



# Gumout Professional

## Job Aid – Chemical Engine De-Carbonization

Reference No.: GOPRO CEDC 2014

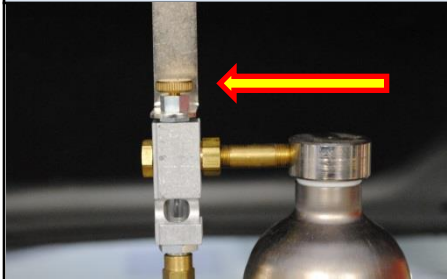
### Safety Requirements

- Use Throttle body cleaning job aid in conjunction with this job aid
- Always use Safety Glasses and gloves
- Bring engine to normal operating temperature
- Use in a well ventilated area
- Do not apply induction cleaner to diesel, rotary or direct injection engines that do not have a throttle plate.



### Fuel System Cleaner

1. Pour contents of bottle labeled Fuel System Cleaner into the gas tank.
2. Properly secure gas cap.



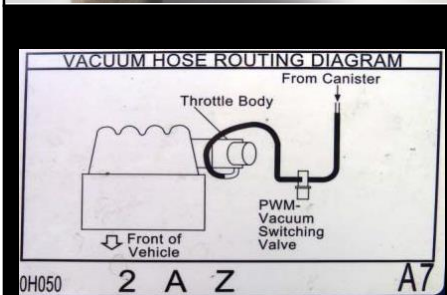
### Induction Cleaner Bottle Set up

1. Turn applicator flow control dial to the closed (full off) position.



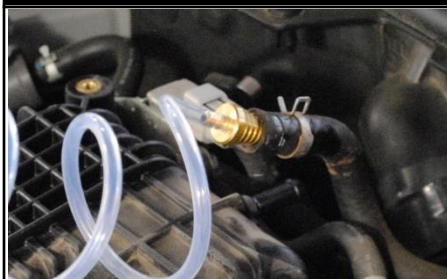
2. Pour entire contents of bottle\* labeled Induction Cleaner into the induction cleaner applicator.
3. Hang the applicator from the hood.

\*bottle style/shape may vary



### Vacuum Source Selection

1. Locate a strong manifold vacuum source as close to the throttle plate as possible to distribute cleaning solution to all cylinders.
2. Connect the applicator tip to the selected vacuum source.



Note how the selected vacuum hose originates from central and just behind the throttle plate. Always select a location like this. Never use a vacuum port that originates from an individual intake runner.



# Gumout Professional

## Job Aid – Chemical Engine De-Carbonization



### Alternative Method for Vacuum Source

1. Locate the Idle Air Control Valve (IAC) mounted on top of Throttle Body.

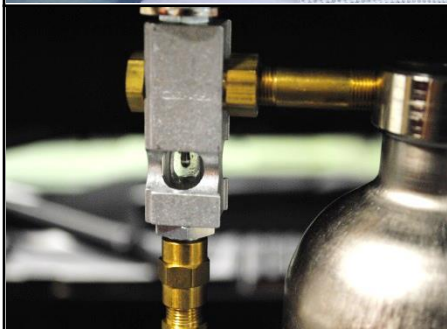


2. Tear off one of the small flaps on the kit box and use it to block off the complete (IAC) opening, and insert the applicator tip into the flap.



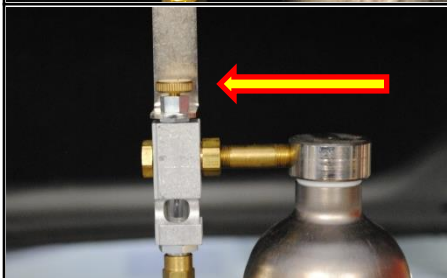
### Pedal Depressor Application

- Start the engine, increase and stabilize engine speed to between 1,200 and 1,500 RPM using a throttle pedal depressor or other appropriate means.



### Drip Rate Selection

- Adjust the flow control dial so that the rate of flow in the sight glass is a fast, steady drip, but not a stream.



### Completion of service

1. When the applicator is empty, turn the flow control valve to the closed position. Run the engine at 1,800 to 2,000 RPMs for 1 to 2 minutes to purge cleaner from the system.
2. Disconnect the applicator bottle and re-connect the vacuum hose and anything else that was disconnected.
3. Perform a quality control road test of at least 1 mile.

