

Press Release TATRA, a.s.

TATRA ON AIR[™] - the world's only air-cooled diesel engine meeting EURO 5 standards

- Simple, effective, environmentally-friendly and an economical solution

Kopřivnice 2008. TATRA today announced the introduction of its new EURO 5 engine line known as TATRA ON AIR. The current EU regulation known as EURO 4 sets the emission limits (esp. Nitrogen oxides Nox, carbon monoxide CO, hydrocarbons and solid particles) in exhaust fumes of vehicles sold and registered for the first time as of January 2007. Since then TATRA has offered its customers trucks and special vehicles of excellent driving qualities equipped with TATRA's original air-cooled EURO 4 diesel engines with SCR Technology (Selective Catalytic Reduction). This EURO 5 engine line is significantly ahead of any competition and ahead of the forthcoming EURO 5 emission standard which sets even more demanding emission standards and which come into force in the EU countries on October 1, 2009; the Company is introducing the new engines TATRA ON AIRTM EURO 5 again equipped with the SCR technology.

TATRA ON AIR[™] engines T3D-928 EURO 5 SCR are original and unique eight-cylinder directly air cooled Vengines equipped with mechanical fuel injection, charged by a turbocharger with a turbine bypass regulator and charge-air cooling. The design is traditional; 12,667 cm3 volume, roller bearing crankshaft, independent ironcast cylinders, aluminium heads and OHV transfer. The cooling blower is a part of the engine together with the oil and charge-air coolers which creates one compact unit.

TATRA a.s. is the only producer in the world able to offer its own, direct air-cooled engine of EURO 5 emission standard with mechanical fuel injection. Many experts believed that it was impossible to build this type of engine in EURO 4 specification without electronic injection management. Despite these doubts, TATRA was not only able to build such an engine, but has even achieved EURO 5 standards.

TATRA traditional advantages are reliability, guaranteed engine operation in extremely low and high temperatures, simple engine installation, easy service and lower operating cost. The fuel consumption is comparable with all the other engines.

Production of such directly air-cooled engines is, due to the absence of liquid cooling systems, also more ecologic and, therefore, the production of greenhouse gasses is significantly reduced.

In Kopřivnice February, 2008

Achievement of the EURO 5 emission standard is ensured by an exhaust fumes treatment system which replaces the vehicle exhaust muffler. It includes a catalytic converter of solid particles and a SCR set controlled by the independent electronic unit. The set consists of an AdBlue tank, injection device and its own catalytic converter. TATRA ON AIR T3D-928 EURO 5 engines are available in two power and torque levels: 280 kW/1700 – 1750 min⁻¹, 1800 Nm/1000 – 1200 min⁻¹ a 325 kW/1700 – 1750 min⁻¹, 2100 Nm/1000 – 1200 min⁻¹.

The Euro 5 TATRA ON AIR vehicle has a separate AdBlue liquid tank located next to the fuel tank. The systém requires regular AdBlue tanking carried out by the crew usually at the petrol station. The driver is informed by the indicator on the dashboard when it is necessary to tank the AdBlue. The dosing unit is also equipped with dashboard diagnostics which monitor the function of all important parts of the system. At the exhaust pipe there is a sensor monitoring the emission level and managing the whole SCR process. When any emission problem occurs, the driver should rectify the problem or the engine power is reduced. An engine operated without the AdBlue won't break, but it will not perform at the EURO 5 emission level. After the AdBlue is refilled, the entire catalytic process will start again.



Today, the TATRA ON AIRTM (T3D-928 EURO 5 SCR) engine has 7.5 times lower emissions of the solid particles and 3.5 times lower emission of nitrogen oxides comapared to the 1995 TATRA (T3B-928 EURO 2) engine. In the same time, the engine increased its power by 27.5 % and increased its torque by 33.8 %.

Beginning in February 2008, TATRA ON AIR[™] engines will be the heart and the source of power for TATRA vehicles which, thanks to their unique chassis construction, perform the most difficult jobs in the most extreme off road and climatic conditions. The famous central tube and swinging half-axles are the secret behind TATRA's legendary off-road parameters. New TATRA vehicles with the TATRA ON AIR[™] engines provide the solution to logistical and transportation problems of TATRA customers in the oil and gas industry, in mining, forestry, firefighting, military and many others vehicle segments on all continents.

In Kopřivnice February, 2008

