

## **A Step-by-Step Guide for BAC101 DPF Cleaning**

Diesel Particulate Filters (DPF) are essential components in modern diesel engines, helping to reduce emissions by trapping soot and particulate matter. Over time, these filters become clogged, leading to reduced engine performance, increased fuel consumption, and potential damage. The BAC101 DPF Cleaner by Sauber EU Ltd provides an effective way to restore your DPF's performance without requiring a costly replacement. This guide outlines the step-by-step process for injecting the cleaning chemicals directly into the DPF unit through the oxygen (O2) sensor or pressure sensor.

### **Preparation**

Before beginning the cleaning process, ensure you have the necessary tools and materials:

- BAC101 DPF Cleaning Kit (including Part A or Part B, and Part C chemicals)
- O2 Sensor Removal Kit (typically available for £15/\$20)
- Hand Pump
- Diagnostic Tool (optional but recommended)
- Rags and gloves

#### Step 1: Locating and Removing the Sensor

Most O2 sensors are located on the side or rear of the engine block, attached to the exhaust system. Accessing them is significantly easier using an O2 sensor removal kit.

#### **Follow these steps:**

1. Ensure the engine is off and cool before proceeding.
2. Identify the O2 sensor or pressure sensor leading to the DPF.
3. Use the removal tool to carefully unscrew and remove the sensor.

#### Step 2: Preparing the Cleaning Solution

The cleaning process involves two different chemical mixtures:

- First Cleaning Stage: Part A or Part B
- Final Cleaning Stage: Part C

#### **To prepare the cleaning solution:**

1. Add 200ml of Part A or Part B into the hand pump.
2. Top up with 1500ml of water.
3. Mix thoroughly to ensure even distribution of the cleaning agent.

#### Step 3: Cleaning the Sensor

**Before injecting the cleaning solution, clean the removed sensor to ensure it functions properly:**

1. Submerge the sensor into the mixed cleaning solution.
2. Allow it to sit for 15-30 seconds to dissolve carbon deposits.
3. Wipe the sensor clean using a rag.
4. Set the sensor aside in a clean area.

#### Step 4: Injecting the First Cleaning Solution

With the cleaning mixture ready, proceed with the first stage of the cleaning:

1. Insert the hand pump's nozzle into the open sensor port leading to the DPF.
2. Inject the entire 1700ml solution directly into the DPF.
3. Allow the solution to rest for 15 minutes to break down carbon and soot deposits.

**\*\*\*MAKE SURE THE DPF IS LOWER THAN THE INJECTION POINT TO AVOID HYDRO-LOCK. IF IN DOUBT, CONTACT US FOR SUPPORT.\*\*\***

#### Step 5: Running the Engine

Once the first stage solution has had time to work:

1. Start the engine and let it idle for 15 minutes.
2. Turn off the engine and prepare for the second stage.

#### Step 6: Second Cleaning Stage with Part C

Now, repeat the process with Part C to finalize the cleaning:

1. Prepare the second solution by mixing 200ml of Part C with 1500ml of water.
2. Inject the entire 1700ml solution into the DPF through the same sensor port.
3. Let the solution sit for 15-30 minutes for deeper cleaning.

#### Step 7: Final Engine Run and Clearing the DPF

##### **To complete the cleaning process:**

1. Start the engine and let it idle.
2. If the DPF is severely clogged, gradually increase the RPM to 2000-2250 RPM for 15 minutes or until the smoke stops.
3. The cleaning process can take anywhere from 5 minutes to 60 minutes depending on the level of soot buildup.
4. Expect to see plumes of smoke as the deposits burn off. This is normal and should subside over time.

#### Step 8: Reinstalling the Sensor

Once the cleaning is complete:

1. Turn off the engine.
2. Reinstall the cleaned O2 sensor or pressure sensor securely.
3. Start the engine at idle speed and monitor performance.

#### Step 9: Resetting Fault Codes (If Necessary)

##### **If you have a diagnostic tool:**

1. Scan for any remaining fault codes.
2. Reset the codes if they persist.
3. If no diagnostic tool is available, codes may clear automatically after driving.

##### **Final Considerations**

- It is normal for additional smoke to appear while driving after the cleaning, as residual carbon, soot, and ash are expelled from the exhaust system.
- Regular DPF maintenance using BAC101 can prevent blockages and prolong the filter's lifespan.
- If persistent issues occur, a forced regeneration via a diagnostic tool may be required.

### **Conclusion**

Using BAC101 DPF Cleaner by Sauber EU Ltd is an efficient and cost-effective method to restore your vehicle's diesel particulate filter. By following these steps carefully, you can clean your DPF without the need for expensive professional services, ensuring your vehicle maintains optimal performance and emission compliance.