

METER OPERATION & ANTENNA ADJUSTMENTS

A correctly set CB antenna will protect your radio from damage and improve transmit & receive performance. For optimum transmit/receive performance and to avoid costly radio repairs follow the steps below to check and adjust your CB antenna. A SWR reading of 2 or lower on channel 1, 20 & 40 is preferable.

- 1) Turn Off CB radio.
- 2) Disconnect the antenna coax cable from back of CB radio.
- 3) Connect the end of your antenna coax cable to the SWR meter where it indicates "ANT" on back.
- 4) Connect a short coax cable (may not be supplied) to the back of the meter where it indicates "RADIO". Connect the other end of the cable to the antenna connection on the rear of your CB radio.
- 5) Turn on the CB and select channel 1 on the radio.
- 6) Switch the meter to the "FWD" (forward) position.
- 7) Close the hood and doors of vehicle.
- 8) Key the microphone and turn the knob on SWR meter until the needle indicates the set position.
- 9) Release the microphone and switch the meter to "REF" (reflect) position.
- 10) Key the microphone. The red needle on SWR meter will indicate the reading. Make note of the reading to be used for antenna adjustment purposes.
- 11) Turn the CB radio to channel 40 and repeat steps 7 through 10.
- 12) The next step is to adjust the antenna for maximum performance.

The lower the SWR reading on the meter, the better your CB radio will perform. The ultimate goal is to set the antenna to the lowest SWR possible, evenly across the 40 channel bandwidth. Example: On Channel 1, the SWR reading is 1.5 and on channel 40 the reading is 1.5. By adjusting your antenna evenly over the 40 channel bandwidth your radio will perform well on any channel selected.

If the SWR reading was higher on channel 40 than on channel 1, the electrical length on your antenna is too long. You will need to trim down or adjust down the electrical length of the antenna.

If the SWR reading was higher on channel 1 than on channel 40, the electrical length on your antenna is too short. If you have a tuneable tip or steel rod type antenna raise or adjust the length of the antenna to highest point. Re-Check SWR on 1 & 40 with meter. If a lower reading can not be attained then you can add a spring, lengthen the coax cable or re-position the antenna.

DO NOT OPERATE THE CB RADIO UNTIL YOU CAN ACHIEVE A SWR READING LESS THAN 3.

Helpful hints to adjust your style of antenna are listed below;

Tuneable Tip: Remove cap. To adjust antenna turn screw to lower or higher position. Replace cap & re-check SWR on channels 1 & 40. Repeat step until low SWR is achieved on channels 1 & 40.

Fiberglass: Remove cap. If SWR is higher on channel 40 than it is on channel 1, pull small amount of wire out from end of antenna and cut off. Press wire back down against the coiled wire inside of jacket. Note: The wire should not be sticking straight up. Replace cap & re-check SWR on channels 1 & 40. Repeat step until low SWR is achieved on channels 1 & 40.

Steel Rod Type: Loosen the setscrew. Press the rod to the bottom, then raise slightly. Re-tighten setscrew. Re-check SWR on channels 1 & 40. If the SWR reading is higher on channel 40 than on channel 1, remove rod & cut small amount from bottom of rod off. Repeat step until low SWR is achieved on channels 1 & 40.