

## E-Go! Fuel Injection Cleaning System 18-8600 Instruction Sheet



Step 1: Connect engine to hose or water source and run engine until it has reached operating temperature. NOTE: For optimal performance, do not attempt to clean a cold engine. Locate the Schrader valve and connect the fuel injection cleaner with the appropriate adaptor. Valve can be found either on the fuel rail or the VST Tank.

- Step 2: Monitor the operating fuel pressure and record.
- Step 3: Disconnect the fuel pump electrical connection from the system. <u>NOTE: Some systems will require restricting fuel flow (pinching the fuel hose shut) to prevent solvent from backflowing to the fuel tank or overflowing via the vent tube.</u>
- **Step 4:** Fill the Sierra Fuel Injection Cleaning System canister with one (1) can of E-Go! Blast Fuel System Cleaner (18-8606). Connect a source of shop air pressure to the cleaning system canister. Adjust air pressure until you reach the engine's operating fuel pressure (recorded in Step 2).
- **Step 5:** Start the engine. Once the engine is running on the cleaning solvent increase engine RPMs several times and then allow the engine to drop back to idle. Continue to do this until the canister is empty (engine dies). Allow the engine to sit for 10-15 minutes to let the cleaner continue to work.
- **Step 6:** Reconnect the fuel pump electrical connector to the system (release the fuel hose if it was restricted in step 3 above, be sure to check for any hose damage or leaks) and start the engine. Accelerate the RPMs several times and then let engine idle for a moment and shut off.
- **Step 7:** Add Sierra E-Go! Boost Fuel Booster (18-8607) into the fuel tank. One can treats up to 16 gallons of fuel to help prevent gum and varnish build-up from forming in the future. It is recommended that this step be repeated every 50 hours engine run time.

**Optional:** Injection cleaner can be used in conjunction with STATS® (Sierra Touch and Test System) to check fuel injection pressure drop before and after results.

## The Reason For Cleaning Fuel Injectors

When an engine is running, the fuel injectors are kept cool and clean by fuel flowing through them. When the engine is turned off (especially after running for a short time) the temperature will rise and heat soaks the fuel injectors. During this process, the fuel is broken down into gum and varnish on the tips and inside the fuel injectors. In an automobile engine, the vehicle is usually driven for a substantial amount of time before being shut off while boat engine operation is quite different. Boats are stored for long periods of time and are usually run for short periods of time followed by the engine being shut off without airflow to assist in cooling. In a boat engine's life this happens repeatedly, more so than an automobile engine where fuel injection services have become an essential periodic maintenance. The worst time for marine fuel injectors is during the winter months when the engine is not started at all. The layers of gum and varnish harden deeply inside and outside the tip of the fuel injector.

Fuel additives and gasoline alone cannot clean away layers of fuel deposits when the engine is running. The only proven method is by removing the "stale" fuel (the cause of the deposits) and using a fuel system cleaner periodically.

By using the Sierra Fuel Injection Cleaning System regularly, will help maintain the injector's cleanliness and performance throughout the life of the engine.

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