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SERVICE INSTRUCTION

DATE: June 11, 2002

Service Instruction No. 1489A (Supersedes Service Instruction No. 1489) Engineering Aspects are FAA Approved

SUBJECT: Fuel Manifold Spring Change

MODELS AFFECTED: All IO-360-L2A model engines with serial numbers up to and including L-

27982-51A installed in Cessna 172R aircraft; all IO-540-AC1A5 model engines shipped from the factory before June 10, 2002 installed in Cessna 206 aircraft; all TIO-540-AJ1A model engines shipped from the factory before

June 10, 2002 installed in Cessna T206 aircraft.

TIME OF COMPLIANCE: At owner's discretion.

To improve idle characteristics, especially in hot weather, the flow divider spring is being replaced with a new 4psi spring, Precision P/N 2577011 in IO-360-L2A, IO-540-AC1A5 and TIO-540-AJ1A model engines.

The replacement of the spring is accomplished as follows:

- 1. Remove the top cowling.
- 2. Access the flow divider cover. If the divider is not installed "cap down" it will have to be removed from the engine.
- 3. Remove the safety wire and the four screws securing the top of the flow divider.
- 4. Carefully remove the cover of the flow divider, using care not to damage the diaphragm. The diaphragm should not be removed from the body, and care should be taken not to allow the diaphragm to rotate in the body.
- 5. Remove the spring above the diaphragm and discard it.
- 6. Install the new Precision P/N 2577011 spring on top of the diaphragm insuring that it is seated in the metal cup on top of the diaphragm.
- 7. Reinstall the cover and torque the four screws to 20-30 in.-lbs. Retighten after 20 minutes. Insure the cover is reinstalled in the same position it was removed.
- 8. To show that the new 4 psi spring has been installed, vibropeen "4psi" next to the Precision part number on the cover of the flow divider.

- 9. Lockwire the four cover screws with a single strand of .025" lockwire. Wire must pull screws clockwise and be twisted only at the ends.
- 10. Start the engine and warm it up to operating temperatures.
- 11. Check the idle speed and mixture and reset to the Cessna specified values if necessary.
- 12. Enter compliance in the airframe and/or maintenance records as required.

NOTE: Revision "A" adds engine models IO-540-AC1A5 and TIO-540-AJ1A.