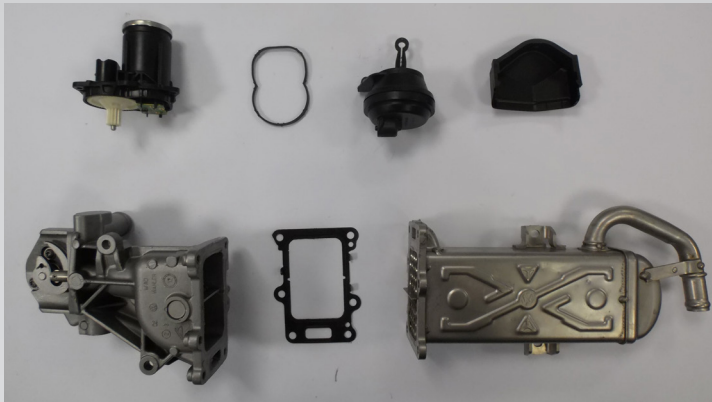


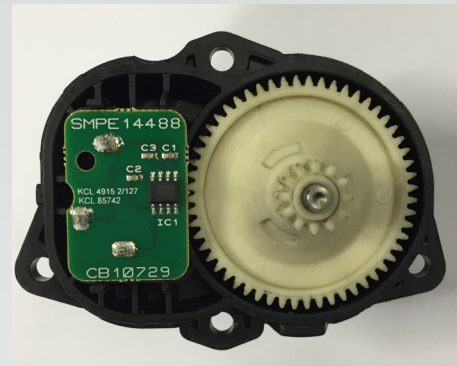


OUR REMANUFACTURING PROCESS



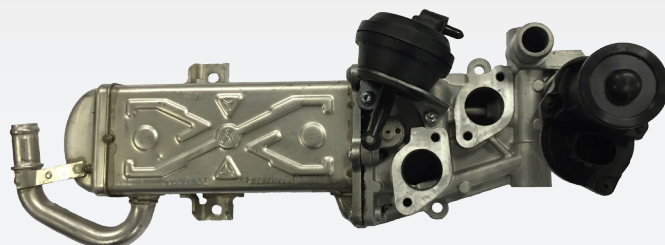
All components are stripped, cleaned of carbon deposits, inspected for wear, and replaced where necessary.

A new SMPE in-house manufactured PCB with custom designed electronics is fitted to the motor assembly.



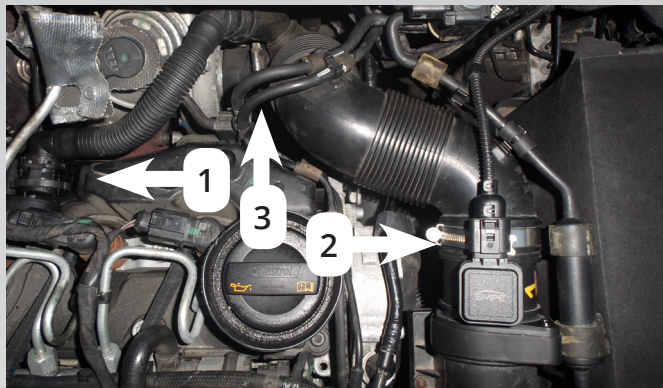
SMPE		
TEST CERTIFICATE		
CALIBRATED EGR VALVE		
Part# 14488		
Serial# 146232290437088		
Cam Angle (°)	86	PASS
IC Current (mA)	8.13	PASS
Motor Current (A)	1.05	PASS
Voltage Factor (V)	3.03	PASS
Linearisation (V)	2.86	PASS
Reference (V)	5.00	PASS
Actuator Test (Bar)	0.57	PASS
Leak Test (Bar)	0.00	PASS
RESULT : PASSED		

All components are reassembled before the unit is calibrated and tested. This procedure accurately calibrates the electronic feedback of the valve. The coolant section is then pressure tested to detect any leaks. The final test is to flow gasses through the unit at various pressures and rates to ensure the correct electronic signal is produced.



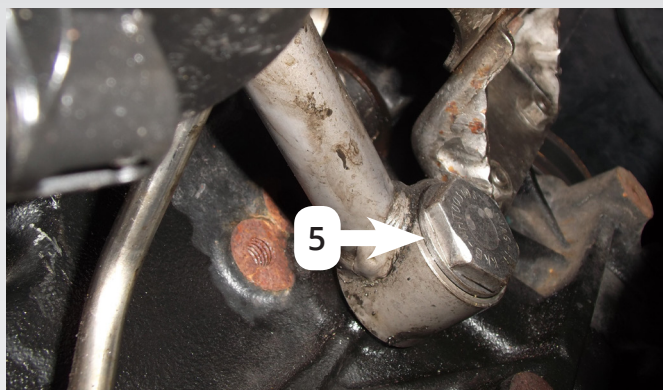
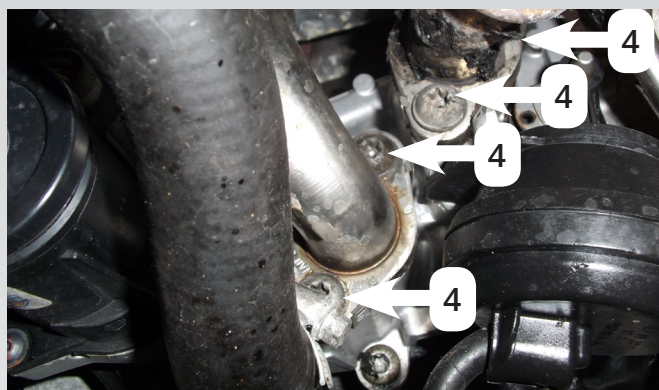


EGR VALVE REMOVAL



Remove particulate filter and downpipe*
Disconnect crankcase breather hose (1)
Detach air pipe from air filter housing (2)
Move air hose and connection to rear and detach from turbo charger (3).

Remove bolts (4) and detach exhaust gas recirculation pipes
Use the new gaskets provided on reassembly.



Remove bolts and banjo bolt then detach support for turbocharger with oil supply line (5)
Use the new gasket provided on reassembly.
Only applicable to some models.
Clamp off coolant hoses then disconnect from EGR valve
Remove attachment bolts then remove EGR valve.

Refitting is a reversal of the removal process. Top up coolant as necessary.

After fitting, use appropriate diagnostic equipment to clear any fault codes, and ensure the ECU is updated with the latest software issue. Switch off ignition for at least 30 seconds, then start engine and allow to idle until it reaches normal operating temperature.

The new EGR valve base settings should now have been learned. The engine may run slightly uneven for approximately 50 miles, until the ECU fully learns the adaptive parameters of the new EGR valve.

*On certain models only it may be possible to remove the EGR valve without removing the DPF. **DO NOT ATTEMPT** this if you are not confident. SMPE accepts no liability for consequential damage.

PKZ05 v2