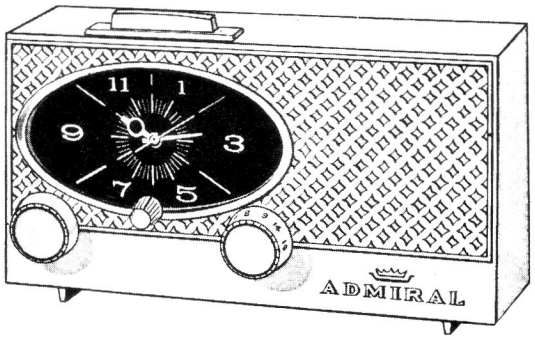
ADMIRAL

CLOCK RADIO



Y3550 SERIES

SPECIFICATIONS

ANTENNA: Built-in loop.

CIRCUIT: Superheterodyne using 5 miniature tubes.

FREQUENCY RANGE: Standard broadcast band; 535 KC to 1620 KC.

INTERMEDIATE FREQUENCY: 455 KC.

POWER SUPPLY: 117 volts, 60 cycles, AC.

POWER CONSUMPTION: 30 watts.

SPEAKER: 4" PM with Alnico V magnet. Voice coil impedance 3.2 ohms.

MODEL	COLOUR	CHASSIS
Y3553	White	5D6EX
Y3554	Pink	
Y3557	Beige	
Y3559	Blue	

GENERAL

All components, except the speaker (with output transformer) and the antenna loop are mounted on an etched circuit board. The use of etched circuitry provides an efficient, compact and practically trouble free receiver.

VOLTAGE PRECAUTION

DO NOT CONNECT AN EARTH GROUND WIRE TO THE RECEIVER.

The etched circuit board of this receiver is connected directly to one side of the power line. To prevent damage to test equipment or to etched wiring, do not place chassis directly on a metal bench, or other metal objects.

COMPONENTS REPLACEMENT

Defective resistors and capacitors should be removed by clipping leads as close to the unit as possible then the new part neatly soldered to the old leads. If any resistor or capacitor is found inconvenient to replace on the top side of board, it is permissible to solder component on the bottom of the board.

If a unit such as the oscillator coil or IF transformer is to be replaced, first remove old part by heating the mounting lugs with a pencil type soldering tool (35 watts or less) and straighten with pick and long nose pliers. Brush away any loose solder with a stiff glue brush. Before inserting new part make certain all lug holes are free of solder, to prevent damage to wiring or components or both.

Service Manual T1182

ALIGNMENT PROCEDURE

Use an isolation transformer or connect a .1 mf capacitor in series with low side of signal generator. **CAUTION:** Do not connect an earth ground wire directly to chassis.

Set volume control full on.

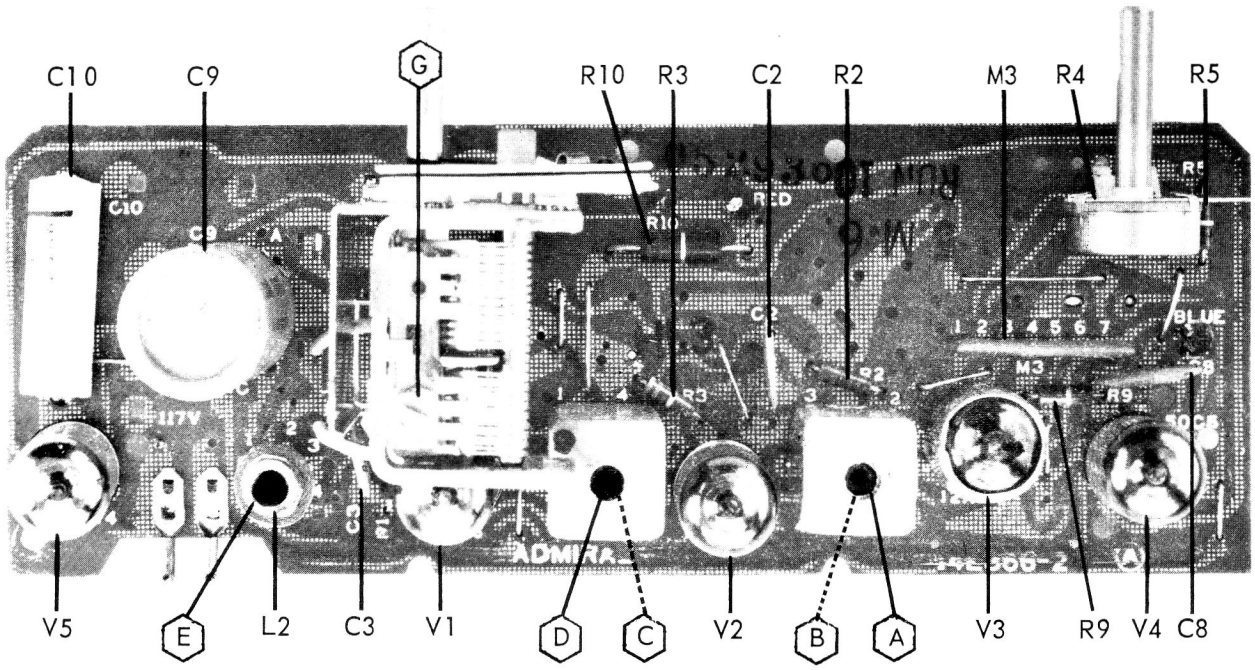
Connect output meter across output secondary. Disconnect speaker and use a 3.2 ohm load.

Use lowest setting of signal generator capable of producing adequate indication on lowest scale of meter.

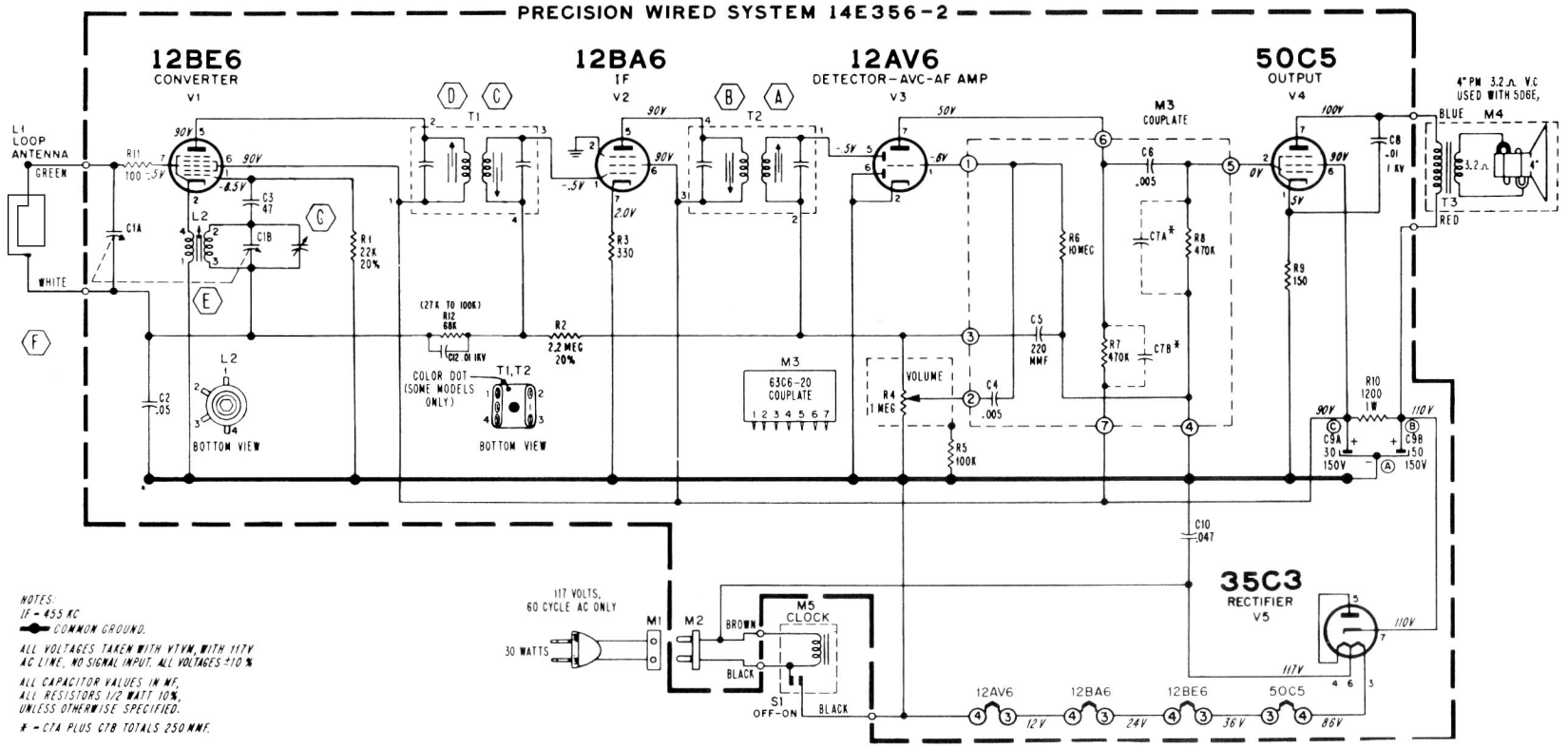
By using alignment tool 98A30-7, you can align both IF transformer slugs from the top of the can.

Repeat adjustments to insure best results.

STEP	CONNECTION OF SIGNAL GENERATOR	SIGNAL GENERATOR FREQUENCY	RECEIVER GANG SETTING	ADJUSTMENT DESCRIPTION	ADJUSTMENT USE INSULATED TOOL
1	Through a .1 mf capacitor to stator, antenna section of tuning capacitor.	455KC	Fully Open	2nd IF 1st IF	Ⓐ Ⓑ Ⓒ Ⓓ For Max
2	Repeat step 1 for maximum output.				
3	Use a radiated signal loop of several turns of wire, or place generator lead close to receiver loop for adequate signal pickup.	1620KC	Fully Open	Osc Trimmer	Ⓖ for Max
4	Same as step 3	535KC	Fully Closed	Osc Slug	Ⓔ for Max
5	Repeat steps 3 & 4 several times until there is no further increase in Output and oscillator tracks properly.				
6	Same as step 3	1400KC	1400KC	Antenna Trimmer	Ⓕ for Max



TOP VIEW OF CHASSIS SHOWING COMPONENTS AND ALIGNMENT POINTS


PRECISION WIRED SYSTEM 14E356-2
12BE6
CONVERTER
V1
12BA6
IF
V2
12AV6
DETECTOR-AVC-AF AMP
V3
50C5
OUTPUT
V4
4" PM 3.2Ω V.C
USED WITH 5D6E,
L1
LOOP
ANTENNA
GREEN
WHITE
R11
100
C1A
C1B
L2
C3
47
R1
22K
20%
C2
.05
BOTTOM VIEW
T1
T2
R3
330
2.0V
R2
2.2 MEG
20%
(27K TO 100K)
R12
68K
C12 .01 1KV
COLOR DOT
(SOME MODELS
ONLY)
T1,T2
BOTTOM VIEW
M3
63C6-20
COUPLATE
1 2 3 4 5 6 7
VOLUME
R4
1 MEG
C4
.005
R5
100K
C5
220
MMF
M3
COUPLATE
C6
.005
C7A*
R6
10 MEG
R7
470K
C7B*
R8
470K
R9
150
C8
.01
1 KV
BLUE M4
3.2Ω
4"
T3
RED
R10
1200
1W
C9A
30
150V
C9B
50
150V
C10
.047
35C3
RECTIFIER
V5
117 VOLTS,
60 CYCLE AC ONLY
30 WATTS
M1
M2
BROWN
BLACK
M5
CLOCK
S1
OFF-ON
BLACK
12AV6
12V
12BA6
24V
12BE6
36V
50C5
86V
NOTES:
IF - 455 KC
COMMON GROUND.
ALL VOLTAGES TAKEN WITH VTVM, WITH 117V
AC LINE, NO SIGNAL INPUT. ALL VOLTAGES ±10%
ALL CAPACITOR VALUES IN MF,
ALL RESISTORS 1/2 WATT 10%,
UNLESS OTHERWISE SPECIFIED.
* - C7A PLUS C7B TOTALS 250 MMF.

PARTS LIST FOR 5D6EX CHASSIS

RESISTORS

Sym.	Description	Part No.
R1	22K ohms, ½W, 20%	6088-223
R2	2.2 megohms, ½W, 20%	6088-225
R3	330 ohms, ½W, 10%	6088-331
R4	Control 1 megohm Vol.	75C77-3
R5	100K ohms, ½W, 10%	6088-104
R9	150 ohms, ½W, 10%	6088-151
R10	1.2K ohms, 1W, 10%	60B14-122
R11	100 ohms, ½W, 10%	6088-101
R12	100K ohms, ½W, 10%	6088-104

CAPACITORS

C1	Gang Cond.	68C96-2
C2	.05 mfd, 50V.	65C45-32
C3	47 mmfd, 500V, 20%	65D10-198
C8	.01 mfd, 1KV, GMV	65M1-3
C9A	30 mfd, 150V, Electrolytic	67B39-1
C9B	50 mfd, 150V, Electrolytic	67B39-1
C10	.02 mfd, 1000V.	65D10-239
C12	.01 mfd, 1KV, GMV	65M1-3

COILS & TRANSFORMERS

L2	Coil, Oscillator	69C292-1
T1	Transformer I. F. (1st)	72C170-5
T2	Transformer I. F. (2nd)	72C227-4

MISCELLANEOUS CHASSIS PARTS

S1	On-off-switch	Part of clock
M3	Couplate	63D6-20
Connector, Interlock		9B42-2
Socket, Tube Min. 7 Pin		87D35-47
Tube Socket, Min. 7 Pin (with Gnd. Strap)		87D35-49
Tube Shield, 7 Pin		87B52-2

CABINET PARTS LIST

Description	Part No.
Spring	19D1-75-60
Clock Face	21C153-3
Clock Xtal	24C55-2
Hour Hand	25D92-5
Minute Hand	25D92-6
Second Hand	25D92-7
Alarm Hand	25D92-8
Support, P. C. Board	33B464-1
Knob, Tuning White Y3553	33C601-7
Knob, Volume White Y3553	33C601-8
Knob, Tuning Pink Y3554	33C601-9
Knob, Volume Pink Y3554	33C601-10
Knob, Tuning Beige Y3557	33C601-11
Knob, Volume Beige Y3557	33C601-12
Knob, Tuning Blue Y3559	33C601-13
Knob, Volume Blue Y3559	33C601-14
Button, Doze, Pink Y3554	33C602-1
Button, Doze Beige Y3557	33C602-2
Button, Doze, Blue Y3559	33C602-3
Button, Doze White Y3553	33C602-7
Escutcheon	33C613-1
Cabinet, White Y3553	34E204-6
Cabinet Pink Y3554	34E204-7
Cabinet Beige Y3557	34E204-8
Cabinet Blue Y3559	34E204-9
Operating Instructions	41L15-18
Trimmer	66A33-1
Loop Ant. & Cab't Back	69N16-2
Speaker 4" W/Transformer	78D142-8
Line Cord & Plug	89C62-4
Clock	91C66-2
Knob (Clock)	91C66-10
Time Set Shaft	91C68-2

Canadian Admiral CORPORATION, LTD.
PORT CREDIT, ONT.