

# CRDI SPECIALIST

## User Manual

**(CRDI CARBON CLEAN SYSTEM)**

**Model : IMPACT-750**



Tel: 82-31-761-2279 / office

82-10-3718-7056 / mobile



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### Overview for Petrol

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## Overview.

Diesel and Oil are manufactured from organic matter. When these products are burnt or left to naturally degrade contamination is created. This contamination builds up on key components within the engine leading to a reduction in performance and efficiency.

The IMPACT-750 Carbon Clean Machine enables effective cleaning of CRDI Fuel Injection systems, Air intake systems and DPF systems, Turbo-intercooler , without the need for dismantling key components and specially for Evaporator clean.

This cleaning process restores the vehicle back to a clean and efficient state, restoring lost performance and improving fuel efficiency by as much as 10 – 15 %

The IMPACT-750 Carbon Clean Machine has been designed to work on CRDI, common rail diesel and, when used with IMPACT cleaning solution, ensures the effective and safe removal of contamination throughout the whole system.

For effective preventative maintenance and every day cleaning of the Fuel System, we recommend to use IMPACT System Cleaner , 7000 model as fuel additive

# Carbon Clean Machine

## CRDI Injection Cleaning Instructions.

**This equipment should only be operated by a competent technician. It is the responsibility of the user to determine when and how the equipment should be used.**

**IMPACT Corp. accepts no responsibility or liability for damage caused through the inappropriate use of this equipment or the misinterpretation of these instructions.**

### Connecting and operating the machine.

1. When working on vehicles fitted with a separate low-pressure fuel pump the fuse or relay operating the fuel pump must be taken out to stop the pump from operating and causing possible damage.
2. Fill the Diesel cleaning tank on the machine with 1 bottle of IMPACT CRDI System Cleaner 700D, which already mixed. The tank will hold 1.6 liters of solution. Under normal operating procedure this will allow for approximately 40 - 60 minutes of cleaning by 1 liter 700D solution.
3. Connect the injector cleaning supply hose to a suitable connection at the inlet side of the high-pressure fuel injection pump. Note: Typically this will be between the fuel filter and the high pressure fuel pump.
4. Connect the fuel return line from the machine to a suitable point on the fuel return line. Note: on some older vehicles this may require the use of the "T" piece to allow a further fuel return from the injector rail.
5. Connect the 220v power supply from the machine to the commercial electric .
6. Turn on the Injection Cleaning pump on the machine by flicking the switch on the right hand side of the machine to the Up position.
7. Set the pressure on the Diesel Cleaning gauge to approximately 1.5bar (22psi) Ensure the Diesel Injection cleaning gauge is reading in the green zone.

(Engine start will be done from 0.5 bar upto 2.5 bar, depends on engine , but few high performance BMW, etc may need 3.5 bar pressure )

8. Start the engine and adjust the fuel pressure using the controller valve on the machine so the needle on the gauge reads in the green zone.

\*When using the machine on common rail injection systems, start the engine using the pressure regulator on the front of the machine and adjust the pressure to ensure the needle on the gauge reads in the green zone.

9. Check system for leaks, if any leaks are discovered the cleaning process should be stopped immediately and the leak repaired before continuing.
10. Basic operation time is already Set 40 minutes as minimum, when you start to clean by switch ON, then operation pump On and time on together,

Note: It may be necessary to adjust the rpm on the vehicle during the cleaning process and top up the fuel tank on the machine with suitable cleaning solution recommend to add Impact-7000, fuel injector cleaner into the tank.

**For preventative maintenance and basic cleaning it is recommended that the cleaning process be carried out for a period of 40 minutes.**

**For heavy contamination the cleaning procedure should be carried out for 60 or more minutes.**

11. Once the cleaning process is complete,

First of all, engine off and then turn off the switch, it means that injection cleaning pump off and Timer off together. Must follow this procedure.

12. Disconnect the power supply (Plug Off).
13. Disconnect the fuel supply and return lines from the machine to the vehicle and securely reconnect the fuel lines.
14. Start the vehicle and check for leaks

**Before driving the vehicle it is strongly recommended that all fuel lines are carefully checked for leaks. A leaking fuel line during driving may lead to fire in the engine compartment.**

The method of timer set, if necessary

1. Push SET, then Blink in "PV" window
2. Adjust required number by ▲ ▼ button and then Push SET again
3. "SV" is the bell time, not necessary to change

# **SMOG CARBON CLEANER**

## **Air Intake Cleaning Instructions.**

**This equipment should only be operated by a competent technician. It is the responsibility of the user to determine when and how the equipment should be used.**

**IMPACT CORP. accepts no responsibility or liability for damage caused through the inappropriate use of this equipment or the misinterpretation of these instructions.**

**recommended that the intake manifold is dismantled and contamination is removed manually. Failure to carry out this procedure may result in large foreign objects entering the combustion chamber and causing damage. IMPACT cannot be held responsible for any damage caused due to user error.**

### **Operating the machine.**

1. Fill the required chemical to solution tank. The tank will hold 1 liter of solution. Under normal operating procedure, this will allow for approximately 10-30 minutes of cleaning. (depends on working process)
2. Connect the 220 v power supply to the machine.
3. Green switch on, in this time, small amount of chemical will coming out within 10 seconds during warm up time, spray out in the ground and then showing smog, start to cleaning on the specific surface
4. Must clean , Air intake and Turbo-intercooler clean by Air intake cleaning solution ( Impact-730D)  
Directly spray into the surface from the gate to the end as much you can

Most powerful cleaning effectiveness is to clean Air intake system directly by 500 ml of solution and then clean Turbo-intercooler , spray from the air cleaner hole line

**Best cleaning method of Air intake system / recommendation**

**If engine is hot condition and about 2000 rpm is best while cleaning process, possible to gain much better cleaning effectiveness**

**Cleaning 3-4 minutes by machine and stop cleaning about 2-3 minutes while engine run , and repeat cleaning 3-4 minutes and wait 2-3 minutes until chemical disappear all**

**For preventative maintenance and mild cleaning it is recommended that the cleaning process be carried out for a period of 10 – 15 minutes.**

**For heavy contamination the cleaning procedure should be carried out for 10-30 minutes.  
Means that Cleaing few minutes and wait few minute**

## **DPF & Catalytic converter Cleaning instruction**

- DPF Cleaning solution : Impact-740
- Catalytic converter cleaning solution : Impact-740C

### **Operating the machine.**

**Recommend Basic cleaning process :**

**all cleaning process run under 2,000 rpm for best cleaning effectiveness  
Spray smog about 500 ml at beginning time and wait about 5-10 minutes and spray smog again about lest of 500 ml and wait again and finally full acceleration during few minutes.**

Possible to clean via below 3 method

- 1) Via the lambda sensor located between the exhaust manifold plug hole.
- 2) Via the DPF or Catalytic converter sensor plug
- 3) By drilling a small 4mm hole in the exhaust prior to the DPF and using the spray nozzle. After cleaning the hole should then be plugged using a self-tapping screw and copper washer.

### **Process**

1. Locate the appropriate spray nozzle at an appropriate delivery point prior to the DPF and Catalytic converter
2. Start the vehicle and set the engine to idle at 2,000 RPM. Allow engine to come up to normal operating temperature.

3. Inject the smog of cleaning solution in a fine mist. Flow rate should be set to allow a full tank of cleaning solution to be delivered in approximately 15 minutes.
4. If want to clean step by step, just green switch On and Off, as described before it is better to cleaning 2-4 times divided for 1 liter

No control for the spray volume and pattern, not necessary

Allow the engine to run for a further 15 minutes at idle then refill the tank on the machine with cleaning solution .

5. Remove smog spray nozzle and return the vehicle to its normal operating state.
6. To ensure the fuel injectors are working efficiently and to reduce the amount of soot being passed into the DPF it is recommended that one bottle of Fuel system Cleaner ( Impact-7000 ) is added to the fuel tank.

**Once the cleaning process is complete it is recommended that the vehicle be taken for a spirited drive of approximately 15 minutes to**