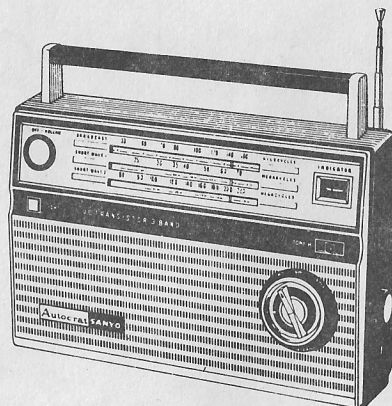


AUTOCRAT SERVICE MANUAL

ALL TRANSISTOR PORTABLE

MODEL :

10U-P28

FREQUENCY RANGE :

BC 515 - 1650Kc/s
SW1 2.00 - 7.5Mc/s
SW2 7.75 - 22.67Mc/s

INTERMEDIATE FREQUENCY :

455Kc/s

TRANSISTORS :

2SA222 (2SA58) OSCILLATOR
2SA222 (2SA60) FREQUENCY CONVERTER
2SA322 (2SA28) 1ST IF AMPLIFIER
2SA203 (2SA53) 2ND IF AMPLIFIER
2SB185 (2SB54) 3RD IF AMPLIFIER
2SB185 (2SB54) 1ST AUDIO AMPLIFIER
2SB185 (2SB54) 2ND AUDIO AMPLIFIER
2SB187 (2SB54) DRIVER
2SB22 x 2 POWER AMPLIFIER

POWER OUTPUT :

UNDISTORTED 300mW
MAXIMUM 500mW

BATTERY :

3 x D SIZE FLASH LIGHT
(EVEREADY 1050 OR 950)

LOUDSPEAKER :

6 x 4
VOICE COIL IMPEDANCE 4 OHMS

CURRENT DRAIN :

NO SIGNAL 16-23mA

DIODE :ALIGNMENT PROCEDURE.

GENERAL: ALLOW THE TEST EQUIPMENT TO WARM UP FOR FIFTEEN MINUTES BEFORE STARTING THE ALIGNMENT PROCEDURE.

OUTPUT METER: CONNECT THE OUTPUT METER (A 1000-OHM-PER-VOLT OR MORE A.C. VOLTMETER) ACROSS THE VOICE COIL CONNECTIONS.

SIGNAL GENERATOR: USE AN A.M.R.F. SIGNAL GENERATOR. CONNECT THE OUTPUT AS SHOWN IN THE CHART.

OUTPUT LEVEL: ATTENUATE THE SIGNAL GENERATOR OUTPUT THROUGHOUT THE ALIGNMENT SO AS TO MAINTAIN THE OUTPUT LEVEL BELOW 0.2 VOLTS.

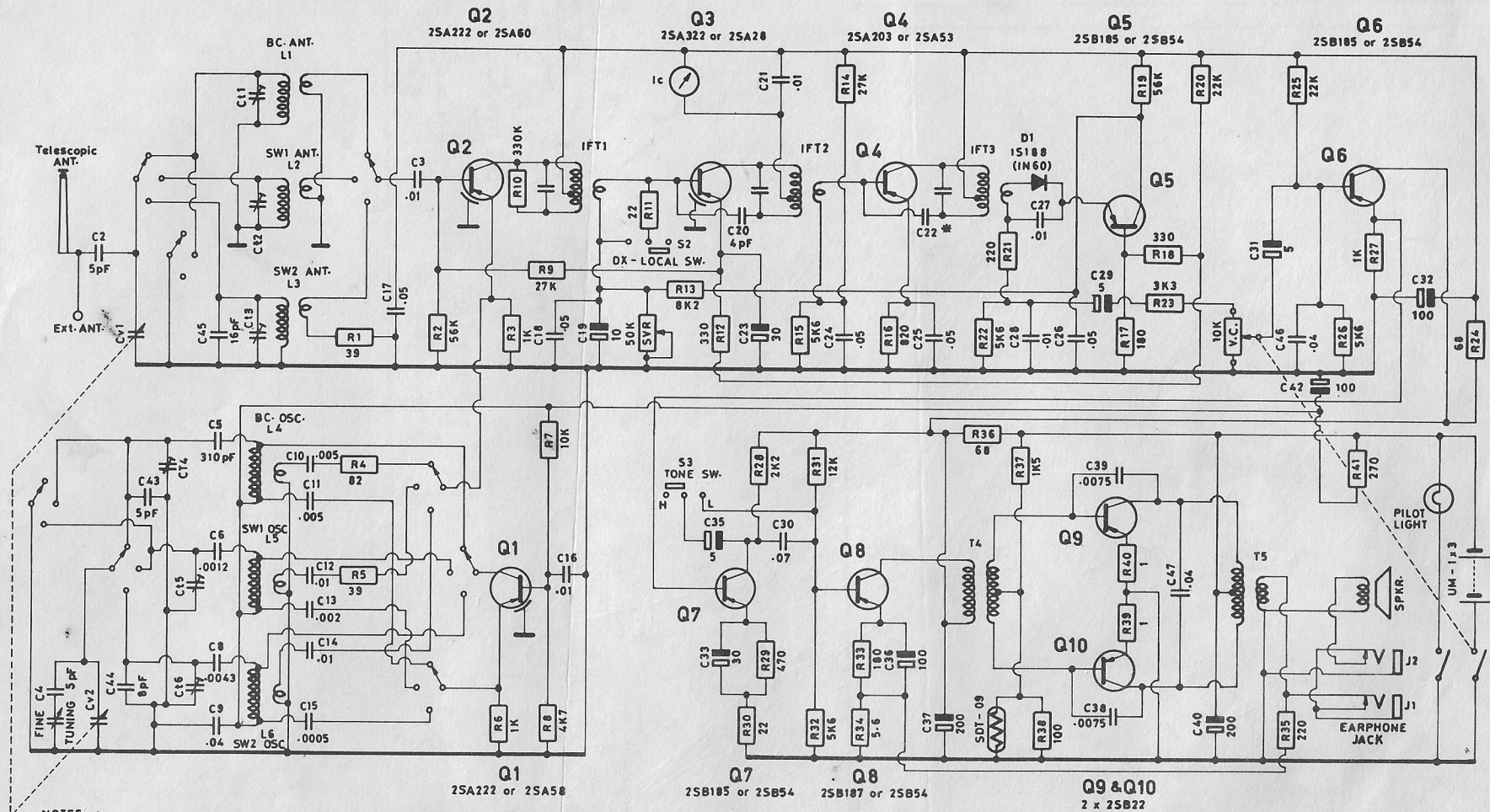
CONTROLS: SET THE VOLUME CONTROL TO MAXIMUM. SET THE TUNING CONTROL AS INDICATED IN THE CHART. SET DX-LOCAL SWITCH IN DX POSITION.

RADIATING LOOP: SIX TURNS OF WIRE, SIX INCHES DIAMETER.

STEP	SIGNAL GENERATOR COUPLING	SIGNAL GEN. FREQUENCY	RADIO DIAL SETTING	ADJUST FOR MAX OUTPUT
IF ALIGNMENT				
1	RADIATE SIGNAL THROUGH A LOOP COIL CONNECTED TO SIG. GEN. OUTPUT CABLE	455Kc/s	UPPER END	IF TRANSF. T3 IF TRANSF. T2 IF TRANSF. T1
BROADCAST ALIGNMENT				
2	RADIATE SIGNAL THROUGH A LOOP COIL CONNECTED TO SIG. GEN. OUTPUT CABLE	515c/s	LOWER END	L4
3		1650c/s	UPPER END	OSC. TRIM CT4
REPEAT STEPS 2 AND 3 UNTIL NO IMPROVEMENT				
4		570c/s	570c/s	L1
5		1420c/s	1420c/s	ANT TRIM CT1
REPEAT STEPS 4 AND 5 UNTIL NO IMPROVEMENT				
SW1 ALIGNMENT				
6	RADIATE SIGNAL THROUGH A LOOP COIL CONNECTED TO SIG. GEN. OUTPUT CABLE	2.00Mc/s	LOWER END	L5
7		7.48Mc/s	UPPER END	OSC TRIM CT5
REPEAT STEPS 6 AND 7 UNTIL NO IMPROVEMENT				
8		2.3Mc/s	2.3Mc/s	L2
9		6.5Mc/s	6.5Mc/s	ANT TRIM CT2
REPEAT STEPS 8 AND 9 UNTIL NO IMPROVEMENT				
SW2 ALIGNMENT				
10	RADIATE SIGNAL THROUGH A LOOP COIL CONNECTED TO SIG. GEN. OUTPUT	7.75Mc/s	LOWER END	L6
11		22.67Mc/s	UPPER END	OSC TRIM CT6
REPEAT STEPS 10 AND 11 UNTIL NO IMPROVEMENT				
12		8.5Mc/s	8.5Mc/s	L3
13		21.Mc/s	21.Mc/s	ANT TRIM CT3
REPEAT STEPS 12 AND 13 UNTIL NO IMPROVEMENT				

ALIGNMENT OF SEMI-FIXED RESISTOR.

1. APPLY 4.5V TO THE RECEIVER AND TUNE IT TO NO SIGNAL
2. DISCONNECT T.C. WIRE GOING FROM RESISTOR TO EARTH, AND CONNECT AN AMMETER (RANGE: 1mA) BETWEEN RESISTOR AND EARTH.
3. ADJUST SEMI FIXED RESISTOR TO OBTAIN 400 A DEFLECTION.
4. RESOLDER THE T.C. WIRE TO EARTH AFTER ADJUSTMENT.



NOTES:-

- 1) RESISTANCE IN OHMS & CAPACITY IN MICROFARADS UNLESS OTHERWISE STATED
- 2) * C22.....12pF.....25A53
13pF.....25A203

MODEL:
10U - P28

DRN. 17	6.11.67
APPD. 17	CHKD. 17
D379a	