
Service Bulletin

November 1, 1999

SEB99-18

TITLE**FUEL QUANTITY INDICATING SYSTEM INSPECTION****EFFECTIVITY**

The following airplanes equipped with a Stewart Warner manufactured fuel quantity indicating system:

<u>Model Series</u>	<u>Year</u>	<u>Serial Numbers</u>
150	1960	17001 thru 17999
150	1960	59001 thru 59018
150		617, 628, 644, 649
150	1961 thru 1977	15059019 thru 15079405
A150	1970 thru 1977	A1500001 thru A1500734
A150		15064970
152	1978 thru 1985	15279406 thru 15286033
A152	1978 thru 1985	A1520735 thru A1521049
A152		A1500433, 681
172	1959 thru 1985	36966 thru 17276516
172		638, 639
175	1958 thru 1960	55001 thru 56777
175	1961 thru 1962	17556778 thru 17557119
175		619, 28700A
P172	1963	P17257120 thru P17257188
R172 (T41)	1967 thru 1969	R172-0001 thru R172-0409
R172 (T41)	1969 thru 1981	R1720410 thru R1723454
R172		P17257189, 680
177	1968 thru 1978	17700001 thru 17702752
177		661
177RG	1971 thru 1978	177RG0001 thru 177RG1366
180	1957	32662 thru 32999
180	1957 thru 1960	50001 thru 50911
180	1961 thru 1981	18050912 thru 18053203
180		645, 624

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To obtain satisfactory results, procedures specified in this publication must be accomplished in accordance with accepted methods and prevailing government regulations. The Cessna Aircraft Company cannot be responsible for the quality of work performed in accomplishing the requirements of this publication.

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<u>Model Series</u>	<u>Year</u>	<u>Serial Numbers</u>
182	1957 thru 1960	33843 thru 53007
182	1961 thru 1978	18253008 thru 18266590
182		634, 631, 675
R182	1978	R18200002 thru R18200583
185	1961 thru 1969	185-0001 thru 185-1599
185	1970 thru 1985	18501600 thru 18504448
185		632, 652
188	1966 thru 1969	188-0001 thru 188-0572
188		653
A188	1966 thru 1969	188-0001 thru 188-0572
A188		653
188A	1970 thru 1971	18800573 thru 18800832
A188A	1970 thru 1971	18800573 thru 18800832
188B	1972 thru 1975	18800833 thru 18802348
A188B	1972 thru 1983	18800833 thru 18803973
A188B	1972 thru 1983	18800967T thru 18803973T
A188B		678T
T188C	1972 thru 1983	T18803325T thru T18803974T
T188C		T18803307T, T18803308T
T188C		T18802839T
210-5 (205)	1963 thru 1964	205-0001 thru 205-0577
210-5 (205)		641
206	1964	206-0001 thru 206-0275
U206	1965 thru 1969	U206-0276 thru U206-1444
U206/TU206	1970 thru 1978	U20601445 thru U20604649
U206/TU206		676
P206	1965 thru 1969	P206-0001 thru P206-0603
P206/TP206	1970	P20600604 thru P20600647
207/T207	1969 thru 1978	20700001 thru 20700482
210	1960	57001 thru 57575
210		618, 616
210	1961 thru 1969	21057576thru 21059199
210/T210	1978 thru 1981	21062274 thru 21064339
T210	1966 thru 1969	T210-0001 thru T210-0454
T210		21058140
P210	1978 thru 1981	P21000001 thru P21000691
A-150	1972 thru 1973	A-1501001 thru A-1501039
A-A150	1972 thru 1973	A-A1500001 thru A-A1500009

<u>Model Series</u>	<u>Year</u>	<u>Serial Numbers</u>
A182	1966 thru 1976	A182-0001 thru A182-0148
A-A188B	1972 thru 1976	A-A1880001 thru A-A1880034
F150	1966 thru 1969	F150-0001 thru F150-0529
F150	1970 thru 1977	F15000530 thru F15001428
FA150	1970 thru 1977	FA1500001 thru FA1500336
FRA150	1972 thru 1977	FRA1500121 thru FRA1500336
F152	1978 thru 1986	F15201429 thru F15201980
FA152	1978 thru 1986	FA1520337 thru FA1520425
FP172	1963	FP172-0001 thru FP172-0003
F172	1963 thru 1969	F172-0001 thru F172-0654
F172	1970 thru 1985	F17200655 thru F17202238
FR172	1968 thru 1981	FR17200001 thru FR17200675
F177RG	1971 thru 1977	F177RG0001 thru F177RG0177
F182	1976 thru 1980	F18200001 thru F18200169
FR182	1978	FR18200001 thru FR18200020

PURPOSE

To inspect the Stewart Warner manufactured fuel quantity indicating system for verification that each fuel tank quantity gauge indicates empty when the fuel tank contains only unusable fuel and indicates full when the fuel tank is full. Non-compliance with this service bulletin may result in an incorrect fuel quantity indication. Failure to resolve incorrect fuel quantity indications as well as improper preflight inspections and in-flight planning by the pilot could allow depletion of the airplane fuel supply and subsequent loss of engine power.

COMPLIANCE

Mandatory:

- A. Initial Inspection; shall be accomplished within the next 100 hours of operation or 12 months, whichever occurs first.
- B. After the Initial Inspection has been accomplished, this inspection shall be reaccomplished every 12 months thereafter.

APPROVAL

FAA approval has been obtained on technical data in this publication that affects airplane type design.

For Reims Aviation airplanes: DGAC approval has been obtained on technical data in this publication that affects airplane type design.

MAN-HOURS

Not determined

MATERIAL

Replacement fuel quantity indicating system components are available from Cessna Parts Distribution through an appropriate Cessna Service Station. Refer to applicable Service Bulletins and Illustrated Parts Catalogs for part numbers.

ACCOMPLISHMENT INSTRUCTIONS

NOTE: When applicable, refer to appropriate sections of the airplane Service Manual and Owners Manual as required to accomplish this procedure.

WARNING: REMOVE ALL IGNITION SOURCES FROM THE AIRPLANE AND VAPOR HAZARD AREA. SOME TYPICAL EXAMPLES OF IGNITION SOURCES ARE STATIC ELECTRICITY, ELECTRICAL POWERED EQUIPMENT (TOOLS OR ELECTRONIC TEST EQUIPMENT - BOTH INSTALLED ON THE AIRPLANE AND GROUND SUPPORT EQUIPMENT), SMOKING AND SPARKS FROM METAL TOOLS.

WARNING: OBSERVE ALL STANDARD FUEL SYSTEM FIRE AND SAFETY PRACTICES.

1. Disconnect all electrical power from the airplane. Attach maintenance warning tags to the battery connector and external power receptacle stating: **DO NOT CONNECT ELECTRICAL POWER — MAINTENANCE IN PROGRESS.**
2. Electrically ground the airplane.
3. Level the airplane and drain all fuel from wing fuel tanks.

NOTE: Refer to the applicable service manual for adjustment/replacement instructions.

4. Gain access to each fuel transmitter float arm and actuate the arm through the transmitter's full range of travel.
 - A. Ensure the transmitter float arm moves freely and consistently through this range of travel. Replace any transmitter that does not move freely or consistently.

WARNING: USE EXTREME CAUTION WHILE WORKING WITH ELECTRICAL COMPONENTS OF THE FUEL SYSTEM. THE POSSIBILITY OF ELECTRICAL SPARKS AROUND AN "EMPTY" FUEL CELL CREATES A HAZARDOUS SITUATION.

- B. While the transmitter float arm is being actuated, apply airplane battery electrical power as required to ensure that the fuel quantity indicator follows the movement of the transmitter float arm. If this does not occur, troubleshoot, repair and/or replace components as required until the results are achieved as stated.
5. With the fuel selector valve in the "OFF" position, add unusable fuel to each fuel tank.
6. Apply electrical power as required to verify the fuel quantity indicator indicates "EMPTY".
 - A. If "EMPTY" is not indicated, adjust, troubleshoot, repair and/or replace fuel indicating components as required until the "EMPTY" indication is achieved.

NOTE: Refer to the applicable service manual for adjustment/replacement instructions.

7. Fill tanks to capacity, apply electrical power as required and verify fuel quantity indicator indicates "FULL".

A. If "FULL" is not indicated, adjust, troubleshoot, repair and/or replace fuel indicating components as required until the "FULL" indication is achieved.

NOTE: Refer to the applicable service manual for adjustment/replacement instructions.

8. Install any items and/or equipment removed to accomplish this procedure, remove maintenance warning tags and connect the airplane battery.

9. Make an entry in the airplane logbook stating compliance with this Service Bulletin and when this inspection is next due.

Service/Maintenance Manual Revisions

The Cessna Manufacturer's Maintenance Manual and/or Instructions for continued airworthiness compliance per FAR 43.13 are amended by the contents of this Service Bulletin.

Continued Airworthiness

This information shall be considered an amendment to the Cessna Manufacturer's Maintenance Manual and Instructions for continued airworthiness, and must be accomplished for ongoing airworthiness compliance as required per FAR43.13.

CREDIT

Not applicable

OWNER NOTIFICATION

On November 1, 1999, the following Owner Advisory message will be sent to applicable owners of record in SEB99-18A.

Dear Cessna Owner:

If your airplane is equipped with a Stewart Warner manufactured fuel quantity indicating system, an inspection of the fuel quantity indicating system is required. The inspection will verify that each fuel tank quantity gauge indicates "EMPTY" when the fuel tank contains only unusable fuel and indicates "FULL" when the fuel tank is full. Non-compliance with Service Bulletin SEB99-18 may result in an incorrect fuel quantity indication. Failure to resolve incorrect fuel quantity indications as well as improper preflight inspections and in-flight planning by the pilot could result in depletion of the airplane fuel supply and subsequent loss of engine power.

Compliance is mandatory:

- A. Initial Inspection; shall be accomplished within the next 100 hours of operation or 12 months, whichever occurs first.
- B. After the Initial Inspection has been accomplished; this inspection shall be reaccomplished every 12 months thereafter.

The information contained in Cessna Service Bulletins shall be considered an amendment to the Cessna Manufacturer's Maintenance Manual and Instructions for continued airworthiness, and must be accomplished for ongoing airworthiness compliance as required per FAR43.13.

Please contact a Cessna Single Engine Service Station for detailed information and make arrangements to have Service Bulletin SEB99-18 accomplished on your airplane.

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Revision Transmittal

April 30, 2001

TO: Cessna Distributors, Single Engine Service Stations and CPC's

SUBJECT: Single Engine Service Bulletin SEB99-18 Revision 1, Fuel Quantity Indicating System Inspection

REASON FOR REVISION

To delete the Stewart-Warner only manufactured condition statement from the Effectivity section.

This Service Bulletin is applicable for all fuel quantity indicating systems for the affected airplane serial numbers.

To add additional airplane serial numbers to the Effectivity section.

To revise the Effectivity section by providing a more detailed listing of affected airplane models and serial numbers.

Miscellaneous changes as required.

REQUIRED ACTION

Please replace any copy of SEB99-18 with the attached copy of SEB99-18 Revision 1 which is printed in its entirety.

NOTE: Compliance with the repetitive inspection of this revision is required if in compliance with the original issue of this service bulletin.

LOG OF EFFECTIVE PAGES

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172B	1961	17247747 thru 17248734
172B		630
172C	1962	17248735 thru 17249544
172D	1963	17249545 thru 17250572
172E	1964	17250573 thru 17251822
172E		639
172F	1965	17251823 thru 17253392
172G	1966	17253393 thru 17254892
172H	1967	17254893 thru 17256492
172H	1967	17256494 thru 17256512
172H		638
172I	1968	17256513 thru 17257161
172K	1969	17257162 thru 17258486
172K	1970	17258487 thru 17259223
172L	1971	17259224 thru 17259903
172L	1972	17259904 thru 17260758
172M	1973	17260759 thru 17261444
172M	1973	17261446 thru 17261577
172M	1973	17261579 thru 17261898
172M		17256493
172M	1974	17261899 thru 17263458
172M	1975	17263459 thru 17265684
172M	1976	17265685 thru 17267584
172N	1977	17267585 thru 17269309
172N		17261445
172N	1978	17269310 thru 17270049
172N	1978	17270051 thru 17271034
172N		17261578
172N	1979	17271035 thru 17272884
172N	1980	17272885 thru 17274009
172N		17270050
172P	1981	17274010 thru 17275034
172P	1982	17275035 thru 17275759
172P	1983	17275760 thru 17276079
172P	1984	17276080 thru 17276259
172P	1985	17276260 thru 17276516
172P	1986	17276517 thru 17276654
172Q	1983	17275869
172Q	1983	17275927 thru 17275934
172Q	1983	17275952, 17275959, 17275960
172Q	1983	17275962, 17275964, 17275965