

## AIC-6000 series Installation of circulation pump

888  
Instruktor

900  
Veritas

1000

4000  
Veritas

5000  
Fuel flow  
Master

6000  
Swissline

FS

BC 2022  
+  
Totalizer



CE Zertifiziert  
EME geprüft  
Laut Euro-Norm  
95/54/CE

CE certified  
EME Test according to  
95/54/CE directives

Certifié CE  
Conforme aux tests  
EME suivant la  
directive 95/54/CE

## **SAFETY FIRST**

The AIC 6004 or AIC 6008 meters can only be installed in order to measure any fuel flow.

Other applications are not guaranteed by AIC.

The meters shall be installed, connected, commissioned, operated and maintained under supervision of a qualified engine engineer, who is aware of all danger factors.

## **Important**

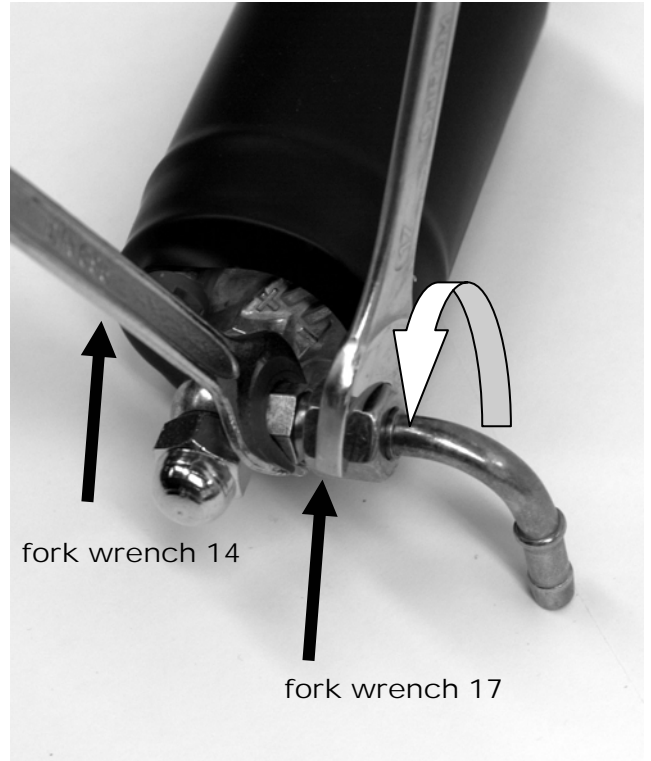
While opening the AIC-6000 meter make sure that fuel oil has been removed from it.

## **Removing the existing pump**

### **1st step**

#### **Outflow side first (Fork wrench 14 mm + 17 mm)**

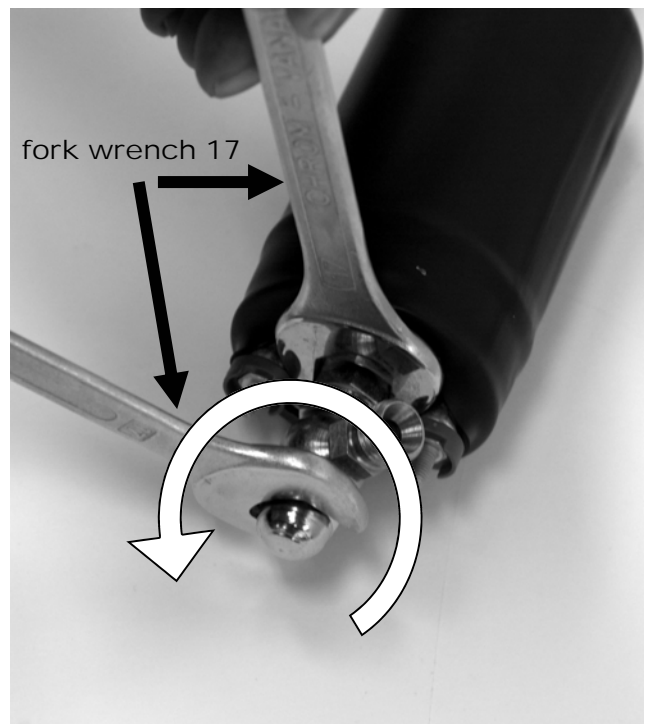
Unscrew at the outflow side the elbow pipe connector first. Maintain the pump side nut (DN 14) with the fork wrench, and unscrew the elbow nut (DN 17). As shown on the picture.



### **2nd step**

#### **Outflow side (Fork wrench 2 x 17 mm)**

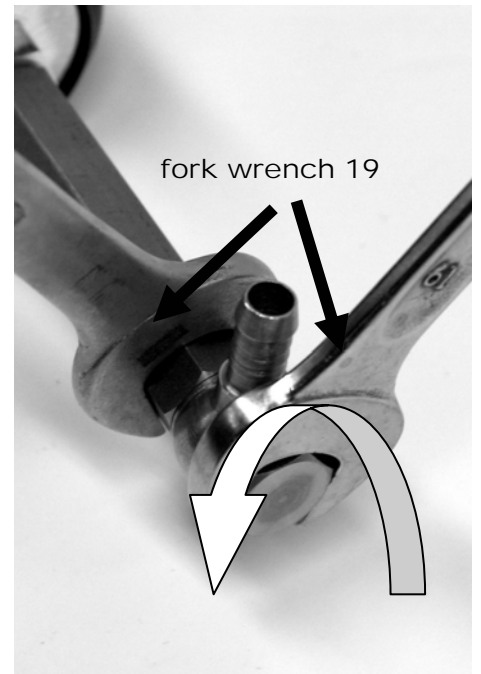
Unscrew at the outside flow side, the banjo connector. Maintain the pump side screw (DN 17) with the fork wrench, and unscrew the nut (DN 17). As shown on the picture.



### **3rd step**

#### **Inflow side (Fork wrench 2 x 19 mm)**

Unscrew at the inside flow, the banjo bolt of the extension pipe. Maintain the extension pipe (DN 19) with the fork wrench, and unscrew the banjo bolt (DN 19). As shown on the picture.



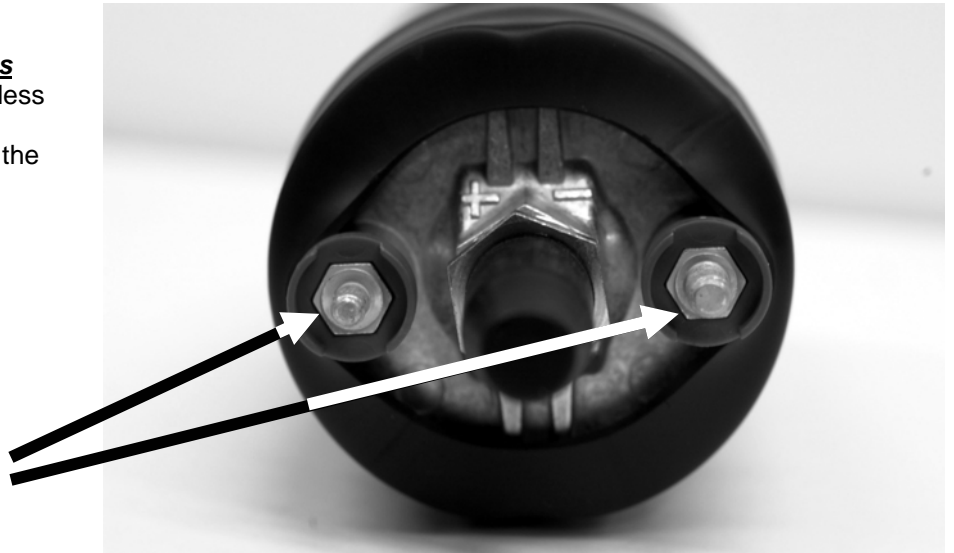
### **4th step**

#### **Disconnect the electrical connections**

Remove the pump from inside the stainless steel housing.

Unscrew both electrical connector from the pump

Remove the protection caps, and disconnect the pump

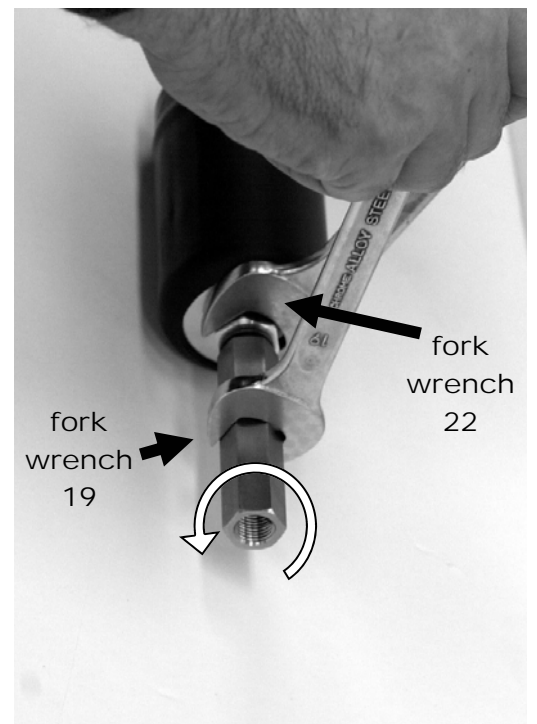


### **5th step**

#### **Inflow side (Fork wrench 22 mm + 19 mm)**

Unscrew at the inside flow, the extension pipe from the pump.

Maintain the pump (DN 22) with the fork wrench, and unscrew the extension pipe (DN 19). As shown on the picture.



## Mounting the new pump

### Important

- Make sure that while proceeding to the mounting of the pump, that no dirt is entering the pump.
- While putting back the different bolts and nuts, please use always new copper washers.

### For mounting the new pump onto the AIC-6000 meter, proceed from the step 5 to the step 1 of the removing pump explanation.

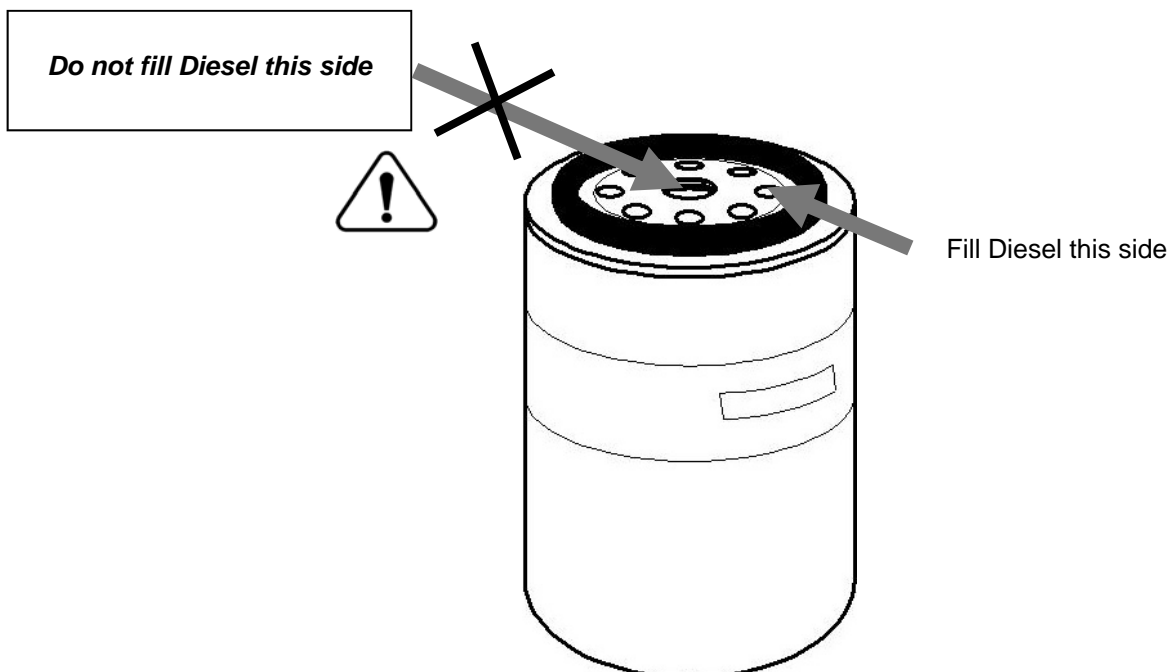
- Never exceed the following tightening torque :
  - Step 1 = 30 Nm
  - Step 2 = 30 Nm
  - Step 3 = 40 Nm
  - Step 4 = 5 Nm
  - Step 5 = 40 Nm

## Connection to the fuel hoses

**Important** : all connections from tank, couplings and measuring instrument must be absolutely tight. When fuel leakage happens on suction side, no fuel leak can be seen, but engine malfunctions can be expected.

After installation of the AIC-measuring-unit, the filter cartridge must be filled up with clean Diesel fuel (approx. 1 litre) **before starting the engine.**

It is recommended to fill the filter via the external holes (inlet side of the filter) in order to filter the fuel brought in. Tighten up the filter cartridge **by hand only.**



## Bleeding / Venting

Once the flow meter is mounted on the vehicle, meter, filter and piping system must be vented.

### Important notice:

**If the Diesel piping system is not vented correctly, an accurate measurement cannot be guaranteed.**



NB: the bleeding can be done by starting the engine then, it is not necessary to use the hand pump first!

### Bleeding / venting, step by step:

On the flow meter, disconnect the return-line coming from the engine.

Close the return-fitting on the flow meter with a cap-nut. The pipe connections need to be hermetically closed, to avoid air coming into the piping system during the bleeding / venting.

Introduce the return-line into the filler-cap of the fuel-tank or into an other receptacle.

Start the engine and run it in idling rpm.. Run the engine minimum 10 minutes as long as bubbles remain in the fuel.

Stop the engine, remove cap nut on the return fitting, and connect the return-line to the flow meter

Start again the engine and check the tightness after the test drive.

**Attention: engines with specific bleeding arrangement (fine filter for exp.), must be vented according to the engine manufacturer recommendations.**

## Maintenance

The maintenance of the AIC flow meters is limited to the exchange of the filter, to the periodical check of the fuel lines and to the tightness of the connectors.

According to the fuel quality, we recommend to exchange the filter every 30 000 to 50 000 Km (20 000 to 35 000 Mi.)



***Never blast compressed air into the flow meter !***



### Filter characteristics

Filter cartridge to be screwed on:

0.75 to 1 litre

Thread: M16 x 1.5

Gasket diameter: 71 /62 mm

Filter cartridge diameter: 93 mm

### Example:

HENGST	H 17 WK 03 (L = 142 mm)
MANN	WK 940 / 5 (L = 142 mm)
MANN	WK 962 / 4 (L = 210 mm)
HIFI	FF 231 (L = 142 mm)
HIFI	FF 4070 (L = 210 mm)



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