

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: 11
PAGE NO: 1

1. Bias Adjustment. As stated in the instruction book, paragraph 4, p.2, section III, the bias is set at a current at which the overall output at 1000 cycles is 2 db below the maximum. For serial numbers above 1605 see Service Bulletin #19 paragraph "B". The bias current is very uncritical as far as affecting distortion, once a certain minimum is exceeded. Above this minimum point, the output remains constant for the same distortion over a very wide range. The only effect of excessive bias current is to erase high frequencies. Actually, the optimum current for the bias setting is that which produces maximum sensitivity at 1000 cycles. The bias setting is specified to be much higher than this to insure that the current will always be well beyond the region of distortion. This setting is overly conservative, and if it is found that difficulty is ever encountered in obtaining sufficiently high record level at the high frequencies, greater high frequency output can be obtained by slightly reducing the bias current. Following the procedure outlined in the instruction book, any setting just beyond the peak to 2 db down is satisfactory.