

President George

MODIFICATION

Programming

Resetting Access Codes

- a) Depress POWER NB/ANL and PROGRAM simultaneously and keep pressed down to the display lit off.
 - b) Release POWER and keep pressed NB/ANL and PROGRAM down: "codE" flashes in the display, and wait for "codE" disappears.
 - c) Release NB/ANL and PROGRAM
 - d) Push MODE one times.
 - e) Push M1 one times.
 - f) Push M3 one times.
 - g) Push PROGRAM one times.
 - h) Push PROGRAM 4 times.
 - i) Push POWER
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Changing the configuration

Programming :

- a) Turn your set on by pushing POWER.
- b) Turn your set off by pushing POWER,
- c) Depress POWER and keep pressed down. Your set goes on and then goes off.
- d) Keep POWER depressed and press PA and DIMMER simultaneously.
- e) Release POWER after 5 sec. while keeping PA and DIMMER pressed down: "codE" flashes in the display for 5 seconds.
- f) "codE" disappears and the display remains lit up.
- g) Release PA and DIMMER.
- h) Press :

M1

for 240 ch. FM/AM/SSB (International configuration, 20 Watt AM/FM, 50 Watt SSB), the display goes out.

M2

for 40 ch. FM 4 Watt and ch. 4-15 AM 4 Watt (Germany), the display goes out.

M3

for 40 ch. FM 4 Watt (CEPT), the display goes out.

MODE

for 40 ch. FM 4 Watt (Britain and Poland), the display goes out.

PROG

for 40 ch. AM/FM/SSB 4 Watt (French standard), the display goes out.

i) Enter your access code, then press POWER. Your set is now in new configuration.

Available functions in the international configuration:

DIMMER:

In the international configuration only, the DIMMER key allows you to change band, thereby giving you the use of 240 channels. A short depression allows you to advance by one band at a time - A B C D E F A.... (6 bands, 40 channels), A longer depression allows you to do the same thing in reverse - F E D C B A F

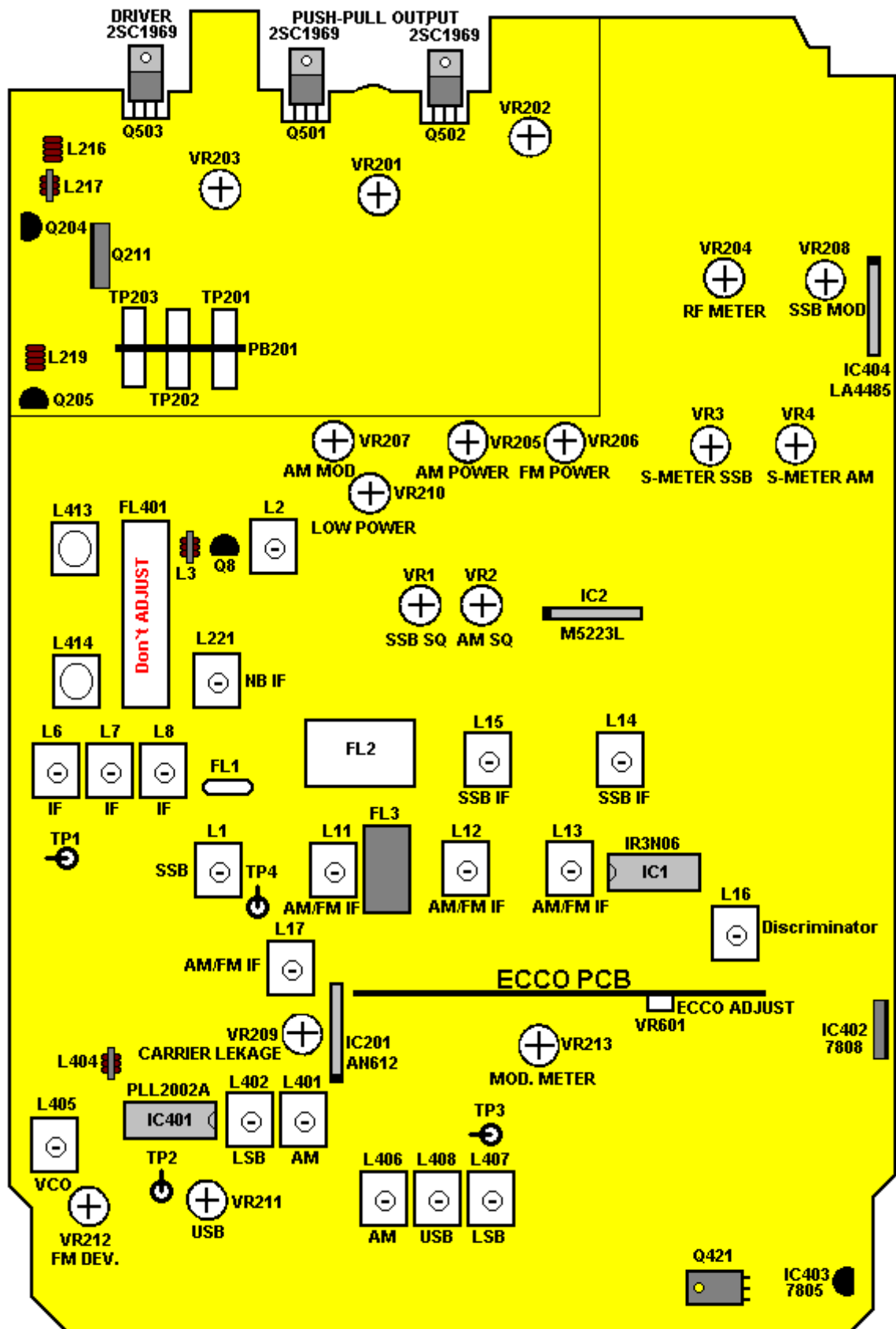
SELECT.

This key allows you to go up or down by 5 kHz at a time around the reference channel. It is used in conjunction with the CH UP and CH DOWN keys.

Display test:

- a) Turn your set on by pushing POWER.
- b) Turn your set off by pushing POWER,
- c) Depress POWER and keep pressed down. Your set goes on and then goes off.
- d) Keep POWER depressed and press M1 and CH19 simultaneously.
- e) Release POWER after 5 sec. while keeping M1 and CH19 pressed down: "codE" flashes in the display for 5 seconds and the station will start Display-Test.
Push M1 to stop test.

Adjustment



VR 205 Adjust for 30 Watt AM in international mode
 VR 206 Adjust for 30 Watt FM in international mode
 VR 210 Adjust for 4 Watt FM in CEPT mode

VR 601 Adjust Ecco

VR 212 Adjust FM-Deviation (FM-Modulation)

VR 207 Adjust AM-Modulation

VR 208 Adjust SSB-Modulation

VR 3 Adjust S-Meter for SSB

VR 4 Adjust S-meter for FM/AM

VR 213 Adjust Modulation Meter

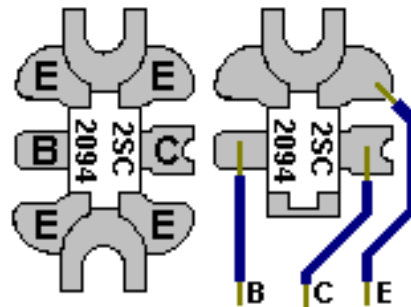
VR 204 Adjust RF-meter (Power output)

50 Watt RF Power modification

To get 50 Watt RF output power for President George, replace finale transistors Q501 and Q502 2SC1969 with 2SC2094

Cut Collector connection and cut cooling on right side of transistor.

Solder 3 wires on the transistor for connection to PCB.



Receiver modification for President George Varicap Tuned Circuits

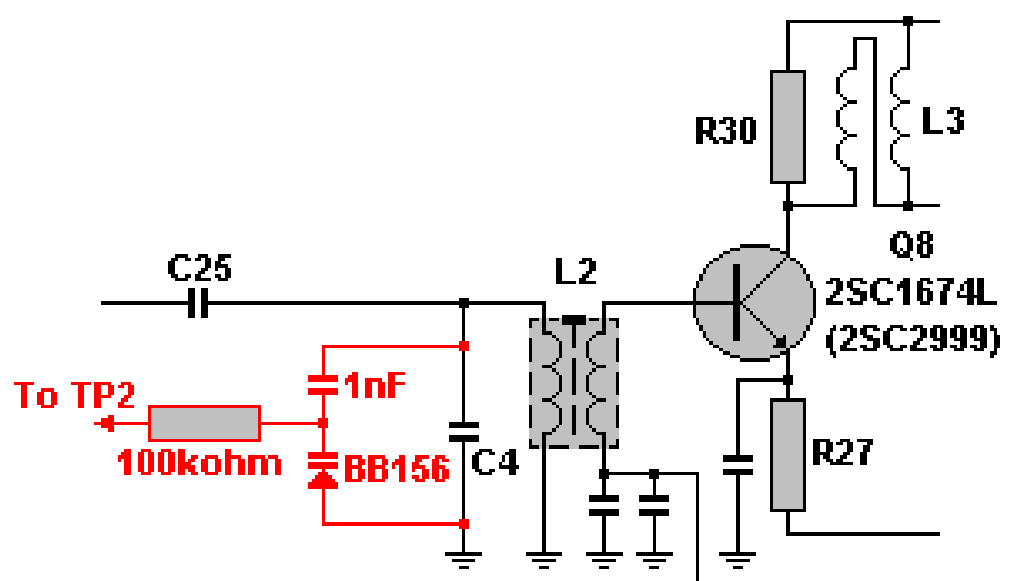
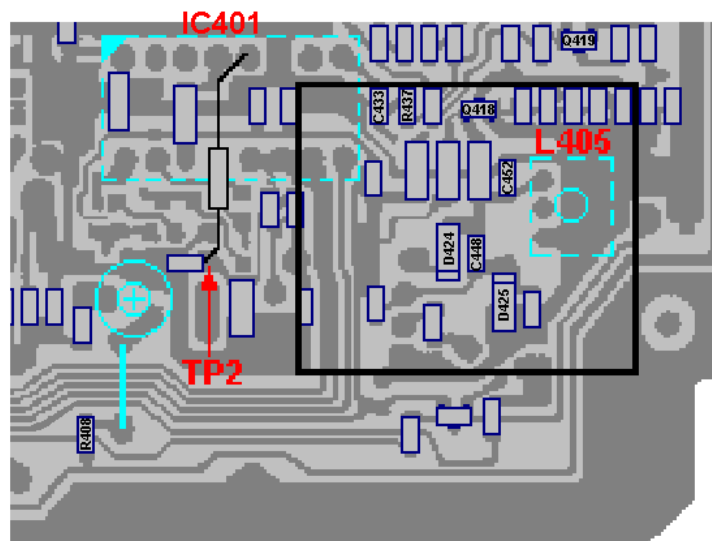
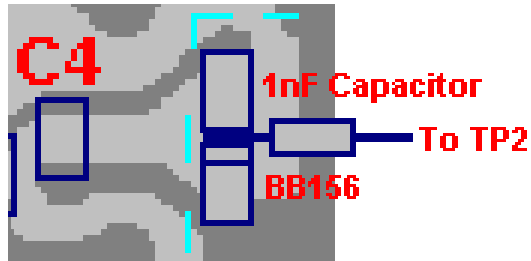
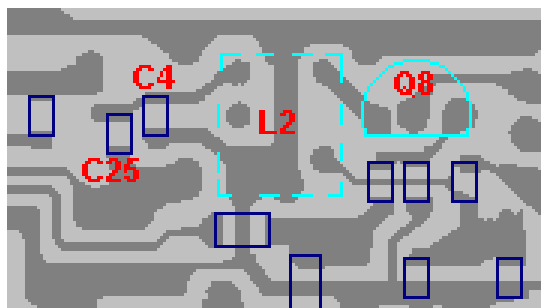
In the first stages of the HF input L2 and C4 is responsible for the selectivity of the receiver. This is a narrowband filter, and will not cover the hole 26.065 to 28.755 frequency band with full sensitivity.

To achieve maximum sensitivity for 26.065MHz C4 will increase to 36pF, and for 28.755MHz C4 will reduce to 29pF. This is possible by a varicapdiode.

To cover the hole band, replace C4 with 22pF ceramic capacitor and connect the varicap tuned circuits across C4. Connect 100kohm resistor to TP2.

Set the station to RX AM 27.405 MHz. Connect the DC Voltmeter to TP2 and adjust L405 for 2.5 Volt +/- 0.01 Volt. The VCO-Voltage will then be 4,4Volt@26.065MHz and 1,5Volt@28.755MHz. The BB134 or is 14pF@1,5Volt and 7pF@4,4Volt, and $14\text{pF}||22\text{pF}=36\text{pF}$ and $7\text{pF}||22\text{pF}=29\text{pF}$.

Re-adjust L2 for maximum gain.



Improved receive gain

Quieting of SSB and AM reception and improving gain of incoming signals is a common request from radio operators.

In the first stages of the HF input 2SC1674 (Q8) transistor can be found. This transistor is responsible for the amplification of a small detected signals. A problems exist if the transistor itself is noisy as is such the case of the 2SC1674 when compared to other low noise packages. Along with the amplification of the incoming signals is transistor noise. Replacement of this transistor with a higher gain, lower noise transistor greatly improves the signal to noise ratio of your receiver.

The transistor Q8 operates at $V_{CE}=6\text{V}$ and $I_E=2,5\text{mA}$. We will use an 2SC2999 transistor that has higher gain and lower noise characteristic. Replace 2SC1674 (Q8) with 2SC2999 (or similar low noise and high gain transistor) to achieve this improved signal to noise ratio.

Re-adjust L2.

The gain will improved with more than 6dB with the same signal to noise ratio.