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FIELD ENGINEERING BULLETIN #B6  
 8000A Optimod-FM

July 11, 1979

ALTERING PRE-EMPHASIS TO 50  $\mu$ s

In Europe and other foreign countries, broadcasting standards require use of 50  $\mu$ s pre-emphasis rather than the 75  $\mu$ s required in North America.

Model 8000A is factory modified at no charge if this requirement is stated on the order. A "Special Modification" label is attached near the serial label to indicate the change.

This bulletin describes how to make the change as a field operation.

- 1) Remove the top cover revealing the limiter/compressor section. Referring to the diagram on Page 3, locate the four affected resistors.
- 2) Referring to field repair techniques described on Pages V-3 and V-4 of the Operating Manual, change these resistors according to Table 1 below.
- 3) Remove the bottom cover revealing the input filter and stereo generator sections. Referring to the diagram on Page 3, locate the two affected capacitors.
- 4) Change these capacitors according to Table 2 below.
- 5) No recalibration is necessary. Replace both covers tightening all screws evenly.

<u>Ref. Des</u>	<u>Old Value</u>	<u>New Value</u>	<u>Remarks</u>
R233	3.83K	5.90K	L Limiter
R234	3.83K	5.90K	R Limiter
R235	(absent)	10.2K	L Limiter
R236	(absent)	10.2K	R Limiter
C317	1600 pF	1070 pF*	L Input filter
C318	1600 pF	1070 pF*	R Input filter

NOTE: It is wise to solder replacement components to both sides of the circuit board to assure reliable connections after removal of old components.

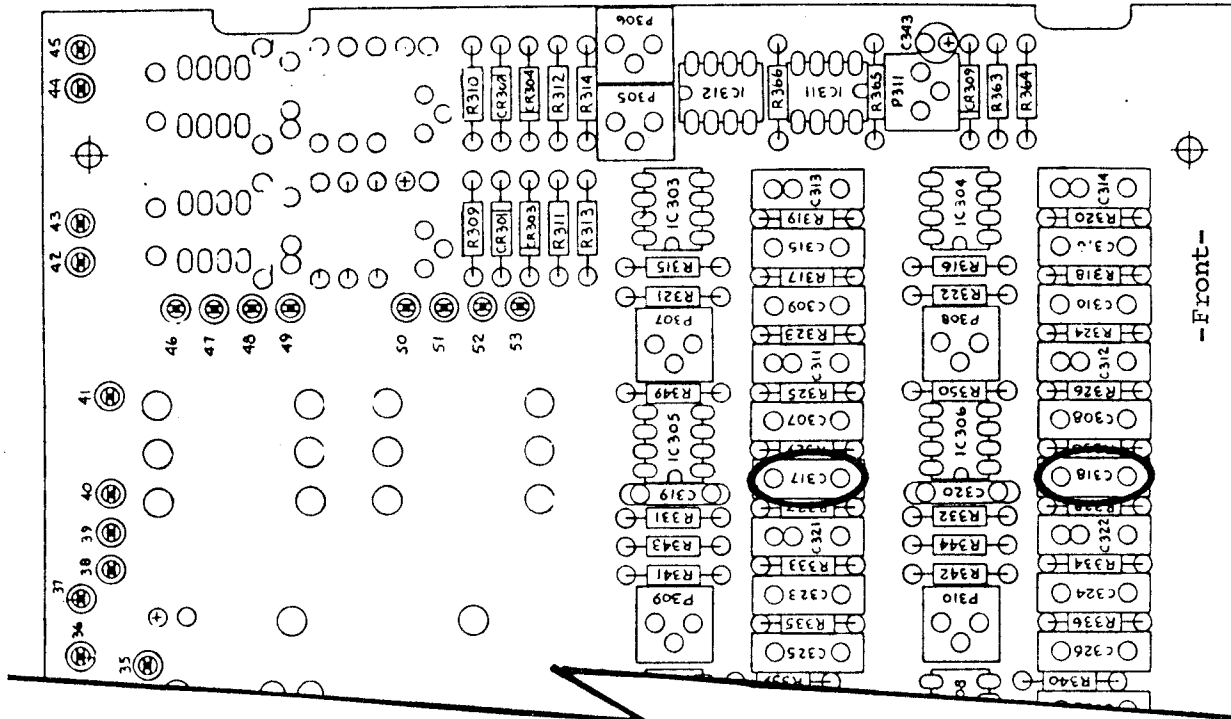
Resistors are 1/8W, 1% Metal Film (RN55D style)

\*Capacitor values are  $\pm 1\%$ . These are obtained by paralleling selected 390 pF and 680 pF mica CM05-style capacitors.

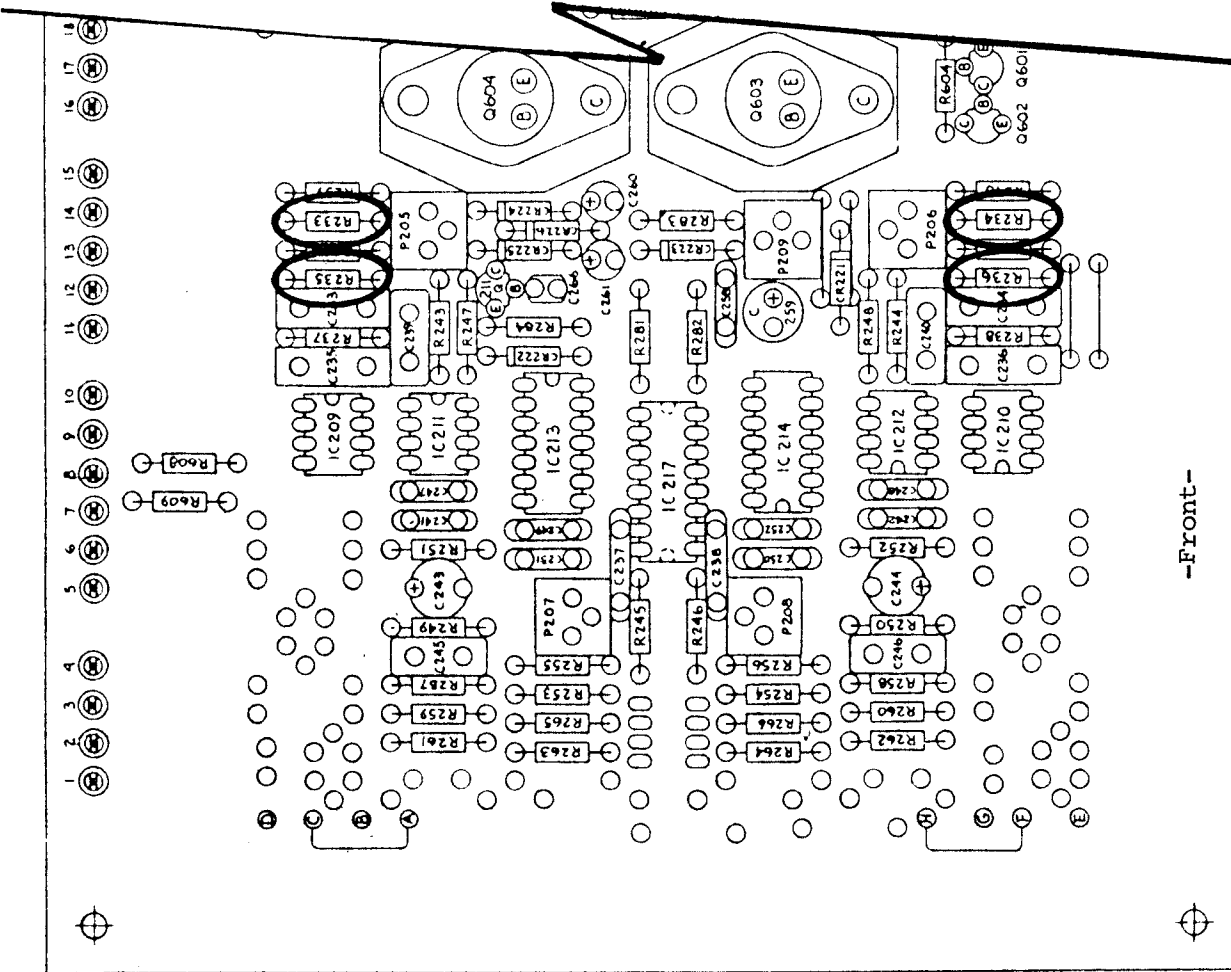
Field Engineering Bulletin #B6

Parts List for Field Retrofit Kit

<u>Quantity</u>	<u>Description</u>	<u>Orban P/N</u>	
2	5.90K, 1%, MF Resistor	20041-590	
2	10.2K, 1%, MF Resistor	20042-102	
2	680 pF, 1%, Mica Cap	21022-168	} Bridged to 1070 pF±1% & Piggy-Backed
2	390 pF, 1%, Mica Cap	21020-139	
1	Label, Special Modification "50 μs Pre-emphasis"	59020-000	



Segment of  
STEREO GENERATOR BOARD  
(beneath bottom cover)



Segment of  
COMPRESSOR/LIMITER BOARD  
(beneath top cover)