

Liquid fuel filter change instruction

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Techn. Area / DCC M/& DC105

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# Liquid Fuel filter Change Instruction for YAMAMA GT6 - GT9

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### Liquid fuel Filter Change Instruction

## 1 Introduction

### 1.1 Purpose of the document

The purpose of this document is to give instructions on how a filter change is performed.



Warning!

Contact with fuel can cause allergy and/or irritated skin.

Before any action is taken, read the document *Maintenance Safety*.

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#### Liquid fuel Filter Change Instruction

# 2 Liquid fuel filter change instructions



Warning! Only authorised personnel are allowed to change liquid fuel filter cartridges

The liquid fuel filter is installed in a hazardous zone, sparks can ignite fuel

fumes.

Caution! It is of utmost importance that the liquid fuel filter exchange is performed

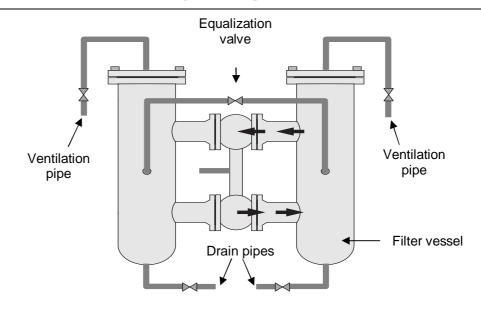
correctly according to the following instructions. Negligence to follow the

instruction may lead to severe damage to the gas turbine.

#### 2.1 Description of the liquid fuel filter

The coalescer filtered fuel enters the liquid fuel filter unit at the bottom and passes through one of the two filters (one in operation and one in stand-by). The filtered liquid fuel passes out at the top of the liquid fuel filter unit. See figure below.

Liquid fuel filter unit with fuel flow through filter in operation



Caution!

If the dirty filter is to the right, all actions must be performed as shown but MIRROR REVERSED.

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### 2.2 When to exchange filters

When an alarm is given for high differential pressure across the dirty filter elements, the fuel flow must be transferred to the clean element, and the dirty element must be changed. You can check the differential pressure on the indicator, see P&ID 2046025, MBN10CP005.

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#### 2.3 Before exchanging the filter

Before you start to exchange the filter provide a suitable spanner, a pair of gloves and a bucket.



Warning! HAZARDUOS AREA, smoking is not permitted in liquid fuel skid.

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#### 2.4 **Exchange Instructions**

The filter can be changed during operation and stand still. Further details are given in the subsuppliers documentation, system MBN.

#### 1. Open the equalization valve (1)

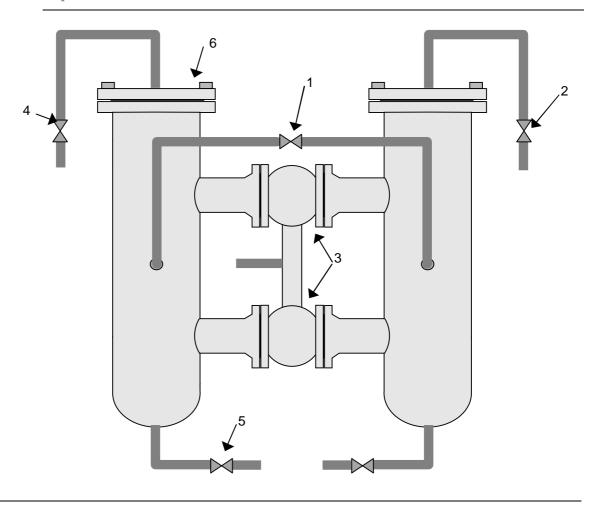
This valve is connected across the three way valve and enables fuel to pass from the filter in operation into the stand-by filter.

#### 2. Clean filter: Open the ventilation valve (2) until fuel streams in the pipe. Then close the ventilation valve (2)

This ensures that the clean filter vessel is filled with fuel.

- Shift the three way valve (3) position by means of the handle
- Close the equalization valve (1).

#### Liquid fuel filter unit



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- 6 Dirty filter: Open the drain valve (5) and the ventilation valve (4). Drain the fuel into a bucket.
- 7 Dirty filter: Close the drain valve (5) and the ventilation valve (4).
- 8 Dirty filter: Open the empty filter housing by opening the vessel lid (6). Remove the filter cartridge. Install new filter cartridge. Check and if necessary change the gasket. Close the vessel lid (6).
- 9 Open the equalization valve (1) and the ventilation valve (4) of the exchanged filter until fuel streams in the pipe. After this, close the equalization valve (1). Now the exchanged filter are filled with fuel.
- 10 Close the ventilation valve (4) for the cleaned filter vessel.

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