Crosley Corp.

Model: 11-101U	Chassis:	Year: Pre 1952
Power:	Circuit:	IF:
Tubes:		
Bands:		

Resources
Riders Volume 22 - CHANGES 22-2
Riders Volume 21 - CROSLEY 21-10
Riders Volume 21 - CROSLEY 21-11
Riders Volume 21 - CROSLEY 21-12
Riders Volume 21 - CROSLEY 21-13

1. Check or replace resistor (Illus. No. 38).
2. Check or replace capacitor (Illus. No. 17).

If the tubes, vibrator, and voltages are correct and radio does not play the trouble will be in the grid circuit of the radio. To continue, it will be necessary to check the grid circuit by means of signal tracing.

Turn on signal generator on and off switch, place the modulation switch in the modulated position set signal generator tone control to 0.5 and place shielded lead assembly in jack marked "audio." Ground the black lead to the radio chassis. Turn on radio receiver with volume to maximum position.

With red lead touch pin marked "P" on the 6V6GT tube. If you have no signal, check the following:

1. Check or replace speaker.
2. Check or replace audio transformer.

Touch pin "G" on 6V6GT tube. If no signal check or replace 6V6GT tube.

Touch pin "P" on the 6SQ7 tube. If no signal check the following:

1. Check or replace capacitors (Illus. Nos. 25, 26, 27, and 28).
2. Check or replace tone control.

Touch pin "G" on 6SQ7 tube. If no signal, check or replace 6SQ7 tube.

Touch the two pins marked "DP" on 6SQ7 tube. A signal should be heard on each one. If no signal check or replace 6SQ7 tube.

Change the signal generator shielded lead to the intermediate frequency "I.F." jack. Tune signal generator to exactly 262 and set band switch in "A" position. Turn the signal generator volume control about one-third open and touch pin "P" on intermediate frequency 6SK7 amplifier tube. If no signal, check the following:

1. Check or replace intermediate frequency transformer.
2. Check or replace volume control.
3. Check or replace capacitor (Illus. No. 23).
4. Check or replace resistor (Illus. No. 44).

Touch pin "G" on i-f 6SK7 amplifier tube. If no signal check or replace 6SK7 tube.

Touch pin "P" on 6SA7 tube. If no signal check the following:

1. Check or replace intermediate frequency transformer.
2. Check or replace sensitivity control.

Touch pin marked "G" on 6SA7 tube. If no signal check or replace 6SA7 tube.

Change the signal-generator shielded lead to the radio frequency "R.F." jack, tune signal generator to exactly 1000 kc and set band switch to "B" position. Tune radio to 1000 kc. Touch pin "P" on 6SK7 amplifier tube. If no signal check the following:

1. Check or replace radio frequency coil (Illus. No. 3).
2. Check or replace oscillator coil (Illus. No. 4).
3. Check or replace capacitors (Illus. Nos. 18, 19A, 19B, 20 and 21).

Touch pin "G" on r-f 6SK7 tube. If no signal check or replace 6SK7 tube.

Place a 0.000075-μf capacitor on the end of red lead and plug in antenna socket. If no signal check the following:

1. Check or replace antenna coil (Illus. No. 1).
2. Check or replace choke coils (Illus. No. 2).
3. Check or replace antenna trimmer (Illus. No. 16).
4. Check or replace resistors (Illus. Nos. 37 and 42).

Crosley 11-100U, 11-101U, 11-102U, 11-103U, 11-104U, 11-105U, Ch. 330

Chassis 330 is similar to Chassis 301, which is also used with the above models, except that the 330 uses a 12SQ7GT (V3) in the detector—avc 1st a-f amplifier stage, whereas the 301 uses a 12AV6. The 12SQ7GT is connected in the following way: pin 1 goes to the shield; pin 2 goes to the junction of R5 and C8B; pin 3 goes to the junction of ground, pin 4, and C8A; pin 5 goes to tap 2 of the 2nd i-f transformer T2, pin 6 goes to the junction of R8, C8C, and C8D; pin 7 goes to pin 3 of V1, and pin 8 is grounded. The voltage readings are as follows: pins 1, 3, 4, and 8 are 0 volts; pin 2 is —0.8 volt; pin 5 is —0.6 volt; pin 6 is 52 volts; pin 7 is 12 volts a.c.

The following part should be added to the parts list: TS2, Part No. W-46447-1, Shield, tube (V3).

The following procedure should be used when installing an idler spring (part no. 151085) on the drive shaft:

1. Remove cotter from end of shaft under chassis.
2. Pull drive shaft straight out from chassis being careful to keep drive cord on shaft and pulley.
3. Remove spring washer from shaft.
4. Place idler spring on shaft and then hook one end of the spring under the chassis. The other end of the spring hooks around the portion of drive cord that is between the drive shaft and the tuning capacitor pulley.
5. Place spring washer on the drive shaft, insert drive shaft in chassis, and insert cotter on end of shaft.

Emerson 559, Ch. 120059A

The schematic diagram for Chassis 120059A shows two resistors marked R15. The one going to pin 6 of the 117Z3 should be marked R10.

Emerson 672B, Ch. 120097-B

The 672B is similar to Model 634B in that both models use a 120097-B chassis. The service data and Parts List for 672B, Ch. 120097-B, are the same as those for the 634B except for the cabinet parts listed below:

Part No.	Description
140396	Cabinet
470092	Lid support
620145	Chassis mounting board
580138	Shielded lead wire (25")
450099S	Knob
450099	Knob
587011	Spring insert
700053	Loop antenna
410807-1	Dial back plate
530002	Drive cord (37")
525022-1	Pointer.

Farnsworth P-63

Record changer P-63 is basically the same as the P-62 record changer—the difference lies in the type of trip mechanism. The P-62 changer employs a fixed position trip; the P-63, a velocity trip.

Farnsworth 36P10, Capehart

Model 36P10 employs the Farnsworth P-10 a-m—f-m radio chassis and the Farnsworth P-73 intermix record changer in a mahogany chairside cabinet with a 12-inch high-fidelity p-m speaker. For information on the radio chassis and record changer used in this instrument see Farnsworth Chassis P7, P9, and P-10 and the Farnsworth P-72 and P-73 Record Changers.

Following is a list of parts which pertain to the Model 36P10 only. Parts for the integral parts of the chassis and record changer are included under their respective chassis.

Part No.	Description
H-328	Cabinet (36P10)
750000A	Dial escutcheon
59373	Knob (2)
59316	Knob (2)
650011A-1	Speaker and output transformer
13908	Loop antenna assy.
750004A-1	A-m dial glass
750004A-2	F-m dial glass.

Farnsworth P-860

The alignment procedure and table, the chassis component layout, suggested batteries, and dial-cord stringing diagram for Model P-860 are the same as those for Farnsworth Model GP-350.

Farnsworth "N" Series, Capehart

In order to permit the use of the "Magnetic True Timbre" pickup in the N series instruments, a modification kit has been prepared, No. 41141.

A separate phono preamplifier (2-stage) using a 6SC7 twin triode tube, and mounted on a separate chassis, is used in place of the 6J7 preamplifier stage included on the tuner chassis. The schematic diagram for this stage is shown in Fig. 1. The 6J7 tube has been removed and the power cable to the preamp chassis is brought through the unused socket and connections made on the underside of the socket. The 6J7 stage is not used, so a shielded lead is connected directly from the phono input socket to the phono lug on the auxiliary bandswitch.

The noise eliminator, which is furnished with the record changer modification kit, is also included in these modified N series instruments. The circuit diagram of the noise eliminator is the same as that in the P4 series.

The voltage and resistance readings for the 6SC7 are given below:

Pin	Voltage (volts)	Resistance (ohms)
1	0	0
2	150	200 K
3	—0.3	inf
4	—0.3	inf
5	135	200 K
6	0	0
7	0	0
8	5.4ac	2.5

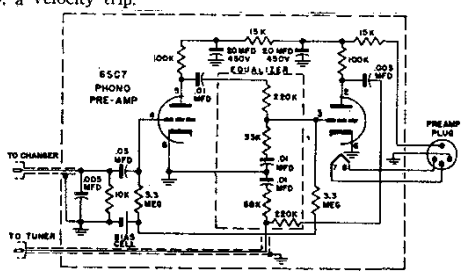
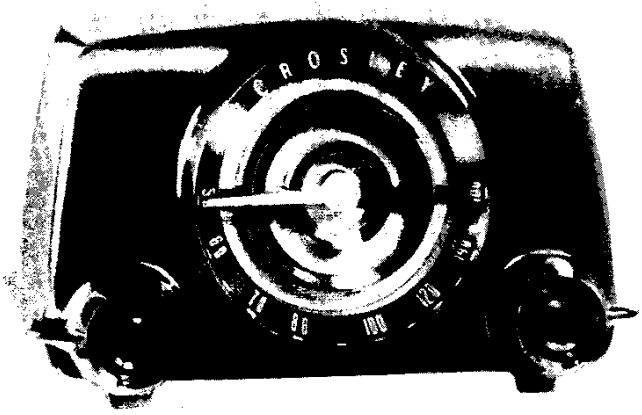


Fig. 1. Schematic for the 6SC7 phono-preamplifier stage used in the Farnsworth "N" Series, Capehart.

MODELS 11-100U, 11-101U, 11-102U,
11-103U, 11-104U, 11-105U, Ch. 301

Model No.	Color
11-100U	White
11-101U	Blue
11-102U	Green
11-103U	Red
11-104U	Ebony
11-105U	Chartreuse



DESCRIPTION

TYPE: Five-tube, single band, Superheterodyne.

FREQUENCY RANGE: 540 to 1600 kc.

INTERMEDIATE FREQUENCY: 455 kc.

POWER SUPPLY: a.c.-d.c.

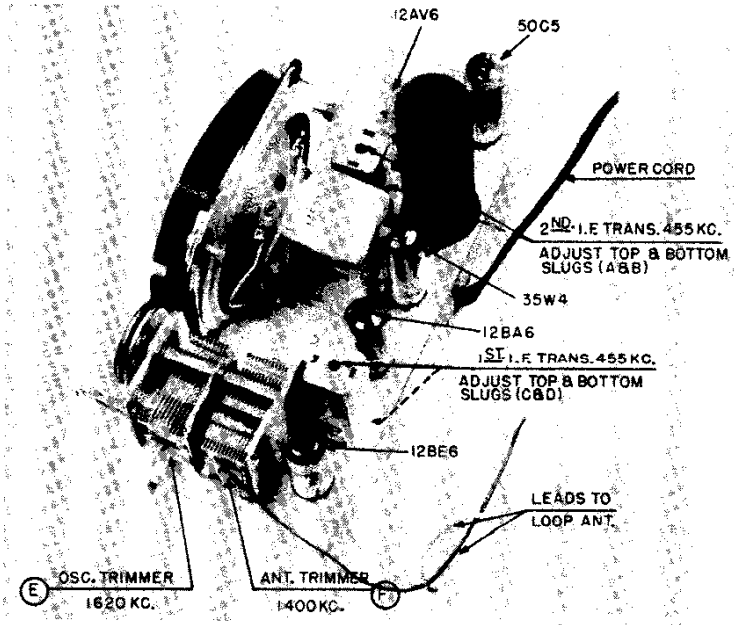
VOLTAGE RATING: 105-125 volts.

POWER CONSUMPTION: 30 watts.

POWER OUTPUT: 1.5 watts maximum.

TUBE COMPLEMENT

Type	Function
12BE6	Converter
12BA6	I. F. Amplifier
12AV6	Detector, AVC, 1st A.F. Amplifier
50C5	A.F. Power Output
35W4	Rectifier



CHASSIS, TOP VIEW

When using direct current it may be necessary to reverse the position of the power plug in the electric outlet for correct polarity.

Reversing the position of the power plug when alternating current is used may reduce hum.

Under no circumstances should a ground be connected to this receiver.

ALIGNMENT PROCEDURE

1. Connect an output meter across the speaker voice coil.
2. The r.f. signal input from the signal generator should be connected as indicated in the alignment chart. Connect the signal generator ground through a 0.1 mfd. condenser to B - (pin 2 on 12BA6 tube socket).
3. Turn the volume control on full and adjust the signal generator output to produce approximately midscale deflection of the output meter, but maintain signal generator output as low as possible to prevent AVC action in the receiver.

ALIGNMENT CHART

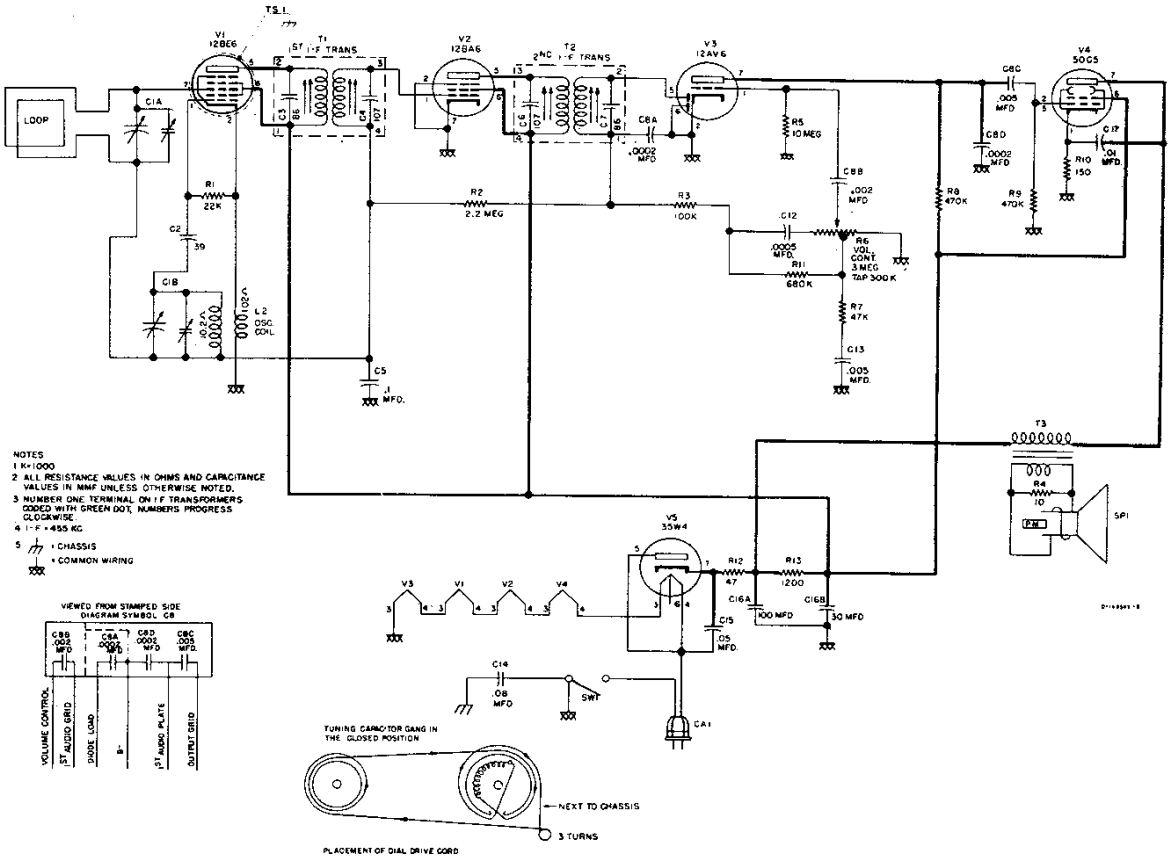
Alignment adjustment locations are shown on page 1, "CHASSIS, TOP VIEW."

Alignment Sequence	Signal Generator Output			Position of Dial pointer	Adjust for Maximum Output
	Frequency in KC	In Series with	To		
1	455	200 mmf.	High Side of Loop	1620	A, B, C & D (See Note 1.)
2	1620	Radiated to Loop		1620	E (See Note 2.)
3	1400	Radiated to Loop		Tune to Signal	F (See Note 2.)

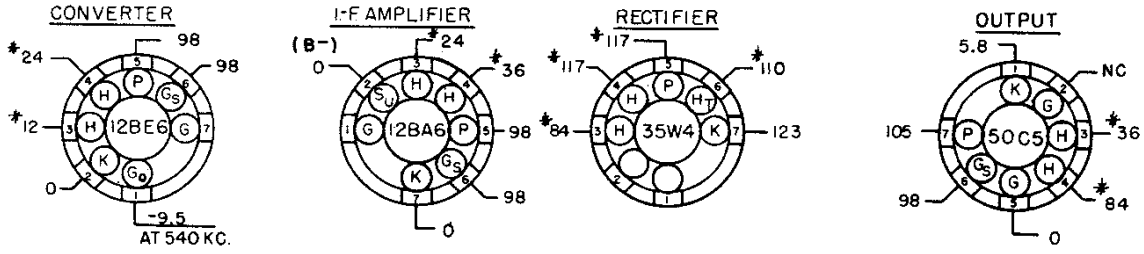
ALIGNMENT NOTES

1. Repeat adjustments (A, B, C & D) in sequence, until maximum output is obtained.
2. Place signal generator output lead near the loop antenna. The loop antenna must be positioned with respect to the chassis to simulate its position when chassis and loop are fastened in cabinet.

MODELS 11-100U, 11-101U, 11-102U,
11-103U, 11-104U, 11-105U, Ch. 301

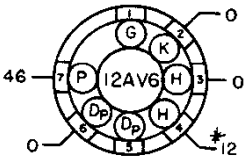


SCHEMATIC DIAGRAM



NOTES:
1. BOTTOM VIEW OF TUBE SOCKETS.
2. MEASURE VOLTAGE WITH AN ELECTRONIC VOLTMETER FROM SOCKET LUG TO B- PIN 2 ON THE 12BA6.
3. LINE VOLTAGE 117 V 60~
4. NC = NO CONNECTION.
5. * = AC VOLTAGE
6. SOCKET VOLTAGE TOLERANCE ±10%.

DET-AVC-1ST AUDIO AMPL.



SOCKET VOLTAGE CHART

MODELS 11-100U, 11-101U, 11-102U, 11-103U, 11-104U, 11-105U, Ch. 301

REPLACEMENT PARTS LIST

Symbol No.	Part No.	Description
C1A	B-148350	Capacitor, Variable } Two Section
C1B		Capacitor, Variable }
C2	C-137727-109	Capacitor, 39 mmf., 10%, 200 v., ceramic
C3	Part of T1	Capacitor, 86 mmf.
C4	Part of T1	Capacitor, 107 mmf.
C5	39001-19	Capacitor, .1 mfd., 600 v., paper
C6	Part of T2	Capacitor, 107 mmf.
C7	Part of T2	Capacitor, 86 mmf.
C8A	C-144675-1	Capacitor, .0002 mfd., 500 v. } Four Section disc ceramic
C8B		Capacitor, .002 mfd., 500 v. }
C8C		Capacitor, .005 mfd., 500 v. }
C8D		Capacitor, .0002 mfd., 500 v. }
C12	39001-5	Capacitor, .0005 mfd., 600 v., paper
C13	39001-11	Capacitor, .005 mfd., 600 v., paper
C14	39001-85	Capacitor, .08 mfd., 600 v., paper
C15	39001-17	Capacitor, .05 mfd., 600 v., paper
C16A	B-148357	Capacitor, 100 mfd., 150 v. } Two Section Electrolytic
C16B		Capacitor, 30 mfd., 150 v. }
C17	39001-13	Capacitor, .01 mfd., 600 v., paper
R1	39373-60	Resistor, 22,000 ohm, ½ w.
R2	39373-97	Resistor, 2.2 megohm, ½ w.
R3	39373-74	Resistor, 100,000 ohm, ½ w.
R4	39373-1	Resistor, 10 ohm, ½ w.
R5	39373-107	Resistor, 10 megohm, ½ w.
R6	B-148327	Control, Volume (3 megohm, Tap 300,000 ohm)
R7	39373-67	Resistor, 47,000 ohm, ½ w.
R8	39373-87	Resistor, 470,000 ohm, ½ w.
R9	39373-87	Resistor, 470,000 ohm, ½ w.
R10	39373-16	Resistor, 150 ohm, ½ w.
R11	39373-90	Resistor, 680,000 ohm, ½ w.
R12	39374-97	Resistor, 47 ohm, 10%, 1 w.
R13	39374-114	Resistor, 1200 ohn, 10%, 1 w.
CA1	C142769-1	Cable & Plug Assy., Power
L1	C-148399	Loop & Back Assy.
L2	AW-148259	Coil, Oscillator
SP1	AD-148400	Speaker
SW1	Part of R6	Switch, Power
TS1	W-147784	Shield, Tube (V1)
T1	C-139919-5	Transformer, 1st I.F.
T2	C-139919-5	Transformer, 2nd I.F.
T3	138131-1	Transformer, Output
	AB-148406-1	Baffle & Grille Cloth Assy.
	AB-148465-1	Cabinet (11-100U)
	AB-148465-2	Cabinet (11-101U)
	AB-148465-3	Cabinet (11-102U)
	AB-148465-4	Cabinet (11-103U)
	R-148273-3	Cabinet (11-104U)
	AB-148465-6	Cabinet (11-105U)
	W-148434	Clip, I.F. Transformer Mtg.
	W-131154-1	Cotter (External), Tuning Shaft
	B-148364	Gasket, Speaker
	W-148390	Grommet (3 used), chassis
	B-148318-1	Knob (11-100U)
	B-148318-2	Knob (11-101U)
	B-148318-3	Knob (11-102U)
	B-148318-4	Knob (11-103U)
	B-147318-5	Knob (11-104U)
	B-148318-6	Knob (11-105U)
	B-94704-7	Nut (Push On), Grille Cloth Mtg.
	B-148320	Pointer, Dial
	39176-59	Screw, Chassis Mtg.
	W-148379	Shaft, Tuning
	AW-148806	Shaft & Pulley Assy., Pointer
	39462-2	Socket, Tube
	W-148469	Spring (Retainer), Pointer Pulley
	W-51752	Spring, Drive Cord
	AB-148362	Support & Bushing Assy., Pointer Pulley
	W-134916	Washer (Spring), Tuning Shaft

Slipping of dial drive cords on these models can be corrected by replacing the drive cord with a cord long enough to permit it to be wrapped around the drive shaft four turns instead of three turns.

If necessary, place a 1/16" thick #6 flat washer on each screw that mounts the tuning capacitor. The washer should be placed between the rubber grommet eyelet and the capacitor frame. When the mounting screws are drawn tight, the eyelet will then flatten enough to reduce the flexibility of the grommet. This will hold the capacitor rigid and prevent the cord from becoming loose when the drive shaft is rotated.

In addition to the recommendations in the original service instruction it is sometimes necessary to replace the drive shaft with new shaft (part Number 148379). This new shaft does not have a groove for the drive cord.

On some sets of models 11-100U to 11-109U, R2 is a 3.3 megohm, 10%, 1/2 watt resistor instead of a 2.2 megohm resistor; and because of this C5 is an .05 mfd., 600 volt paper capacitor (Part No. 39001-17).