

Action code: IMMEDIATELY

**Inlet pressure settings for air starters**

SL2020-696/JNN  
May 2020

**Concerns**

Owners and operators of  
MAN four-stroke diesel engines.

Type:

Marine: L27/38, L23/30H Mk3

Stationary: L27/38S, L23/30S Mk3

Propulsion: L28/32A, L27/38

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

Dear Sir or Madam

This Service Letter contains important information concerning possible early deterioration of the starting gear rim in the engine's fly-wheel.

Our Service Department has reported early deterioration of the starter gear rim on some engines in service. According to our investigations the observed deterioration is caused by unfavorable starting air pressure before the engine.

Our recommendation for the air starting pressure is to keep the inlet pressure at 7-9 bar. However, due to the above observations, we recommend to keep the pressure at the upper limit of 9 bar to ensure optimum performance of the air starter.

**NOTE:** This service letter only covers air starters with a maximum allowable inlet pressure of 10 bar. We therefore recommend to check the actual pressure limit on the name plate of the air starter before making any changes to the inlet pressure.

In addition to the pressure settings before the air starter, it is important to frequently drain out condensate water from the starting air system and to clean and maintain filters and valves in the system to ensure correct air pressure and flow to the starter.

For new engines the pressure setting value will be increased as standard, and the recommended setting value will appear from the documentation delivered with the engines.

Please see next page for more information.

Yours faithfully

  
**Mikael C. Jensen**

Vice President,  
Engineering

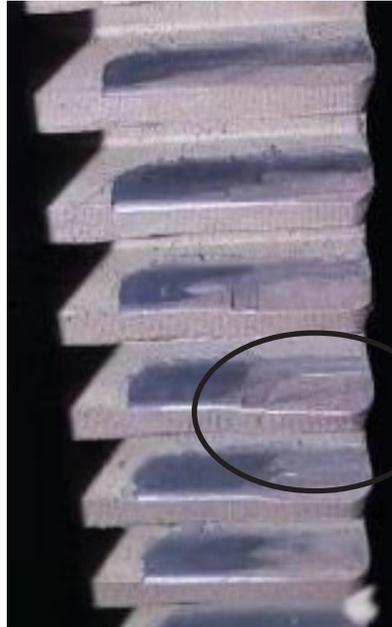
  
**Henrik Møller Hansen**

Senior Manager,  
Production Support



In case of unfavorable pressure conditions before the starter, there is a risk of reengagement of the starter pinion drive during the starting sequence; also called bouncing pinion. In such a case there is a risk that the turning torque can be applied to the pinion drive when this is only partly engaged, hereby causing deformation to the teeth of the starter gear rim on the flywheel.

The observed damage may extend further and can lead to starting failure if starting of the engine is continued with unfavorable pressure conditions.



Example of indent marks, observed at the tip of the teeth on the starting gear rim, caused by reengagement of the pinion drive

Example of new gear rim and a gear rim with damage

If you have any questions to this service letter please contact your local PrimeServ agent or our PrimeServ department by e-mail to [primeserv-hol@man-es.com](mailto:primeserv-hol@man-es.com)