MODELS 7T06, 7T12
CHASSIS 4B1

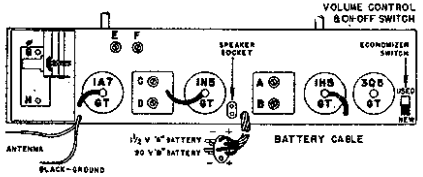
ALIGNMENT PROCEDURE

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

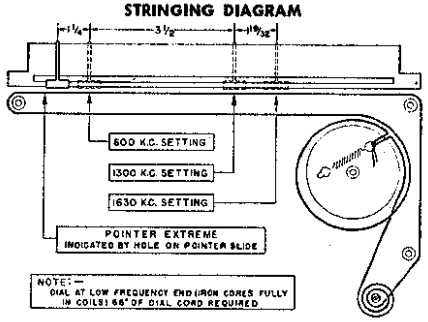
Single unit "AB" battery pack: 90 volt "B", 1½ volt "A." Plug-in connection. Use Ensign AB48, Burgess 17G-D60, Eveready 748, General 60DL-11L, Ray-O-Vac AB-82, Bond 0528 Battery or equivalent.

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.

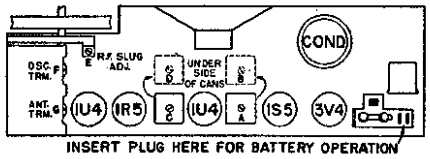
IMPORTANT: Check dial drum position on shaft. Tuner arm should just complete downward travel when gang is fully meshed. At this point, tuner arm should be on short flat part of cam. Check pointer. It should be at last dial scale mark just below 550 K.C. when gang is fully meshed. If not, move pointer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

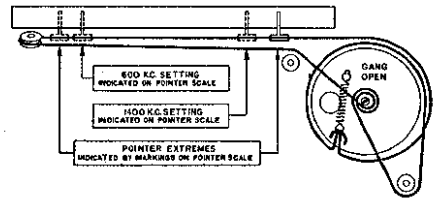
REPLACING R.F. TUNING SLUG

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

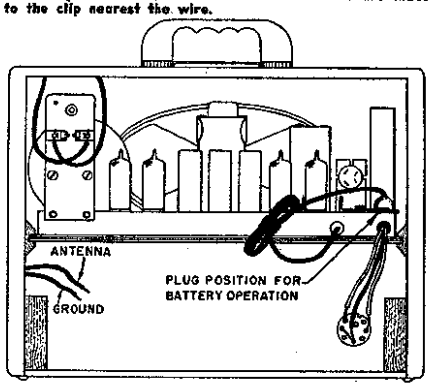


DIAL CORD STRINGING



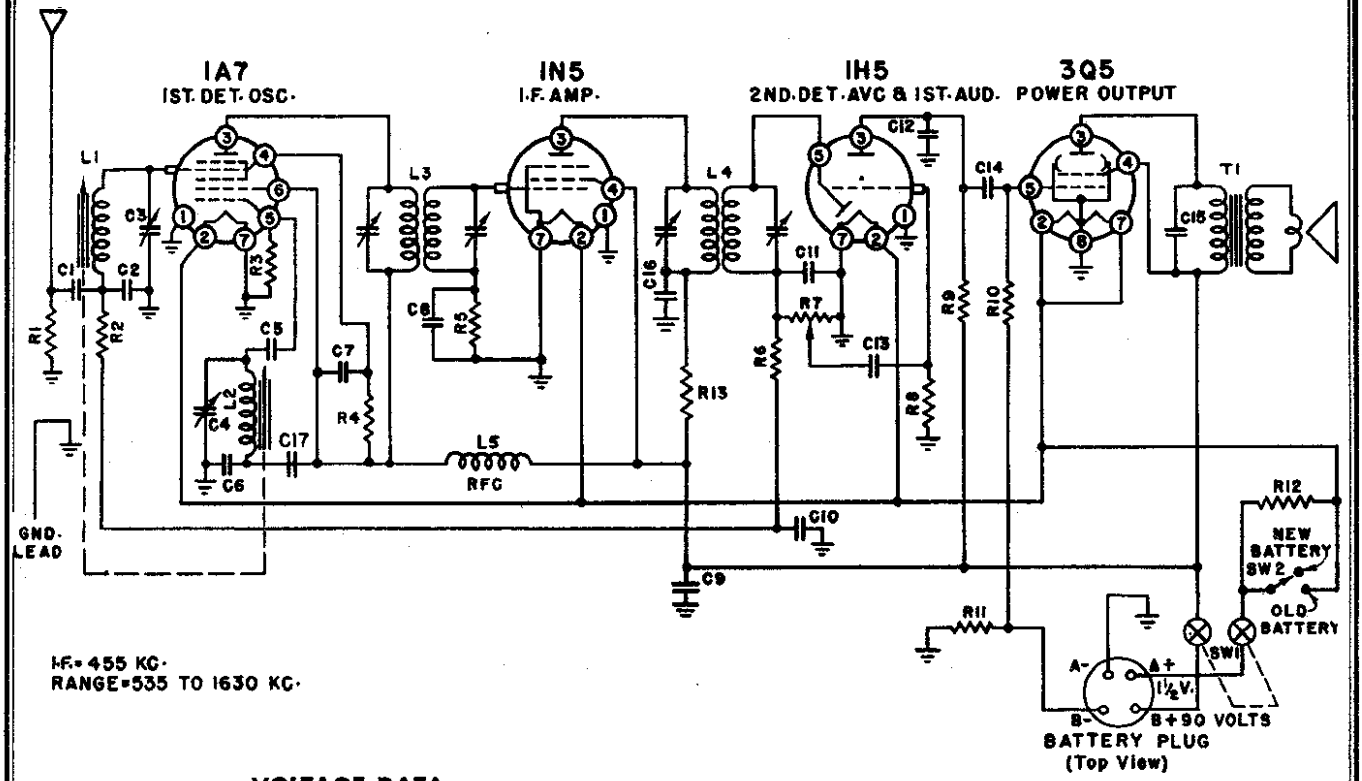
INTERNAL ANTENNA CONNECTIONS

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



MODELS 7T06, 7T12,
Chassis 4B1

ADMIRAL CORPORATION

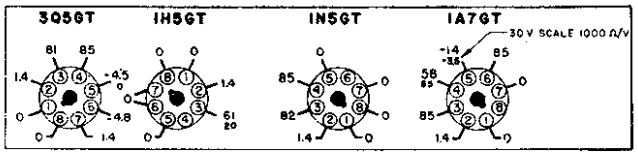


I.F. = 455 KC.
RANGE = 535 TO 1630 KC.

VOLTAGE DATA

All readings made between tube socket terminals and chassis. Voltages indicated have been obtained using a Vacuum Tube Voltmeter. A second voltage reading is shown made with a 1000 ohm-per-volt meter, when use of this instrument would result in appreciably lower readings. Measured with a fresh battery, volume control full on, dial at the high frequency end, no signal.

VOLTAGE CHART — BOTTOM VIEW



OSCILLATION IN 4B1 RADIO CHASSIS

Occasionally audio oscillation may occur in the 4B1 chassis with the volume control in an intermediate position. Should you encounter this trouble, reverse the leads of the primary of the output transformer or ground the speaker frame to the chassis. The speaker leads and the grid lead of the 1H5 should be kept as far as possible from the 3Q5 output tube.

REPLACEMENT PARTS

ISSUE A 1947

CONDENSERS

Symbol	Description	Part No.
C1	.01 mfd. 400 Volts	64B 1-25
C2	.0008 mfd., Mica	65B 5-31
C3, C4	Trimmer, Antenna / Trimmer, Oscillator	66A 9-1
C5	.0001 mfd., Mica	65B 7-17
C6	.0008 mfd., Mica	65B 5-31
C7	.01 mfd., 400 Volts	64B 1-25
C8	.002 mfd., 600 Volts	64B 1-14
C9	4. mfd., 150 Volts (Elect)	67A 4-2
C10	.05 mfd., 200 Volts	64B 1-32
C11	.00025 mfd., Mica	65B 7-22
C12	.00025 mfd., Mica	65B 7-22
C13	.01 mfd., 400 Volts	64B 1-25
C14	.01 mfd., 400 Volts	64B 1-25
C15	.005 mfd., 600 Volts	64B 1-12
C16	.01 mfd., 400 Volts	64B 1-25
C17	.01 mfd., 400 Volts (C17 omitted in early models)	64B 1-25

RESISTORS

Symbol	Description	Part No.
R1	15,000 ohm ½ Watt	60B 8-153
R2	470,000 ohm ¼ Watt	60B 2-474
R3	220,000 ohm ½ Watt	60B 8-224
R4	33,000 ohm ½ Watt	60B 8-333
R5, R8	4,700,000 ohm ¼ Watt	60B 2-475
R6	2,200,000 ohm ¼ Watt	60B 2-225
R7	1 meg. Vol. Control	75B 1-1
R9, R10	1,000,000 ohm ¼ Watt	60B 2-105
R11	390 ohm ¼ Watt	60B 2-391
R12	.75 ohm ½ Watt (wire)	61A 2-1
R13	2200 ohm ¼ Watt	60B 2-222

TRANSFORMERS and COILS

Symbol	Description	Part No.
L1	Antenna Coil	AC105-1
L2	Oscillator Coil	A1020
L3	1st I.F. Transformer	72B 5
L4	2nd I.F. Transformer	72B 6
L5	Choke Coil (RF)	A8103-1
T1	Output Transformer	98A 5

MISCELLANEOUS

Description	Part No.
Background, Dial	X22C 5-1
Cabinet, Plastic (7T12)	34D 10
Cabinet, Wood (7T06)	35D 49
Cable, Battery (complete with plug)	A1026
Cord, Dial (5" on tuner and 66" on dial drive)	50A 1-3
Drum and Hub, Tuning	A1035
Iron Slug, with wire (Osc.)	71B 1-3
Iron Slug, with wire (Ant.)	71B 1-4
Knob	33A 21-3

MISCELLANEOUS

Description	Part No.
Plug, Battery 5 Prong	88A 4-4
Pointer, Dial	25A 9-1
Pulley, Fibre Dial	17A 1-3
Scale, Glass Dial (7T06)	21B 31-1
Scale, Glass Dial (7T12)	21B 32-1
Screw studs (for iron cores)	27A 4
Shaft, Tuning	28A 1-1
Shield, Tube	87A 8
Socket, Octal Tube	87A 5-1
Speaker and Output Transformer	78B 3
Spring, Dial Drum Cord Tension	19B 1-7
Spring, Hairpin (To hold Ant. or Osc. coils)	19A 3-1
Spring, Tuner, back bearing takeup	19A 6
Spring, Tuner, front bearing takeup	19A 5
Spring, Tuner Slide Cord Tension	19B 1-8
Spring, Tuner Slide Pressure	18A 9
Switch, SPST (Economizer) SW2	77B 1-6
Washer, C	4A 4-1
Washer, spring (coils)	4A 6-12-0
Washer, spring (shaft)	4A 6-3-0

For Alignment, data, see P.16-10