

Sears Roebuck & Co.

Model: 6439

Chassis:

Year: Pre June 1940

Power:

Circuit:

IF:

Tubes:

Bands:

Resources

Riders Volume 11 - SEARS 11-72

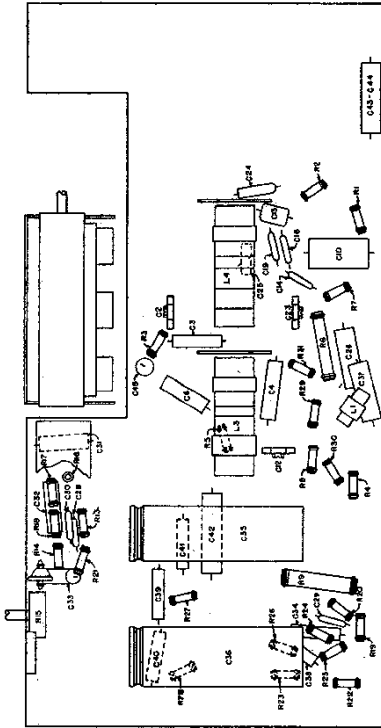
Riders Volume 11 - SEARS 11-82

Riders Volume 11 - SEARS 11-89

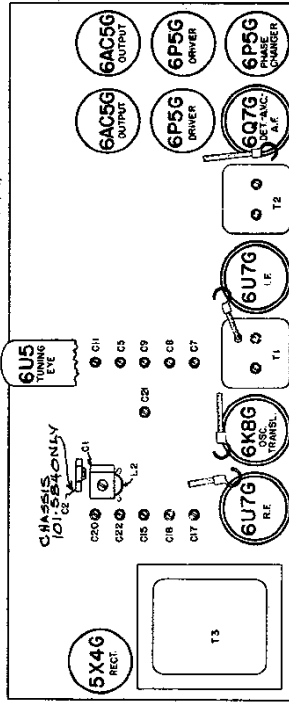
MODELS 6346, 6346A, 6446, 6446A
Alignment, Chassis, Socket
Trimmers, Dial Drive Data

SEARS, ROEBUCK & CO.

MODELS See Below
Dial Drive Data

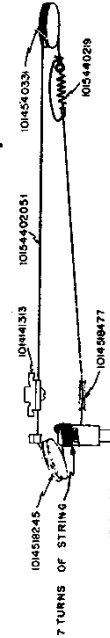


LOCATIONS OF PARTS UNDER CHASSIS 101584-1, 2, 4, 5.



LOCATIONS OF PARTS ON TOP OF CHASSIS 101584

Before ordering parts for Dial Drive System, check these drawings:



DIAL AND DRIVE SYSTEM
FOR MODELS 6346, 6346A, 6446 Chassis 101.584-1, -2, -3,
AND FOR THE FOLLOWING EXCEPT THAT PART NO. 101.414313
IS REPLACED BY PART NO. 101.4140501.
6436, 6438A, 6439 Chassis 101.583; 6438B, 6439A, 6497
Chassis 101.583-1; 6438B, 6439A, 6440 Chassis 101.583-2;
6497 Chassis 101.595.

RECOMMENDED ANTENNA EQUIPMENT:

Catalog #523: Greatest pickup and noise reduction.
Catalog #522: Less effective pickup and noise reduction than Catalog #523.
Catalog #575: Conventional antenna.

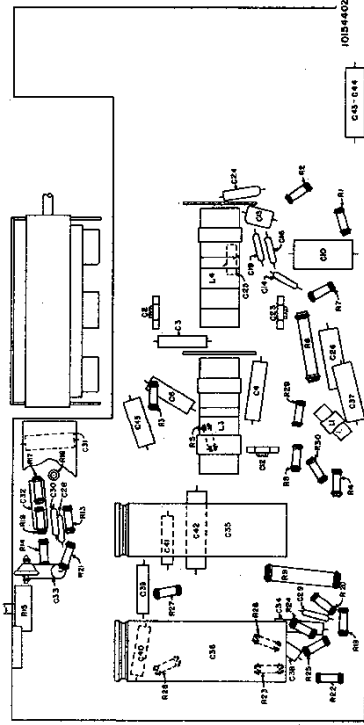
ALIGNMENT PROCEDURE

PRELIMINARY:
Output meter connection Across loud speaker voice coil
Adjust meter reading to indicate 500 milliwatts.
Antenna stringing to indicate 500 milliwatts output.
Connection of generator output lead See chart below
Connection of generator ground lead See chart below
Dummy antenna valve to be in series with generator output
Position of Volume Control Fully clockwise
Position of Tone Control Fully clockwise
Position of Dial Pointer with variable fully closed. On mark to left of
550 kc calibration

WAVE BAND SWITCH POSITION	POSITION OF VARIABLE CONTROL	GENERATOR DUMMY ANTENNA CONNECTION	TRIMMERS (IN ORDER FUNCTION SHOWN)	TRIMMER FUNCTION	APPROXIMATE MICROWATTS
5A*	Closed	455 kc	T2, T1	IF Circuit	20
5A*	Open	1720 kc	C1, C11	RF, Transl.	20
5A*	600 kc (rock)	600 kc	C21, C22	IF Circuit	150
5C*	18.3 mc	18.3 mc	C22, C25	IF Circuit	75
5C*	15 mc (rock)	15 mc	C25, C26	IF Circuit	100
5D*	9.55 mc	9.55 mc	C18, C8	IF Circuit	100
5D*	11.7 mc	11.7 mc	C17, C7	IF Circuit	100

IMPROVED ALIGNMENT NOTES

The alignment procedure for 101.584-1, -2, -3 is the same as above except that the C20 adjust-
ment is made with the generator at 1625 kc. After the alignment has been completed, the C1
and C11 adjustments should be repeated, using a 1400 kc broadcast signal.
Where indicated by the word, "Rock", the variable should be rocked back and forth a
degree or two while making the adjustment.
If two peaks can be had, the correct adjustment is with the trimmer screw further out.
The other peak is the image.
The alignment procedure should be repeated stage by stage, in the original order, for
greatest accuracy. Always keep the output from the test oscillator at its lowest possible
value to make the AVC action of the receiver ineffective.



LOCATIONS OF PARTS UNDER CHASSIS 101584-1, 2, 3.

PUSH BUTTON TUNING MECHANISM:

The adjustment for each push button is locked or unlocked by tightening or loosening the
slotted screwshead made accessible when the push button knob is pulled to the right.
Stations are set up by unlocking the mechanism, tuning in the station, pushing in the plunger.
(Being careful not to detune the station), releasing the plunger, then securely locking the
adjustment by holding the screwsdriver lightly in the screw head allowing the spring tension
to hold the plunger against the screwsdriver.

MODELS See Below
Alignment

SEARS, ROEBUCK & CO.

ALIGNMENT PROCEDURE

PREAMBLARY: For all Models and Chassis listed in the tables below.
Output meter connection Across loud speaker voice coil
Approximate microvolts input for 50 milliwatts output See chart below
DUMMY antenna value to be in series with generator output See chart below
Connection of generator output lead See chart below
Generator modulation 20% 400 cycles
Position of Volume Control Fully clockwise
Position of Dial Pointer with variable fully closed At block to left of
550 kc calibration mark.

MODEL 6441 CHASSIS 101.589

Output meter reading to indicate 500 milliwatts 1.28 volts
Generator ground lead connection To external ground

WAVE BAND SWITCH POSITION	GENERATOR FREQUENCY	DUMMY ANTENNA	GENERATOR CONNECTION	TRIMMERS (IN ORDER SHOWN)	TRIMMER FUNCTION	APPROXIMATE MICROVOLTS
WA	145 kc	1 mfd.	6K63 Grid	T2, T1	IF	100
WB	145 kc	1450 kc	Ant. Term.	G12	Oscillator	25
WC	1400 kc	1400 kc	Ant. Term.	G11	Ant. Transl.	10
WD	500 kc (rook)	600 kc	Ant. Term.	G10	Padder	35
WE	2.5 mc	400 ohms	Ant. Term.	G14	Transl. Pad	100
WF	18.5 mc	400 ohms	Ant. Term.	G15	Oscillator	50
WG	9.25 mc	400 ohms	Ant. Term.	G8	Transl. Pad	100
WH	9.25 mc	400 ohms	Ant. Term.	G9, G13	Osc. Transl.	60

MODELS 6438, 6438A, 6439 CHASSIS 101.583; 6438B, 6439A, 6439 CHASSIS 101.583-1
6497 CHASSIS 101.898

Output meter reading to indicate 500 milliwatts 1.6 volts
Connection of Generator Ground Lead To chassis

WAVE BAND SWITCH POSITION	GENERATOR FREQUENCY	DUMMY ANTENNA	GENERATOR CONNECTION	TRIMMERS (IN ORDER SHOWN)	TRIMMER FUNCTION	APPROXIMATE MICROVOLTS
WA	Closed	1700 ohms	6K63 Grid	T2, T1	IF	100
WB	Open	1400 kc	Ant. Term.	G15	Oscillator	25
WC	500 kc (rook)	600 kc	Ant. Term.	G10	Ant. Transl.	10
WD	5 m	400 ohms	Ant. Term.	G11	Padder	35
WE	18.5 mc	400 ohms	Ant. Term.	G14, G5	Osc. Transl.	150
WF	18.5 mc	400 ohms	Ant. Term.	G14*	Oscillator	75
WG	9.25 mc	400 ohms	Ant. Term.	G9	Transl. Pad	100
WH	11.7 mc	400 ohms	Ant. Term.	G18, G9	Osc. Transl.	100
WI	11.7 mc	400 ohms	Ant. Term.	G18, G7	Osc. Transl.	100

Ⓐ For Models 6438, 6438A, 6439 Chassis 101.583

IMPORTANT ALIGNMENT NOTES

Where indicated by the word, "Rook", the variable should be rooked back and forth a degree or two while making the adjustment.
If two peaks can be had, the correct adjustment is with the trimmer screw further out, the other peak is the image.
The alignment procedure should be repeated stage by stage, in the original order, for greatest accuracy. Always keep the output from the test oscillator at its lowest possible value to make the AVC action of the receiver ineffective.
After the alignment has been completed, the G1 and G10 adjustments should be repeated, using a 1400 kc broadcast signal.

ALIGNMENT PROCEDURE

PREAMBLARY: For all Models and Chassis listed in the tables below.
Output meter connection Across loud speaker voice coil
Approximate microvolts input for 50 milliwatts output See chart below
DUMMY antenna value to be in series with generator output See chart below
Connection of generator output lead See chart below
Generator modulation 20% 400 cycles
Position of Volume Control Fully clockwise
Position of Dial Pointer with variable fully closed At block to left of
550 kc calibration mark.

MODELS 6359, 6360, 6361, 6379, 6380, 6381 CHASSIS 101.579

WAVE BAND SWITCH POSITION	GENERATOR FREQUENCY	DUMMY ANTENNA	GENERATOR CONNECTION	TRIMMERS (IN ORDER SHOWN)	TRIMMER FUNCTION	APPROXIMATE MICROVOLTS
WA	Closed	1 mfd.	1A7G Grid	T2, T1	IF	100
WB	145 kc	1450 kc	Ant. Term.	G12	Oscillator	25
WC	1400 kc	1400 kc	Ant. Term.	G11	Ant. Transl.	10
WD	500 kc (rook)	600 kc	Ant. Term.	G10	Padder	35
WE	2.5 mc	400 ohms	Ant. Term.	G14	Transl. Pad	100
WF	18.5 mc	400 ohms	Ant. Term.	G15	Oscillator	45
WG	9.25 mc	400 ohms	Ant. Term.	G8	Transl. Pad	40
WH	9.25 mc	400 ohms	Ant. Term.	G9, G13	Osc. Transl.	40

MODELS 6362, 6363, 6364 CHASSIS 101.681

WAVE BAND SWITCH POSITION	GENERATOR FREQUENCY	DUMMY ANTENNA	GENERATOR CONNECTION	TRIMMERS (IN ORDER SHOWN)	TRIMMER FUNCTION	APPROXIMATE MICROVOLTS
WA	Closed	1 mfd.	1A7G Grid	T2, T1	IF	100
WB	145 kc	1450 kc	Ant. Term.	G12	Wave Trap	25
WC	1400 kc	1400 kc	Ant. Term.	G11	Padder	10
WD	500 kc (rook)	600 kc	Ant. Term.	G10	Osc. Pad	35
WE	2.5 mc	400 ohms	Ant. Term.	G14	Transl. Pad	100
WF	18.5 mc	400 ohms	Ant. Term.	G15	Oscillator	45
WG	9.25 mc	400 ohms	Ant. Term.	G8	Transl. Pad	40
WH	14.5 mc	400 ohms	Ant. Term.	G9, G13	Osc. Transl.	40

MODEL 6368 CHASSIS 101.692, MODEL 6382 CHASSIS 101.694

WAVE BAND SWITCH POSITION	GENERATOR FREQUENCY	DUMMY ANTENNA	GENERATOR CONNECTION	TRIMMERS (IN ORDER SHOWN)	TRIMMER FUNCTION	APPROXIMATE MICROVOLTS
WA	Closed	1 mfd.	6D8 Grid	T2, T1	IF	100
WB	145 kc	1450 kc	Ant. Term.	G6*	Wave Trap	25
WC	1400 kc	1400 kc	Ant. Term.	G4	Oscillator	10
WD	500 kc (rook)	600 kc	Ant. Term.	G11	Padder	75
WE	2.5 mc	400 ohms	Ant. Term.	G11	Oscillator	110
WF	18 mc	400 ohms	Ant. Term.	G5*	Oscillator	50
WG	9.25 mc	400 ohms	Ant. Term.	G5	Transl. Pad	100
WH	14.5 mc	400 ohms	Ant. Term.	G3	Transl. Pad	50
WI	14.5 mc	400 ohms	Ant. Term.	G10	Padder	50

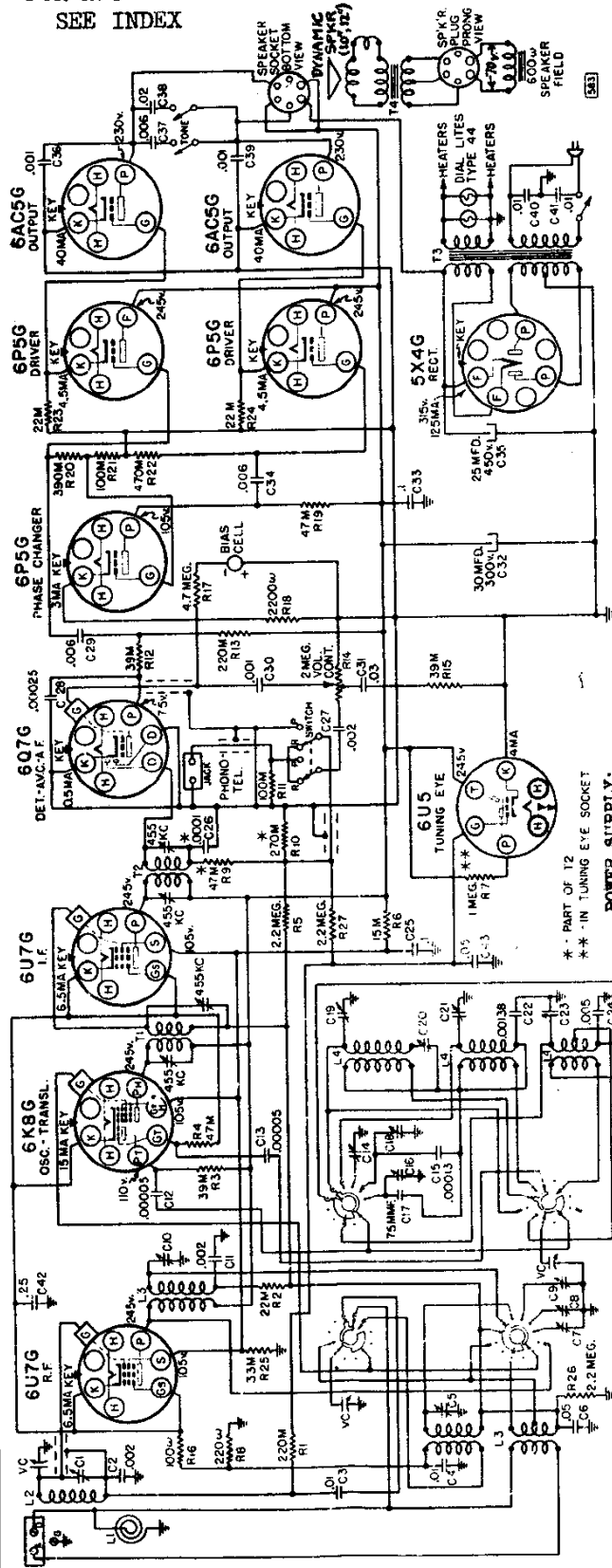
IMPORTANT ALIGNMENT NOTES

The generator should be adjusted for high output. The trimmer should be adjusted for minimum output. The AVC control should be adjusted for minimum AVC action. The frequency of that station instead of to 455 kc.
Tune the G14 and G15 adjustments until perfect alignment is obtained. This will require going back and forth in these adjustments several times.
If two peaks can be had, the correct one is with the trimmer screw further out; the other peak is the image.
Where indicated by the word, "Rook", the variable should be rooked back and forth a degree or two while making the adjustment.
The alignment procedure should be repeated stage by stage, in the original order, for greatest accuracy. Always keep the output from the test oscillator at its lowest possible value to make the AVC action of the receiver ineffective.

SEARS, ROEBUCK & CO.

MODELS 6438, 6438A, 6439
 Chassis 101.583
 Schematic, Voltage, Chassis
 Tuner, Socket, Trimmers
 CHASSIS 101.583-1
 Socket, Trimmers, Chassis

FOR ALIGNMENT
 SEE INDEX

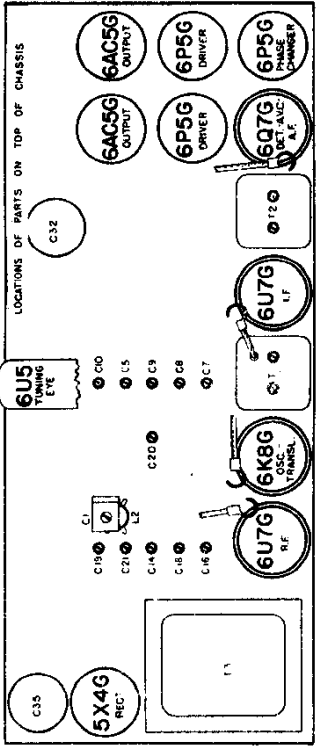


POWER SUPPLY:
 All models available 105-125 volts, 50-60 cycles; 105 watts
 All models available 105-125 volts, 25-60 cycles; 110 watts

TUBE SOCKETS ARE VIEWED FROM UNDER SIDE OF CHASSIS. VOLTAGE READINGS SHOWN AT SOCKET PRONGS ARE TO CHASSIS, AND ARE TAKEN WITH NO SIGNAL. TUBE SWITCH IN BROADCAST POSITION. LINE VOLTAGE AT TUBES: WHERE NO READING IS GIVEN, THE VOLTAGE IS ZERO OR 100 LOW TO READ.

INTERMEDIATE FREQUENCY 455 kc

POWER OUTPUT:
 Type Push pull direct coupling
 Undistorted 6 watts
 Maximum 10 watts



CHASSIS 101.583

PUSH BUTTON TUNING MECHANISM:

The adjustment for each push button is locked or unlocked by tightening or loosening the slotted screwhead made accessible when the push button knob is pulled off of its plunger. Stations are set up by unlocking the mechanism, holding the plunger all the way in and tuning to the desired station, and then securely locking the adjustment.

