



Action code: AT FIRST OPPORTUNITY

New Design of High-Pressure Hydraulic Hoses

Personnel safety – protective tubing

SL2017-639/CSB
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Concerns

Owners and operators of MAN four-stroke diesel engines.

Types:

Marine: L16/24, L21/31, L23/30H, L27/38, L28/32H

Stationary: L16/24S, L21/31S, L23/30S, L27/38S, L28/32S, V28/32S

Propulsion: L21/31, L27/38, L23/30A, V23/30A, L28/32A, V28/32A

Summary

In order to minimize the risk of personal injury when working on MAN engines we enforce the use of hydraulic hoses equipped with protective hose.

Dear Sirs

In 2006 a new design of hydraulic hoses with protective tubing was introduced to minimize the risk of personal injury in the event of a rupture.

During service attendance we still see many ships using the old type of hydraulic hoses without the protective tubing. As our service personnel have reported near miss incidents with ruptured hydraulic hoses, it is of utmost importance that this risk is eliminated. As a consequence, our service personnel is instructed to only use the new type of hydraulic hoses with the protective tubing.

We encourage you to do the same to improve the safety of your personnel working on MAN Diesel & Turbo designed engines. As the upgrade is inexpensive and the safety benefits are high, we hope you will follow our example, and consequently urge the crew on board the vessels to inspect their hydraulic hoses and, if required, replace them as soon as possible with the new type.

The new type can be acquired from MAN PrimeServ Four-Stroke Denmark Spare Part Sales:

Propulsion : PrimeServ-frh@mandieselturbo.com
GenSet: PrimeServ-HOL@mandieselturbo.com

On the following page further information on the issue is provided including a guideline on how to identify which type you have onboard.

Yours faithfully

Poul Knudsgaard
Vice President
PrimeServ

Jim Nepper
Senior Technical Manager
PrimeServ



NOTICE Possible consequence of using old type of hose

Destructive tests to see the difference between the two types of hoses have been performed and they illustrate very well the improved safety of using the new type.

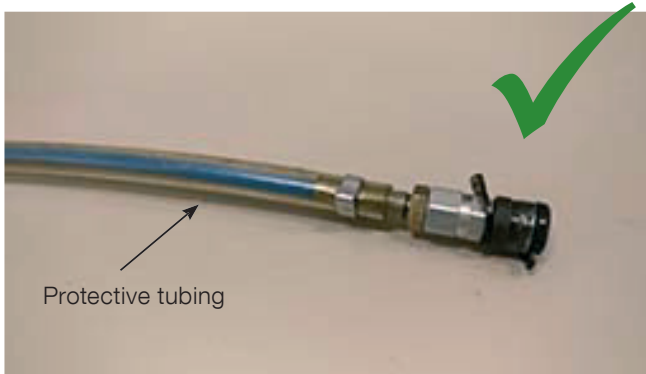
- The video in this link shows what happens in case of a rupture with a hydraulic hose of the old type.
[Video of a rupture when using OLD type of hose](#)
- The video in this link shows a rupture in the new type of hydraulic hose and the added safety the protective tubing gives.
[Video of a rupture when using the NEW type of hose](#)

The first video clearly demonstrates the risk, when a hydraulic hose with 1200 bar of pressure ruptures. The high-pressure oil jet may cause physical injury or poisoning to the operating personnel. The physical injuries are obvious, but the poisoning happens when the hydraulic oil penetrates deep under the skin. A poisoning of that kind is life threatening to the injured, especially in environments far away from medical attention.

NOTICE How to identify if you have the new or old type of hydraulic hose

The pictures below show the old and new types. Please scrap the old types and replace them with the new type of hydraulic hoses to improve safety onboard your vessel.

The new type



The old type



Identification numbers for the hydraulic hoses can be found in your instruction manual in the chapter “520/620 – Tools”.