MICOR™ DVP™ UHF
BASE/REPEATER (RT) STATION
MODELS: C64RXB1196A-SP71
C64RXB3196A-SP71
C64RXB3106AT-SP71

1. ATTACHMENT

UHF *DVP* Station Instruction Manual 68P81034E25

2. DESCRIPTION

The special "SP71" suffix added to the station models listed above denote stations that are modified to operate in the 420-450 MHz frequency range. This is accomplished by replacing the receiver and exciter with one modified to operate in this frequency range.

3. MODEL COMPLEMENT

The model complement of these "SP71" stations differs from that of the standard versions described in the attached instruction manual as follows:

ITEM	CHANGE
TRE1241A-SP10 Receiver (420-450 MHz)	Replaces TRE1242A Receiver (450-470 MHz)
TLE1853A-SP3 Exciter (440-450 MHz)	Modified

NOTE

For stations operating in the 440-450 MHz frequency range, the following special items are also used in place of their standard counterparts. These items are special only for their application in the 440-450 MHz range.

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ITEM	C34RXB (12-Watt RF)	C64RXB (60/75-Watt RF)
TLE1603B-SP3 Tripler/ Low Level Amp.	X	X
TLE1683A-SP3 12-Watt Power Amp.	X	
TLE1713A-SP3 75-Watt Power Amp.		X
TLE1663B-SP3 Antenna Network (BASE) OR TLE1673B-SP3 Antenna Network (RPTR)	X	X

4. UNIQUE ITEM DESCRIPTION

4.1 TRE1241A-SP10 RECEIVER

This special receiver is modified for 420-450 MHz operation by making the following changes to the receiver rf deck and the rf and i-f board (re-identified as TLE8201A-SP7 and TLE8921A-SP8 respectively).

-- TLE8021A-SP7 RF Deck changes - Coils L112, 113, 114, 115 changed to part no. 24-83731E12. Coils L111 and 116 changed to part no. 1-06712B32.

-- TLE8921A-SP8 RF and I-F Board changes - C117 part no. 21-82355B03, 24 pF ±5%; N330; C119 part no. 21-82610C04, 36 pF ±5%; N220. C136 part no. 21-82610C03, 47 pF ±5%; N220; R118 part no. 6-127803, 1.5k ±10%; 1/4 W.

4.2 TLE1853A-SP3 EXCITER

This special exciter is modified for 440-450 MHz operation by replacing the TLD5645A Exciter Board (450-470 MHz) with a TLD5644A Exciter Board (406-420 MHz) which can be tuned to cover the 420-450 MHz range. The exciter is also modified by replacing the exciter filter with a special TFD6373A-SP3 (143.3-150 MHz) filter. Special tuning procedures are outlined in the following paragraph.

5. TRANSMITTER TUNING PROCEDURE

As a result of the modifications previously described, the transmitter tuning procedure is changed as follows:

Step 1. Remove the first bandpass filter from the transmitter.

Step 2. Provide 50-ohm rf intercabling from the exciter to the bandpass filter and from the filter to the tripler/low level amplifier so that the tuning screws are easily accessible.

Step 3. Temporarily disconnect the bandpass filter from the exciter, and terminate the exciter into a 50-ohm load.

Step 4. Key the transmitter and tune the exciter per the standard alignment procedure in the attached instruction manual.

Step 5. After the exciter is tuned, reconnect the exciter output to the bandpass filter.

Step 6. Terminate the low level amplifier output into a thru-line wattmeter an a 50-ohm load. The output should be approximately 1 to 2 watts.

Step 7. Key the transmitter and adjust the bandpass filter tuning screws (working from the input to the output) for maximum power out as indicated on the wattmeter.

Step 8. Re-install the bandpass filter and key the transmitter. Repeak the exciter per the standard alignment procedure.

Step 9. For minor retuning during maintenance, only repeaking of the exciter i necessary.