

CODAR CR70A RECEIVER.

SERVICE DATA .

ALIGNMENT FREQUENCIES.

I.F. TRANSFORMERS 470KCS.

BAND 4. 540 KC/S and 1.5 MC/s.
BAND 3. 1.5 MC/S " 4.2 "
BAND 2. 4.2 MC/S " 11.5 "
BAND 1. 11.5 MC/S " 30.0 "

Before alignment check that pointer is correctly positioned. With the gang capacitor fully meshed, pointer must be at vertical markers on extreme left of band scales. Adjust if necessary by moving pointer carriage along drive cord, or re-setting cord drum on gang shaft, ensuring gang is kept fully meshed. If cord drum is adjusted, the two screws in centre bush must be well tightened.

Oscillator cores are adjusted at L.F. end of each Band, and the top trimmers at the H.F. end of each band. Metal tools must not be used for core alignment as these will alter the inductance effect of the ferrite cores. A special hexagonal nylon trimmer tool is available if required at 1/9 post free.

I.F. ALIGNMENT.

Set signal generator to 470 KC/S.

Set Bandswitch in Band 4. Dial reading 1.5 MC/S. Function switch A.M.

Short circuit rear gang section (oscillator) to chassis.

Set signal generator to 470 KC/S and connect to A/E sockets.

Adjust I.F. Transformers cores in the following order:

1st. Top core 2nd. I.F. Transformer (close to rear of gang capacitor.)

2nd. Bottom core " " "

3rd. Top core 1st. I.F. " "

4th. Bottom core " " "

Signal generator level should be set to give a reading of between 7 and 9 on the "S" meter. Peak all cores to give highest reading.

NOTE: Two peaks may be found on the core travel. The correct peaks are with the top cores nearest to the top of the former, and the bottom cores nearest the centre of the former.

BAND ALIGNMENT.

Remove short circuit on gang and align each band at the frequencies quoted above, using "S" meter to obtain peak settings. On Band 4 at 540 KC/S adjust aerial coil core with aerial trimmer half mesh (mounted on right hand chassis drop.) This coil must be peaked at this frequency only. Check for image on Bands 1 and 2 alignment points, and also at 4.2 MC/S on BAND 3. After initial alignment, move signal generator 940 KC/S lower frequency than the alignment frequency. No signal should be heard if alignment is correct. If signal is present, re-align at second signal obtained at alignment frequency. On 30 MC/S set aerial trimmer half mesh before adjusting oscillator trimmer. Slight adjustment of both trimmers may be necessary to obtain highest peak.

Viewed from under chassis, oscillator coils are positioned as follows:

BAND 1. Extreme left. B.F.O. Coil. Chassis rear, near power take off

BAND 2. Next right. socket.

BAND 3. Next right.

BAND 4. Extreme right.

BAND 4 AERIAL coil on right hand chassis drop.

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B.F.O.

Function switch in CW/SSB position.

Set Bandswitch on Band 4.

Pointer at 1.5 MC/S.

Set signal generator at 470 KC/S, internal modulation off. Inject sufficient signal from generator to obtain beat note and adjust core for zero beat.

Voltages.

A.F.Gain at minimum.

I.F.Gain at maximum.

No signal, aerial disconnected.

Bandswitch BAND 4. Pointer at 1.5 MC/S.

Function switch in A.M. position.

Test meter 50,000 O.P.V. A.C. input 230 volts.

V.1. Cathode Pin 3	1.5 volts.
V.1. Screen Pin 1.	80 volts.
V.1. Osc. anode Pin 8.	50 volts. (Connect Osc. grid Pin 9 to chassis.)
V.1. Anode Pin 6.	210 volts.
V.2. Cathode Pin 1.	2 volts.
V.2. Screen Pin 8.	75 volts.
V.2. Anode Pin 7.	210 volts.
V.3. Anode Pin 1.	25 volts.
V.3A. Anode Pin 6.	200 volts.
V.3A. Cathode Pin 8	2.9 volts.
V.4. Anode Pin 6	150 volts.
V.4. Cathode Pin 8.	2.3 volts
V.4A. Anode Pin 1.	130 volts. (Connect Grid Pin 2 to chassis)
V.4A. Cathode Pin 3	1.6 volts. (Function Switch CW/SSB)

D.C. RESISTANCES.

T4	Primary	85 ohms
T4	H.T. Secondary	650 ohms (Total winding)
T3	Primary	270 ohms
T2	Primary	16 ohms
T2	Secondary	16 ohms
T1	Primary	16 ohms
T1	Secondary	16 ohms

