

AMPEX CORPORATION  
AUDIO-VIDEO SYSTEMS DIVISION

## FIELD ENGINEERING BULLETIN

MODEL ATR-100  
BULLETIN NO. 60991 SHEET 1 OF 6  
DATE 3/85 BD-8503-07

### ATR-100 MOTHERBOARD

#### I. APPLICABILITY

All ATR-100 machines in service.

#### II. PURPOSE

To avoid failures of CR1 (013-678) located on the electronics motherboard PWA (4050861). In some cases this has caused catastrophic damage to the motherboard and to capstan PWA (4050860) and/or reel servo PWA (4050778).

#### III. DISCUSSION

In order to help prevent this problem, add another diode in parallel to the existing device. You will also need to increase the wattage capacity of R1. This is accomplished by removing the existing R1 and substituting it with the higher wattage resistor.

#### IV. PARTS REQUIRED

Parts required for this update may be purchased through Ampex. Installation assistance can be obtained through your local Ampex regional office at current Ampex Field Engineering rates.

<u>AMPEX P/N</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>
013-678	1N4005 Diode	1
041-545	1K Ohm, CC, 2 Watt, Resistor	1

MODEL	ATR-100	SHEET	2	OF	6
BULLETIN NO.	60991	DATE	3/85	BD-8503-07	

**ATR-100 MOTHERBOARD - Continued****V. PROCEDURE:**  

---

1. Solder in parallel the new diode (013-678) to the existing device, (CR1), on the motherboard PWA. (Make certain that you observe the same polarity). Designate CR2.
2. Remove R1 470 ohm, 1 watt resistor replacing it with the 1K ohm, 2 watt resistor (041-545).

**NOTE**

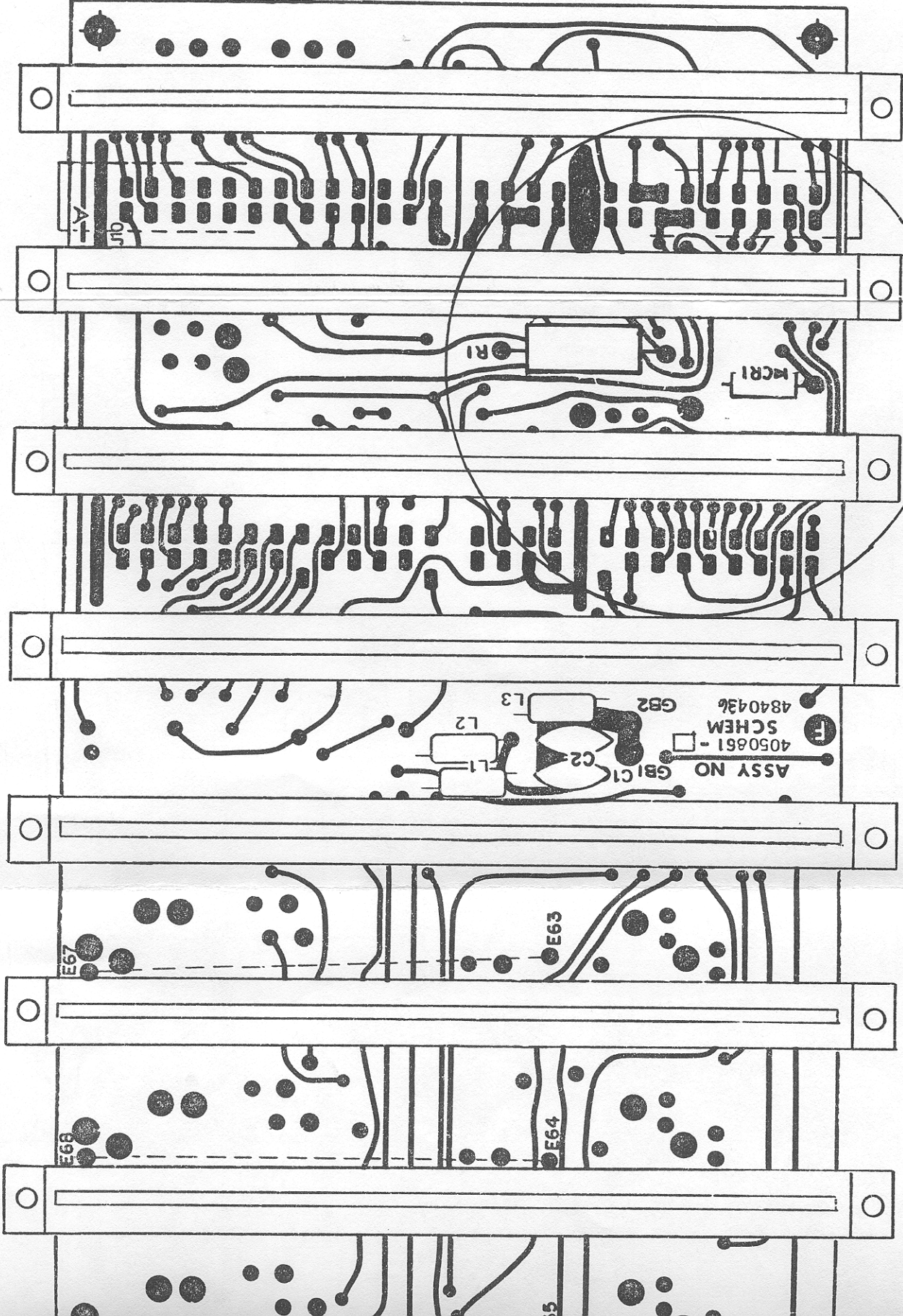
Make certain that you allow enough room for inserting the Main Audio PWA's.



PWA No.  
4050861

PRINTED WIRING  
ASSEMBLY  
MOTHER BOARD

Revision H



REMOVE EXISTING 470 OHM RESISTOR:  
REPLACE WITH 1K OHM 2 WATT.

ADD 1N4005 DIODE IN PARALLEL TO CR1,  
(CAUTION\* BE SURE TO OBSERVE THE  
CORRECT POLARITY.)

NOTE: ON LATER MACHINES,  
CR2 WAS INSTALLED  
AT THE FACTORY.

THIS SCHEMATIC SHOWS COMPLETED  
MODIFICATION.

