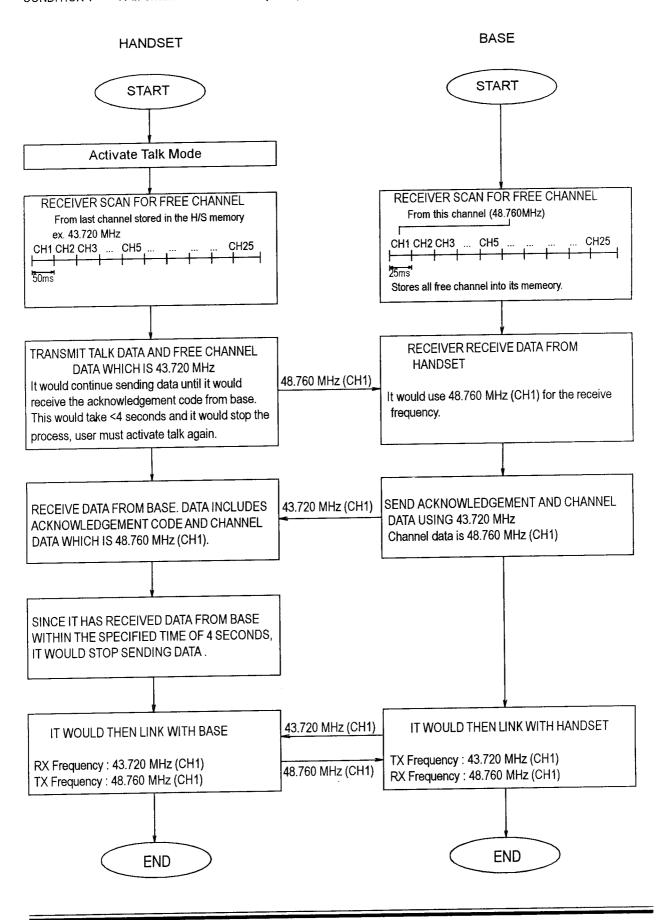
CONDITION 1 : All channels are unoccupied (Free channel)



CONDITION 2 : Multi channel on the base TX frequency are occupied.

Ex. CH 1: 43.720 MHz

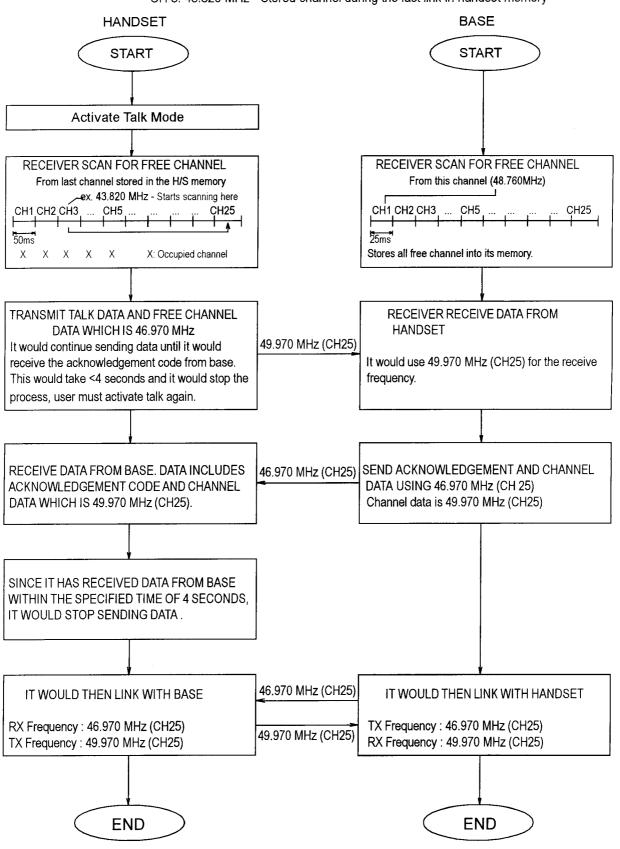
CH 4: 43.840 MHz

CH 2: 43.740 MHz

CH 5: 43.920 MHz

CH 3: 43.820 MHz

CH 3: 43.820 MHz - Stored channel during the last link in handset memory



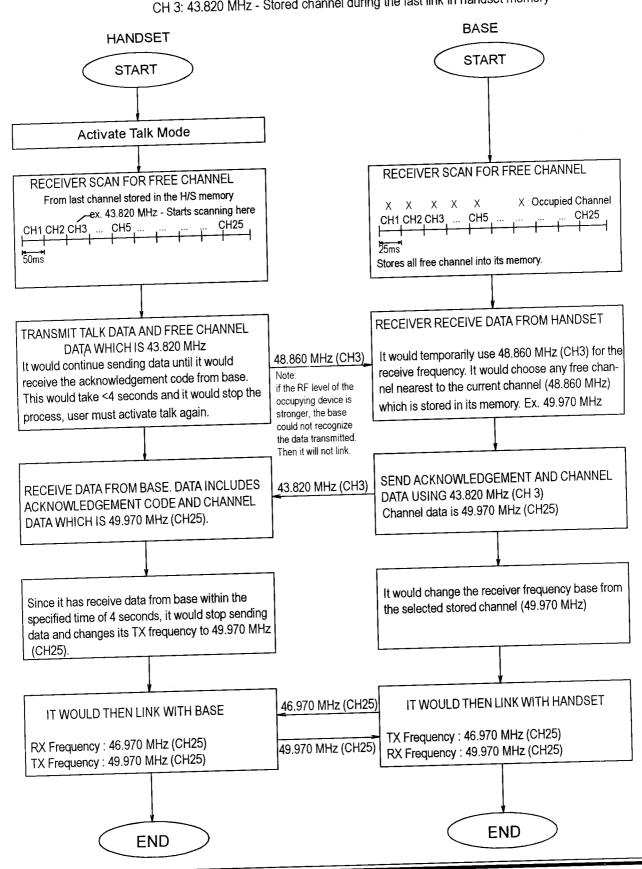
CONDITION 3 : Multi channel on the Handset TX frequency are occupied.

CH 1: 48.760 MHz Ex. CH 2: 48.840 MHz

CH 4: 48.920 MHz CH 5: 48.020 MHz

CH 3: 48.860 MHz

CH 3: 43.820 MHz - Stored channel during the last link in handset memory



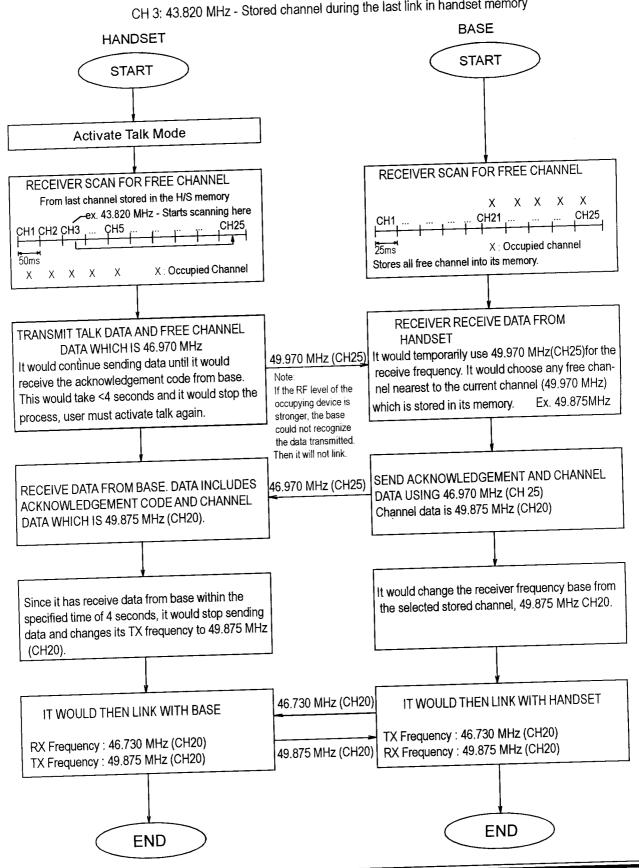
: Multi channel on the Base TX and Handset TX frequency are occupied. **CONDITION 4** 

Ex. CH 1: 48.760 MHz CH 4: 48.920 MHz CH 2: 48.840 MHz CH 5: 48.020 MHz CH 21: 49.830 MHz CH 24: 49.990 MHz 

CH 3: 48.860 MHz

CH 23: 49.930 MHz

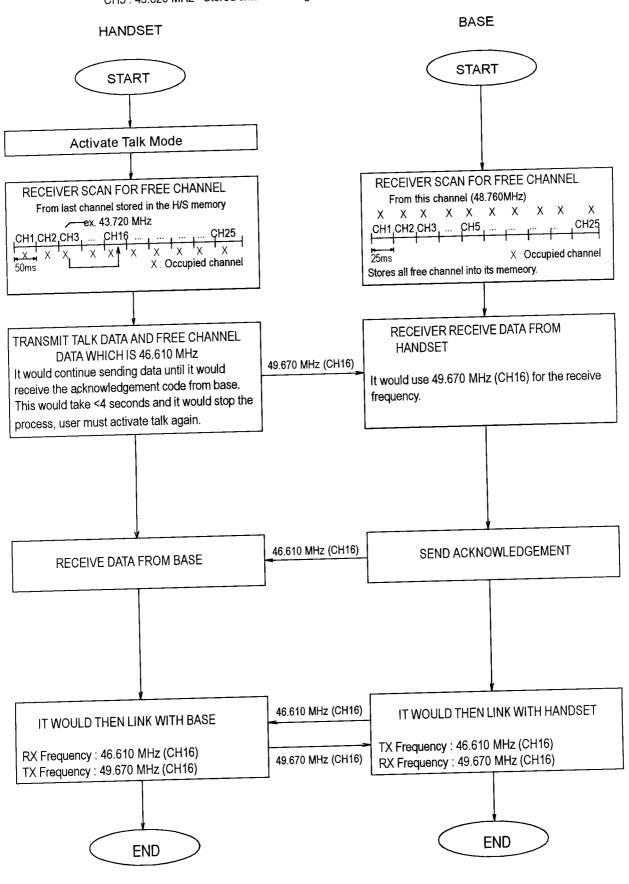
CH 3: 43.820 MHz - Stored channel during the last link in handset memory



**CONDITION 5** 

: All TX channels of Handset and Base are occupied (All Busy)

CH3: 43.820 MHz - Stored channel during the last link in Handset memory.



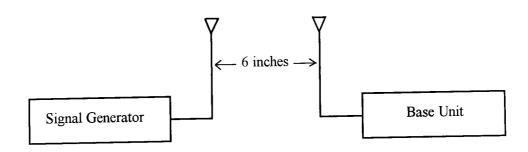
# 33030 AUTOMATIC CHANNEL SELECTION

The following tests were performed to show the incorporation of automatic channel selection.

## Equipment Used to Perform the Tests

- JUNGJIN JSG-1051B Signal Generator Interference Signal 1KHz, 5KHz deviation

### Test Set-Up



#### **Test Procedures**

- 1. Set signal generator at a certain channel (e.g. channel 1), then turn the generator off.
- 2. Turn on the phone, set the phone at the same channel as in step 1, then turn off the phone.
- 3. Turn on the signal generator.
- 4. Turn on the phone, investigate and record the locked channel. If scan functions correctly, it will lock to any channel, but not the one in step 1.
- 5. Repeat Step 1-4 for 25 channels

**Test Results** 

INTERFERENCE CHANNEL AT	PHONE PRE-SET CHANNEL AT	PHONE AUTO-SCAN TO CHANNEL AT -13 dBm
1	1	2
2	2	3
3	3	4
4	4	5
5	5	7
6	6	7
7	7	8
8	8	9
9	9	10
10	10	11
11	11	12
12	12	14
13	13	14
14	14	15
15	15	16
16	16	17
17	17	18
18	18	19
19	19	20
20	20	22
21	21	22
22	22	23
23	23	24
24	24	25
25	25	1

## Summary

The phone under test has an automatic selection mechanism that will prevent establishment of a link on any occupied frequency channel.