

AMPEX

CORPORATION

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

MAGNETIC RECORDERS

SERVICE BULLETIN

DATE: 20 March 1953
MODEL: 300
BULLETIN NO: 16
PAGE NO: 1

COMPONENT CHANGES FOR VARIOUS SERIAL NUMBERS OF 300 SERIES RECORDERS

1. Models 300, 301, 302 below serial number 500 used various combinations of two pole and three pole top plate control relays K401 and K402. All can be replaced with three pole relays, catalog number RL-34.
2. Some Models 300, 301, and 302 below serial number 800 used a 7500 ohm, 50 watt adjustable resistor as R120 in the erase oscillator / B loading circuit. ~~RC-244~~, 6000 ohm, 40 watt resistor, will satisfactorily replace the early type.
3. Models 300, 301, 302 below serial number 300 (approximately) incorporate a spanner nut for mounting the reel idler. Catalog number 354 reel idler will not directly mount on these machines. Replacements for this group should be ordered as catalog number 354-F.
4. The following changes are effective at serial number 500:
 - a. Top plate control circuit revised to incorporate DC rather than AC relays and solenoids.
 - b. Head cable connections modified.
 - c. Takeup tension arm modified.
 - d. Safety switch modified.

These replacement components for recorders with serial numbers lower and higher than 500 are not interchangeable. Refer to the parts list for proper components.

5. Model 300's drive motors were changed from catalog number 641 Cyclohm, or catalog number 496 Electric Indicator, to catalog number 1030 Bodine motors. Models 301 and 302 drive motors were changed from catalog number 629 Electric Indicator, to catalog number 1075 Bodine.
6. The equalization components used in the playback amplifier were changed on Model 300's with serial numbers higher than 886. The correct components for recorders above and below this number can be identified from the parts list.
7. Model 300 record amplifiers with serial numbers higher than 801 incorporate a relay in the record amplifier allowing use of extended range head. Also added were condensers C123, C125, and C126. C109 and C110 were changed. C121 and R126 were changed.
8. The drive assembly mounting plate in all series 300 recorders was changed from a flat plate to a stiffening casting on machines with serial numbers above 1800.

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9. Second electrolytic condenser C806 added beginning with serial 1901.
(In Model 307, added beginning serial 1801.)
10. Suppressor condensers C807, C808, and C809 added to suppress starting and stopping transients effective, serial 2501.
11. AC outlet for fan added beginning serial 2101.
12. Erase coupling condenser C119 changed to .002 mfd effective serial 2103.
13. Oscillator circuitry changed effective serial 1850.
14. Record and playback head gaps changed to 1 mil and $\frac{1}{4}$ mil respectively, effective serial 1605.
15. Capstan diameter changed effective serial 2501.
16. Condenser C109 changed to .0035 mfd. C110 changed to .002 mfd effective serial 2912.