FENNEC ALIGNMENT

1) POWER ALIGNMENT

NO. PROCESS DESCRIPTION

1 ''CONNECT FRONT LCD DISPLAY , VOLUME CONTROL PCB , PROGRAMMING CABLE AND ANTENNA CABLE.''

2 ''SWITCH '"'ON'"' THE POWER.''

3 CHECK THE POWER ACROSS CH1 ~ CH6 BY PTT AT EVERY CH.

4 ''OPEN '"'FennecWin.exe'"'.''

1 POWER ALIGNMENT

1.1. ''OPEN '"'FennecWin.exe'"' AND SELECT DEALER''

''i) CLICK '"'Dealer'"' AT HEADER MANUAL AND AFTER CLICK ON '"'Alignment'"' ''

''ii) WAIT UNTIL DISPLAY '"'Upload Completed'"' AND '"'Adjustment'"' DIALOG BOX DISPLAY .''

''iii) ALIGNMENT THE HIGH POWER FOR CH1 ~ CH3 BY CHANGING THE SOFTPOT AT '"' Tx_P High (Wide) '"' AND CLICK '"'OK'"'.''

iv) CONFIRM THE POWER READING FROM HP8920.

v) IF THE POWER ALREADY IN SPEC. THEN CONTINUE STEP (vi) ; IF NOT BACK TO (i~iv)

vi) CLICK '"'Dealer'"' AT HEADER MANUAL AND AFTER CLICK ON '"'Alignment'"' ''

vii) WAIT UNTIL DISPLAY '"'Upload Completed'"' AND '"'Adjustment'"' DIALOG BOX DISPLAY .''

viii) ALIGNMENT THE LOW POWER FOR CH4 ~ CH6 BY CHANGING THE SOFTPOT AT '"' Tx_P Low (Wide) '"' AND CLICK '"'OK'"'.''

ix) CONFIRM THE POWER READING FROM HP8920.

x) IF THE POWER ALREADY IN SPEC. THEN CONTINUE STEP (xi) ; IF NOT BACK TO (vi~ix)

xi) TEST END

REMARKS : MAKESURE ATTENUETOR IS ATTACH. (20dB ; 50W)

2 VCO CHECK & ALIGNMENT

NO. PROCESS DESCRIPTION

1

VCO CHECK & ALIGNMENT

1. ""ON"' POWER BY TURNING VOL1201 AT VOL CONTROL PCB."

2. "LCD WILL DISPLAY '"'CH 001'"' "

3. "SET THE CHANNEL TO '"'CH 003'"'."

4. CHECK THE RX VCO VOLTAGE FROM THE MULTIMETER.
   SPEC - RX VCO = 3.0 Vdc ~ 3.2 Vdc

   i) For VHF ONLY CONFIRMATION AND UHF HAVE TO ALIGN.

   ii) ADD SILICON (TSE 399) UHF ALIGN BY OPENING L305 AIRCOIL.

5. "CHECK THE TX VCO VOLTAGE BY TURN '"'ON"' THE PTT SWITCH AT THE TEST BOX."
   SPEC - TX VCO = 3.0 Vdc ~ 3.2Vdc

   i) For VHF ONLY CONFIRMATION AND UHF HAVE TO ALIGN.

   ii) ADD SILICON (TSE 399) AND UHF ALIGN BY OPENING L309 AIRCOIL.

6. "TURN '"'OFF"' PTT SWITCH. "

3 TX FREQ. ALIGNMENT

1. "TURN '"'ON"' PTT SWITCH AT TEST BOX."

2. CHECK THE FREQ. ERR. AT THE HP 8920

   SPEC - FREQ ERR = -50 Hz TO 50 Hz.

3. "ALIGN THE BY USING '"'FennecWIN.exe'"'. "

   "i) CLICK '"'Dealer'"' AT HEADER MANUAL AND AFTER '"'Alignment'"' "

''ii) WAIT UNTIL DISPLAY '"'Upload Completed'"' AND '"'Adjustment'"' DIALOG BOX DISPLAY ."

''iii) SELECT THE '"'TX Limit'"'."

''vi) CHANGE THE VALUE AT '"'CDCSS Decode center Level'"' TO GET ''

4 TX MODULATION ALIGNMENT

1. ''CHECK CH 1 TO CH 3 THE READ OF THE MODULATION BY TURN '"'ON'"' PTT WHEN SWITCH CH.''
2. ''TURN '"'OFF'"' PTT SWITCH. ''
3. ''CHANGE THE VALUE AT '"'AK 2345 Limit'"' TO GET THE BEST READING.''

SPEC - STANDARD MODULATION = 4.5KHz ~ 4.6KHz

5 TX DCS & CTCSS ALIGNMENT

1. SET THE CH TO CH 007 TO ALIGN DCS.
2. ''TURN '"'ON'"' PTT SWITCH AT TEST BOX.''
3. ALIGN VR301 GET THE SQUARE WAVEFORM AT OSCILLOSCOPE AS FLAT AS POSSIBLE.
4. SET THE CH TO CH 008 TO ALIGN CTCSS.
5. ALIGN VR501 GET CTCSS IN SPEC.

SPEC - CTCSS = 0.700 KHz ~ 0.800KHz

6. '"'OFF'"' POWER AND REMOVE PCB FROM FIXTURE.''
7. END TEST

NOTICE : ''SWITCH '"'OFF'"' FIXTURE POWER SUPPLY SWITCH FIRST BEFORE REMOVE PCB FROM FIXTURE. '' TEST ITEM

6 RX TEST

NO. PROCESS DESCRIPTION

1 Connect the Antenna & Power Cable.

2 '""ON"' POWER BY TURNING VOL1201 AT VOL CONTROL PCB, DISPLAY WILL SHOW CH 001."

3 TURN THE VOL CONTROL TO GET 3.5 Vac +/- 0.3 FROM AC VOLTMETER.

4 CONFIRM THE SINAD > 12dBm FROM THE SINAD METER.

5 CHANGE THE CHANNEL FROM CH 001~ CH 006 AND THE REG 01~ REG 06 TO CONFIRM THE SINAD RESPECTIVELY

6 MARK THE UUT UNIT AFTER CONFIRMED WITHIN THE SPEC.

7 CONTINUE THE STEP 1~6 FOR THE NEXT UNIT.

REMARKS :"IT IS CONSIDERED PASS EVEN THOUGHT '"INST PK+'" OR '"INST PK-'" FAILED. "