

Instructions for Continued Airworthiness

Applicable to:

**Cessna Models 182E, F, G, H, J, K, L, M, N, P, Q, R
Modified by STC SA3825SW**

This manual applies only to Cessna model 182 aircraft modified in accordance with STC SA3825SW which provides for the installation of a Continental IO-470-F engine, or an optional IO-550 engine installed in the Cessna models listed above.

The information contained in this manual supplements or supersedes the basic aircraft service manual only in those areas outlined herein. For limitations, procedures and information not contained in this manual, consult the basic aircraft, engine or propeller service manuals.

REVISIONS LOG

Revision	DATE	DESCRIPTION	PAGE(S)
Original	August 5, 2005	Original Issue	All
A	February 26, 2010	Added IO-550-D and McCauley Propellers	4
B	March 24, 2010	Renumbered pages, revised some minor language and deleted specific manuals (by component manufacturers)	All
C	April 23, 2010	Reformatted document. Added additional information on the engine, propeller, instruments, fuel system, inspections and maintenance.	All
D	May 10, 2010	Clarified Revisions and Amendments. Added Aircraft Design Changes and additional information to Airplane Systems Descriptions. Added Trouble-shooting to Time Limits and Maintenance. Revised Placards section. Added Servicing and Airworthiness Limitations sections.	2, 3, 4, 7, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21
E	June 8, 2010	Revised to include all of 23.1529 and Appendix G requirements, agree with AFMS, installation drawing, and abrasion boots.	

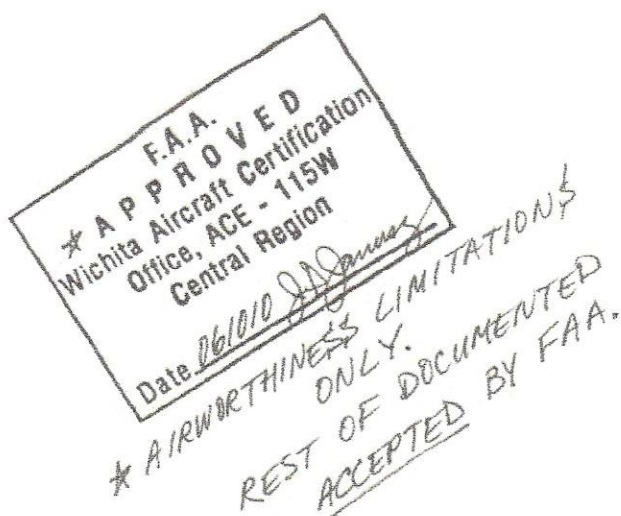


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1. INTRODUCTION

The airplane systems as modified by STC SA3825SW and installed in accordance with Drawing 1000-100-1, Revision (E), dated August 3, 1987 or later FAA approved revision calls for the installation of a Teledyne Continental Motors (TCM) IO-470-F or IO-550-D fuel injected engine, engine driven fuel pump fuel feed system with electric boost pump and accumulator tank, and McCauley or Hartzell propeller.

2. REVISIONS AND AMENDMENTS

All Instructions for Continued Airworthiness changes will be submitted to the FAA for review and acceptance by the Aircraft Certification Office and the Airplane Evaluation Group prior to issuance to the field. Once an ICA revision is accepted by FAA it shall be distributed to all registered owners by either U.S. mail or via internet email at the election of the STC holder. The STC holder shall retain a list of all registered owners. This list shall be made available to FAA for any Continued Operational Safety issues (Airworthiness Directive, etc.) that arise concerning this STC. For questions or assistance regarding these Instructions for Continued Airworthiness (ICA), contact Peterson's Performance Plus, Inc., 1465 SE 30th, El Dorado, KS 67042

3. AIRPLANE SYSTEMS AND DESCRIPTION

[Refer to drawing 1000-100-1]

ABRASION BOOTS

Cessna part number 1232040-3 abrasion boot is not approved for the Cessna 182 with the TCM IO-550-D engine installation. The Cessna 182 with the TCM IO-550-D installation can have either a horizontal stabilizer with no abrasion boots installed or the Cessna part number 1232040-5 abrasion boots installed.

ENGINE, MOUNT and BAFFLES

The airplane is powered by a horizontally-opposed, six cylinder, fuel injected engine with a wet sump oil system. The engine is either a TCM IO-470-F and is takeoff rated at 260 HP at 2625 RPM or 259 HP at 2600 RPM, or an IO-550-D takeoff rated at 292 HP at 2600 RPM or 282 HP at 2450 RPM. Major engine accessories include a propeller governor on the front of the engine and dual magnetos, starter, and belt driven alternator on the rear of the engine. Provisions are also made for a vacuum pump and a full flow oil filter. The only change made to the engine mount is the replacement of the rear cross tube. This provides greater clearance for the throttle body. No changes have been made to the engine baffles.

ENGINE INSTRUMENTS

The tachometer is remarked with the appropriate range markings. The manifold pressure gauge is replaced with a split manifold pressure/fuel flow gauge displaying manifold pressure on the left side and fuel flow on the right side. The manifold pressure side is direct reading and indicates induction air pressure in inches of mercury. The fuel flow side of the fuel pressure gauge is calibrated to indicate the approximate gallons per hour of fuel being metered to the engine. A pressure line is attached to the fuel manifold and is connected to the fuel flow indicator on the instrument panel. Refer to Table I, II, III. or IV for the applicable instrument markings for each applicable airplane model, engine and propeller configuration.

TABLE I
182 E thru P with IO-470-F

INSTRUMENT	RED LINE	GREEN ARC	YELLOW ARC	RED LINE
	MINIMUM LIMIT	NORMAL OPERATING		MAXIMUM LIMIT
Tachometer				
Idle (Static RPM)				
Propeller: 2A34C50/90A-8 or 2A34C66/90AT-8 or D2A34C58/90AT-8		2200–2450	2450–2600	2600
Propeller: BHC-G2YF-1BF/F8468A-2R		2200–2450	2450–2600 ★	2600
Manifold Pressure (In. Hg.)		15 – 26.3	26.3 – 29.5	29.5
Oil Temperature (°F)		100 – 240		240
Cylinder Head Temperature (°F)		200 – 460		460
Oil Pressure (psi)	10	30 – 60		100
Fuel Flow (Pressure)	2.2 psi	9.2 – 14.7 gph		17.5 psi / 22.3 gph

NOTE ★: Do not exceed 23" manifold pressure below 2300 RPM.

TABLE II
182 Q and R with IO-470-F

INSTRUMENT	RED LINE	GREEN ARC	YELLOW ARC	RED LINE
	MINIMUM LIMIT	NORMAL OPERATING		MAXIMUM LIMIT
Tachometer				
Idle (Static RPM)				
Propeller: 2A34C50/90A-8, or 2A34C66/90AT-8, or D2A34C58/90AT-8		2200–2400	2400–2625	2625
Propeller: BHC-G2YF-1BF/F8468A-2R		2200–2400	2400–2625 ★	2625
Manifold Pressure (In. Hg.)		15 – 27.3	27.3 – 29.5	29.5
Oil Temperature (°F)		100 – 240		240
Cylinder Head Temperature (°F)		200 – 460		460
Oil Pressure (psi)	10	30 – 60		100
Fuel Flow (Pressure)	2.2 psi	9.2 – 14.7 gph		17.5 psi / 22.3 gph

NOTE ★: Do not exceed 23" manifold pressure below 2300 RPM.

TABLE III
182 E thru R with IO-550-D

INSTRUMENT	RED LINE	GREEN ARC	YELLOW ARC	RED LINE
	MINIMUM LIMIT	NORMAL OPERATING		MAXIMUM LIMIT
Tachometer				
Idle (Static RPM)	825 +50 / -0			
Propeller: D3A34C401/90DFA-8 (82")		1900-2600		2600
Manifold Pressure (In. Hg.)		15 – 24.5	24.5 – 29.5	29.5
Oil Temperature (°F)		100 – 240		240
Cylinder Head Temperature (°F)		200 – 460		460
Oil Pressure (psi)	10	30 – 60		100
Fuel Flow (Pressure)	3.5 psi	7.0 –17.0 gph		19.5 psi / 25.2 gph

TABLE IV
182 P, Q and R with IO-550-D

INSTRUMENT	RED LINE	GREEN ARC	YELLOW ARC	RED LINE
	MINIMUM LIMIT	NORMAL OPERATING		MAXIMUM LIMIT
Tachometer				
Idle (Static RPM)	825 +50 / -0			
Propeller: D3A34C401/90DFA-4 (86")		1900-2450	1900-2100 ★	2450
Manifold Pressure (In. Hg.)		15 – 24.5	24.5 – 29.5	29.5
Oil Temperature (°F)		100 – 240		240
Cylinder Head Temperature (°F)		200 – 460		460
Oil Pressure (psi)	10	30 – 60		100
Fuel Flow (Pressure)	3.5 psi	7.0 –17.0 gph		19.5 psi / 25.2 gph

NOTE ★: Continuous operation between 1900-2100 RPM at or above 26 in. Hg. manifold pressure is prohibited.

AIR INDUCTION SYSTEM

The engine air induction system receives ram air through an intake in the lower front portion of the engine cowling. The intake is covered by an air filter which removes dust and other foreign matter from the induction air.

The airflow passing through the air filter enters an adapter that contains a spring-loaded alternate air door. If the induction air filter should become blocked the alternate air door will automatically open and draw unfiltered air from inside the cowl. Air flow through this adapter is channeled to the fuel injection throttle body by means of a flexible hose that is attached at both ends with hose clamps.

FUEL INJECTION SYSTEM

The engine is equipped with a fuel injection system. The system is comprised of an engine driven fuel pump, fuel/air control unit, fuel manifold, fuel flow indicator and air bleed type injector nozzles.

Fuel is delivered by the engine driven fuel pump to the fuel/air control unit on the bottom of the engine. The fuel/air control unit correctly proportions the fuel flow to the induction air flow. After passing through the control unit, induction air is delivered to the cylinder through intake manifold tubes and metered fuel is delivered to a fuel manifold. The fuel manifold, through spring tension on a diaphragm and valve, evenly distributes the fuel to an air-bleed type injector nozzle in the intake valve chamber of each cylinder. A pressure line is also attached to the fuel manifold and is connected to the fuel flow indicator on the instrument panel.

PROPELLER

The airplane is equipped with either a two-blade, all metal, constant speed, governor regulated propeller for the IO-470-F engine, or a three-blade, all metal, constant speed, governor regulated propeller for the IO-550-D. In addition, the IO-550-D engine has two different length propellers approved; either the McCauley D3A34C401/90DFA-8 (82" diameter) for Cessna 182 Models E thru R, or the D3A34C401/90DFA-4 (86" diameter) for Cessna 182 Models P thru R.

FUEL SYSTEMS

Fuel flows by gravity from the wing tanks to a four position fuel selector valve labeled BOTH, RIGHT, LEFT and OFF. With the fuel selector in the LEFT TANK, RIGHT TANK, or BOTH positions fuel flows from the fuel selector valve to the accumulator tank, from the accumulator tank to the fuel strainer and through a bypass in the auxiliary fuel pump (when it is not in operation) to an engine driven fuel pump. The engine driven fuel pump delivers the fuel to the fuel control unit where it is metered and directed to a manifold which distributes it to each cylinder. Vapor and excess fuel from the engine driven fuel pump and fuel control unit are returned by way of a vapor return line to the accumulator tank to the right wing tank.

An accumulator tank is installed between the fuel selector and the fuel strainer. The accumulator tank is located aft of the firewall in the tunnel forward of the fuel selector. Excess fuel and vapor are returned to this accumulator tank from the engine fuel pump. A second vent line runs from the accumulator tank up the right hand forward door post and tees into the overhead vent line that connects the fuel tanks together.

An electric fuel pump, located on the lower left forward side of the firewall, is used for normal engine starting, minor vapor purging and continued engine operation in the event of an engine driven fuel pump failure. If the engine driven fuel pump fails, the electric boost pump will allow the engine to be operated at power settings of up to 85%.

The operation of the boost pump is controlled through a toggle switch located in the lower left section of the instrument panel. The up position is on and the down position is off. With the toggle switch in the on position the boost pump operates at one of two flow rates that are dependent on the throttle setting through the use of a micro switch that senses the throttle setting. With the throttle open to a high cruise setting the boost pump operates at a high enough output to supply a sufficient supply of fuel flow to allow power settings of up to 85% with an inoperative engine driven fuel pump. When the throttle is moved toward the closed position the fuel flow rate is automatically reduced, preventing an excessively rich mixture during those periods of reduced engine power.

As an alternate configuration for the IO-550-D installation, a manual three-position boost pump switch is used. With the three-position toggle switch the up position is high boost, the down position is low boost and the middle position is off. With the boost pump switch in the up position, the boost pump operates at a high enough output to supply a sufficient supply of fuel flow to allow power settings of up to 85% with an inoperative engine driven fuel pump. When the throttle is moved toward the closed position, the boost pump switch should be moved to the low position when the power is reduced to 16" of manifold pressure or below. This prevents an excessively rich mixture during those periods of reduced engine power.

ENGINE CONTROLS

The throttle and mixture controls are replaced by controls that utilize rod end bearings where they attach to the throttle and mixture control arms.

FUEL CAPS

Vented fuel caps must be installed in the left and right fuel filler locations. (Ref. Airworthiness Directive 79-10-14).

FIREWALL BOX

A firewall box is installed to provide additional clearance for the engine-driven fuel pump. The firewall box has a removable plug to allow access to the fuel pump from inside the cabin.

ENGINE AND PROPELLER COMBINATIONS

IO-470-F ENGINE

Engine Manufacturer: Teledyne Continental Motors

Engine Model: IO-470-F

Engine Type: Normally aspirated, direct drive, air cooled, horizontally opposed, fuel injection six-cylinder engine with 470 cubic inch displacement.

Horsepower Rating and Engine Speed Cessna 182E thru P Models:

Maximum Power: 259 HP at 2600 RPM

Maximum Continuous Power: 230 HP at 2600 RPM

Horsepower Rating and Engine Speed Cessna 182Q thru R Models:

Maximum Power: 260 HP at 2625 RPM

Maximum Continuous Power: 230 HP at 2400 RPM

PROPELLERS FOR IO-470-F:

Propeller Manufacturer: McCauley Propeller Systems

Propeller Model Numbers: 2A34C50/90A-8 or 2A34C66/90AT-8 with existing spinner

Number of Blades: 2

Pitch setting at reference station 30

Low: 10.5° High: 22.0°

Diameter: not over 82", not under 80"

Propeller Type: Constant speed and hydraulically actuated.

Propeller Model Number: D2A34C58/90AT-8 with existing spinner

Number of Blades: 2

Pitch setting at reference station 30

Low: 9.2° High: 22.0°

Diameter: not over 82", not under 80"

Propeller Type: Constant speed and hydraulically actuated.

Propeller Manufacturer: Hartzell Propeller

Propeller Model Number: Hartzell Model BHC-G2YF-1BF/F8468A-2R with Spinner Assembly D-4798P

Number of Blades: 2

Pitch setting at reference station 30

Low: 13.0° High: 31.0°

Diameter: not over 82", not under 80"

Propeller Type: Constant speed and hydraulically actuated

Propeller Governor:

The existing propeller governor may be reused or C290D 3B/T-11.

IO-550-D ENGINE

Engine Manufacturer: Teledyne Continental Motors

Engine Model: IO-550-D

Engine Type: Normally aspirated, direct drive, air cooled, horizontally opposed, fuel injection six-cylinder engine with 550 cubic inch displacement.

Horsepower Rating and Engine Speed with McCauley D3A34C401/90DFA-8 (82") propeller:

Maximum Power: 292 HP at 2600 RPM

Maximum Continuous Power: 292 HP at 2600 RPM

Horsepower Rating and Engine Speed with McCauley D3A34C401/90DFA-4 (86") propeller:

Maximum Power: 265 HP at 2450 RPM

Maximum Continuous Power: 265 HP at 2450 RPM

PROPELLERS FOR IO-550-D:

Propeller Manufacturer: McCauley Propeller Systems

Propeller Model Number for Cessna Model 182E thru G: D3A34C401/90DFA-8 (82") with Spinner Assembly D7510-1

Pitch setting for D3A34C401/90DFA-8 at reference station 30:

Low: 11.2° High: 28.5°

Diameter D3A34C401/90DFA-8: not over 82", not under 80"

Propeller Type: Constant speed and hydraulically actuated

Number of Blades: 3

Propeller Model Number for Cessna Model 182H thru R: D3A34C401/90DFA-8 (82") with Spinner Assembly D7515

Pitch setting for D3A34C401/90DFA-8 at reference station 30:

Low: 11.2° High: 28.5°

Diameter D3A34C401/90DFA-8: not over 82", not under 80"

Propeller Type: Constant speed and hydraulically actuated

Number of Blades: 3

Propeller Model Number for Cessna 182P thru R: D3A34C401/90DFA-4 (86") with Spinner Assembly D7515

Pitch setting for D3A34C401/90DFA-4 at reference station 30:

Low: 10.0° High: 28.0°

Diameter D3A34C401/90DFA-4: not over 86", not under 84"

Propeller Type: Constant speed and hydraulically actuated

Number of Blades: 3

PROPELLER GOVERNORS:

Propeller governor model for D3A34C401/90DFA-8: C290D3/T1 (2600 RPM red line)
Propeller governor model for D3A34C401/90DFA-4: C290D3/T34 (2450 RPM red line)

4. SPECIAL OPERATING INFORMATION:

See the Supplemental Airplane Flight Manual Supplement or Airplane Flight Manual Supplement for any special operating instructions and limitations.

5. SERVICE INFORMATION:

POWERPLANT

The engine should be maintained and serviced in accordance with the following TCM manuals or later revisions.

IO-470-F ENGINE

IO-470 Operator's Manual	X30024
IO-470 Overhaul Manual	X30588A
IO-470 Parts Catalog	X30589A
	TCM Service Bulletins

IO-550-D ENGINE

IO-550-D Maintenance and Operator's Manual	X30605
IO-550-D Overhaul Manual	X30607A
IO-550-D Parts Catalog	X30606A
	TCM Service Bulletins

The overhaul time limits for the engine and its accessories are set by the manufacturer and will be the current overhaul limit as published in the manufacturer's service bulletins and/or letters.

ELECTRIC FUEL PUMP ADJUSTMENTS AND PRESSURES

Whenever repairs or replacement of the fuel pump or engine controls are performed, the boost pump should be checked for proper operation and pressures. Boost pump output is controlled by two wires and a single resistor mounted on the lower left forward side of the firewall for the IO-470 engine. The IO-550 utilizes two resistors wired in series at the same location. One of the two wires carries full voltage to the boost pump for the high output position. The second wire utilizes the resistor(s) to lower the voltage to the boost pump for the low output position. The low output position is controlled either manually or by a micro-switch installed on the throttle arm to sense the throttle position. The throttle switch should be adjusted to activate the boost pump to the low speed at 16 inches of manifold pressure. The 16 inches of manifold pressure can be determined by ground running the engine, marking the throttle position at 16 inches of manifold pressure and adjusting the switch accordingly. Refer to Drawing 1000-100-1, Rev. N dated 1/27/10 or latest revision for a wiring schematic for the electric boost pump. The alternate manually controlled 3-position boost pump switch has no micro-switch to sense the throttle position therefore no adjustments or rigging are necessary.

FUEL

Approved Fuel Grades (and colors)
100LL Grade Aviation Fuel (blue)
100 Grade Aviation Fuel (green)

PROPELLER

The Hartzell propeller should be maintained and serviced in accordance with the Hartzell Manual 115N or later FAA Approved Revisions and the manufacturers overhaul manual or latest revisions.

The McCauley propellers should be maintained and serviced in accordance with the McCauley Service Manuals 720415 and 761001 or manufacturer's latest revisions.

The overhaul time limit for the propeller is set by the manufacturer and will be the current overhaul limit as published in the manufacturer's service bulletins and/or letters.

AIRFRAME AND ENGINE ACCESSORIES

All accessories should be maintained in accordance with applicable manufacturers' overhaul manuals and service bulletins.

ABRASION BOOTS

For the removal and installation of the horizontal stabilizer abrasion boots refer to the appropriate Cessna 182 Service Manual.

PETERSON'S PERFORMANCE PLUS, INC. MODIFICATIONS AND COMPONENTS

Parts manufactured by Peterson's Performance Plus, Inc. do not have a service limit for overhaul. Reference Section 10 for inspection procedures on Peterson's Performance Plus, Inc. components and systems.

6. TROUBLESHOOTING

For troubleshooting the IO-470-F engine installation refer to TCM Operator's Manual X30024, Overhaul Manual X30588A or manufacturer's latest revisions, and the Cessna 185F Service Manual D2067-1-13 Section 11A-13 or manufacturer's latest revisions.

For troubleshooting the IO-550-D engine installation refer to TCM Operation and Installation Manual X30605, Overhaul Manual X30607A or manufacturer's latest revisions, and the Cessna 185 Service Manual D2067-1-13 Section 11A-13 or manufacturer's latest revisions.

For troubleshooting the Hartzell propeller refer to Hartzell Owner's Manual 115N or latest revision.

For troubleshooting the McCauley propellers refer to McCauley Propeller Operator's Manual MPC-11 or McCauley Service Manuals 720415 and 761001 or manufacturer's latest revisions.

7. PARTS, REMOVAL AND REPLACEMENT

Refer to drawing 1000-100-1, the applicable airplane, engine and/or propeller service manual identified in Section 5 above for specific part removal and replacement information.

Engine and propeller removal and replacement

Because the design for the engine and propeller installation under STC SA3825SW was based on the Cessna 185F Skywagon, the Cessna 185F Service Manual, D2067-1-13, with the revisions listed below, the appropriate TCM installation manual and Drawing 1000-100-1 should be used for the engine and propeller removal and reinstallation.

REVISIONS TO CESSNA 185F SERVICE MANUAL, D2067-1-13:

11A-15 REMOVAL

Paragraph 7, Item 4. Eliminate.

Primer has been removed.

Paragraph 7, Item 5. Change paragraph to:

Disconnect fuel supply hose at the boost pump.

11A-20 INSTALLATION

Paragraph a. Change last sentence to:

For torque values refer to the appropriate Cessna 182 Service Manual.

Paragraph b. Change last sentence to:

For torque values refer to the appropriate Cessna 182 Service Manual.

Paragraph g, Item 3. Eliminate.

Primer has been removed.

Paragraph g, Item 4. Change paragraph to:

Connect inlet fuel hose to boost pump.

Paragraph k. Add:

Torque Limits

Engine

Engine installation bolt torque is unchanged from the torque values called out in the airframe manufacturer's service manual.

Propeller

Propeller torque values for the Hartzell propeller are found in the Hartzell Owner's Manual 115N or latest revision.

Propeller torque values for McCauley propellers can be found in McCauley Service Bulletin 227B dated August 28, 2001 or latest revision.

8. PLACARDS

Refer to the Airplane Flight Manual Supplement and Drawing 1000-100-1.

IO-470-F Installation Placards

Applicable boost pump placard should be located next to boost pump switch.

100 Octane Minimum placard should be located next to fuel filler caps.

IO-470-F with Hartzell Propeller installation, following placard should be located next to tachometer:

DO NOT EXCEED 23" MANIFOLD PRESSURE BELOW 2300 RPM

IO-550-D Installation Placards

Applicable boost pump placard should be located next to boost pump switch.

100 Octane Minimum placard should be located next to fuel filler caps.

IO-550-D with McCauley D3A34C401/90DFA-4 propeller installation, following placard should be located next to tachometer:

CONTINUOUS OPERATION BETWEEN 1900-2100 RPM AT
OR ABOVE 26" MANIFOLD PRESSURE IS PROHIBITED

9. DATA

All information to support the continued airworthiness of this modification is contained in:

- The Installation Instructions on drawing 1000-100-1, and this ICA.
- The applicable service or parts manual as defined in the Service Information section herein.

10. ANNUAL AND/OR 100-HOUR INSPECTION

Refer to drawing 1000-100-1.

ENGINE

Reference the applicable TCM Operation and Installation Manual X30024 for inspection and post inspection ground run procedures for the IO-470-F engine or TCM Maintenance and Operator's Manual X30605 for the IO-550-D engine.

Both the throttle and mixture controls are replaced under STC SA3825SW. Check threaded rod end bearings for security where they attach to the mixture and throttle arms. For the routing of these controls refer to Drawing 1000-100-1.

Inspect the condition and security of the engine baffles and baffle seals.

PROPELLER

Reference the applicable Hartzell Manual 115N or latest revision, or McCauley Manuals 720415, 761001 or latest revision for inspection procedures. The propeller control is unchanged. Refer to the appropriate Cessna 182 Service Manual for adjustment and inspection procedures.

AIRFRAME

Reference the applicable Cessna 182 Service Manual for inspection procedures with the additions of the following items which can be found on Drawing 1000-100-1.

INDUCTION SYSTEM

1. Inspect the condition and security of the induction air hose connecting the inlet air hose in the lower cowl to the throttle body.
2. Inspect the condition, security and operation of the alternate air door located at the end of the inlet air duct adapter in the lower cowl.

FUEL SYSTEM

1. Inspect the engine vapor return system for leaks, chafing and security.
2. Inspect the accumulator tank and vent system for leaks and security.
3. Inspect the electric boost pump installation and plumbing for leaks and proper operation of fuel pump.
4. Inspect the boost pump wiring, switches and resistor(s) for proper connections and security.

INSTRUMENTS

1. Inspect combination manifold pressure/fuel flow gauge and lines for leaks and proper operation.

ENGINE FUEL PRESSURE, IDLE SPEED AND MAXIMUM RPM

1. Engine fuel pressure and mixture should be checked for conformity to TCM Service Information Directive SID97-3C or latest revision and adjusted accordingly.
2. For IO-470-F idle speeds refer to the appropriate Cessna 182 airframe service manual. Idle RPM for the IO-550-D engine must be 825 RPM, +50/-0.
3. As the propeller control is unchanged, adjust the maximum RPM in accordance with the appropriate Cessna 182 Service Manual.

11. AIRWORTHINESS LIMITATIONS

The Airworthiness Limitations Section is FAA approved and specifies maintenance required under 14 CFR part 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved. There are no changes to the Airworthiness Limitations Section as a result of this modification.