federal Aviation Administration

Supplemental Type Certificate

Number SE62WE

This certificate issued to RPM Commander LLC
1401 North Riverside Drive, Suite 607
Pompano Beach, FL 33062

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.

Original Product - Type Certificate Number IE15
Make: Lycoming
Model: IO-720-B1B

Description of Type Design Change: Installation of two Rajay Turbochargers, P/N RJ 0326 or -1, or -2 on Lycoming Engine Model listed above in accordance with FAA sealed Ted R. Smith & Associates Inc. Drawing No. 41002, which is on file at the FAA Western Regional Office, Hawthorne, California. This STC establishes the eligibility of the engine listed hereon for operation with the Rajay turbocharger in accordance with the engine operating limitations specified. Approval of the engine with a turbocharger in any airplane will be covered by an STC issued against the airplane on which it is installed.

Limitations and Conditions:

(See continuation sheet 3 of 3)

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: January 31, 1973

Date reissued: 3/14/74; 8/16/74; 1/30/06;
4/16/08

Date of issuance: June 01, 1973

Date amended: 7/7/75; 8/19/75



By direction of the Administrator

Melvin D. Taylor
(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 SE62WE

Date of Issuance: June 01, 1973

Reissuance Date: January 30, 2006; April 16, 2008

Limitations and Conditions (Continued):

This approval covers engine/turbocharger compatibility only.

Engine Operating Limitations

Where applicable, the following engine limitations supersede those specified on Engine Type Certificate Data Sheet 1E15:

Engine Speed (Turbocharged)

Takeoff	2650 RPM
Max. Cont.	2650 RPM

Manifold Pressure (Turbocharged)

Takeoff	29.5" HgA
Max. Cont.	29.5" HgA

Fuel (Minimum grade Aviation gasoline) 100/130

Altitude

Maximum operating altitude 30,000" MSL (density)

Maximum Permissible Temperatures

Exhaust Gas (turbo inlet)	1600°F @ 100,000 RPM
	1650°F @ 90,000 RPM

Engine and Turbocharger Operation:

For engines equipped with separate throttle and propeller controls, do not operate the turbochargers unless the throttle is wide open. When increasing power, fully open the throttle; then slowly close the waste gates until the desired manifold pressure is obtained. When decreasing power, fully open waste gates; then close the throttle.

For those engines equipped with integrated power controls, (i.e., throttle and propeller controlled by a common control), do not operate the turbochargers below 2200 RPM. When increasing power, set desired RPM; then slowly close the waste gates until the desired manifold pressure is obtained. When decreasing power, fully open waste gates; then make further power reduction by the integrated power lever.

Compatibility of this design change with previously approved modifications must be determined by the installer. 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.

-END-

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