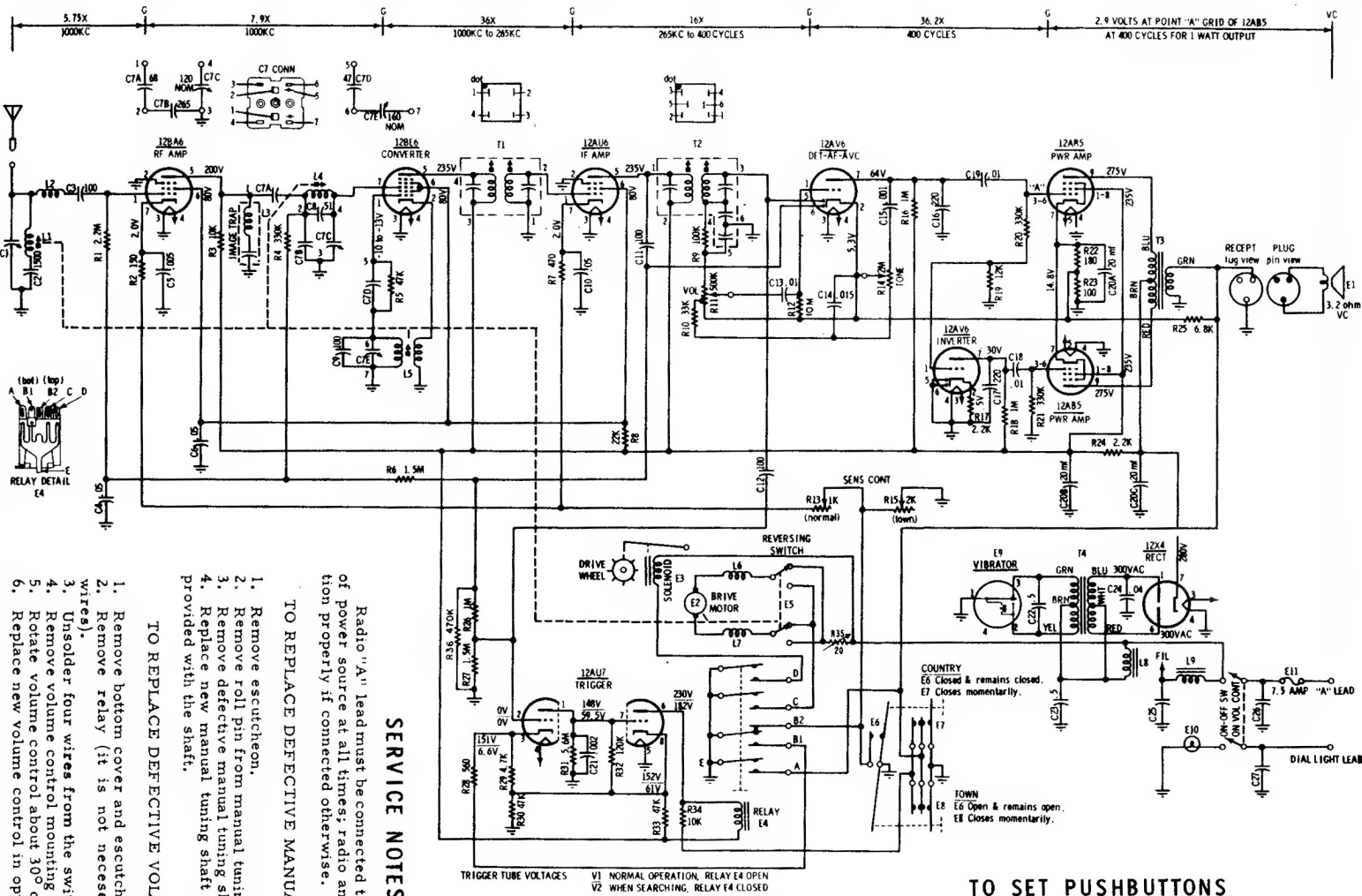


# MOTOROLA

AUTO RADIO  
MOTOROLA 69MF  
FORD FDR-18806-F



## SERVICE NOTES

Radio "A" lead must be connected to the positive (+) side of power source at all times; radio and tuner will not function properly if connected otherwise.

### TO REPLACE DEFECTIVE MANUAL TUNING SHAFT

1. Remove escutcheon.
2. Remove roll pin from manual tuning shaft.
3. Remove defective manual tuning shaft.
4. Replace new manual tuning shaft using the new roll pin provided with the shaft.

### TO REPLACE DEFECTIVE VOLUME CONTROL

1. Remove bottom cover and escutcheon
2. Remove relay (it is not necessary to unsolder relay wires).
3. Unsolder four wires from the switch.
4. Remove volume control mounting clip.
5. Rotate volume control about 30° clockwise and pull out.
6. Replace new volume control in opposite manner.

## TO SET PUSHBUTTONS

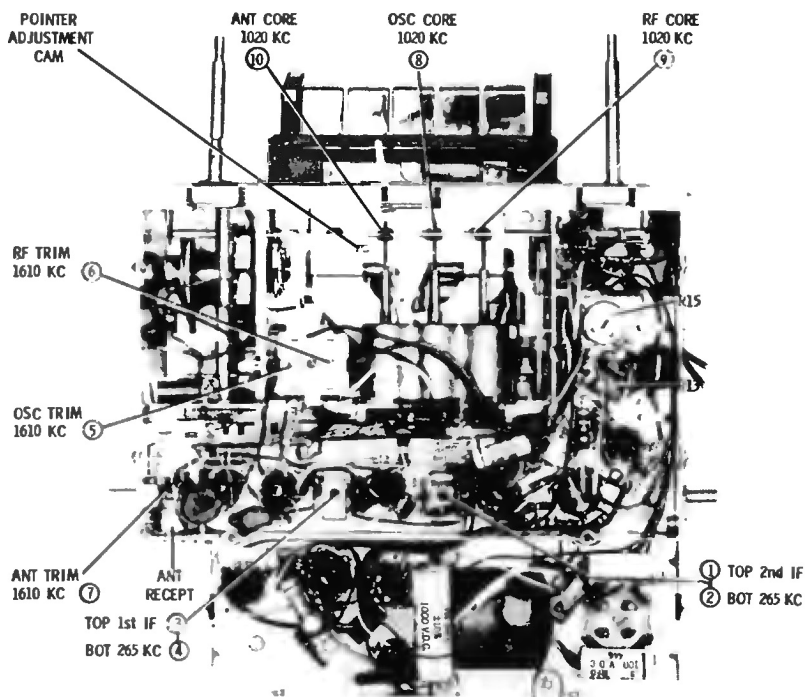
Stations may be set up in any order. However, for convenience in remembering, it is suggested that stations be set up in frequency sequence, from left to right.

1. Turn receiver on and allow to operate for fifteen minutes. Antenna should be fully extended.
2. Unhook one of the pushbuttons by pulling it out.
3. Accurately tune in a station with the manual tuning.
4. Lock pushbutton to that station by pushing in firmly.
5. Repeat above procedure for remaining pushbuttons.

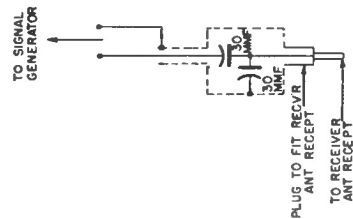
### NOTES:

Capacitors - decimal values in  $\mu$  all others in  $\text{mmf}$  unless otherwise specified.  
Voltages - measured from point indicated to chassis with a VTVM. No signal input. Input voltage 14.4 volts at end of "A" lead.  
Polarity: (-) negative chassis; (+) positive, end of "A" lead.  
Voltage readings taken with set in normal operation (not searching)

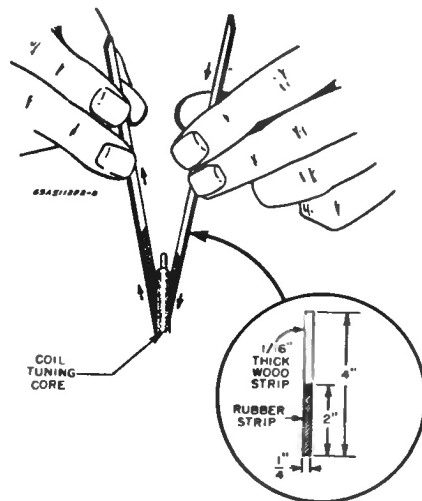
# MOTOROLA Auto Radio 69MF, Ford FDR-18806-F Alignment Information



ALIGNMENT ADJUSTMENT LOCATION DETAIL



DUMMY ANTENNA DETAIL



CORE ALIGNMENT TOOL DETAIL

## ALIGNMENT

Connect a VTVM from the AVC line to ground. Set volume to minimum and tone to treble. Attenuate signal generator to maintain VTVM reading between 1.5 and 2 volts.

STEP	GENERATOR CONNECTION	GENERATOR FREQUENCY	TUNER SET TO	ADJUST	REMARKS
IF ALIGNMENT					
1.	12BE6 grid (pin 7) thru .1 mf & chassis	265 Kc	Hi end stop	2, 3, 4,	Adjust for maximum.
2.	"	265 Kc	Hi end stop	1	Adjust for dip.
RF ALIGNMENT - NOTE: Back tuning cores completely out of coils before proceeding.					
3.	Ant recept thru dummy. See Fig.	1610 Kc	Hi end stop	5, 6, 7	Adjust for maximum.
4.	"	1020 Kc	49/64" from hi end stop	8, 9, 10	Adjust for maximum
5. Repeat steps 3 & 4 until no further increase, then cement cores in place.					
SENSITIVITY CONTROLS - NOTE: Connect an output meter across speaker voice coil.					
6.	Ant recept thru dummy. See Fig.	1000 Kc at 5 microvolts	Tune for max	R13	Adjust for 1.79 volts (1 watt output)
7.	"	1000 Kc at 100 microvolts	Tune for max	R15	Turn set off. Depress and release TOWN button (left side). Turn set on. Open contact B2 by inserting insulation (paper) between contacts on relay E4 and adjust for 1.79 volts output.
ANT TRIMMER ADJ					
8.	-	-	Weak station around 1400 Kc	7	Adjust for maximum with radio in car. Antenna should be fully extended.
POINTER CALIBRATION					

Tune radio to 1000 Kc signal and adjust the pointer adjusting cam (see Alignment photo) until the pointer lines up with the calibration mark on the dial background.