

SEARS ROADTALKER Mdl. 663.38100050: KIT #106, 26.515-27.855MHz
by B.W.

This particular unit is throwing people on the proper kit installation and 'slide' modification. There is no SAMS available on this unit - but Cobra 146GTL is close. Due to construction of front panel on a separate PCB it is advisable to do the 'slide' modification first.

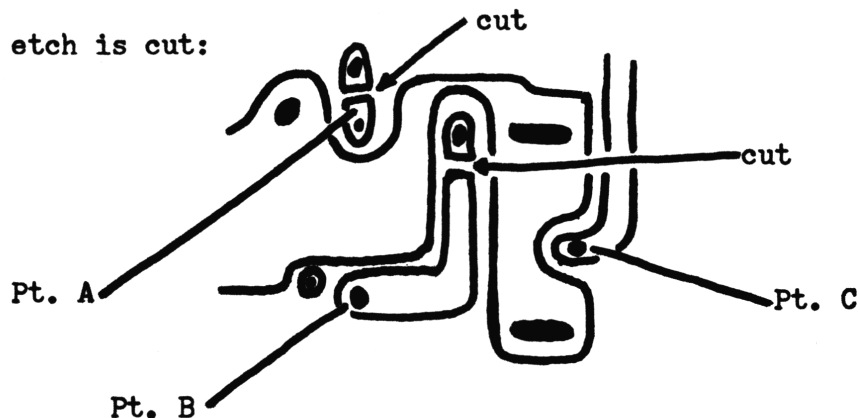
Following procedure is for installation of Secret CB Kit #106 in Sears RoadTalker Mdl. 663.38100050, ONLY..

KIT-106 for Sears Roadtalker Mdl. 663.38100050, uPD2824C chip-ONLY.
Installation instructions and 'Slide' modification

Due to the front panel construction it is advisable the 'Slide' modification be performed first. Also change the insulators on Driver/Final to thin MICA type. Correct fuse for this unit is 4 Amp - Fast Blow. NO SAMS is available - use Realistic TRC-451 or Cobra 146GTL schematics as both are close. **FACTORY SCHEMATICS ARE LOUSY!**

SLIDE MODIFICATION....Sears 663,38100050 ONLY...

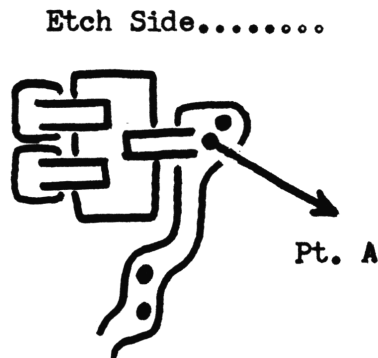
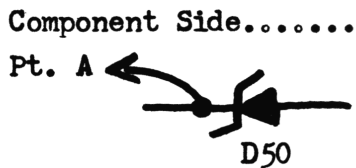
1. Follow diagram below and make two (2) cuts on front panel PCB etch directly behind the Fine Tuning Control... Use VOM to double-check that the etch is cut:



Pt.s A & B are outer terminals of the Fine Tuning Pot, Pt. C is the center wiper.

Slide Mod. - Cont.

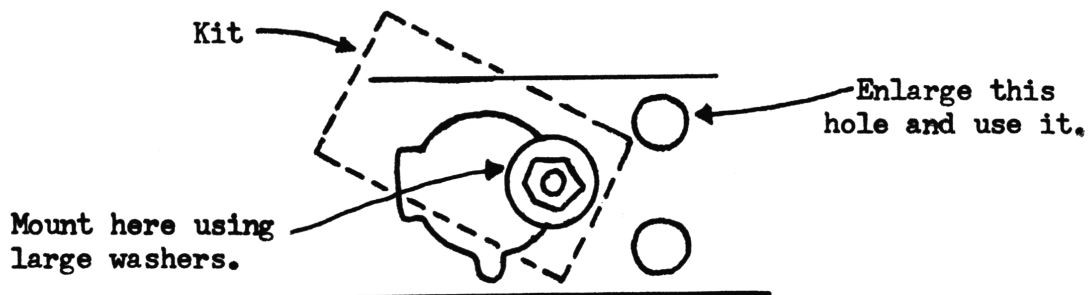
2. Run wire from Pt A to D50 (7.5VDC Zener Diode) - located next to 2SA473 and Audio Chip. Solder to leg or diode on component side, or do it right and solder to etch on reverse side of PCB. See below.....



3. Run wire from Pt B to D.C. Ground. (Use the etch side of PCB, next to the shield is perfect.)
4. Remove D32, no replacement.
5. Remove R122 (15K), no replacement.
6. Remove D³¹~~32~~, replace with solid buss wire.
7. Check slide, should be approximately -2.3, +1.8KHz.
8. Replace D30 with a 'Super Diode', slide should be around -2, +8KHz.

KIT INSTALLATION

1. Kit will mount on left side of chassis next to PLL chip. Mounting is optional, in two different places: Enlarge one of the holes and use it or use existing mike hole and change to large washers.



Kit 106 - Sears Roadtalker 663.38100050 (Cont.)...

Kit Installation (Cont.)..

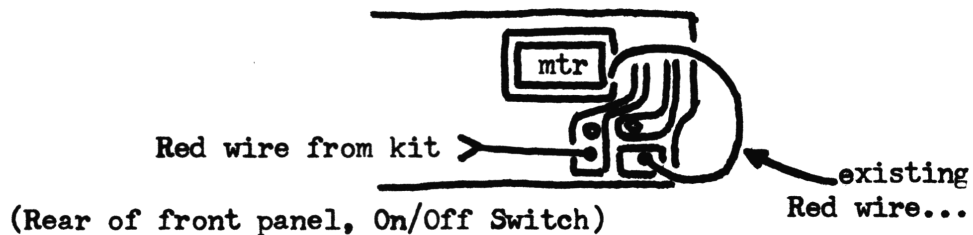
1. Cont...suggest mounting in the microphone hole. This way a small amount of each cover will only have to be removed, and hard to mess it up. The other way can mess it up very easy, if you aren't familiar with metal working! **DON'T MOUNT THE KIT YET..**

2. Kit wires go to the following locations:

Brown - See 'Slide', Step #1. Solder to Pt. C

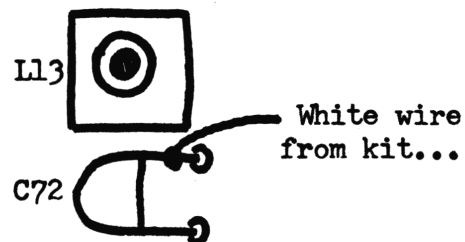
Black - Solder to DC Ground. (There is a hole to right of L14; can be used for this purpose; as at DC Ground.)

Red - Solder to switched 13.8VDC line. See drawing below:!



White - Solder to C72, side closest to L13.

* The 2 crystals in this kit will require 2 VARIABLE CAPS (3-13pf) for frequency Adjustments. Cut trace between each crystal and the switch and solder in caps.



* Special Notes on Installation: may be necessary to shield top of L13 and Kit (Xtals) to keep parts from shorting to case ground.

3. Install the White wire before mounting kit to side of chassis, then do remainder of wiring.

4. Using L13 and L14 at this time try to get the entire frequency range to 'come up'. NOTE: in this unit S/N 13001072 - had to use a 'Super Diode' in the VCO circuit, this is D25. Replace with 'S-D' if you encounter problems with the alignment, will cure the problem.

5. Tune L15, L40, L39, L38, L37, and L28 for overall LINEAR RF Output Power in SSB MODE.

Kit 106 - Sears Roadtalker 663.38100050 (Cont.)...

Kit Installation (Cont.)..

6. Further adjustments are: VR1-S Mtr, VR2-Sq Rng, VR4-Carrier Balance, VR5-AMC, VR6-ALC (SSB PWR), VR7-RF Mtr, VR8-Final Bias, VR9-Driver Bias, VR10-AM Pwr.

7. Measure covers carefully before cutting for the opening!

8. Final configuration of switch on this particular unit is:

Low Fo's - Down; Reg. C.B. Fo's - Middle; High Fo's - Up.

If needed for trouble-shooting and complete 'factory alignment', obtain Realistic TRC-451 (21-1565). Is close to this and very good, just make sure that you receive the large schematic with it - usually not sent with a Zerox'ed manual.

SPECIFIC TUNEUPS

Midland 77-104 (IC7132 - PLL): Small units, perfect for the small cars. Tune L11, and L12 for max forward. Has 2SC2078 Final - most units will tune-up to 6 Watts with 100% modulation, up to 10W forward. RV1-RX LED; RV2-TX LED; RV3-Sq Rng; RV4-AMC (Do not defeat). Rejection isn't that good, do filter mod that was printed in previous volumes.

Claricon Md1. 71200, AND SBE-22CB Catalina II: Tune C162 for max RF on Channel 13; then tune L110, L11, L107, L106, L104 for MAX FORWARD. R152-AMC, R155-Sq Rng.

GE3-5804F: Mod defeat is D-8, unsolder carefully as some units may require that it be replaced.

Cobra 19XS: Remove C253 for max mod only if needed! Will have to put back into the circuit in most units.

Universe CB747: VR7-AMC

Browning Baron: Remove CD36 for additional modulation ONLY if R134 doesn't give enough.

"Printing - Slide?"

Or as old 'Dizzy' would say; 'SLUD'! Seems that page 51 of Volume 20 moved, and locator B drawing didn't have the far right adjustment marked. It is VR13.