United States of America
Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

Number **SA4519NM**

This certificate issued to **ACS Products Company**

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part **3** of the **Civil Air Regulations.**

Original Product—Type Certificate Number: **3A12**
Make: **Cessna**
Model: **172, 172A, B, C, D, E, F, G, H, I, K, L, M, N, P, Q**

Description of Type Design Change: **Installation of ACS Products mixture control, in accordance with ACS Products Master Drawing List ACS-360, Revision 1, dated October 6, 1988, or later FAA approved revision.**

Limitations and Conditions: **The approval of this change in type design applies to the basic aircraft of the specified model that is otherwise unmodified. This approval should not be extended to other aircraft 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 introduce no adverse effect upon the airworthiness of that aircraft.**

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: **June 28, 1988**
Date of issuance: February 17, 1989

Date reissued:
Date amended:

By direction of the Administrator
Frederick Lee
(Signature)
Manager, Los Angeles 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.

This certificate may be transferred in accordance with FAR 21.47.

FAA Form 8110-2 (10-68)

United States of America
Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

Number SA5004NM

This certificate issued to ACS Products Company

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 3 of the Civil Air Regulations.

Original Product—Type Certificate Number: 3A19
Make: Cessna
Model: 150, 150A, B, C, D, E, F, G, H, J, K, L, M A150K, A150L, A150M, 152, A152

Description of Type Design Change: Installation of ACS Products mixture control, in accordance with ACS Products Co. Master Drawing List ACS-360, Revision 3, dated September 6, 1990, or later FAA approved revisions.

Limitations and Conditions: The approval of this change in type design applies to the basic aircraft of the specified model that is otherwise unmodified. This approval should not be extended to other aircraft 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 introduce no adverse effect upon the airworthiness of that aircraft.

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: August 15, 1989
Date of issuance: DECEMBER 23, 1991

Date reissued:
Date amended:

By direction of the Administrator
Robert Fullmer
(Signature)
Manager, Propulsion Branch
(Title)

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

This certificate may be transferred in accordance with FAR 21.47.

FAA Form 8110-2 (10-68)

ACS PRODUCTS CO.

ACS FORM 501

AIRCRAFT ELIGIBILITY LIST

A-790-12 VERNIER MIXTURE CONTROL ASSEMBLY

Installation Approved on the following Aircraft Models:

Aircraft Make	Aircraft Model	Approval Basis
Cessna	150, 150A, B, C, D, E, F, G, H, J, K, L, M	STC SA5004NM
Cessna	A150K, A150L, A150M	STC SA5004NM
Cessna	152	STC SA5004NM
Cessna	A152	STC SA5004NM
Cessna	172, 172A, B, C, D, E, F, G, H, I, K, L, M, N, P, Q	STC SA4519NM

FAA-PMA Approved per PMA Letter, Supplement No. 3 of May 5, 1989 and Supplement No. 4 of April 13, 1993.

ACS VERNIER TYPE MIXTURE CONTROL

Installation Instructions

1. Disconnect the mixture control at carburetor and save the hardware that was removed.
2. Remove mixture control assembly from aircraft saving all hardware removed.
3. Measure the old control assembly from the mounting to the end of the housing. If it is shorter than the ACS vernier control, remove the center wire from the ACS control by depressing the center button and pulling the wire from the housing. Be careful not to loose the small ball which will drop out as you are pulling the wire out. Then cut the housing the same length as the one removed. Insert the wire back in the hole as the button is depressed and insert the wire all the way.
4. Measure the mounting hole in the instrument panel for an opening of at least 0.75", if smaller, enlarge to 0.75" being careful not to damage wiring behind instrument panel.
5. Check the hole in the firewall with a 1/4" drill bit. If it will not go through enlarge to 1/4".
6. Remove swivel at the carburetor mixture control lever and enlarge the wire hole in the bolt to .081 with a #46 drill bit.
7. Install the control, routing it the same as the removed mixture control. Be sure to install nut and washer as the control is being inserted through the instrument panel.
8. Install the control wire through the swivel at the mixture control lever at the carburetor but do not tighten.
9. Secure housing with the removed clamp just aft of the mixture control lever 1/4" from the end of the housing.
10. At this time push in the control in the cockpit full in then turn the knob counterclockwise one turn. Place the mixture control lever in the full rich position and tighten the control wire swivel and safety in accordance with the aircraft maintenance manual.
11. Check the control for full travel assuring the mixture control lever is against both the full rich and idle cut off positions.
12. Secure housing behind the instrument panel and in the engine accessory section per the aircraft maintenance manual instructions.
13. If the existing placard is removed or obliterated, install new placard that reads: "MIXTURE-PULL LEAN".
14. Make log book entry in accordance with FAR 43.9.

Model A790
Drawing No. A-3310-A