General Aviation Modifications, Inc. Installation Procedure, No. IP-98-002

(Rev. D)

Date: August 11, 1998

GAMI Kit N	os. GLT20/GLVT20	)
	S/N	_

## turboGAMIjector™ Installation Procedure for turbocharged Lycoming Engines\*

STC No. SE09445SC

- 1. Remove existing Lycoming fuel injector nozzle assemblies by disconnecting fuel and upper deck air lines at the nozzle assemblies. Remove the shroud nozzle tube assemblies and related "O" rings, spring and nuts. Remove the nozzle assemblies from the cylinders using a ½ inch deep socket.
- 2. Refer to the number code (1-6) stamped on each nozzle for placement in corresponding cylinder number. (Note: Nozzles are stamped with both number and letter codes). Cylinders are numbered from front to rear with odd numbered cylinders on the right side. Install appropriate  $turboGAMIjector^{TM}$  in cylinder and tighten to not more than the torque limit of 60 in. lbs. such that the letter code stamped hex flat is installed within one flat of the bottom of the engine.
- 3. Check to see that the "O" rings are properly installed in the respective grooves of the nozzles. Carefully slide the GAMI supplied air collar assembly over the nozzle until it seats.
- 4. Place GAMI supplied rubber washer (P/N 640612) against air collar assembly followed by plain (metal) washer (P/N 628556). Reconnect and tighten the fuel line to the *turboGAMIjector*™ nozzle. Reattach air line to air collar assembly and tighten hose clamp.
- \* For normally aspirated engines identified on the STC model list that have been equipped with turbochargers installed under an airframe type certificates or supplemental type certificates, verify that the installed nozzles to be replaced by the GAMIjectors in this kit are one of the nozzles listed below (or their direct replacements).

Lycoming P/Ns:

LW18853

LW18854

LW10475

LW18267

LW18855 (High Flow)

Bendix/Precision Nozzle Installation Assy. P/Ns:

2524866

2524917

2524923

2524926 (High Flow)

If some nozzle other than those listed above is currently installed in the engine, GAMIjectors™

- 5. Check installation for crimped lines, loose fittings, etc.
- 6. Leak check the *turboGAMIjector*™ nozzles and associated fuel lines by use of the electric fuel pump, prior to starting the engine. Perform a ground engine run-up and recheck for fuel leaks before flight.
- 7. Clean a flat 1.5" X 2" area on each cylinder rocker arm cover with acetone or isopropyl alcohol. Apply the correct *turboGAMIjector*™ label to the cleaned area with high temperature RTV silicone, such as Permatex "Ultra Copper" P/N101B or equivalent. Allow to cure, thoroughly, prior to operation of the engine. Remove the fuel line label from its backing. Locate the middle of the tag against the fuel line approximately 5" from the injector nozzle and wrap the correct label (according to its cylinder number identification) around each fuel line going to the appropriate injector, doubling it over onto itself as a tag.
- 8. Check to insure that the  $turboGAMI_{\underline{jectors}}^{\bowtie}$  labels have been installed on the proper cylinder and fuel line and that the  $turboGAMI_{\underline{jector}}^{\bowtie}$  part number in each cylinder corresponds with the part number called out on the labels affixed to its respective cylinder head rocker arm cover and fuel line.
- 9. This STC does not require alteration of the fuel system metered or unmetered fuel pressures or other recalibration of the fuel system. In connection with this STC, no further alteration of the fuel system, other than in compliance with appropriate Lycoming Service Bulletins, airworthiness directives, or compatible STC's is authorized.
- 10. Complete and submit a Form 337 for the aircraft, referencing installation of the General Aviation Modifications, Inc., Kit Number and this STC No.SE09445SC. There is no change in weight and balance.

Instructions for Continued Airworthiness and Periodic Maintenance: GAMI recommends removal and cleaning of the nozzles at normal intervals of 100-200 hours. Nozzles may be soaked in an appropriate solvent such as Gunk carburetor cleaner or Hoppe's #9 Gun Solvent, followed by blowing off with an air nozzle. A small hole should be visually clear through the nozzle. Caution: Do not attempt to insert any drill, wire or other article into the nozzle in an attempt to clean the orifices. In the event that a nozzle becomes clogged and requires cleaning and recalibration, it may be returned to GAMI for immediate service.