

General Information

1996

CRT: A33LPE0201 (14")

Remote Control:

631020001071 (2096R,1496R)

63020001081 (2096T,1496T)

Door Flap:

905001212060 (1496R)

905001212050 (1496/T)

905100007010 (2096 R/T)

Main Power Button:

905108010985 (1496)

905111007120 (2096)

Specifications

Specifications for Matsui 149R/T

Picture Tube: 37cm measured diagonally
Colour System: PAL I
Tuning System: 100 tuneable channels and one SCART input channel
External Antenna: 75Ω DIN type
Sound Output: 3 Watts RMS
SCART Socket: 21 PIN

General

Mains Supply: AC 240V 50Hz
Power Consumption: 60W (max.)
Accessories: Remote control & batteries

Specifications for Matsui 2096R/T

Picture Tube: 50cm measured diagonally
Colour System: PAL I
Tuning System: 100 tuneable channels and one SCART input channel
External Antenna: 75Ω DIN type
Sound Output: 4 Watts RMS
SCART Socket: 21 PIN

General

Mains Supply: AC 240V 50Hz
Power Consumption: 70W (max.)
Accessories: Remote control & batteries

Service Adjustments

Servicing Adjustments and Alignments

High Voltage Test

There is no high voltage adjustment component on the chassis. Changing of +120 depends on the supply voltage if high voltage is to be measured.

- 1: Connect the + probe of high voltage tester to the anode of CPT.
- 2: Adjust contrast and brightness to minimum.
- 3: Measure the high voltage as 23.0 + 5%KV DC for 14". That voltage is 25.5 ± 5%KV DC KV for 20" (51cm) screen size.
- 4: For maximum brightness high voltage regulation should be 2KV DC max.

AGC Adjustment

- 1: Adjust Philips pattern signal which is 60dB uV amplitude (IV) to the RF input.
- 2: Adjust VR182 until a picture is without snow.

Vertical Adjustment

- 1: Apply Philips pattern.
- 2: Cut down the vertical amplitude with VR576.
- 3: Centre picture with three position key.
- 4: Make vertical adjustment with VR576 that will see lower and top lines of picture.

Horizontal Adjustment

- 1: Apply Philips pattern signal.
- 2: Centre the picture to right or left with VR181.

Adjustment of Supply Voltage

- 1: Apply Philips pattern signal.
- 2: Make the volume, brightness and contrast adjustments to minimum.
- 3: Adjust the supply voltage on the pin cathode of D112 as $V_{sys} = 120 \pm 0.5$ by using VR101.

Focus Adjustment

Adjust the thickness of lines until being minimum, by focus trimpot on the transformer. By using crosshatch of multi-burst test pattern.

White Balance Adjustment

- 1: Apply Philips pattern.
- 2: Adjust VR53, VR55 are trimpots to middle position and VR51, VR52 and VR54 are trimpots to minimum.
- 3: Adjust brightness, contrast and colour to minimum.
- 4: Adjust at lower grey bar of Philips pattern by screen trimpot that two bars should be seen.
- 5: Increase brightness control little and adjust white balance by using VR51, VR52 and VR54 with eyes.
- 6: Apply white pattern. Settle screen probe of Minolta. Adjust Y = 5 nits with brightness.
- 7: Increase contrast. Adjust A = Y + 270 + 276 nits by means of VR53 and VR55.
- 8: Set contrast to minimum. Adjust X = Y = 270 + 276 units at Y = 5 nits by means of VR51, VR52 and VR54.
- 9: Check white balance at high and low contrast level. Again make adjustments if necessary.

AFT Adjustment

- 1: Disconnect the IF output of tuner from IF input.
- 2: Apply 39.5MHz signal with signal generator to IF input.
- 3: Connect a digital voltmeter to AFT pin of IC476.
- 4: Adjust T181 coil until the voltage of IC476 is being 2.5Vdc.
- 5: Connect the IF input which was connected at the beginning.

Note: AFT adjustment will be done at 39.5MHz in PAL I chassis.

FTZT Adjustment

- 1: Disconnect the IF output of tuner from IF input.

- 2: Apply 30.9MHz signal with a signal generator.
- 3: Connect oscilloscope probe L151 by Q151, adjust signal at oscilloscope by T27 coil that the signal should be minimum level.
- 4: Apply 40.4MHz signal with signal generator.
- 5: Connect oscilloscope probe L151 by Q151, adjust signal at oscilloscope by T26 coil that the signal should be minimum level.
- 6: Connect the IF input which was disconnected in the beginning.

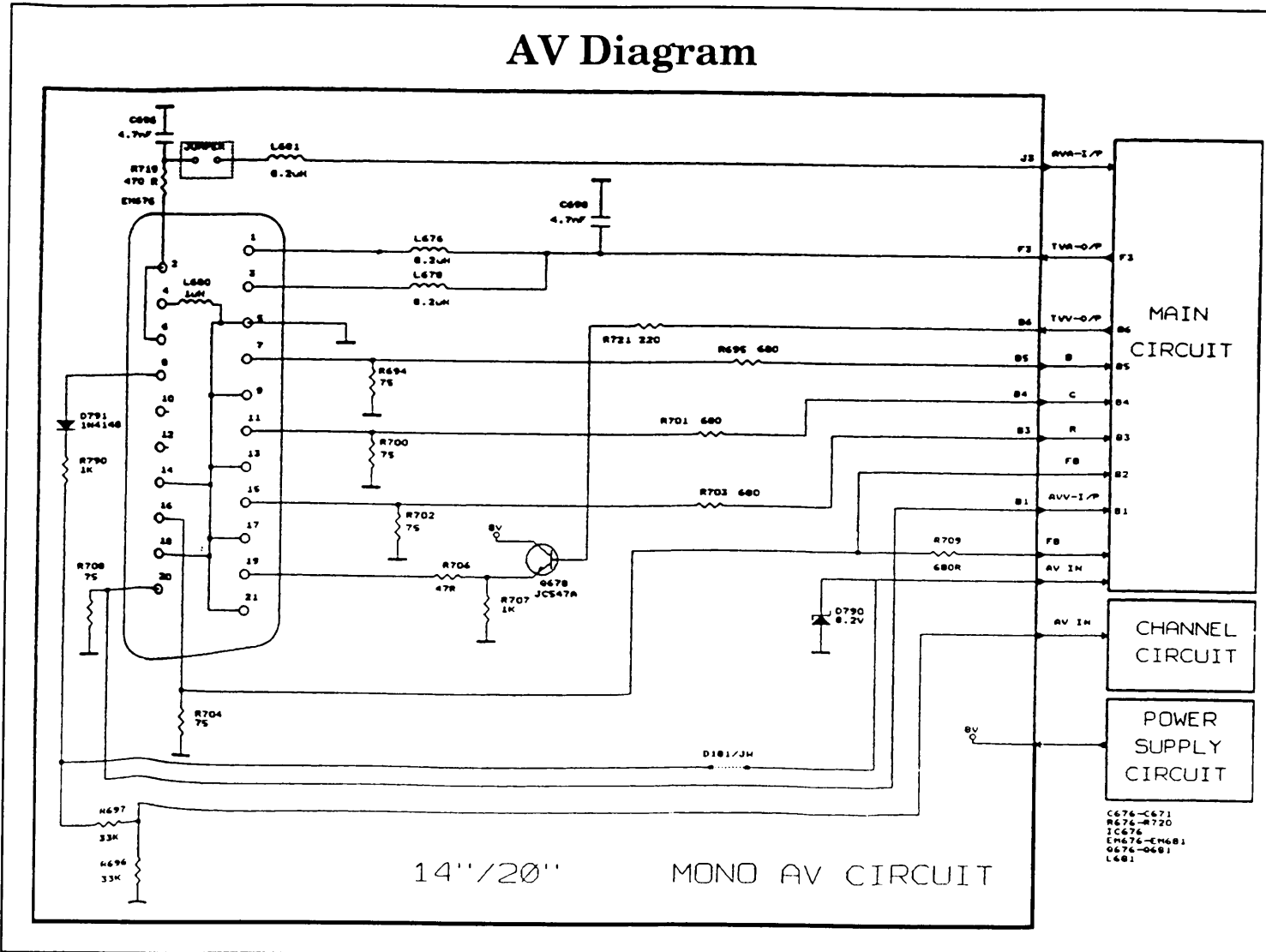
Removal of Child Lock

There is a situation that can occur whereby a consumer may have entered a PASS code number and then lost their record, or accidentally input a random code number. Should either situation occur, the TV will remain in the PASS mode and will not allow access to these channels. There is not a procedure within the instruction book to override this situation.

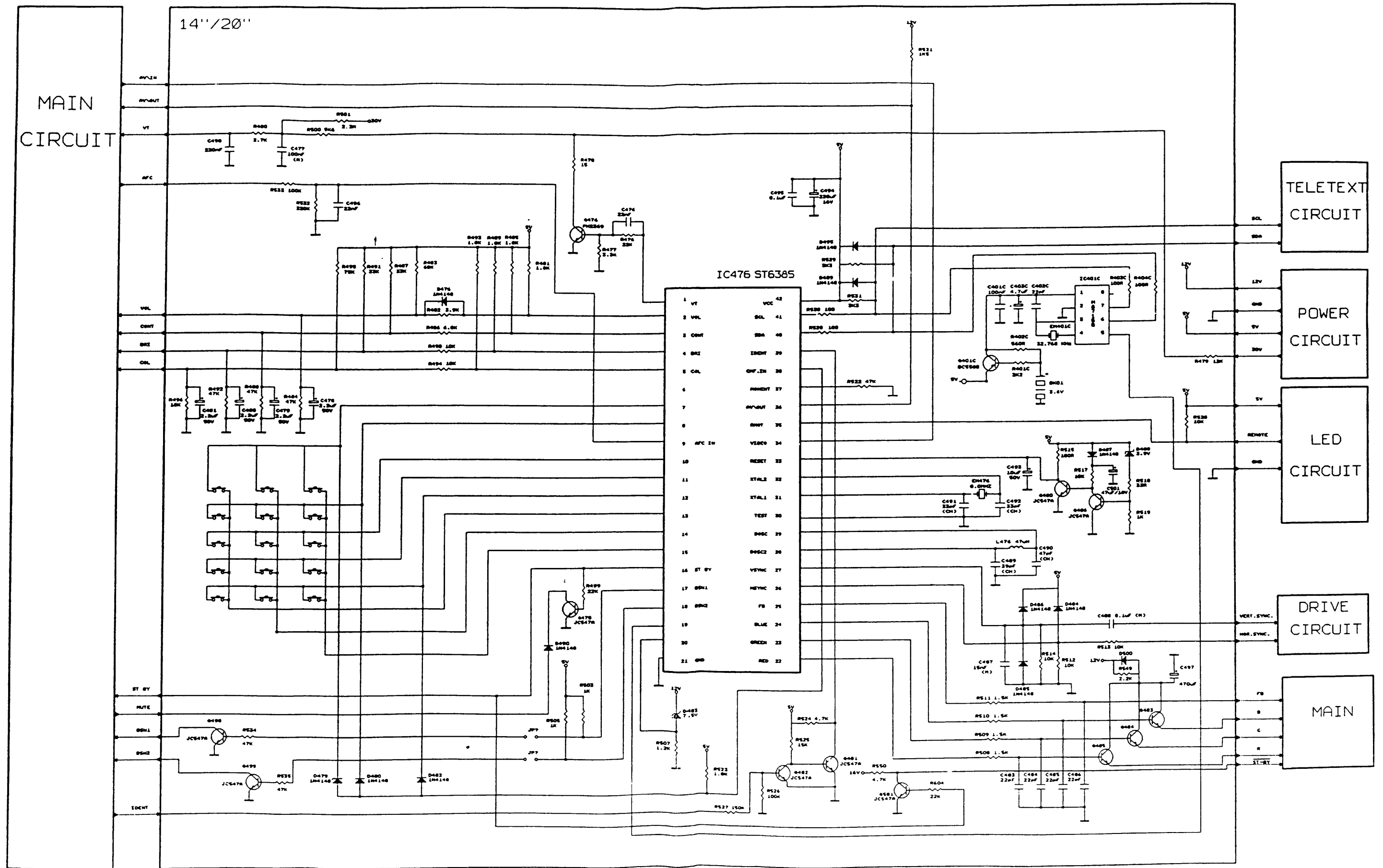
To remove the PASS (child lock) code number will require a modification to a remote control. Please DO NOT modify consumers remote.

- 1: Remove Philips securing screw on the rear case of the remote control.
- 2: Remove rear case by sliding it towards the battery compartment.
- 3: Remove PCB and connect a tact switch (type used in most own brand VCR) between pin 4 and pin 17 of IC1. When the TV is switched on via the remote control and a channel selected which has a PASS code number (child lock) will allow access approximately 1 second after pressing the tact switch once. The pass channel will clear and the picture will return.
- 4: To remove child lock permanently, press tact switch again, a message "PASS CLEAR" will appear on screen.

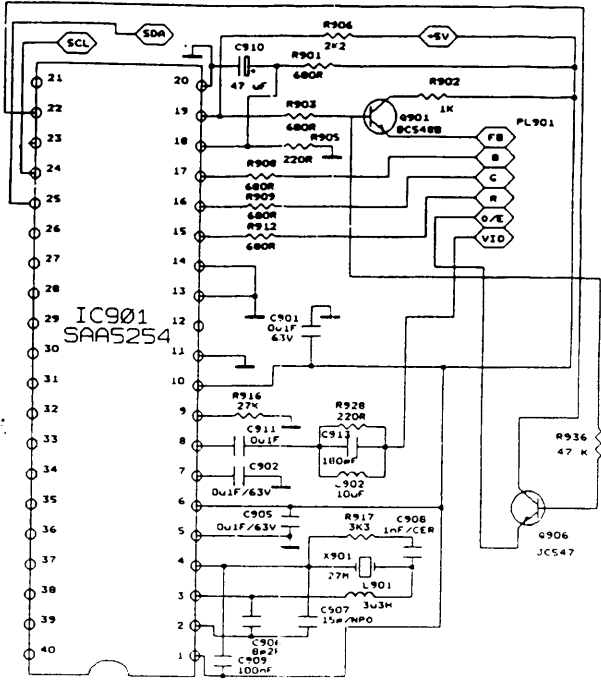
CRT Diagram



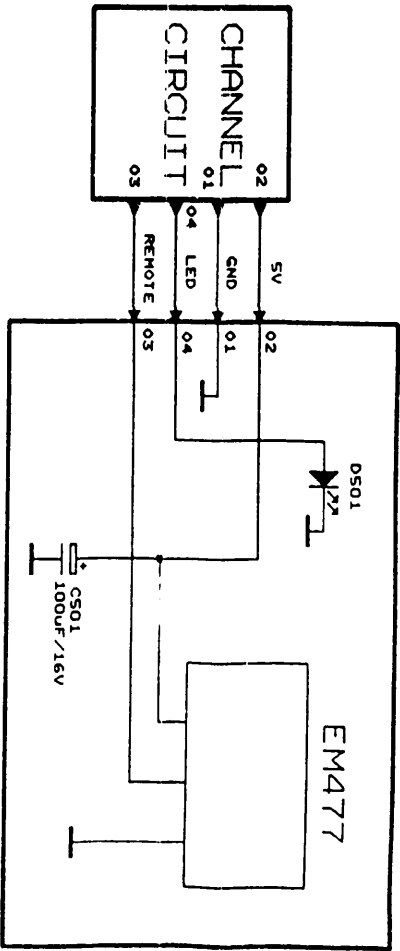
Channel Diagram



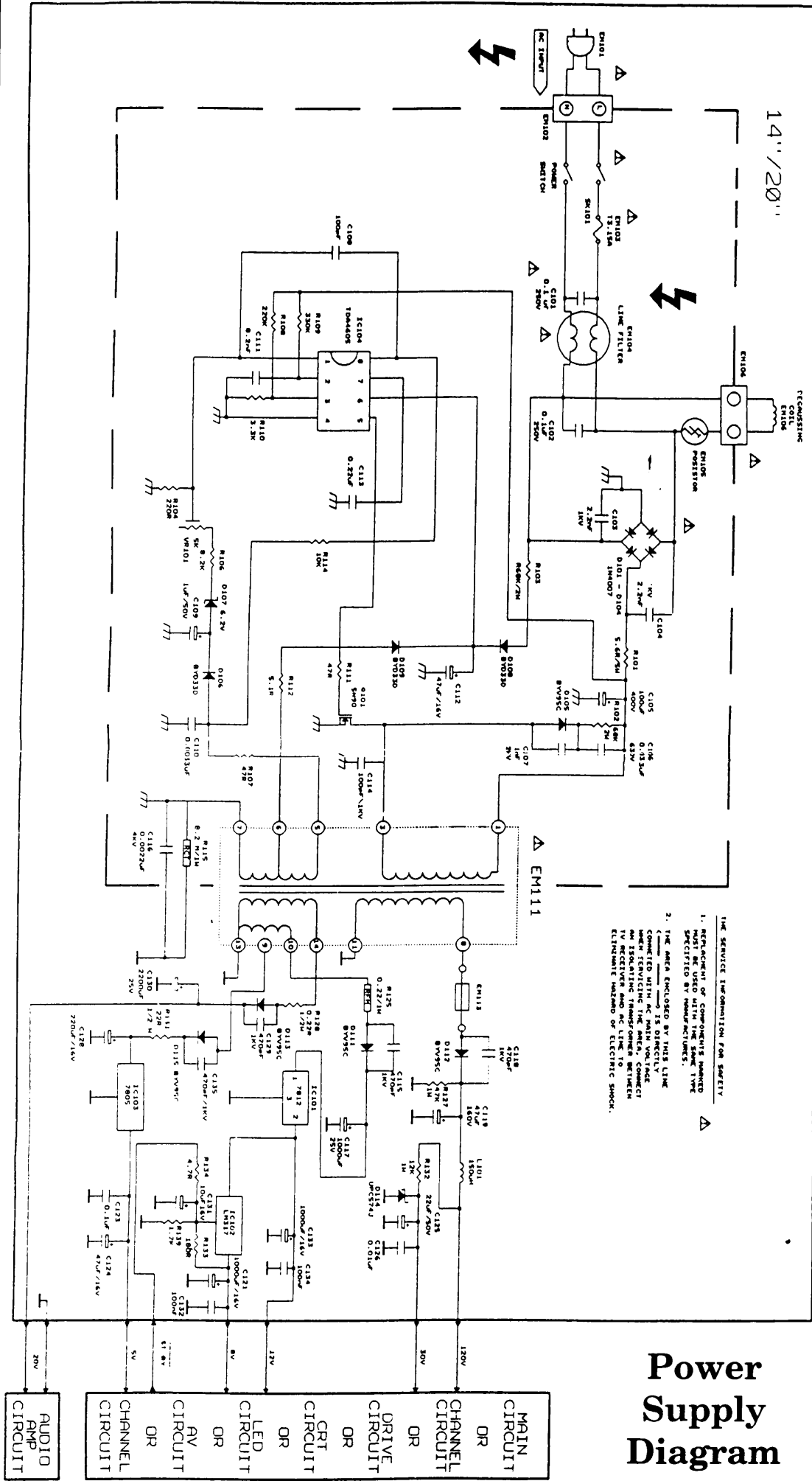
Text
Diagram



LED Diagram



Power
Supply
Diagram



Drive
Diagram

