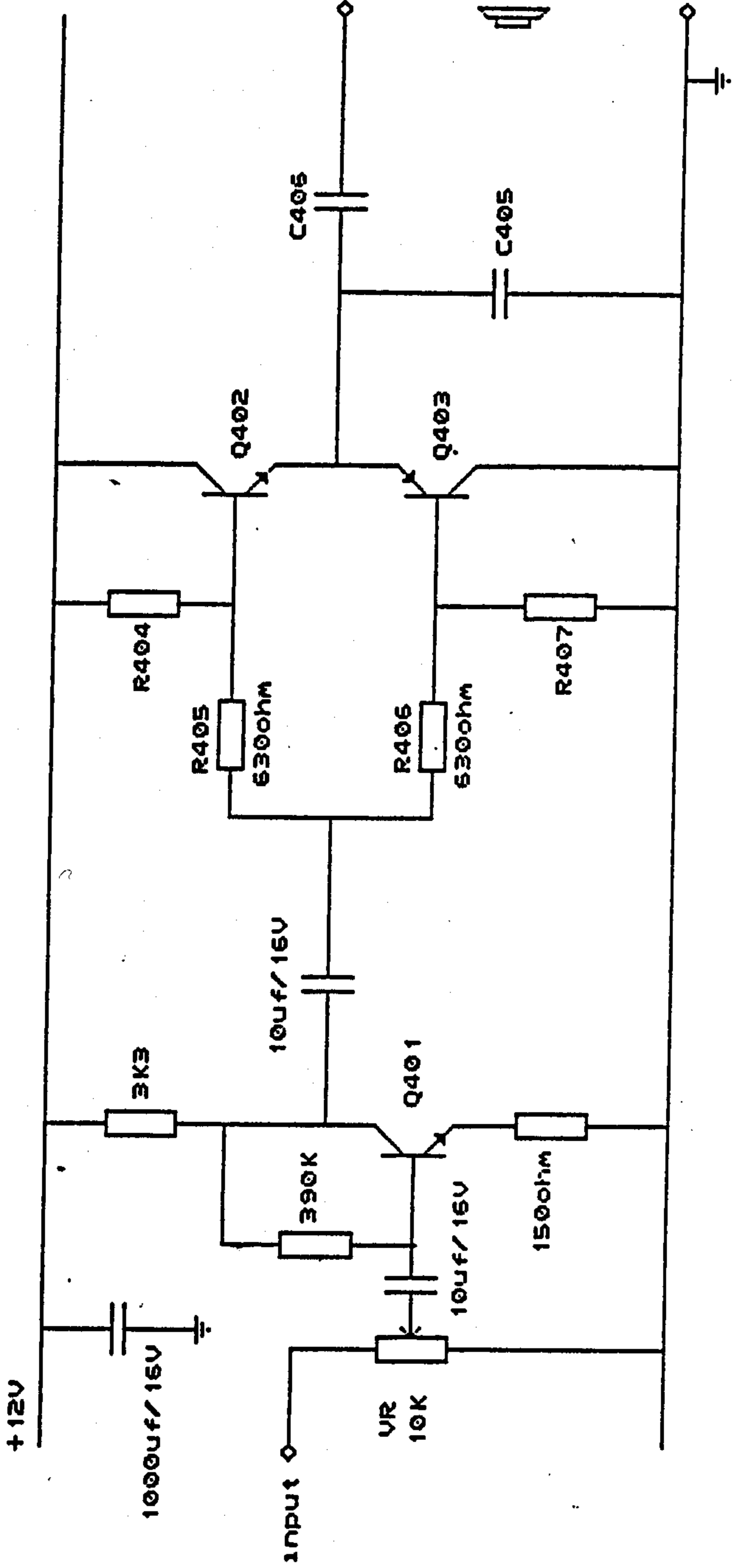
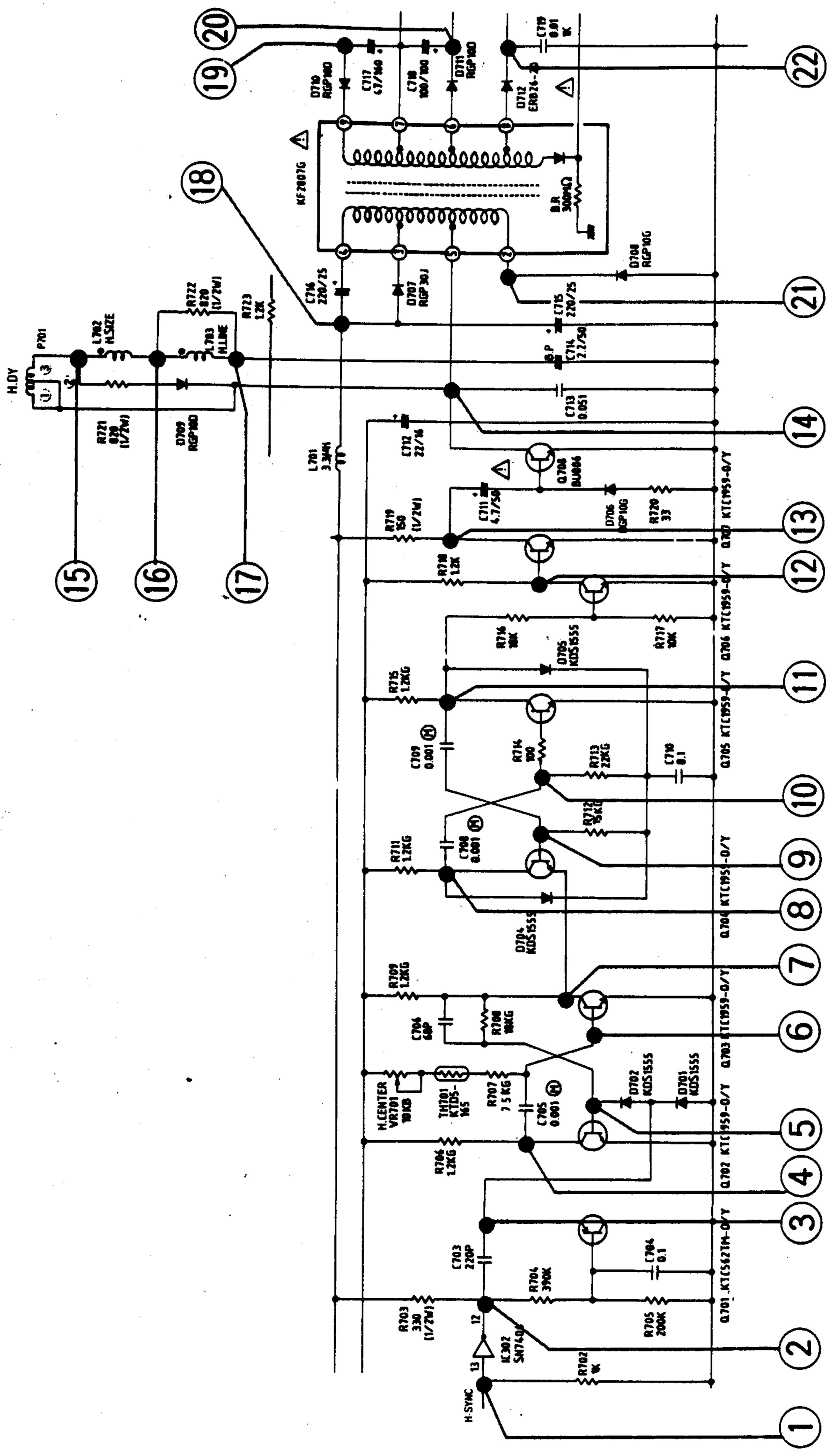
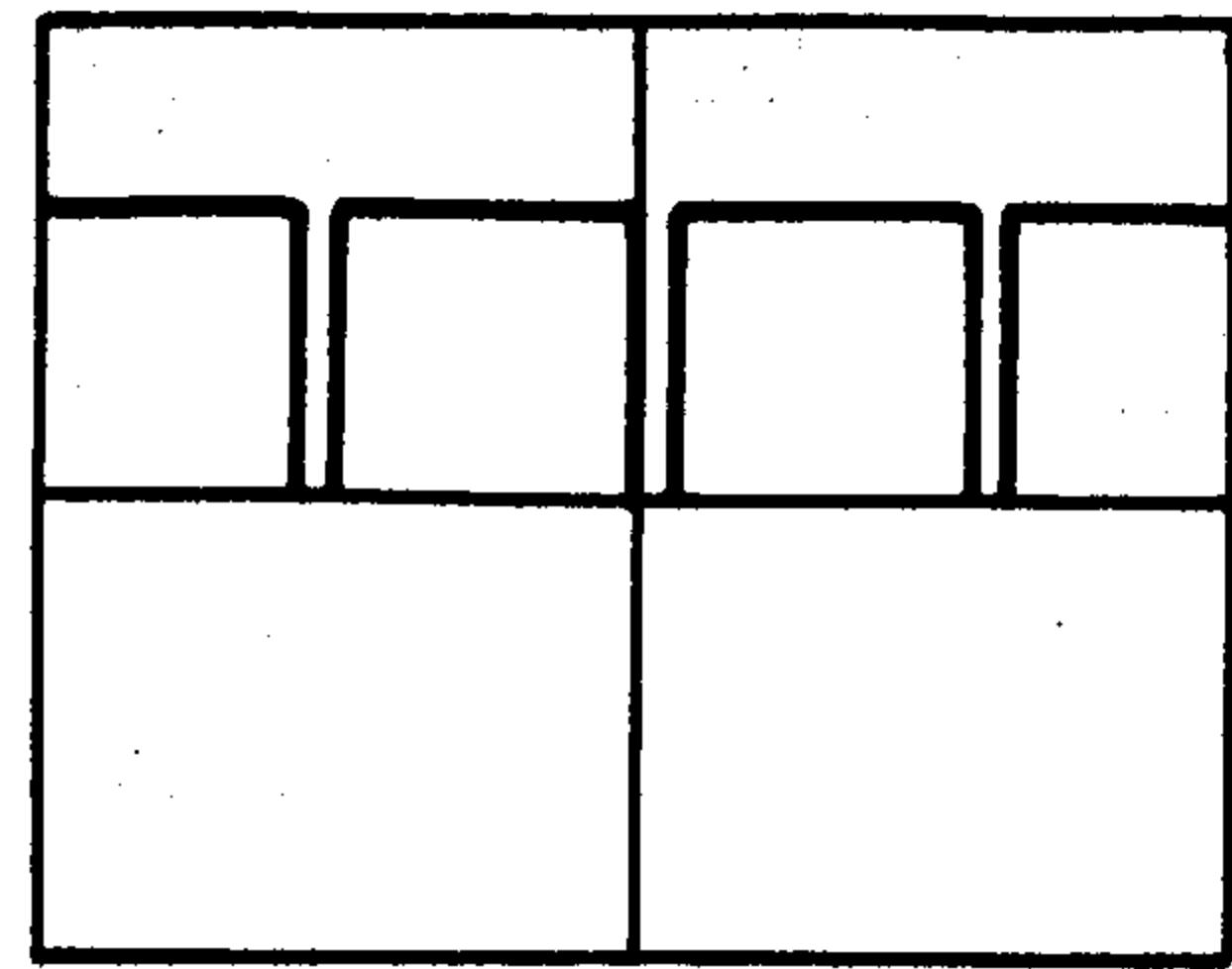


# REVISED AUDIO CIRCUIT SM124 MONITOR

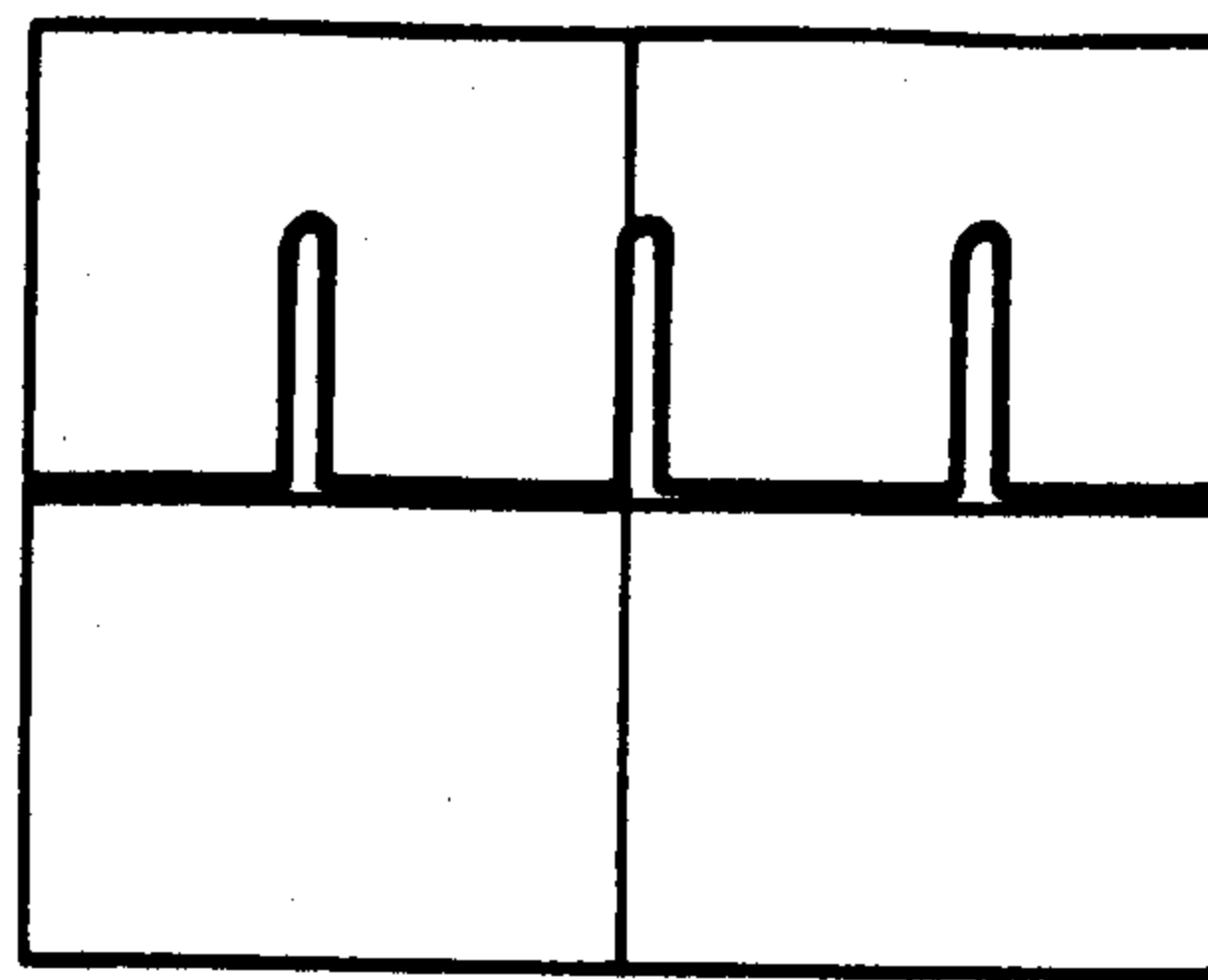


# HORIZONTAL DEFLECTION CIRCUIT

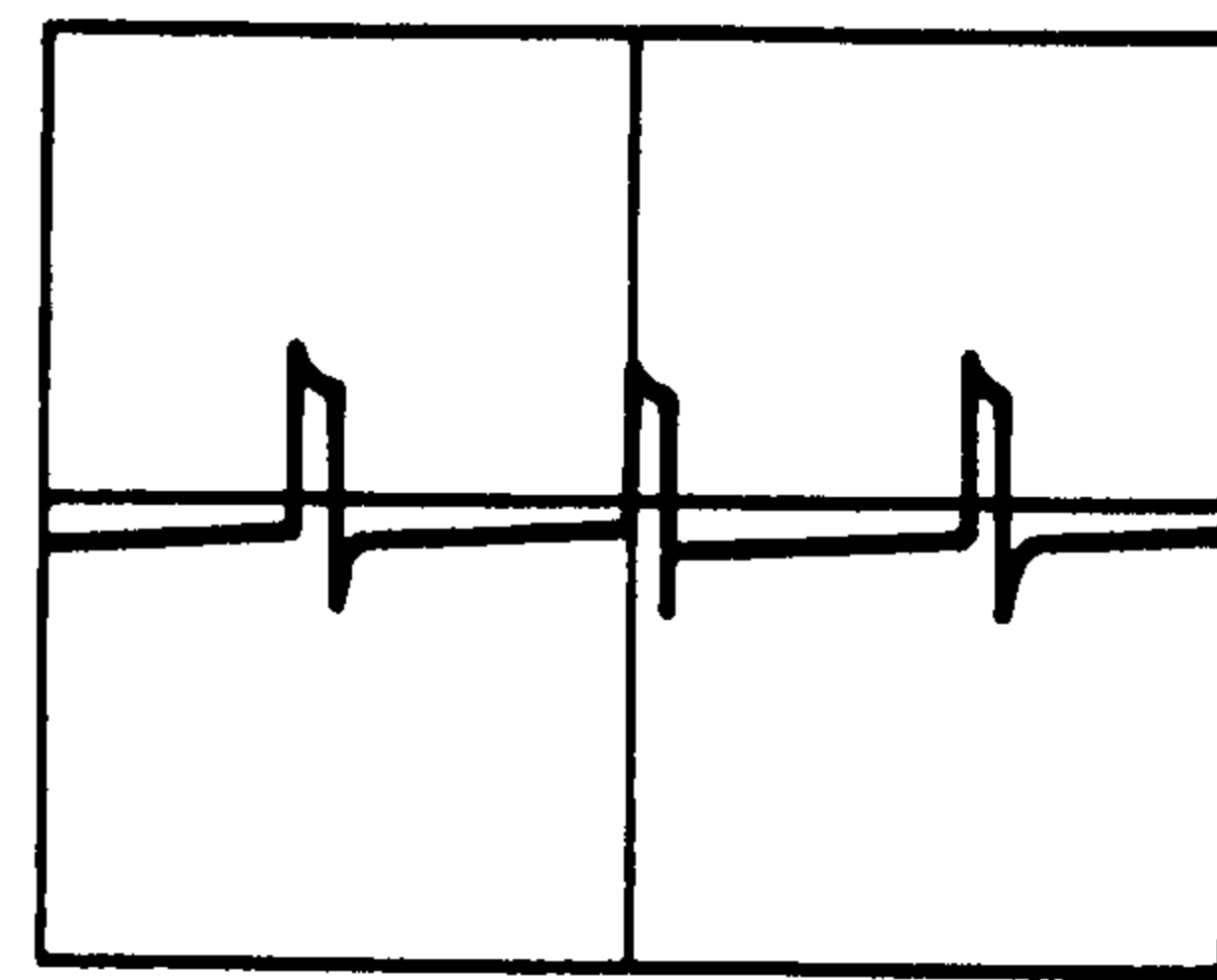




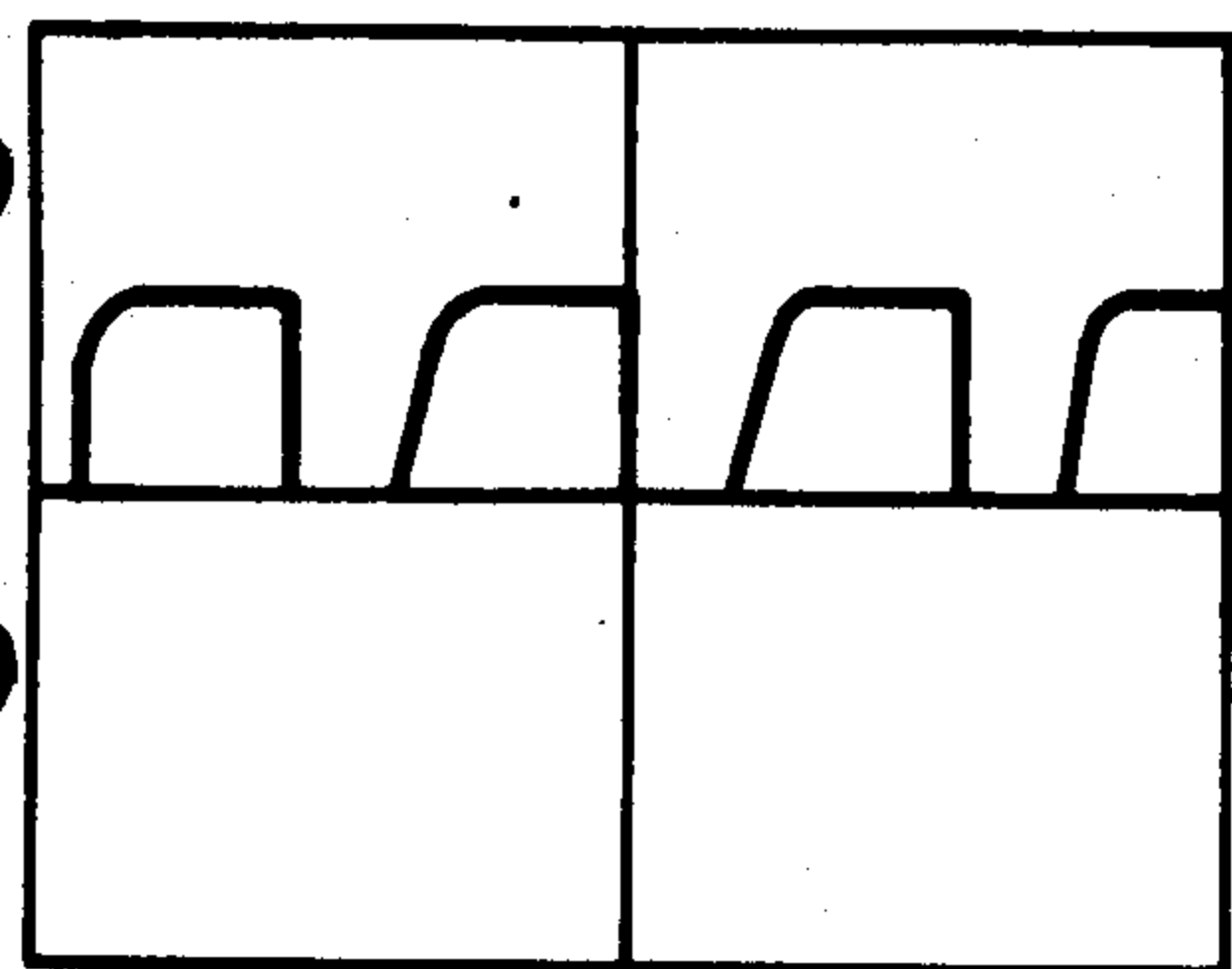
① 5Vp-p  
35.7KHz



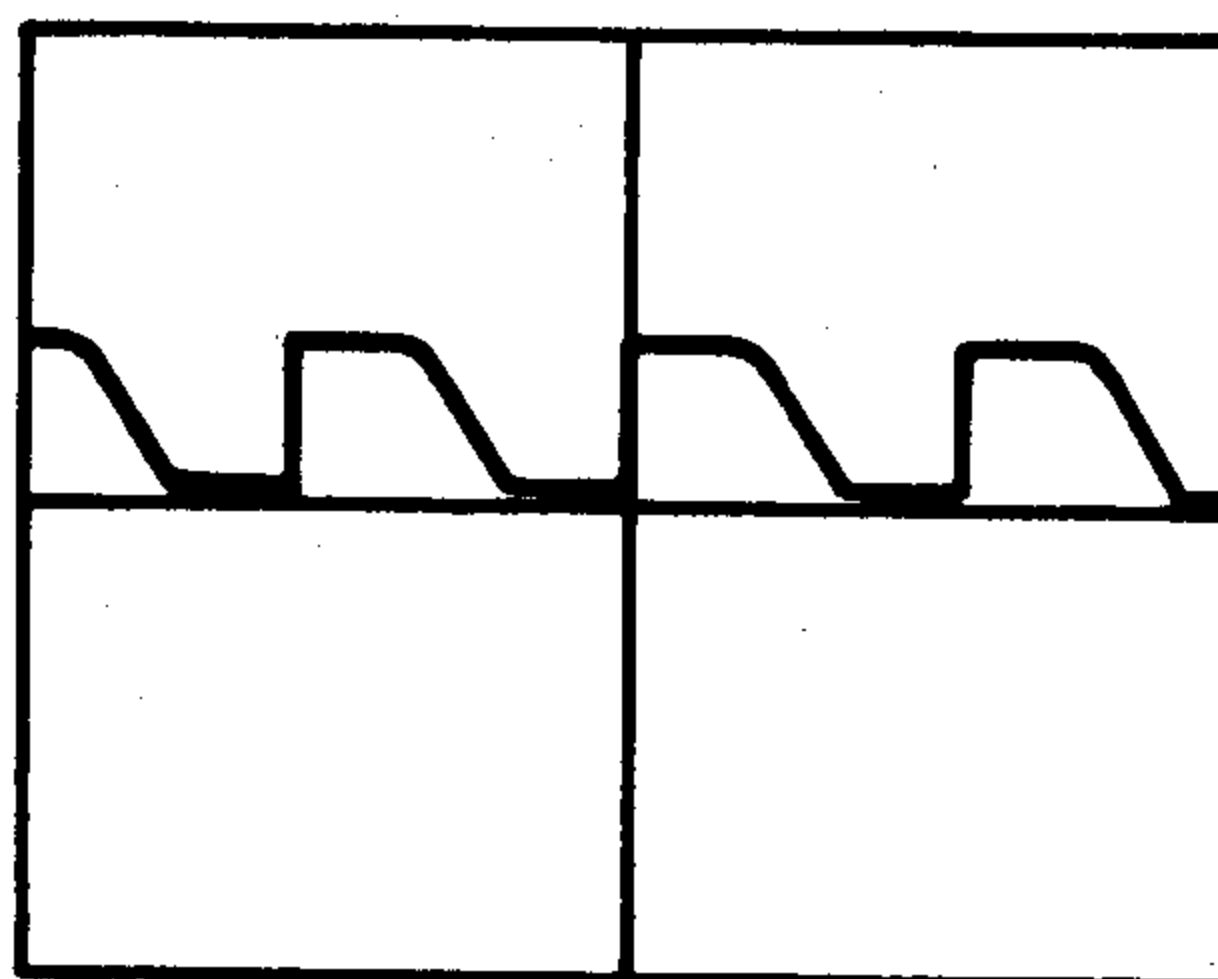
② 11.5Vp-p  
35.7KHz



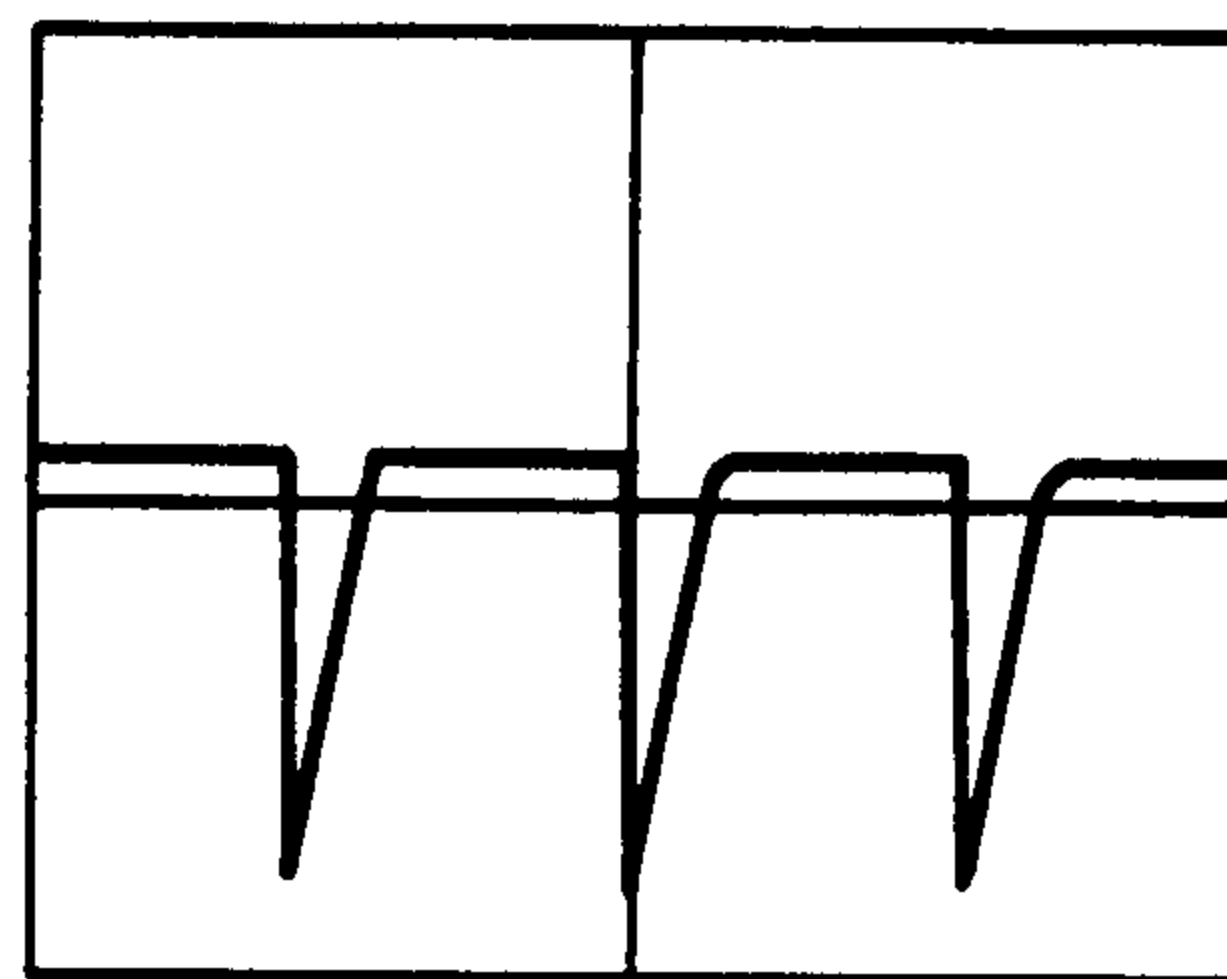
③ 2.3Vp-p  
35.7KHz



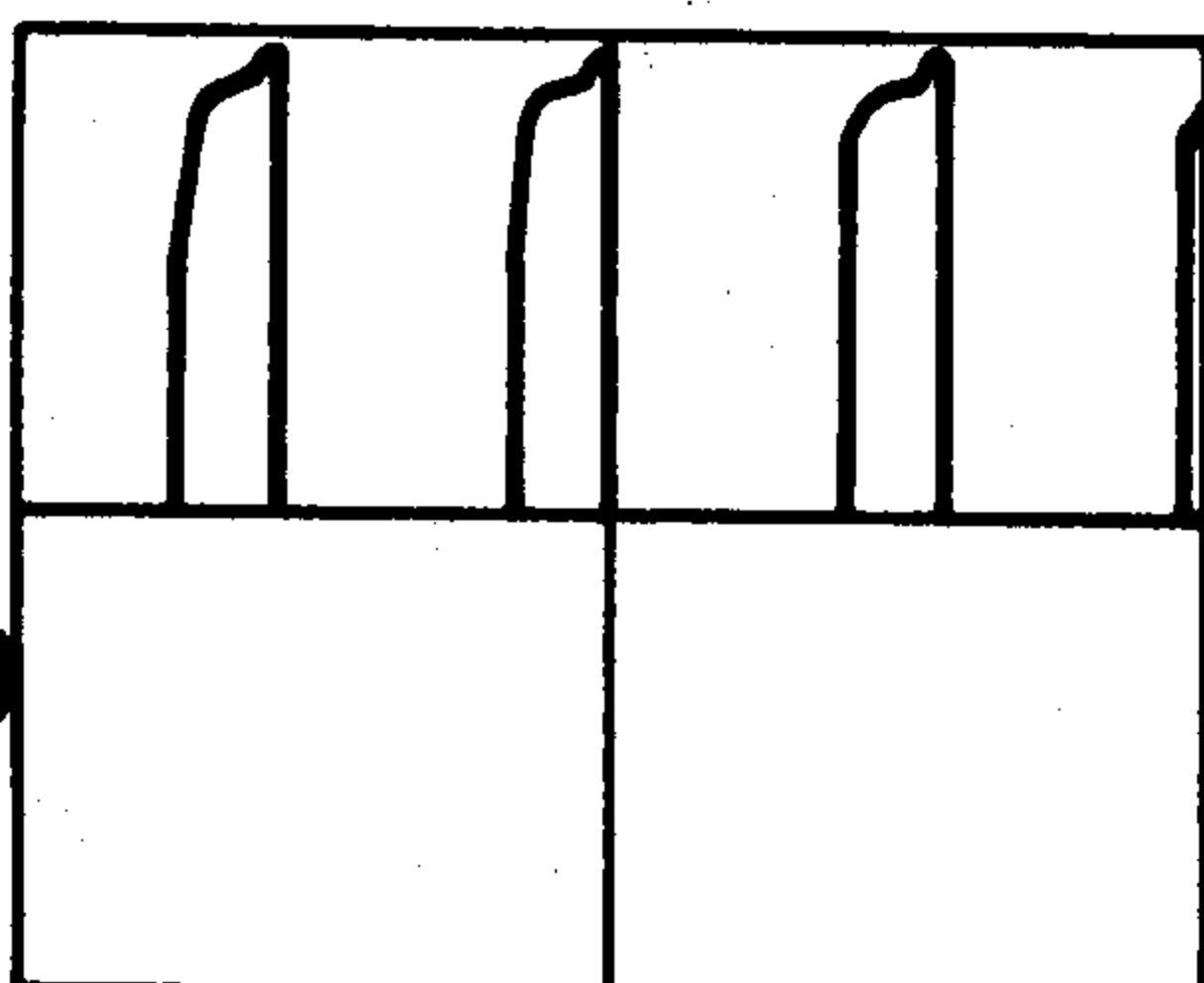
④ 9.0Vp-p  
35.7KHz



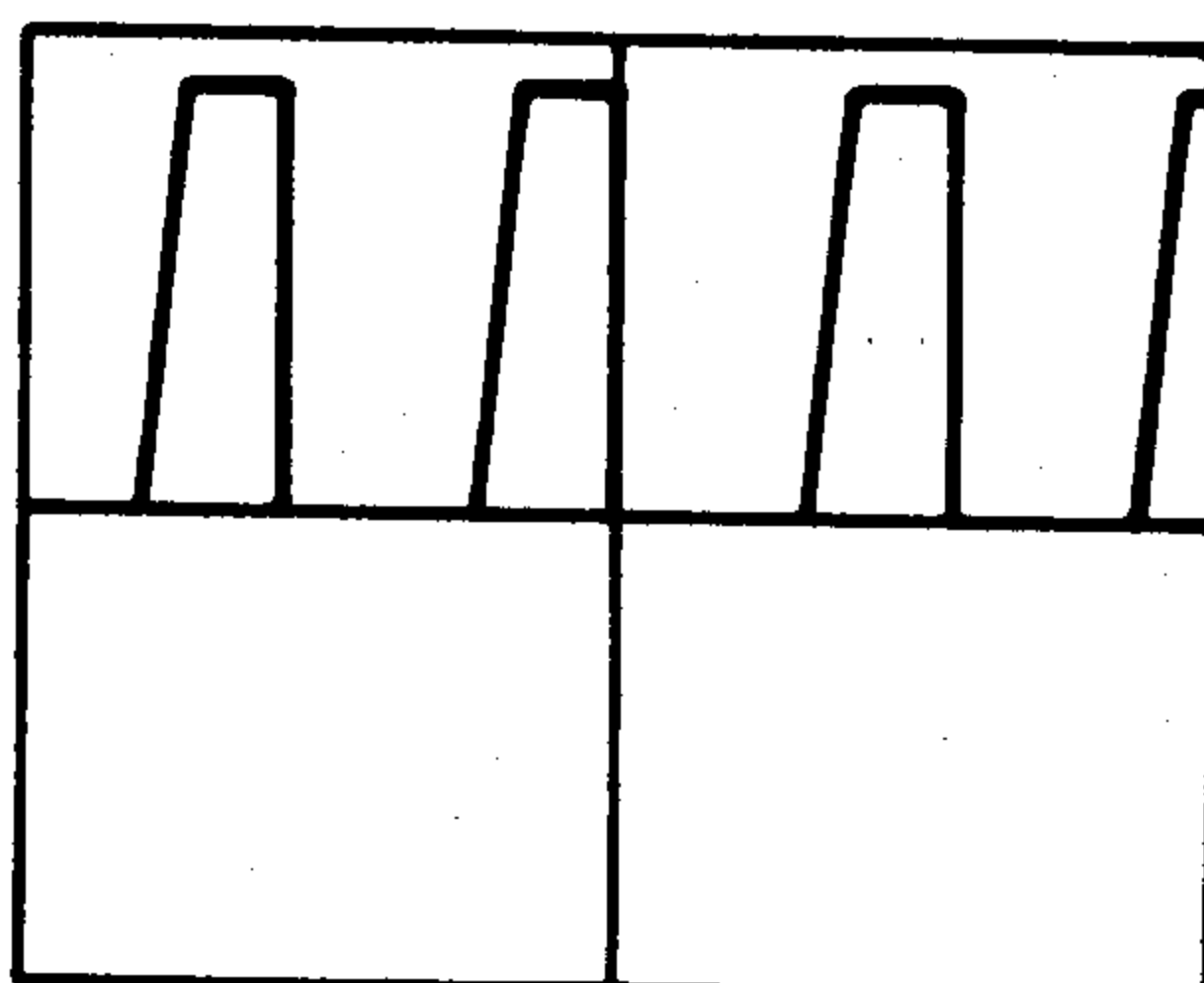
⑤ 0.7Vp-p  
35.7KHz



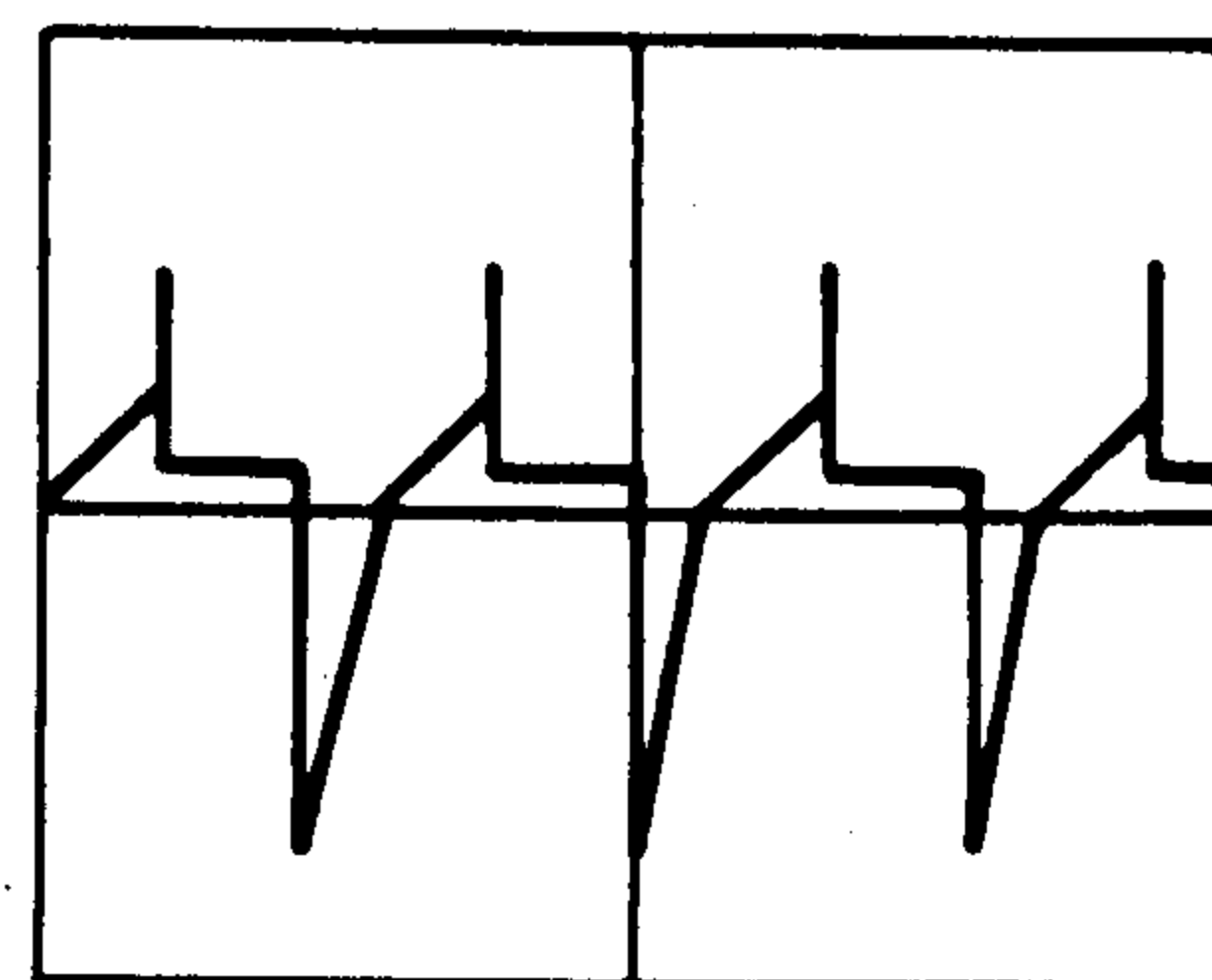
⑥ 6.8Vp-p  
35.7KHz



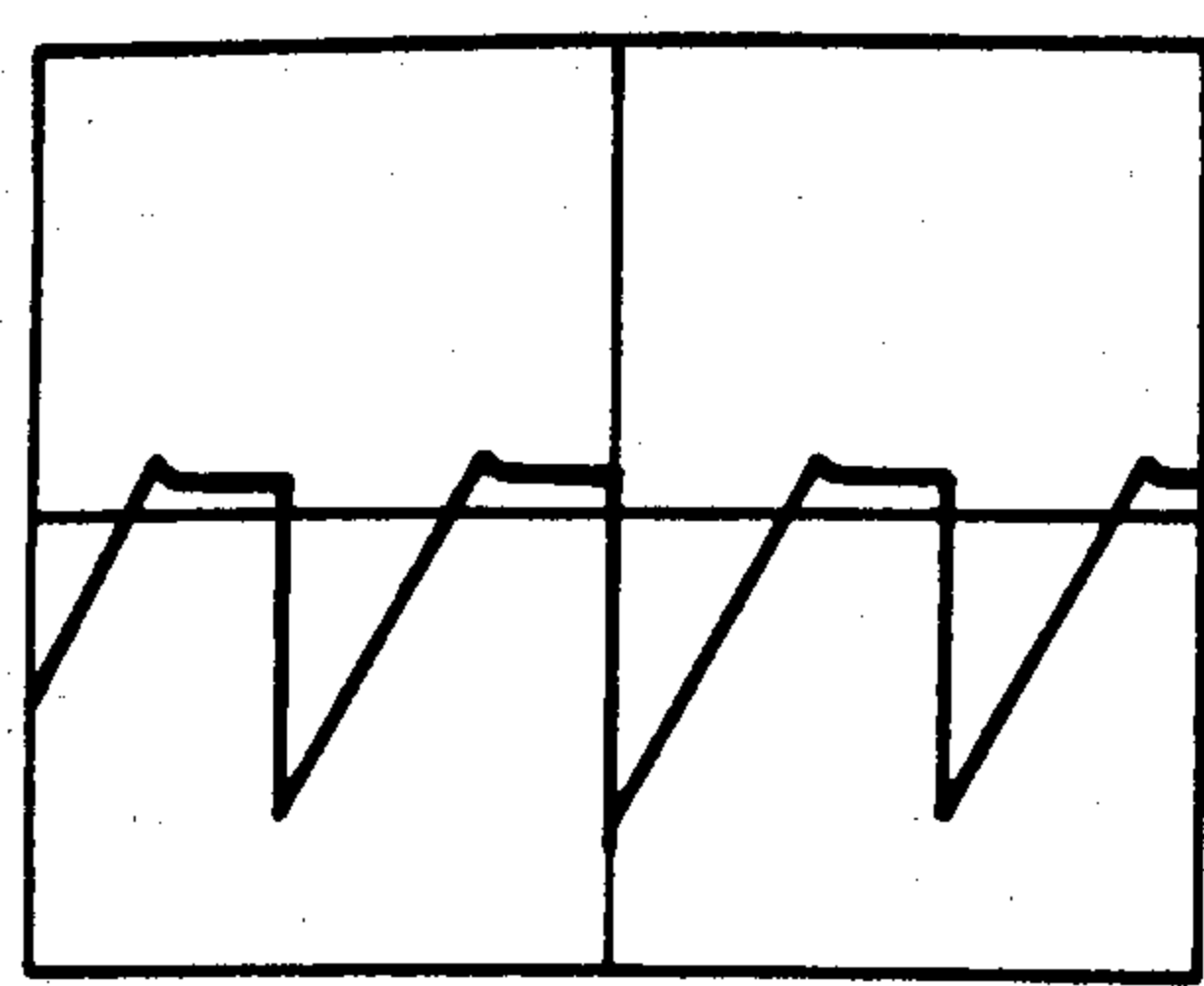
⑦ 8.0Vp-p  
35.714KHz



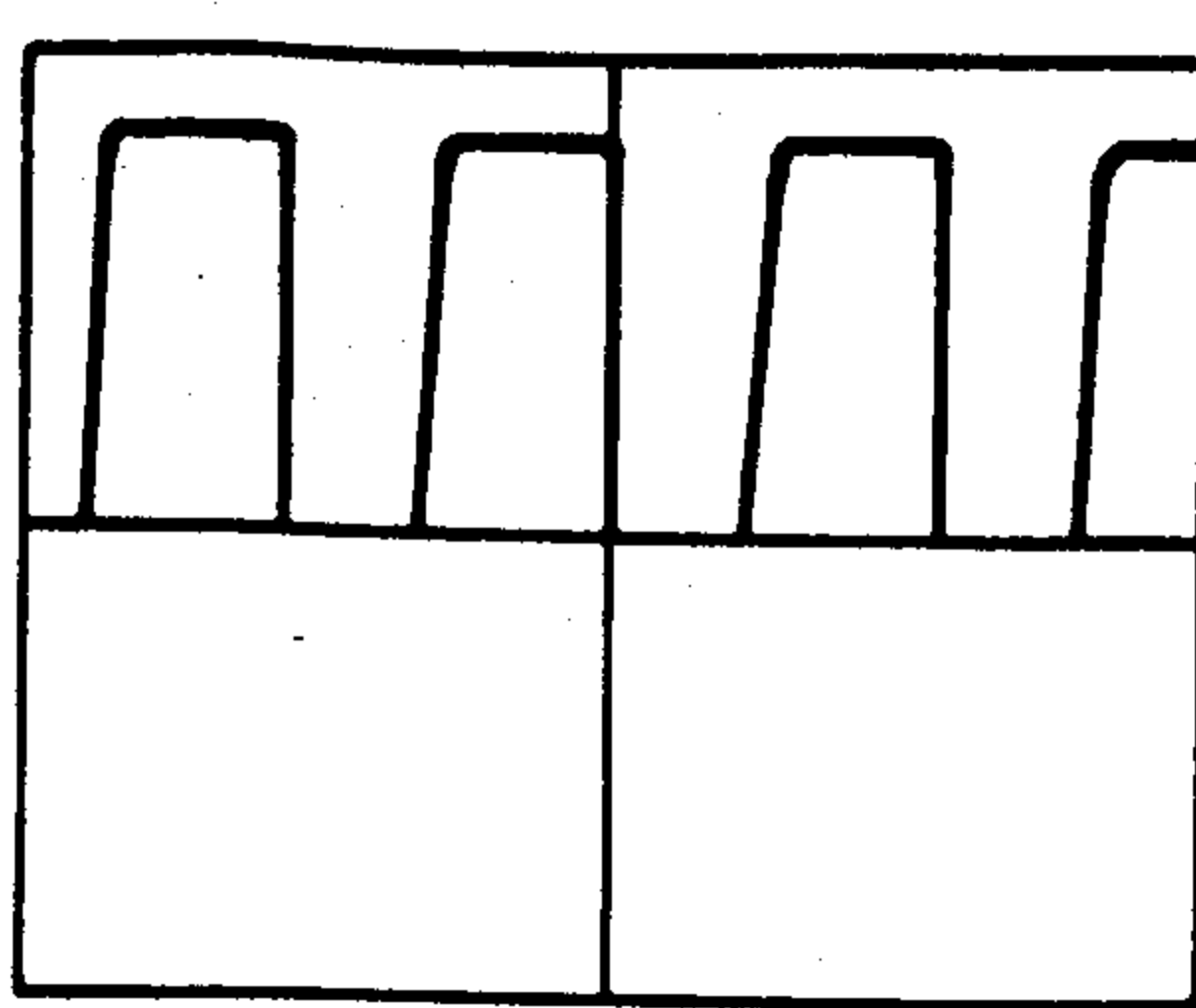
⑧ 7.2Vp-p  
35.714KHz



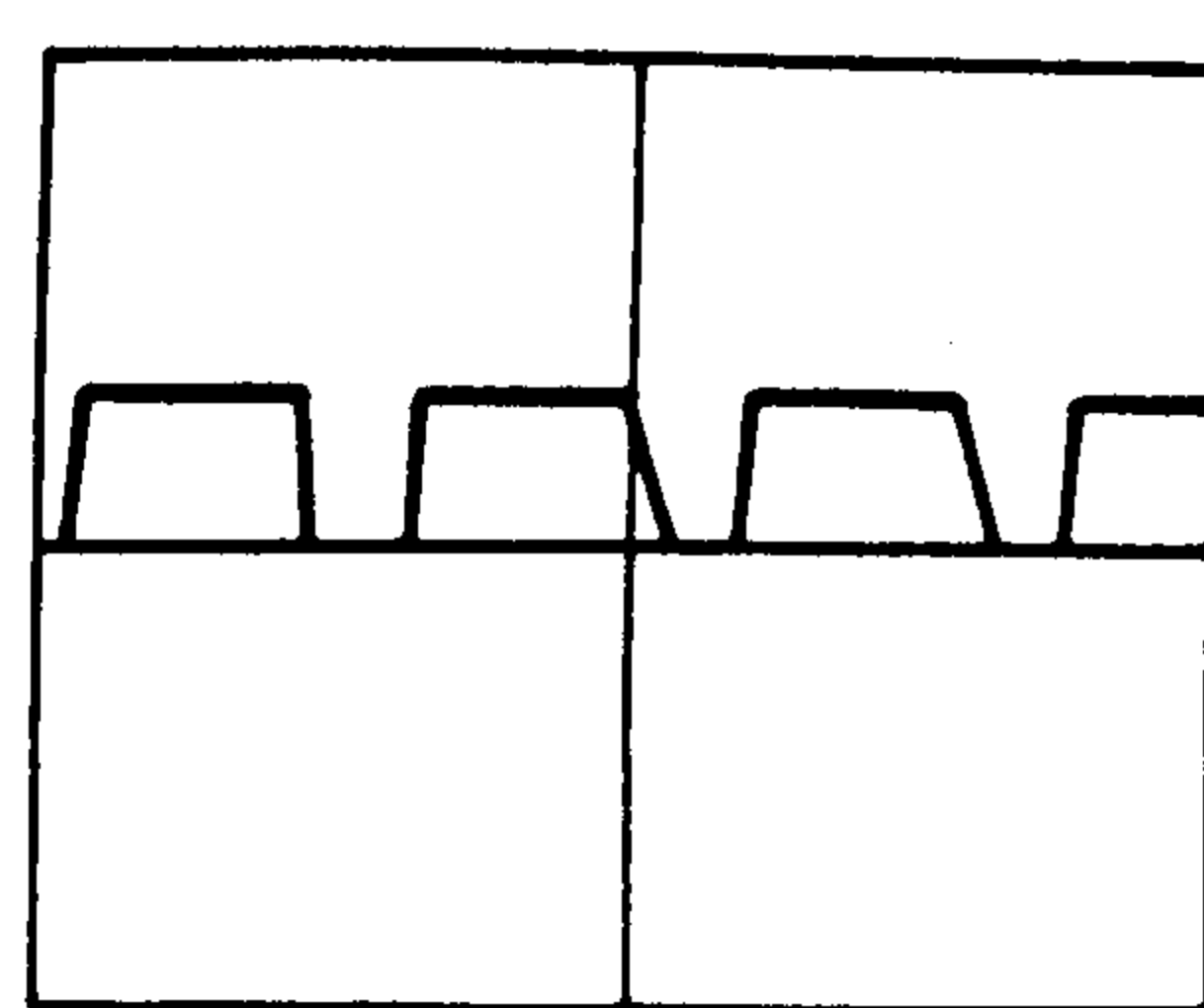
⑨ 7.0Vp-p  
35.714KHz



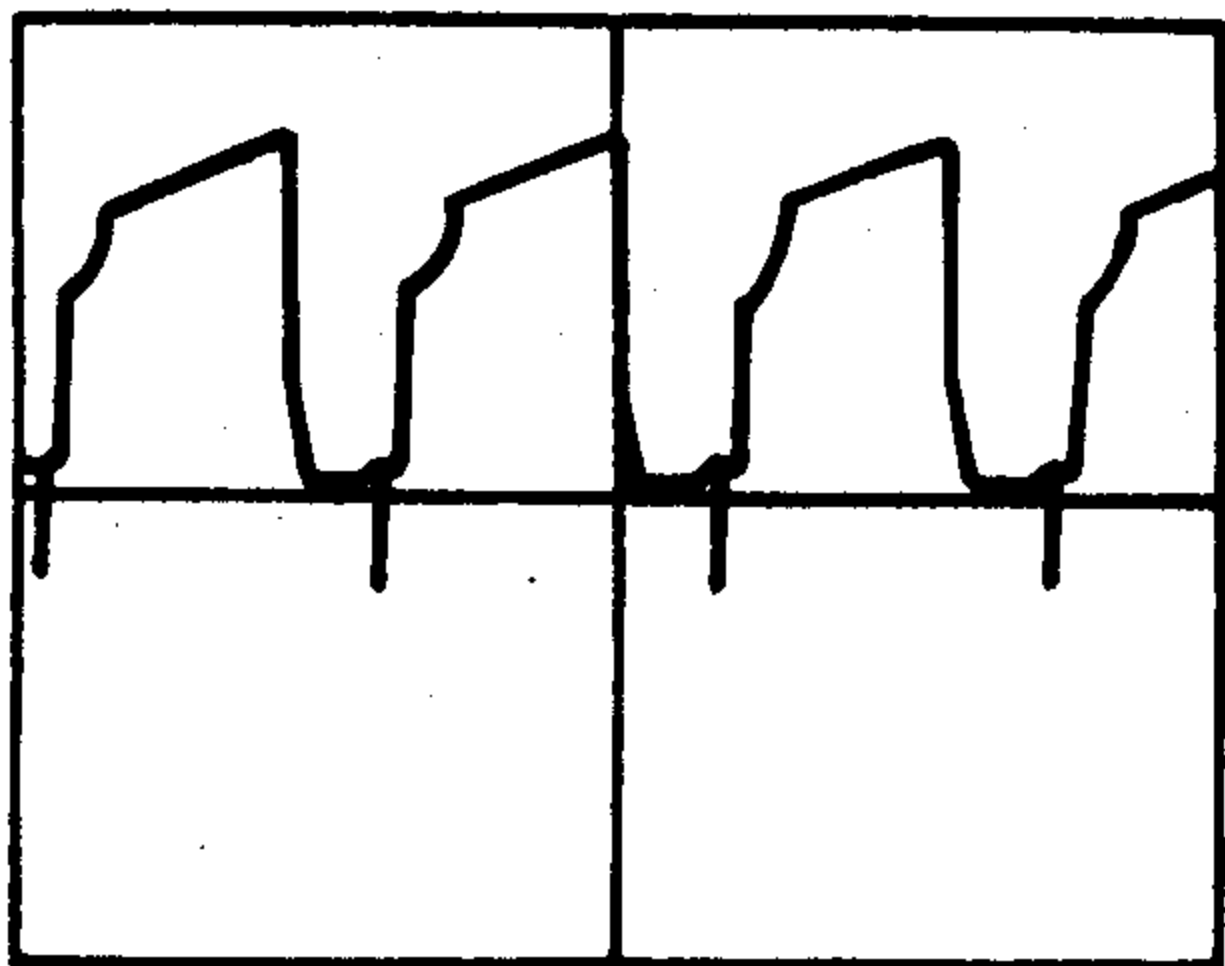
⑩ Vol: 6.4Vp-p  
35.714KHz



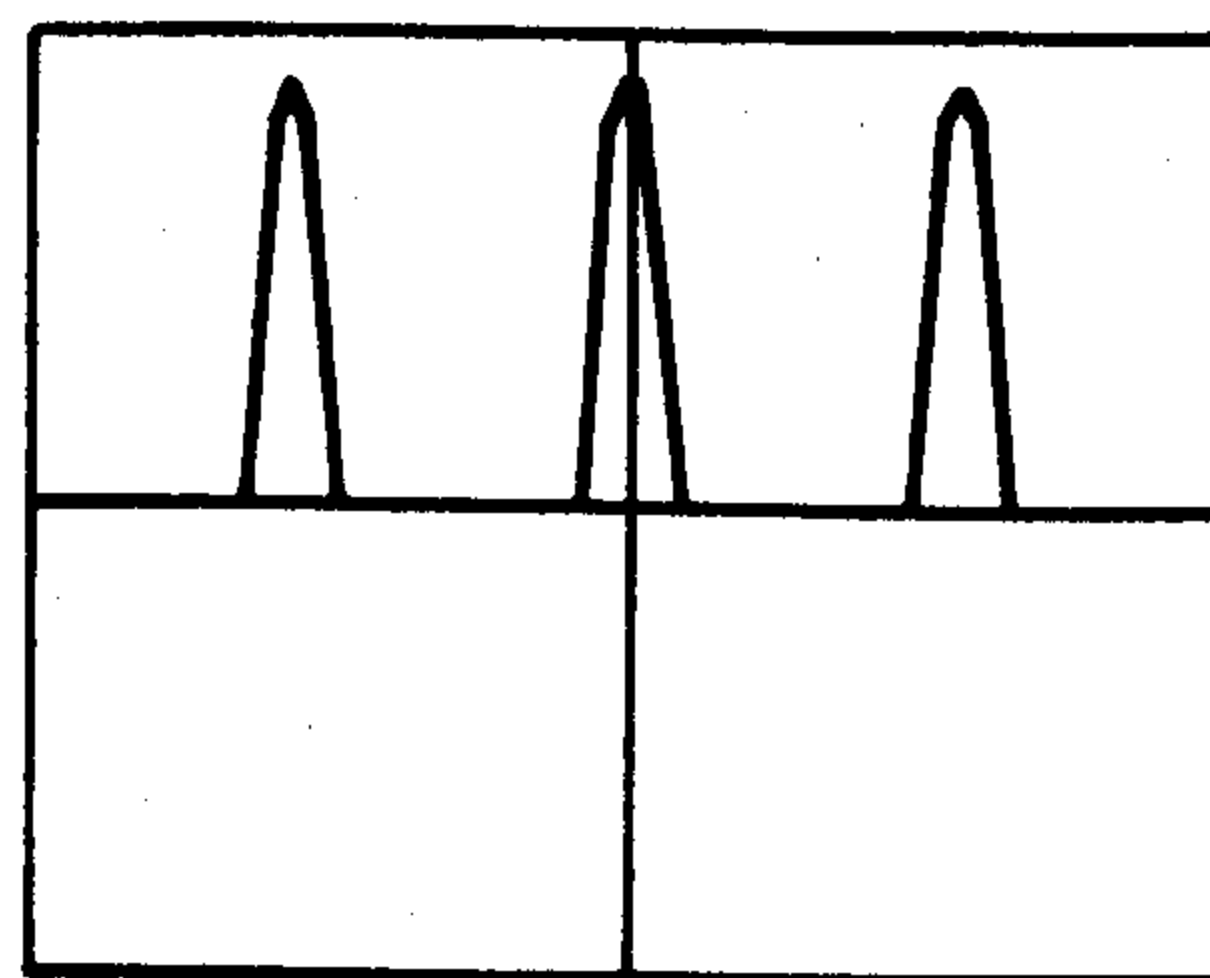
⑪ 7.0Vp-p  
35.714KHz



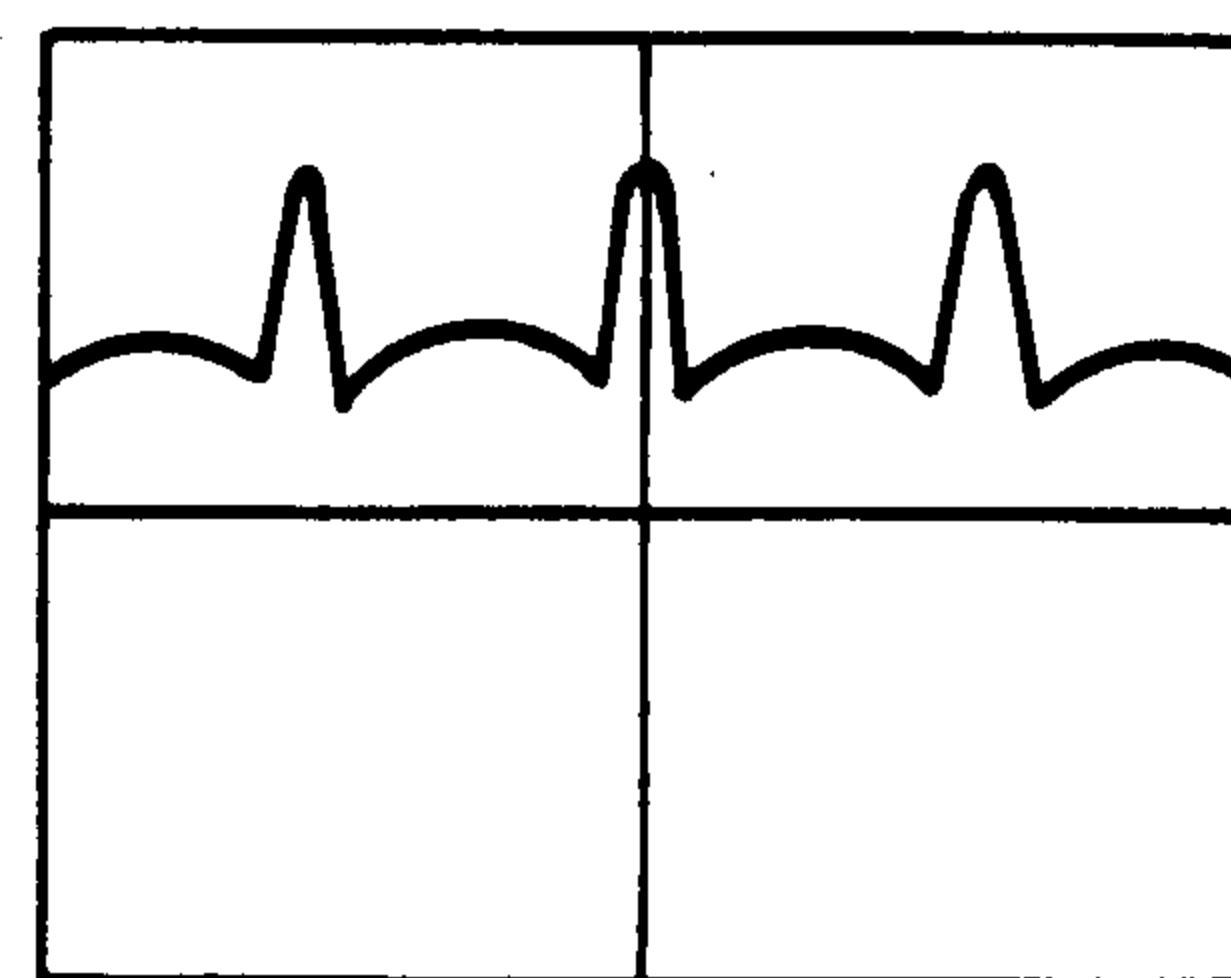
⑫ 0.7Vp-p  
35.714KHz



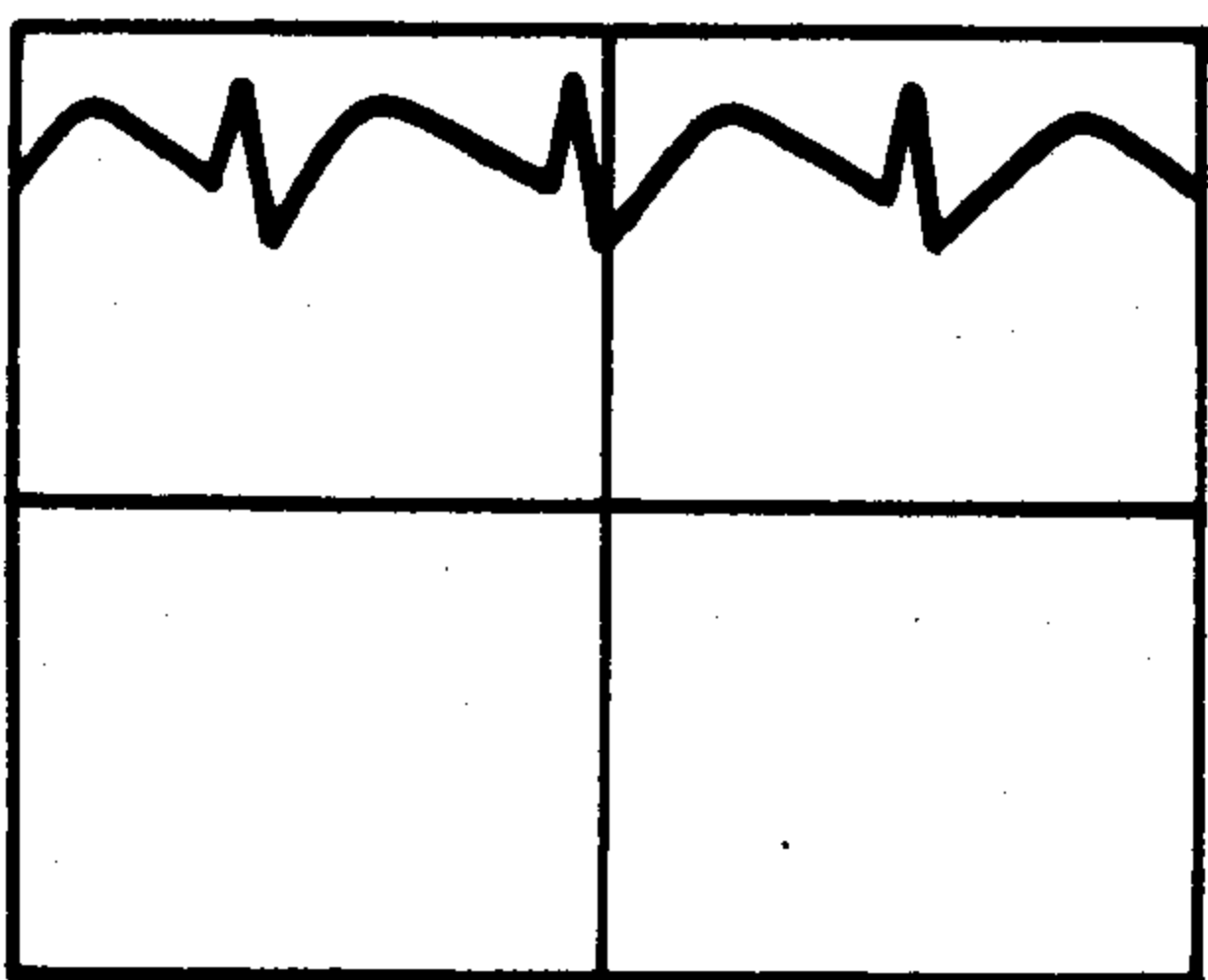
⑬ 4.71Vp-p  
35.714KHz



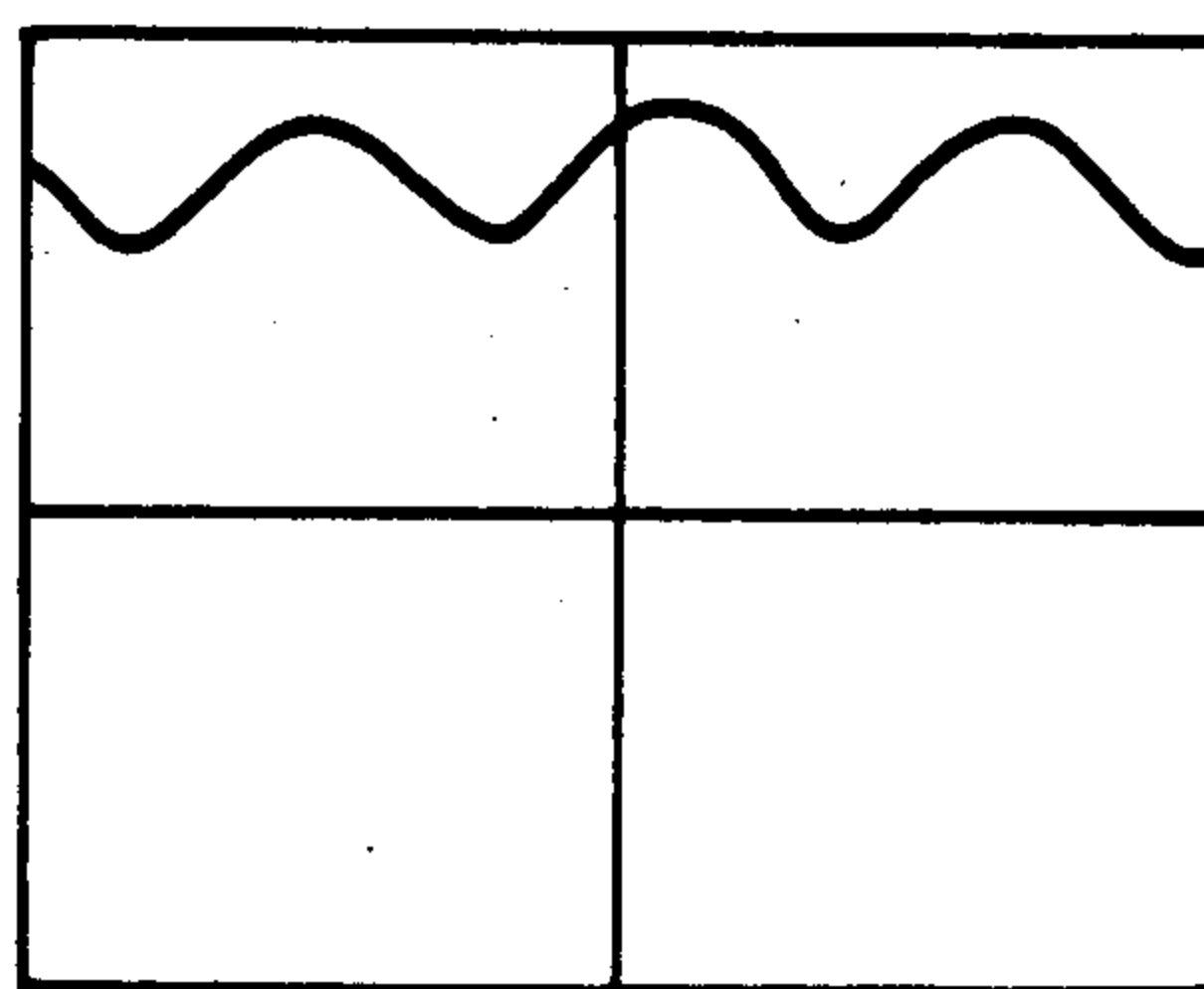
⑭ 180Vp-p  
35.714KHz



⑮ 56Vp-p  
35.714KHz



⑯ 38Vp-p  
35.714KHz



⑰ 36Vp-p  
35.714KHz

⑱ 11.8VDC

⑲ -70.0VDC

⑳ 69.5VDC

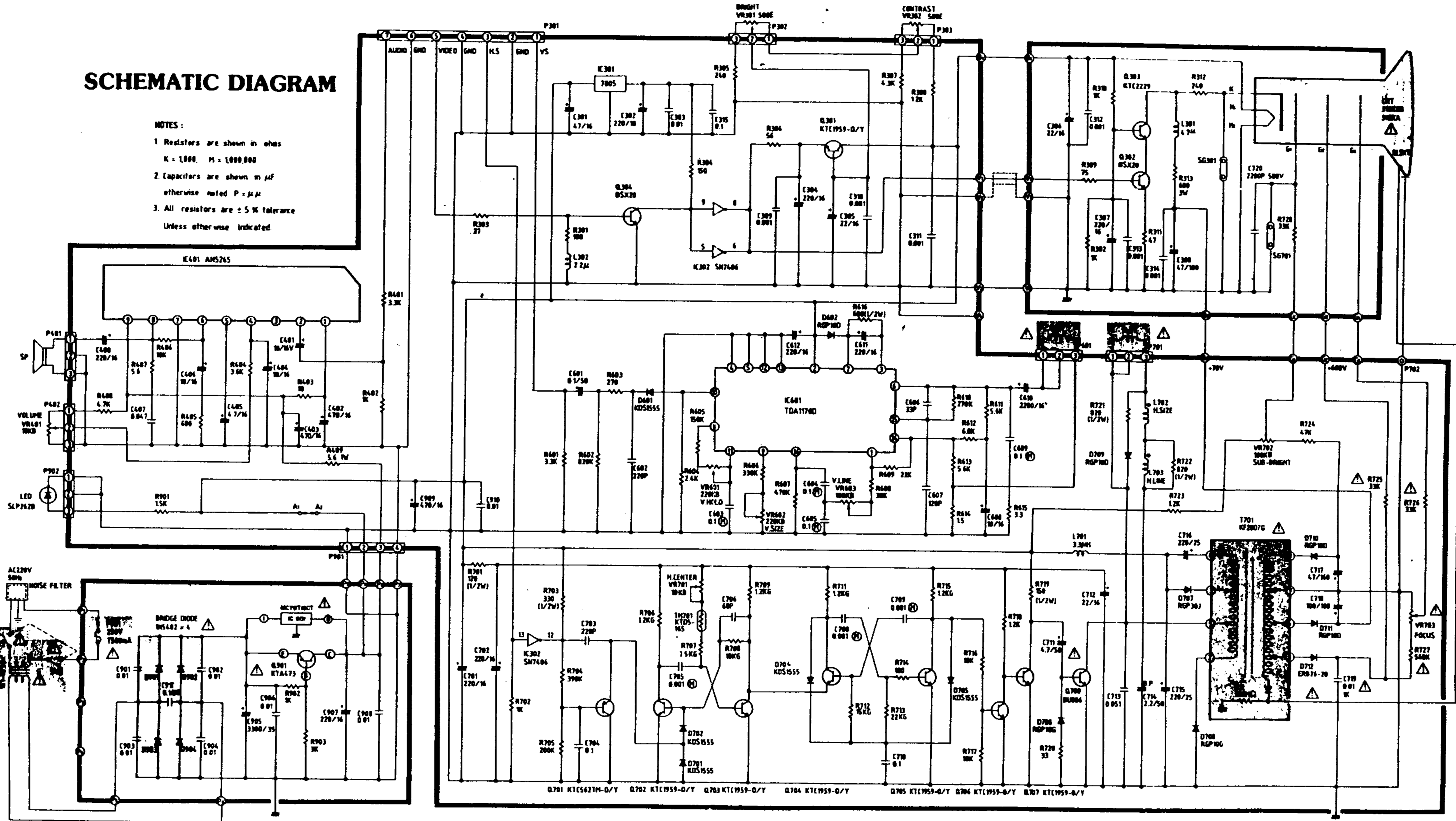
㉑ 28.8VDC

㉒ 600VDC

# SCHEMATIC DIAGRAM

## NOTES:

1. Resistors are shown in ohms  
K = 1,000, M = 1,000,000
2. Capacitors are shown in  $\mu\text{F}$   
otherwise noted P =  $\mu\text{M}$
3. All resistors are  $\pm 5\%$  tolerance  
Unless otherwise indicated.



⚠ : REPLACE ALL COMPONENTS MARKED WITH SAFETY SYMBOL WITH IDENTICAL TYPE

### IMPORTANT SAFETY NOTICE

THE SHADED AREA ON THIS SCHEMATIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR PROTECTION FROM X-RADIATION, FIRE AND ELECTRICAL SHOCK HAZARDS. WHEN SERVICING IT IS ESSENTIAL THAT ONLY MANUFACTURER'S SPECIFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE SHADED AREAS OF THE SCHEMATIC.

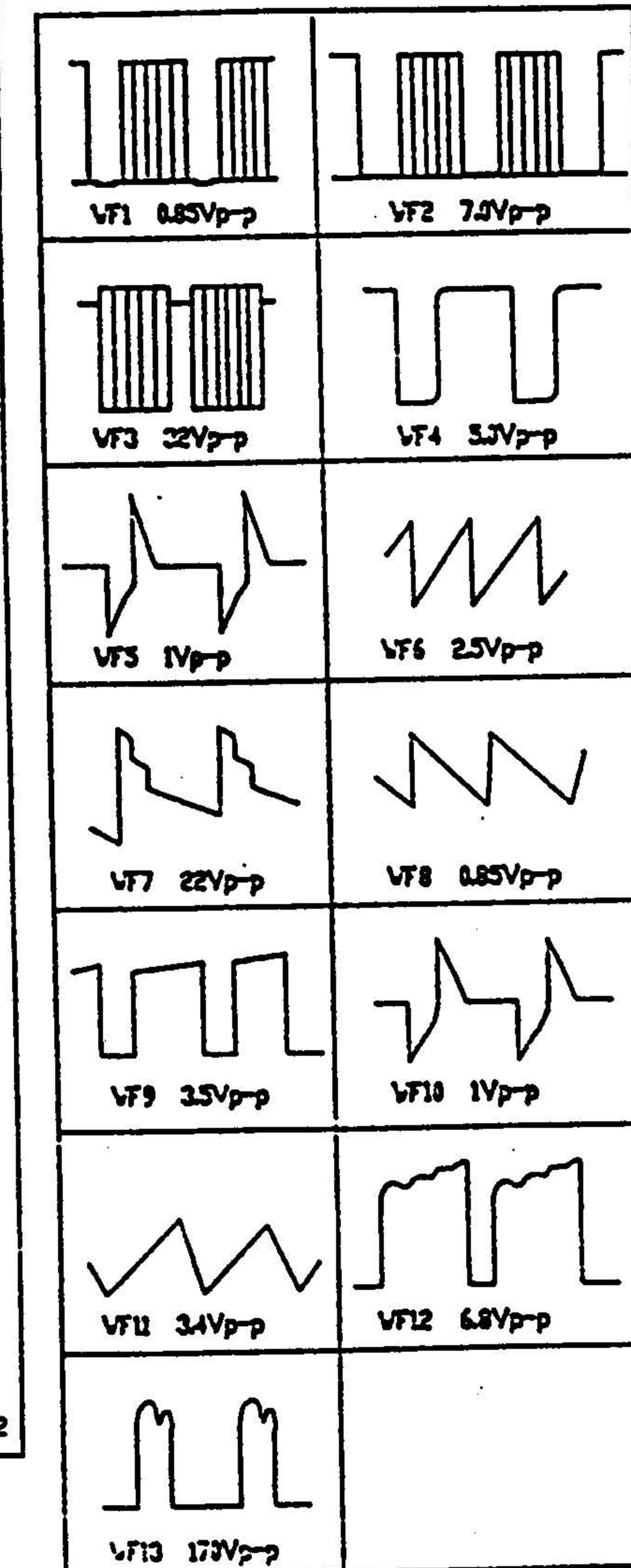
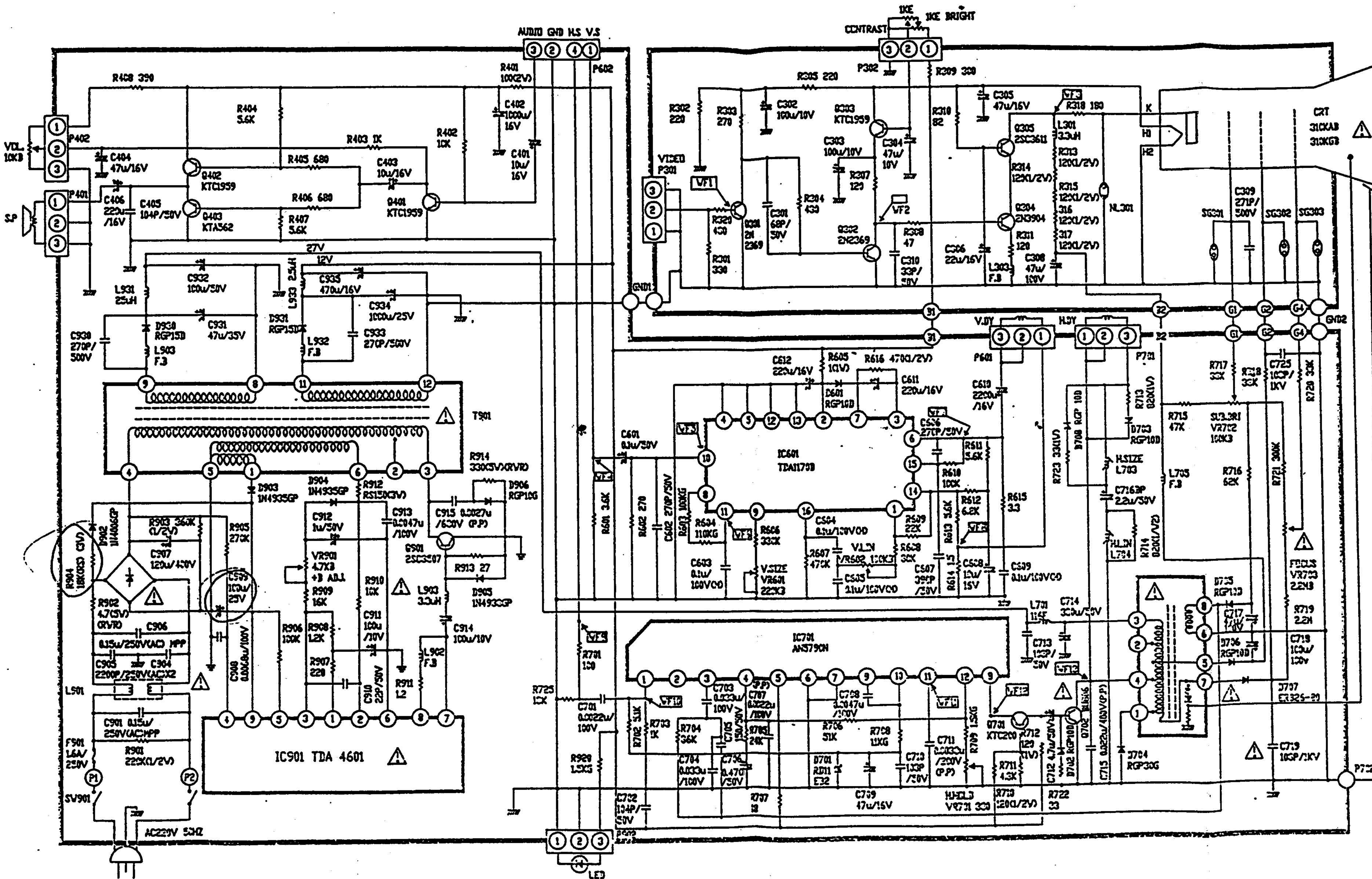
### IMPORTANT AVIS SUR LA SÉCURITÉ

LA PARTIE OMBRÉE DE CE DIAGRAMME SCHEMATIQUE COMPREND D'IMPORTANTES CARACTÉRISTIQUES SPÉCIALES CONÇUES POUR PROTÉGER DES RAYONS X, ET DES DANGERS D'INCENDIE ET DE SECOURS ÉLECTRIQUES EN CAS DE BESOIN SI DES PIÈCES DE CETTE PARTIE OMBRÉE DOIVENT ÊTRE REMPLACÉES N'UTILISEZ QUE DES PIÈCES SPÉCIFIÉES PAR LE MANUFACTURIER.

# MT-21 SCHEMATIC DIAGRAM

R 904 22KΩ 3W → 18KΩ 3W

C 909 47/25V → 100/25V



- NOTES :
1. RESISTORS ARE SHOWN IN OHMS  
K = 1,000    M = 1,000,000
  2. CAPACITORS ARE SHOWN IN μF  
OTHERWISE NOTED P = μμ
  3. ALL RESISTORS ARE ± 5% TOLERANCE  
UNLESS OTHERWISE INDICATED.
- REPLACE ALL COMPONENTS MARKED WITH  
SAFETY SYMBOL WITH IDENTICAL TYPE

### IMPORTANT SAFETY NOTICE

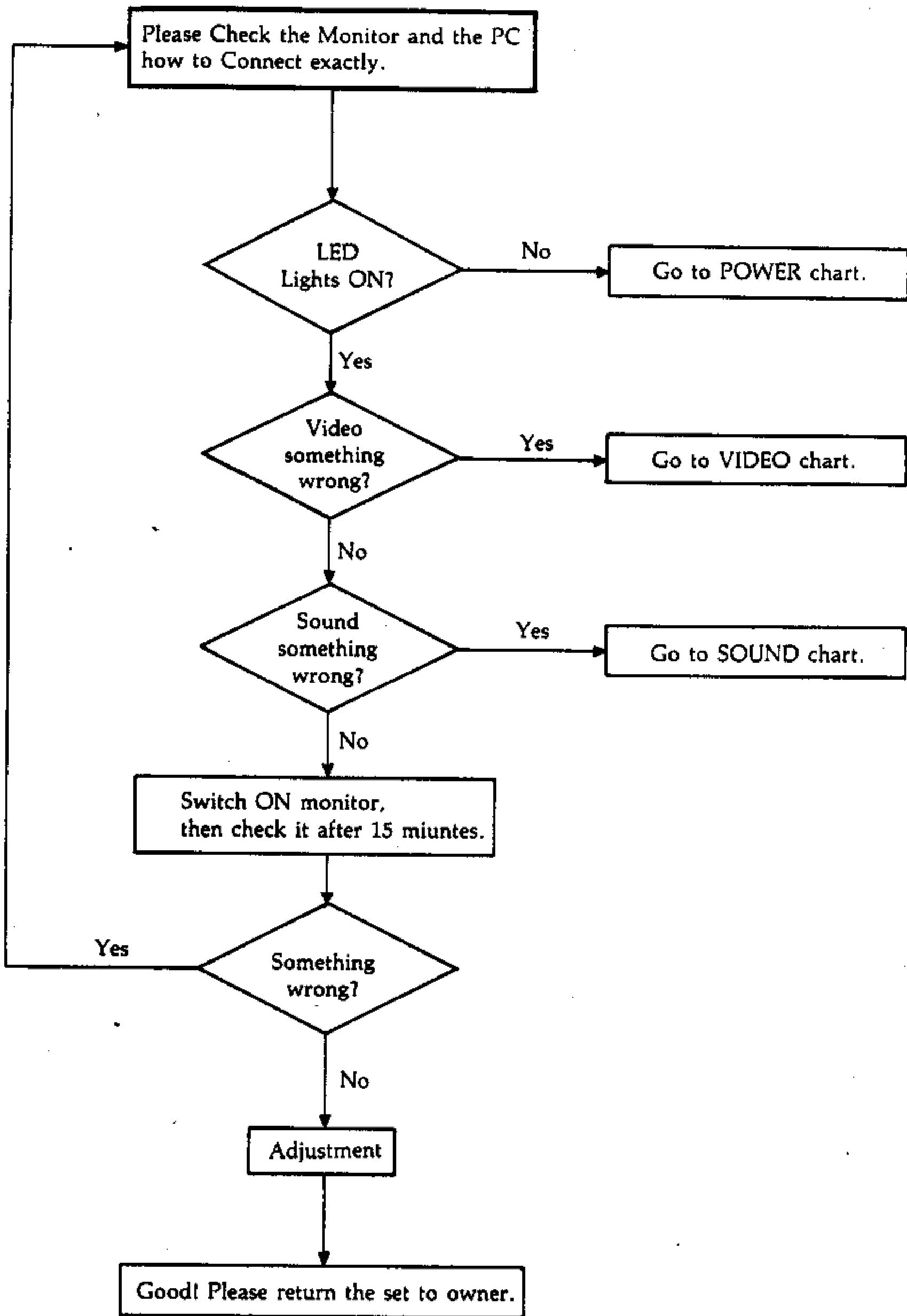
THE SHADED AREA ON THIS SCHEMATIC DIAGRAM INCORPORATES SAFETY FEATURES IMPORTANT FOR PROTECTION FROM X-RADIATION, FIRE AND ELECTRICAL SHOCK HAZARDS, WHEN SERVICING IT IS ESSENTIAL THAT ONLY MANUFACTURER'S SPECIFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE SHADED AREAS OF THE SCHEMATIC.

Nov - 6 - '87

N. S. LEE

# TROUBLESHOOTING CHART

## MAIN CHART



# POWER CHART

Please check the monitor and outlet connections.

LED Lights?

Yes

To the main chart.

No or Weak

Check input of IC901.

+22V DC?

Yes

Check output of IC901 & PIN #2 of connector (P901).

No

Check AC fuse (F901).

Open?

No

Check P5 & P4 of power PCB.

Yes

Replace AC fuse.

No

+12V DC?

Yes

Replace IC901 or Q901.

To the main chart.

No

Fuse Reopen?

Yes

Trouble in D901-D904

17V AC?

No

Yes

Replace Power Switch.

Replace Transformer.



# VIDEO CHART

Check the connection between Monitor and PC.

Display?

Faulty

No

Check #3 of P301

1.6Vp-p?

No

Trouble in Signal Cable.

Yes

Check #5 or #9 of IC302

5Vp-p?

No

Trouble in IC301 or Q304.

Yes

Check #8 or #6 of IC302

4.8Vp-p?

No

Trouble in IC302 or Q301

Yes

Check cathode of CRT PCB.

28Vp-p?

No

Check Q303 and Q302.

Yes

Check FBT circuit.

Yes

Normal?

No

Trouble in Q303 or Q302.

Normal?

Yes

Trouble in CRT.

No

Trouble in FBT.

Adjust  
V-Hold (VR601)  
H-Center (VR701)  
Sub-Bright (VR702)

OK?

Yes

No

To the main chart

Check Video circuit

Check Hor. circuit.

Check Vert. circuit.

# SOUND CHART

Check the connection between Monitor and PC.

Power is ON?

No

To the Power chart.

Yes

Check connector (P901).

Yes

Normal?

No

Trouble in connector. (P901)

Yes

Check connector (P402).

Normal?

No

Trouble in connector. (P402)

Yes

Check connector (P401).

Yes

Normal?

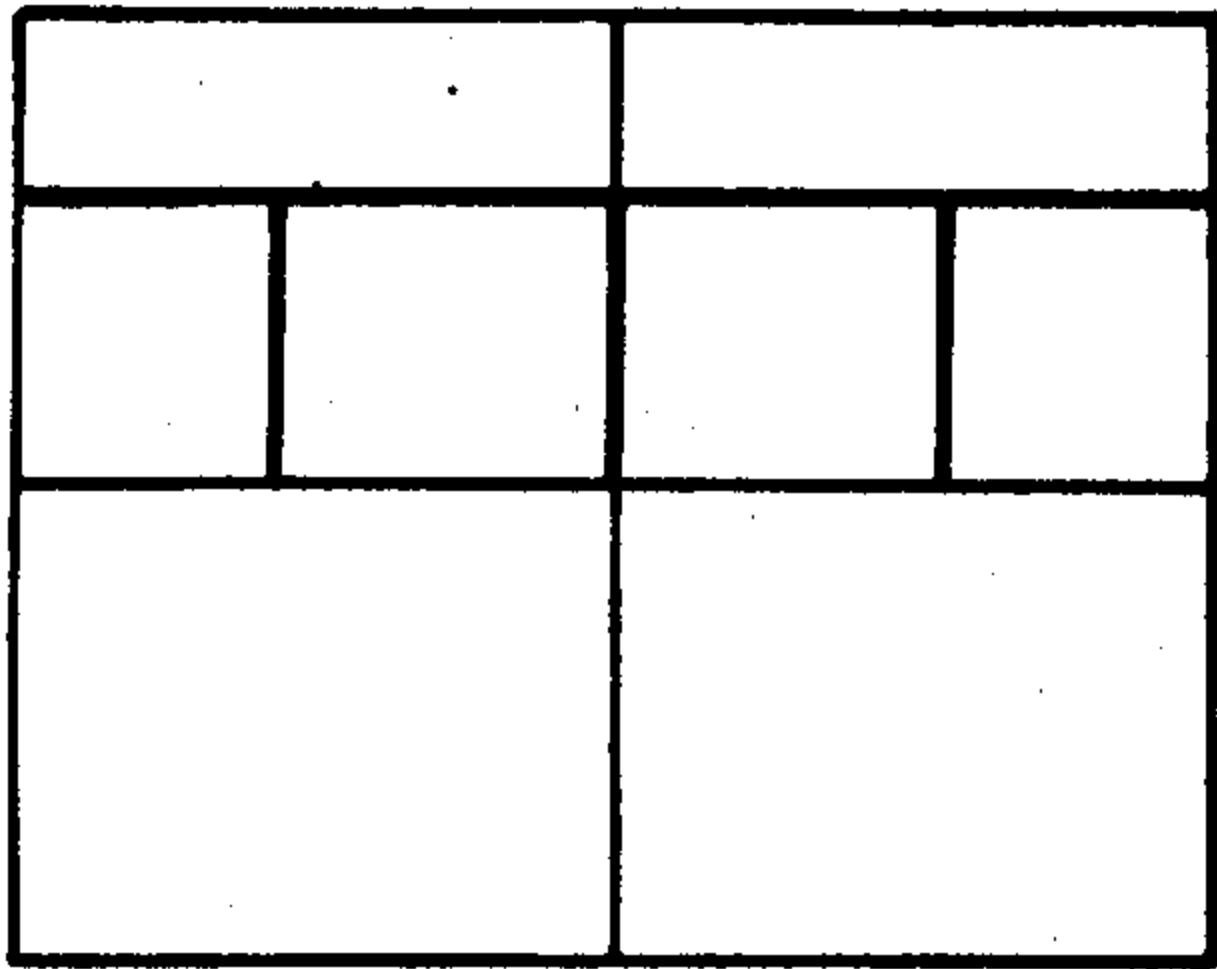
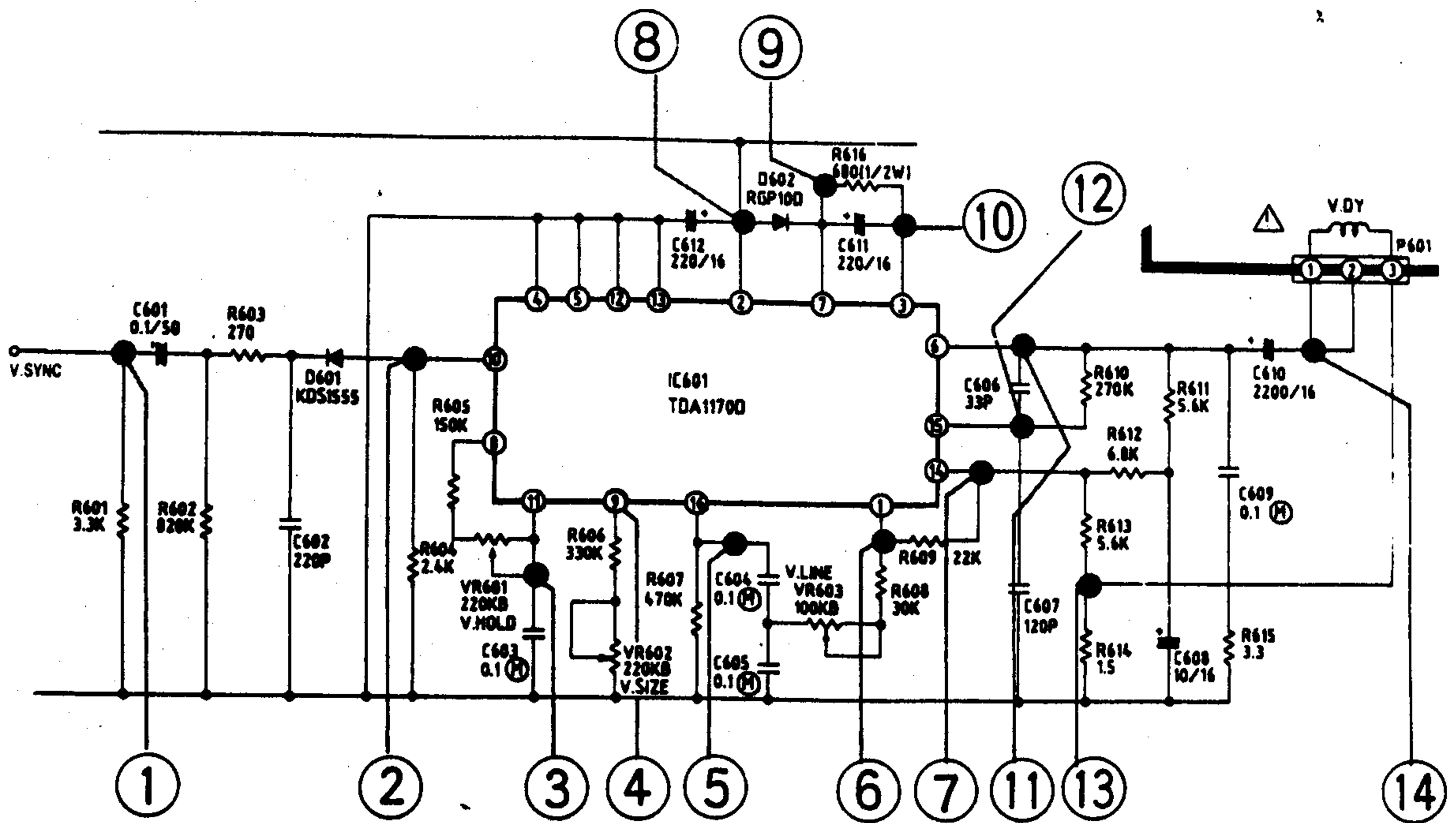
No

Trouble in connector. (P401)

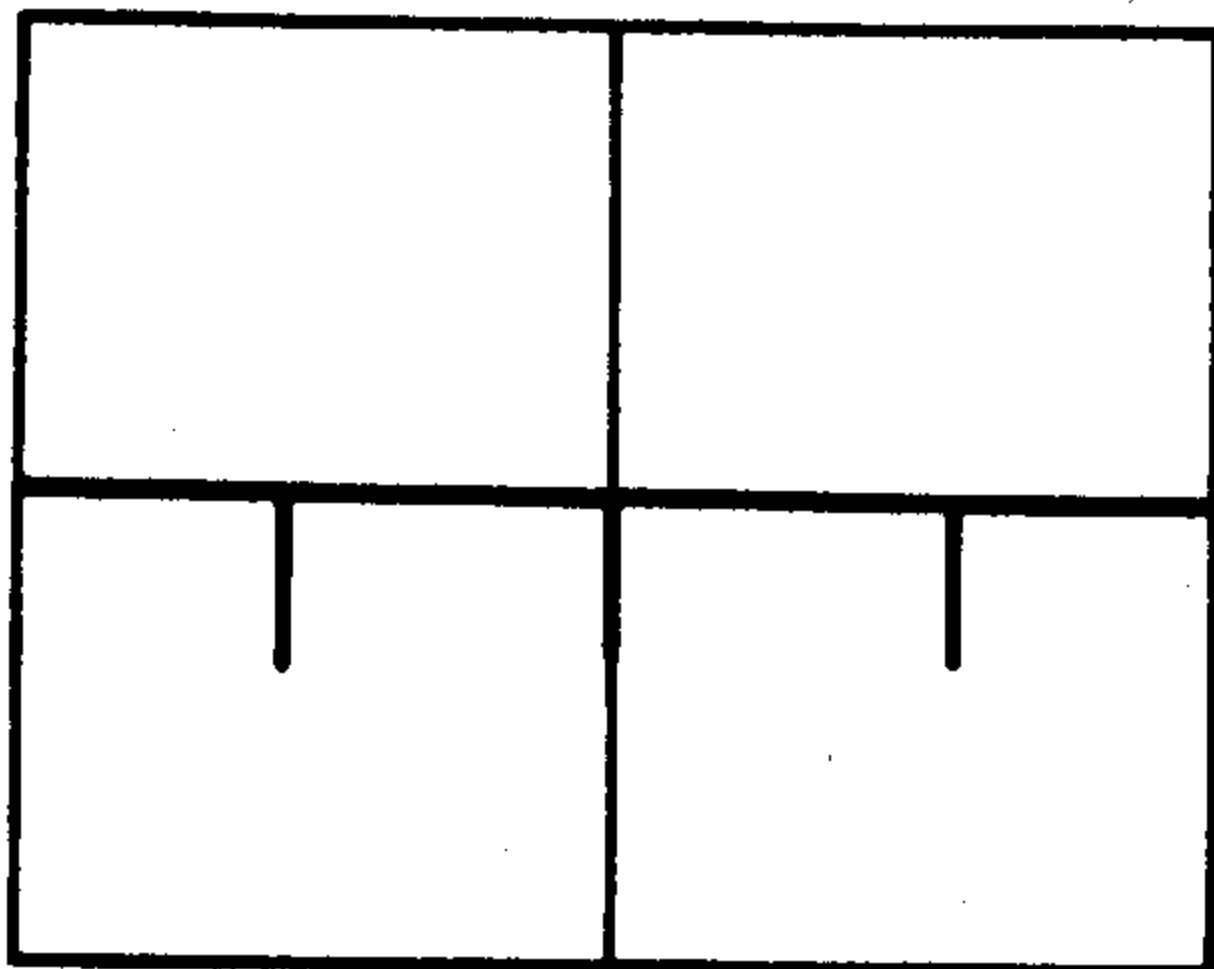
Yes

Trouble in IC401 and C403.

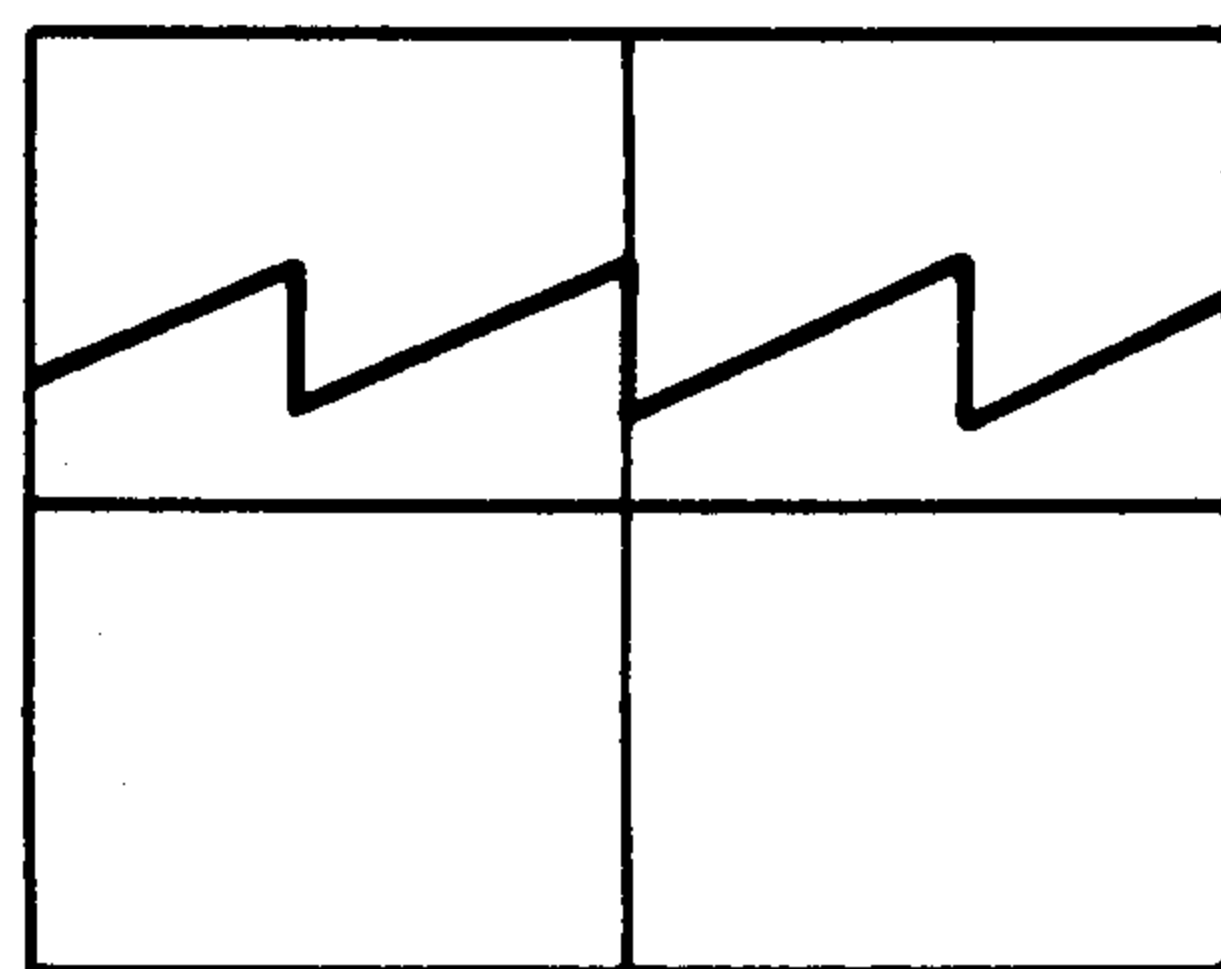
# VERTICAL DEFLECTION CIRCUIT



① 5.0Vp-p  
71.43Hz

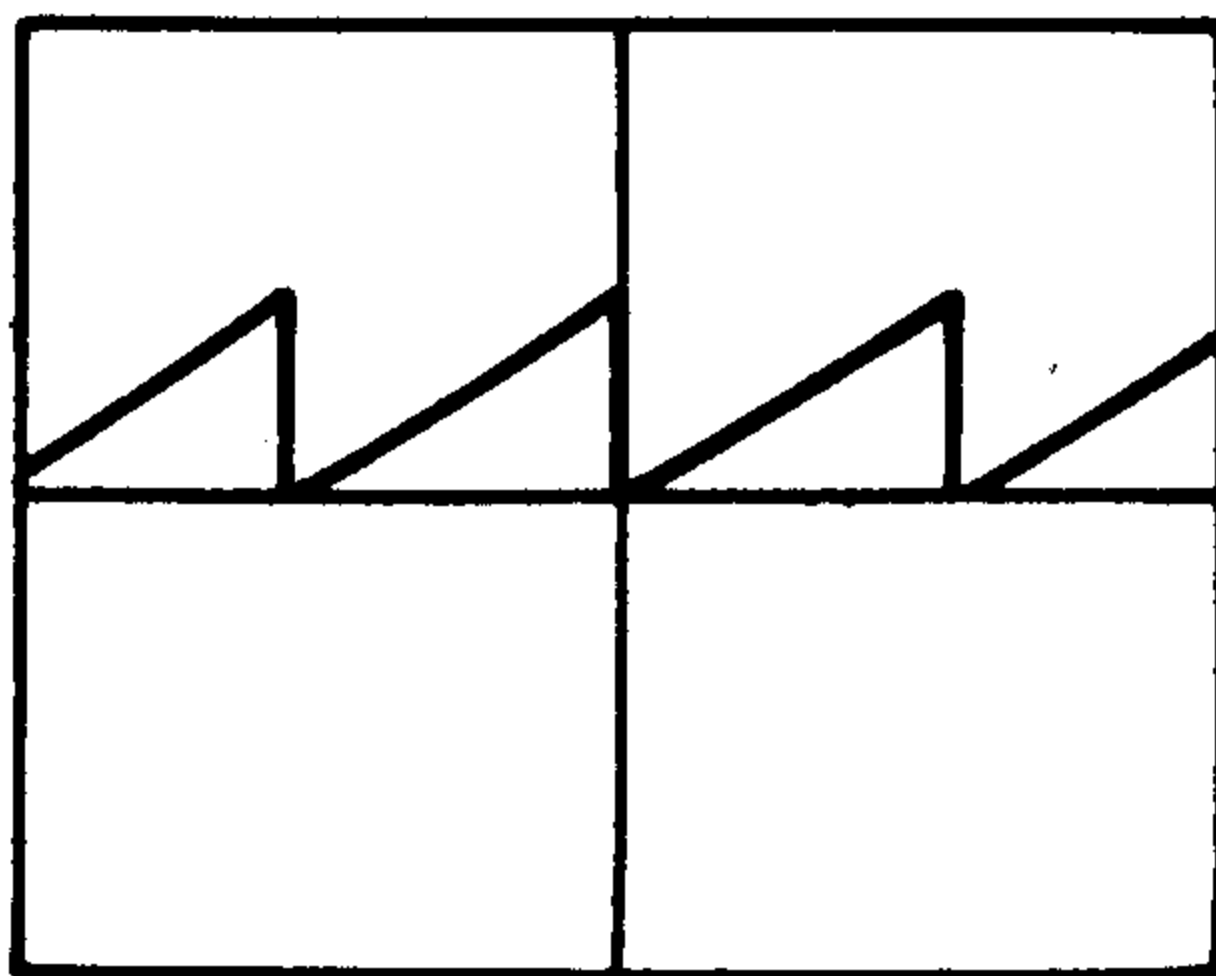


② 0.7Vp-p  
71.43Hz

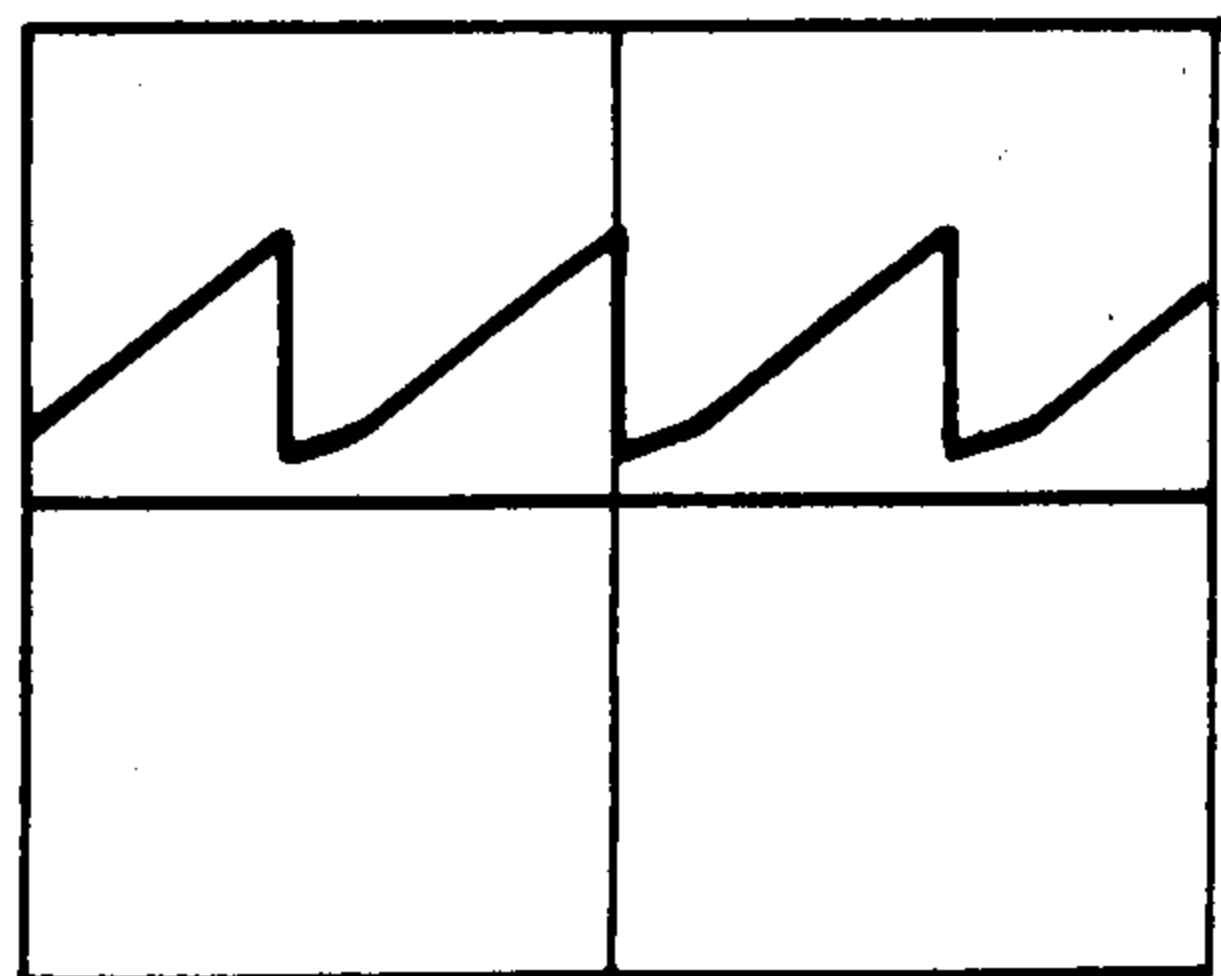


③ 4Vp-p  
71.43Hz

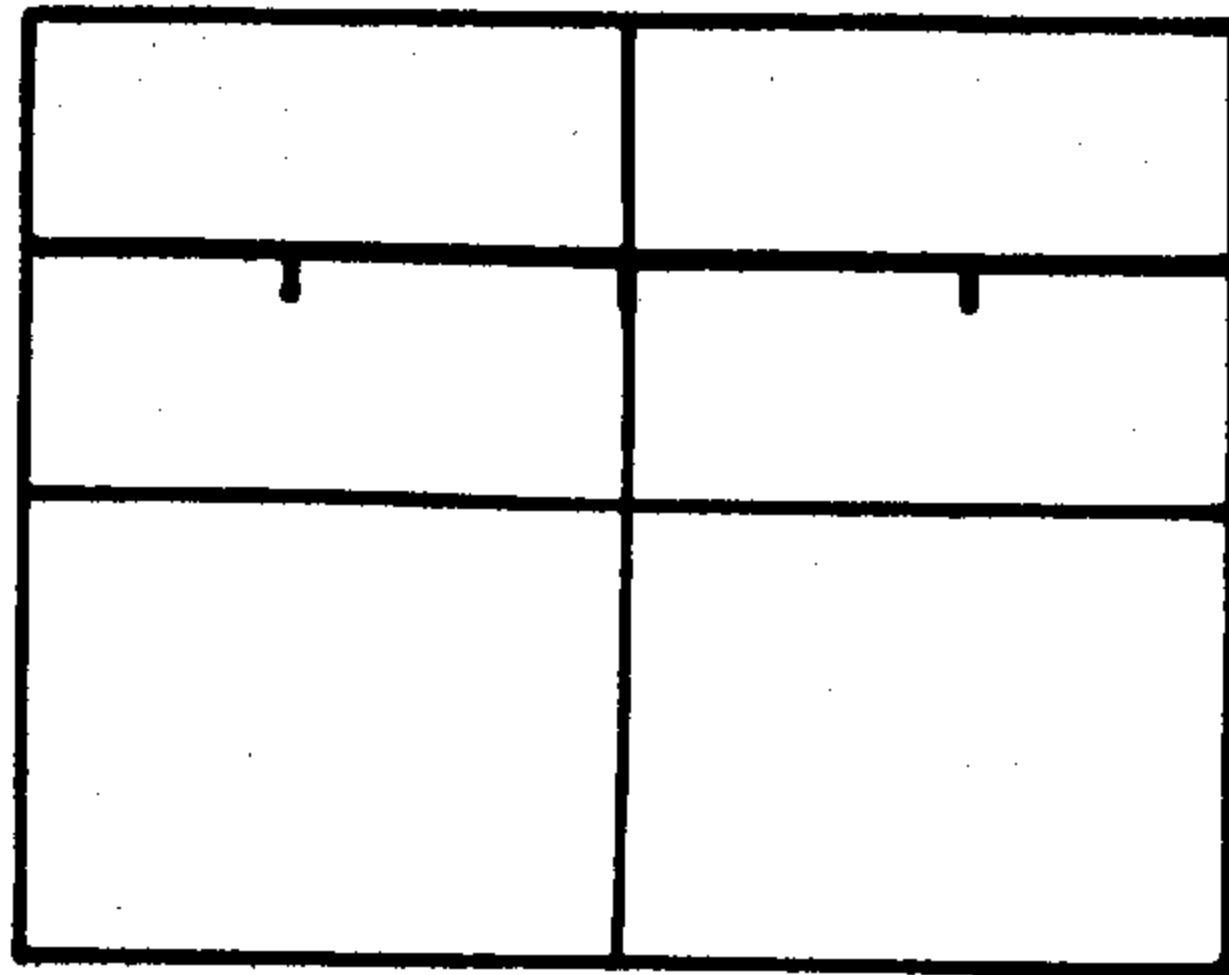
④ 6.68V



⑤ 4.0Vp-p  
71.43Hz

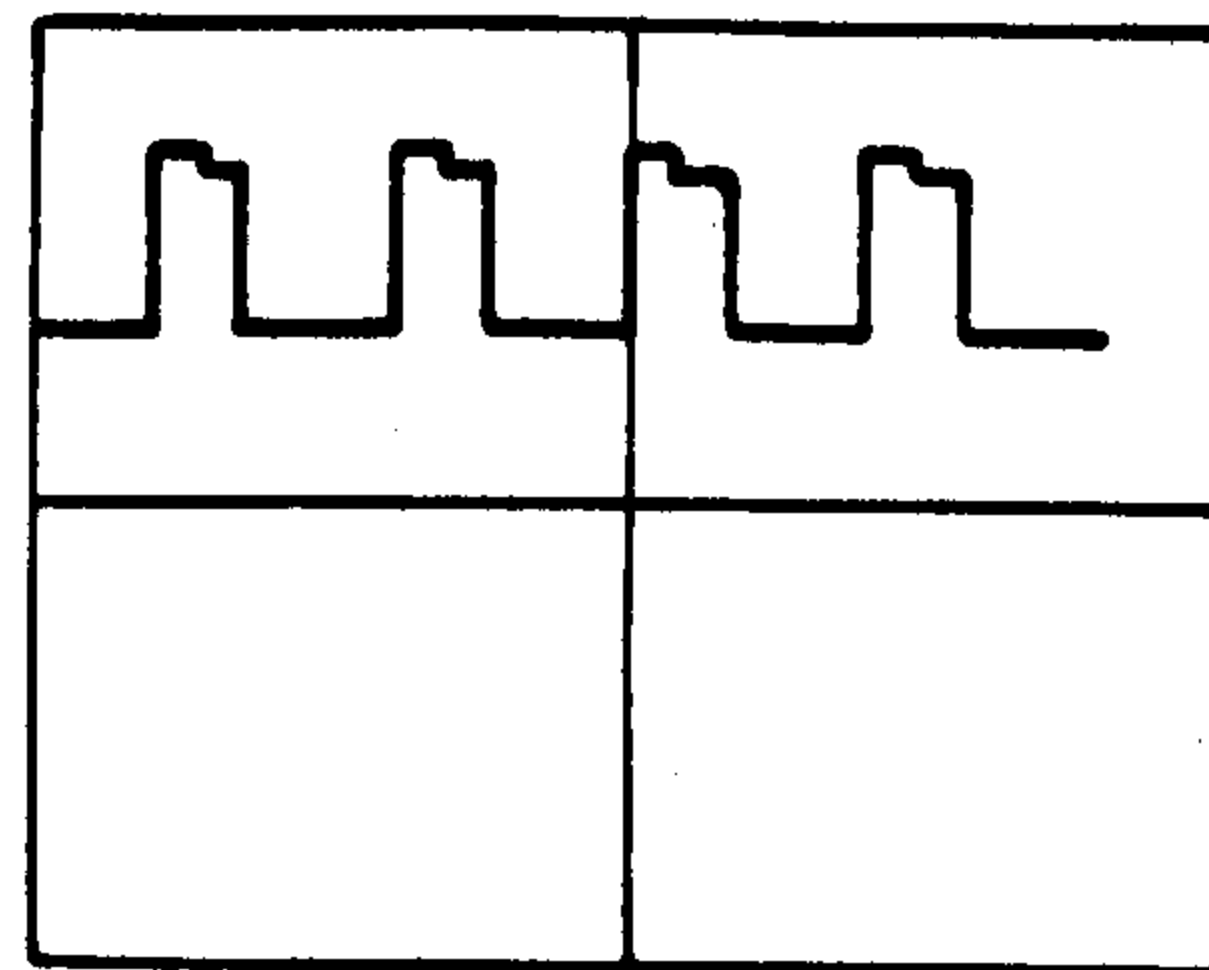


⑥ 4.7Vp-p  
71.43Hz

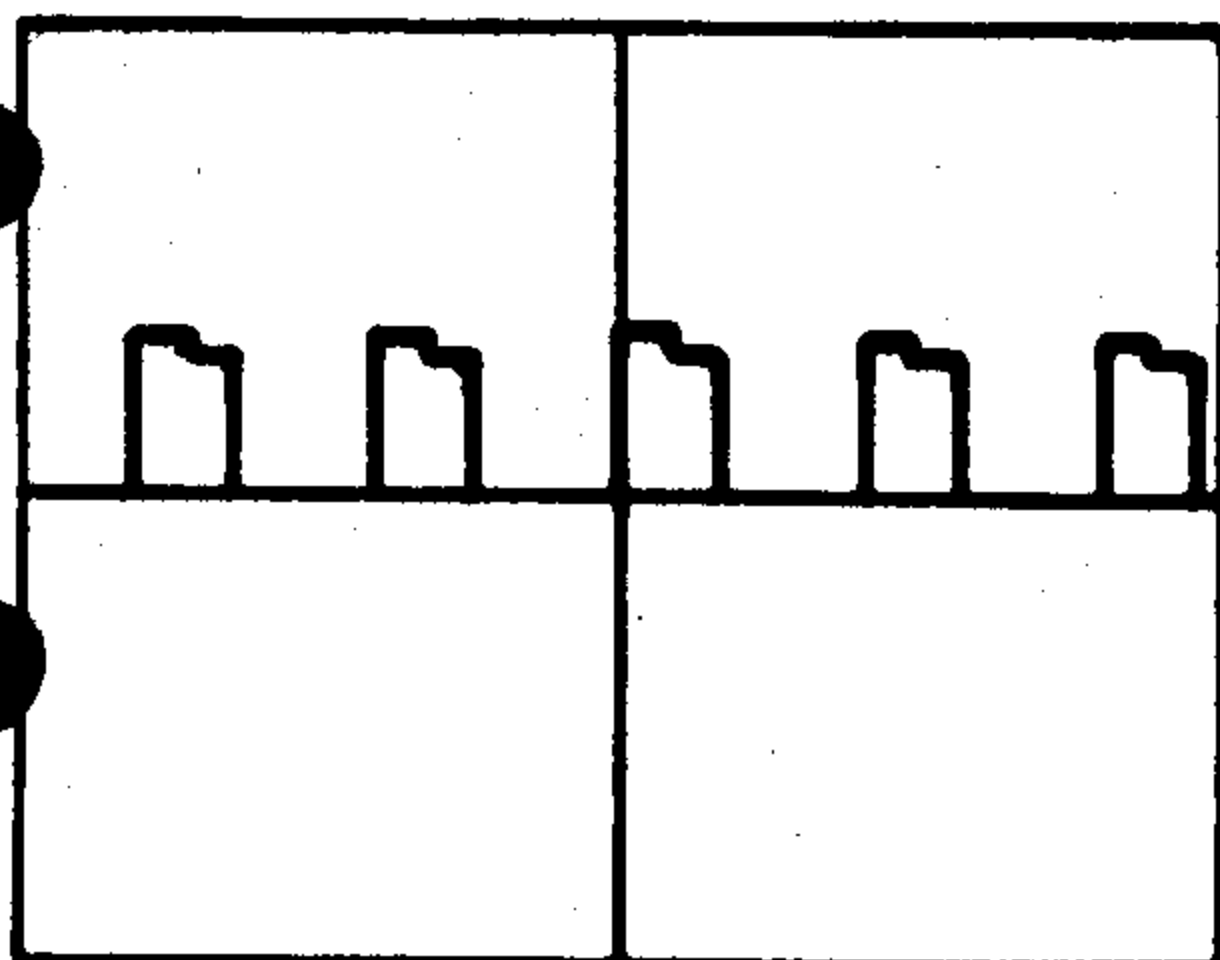


⑦ 2.1Vp-p  
71.43Hz

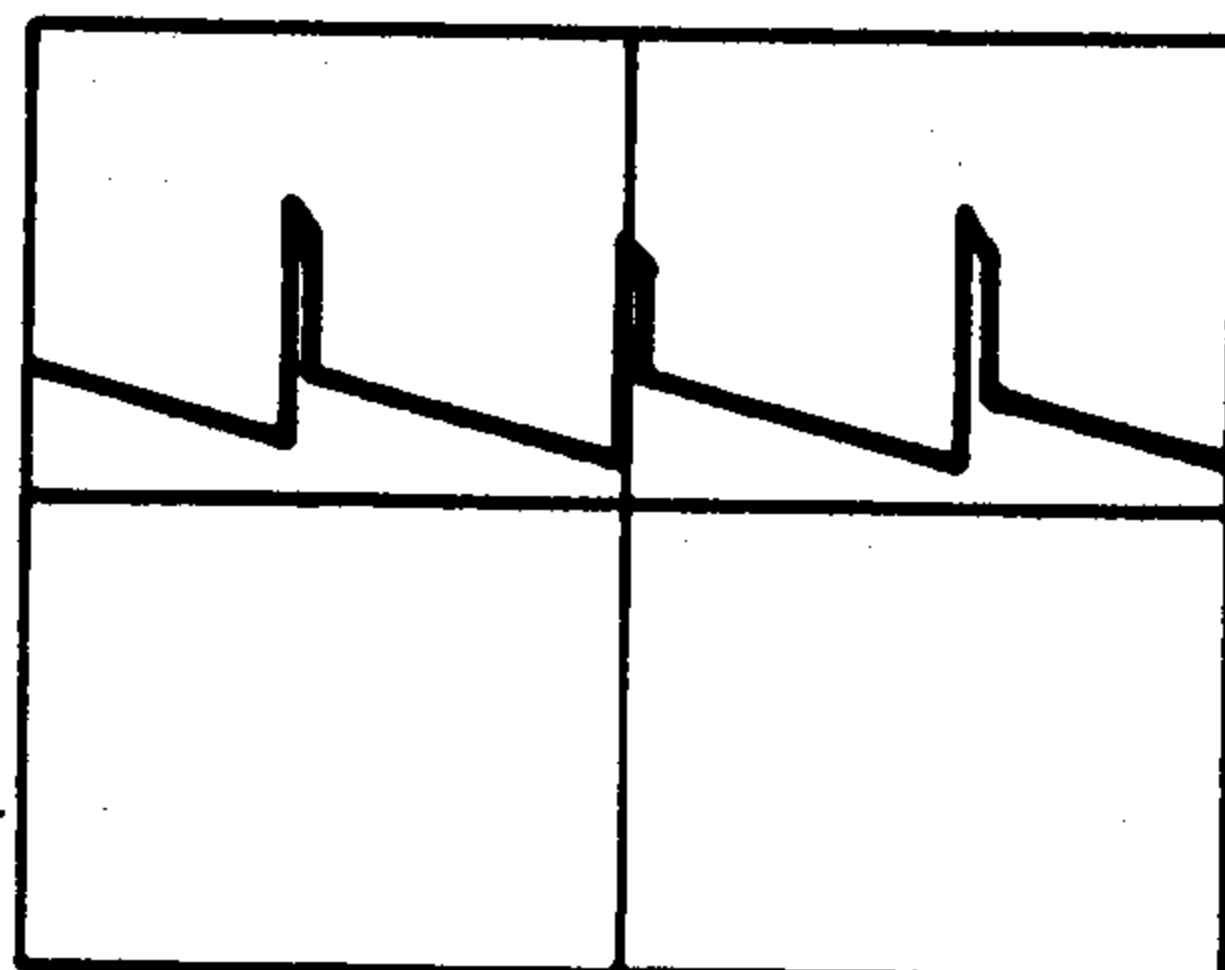
⑧ 11.92V



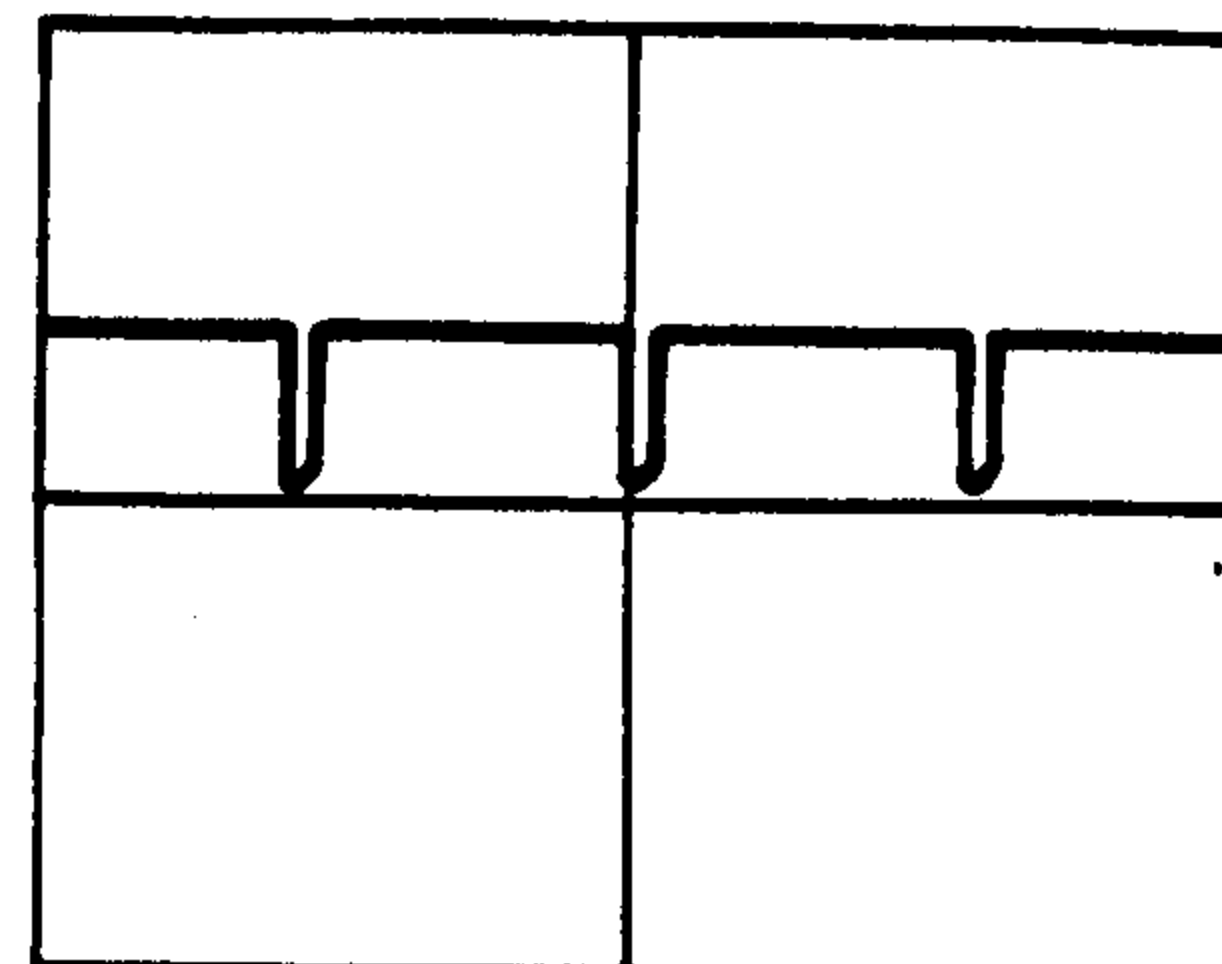
⑨ 24Vp-p  
71.43Hz



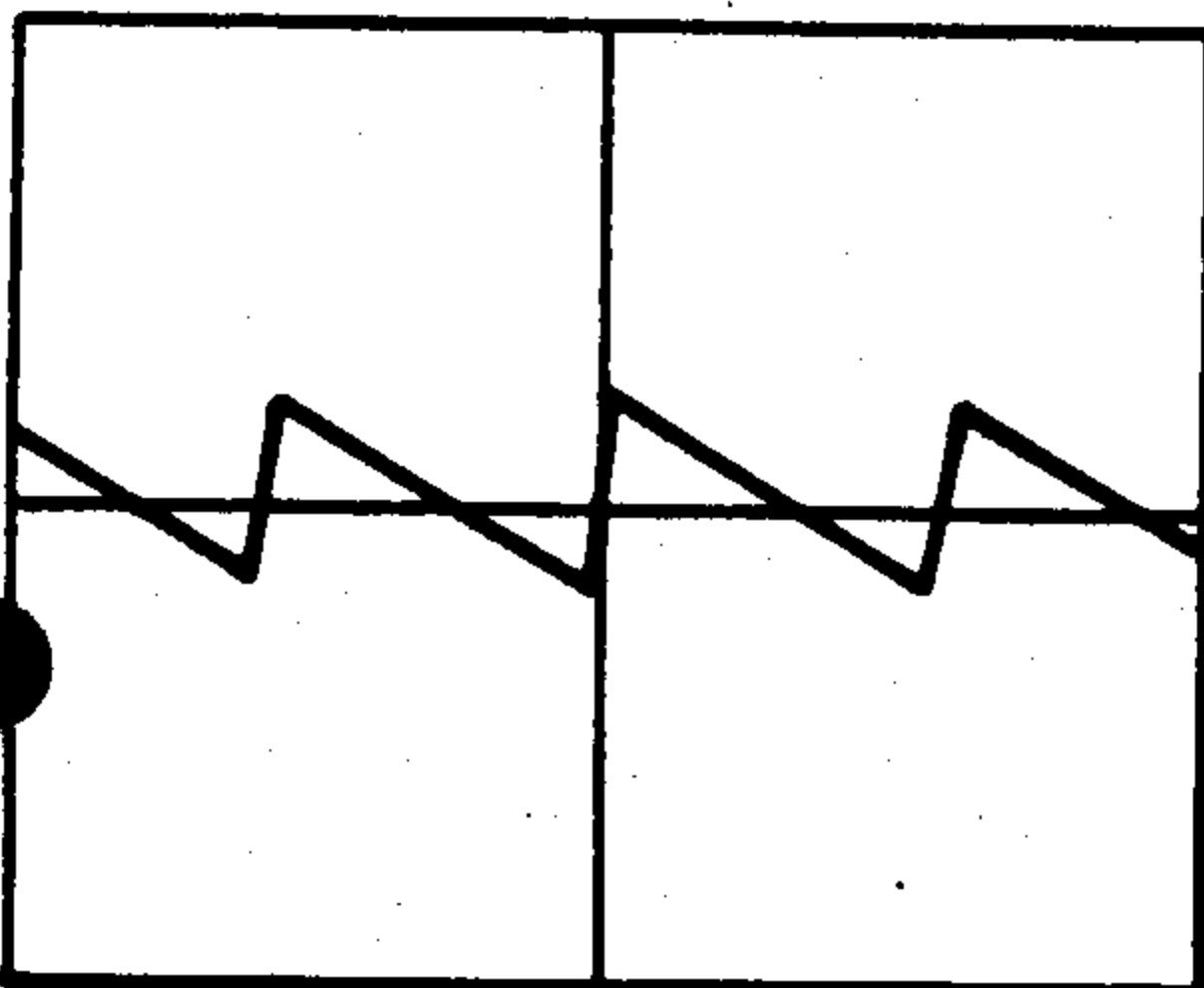
⑩ 12Vp-p  
71.43Hz



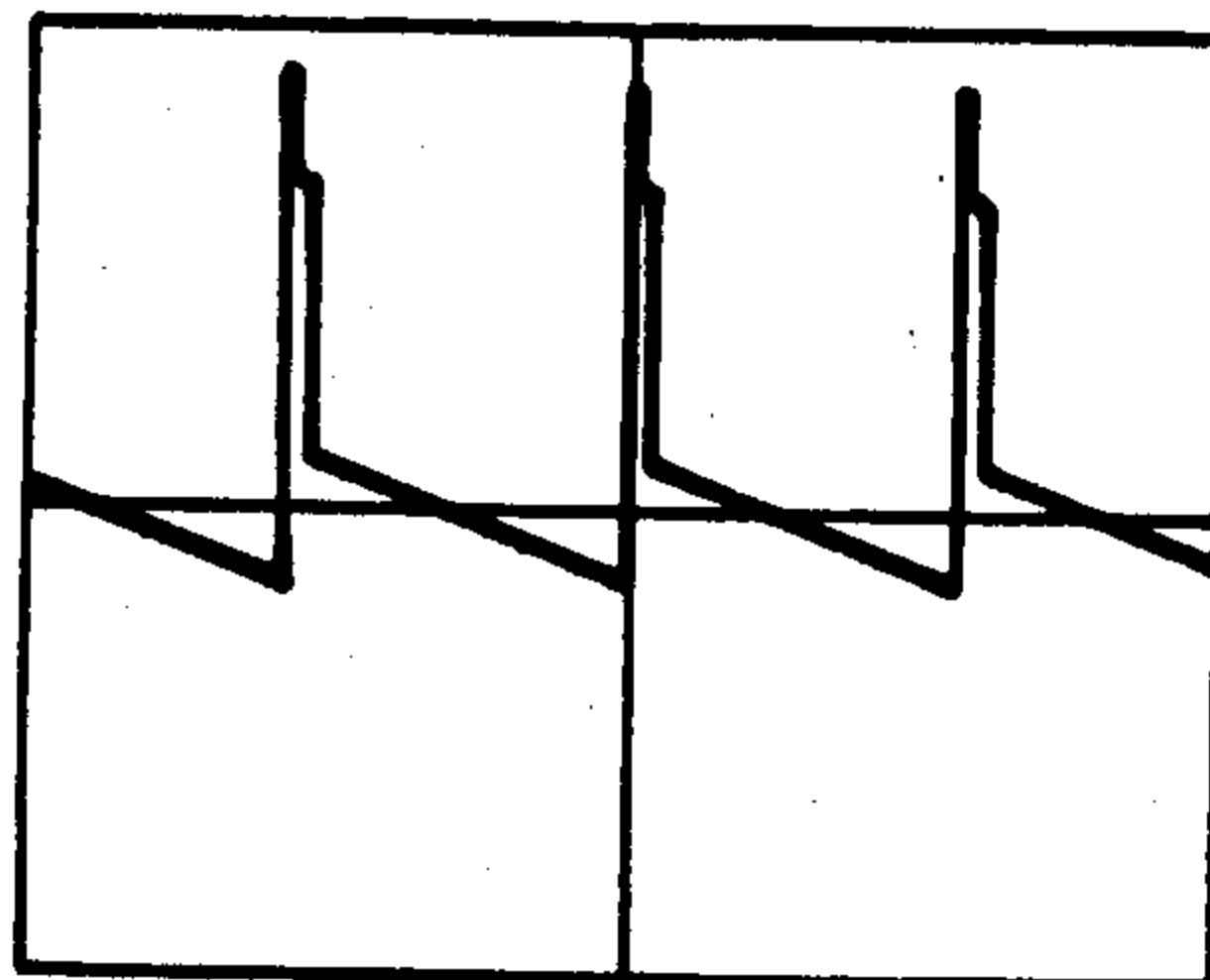
⑪ 2.5Vp-p  
71.43Hz



⑫ 0.7Vp-p  
71.43Hz

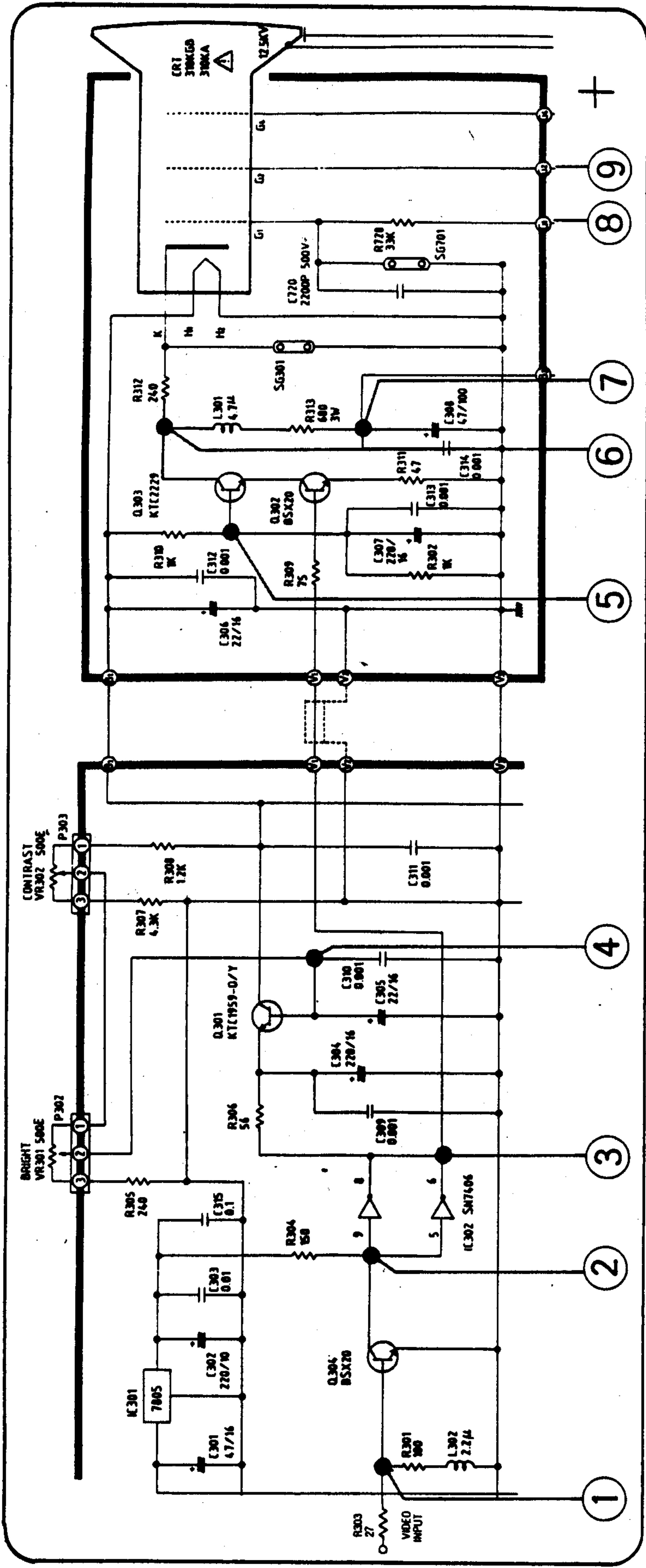


⑬ 0.85Vp-p  
71.43Hz



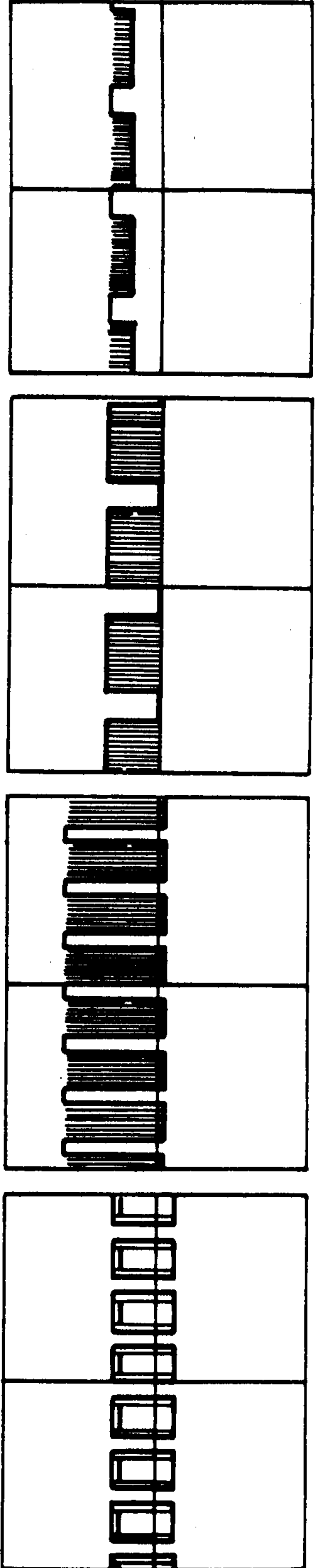
⑭ 22Vp-p  
71.43Hz

# VIDEO CIRCUIT



Q301 BASE 3.3V  
 EMITTER 2.67V  
 COLLECTOR 11.66V

④ : 3.93V  
 ⑤ : 5.88V  
 ⑦ : 70.7V  
 ⑧ : -20.8V  
 ⑨ : 600V



① 0.9Vp-p

② 5Vp-p

③ 3.3Vp-p

⑥ 28Vp-p