

# ***TK GUIDELINE***

## ***HEATER REPLACEMENT IN R134a CHILLERS***

**MODELS :**

***TK500 - TK1000 - TK 2000***

# ***BEFORE STARTING***

**WARNING! Before mounting the heater, make sure to NOT install KRES01# heaters in chillers containing flammable gas (R290)**



**WARNING! Parts replacements and reparation may be carried out only by qualified persons. If this are not performed properly, they can cause electric shock, burns and fires**



# EQUIPMENT AND INITIAL STEP

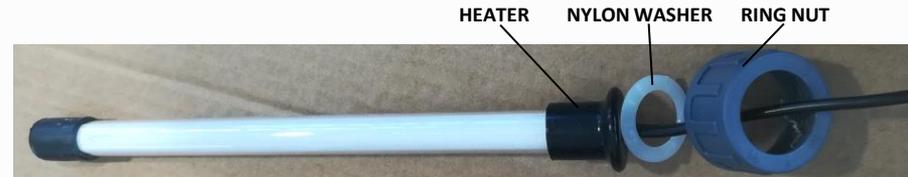
## EQUIPMENT

- *Big Crosshead Screwdriver*
- *Small Crosshead Screwdriver*



## SPARE PARTS

- *Heater KRES02# (spare part)*
- *Nylon washer 3.5.038*
- *Ring nut 2.4.124*



## INITIAL STEP

- *Turn OFF the chiller and let it OFF for twenty minutes before proceeding*
- *Disconnect the chiller from power supply*
- *Never touch internal part or dismount chiller when it is connected to power supply to avoid potential electric shock.*
  
- *Disconnect chiller from water pipe, by using squeeze tube clamps and let some water flow away from chiller exchanger.*



# STEP n. 1



*Remove the conveyor from the top part of the chiller.*

*You can see the metal black grid and the red or grey fan support.*



*Remove the air filter grid and air filter from their position.*

# STEP n. 2



5



6

*Using the screw-driver, remove the 4 INOX screws indicated in the picture*



7



8

*Remove the red or grey fan support lifting it up from the bottom edge.*

*Leave it temporarily on the metal cover, as you can see in the picture.*

*Pay attention not to hurt yourself, the metal sheet is sharp*

# STEP n. 3



*Disconnect the heater connector (img.22)*

*Unscrew the heater ring nut (img.21)*

*Replace the heater inside the exchanger (img.20). Don't forget the nylon washer*

*Screw very well the ring nut (img.21)*

*Connect the new heater to the connector in the cable assembly that you find in the grey or red fan support (img.22)*

# STEP n. 4



*Assemble dismantling parts following the indicated sequence:*

- 1) Four inox screw (fix the fan support on the metal cover)*
- 2) Conveyor*
- 3) Air filter*
- 4) Air filter grid*

# STEP n. 5

## CHECKS IN WATER CIRCUIT

*Connect chiller joints to water pipes and turn on the pump.*

*Check that there is required real water flow trough chiller exchanger.*

*Minimum is 500 l/h for TK500, TK1000, TK2000*

*The real water flow is the effective flow of water that you find when aquarium is assembled (when pumps and pipes are connected to tank and chiller). The real water flow is NOT the nominal one, that you read on the pump (with H=0 m).*

*Never run the chiller without required water flow otherwise the heater will stop to work permanently*

## CHECK THAT HEATING FUNCTION IS ON (O1 PARAMETER)

*Connect chiller to Power Supply*

*Turn on chiller display*

*Enter the programming mode by pressing **SET+ARROW DOWN** keys for more than 3 sec (**Hy** or **o1** will be displayed).*

*Find **o1** parameter pressing **ARROWS** and display its value pressing **SET**.*

*Check that is **ON**. In the case it isn't, use **ARROW** to change **o1** value from **OFF** to **ON**, then wait for 15 sec without pressing any key. The water temperature will be displayed again and the heating function is now ON.*

