

8. Key the transmitter with the microphone push-to-talk switch.
9. Read transmitter RF power on the WATTS scale of the TRANSMITTER RF OUTPUT meter (13). Most CB transceivers operate at the maximum allowable 5 watts input power, which results in an RF output power of 2½ to 3½ watts. For other transmitters, refer to the manufacturer's specification for normal RF output power. *Latest FCC rules limit transmitter output power to 4 watts under any conditions of modulations.*
10. Repeat steps 8 and 9 for each channel. RF power should be equal on all channels.

#### TRANSMITTER FREQUENCY CHECK (Refer to Fig. 7)

This check measures the accuracy of the transmitter operating frequency. It should be performed simultaneously with the TRANSMITTER RF POWER CHECK. Immediately after reading the RF power from the wattmeter, read the transmitter frequency from the frequency counter. The check is applicable to all types of transceivers and transmitters listed for the TRANSMITTER RF POWER CHECK.

#### NOTICE

FCC regulations require that all checks, adjustments and repairs which affect transmitter power and frequency be performed only by or under the immediate supervision of persons holding a valid First or Second Class Radiotelephone License.

1. Perform steps 1 through 7 of the TRANSMITTER RF POWER CHECK.
2. Set up the frequency counter for 27 MHz band reading.
3. Key the transmitter with the microphone push-to-talk switch. An unmodulated carrier is necessary; if necessary, cover the microphone to prevent audio modulation. If microphone gain is adjustable, set for lowest gain.
4. Read the transmitter frequency from the frequency counter. If the transmitter has no RF output, or an extremely low output, a frequency reading is not obtainable.
5. Repeat the check for each channel. Transmitter frequency must be within  $\pm 0.005\%$  or 1350 Hz of assigned CB channels, as follows:

#### NOTES

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	26.965	13	27.115
2	26.975	14	27.125
3	26.985	15	27.135
4	27.005	16	27.155
5	27.015	17	27.165
6	27.025	18	27.175
7	27.035	19	27.185
8	27.055	20	27.205
9	27.065	21	27.215
10	27.075	22	27.225
11	27.085	23	27.255
12	27.105		

#### MODULATION CHECK (Refer to Figure 8)

This check shows whether or not transmitter modulation is normal by displaying the modulation envelope on the oscilloscope. The check is used for AM transceivers and transmitters and should be performed after the TRANSMITTER RF POWER CHECK and TRANSMITTER FREQUENCY CHECK. For AM/SSB units, this check is applicable to the AM mode only; additional modulation checks for the SSB mode are given later.

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1. After performing the TRANSMITTER RF POWER CHECK and TRANSMITTER FREQUENCY CHECK, leave all connections and controls as specified at the conclusion of those checks.
2. Set AUDIO SOURCE switch (9) to 1 kHz.
3. Set AUDIO GAIN control (10) to mid-position.
4. Set SPEAKER switch (11) to ON.
5. If the radio is equipped with adjustable microphone gain, set it to mid-position.
6. Place microphone over the speaker of the Model 1040, face down, so that the speaker output drives the microphone with a constant tone.
7. Key the transmitter with the microphone push-to-talk switch.
8. Adjust the oscilloscope for a stable display of the modulation envelope.
9. Vary AUDIO GAIN control (10) from its minimum to maximum setting. The oscilloscope display should vary