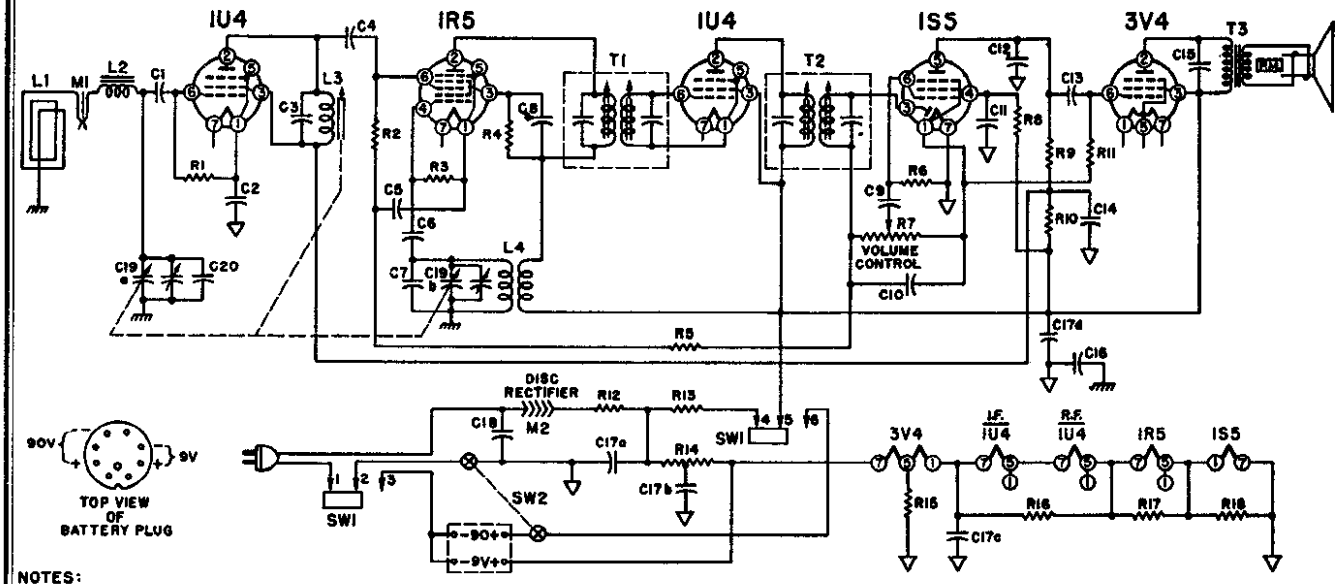
ADMIRAL CORPORATION

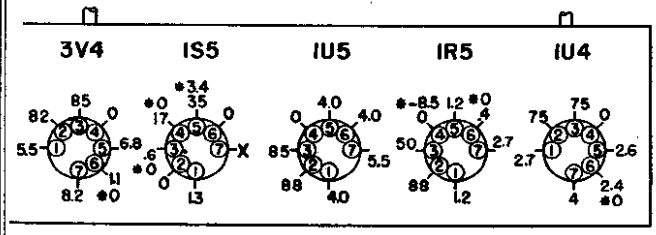
MODELS 7P32, 7P33, 7P34,
Chassis 5H1



NOTES:
I.F. = 455 K.C.
COMMON (LINE GROUND)
CHASSIS GROUND

5-47

VOLTAGE CHART



***Indicates reading taken with 1000 ohm-per-volt meter.**

VOLTAGE DATA

- All readings made between Tube Socket Terminals and Terminal No. 7 on the 1S5 (Point "X" on Voltage Chart).
- A.C. Voltages measured on a 117 Volt A.C. line.
- Dial turned to low frequency end, no signal.
- All Voltages measured with a VoltOhmyst.
- A second voltage reading (marked with an asterisk *) indicates readings made with a 1000 ohm-per-volt meter when use of this instrument would result in appreciably lower readings.

REPLACEMENT PARTS

RESISTORS

Symbol	Description	Part No.
R1	2.2 Megohms, ¼ Watt	60B 3-225
R2	1 Megohm, ¼ Watt	60B 3-105
R3	100,000 Ohms, ¼ Watt	60B 3-104
R4	18,000 Ohms, 1/3 Watt	60B 2-183
R5	3.3 Megohms, ¼ Watt	60B 2-335
R6	10 Megohms, ¼ Watt	60B 3-106
R7	1 Megohm Volume Control and Switch SW2 (DPST)	75B 1-18
R8	4.7 Megohms, ¼ Watt	60B 2-475
R9	470,000 Ohms, ¼ Watt	60B 3-474
R10	10,000 Ohms, ¼ Watt	60B 3-103
R11	2.2 Megohms, ¼ Watt	60B 3-225
R12	47 Ohms, 1 Watt	60B 14-470
R13	2700 Ohms, 1 Watt	60B 14-272
R14	2600 Ohms, 5 Watt	61A 6-1
R15	1500 Ohms, ¼ Watt	60B 2-152
R16	820 Ohms, ¼ Watt	60B 2-821
R17	220 Ohms, ¼ Watt	60B 2-221
R18	150 Ohms, ¼ Watt	60B 2-151

CONDENSERS

Symbol	Description	Part No.
C1	250 Mmfd., Mica	65B 7-22
C2	.25 Mfd., 200 Volts, Paper	64B 1-28
C3	420 Mmfd., Mica	65B 1-13
C4	250 Mmfd., Mica	65B 7-22
C5	.01 Mfd., 400 Volts, Paper	64B 1-25
C6	100 Mmfd., Mica	65B 7-17
C7	15 Mmfd., Ceramic	65B 6-18
C8	.01 Mfd., 400 Volts, Paper	64B 1-25
C9	.01 Mfd., 400 Volts, Paper	64B 1-25
C10	250 Mmfd., Mica	65B 7-22
C11	.01 Mfd., 400 Volts, Paper	64B 1-25

CONDENSERS

Symbol	Description	Part No.
C12	100 Mmfd., Mica	65B 7-17
C13	.01 Mfd., 400 Volts, Paper	64B 1-25
C14	4 Mfd., 150 Volts, Electrolytic	67A 4-2
C15	.002 Mfd., 600 Volts, Paper	64B 1-14
C16	.18 Mfd., 200 Volts, Paper	64A 2-2
C17a	50 Mfd., 150 Volts, Elect.	67C 7-5
C17b	20 Mfd., 150 Volts, Elect.	67C 7-5
C17c	200 Mfd., 25 Volts, Elect.	67C 7-5
C17d	20 Mfd., 150 Volts, Elect.	67C 7-5
C18	.05 Mfd., 400 Volts, Paper	64B 1-22
C19a	0 to 420 Mmfd., Gang	68B 6
C19b	0 to 162 Mmfd., Gang	68B 6
C20	10 Mmfd., Ceramic	65B 6-24

COILS, TRANSFORMERS, SWITCHES, ETC.

L1	Antenna, Loop (Part of cabinet —not supplied separately)	
L2	Coil, Loading	AA 121
L3	Coil, R. F.	AB 100-7
L4	Coil, Oscillator	69A 15
P1	Plug, Battery (9 prong)	88A 3-3
SW1	Switch, Power Change	77A 2-4
SW2	Switch, On-Off (Part of volume control R7)	
T1	Transformer, 1st I. F.	72B 28-1
T2	Transformer, 2nd I.F.	72B 28-1
T3	Transformer, Output	98A 21
	Slug, Tuning (R.F.)	71B 1-3
	Adjustment Screw for Slug	27A 4
	Speaker 6" P.M. & Output Transformer	78B 17-3

MISCELLANEOUS

Description	Part No.
M1....Jack for External Loop Antenna	
M2....Rectifier, Selenium	93A 1-2
Buttons, Snap (for dial scale)	13A 1-1-2
Cabinet (Black 7P32)	35D 58-1
Cabinet (Black 7P33)	35D 50-1
Cabinet (Brown 7P34)	35D 50-2
Cord, Dial	50A 1-3
Dial Window, Plastic (7P33, 7P34)	24B 2
Dial Window and Speaker Grill (7P32)	23C 26
Drum & Cam Assembly	A 1313
Escutcheon, Plastic (7P33, 7P34)	23D 24
Grommet (for mounting R.F. coil)	12A 1-12
Handle, Plastic (7P32, 7P33)	37C 11-1
Knob (7P32)	33A 18-3
Knob (7P33, 7P34)	33A 18-1
Latch, Cover (7P33, 7P34)	37B 2-1
Mounting Clip (for I.F. transformer)	72B 28-10
Mounting Plate (for R.F. coil)	32A 40
Pointer, Dial	25A 24
Scale, Dial (metal)	21B 44
Spring	19B 1-13
Spring, Tension (Dial Cord)	19B 1-5
Tube Shield	87A 7-7
Tube Socket	87A 3-2
Tuner Arm (for R.F. slug tuner)	A1314
Washer, Felt (¾") (for knobs)	5A 4-3
Washer, Spring (for tuner arm)	4A 6-3-0

MODELS 7T06, 7T12
CHASSIS 4B1

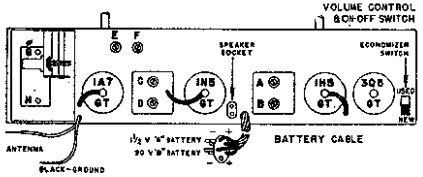
ALIGNMENT PROCEDURE

1. IMPORTANT — Check to see that dial pointer reaches each end of dial scale when Station Selector Control is turned from one end to the other.
2. Volume control—Maximum for all adjustments.
3. Connect radio chassis to ground post of signal generator with a short heavy lead.
4. Connect output meter across voice coil of speaker.
5. Connect dummy Antenna value in series with generator output lead, when needed (see below).
6. Allow chassis and signal generator to "heat up" for several minutes.
7. Use lowest Output setting of Signal Generator capable of producing adequate Output Meter indication and then proceed in the following sequence.

Band	Signal Generator		Connection to Radio	Receiver Dial Setting	Trimmers Adjusted (In Order Shown)	Trimmer Function	Type of Adjustment
	Frequency Setting	Dummy Antenna					
I.F.	455 KC.	.1 mfd.	Grid of 1A7 (Cap)	High Frequency end of dial	A-B—2nd I.F.	Output I.F.	Adjust to maximum output
I.F.	455 KC.	.1 mfd.	Grid of 1A7 (Cap)	High Frequency end of dial	C-D—1st I.F.	Input I.F.	Adjust to maximum output
Broad-cast	1630 KC.	.00020 mfd. Mica	Antenna Lead	High Frequency end of dial	E-(See note below) F-(See note below)	Oscillator Antenna	Adjust to maximum output
Broad-cast	1300 KC.	.00020 mfd. Mica	Antenna Lead	1300 KC.	G H	Oscillator Antenna	Adjust to maximum output

NOTE: Before adjusting trimmers "E" and "F," make sure that each iron core is 1⅜" or more outside of its coil form. If necessary, turn adjustments "G" and "H" to accomplish this.

TUBE AND TRIMMER LOCATION



CIRCUIT

Battery-operated 4 Tube Superheterodyne with Single Tuning Range: 535 KC. to 1630 KC. Covers standard broadcast band, using antenna and ground. Permeability tuning on Antenna and Oscillator circuits. Intermediate Frequency is 455 KC.

POWER SUPPLY

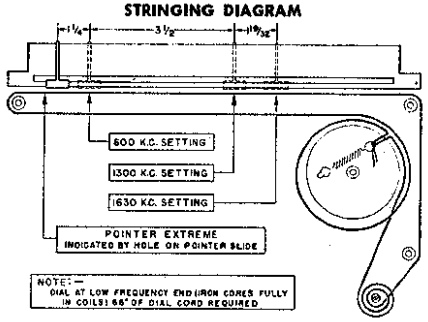
Single unit "AB" battery pack: 90 volt "B", 1½ volt "A." Plug-in connection. Use Ensign AB48, Burgess 17G-D60, Eveready 748, General 60DL-11L, Ray-O-Vac AB-82, Bond 0528 Battery or equivalent.

ECONOMIZER SWITCH

The battery economizer switch is located on the top of the chassis, right side.

Always have this Economizer Switch in the "NEW" battery position when first placing radio in operation or when installing a new battery.

STRINGING DIAGRAM



MODELS 7P32, 7P33, 7P34
CHASSIS 5H1

ALIGNMENT PROCEDURE

1. Disconnect Loop Antenna leads from clips on set and remove chassis from cabinet.
2. Make alignment using a battery whenever possible.
3. Connect a fresh battery to the set.

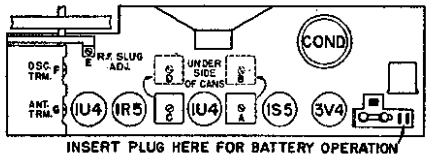
IMPORTANT: Check dial drum position on shaft. Tuner arm should just complete downward travel when gang is fully meshed. At this point, tuner arm should be on short flat part of cam. Check pointer. It should be at last dial scale mark just below 550 K.C. when gang is fully meshed. If not, move pointer on dial cord

Step	Dummy Antenna Used in Series with Signal Generator	Connect High Side Signal Generator to	Signal Generator Frequency	Receiver Gang Setting	Trimmer Designation and Description	Type of Adjustment
(1)	.00025 Mfd. when using A.C. .1 Mfd. when using Battery	Grid of 1R5 (Pin 6)	455 K.C.	Any point where it does not affect Signal	2nd I.F. (A), (B). 1st I.F. (C), (D).	Maximum Deflection Then repeat
(2)	.00025 Mfd. when using A.C. .1 Mfd. when using Battery	Stator lug of rear variable condenser section	1620 K.C.	Tuning Gang Wide Open	Oscillator Trimmer (F)	Maximum Deflection
(3)	.00025 Mfd. when using A.C. .1 Mfd. when using Battery	Stator lug of rear variable condenser section	1400 K.C.	Tune in Generator Signal	R.F. Slug (E)	Maximum Deflection
(4)	Replace Set in Cabinet					
(5)	.00025 Mfd.	Antenna and Ground Leads	1400 K.C.	Tune in Generator Signal	Antenna Trimmer (G)	Maximum Deflection

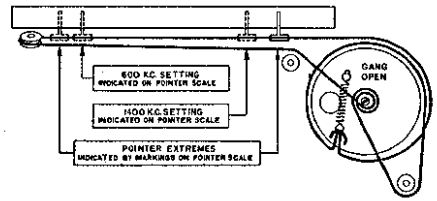
REPLACING R.F. TUNING SLUG

If the R.F. Tuning Slug has to be changed use the following procedure. Set the gang condenser to the point where the plates are fully meshed. Screw the slug adjusting screw about halfway down. Place the slug in the coil in such a position that the top of the slug is flush with the top of the coil. Solder the slug wire to the adjusting screw. Be sure that the position of the slug does not change during the soldering and that the slug wire is straight. Proceed to realign the set as shown in the chart.

TUBE AND TRIMMER LAYOUT



DIAL CORD STRINGING



INTERNAL ANTENNA CONNECTIONS

Note: Antenna connections cross over as shown above for 7P32 only. The 7P33, 7P34 antenna connections are made to the clip nearest the wire.