### Department of Transportation—Hederal Aviation Administration

## Supplemental Type Certificate

. Number SA1119NW

This certificate, issued to Kenmore Air Harbor, Inc.

certifies that the change in the type design for the following product with the limitations the Sivil Air therefor as specified hereon meets the airworthiness requirements of Lart  $ra{3}$  -

Regulations, November 1, 1949, as amended by 3-1 through 3-12

Original Product - Type Certificate Number 3A12

Make Cessna

Model 172N

Description of Type Design Change Installation of a Lycomine 0-320-E2D engine and associated systems in accordance with Kenmore Air Harbor, Inc. Installation Instructions No. K11688.

This is a replacement of the Lycoming 0-320-H2AD engine rated at 160 Hp at NOTE:

This approval is also extended to the above model equipped with Edo 689-2130 floats installed in accordance with STC SA584NW but with the maximum gross weight is limited to 2300 pounds.

Limitations and Conditions Approval of this change in type design applies to the above model aircraft only. This approved should not be extended to aircraft of this model on which other previously approved modifications are incorporated unless it is determined that the relationship between this change and any of those other previously approved modifications, including changes in type design, will introduce no adverse effect upon the airwork iness of that aircraft. A copy of this Certificate, Addendum No. SAll19NW and Installation Instructions K11688 shall be maintained as part of the permanent records for the modified aircraft.

This certificate and the supporting data which is the basis for approval shall remain in effect until sur-

blied, of fitermination date is otherwise established by the Administrator of the

Federal Aviation Afteninistration.

November 12, 1980

MINISTRA

December 7, 1980

Date reissued :

Date amended January 5, 1981; April 10, 1981

By direction of the Admin**j**istra

Acting Chief, Seattle Area Aircraft Certification Office

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

#### United States of America

### Department of Transportation—Federal Aviation Administration

# Supplemental Type Certificate

(Continuation Sheet)

Amended April 10, 1981

Number

SA1119NW

SUPPLEMENTAL TYPE CERTIFICATE ADDENDUM NO. SA1119NW

The conditions and limitations of Type Certificate Data Sheet Number 3A12 apply except where superseded by the following:

SYC SA1119NW, This Supplemental Type Certificate Data Sheet, which is part prescribes the conditions and limitations under which the STC was issued meets the airworthiness requirements of the Civil Air Regulations

SUPPLEMENTAL TYPE CERTIFICATE HOLDER: Kenmore Kir Harbor, Inc.

CESSNA 172N, 4PCLM (NORMAL CATEGORY) AS MODIFIED BY STC SA1119NW

Engine:

Lycoming 0-320-E2D

Fuel:

80/87 minimum/grade aviation gasoline

Engine Limits:

For all operations 2700 rpm (150 Hp)

Propeller and

Propeller Limits:

McGauley 18160/CTM7553

Static rpm: -Not over 2370, Not under 2270 Not over 75", Not under 74" Diameter:

Spinner: Drawing 0550320

McCauley 1C160 /DTM7553

Static/rpm:

Not over 2370, Not under 2270

Diameter:

Not over 75", Not under 74"

Spinner:

Drawing 0550320

McCauley 1A175/ATM8042 (Seaplane Only)

Static rpm:

Diameter:

Not over 2545, Not under 2445

Not over 80", Not under 78.4"

Spinner:

Drawing 0550320

McCauley 1A175/ETM8042 (Seaplane Only)

Not over 2545, Not under 2445 Static rpm:

Diameter:

Not over 80", Not under 78.4"

Spinner:

Drawing 0550320

Maximum Weight:

2300 pounds (Landplane)

2220 pounds (Seaplane)

2300 pounds (Seaplane, Edo 689-2130 floats only, installed

per STC SA584NW).

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

FAA FORM 8110-2-1 (10-69)

This certificate may be transferred in accordance with FAR 21.47.

Equipment:

Cessna Pilot's Operating Handbook for Cessna 172M/must be maintained in the airplane at all times.

- NOTE 1: Current weight and balance report including list of equipment in the certified empty weight must be in the aircraft.
- NOTE 2: In addition to the Placards and Markings required by Type Certificate Data Sheet 3Al2, Note 2, apply the following:
  - a. Adjacent to the fuel filler cap:

80/87 OCTANE MINIMUM

b. Adjacent to or in close proximity to the aircraft identification plate:

LYCOMING 0-320-E2D INSTALLED PER KENMORE AIR HARBOR, INC. STC SA1119NW

c. The following placard is to be placed in front of and in full view of the pilot:

LYCOMING 0-320-E2D INSTALLED PER KENMORE AIR HARBOR, INC. STC SA1119NW. CESSNA 172M PILOT'S OPERATING HANDBOOK APPLIES

NOTE 3: With the described engine and propeller installation, performance will be at least equal to or better than that given in the original FAA Approved Airplane Flight Manual Supplement for the Cessna 172M airplane.



Page 4 of 4 Pages