RED LINE SERVICE CHEMICALS

TOTAL INTAKE SYSTEM CLEANER

RED LINE TOTAL INTAKE SYSTEM CLEANER, when used as directed, provides complete intake cleaning by safely and effectively removing carbon build-up, cleaning the vehicle's upper engine and intake systems from the plenium to the catalytic converter. It helps eliminate rough engine idle, knocking, pinging and engine run-on, while reducing emissions and restoring power and performance. RECOMMENDED FOR PFI, GDI, HYBRID AND DIESEL ENGINES. CAN ALSO BE USED IN VEHICLES RUNNING E-85 FUEL.

PRODUCT / APPLICATION HIGHLIGHTS:

- · Pre-charged to 40 psi
- Enters cold to prevent hydrolock in (warm) engine
- Standard s-hook applicator with 3-foot hose designed for optimal spray into intake system at/near throttle body
- Available s-hook applicator with 8-foot hose designed for in-vehicle spray and throttle control from driver's seat
- No additional fuel service tools required
- Can be peformed in under 10 minutes

GAS ENGINE RECOMMENDED SERVICE PROCEDURE

STANDARD S-HOOK APPLICATOR WITH 3-FOOT HOSE OR AVAILABLE S-HOOK APPLICATOR WITH 8-FOOT HOSE

Create access to the intake system for the s-hook applicator hose via the engine air intake system in front of the engine throttle body. For best results, this should be at or as close as possible to the engine thottle body (see images below).





BEST (INTAKE HOSE AT ENGINE THROTTLE BODY)

ACCEPTABLE (WITHIN INTAKE HOSE, CLEAR OF ANY MAP OR MAF SENSOR)

NOTE

If Total Intake Intake Cleaner travels through too many harsh bends of the vehicles air intake hoses prior to reaching the engine throttle body, product may form into droplets/liquify before entering the throttle body and become less effective. Make sure that cleaner spray is clear of map/maf sensors, or potential stalling and sensor damage could occur.

Start vehicle and make sure engine is at operating temperature before performing service. Begin cleaning process by depressing the **2** applicator spray trigger (slowly at first, allowing the engine to adjust for the air-to-fuel mixture).

NOTE

For best results, modulate the spray with applicator spray trigger to allow cleaner greater opportunity to soak into carbon build up for proper burn off within the intake system (depress spray trigger enough so that steady amount of product can be seen traveling through hose applicator-spray for 3-5 seconds, then 3 seconds rest; repeat throughout). In the event of a vehicle stall anytime during application, simply release spray button and repeat step 2. If using 8' s-hook hose and controling throttle from drivers seat/gas pedal, you will likely be able to extend the spray time by a minute or more.

Service can normally be safely performed at engine idle, depending on vehicle air intake system/throttle body size. However, the best procedure is to keep engine RPM in the 1500-2000 range during service to prevent unlikely occurance of engine stalling. The best way to perform this is using the available s-hook applicator with 8-foot hose and controlling the engine rpm from the driver's seat/gas pedal.

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GAS ENGINE RECOMMENDED SERVICE PROCEDURE: CONT'D USE OF STANDARD S-HOOK WITH 3-FOOT HOSE



USE OF AVAILABLE S-HOOK WITH 8-FOOT HOSE









NOTE

It is recommended to stop spray and gradually rev engine up to 3,000 RPM once at the halfway point (4 minutes after starting service) to prevent engine loading up.

- **3** Continue spraying the Complete Intake System Cleaner into the intake system until can has emptied.
- 4 Once can is empty, allow engine to idle for 2 3 minutes to allow remaining cleaner to run out and gradually rev engine up to 3,000 RPM one last time. Then, shut engine off, remove s-hook hose and reassemble intake hoses. Restart engine and check for smooth idle.
 NOTE

If working with larger displacement engines (6 cyl and above) or it is believed that more deposits likely exists on the EGR valve, intake manifold or intake valves, a second cleaning is recommended.

5 Immediately after intake cleaning, use a fuel tank additive to clean fuel system as directed.

NOTE

If engine is believed to have a high amount of carbon build up prior to service, it is recommended to change engine oil/filter post service due to potential of intake cleaner/residual carbon burn off getting into the engine crankcase during service (piston or ring blow by).