

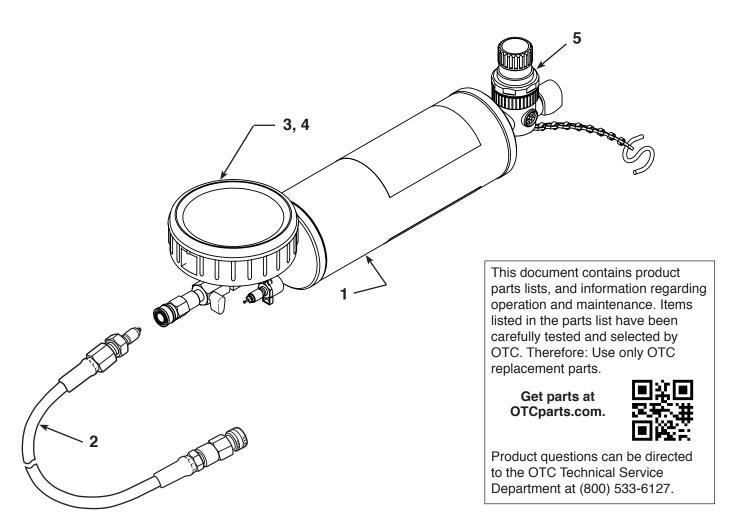


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Parts List & Operating Instructions for:

7448A

# **Fuel Injector Cleaner**



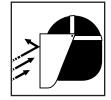
#### **Replacement Parts**

Item	Part		
No.	No.	Qty.	Description
1	567710	1	Fuel Injector Cleaner Canister
2	581340	1	Hose (1/8 NPTF x 6' Lg.) with connectors
3	517145	1	Rubber Gauge Cover
4	313575	1	Pressure Gauge <i>(0-100 PSI / 0-7 BAR)</i>
5	213299	1	Air Regulator

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WARNING: The following safety precautions must be carefully observed to reduce the risk of fire and personal injury.

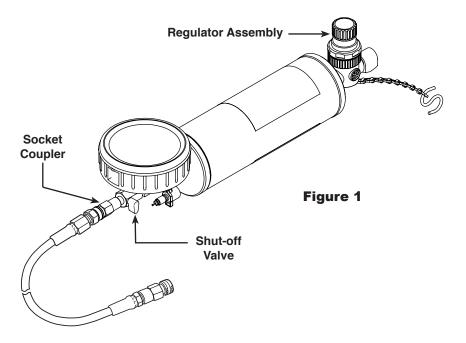
- Read, understand, and follow safety precautions and instructions. If the operator cannot read these instructions, operating instructions and safety precautions must be read and discussed in the operator's native language.
- Operator of the 7448A Fuel Injector Cleaner and bystanders must wear face shields.
- OTC 7448A and OTC 7000A are designed for use on gasoline engines ONLY. Do not use this tool for diesel applications.
- Observe normal precautions for working with flammable liquids: no smoking, open flames, electrical sparks, etc.
- Use the OTC 7448A in well ventilated areas.
- Pressurized liquid and accumulated fumes can ignite. Keep a Class B fire extinguisher nearby when working on fuel injection systems.
- Do not modify any components of the OTC 7448A.
- Do not replace any components of the OTC 7448A except those specified by OTC.
- Use the vehicle manufacturer's recommended procedures to service injectors. Never exceed the vehicle manufacturer's recommended pressures.
  - **Release fuel system pressure before servicing fuel system components.**
  - Wrap a shop towel around pressure tap fittings when connecting or disconnecting adapters to / from the vehicle and when disassembling the canister after use.
  - **Tighten all connections; fuel leakage could cause a fire.**
  - **Do not exceed 100 psi maximum hose pressure.**
  - □ Keep hose away from moving engine parts, hot engine components, and battery terminals.
  - □ Inspect the hose for damage before using the OTC 7448A. Check the inside of the hose to confirm there is no blockage. Replace the hose if needed.
  - **□** Replace injector o-rings whenever injectors are removed.



## **Cleaning Fuel Injectors**

Note: The optional OTC Professional Fuel Injection Application Manual contains instructions and diagrams specific to each vehicle system.

- 1. Read, understand, and follow the *Safety Precautions* on the previous page before using the Fuel Injector Cleaner.
- 2. Run the engine until it reaches normal operating temperature.
- 3. Shut OFF the engine. Turn OFF all accessories.
- 4. Disable the fuel pump. Note: It is best to unplug the fuel pump at the fuel tank. On some vehicles, pulling the fuel pump fuse also disables the ignition system or fuel injectors.
- 5. Turn OFF the shut-off valve at the bottom of the Fuel Injector Cleaner container. See Figure 1. *Note: Valve is OFF if it is turned all the way clockwise.*
- 6. Install the hose assembly on the socket coupler as shown.



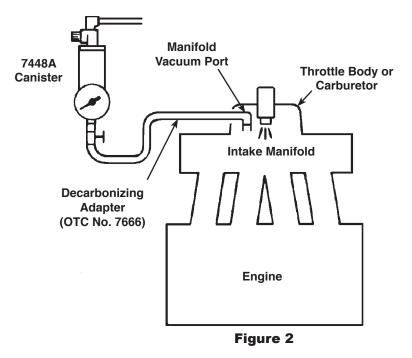
- 7. Remove the top and regulator assembly from the Fuel Injector Cleaner container. Pour fuel injector cleaner (one can of OTC No. 7000A Pro Inject-R-Kleen<sup>®</sup>) into container. Install top and regulator assembly.
- 8. Use the chain and hook to hang the Fuel Injector Cleaner from the hood of the vehicle.
- 9. Refer to the vehicle service manual or optional *OTC Professional Fuel Injection Application Manual* to determine fuel pressure operating specifications. Connect the Fuel Injector Cleaner to the inlet of the fuel rail. *Note: To keep cleaner fluid from going back to tank, block the fuel return line or adjust the regulator to run vehicle at 5 PSI under fuel pressure specifications.*
- 10. Turn regulator on top of Fuel Injector Cleaner to full OPEN position (counterclockwise).
- 11. Attach a shop air hose to fitting on top of cleaner container.
- 12. Adjust regulator (by turning it clockwise) to vehicle manufacturer's fuel running specification, or 5 PSI under the manufacturer's specs. to prevent fuel return.
- 13. Open shut-off valve to full OPEN position (counterclockwise).
- 14. Start engine and let it run at 1,000 1,500 RPM. *Note: Adjust air pressure to obtain a smooth RPM, if necessary.*
- 15. Run engine until container is empty and engine stalls.
- 16. Turn OFF ignition.
- 17. Turn shut-off valve to full OFF (clockwise).
- 18. Disconnect air supply. Turn regulator to full OPEN (counterclockwise) to release pressure in container.
- 19. Remove cleaner. Remove fuel adapter fitting. Connect fuel line. Remove block on fuel return line and connect fuel return line, if applicable. Connect fuel pump power.
- 20. Start the engine and check for fuel leaks.

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## **Decarbonizing the Engine**

- 1. Read, understand, and follow Safety Precautions in this document before using the Fuel Injector Cleaner.
- 2. Run the vehicle until the engine reaches normal operating temperature. Shut OFF the engine.
- 3. Turn regulator on top of Fuel Injector Cleaner to full OPEN position (counterclockwise). Leave the fitting on the end of the regulator open— do NOT connect shop air.
- 4. Close the shut-off valve at the bottom of the Fuel Injector Cleaner. *Note: Valve is OFF if it is turned all the way clockwise.*
- 5. Remove top and regulator assembly from Fuel Injector Cleaner. Fill the container with up to 16 oz. of decarbonizing fluid. Install top and regulator assembly.
- 6. Connect the canister hose to a decarbonizing adapter such as OTC No. 7666.
- 7. Locate a manifold vacuum port (NOT ported vacuum) near the throttle body or carburetor. This will more evenly distribute the decarbonizing solution.
- 8. Connect the decarbonizer hose (with adapter) to the manifold vacuum port. See Figure 2.



- 9. Start the engine. Manually increase throttle to 1,500 RPM while slowly opening the shut-off valve. The engine will run rough and RPM will decrease. Do NOT manually increase RPM.
- 10. When the container is empty, turn OFF the engine.
- 11. Remove the adapter fitting from the engine. Connect the vacuum hose.
- 12. Let the vehicle sit for at least 30 minutes to allow the solution to work on soft carbon deposits.
- 13. Test drive the vehicle for at least 15 miles to flush loosened carbon deposits out of the system.

Note: Until the system is cleaned out, the vehicle may start hard, run rough, and there may be heavy white smoke from the tailpipe.

#### **Cleaning the Fuel Injector Cleaner**

- 1. Install the quick coupler onto the end of the hose assembly.
- 2. Turn OFF the shut-valve at the bottom of the fuel injector cleaner. *Note: Valve is OFF if it is turned all the way clockwise.*
- 3. Turn regulator on top of Fuel Injector Cleaner to full OPEN position (counterclockwise).
- 4. Attach a shop air hose to the fitting on top of the cleaner container.
- 5. Insert the hose into a suitable container.
- 6. Adjust the air regulator to 50 PSI.
- 7. Turn the valve on the bottom the fuel injector cleaner to the OPEN position.
- 8. Let the cleaner flow into the container until the hose is empty.

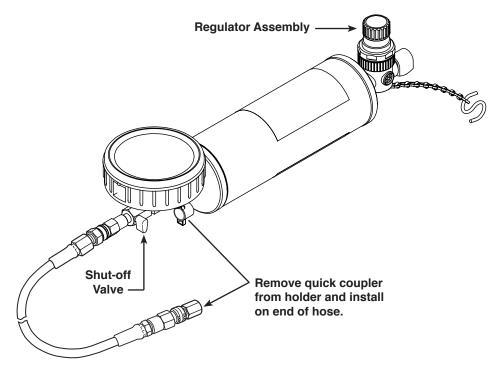


Figure 3

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