

# SERVICE INSTRUCTION

March 16, 2007

Supplement No. 1

To

Service Instruction No. 1308E

Supplement No. 1 to Service Instruction No. 1308E is being issued to revise troubleshooting information for the following engine models and aircraft:

TIO-540-AE and –AH series engines installed on Piper aircraft.

TIO-540-AF series engines installed on Mooney aircraft.

TIO-540-AG series engines installed on Commander aircraft.

If the magneto pressure is more than the pressure in Column D of Table 2 found on page 6 of Service Instruction No. 1308E, the recommended remedy is to clean the bleed hole to .015 inch (.38mm drill). However, on the above listed engine models and aircraft, the airframe manufacturer replaces the Unison pressure vent plug (Unison P/N M3179) with a tachometer sensor assembly (Digital Quartz P/N 420154-1-2). The bleed hole found on P/N 420154-1-2 **cannot** be cleaned with a .015 inch (.38mm drill). Using a .015 inch (.38mm drill) will damage the tachometer sensor. Therefore clean the bleed hole by using compressed air (30 psi maximum).

The troubleshooting guide found on page 8 of Service Instruction No. 1308E should read as follows:

## Troubleshooting

The following is a list of the common troubles which may be encountered with the pressurized magneto. Along with the troubles are the probable causes and remedies.

<u>TROUBLE</u>	<u>PROBABLE CAUSE</u>	<u>REMEDY</u>
1. Magneto pressure more than   pressure in Column D	Magneto bleed hole clogged	**Clean bleed hole to .015 inch (.38mm drill). <b>See Note 2.</b>
	Relief valve inoperative	Replace relief valve.
2. Magneto pressure less than   pressure in Column D	Orifice in pressure relief valve adapter clogged	Clean orifice with No. 55 drill.
	Hoses and fittings loose	Tighten same.
	Leaking pressure at magneto cover or ignition leads	Tighten same, if unable to tighten, replace magneto. Replace grommets.
	Relief valve inoperative	Replace relief valve.
	Leaking pressure at magneto shaft bearing	Replace magneto.

NOTE 1

After each change that is performed, check the operation of the pressurized magneto. Do not try more than one change at a time.

NOTE 2

For TIO-540-AE and -AH series engines installed on Piper aircraft, TIO-540-AF series engines installed on Mooney aircraft, and TIO-540-AG series engines installed on Commander aircraft, clean the bleed hole by using compressed air (30 psi maximum).