

# Kalypso and Zodiak

Video Production Center

TME 2111 & 5811 Fan Replacement



REFERENCE ECO: 236M

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## Grass Valley Web Site

The [www.thomsongrassvalley.com](http://www.thomsongrassvalley.com) web site offers the following:

**Online User Documentation** — Current versions of product catalogs, brochures, data sheets, ordering guides, planning guides, manuals, and release notes in .pdf format can be downloaded.

**FAQ Database** — Solutions to problems and troubleshooting efforts can be found by searching our Frequently Asked Questions (FAQ) database.

**Software Downloads** — Software updates, drivers, and patches can be downloaded.

# ***FMN 075078010***

*Effectivity Date: January 20, 2006*

## **TME 2111 & 5811 Fan Replacement**

### **Purpose**

The existing fans on the TME 2111 and TME 5811 boards used on Kalypso or Zodiak switcher control panels shipped before 2006 need to be replaced because the bearings wear out and fail.

### **Parts List**

Maglev Replacement fan (supplied):

Part Number 369005911

### **Required Tools**

The following tools are required for installation, but are not supplied:

- Medium flat blade screwdriver
- Medium Philips cross head screwdriver
- Long nose pliers
- 3/16-inch nut driver
- # 10 and # 15 Torx Screwdriver

## TME 2111 & 5811 Board Fan Replacement Procedure

The original fans to be replaced (Part Numbers 3690059-00 or 3690059-10) are mounted on these boards:

- 671492300      Kalypso Classic SST board
- 671494200      Kalypso RT Proc Interface
- 671494201
- 671494202
- 671494204
- 610093-00      Kalypso Classic/DUO/HD Local Aux Panel
- 671634601      Zodiak-25 Frame Proc

1. Locate each board installed in your facility in order to replace the original fan with the new Maglev fan supplied.

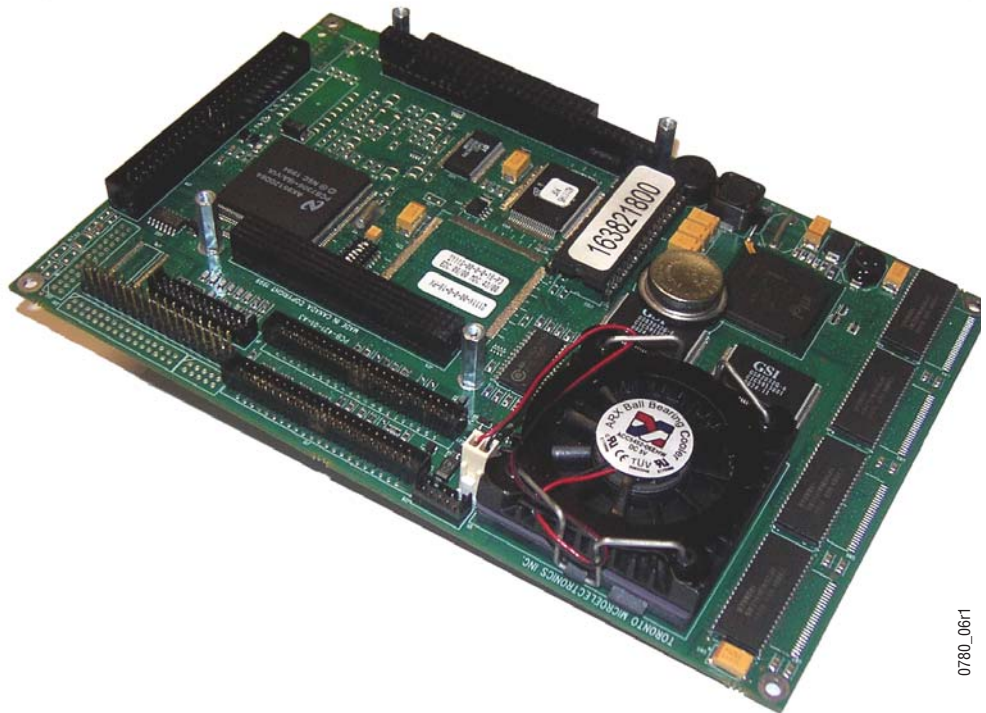
**WARNING Avoid exposed circuitry** — Do not touch exposed connections, components or circuitry when power is present.

**CAUTION Use anti-static procedures** — Static sensitive components are present which may be damaged by electrostatic discharge. Use anti-static procedures, equipment and surfaces during servicing.

2. Remove the processor or board from the frame.

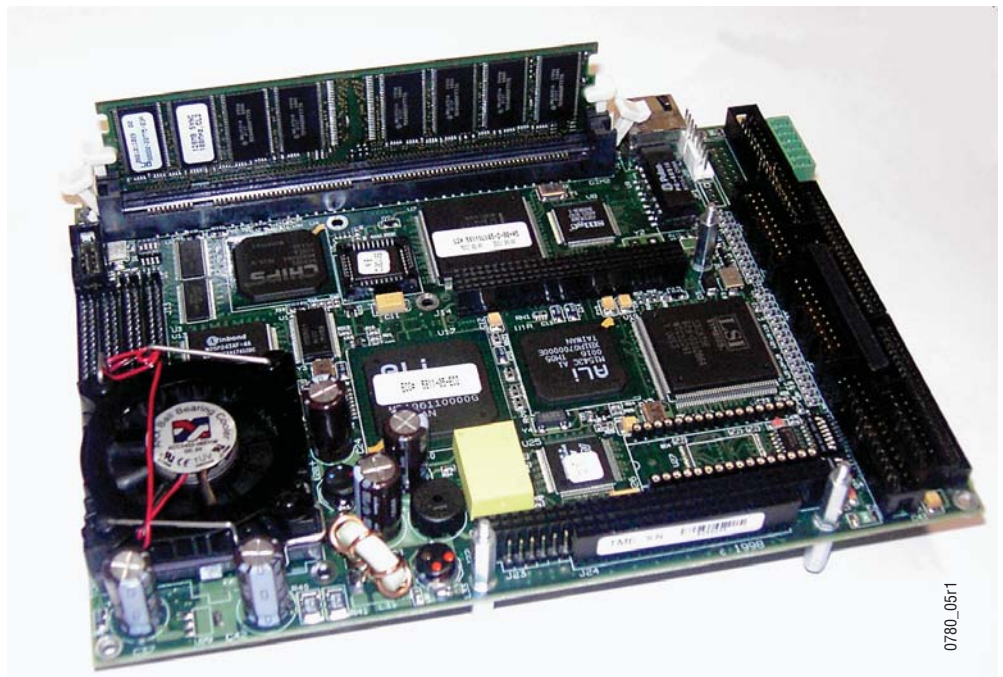
3. Locate the fan on the board. (See [Figure 1](#) and [Figure 2](#).)

Figure 1. 2111 Board with old fan



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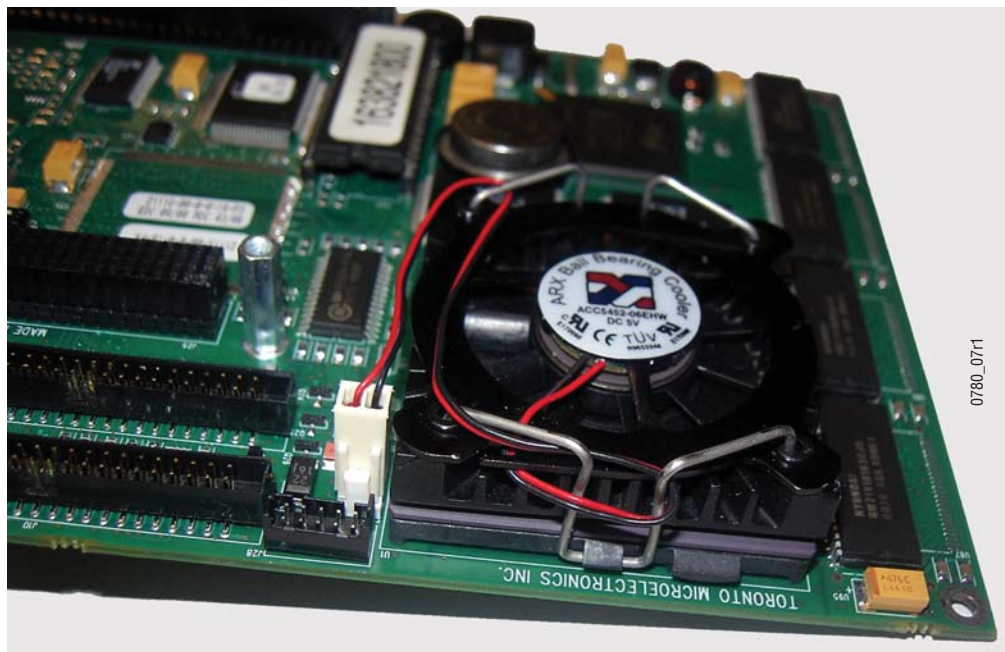
Figure 2. 5811 Board with old fan



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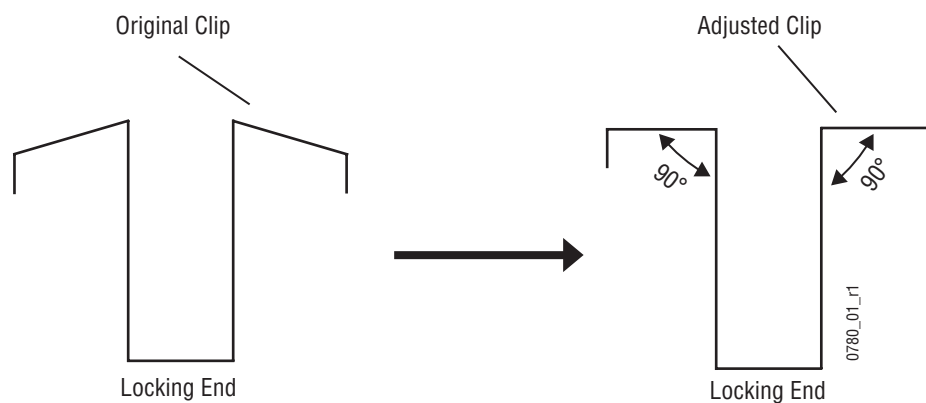
4. Disconnect the red and black fan power connector.

Figure 3. Old fan on 2111 Board with red and black power connector



5. Remove the metal clips holding the fan to the board.
6. Remove the old fan (Part # 369005900/10).
7. Adjust the metal clips for the fan using a pair of long nose pliers.
  - a. Looking at the clip from above, use the long nose pliers to bend the clip wings so that they are at a 90-degree angle to the main body of the clip as shown in Figure 4

Figure 4. How to bend the clips



- b. Now rotate the clip so that you are looking at it from the side with the locking end away from you as shown in [Figure 5](#). Flatten the wings on the clip so that they are aligned with the main body of the clip.
- c. Position the long nose pliers in the middle of the wings on the clip and bend them up to a 20-degree angle as shown in [Figure 5](#).

Figure 5. Side View — Bending the Clip with Locking End At Distant End

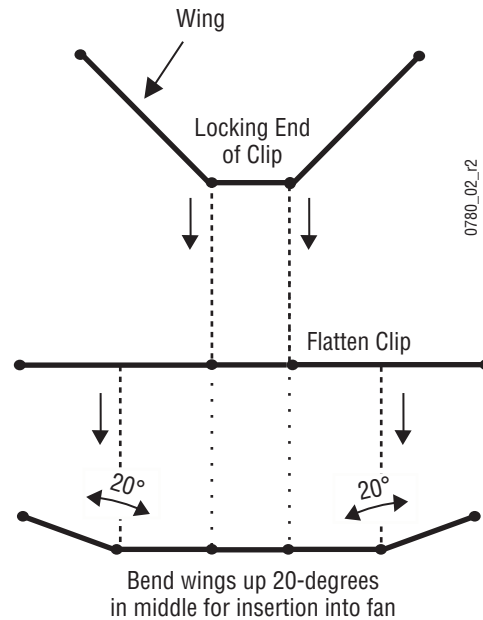


Figure 6. Clips before and after bending

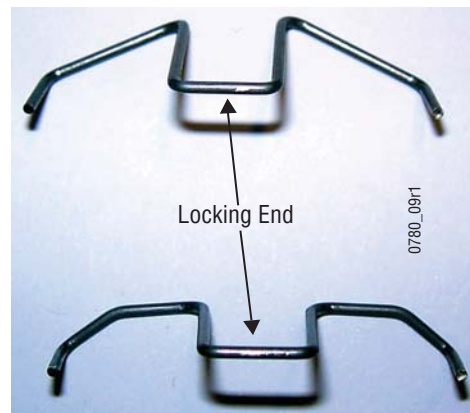
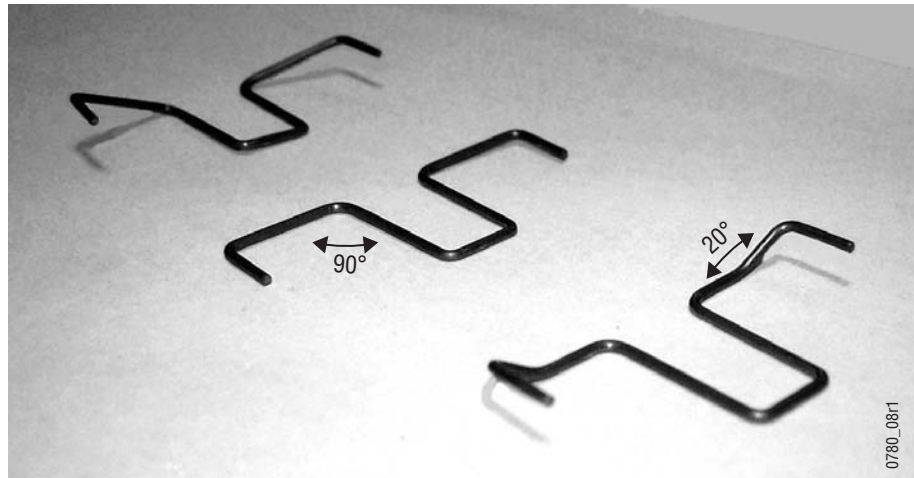


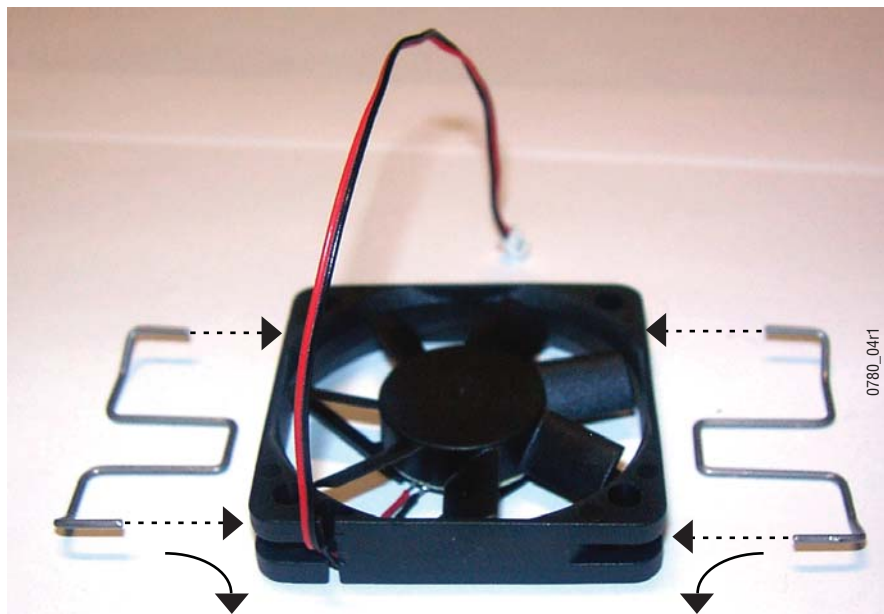


Figure 7. Clips Before adjustment (left) and After (right)



8. Insert the ends of the two clips in the two holes on the side of the fan.

Figure 8. New fan with clips ready to be inserted and bent down

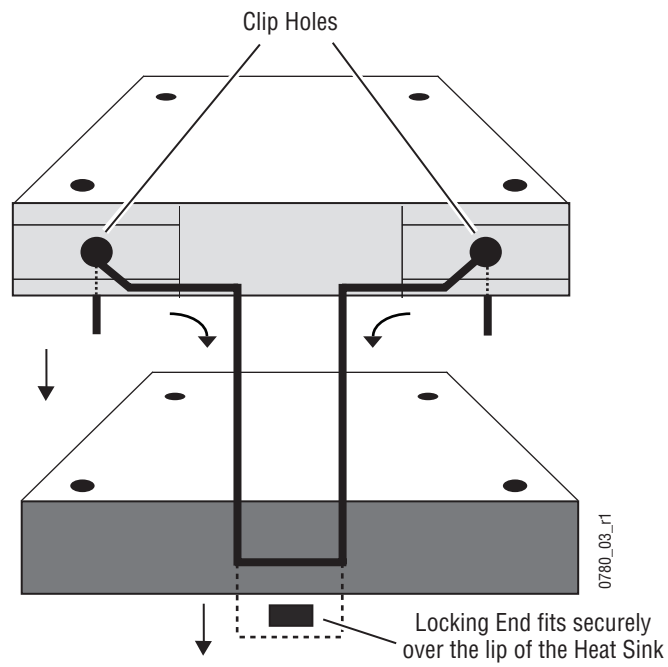


9. Hook the ends of the clip through the clip holes in the fan and bend the locking end of the clip down so you can secure it to the lip of the heat sink. (See [Figure 9 on page 9](#))
10. Place the new fan (Part # 721000300) over the heat sink with the airflow facing into the heat sink (label side down).



**11. Secure the locking end of the clip to the heat sink lip.**

*Figure 9. Placing the Fan over the Heat Sink So That the Clip Connects to the Lip*



**12.** Connect the power plug to the new fan.

*Figure 10. New fan installed on heat sink with label side down, clips secure, and power connected*



**Note** Make sure the plus (+) and minus (-) leads on the fan power plug are connected properly.

When connecting the power connector make sure the Red wire is on the left when you are looking at the fan from the side of the board as shown in [Figure 10](#).