

## 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 plenum 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 performed in under 10 minutes

### DIESEL ENGINE RECOMMENDED SERVICE PROCEDURE

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

- 1 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 throttle body/inlet (see images below). On larger displacement diesel engines in 3/4 or 1 ton trucks, you can also look to install s-hook applicator hose before turbocharger(s), provided you can maintain 1000-1200 RPM range throughout entire service (allowing for adequate turbo impeller spin). In this event, it is also recommended to perform service using 2 cans of cleaner.



#### BEST

(INTAKE HOSE AT ENGINE THROTTLE BODY)



#### ACCEPTABLE

(INTAKE NEAR ENGINE THROTTLE BODY-ONE INTAKE HOSE BEND)

#### 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, become less effective and also increase the risk of engine run on/RPM increase.

- 2 Start vehicle and make sure engine is at operating temperature before performing service. Begin cleaning process by depressing the 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.

## TOTAL INTAKE SYSTEM CLEANER

### DIESEL ENGINE RECOMMENDED SERVICE PROCEDURE: CONT'D

#### NOTE

Service can normally be safely performed at engine idle. However, the best procedure is to keep engine RPM in the 1000-1200 range during service to prevent unlikely occurrence of engine stalling. The best way to perform this is using the available s-hook applicator with 8-foot hose. It is recommended to stop spray and gradually rev engine up to 2,000 RPM once at the halfway point (4 minutes after starting service) to prevent engine loading up.

#### NOTE

If in the unlikely event engine runs on/RPM increases by more than 1,000 RPM above idle and during application, stop the spraying process immediately to allow engine to return to idle (may be necessary to shut engine off to recover from raised RPM's). Make sure that the Intake System Cleaner does not come into contact with the air flow meter or painted components.

- 3 Continue spraying the Complete Intake System Cleaner into the intake system until can has emptied. Recommended to stop spray and rev engine above 2,000 RPM once or twice around halfway point (4 minutes after starting service) to prevent engine loading up.
- 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 2,000 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).