

# Barco service bulletin

---

**Serial Number:** InfoT 589  
**Date:** 19/11/2004  
**Product:** BarcoReality 909  
**Priority code\*:** B

- A. "Must" modification, Barco will provide the necessary components to perform this modification at no charge.
- B. Improves the reliability of the product.
- C. Improves the general working conditions of the product.
- D. For information only.

## 1. BLUE CONVERGENCE (R7631375) FAILURES

### Overview

- Problem
- Solution
- Replacing the base resistors
- Solder tips

### 1.1 Problem

---

#### Oscillations

Oscillations on the end stage of the blue convergence may occur, resulting in an unstable image. These oscillations may cause failures on the peripheral components. Burn out of the Source resistors and other capacitors have been reported.

### 1.2 Solution

---

#### Base resistors

An increase of the Gate resistor value in the blue convergence end stage solves the problem.

### 1.3 Replacing the base resistors

---

#### When ?

The adaptation has to be done in case of a module with index 2 or lower. Convergence modules with index 3 or higher are already adapted.

#### Which resistors have to be replaced ?

- R76, R77, R84, R85, R176, R177, R184, R185  
These 10  $\Omega$  resistors have to be replaced by 100  $\Omega$  resistors

The resistors to be replaced are located on the bottom of the module.

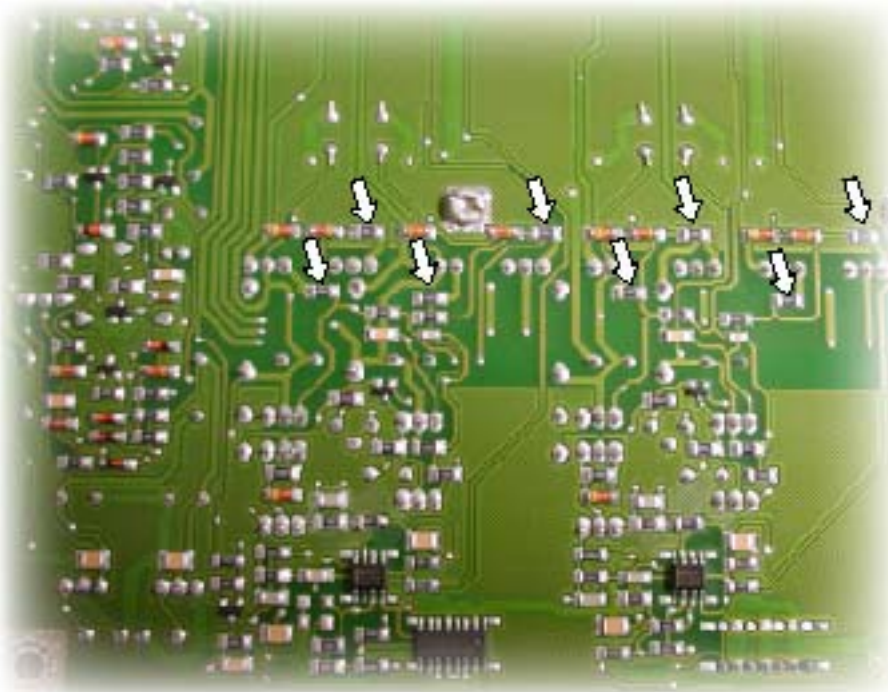


Image 1-1  
Bottom PCB and location of the resistors to be replaced

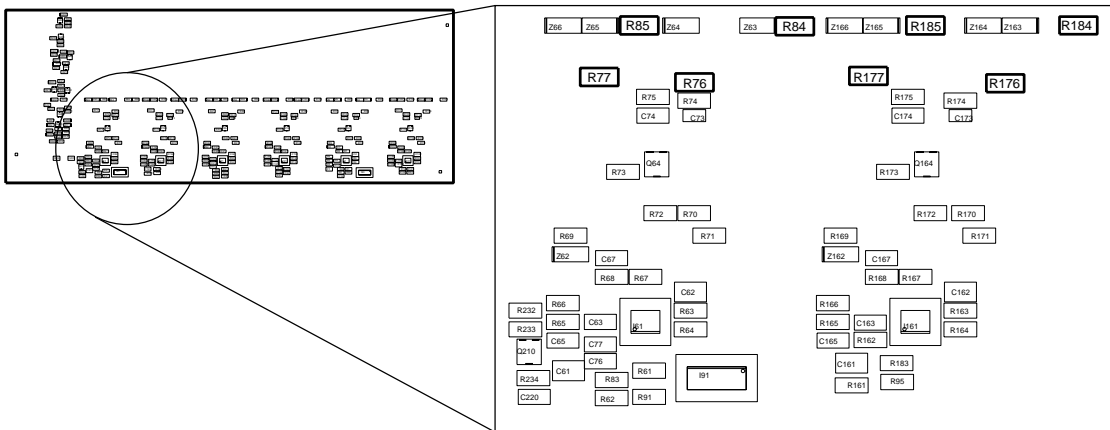


Image 1-2



**Article number**  
**P200387 : 100 Ω resistor**

### How to replace the base resistors ?

1. Remove the drawer
2. Remove the 2 screws and remove the protection plate (image 1-3, image 1-4)  
*Tip: Remove gently the indicated cable from the cable tie*
3. Remove the 2 screws and remove the heatsink (image 1-5)  
*Note: The heatsink may be difficult to remove (superficial tension due to the cooling pasta ). Use a screwdriver (use as lever) and loosen it gently.*
4. Remove the 2 connectors, image 1-5
5. Remove the screws fixing the convergence module.  
*Tip: Do not forget the screw indicated on the image (image 1-6)*

6. Remove the module (image 1-7)
7. Unsolder the 8 resistors located on the bottom of the module (see solder tips)
8. Solder the 8 resistors

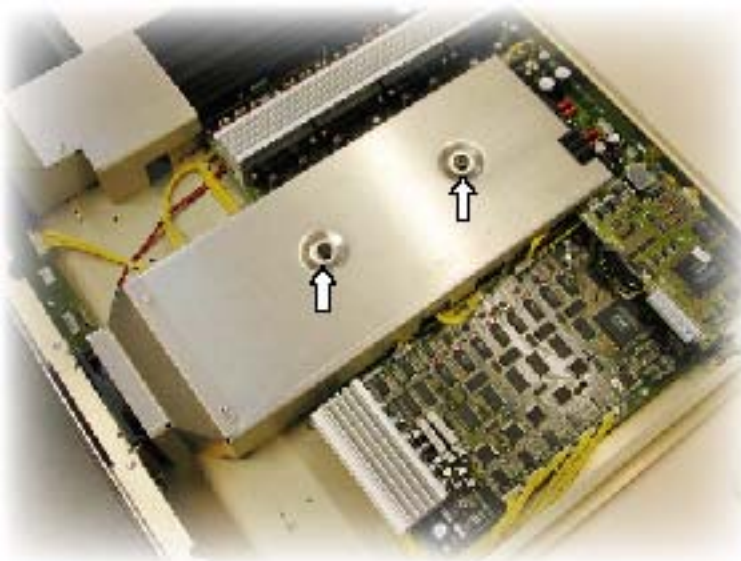


Image 1-3



Image 1-4



Image 1-5



Image 1-6



Image 1-7

## 1.4 Solder tips

---

### Proceed with caution when soldering a SMD component

- Insure that the lead and solder pad area are free of any contamination by cleaning with a solvent approved for use.
- Insure that the Soldering Iron Tip is clean, in good condition and is fully inserted into the heater.
- Use the appropriate Tip and Temperature.
- Do not exert force on the land (pad) during the soldering operation. Damaged or lifted pads may result.
- Maximize the TIP to solder joint heat transfer by melting a small amount of solder on the Tip before contact is made.
- If solder joint is not complete within 5 seconds, the Tip should be removed from the work to prevent thermal damage.
- Surface Mount application however, may require a time period of up to 30 seconds depending upon Component, Land Pattern size and thermal characteristics of the PC Assembly.



**CAUTION: High Tip temperatures may cause damage to the component or to the soldering pads.**

---