

# J02280/J02285 Instruction Manual

## JLM Diesel Intake Extreme Clean treatment

### Two-step professional diesel air intake & turbo cleaner

#### Product description

JLM Diesel Intake Extreme Clean treatment is a unique and very effective high-grade product for cleaning typical contamination and deposits found in the air intake, combustion chamber, intake valves, injector tips and turbo variable vanes. The Diesel Intake Extreme Clean restores the original air flow to the engine making it breathe fresh air once again.

#### Features

- An innovative twostep approach cleaning solution for maximum combined effectiveness.
- Effectively cleans the air intake, throttle valve, combustion chamber, injector tips and turbo.
- A unique very effective heat resistant detergent package cleans the turbo's variable vanes.

#### Benefits

- Improves engine performance, fuel economy, engine idling and starting.
- The controlled dosing system prevents pinging and knocking in highly sensitive modern diesel engines.
- Increases lifetime of sensitive engine components like catalyts and diesel particulate filters.
- Reduces harmful emissions of hazardous exhaust gases.

#### Application

For all diesel engines with or without turbochargers. Will not harm catalytic converters or diesel particulate filters. Recommended use is each 20.000km/12.500miles or once per year.

#### Direction

JLM Air Intake Extreme Clean Fluids Step 1 and Step 2 (J02285) are designed to be used only with the dedicated JLM Intake Extreme Clean Toolkit Pro in combination with the Venturi Disc and Adaptor Ring (J02280, see figure 1).



Figure 1 – J02285 JLM Diesel Intake Extreme Clean Fluid Pack

# Preparation prior to 2-step treatment


1.  **Caution! Surfaces are hot, wear protective gloves and eyewear**
2. Ensure the engine is at operating temperature
3. Switch engine off!
4. Ensure oil and coolant levels are sufficient.
5. Locate the intake manifold and remove the hose to the inlet.
6. Clean the inside of the air intake with a cloth as much as possible.
7. Check if the EGR (Valve) is heavily contaminated or not. If so, it is recommended to clean the EGR with JLM's Diesel EGR Cleaning Spray before commencing the Intake Cleaning treatment.
8. Disconnect the supply to the EGR valve (to obtain proper vacuum) and airflow meter (disconnection airflow meter only necessary when vehicle won't start after removing inlet hose).
9. Make sure the Venturi Disc (fig. 2/G) is placed behind turbo, intercooler, air filter and air mass meter so the Intake Extreme Clean fluids will not pass through them.
10. If the Venturi Disc is too small, use the Adapter Ring (fig. 2/H) to create a good seal.



Figure 2



# Two Step Treatment




Step 1 and 2 should be done at idle rpm.

**Caution! Do not accelerate during the treatment!**



## STEP 1 Diesel Intake Extreme Clean

350 ml:  20-25 minutes

1. Shake the bottle thoroughly and unscrew the cap.
2. Mark a distance of 12 cm from the valve (fig. 2/E) on the transparent hose (fig. 2/F) with a marker for measuring the fluid flow.
3. Add the STEP 1 Cleaning Fluid into the pressure bottle (fig. 2/B) and close it tightly. Make sure valves (fig 2/C + D) are closed.
4. Connect the pressure bottle (fig. 2/A) to the workshop compressed air supply.
5. Keep the valves (fig. 2/C + D) in closed position.
6. Connect the end of the transparent hose (fig. 2/F) to the Venturi Disc (fig. 2/G).
7. Start the engine and let it idle.
8. Place the Venturi Disc (fig. 2/G) and Adapter Ring (fig. 2/H) if required on the air intake. Natural engine suction should keep it in place. In case the disc does not remain at its designated position due to low suction, check whether the Venturi Disc (with or without Adapter Ring) correctly seals the air intake opening. Adjust position accordingly.
9. Firstly, open the outgoing valve (fig. 2/C) and secondly open the flow adjuster screw (fig. 2/D). Fluid will start to flow from the pressure bottle into the air intake via the transparent hose and Venturi Disc.

**The fluid should flow at a speed of max. 12 cm per 10 seconds.**

Adjust the flow with the fine adjuster screw (fig. 2/D). Make sure the engine does not start to knock and runs smoothly. In case of knocking or uncontrolled running stop the engine immediately (if necessary by closing off the air intake).



**Caution! DO NOT OVERDOSE!!!**

10. After a few minutes of operation check the air intake to make sure there are no "pockets" filled with fluid. The air intake should be wet, but without pools of fluid.
11. Let the engine idle until the pressure bottle (fig. 2/B) is empty. This should take about 20-25 minutes. Once empty, close the pressure valves (fig. 2/C + D) on the pressure bottle and let the engine idle for another 5 minutes.
12. Stop the engine and let the product soak in for 5-10 mins, then proceed with STEP 2.





## STEP 2 Diesel Air Intake Extreme Clean

500 ml:  30-35 minutes

1. Follow step 1-10 from the STEP 1 treatment (see above) using the Step 2 Flush Fluid.
2. Let the engine idle until the pressure bottle is empty. This should take about 30-35 minutes. Once empty, close the valves (fig. 2/C + D) on the pressure bottle and let the engine idle for another 10 minutes.
3. Stop the engine and reattach the air intake hose back into the normal position.
4. Delete any fault codes via the onboard diagnostic system.
5. Perform a test drive of approximately 10km/6miles initially low to medium RPM of which the first part with low to medium rpm and the subsequently with higher rpm (approx. 3500 – 4000 rpm) to ensure all dirt and fluid residue are removed and the engine is completely dry again.
6. After treatment the oil and oil filter should be replaced. See also the remark(s) below.

Before replacing the engine oil, it is recommended to flush the oil system using JLM Engine Oil Flush. In addition, it is recommended to add JLM Diesel Injector Cleaner into your diesel fuel to clean injectors and prevent new build-up of carbon deposits. This product should be used every 20000km/12.500miles to keep your engine clean and maintain performance. Alternatively, you can use JLM Diesel Extreme Clean to clean the entire fuel system including injectors and in addition also promote easy DPF regeneration.

### Recommended products in combination with JLM Diesel Intake Extreme Clean treatment:

