

A Mobile Mount for your SGC SG-2020 By Phil Salas – AD5X

Introduction

The SG-2020 is a rugged transceiver with a 20-watt power level that is only about one S-unit lower than the standard 100-watt rig. I've wanted to go mobile with the SG-2020, but SGC didn't provide mounting holes in the radio for a mobile bracket. So my goal was to develop a mobile mount, yet not have to do anything surgical to the SG-2020.

The Mount

I found an "Adjustable Underneath Mounting Bracket" at Radio Shack. (RS270-011 @ \$3.99) that is designed to support most anything under your dash up to nine inches in width. But how could I attach this to the SG-2020? While shopping in the "Deck Center" of my local ACE Hardware Store, I found some steel brackets normally used to support wooden posts. I bought two 4.5"x4.5" angle clips for \$1.19 each, and two 5"x2" mending plates for \$0.49 each. Photos of these plates are shown in "Hardware".

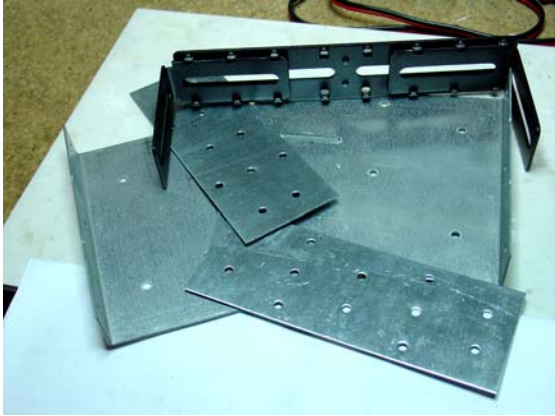
Your first assembly step is to center the 5" mending plates on the 4.5"x4.5" angle clips, drill mounting holes, and assemble using #6x1/4" machine screws. Next, mount the two angle clip assemblies to the bottom of the SG-2020. I was able to do this by using the three bottom SG-2020 mounting holes (see photo "Bottom"). Adjust the spacing so there is about 1/4" clearance between the mending plates and the sides of the SG-2020, and then nibbled out a notch for the screws as can be seen in photo "Right". You'll need to use #6x5/8" screws for the two back screws, and a #6x3/4" screw for the front. Use #6 flat washers between the plates and the SG-2020 case, and put #6 split lock-washers under the heads of the screws. The last thing I did was to attach a Radio Shack CB microphone holder (RS21-923) to the left mending plate. I drilled a hole for the top of the microphone holder, and used the 2-sided tape provided with the holder for securing the bottom of the mic holder. You can see the holder plainly in photo "Left".

Next I attached the above assembly to the Radio Shack bracket using #8 screws, nuts, and wing-nuts as can be seen in photo "FinalAssembly". The wing nuts make it easy to remove the SG-2020 from your car when you feel uncomfortable leaving it unattended.

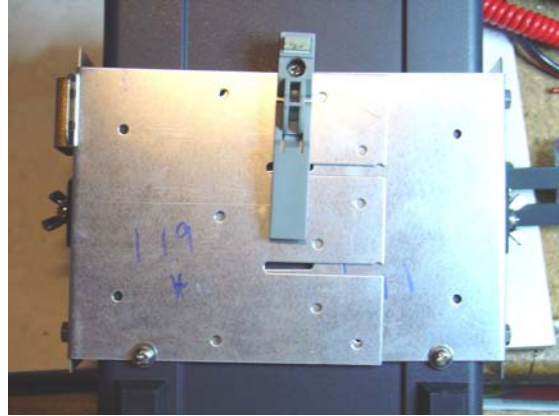
My SG-2020 is mounted under the passenger-side dash in my VW New Beetle. To do this, I cut a 1/2"x4" steel mending plate in half, and filed the ends so they would fit into the dash mounting screw areas. You can see these brackets in several of the photos. In the VW, these mounting screws tie into the car frame, providing a good ground between the SG-2020 case and car chassis. Photo "InCar" shows my final installation.

Conclusion

The SG-2020 can make an excellent mobile rig, except that there is no easy way of securely mounting it. I've shown how to make up a mobile mount for this radio that works well, is very inexpensive (my total cost outlay was less than \$10), and requires no modifications to the SG-2020 case. For the ultimate mount, you may wish to paint the assembly gray to match the SG-2020 case. Happy SG-2020 mobiling!



Hardware required



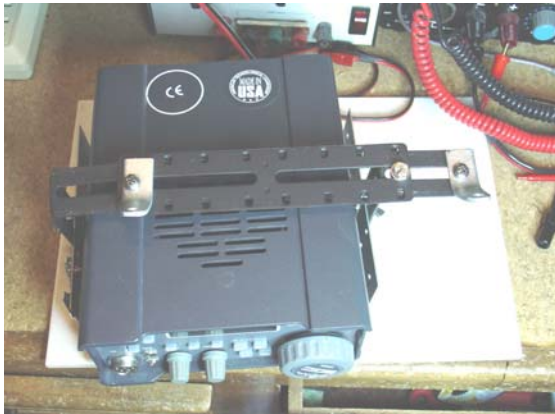
Bottom of SGC with bracket mounted



Right view



Left view



Final Assembly



Mounted in VW New Beetle