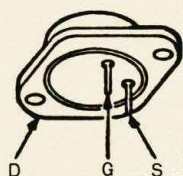


- b) If either of the L- or R-channels is out of order, the relay RY101 or RY151 of the associated channel opens. In this condition, no sound outputs come out from both channel's SPEAKER terminals.

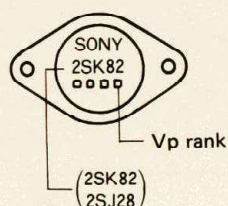
#### 5. Replacing V-FETs

- Completely discharge the power supply electrolytic capacitors as outlined in 2 above.
- Remove V-FET by removing screws.
- Check resistance readings of each two electrodes of V-FET using a VOM as follows.



VOM range:  $\times 1\Omega$   
 GOOD FETs show the following.  
 S-D :  $1 - 2\Omega$   
 S-G :  
 D-G : diode characteristic

When replacing the two P-channel V-FETs 2SK82 and/or the two N-channel V-FETs 2SJ28 in each channel, use two matched ones which have the same  $V_p$  (pinch-off voltage)-rank figure printed on them as shown below. The fluctuation of the  $V_p$  rank of the two can be acceptable on one-rank-difference basis.



Do not install the new V-FETs yet until instructed to do so later.

- Remove the power-drive board of the associated channel by removing two screws. Check the fusible resistors on the power-drive board. Replace those defective fusible resistors.
- Remove the power-amp board of the associated channel by removing ten screws. Replace the tantalum capacitor C104 220/6.3V (L-CH) or C154 220/6.3V (R-CH).
- Reattach the power amp board on the chassis.
- Temporarily make a solder connection to the lead of R119 100k $\Omega$  (L-CH) or R169 100k $\Omega$  (R-CH) for a checking purposes.

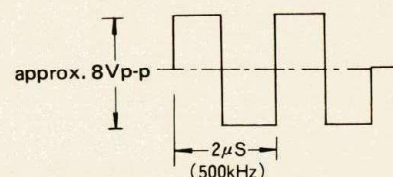
- h) Now the set has the power-drive board and V-FETs removed aside.

Turn POWER ON.

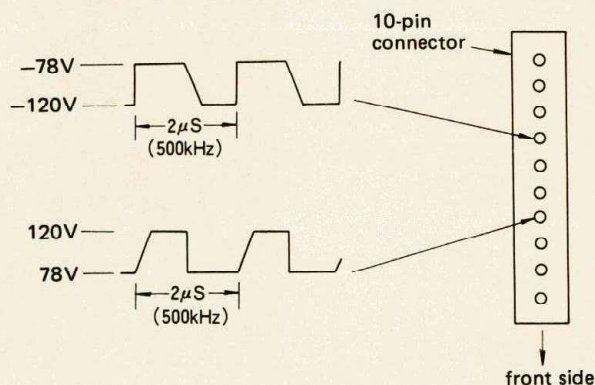
- i) Check the waveform at TP1 (L-CH) and TP2 (R-CH) for that shown below.

Adjust RT101 (L-CH) or RT151 (R-CH) to make the levels of the positive and negative halves equal.

Adjust T301 to obtain the specified pulse width.



- j) Check waveforms at pins 4 and 7 of the 10-pin connector to which the power-drive board connects.

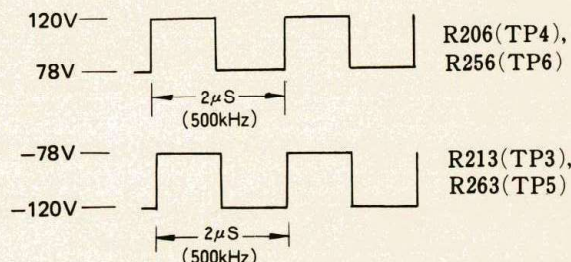


- k) Turn POWER OFF.

- l) Install the power-drive board and V-FETs in place. Do not fasten V-FETs with screws yet, i.e., the drains are in the open-circuit condition.

- m) Turn POWER ON.

- n) Check waveforms at TP3, TP4 (L-CH) and TP5, TP6 (R-CH) as shown below.



- Turn POWER OFF and completely discharge electrolytic capacitors as outlined above.
- Fasten V-FETs with screws. Now the drains of V-FETs are electrically connected.
- Remove the solder joint made to R119 or R169 in step g).