New fan mod. 969-9297 is suitable for Varian pumping systems TV 551 Navigator (models 969-8832, 969-8833, 969-8834 and 969-8835), TV 701 Navigator (models 969-8836 and 969-8837) and TV 1001 Navigator (models 969-8838, 969-8839, 969-8840 and 969-8841).

1-1 Fan outline

The following figure shows the outline of the new fan.

![Figure 1.1 – Outline drawing](image1.png)

1-2 Fan preparation

To prepare the fan for the installation it is necessary to detach the spacer from the fan installation flange. (see the following figure).

![Figure 1.2 – Spacer removing](image2.png)

**NOTE**

*Do not loose the spacer: it must be used during the fan installation.*
1-3 **Controller removing**

Before the fan installation, the Navigator controller must be detached from the pump as detailed in the following procedure (see figures 1.3.1 and 1.3.2):

1. Remove the power cable from the controller.
2. Disconnect the High Voltage connector from the pump.
3. Turn the pump upside-down.
4. Unscrew the three socket head screws M5 that fix the controller to the three fixing blocks.
5. Remove the controller.
6. Unscrew the three M6 screws that fix the fixing blocks to the pump.

![Fig. 1.3.1 – TV 551/701 Navigator controller removing](image1)
![Fig. 1.3.2 – TV 1001 Navigator controller removing](image2)

1-4 **Fan installation**

To install the fan the following procedure must be executed (see figures 1.4.1 and 1.4.2):

1. Position the fan and the spacer on the pump bottom.
2. Position the three fixing blocks.
3. Fix the three fixing blocks, the fan and the spacer with the three M6 screws removed during the controller removing.

![Fig. 1.4.1 – TV 551/701 Navigator fan installation](image3)
![Fig. 1.4.2 – TV 1001 Navigator fan installation](image4)
1-5 Controller installation

To complete the fan installation, the Navigator controller must be reinstalled as detailed in the following procedure (see figures 1.5.1 and 1.5.2):
1. Position the controller on the fan flange.
2. Fix the controller by means of the three socket head screws M5 removed during the controller removing.
3. Turn the pump.
4. Plug the line cord and the pump cable to the pump.
5. Connect the fan supply cable to the suitable connector of the controller as detailed in the following paragraph.
6. Connect the mating connector with the jumper on the interlock signal to start the pump.

Fig. 1.5.1 – TV 551/701 Navigator controller installation

Fig. 1.5.2 – TV 1001 Navigator controller installation

1-6 Fan to Controller Connection

The fan has one cable terminating with one 2-pins plastic male connector for the 24Vdc power supply; plus a female “faston” pin for the shield. Plug the 2-pins plastic male connector into the “FAN” named 2-pins female connector available on the controller. If a small metal blade is present on the controller panel (shield) near the “FAN” connector, plug here the “faston” female in order to shield the fan’s cable, otherwise, if not present, leave it unconnected.