VEHICLE SPEED LIMITING SYSTEM FOR DIESEL ENGINES

SAFETY • RELIABILITY • LOW COST

SAVES • FUEL • TIRES • BRAKES

EASY TO INSTALL • NO MAINTENANCE
An electromechanical Vehicle Speed Limiting System designed for vehicles equipped with diesel engines using in-line or rotary type injection pumps.

It is a tamper free and easy to install system using no mechanical linkage, resulting in a system requiring no maintenance.

It consists of only three (3) basic components; an Electronic Control Module (ECM), an electromechanical Fuel Control Valve (FCV) and an electromechanical Pressure Regulating Valve (PRV) along with connecting electrical harness and related hardware. A signal generator is available if required.

**Function:**
The ECM accepts a speed signal from a tachograph, speedometer, signal generator or magnetic sensor and is adjustable to the desired limit speed. When the speed limit point is reached the ECM signals the FCV to close. Thus reducing fuel supply to the injection pump and the PRV to open regulating fuel supply pressure. This results in a gentle but positive limitation of vehicle speed.

**Below the limit speed has no effect on engine performance.**
As vehicle slows three (3) Kph below the limit speed, full fuel is gently restored. Therefore, if full throttle were maintained, the system functions as a cruise control maintaining vehicle within three (3) Kph of the limit speed.

**Features:**
Installation of the system can be made by any maintenance person familiar with vehicles and engines in two to three hours without special tools. The system assembly includes all materials necessary to complete an installation equal in quality to equipment supplied by the vehicle manufacture. A Tester / Calibrator is available to test and calibrate the system but is not mandatory.

**Anti Tamper Measures:**
A seal is supplied for the module adjustment “the same as used on tachographs” after the system has been calibrated. All electrical connectors are secured with lead wire seals plus if any electrical wire is cut, bridged or broken, the system cycles to the limit position reducing the fuel supply but allowing the vehicle to be driven at a reduced speed. Tampering with the fuel control valve will result in fuel leaks.

**Warranty:**
The system is warranted for three (3) years for materials and workmanship with no limit to useful life.
HEWITT INDUSTRIES

Vehicle Speed Limiter System
Installation Instructions

Electronic Control Module (ECM),
P/N 030-300-0 / P/N 030-304-0
Select mounting location near ignition circuit. Do not mount until after system is installed and calibration is completed. When completed, mount module with connector facing down using supplied double sided tape or hardware through mounting holes.

Fuel Control Valve (FCV),
P/N 025-221 (See back page)
Remove fuel supply line from filter to injection pump. Install FCV to in port of injection pump. This may require 90° fitting and extension on some applications. (See back page.) Install supplied flexible fuel line, fittings and clamps between fuel filter and in port of FCV. Do not secure until all fuel lines are in place.

Pressure Regulating Valve (PRV),
P/N 025-222
Mount PRV as is convenient on engine or firewall. Install supplied flexible fuel line, fittings and clamps between out port of FCV and in port of PRV. Connect out port of PRV to injection pump return line or directly to fuel tank. Note: It must have a restricted flow. Secure valves and all fittings.

Electrical Harness Connections:
ECM Harness P/N 071-750
Connect black wire to ignition circuit. Connect white wire to reliable ground. (Poor ground causes malfunctions.)

Fuel Valve Harness, P/N 071-412
Mate connectors with FCV and PRV and route wires to ECM location. Using supplied butt connectors, connect white, green and brown wires to matching colors on ECM harness P/N 071-750. Install conduit on wires and secure with supplied plastic tie-wraps.

Speed Signal Selection and Connections:
Tachograph Signal
Use ECM P/N 030-300-0. Install supplied tachograph terminal on yellow wire from ECM harness and mate with pin B-7 location in tachograph connector. Connect red wire from ECM harness to reliable ground.

Electronic Speedometer Signal
Use ECM P/N 030-304-0. Using supplied wire tap splices, connect yellow wire from ECM harness plus (+) pulse signal and red wire to reliable ground.

Signal Generator Applications
Use ECM P/N 030-300-0. Install signal generator on transmission drive-in-line with existing speed sender or cable.
P/N 072-215 Signal Generator Harness: Mate connector with signal generator and route wires to ECM. Using supplied butt connectors, connect red and yellow wires to matching colors on ECM harness P/N 071-750.

Note:
Rear engine vehicles may require a wire to front of vehicle for speed signal if not available from transmission.

Refer to calibration procedures
Calibrate as required, seal adjustment of ECM with supplied red seal, connect and mount ECM using double back tape or hardware through mounting holes. Secure connectors on ECM, FCV, PRV and signal generator with supplied lead wire seals as indicated.
Fuel Control Valve (FCV) Mounting Combinations

NOTE: SPECIFY OPTIONAL PARTS REQUIRED.

- TOP MOUNT
- INSIDE MOUNT
- END MOUNT
- OUTSIDE MOUNT

90º FITTING
P/N 063-046
-1 (12 mm)
-2 (14 mm)
-3 (16 mm)

EXTENSIONS
P/N 063-066
-1 (12 mm)
-2 (14 mm)
-3 (16 mm)

90º FITTING
P/N 063-046-2
VEHICLE SPEED LIMITING SYSTEM

**module selection:**
- P/N 030-300-0 HIGH FREQUENCY
- P/N 030-300-L-0 LOW FREQUENCY

**speed sender**
- Drive size | P/N | Notes

**notes:**
1. VEHICLES WITH MECHANICAL SPEEDOMETERS REQUIRE A SPEED SENDER. SELECT THE APPROPRIATE SPEED SENDER. EXAMPLE: 023-002-E