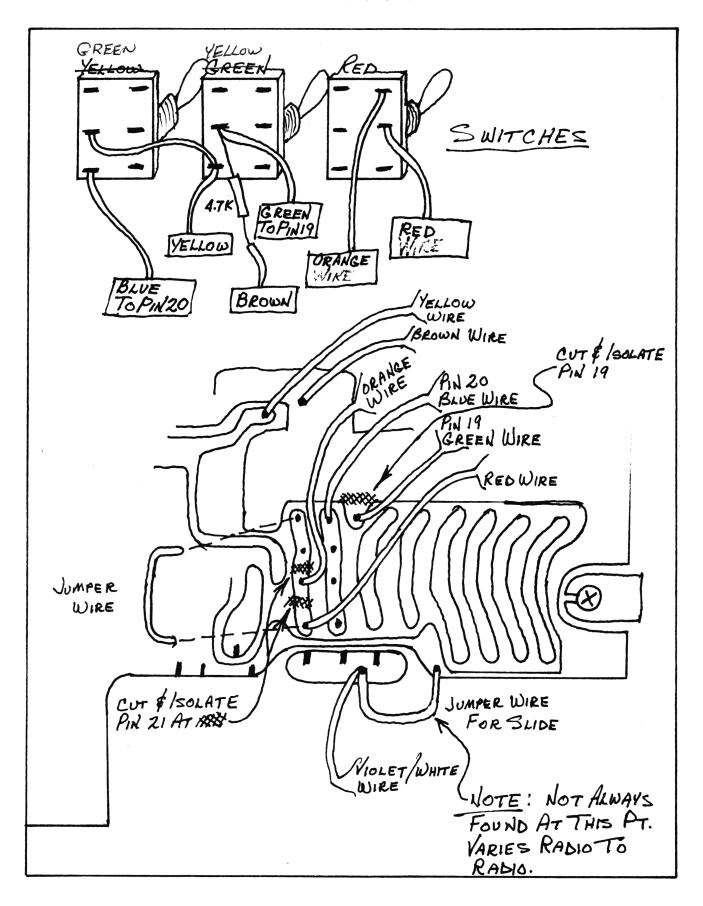
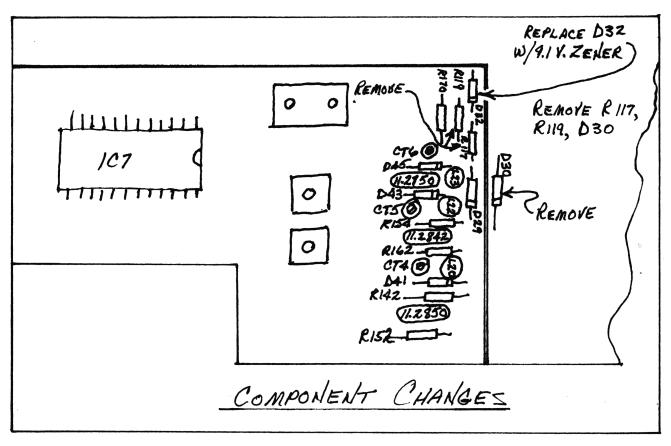
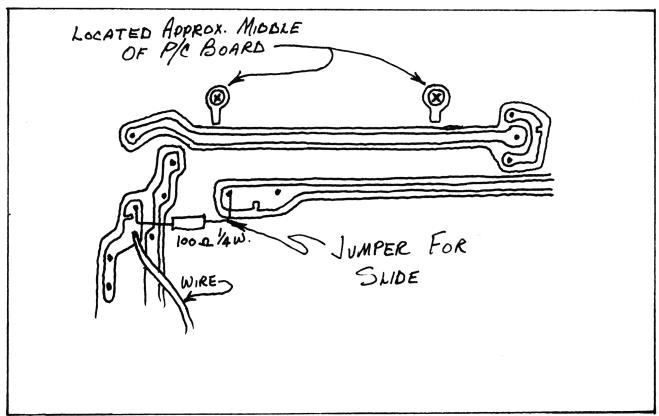
# THE COMPLETE UPDATED 200 CHANNEL AMATEUR CONVERSION

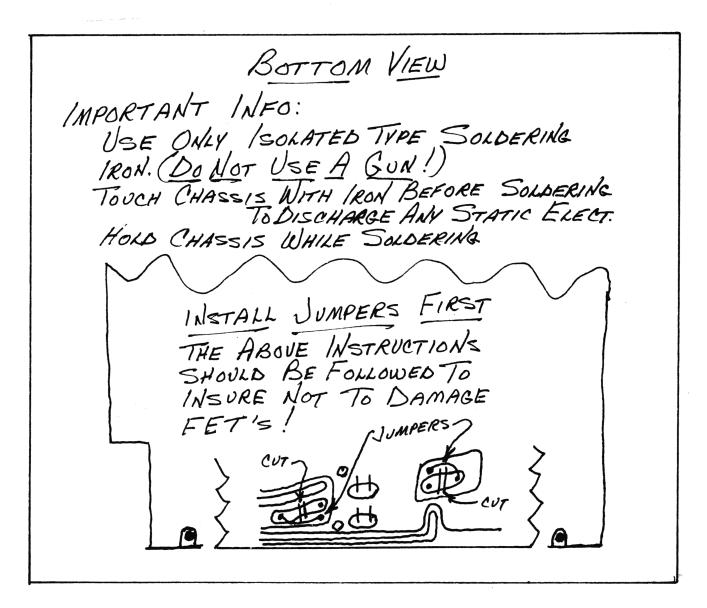
FOR UNIDEN 858 CHASSIS







THIS MODIFICATION MUST BE INSTALLED SO THE RADIO WILL COVER THE ENTIRE RANGE WITHOUT A LOSS OF POWER.



#### INSTRUCTIONS

- 1. Locate L-37.
- 2. Looking at bottom of circuit board, locate areas to be modified (should be near bottom of L-37). Cut traces first.
- 3. Make two cuts as shown by "11". Make two jumpers and place in location as shown.

200 CHANNEL CONVERSION CONTINUED:

#### SLIDE INSTRUCTIONS:

Remove D30, D32, R119, and R117. Install jumper as shown in drawing. Install a 9.1V zener where D32 was removed.

Locate the violet/white wire from the clarifier control and follow it to the P/C board. Cut it loose and ground it. For maximum clarifier install a super diode in place of D45, D41, and D43. For more upward slide remove CT4, CT5, and CT6.

When you increase your slide, the clarifier gets very touchy and hard to tune, so replace your stock pot with a <u>Secret CB</u> Super 10 turn pot. The shaft is slightly larger than the old one, so you must carefully enlarge the hole in the knob, just so it is a snug fit and shove it on. If you make the hole too large, you will have to glue it.

Now you are ready to align your radio. You will not want to make the jump from 11 meters to 10 meter coverage too quickly, so take it easy and in small steps. I suggest you make your radio perform on the 11 meter FØ; then you will want to install the new xtals to make the modification complete to 10 meter amateur band.

You will need a shielded dummy load (Secret CB's "Little Dummy" is a good choice), an RF voltmeter, a two-tone generator (plans in Secret CB), a frequency counter, % modulation meter and/or a scope, and a signal generator. Do not try to align your radio on an unshielded dummy or an antenna. This is not good practice and is discourteous as well as illegal, as some of the FØ are not allowed on amateur operation.

Make or buy a switch kit as shown and install in a convenient place on the chassis.

### ALIGNMENT

- 1. Adjust L24 using a RF voltmeter (plans in <u>Secret CB</u>) on test point 6 for maximum RF.
- 2. Adjust receiver section next for mid-band. Remember, we are adjusting the receiver in two steps; first for 11 meters, and then for 10 meters. If you try to do it in one step you'll get it all out of whack. Adjust your signal generator for mid-band and adjust L3, L4, L5, L7, L8. Check the bottom & top FØ for proper operation, then proceed to the transmitter.
- 3. Using a 1000 Hz tone on AM, adjust L39, L39, L37 for maximum peak RF output. Do not tune L27. Adjust VR7, VR8, & VR6 for maximum AM power & modulation. Switch to SSB and adjust CT7 for maximum SSB output. Cut R43 for more ANL range this will give you 200% improvement on your noise blanker. DELETED TNCREASE VALUE OF R43 DON'T GO TO HIGH AS WILL AFFECT AUDIO SUTPUT, START WITH 1,5 more

RED	SWITCH						
1. 2. 3. 4. 5. 6. 7. 8. 9.	26.965 26.975 26.985 27.005 27.015 27.025 27.035 none none	11. 12. 13. 14. 15. 16. 17. 18. 19. 20.	26.085 26.105 26.115 26.125 26.135 26.155 26.165 26.175 26.185 26.205	21. 22. 23. 24. 25. 26. 27. 28. 29.	26.215 26.225 26.255 26.235 26.245 26.265 26.275 26.285 26.295 26.305	31. 32. 33. 34. 35. 36. 37. 38. 39.	26.315 26.325 26.335 26.345 26.355 26.365 26.375 26.385 26.395 26.405
RED	& GREEN	SWITCH					
1. 2. 3. 4. 5. 6. 7. 8. 9.	26.965 26.975 26.985 27.005 27.015 27.025 27.035 26.855 26.865 26.875	11. 12. 13. 14. 15. 16. 17. 18. 19.	26,885 26.905 26.915 26.925 26.935 26.955 26.965 26.975 26.985 27.005	21. 22. 23. 24. 25. 26. 27. 28. 29.	27.015 27.025 26.255 27.035 27.045 26.265 26.275 26.285 26.295 26.305	31. 32. 33. 34. 35. 36. 37. 38. 39.	26.315 26.325 26.335 26.345 26.355 26.365 26.375 26.385 26.395 26.405
RED	& YELLOV	SWITCH					
1. 2. 3. 4. 5. 6. 7. 8.	26.565 26.575 26.585 26.605 26.615 26.625 26.635 26.455 26.465	11. 12. 13. 14. 15. 16. 17. 18.	26.485 26.505 26.515 26.525 26.535 26.555 26.565 26.575 26.585	21. 22. 23. 24. 25. 26. 27. 28.	26.615 26.625 26.655 26.635 26.645 26.665 26.675 26.685 26.695	31. 32. 33. 34. 35. 36. 37. 38.	26.715 26.725 26.735 26.745 26.755 26.765 26.775 26.785 26.795
10.	26.475	20.	26.6 <b>0</b> 5	30.	26.705	40.	26.805

The frequencies will be the same as above if all three switches are thrown simultaneously.

Now you have completed the modification to expand slide and the channels to 28.045. Now to move the radio up to the complete 10 meter amateur band you must change the 3 mixer xtals X6 11.2850 - X 3 11.2858, X 4 11.2842 with 11.8850 - 11.8858 - 11.8842 available from your favorite supplier. Then repeat all of the alignment steps as before. Set the set for mid-band and align. If the set will not work at these FØ, adjust the FØ down until it will work, then align in small steps until you have the full range of the amateur band. If you have trouble getting RF power up to its rated output, lower the value of C170 & C167 approximately 100 pf.

## SWITCH CHART

YELLOW	&	GREEN	SWITCH
--------	---	-------	--------

THIL	On & CITETIA	DWIIC	11				
1. 2. 3. 4. 5. 6. 7. 8. 9.	26.565 26.575 26.585 26.605 26.615 26.625 26.635 27.455 27.465 27.475	11. 12. 13. 14. 15. 16. 17. 18. 19.	27.485 27.505 27.515 27.525 27.535 27.555 27.565 27.575 27.585 27.605	21. 22. 23. 24. 25. 26. 27. 28. 29.	27.715 27.625 27.655 27.635 27.645 27.665 27.675 27.685 27.695 27.705	31. 32. 33. 34. 35. 36. 37. 38. 39.	27.715 27.725 27.735 27.745 27.755 27.765 27.775 27.785 27.795 27.805
GREE	N SWITCH						
1. 2. 3. 4. 5. 6. 7. 8. 9.	26.965 26.975 26.985 27.005 27.015 27.025 27.035 27.855 27.865 27.875	11. 12. 13. 14. 15. 16. 17. 18. 19.	27.885 27.905 27.915 27.925 27.935 27.955 27.965 27.975 27.985 28.005	21. 22. 23. 24. 25. 26. 27. 28. 29.	28.015 28.025 27.255 28.035 28.045 27.265 27.275 27.285 27.295 27.305	31. 32. 33. 34. 35. 36. 37. 38. 39.	27.315 27.325 27.335 27.345 27.365 27.365 27.375 27.385 27.395 27.405
YELI  1. 2. 3. 4. 5. 6. 7. 8. 9.	26.565 26.575 26.585 26.605 26.615 26.625 26.635 27.455 27.465 27.475	11. 12. 13. 14. 15. 16. 17. 18. 19.	27.485 27.505 27.515 27.525 27.535 27.555 27.565 27.575 27.585 27.605	21. 22. 23. 24. 25. 26. 27. 28. 29.	27.615 27.625 27.655 27.635 27.645 27.665 27.675 27.685 27.695 27.705	31. 32. 33. 34. 35. 36. 37. 38. 39.	27.715 27.725 27.735 27.745 27.755 27.765 27.775 27.785 27.795 27.805