

AMPEX

CORPORATION

934 CHARTER ST. • EMERSON 8-1471
TWX REDWOOD CITY CAL 41
CABLE ADDRESS: AMPEX, REDWOOD CITY
REDWOOD CITY, CALIFORNIA

PROFESSIONAL PRODUCT

SERVICE BULLETIN

MAGNETIC RECORDERS

DATE: April 24, 1957

MODEL: 300 Series

BULLETIN NO: ~~26~~ 7-08

PAGE NO: 1 of 4

CONVERSION OF MODEL 300 TO 15-30 IPS

One of the standard modifications of the Model 300 is a conversion to run at 15 and 30 inches per second. The difference in speed is accomplished by changing the diameter of the motor pulley. A lower mass flywheel is required on the reel idler.

The electronic alterations consists of incorporating relays which operate from the Speed Change Switch. At the 30 ips speed, the relays operate to alter the equalization characteristics in accordance with the requirements of the higher speed.

The specifications are identical to those of the 7-1/2 - 15 ips machine except for speed and frequency response. The frequency response at the 30 inch speed is plus or minus 2 db, 50 to 15000 cycles.

PARTS REQUIRED

251	Flywheel, Reel Idler
352	Spacer, Reel Idler
817	Bracket, Relay Mounting
1030-2	Motor Assembly, 15-30 ips, 60 cps
or 1030-4	Motor Assembly, 15-30 ips, 50 cps
3958-3	Bracket, Motor Mounting
020-001	Relay

RECORD ELECTRONICS

Disconnect swinger of K102 and L101 and connect to ground.
Remove C109.
Remove C110.
Place C110 between open end of L101 and ground.
Connect high speed contact of K102 to C105 and R106.

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DATE:

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25

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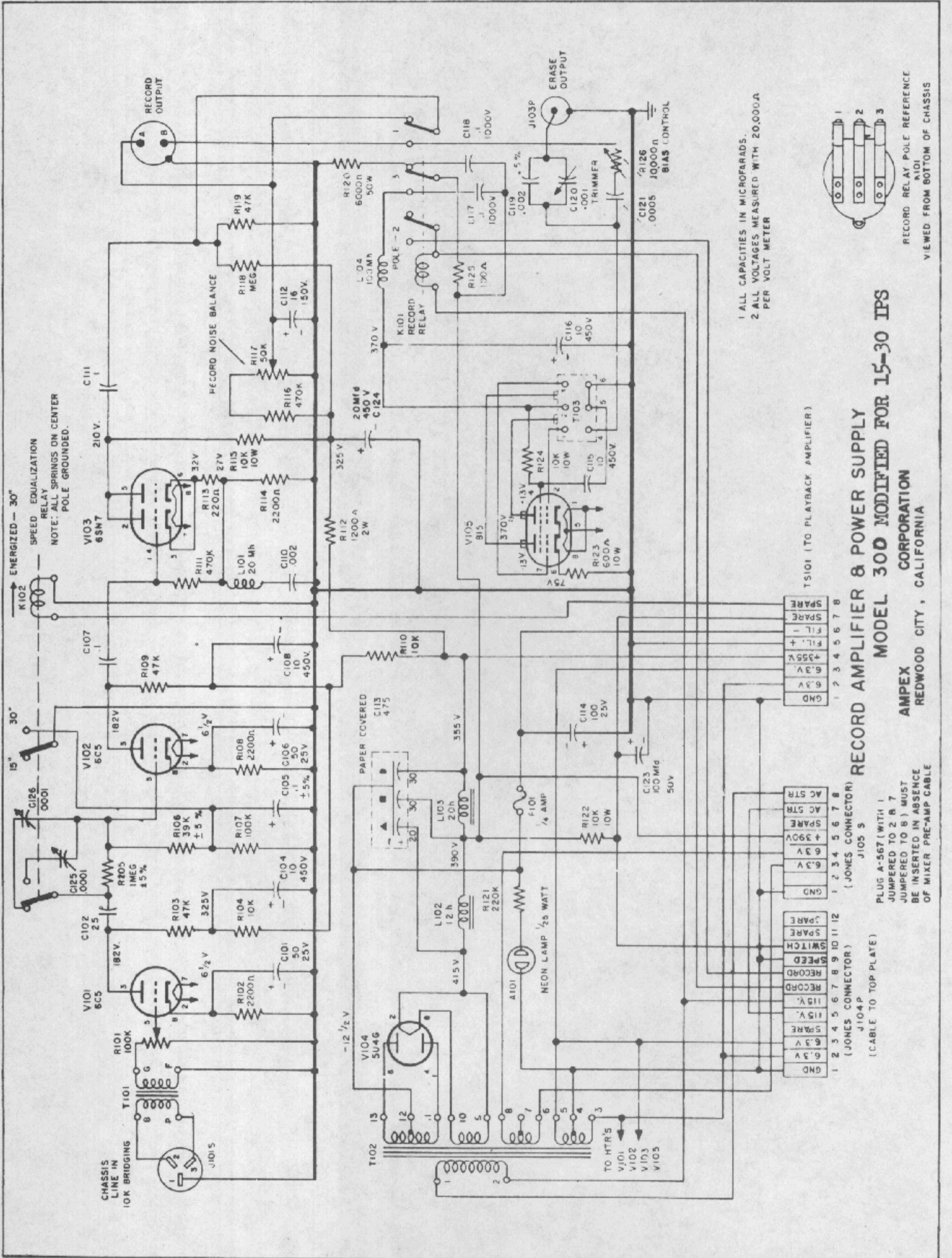
PLAYBACK ELECTRONICS

Add Ampex #020-011 Relay, connecting coil to pins 7 and 8 of power supply terminal switch.

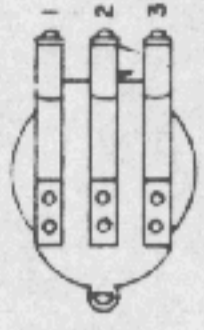
Connect normally open contact of relay to hot side of R205.

Connect swinger contact to ground.

Realign both electronics.



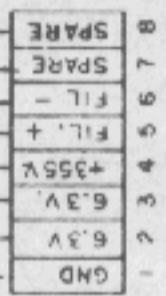
1 ALL CAPACITIES IN MICROFARADS.
 2 ALL VOLTAGES MEASURED WITH 20,000Ω PER VOLT METER



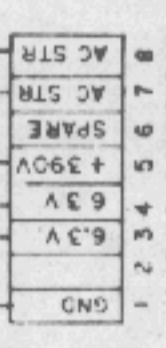
RECORD RELAY POLE REFERENCE
 K101
 VIEWED FROM BOTTOM OF CHASSIS

**RECORD AMPLIFIER & POWER SUPPLY
 MODEL 300 MODIFIED FOR 15-30 IPS**

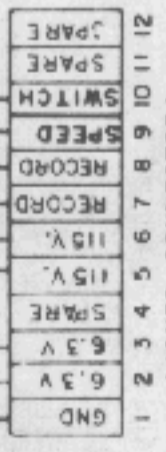
AMPEX CORPORATION
 REDWOOD CITY, CALIFORNIA



T5101 (TO PLAYBACK AMPLIFIER)



PLUG A-567 (WITH 1 JUMPERED TO 2 & 7 BE INSERTED IN ABSENCE OF MIXER PRE-AMP CABLE)



(CABLE TO TOP PLATE)

ENERGIZED - 30"
 SPEED EQUALIZATION RELAY
 NOTE: ALL SPRINGS ON CENTER POLE GROUNDED.

CHASSIS LINE IN 10K BRIDGING

-12 1/2 V

NEON LAMP 1/25 WATT

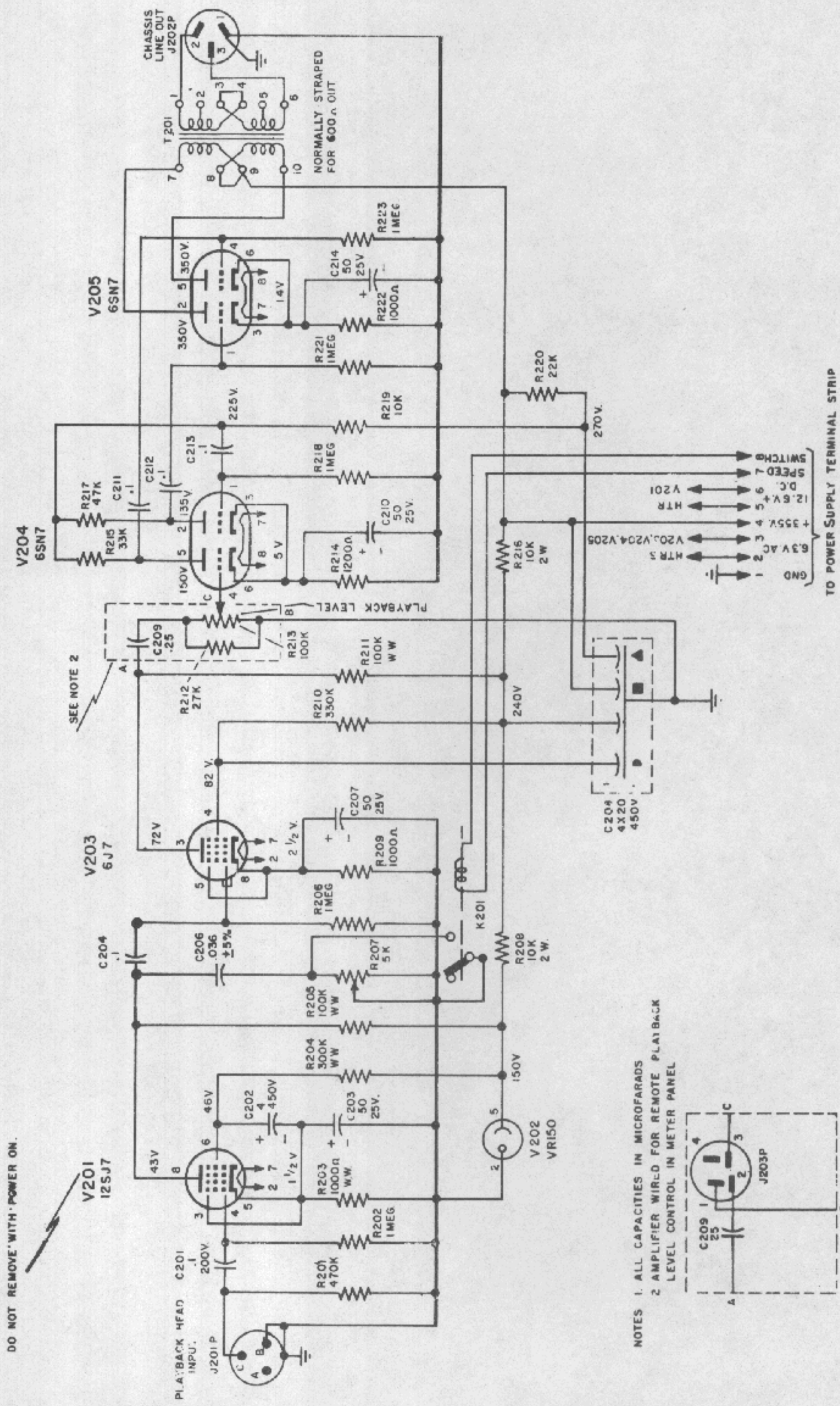
F101 1/4 AMP

PAPER COVERED

1 2 3 4 5 6 7 8
 GND 6.3V +355V FIL+ FIL- SPARE SPARE

1 2 3 4 5 6 7 8
 GND 6.3V +390V SPARE AC STR AC STR

1 2 3 4 5 6 7 8 9 10 11 12
 GND 6.3V SPARE 115V RECORD RECORD SPEED SWITCH SPARE SPARE



PLAYBACK AMPLIFIER
MODEL 300 MODIFIED FOR 15-30 IPS
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