DATE 5-31-60 SH. 1 OF 4 COMPILED BY Wm.F. Everett	TMC SPECIFICATION NO. S 496	
	TITLE: Filter Installation On The FFR 455Kc	JOB C
APPROVED	KIT-166	

1. PURPOSE

1.1 This kit adds a filter to the receiver, improving its IF bandwidth characteristic.

2. DESCRIPTION

2.1 The kit contains the filter, socket, and all other parts to effect the modification.

3. INSTALLATION

3.1 Installation will be simplified if the PROCEDURE is followed step-by-step.

3.2 MATERIALS REQUIRED

a. Soldering Iron & solder

b. Pliers

c. Screwdriver

d. Small Wrench

e. Misc. Wire

3.3 MATERIALS SUPPLIED

a. 22K/2W Carbon Resistor (RC42GF223K)
b. .02uf, 500V Disc Capacitor (CC100-24)
c. 100K ½W Carbon Resistor (RC20GF104K)
d. 100 MMFD, 500V Mica Cap. (CM20B101K)
e. Plug in Filter (FX-196)
f. Jack & Plate Assembly (A3301-3)

4. PROCEDURE

4.1 All components in the following steps are located in the vicinity of the left rear corner of the chassis-around T101.

4.2 Remove wiring as follows:

4.2.1 Disconnect the green wire from green dot terminal of T101 taking care to avoid damage to this wire.

4.2.2 Remove and discard R105(33K) and L106, the components connected to black dot terminal of T101.

4.2.3 Remove and discard R104 & the red and white wire connected to red dot terminal T101.

4.2.4 Remove and discard the blue wire connected to blue dot terminal of T101.

4.3 At this point all leads have been disconnected from T101. The transformer is now removed from the chassis and discarded.

4.4 Utilizing the wide spaced holes formerly used to mount T101 assemble the new filter socket under the chassis with terminals 1 & 2 nearest the rear of the unit.

4.5 Rewire as follows:

4.5.1 Connect a red and white wire between the standoff lug nearest terminal 2 of filter and the end of R103 (68K) connected to a standoff lug nearest terminal 3.

4.5.2 Also connect a 22K 2 watt resistor from the standoff lug nearest lug 2 to pin 5 of V100.

4.5.3 Using bare #2 tinned wire connect terminal 2 to terminal 1 of the filter socket running the wire from terminal 1 to the ground lug under the standoff located near terminal 1.

4.5.4 From the standoff insulated lug connect a .02 mfd disc. ceramic capacitor to the ground lug,

4.5.5 From the same standoff insulated lug connect a 100K resistor to pin 1 of V100.

4.5.6 Connect the 100 mmfd mica capacitor from pin 5, V100, to terminal 3 of the filter socket.

4.5.7 Connect the green wire wire already on pin 1, V101, to terminal 4 of the filter socket.

4.5.8 Solder all connections & check wiring for accuracy.

4.5.9 Insert filter in its socket with the arrow on the case pointing toward the rear of the chassis.

4.6 Realign the BFO as follows:

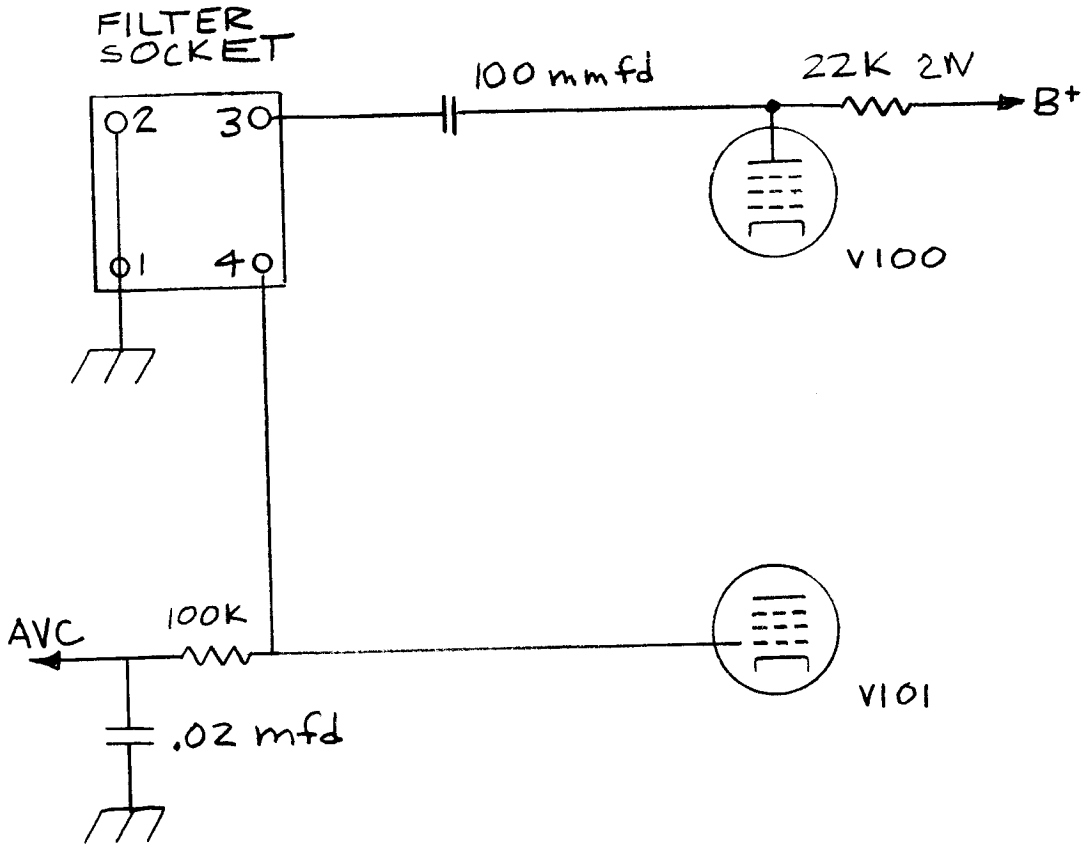
4.6.1 Inject a 455 kc unmodulated signal from the signal generator to the HFO INPUT jack (J-101). Switch the BFO switch to the ON position; and set the BFO MASTER-SLAVE switch to BFO. Set the BFO PITCH control on the front panel to its "Zero" position. At this setting the BFO oscillator should produce a "Zero Beat" with the 455 kcs test signal. In the event that there is no "Zero Beat" at the "Zero" setting, tune the adjustable inductor (L-103) on the bottom of the receiver until a "Zero Beat" occurs at the "Zero" setting.

DATE
SH. 4 OF 4
COMPILED BY

TMC SPECIFICATION NO. S 496

TITLE: KIT-166 JOB C

APPROVED



REVISION SHEET

THE TECHNICAL MATERIEL CORP.
MAMARONECK NEW YORK

S496A

MODEL KIT-166 PROJECT NO _____

DATE	REV.	PAGE	EMN#	DESCRIPTION	CHK.	APP.
11/11/60	A	1, R3.3		Part Nos. Inserted		C
1/2/64	B	1	10698	Revised Sheet 1 per EMN.		46
6/2/64	C	1	11479	Revised Sht. 1 per EMN		46
6/30/67	D	ALL	18355	REVISED ---- MARKED: OBSOLETE - DO NOT ISSURE		SWB

TMC FORM 154-A