

# HUSS Filters



## What they do

The exhaust gas of diesel engines contains particles damaging to health. HUSS diesel particulate filters collect more than 99% of these particles. With continued operation time, the level of particulate matter in the filter grows, and so does the exhaust gas back pressure. The level is displayed on the Control Unit. When the filter is Full (and the exhaust back pressure is at maximum), the HUSS Control Unit starts the alarm "ALARM FILTER LOADED". The HUSS filter will give you approximately 8 to 10 working hours till it's full.



## Control Unit Normal Operation

The ignition switch must be on for the Control Unit to operate. A buzzer sounds for at least 1 second, both LEDs are lit. The status of filter is displayed.

If, prior to last switch-off, the filter was full, or regeneration was interrupted, the buzzer will sound continuously. Under this condition, the engine cannot be restarted till the filter is regenerated.

During normal operation, both green and red LEDs are lit. If the filter is full, only the red LED will be lit. If the display states "call service" or "maintenance" or some other fault, contact the Garage.

Keys:



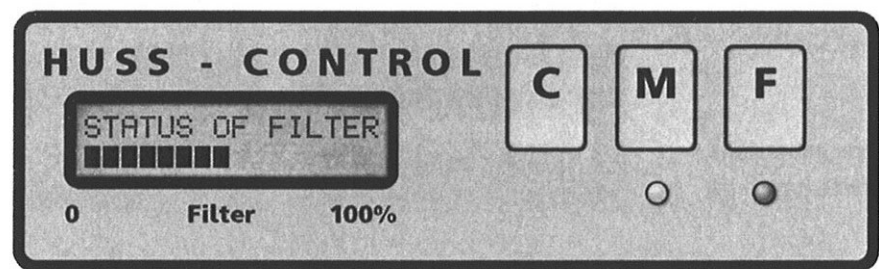
Control



Mode



Function



## Regeneration

During regeneration, the collected soot particulates are burned. These accumulated hydrocarbons are transformed into Carbon Monoxide (CO), Carbon Dioxide (CO<sub>2</sub>), and steam. The resulting gases then escape through the end pipe of the filter.

**Warning:** although the filter screens out 99% of harmful particulate matter, it still produces Carbon Monoxide (CO) which can be hazardous in enclosed spaces.

The engine must be off to regenerate with the Ignition in RUN position.

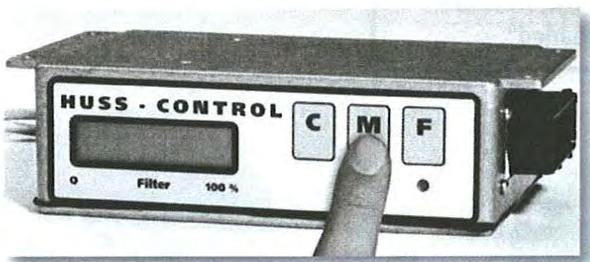
You do not have to wait till the filter is full to regenerate, you can regenerate at any time. Regeneration is recommended at least once a day. The regeneration process takes about 10 to 15 minutes depending on the model of HUSS Filter.

**Warning:** If the filter gets full and is not regenerated, it can cause the engine to shut down. If this occurs at a critical operational moment it can cause injury to personnel or damage to property and equipment.

**Warning:** During regeneration, hot exhaust gases escape from the exhaust gas outlet pipe. Keep a safety distance of at least 60 inches during regeneration.

## Regeneration Procedure (also posted in vehicle)

1. The vehicle should stand level.
2. Switch off the motor.
3. Ignition: "ON", do not start engine. Voltage is supplied to the Control Unit.
4. Press "M" and hold for 5 seconds. The display will countdown 5 seconds, then regeneration will begin.



You can interrupt regeneration by turning OFF the ignition on smaller vehicles, or by pressing the "F" key.

### Further displays after expiry of 5 sec. during regeneration

- The compressor is started to cool down the system
- The glow plug is switched on
- The fuel-air-mixture is ignited.
- Regeneration of the diesel particulate filter is carried out. The display shows the remaining time of regeneration.
- Regeneration is finished. This information is displayed for 3 min.



## Emergency starts

During the regeneration process the engine is interlocked, so you can not start the vehicle.

To move the vehicle in case of emergency during regeneration, press both "M" and "F" buttons simultaneously and hold them down while you start the engine.



You can now move the vehicle. After 1 minute of running the engine in emergency mode, the regeneration process will have to be restarted manually again.

**CAUTION:** Only use Emergency Mode in case of emergency. If you use it to increase filter operation time, it will overload and destroy the filter, possibly damage the engine, and may void the warranty.