Radar Jammer Kit

Parts Required

Q1	**Motorola MJ3001A**
IC1	**Nor Gate CMOS CA4001**
L1-L8	**Driver and Bias Coils**
R1	**1.2 K, ½ Watt Resistor**
R2	**470 Ohm, ½ Watt Resistor**
R3-R4	**25 Watt, 25 Ohm Potentiometer**
C1	**.2 MFD, 50 Volt Disc Capacitor**
C2	**.33 MFD, 50 Volt Disc Capacitor**

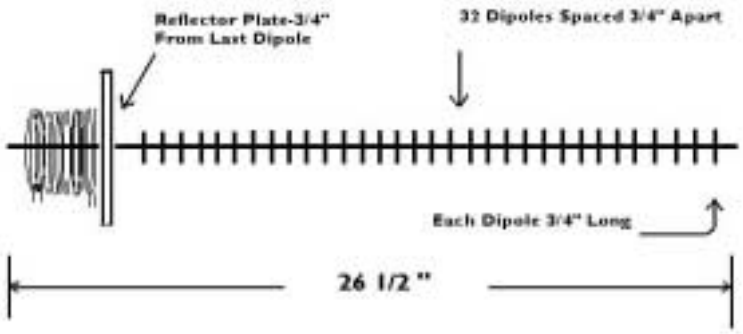
205" x 1/16" Nickle Rod

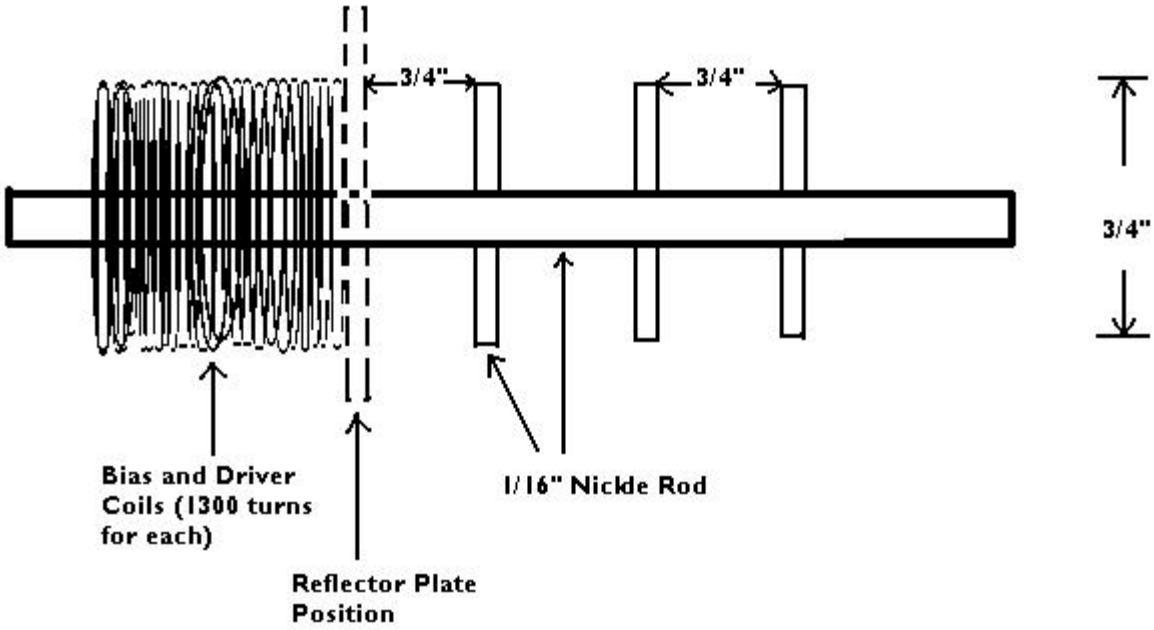
8 Rubber Insulating Grommets

Construction

The dipole antennas, which reflect radar, consist of four nickle rods with 32 dipoles bound to them. Each dipole antenna should be cut to 26" in length. Each dipole should be ¾" long and spaced ¾" apart, repectively. 1/16" Nickle Rod should be used for all parts of the 4 antennas. The construction of these K Band antennas are illustrated in figure 1.

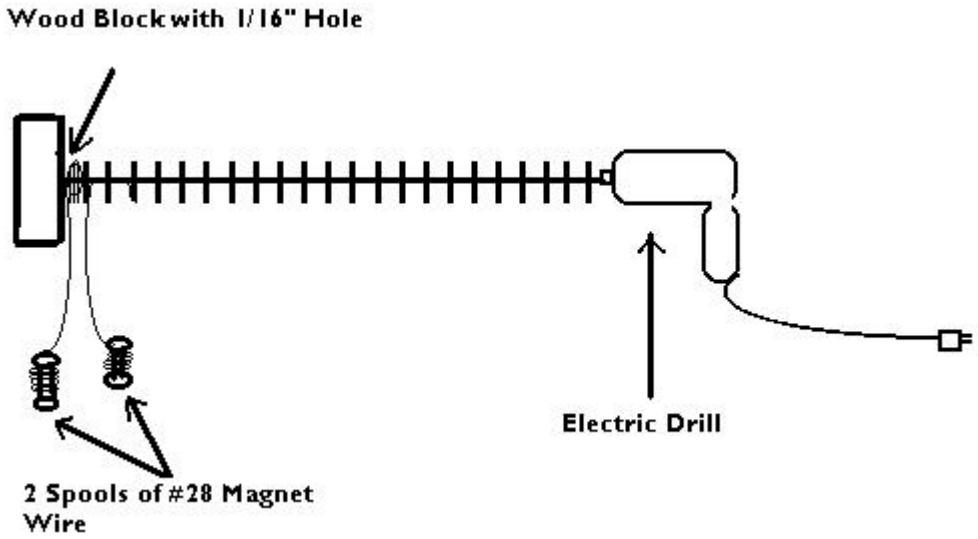
Figure 1.





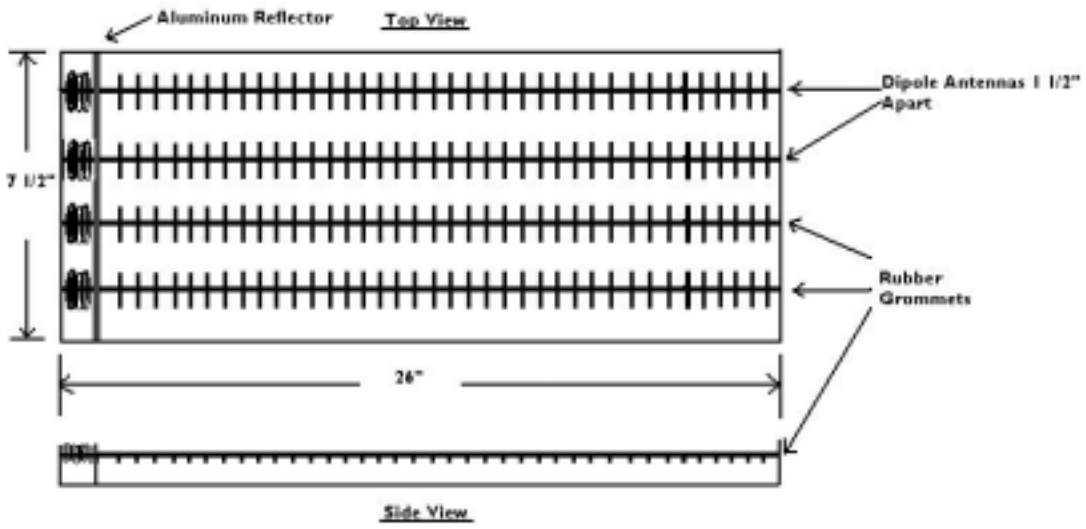
Two coils should be wound on the end of each antenna, each with 1300, or so, turns of #28 Magnet Wire. These coils do not have to be wound in a very neat manner. (Note1: the use of a power drill is the easiest and most effective way to wind the coils. Note2: Make sure to leave about ½" at the end of the rod so that it can be effectively mounted.) Once you complete this process, use a plastic or wooden frame to secure them in place.

Figure 2.



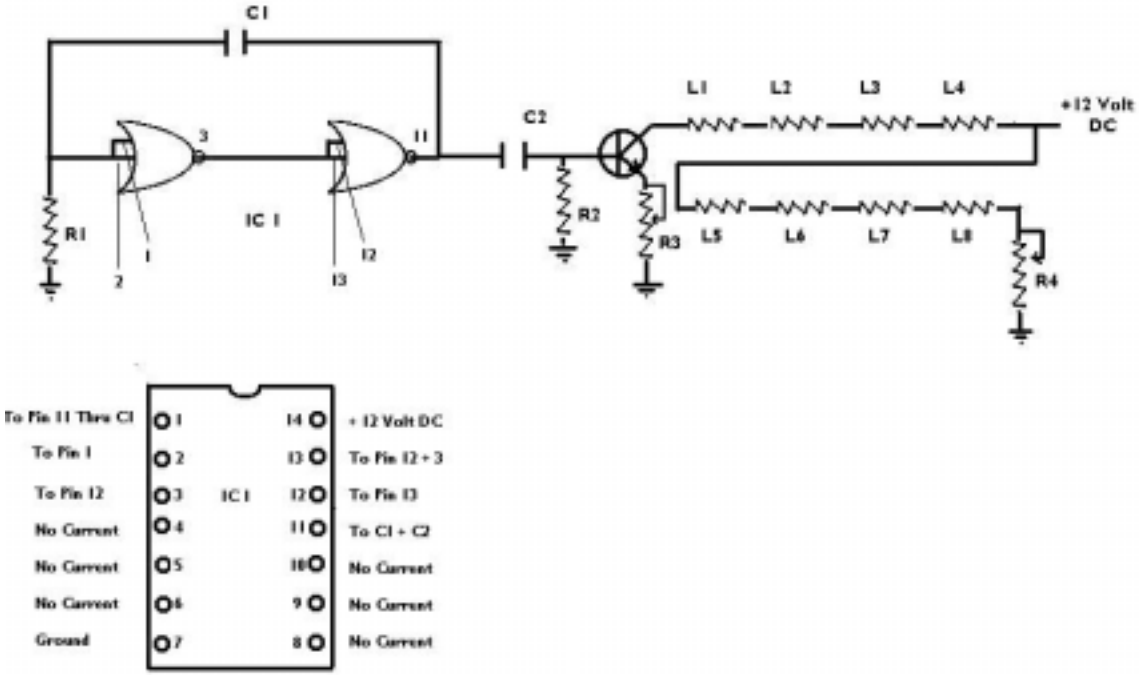
Cover the end of the frame with an aluminum plate to function as a reflector. This plate should be ¾" from the very last dipole. These dipoles are secured in the frame with rubber grommets, for insulation, on the front ends so that they can freely vibrate.

Figure 3.



Once the dipole antenna array is complete, follow the circuit diagram for the construction of the Frequency Oscillator Circuit.

Figure 4.



One of the windings from each antenna coil should be connected, in series, with one coil from each of the other three dipoles. One end of the series of coils should be connected to the transistor

collector, while the other end should be connected to your 12 Volt car battery. The emitter of the transistor is grounded through the 25 Watt, 25 Ohm Potentiometer (R3).

Now, connect the remaining coil windings in series, with one end connected to your 12 Volt car battery and the other end grounded through another 25 Watt, 25 Ohm Potentiometer (R4). This setup becomes the bias coil circuit. Now, adjust the current of the bias coil circuit until the voltage showing at the high end of the Potentiometer (R4) is 6 Volts. Then adjust the Driver Stage Potentiometer (R3), with an oscilloscope, until a maximum waveform is measured at the transistor's collector.