

Action code: AT FIRST OPPORTUNITY

Engine overspeed shutdown system

Replaces SL2023-750

SL2024-755/JNN
April 2024

Concerns

Owners and operators of MAN four-stroke engines
Type:

Marine: L21/31, L27/38

Stationary: L21/31S, L27/38S, V28/32S

Propulsion: L21/31, L27/38

Dual Fuel: L23/30DF, L28/32DF

Attachment:

Work card M5090105-14, Function test of shutdown

Dear Sir or Madam

First and foremost, we take safety issues relating to our products very seriously. Given this commitment, we are continuously monitoring the performance of our products in the field. As a manufacturer of premium quality products, we are committed to keeping you informed of any significant changes in the perceptions of risk relating to the safe operation of our products.

This service letter contains important information regarding the introduction of an improved solenoid valve for the overspeed protection system of the above-mentioned engine types.

Generally, the engine is protected against overspeed by a redundant safety system.

In case the maximum permissible revolutions are exceeded, the system is activated by the engine control system.

The system consists of a primary overspeed shutdown, this is activated by a stop signal sent to the governor, and a secondary air operated mechanical overspeed shutdown system.

In case the overspeed shutdown system is activated, the fuel pumps are forced to index "0" by means of the governor and the pressurised air supplied to each individual fuel injection pump, or to a stop cylinder that will force the fuel rack to stop position, depending on the execution of the shutdown system.

For easy verification of the function of the secondary air-operated overspeed shutdown system, Work card M5090105-14 (Function test of shutdown) has been updated. Please discard the previous version and insert this one in your instruction manual.

The air supply of the overspeed shutdown system is controlled by a solenoid valve installed in the engine's control air system.

Our design consists of various types of solenoid valves that have been applied to the engine types in our engine programme.



Recent test of the applied valve types have revealed that the air flow through one of these valves is limited and in some cases, causes an undesired delay in the activation of the engine emergency overspeed shutdown.

For easy identification, the design of the solenoid valve with reduced flow is shown in Fig 1.

The specific type with reduced flow is of the brand Lucifer and marked E133K05, please see Fig 2.



Fig 1. Solenoid valve for overspeed shutdown



Fig 2. Marking of solenoid valve

An identical Lucifer valve with higher flow rate is available, this valve is marked E131K06.

In cases where the valve type E133K05 is installed at the engine overspeed shutdown system, we recommend to replace this at first opportunity with the valve of a higher flow rate marked E131K06.

The observed delay in activation of the overspeed shutdown can in a worst case scenario lead to a delayed shutdown, which in very rare cases might in consequence not stop the engine in due time.

We would like to remind you of the importance of conducting regular checks of the overspeed shutdown functionality every 3 months according to the maintenance programme in the instruction manual.

For ordering the replacement parts mentioned in this service letter, please contact your local PrimeServ agent or our PrimeServ department by e-mail to: primeserv-hol@man-es.com

Yours faithfully



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