

INFORMATION NEW LEGISLATION FOR RETROFIT SYSTEM TO BE INSTALLED IN  
LIGHT DUTY VEHICLES FOR THE USE OF E85 IN THEIR PROPULSION

Transmitted by the expert of Sweden

Introduction

From the 1 of July 2008 a new legislation entered into force in Sweden. This new regulation makes it possible to nationally type approve a retrofit system that can be installed in a light duty vehicle for the use of ethanol fuel E85 in the propulsion. The new legislation is divided in two parts. The first part is an amendment to the Act (SFS 2001:1080) concerning motor vehicles exhaust gas emissions and automotive fuels. The second part is an amendment to the Swedish Road Administration's regulations (VVFS 2003:22) on cars, lorries, buses, coaches and their trailers and also the Swedish Road Administration's regulations (VVFS 2003:29) on national type approval of system component and separate technical unit.

From the 1 of January 2009 a new authority, the Swedish Transport Agency, starts its activity in Sweden. This authority is responsible for regulatory development, surveillance and administration in the transport area and will from that date deal with applications for type approval of this type of retrofit system. The administration of application for type approval of retrofit system was to the 31 of December 2008 handled by the Swedish Road Administration.

So far we have only received two applications for type approval of E85 retrofit systems and both of them conformed to the requirement so we issued type approval for both of them.

The first part of the legislation

The amendment of SFS 2001:1080 is a small change with the purpose to move the manufacturer's responsibility regarding conformity to exhaust emission standards and in service conformity to the manufacturer of the retrofit system.

The second part of the legislation

This part of the new legislation sets the requirement and the procedure for type approval of the retrofit system.

Requirement on the retrofit system

It is possible to type approve retrofit system for single fuel vehicles and flex fuel vehicles, that is a single fuel vehicle is a vehicle that can use only E85 and a flex fuel vehicle is a vehicle that can use any mixture of E85 and petrol.

There are requirement on exhaust emission, components of the emission control system and fuel system if there is a need to replace one or more of them and also the engine power are not allowed to exceed the engine power of the original vehicle with more than 5 %. We also have a requirement that the retrofit system shall not affect the OBD system if the vehicle is equipped with such system in its original design. That means that the functionality of the OBD system shall be as in the unmodified vehicle.

Regarding the exhaust emission the manufacturer of the retrofit system shall show that a vehicle with installed retrofit system complies with the exhaust emission standard which the unmodified vehicle conformed to. The requirement is for type 1 and type 2 tests according to EC directive 70/220/EC.

The manufacturer of a retrofit system must have a quality system preferable certified according to EN ISO 9001 but a quality system with corresponding requirement is also accepted.