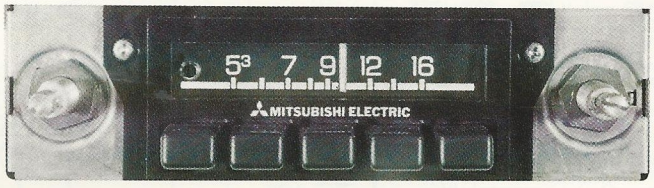
MITSUBISHI

SERVICE MANUAL

AM CAR RADIO

MODEL : AR-3155SE-II
PART NO. : MB 141629

MODEL : AR-3155SUB-II, AR-3155SUB-YII
PART NO. : MB 088930, MB 171765



SPECIFICATIONS

Circuit System:
Superheterodyne with RF amplifier
Tuning Range:
525 ~ 1605 KHz
Intermediate Frequency:
455 KHz
Power Output:
6.0 W
Output impedance:
4Ω
Power Source:
11.0 V ~ 16.0 V Negative ground only
Current Consumption:
0.3 ~ 1.0 A at 13.2 V
IC: 2
Diode: 2

Shaft Distance:
130 mm ($5\frac{1}{8}$'')
Size:
W: 160 mm ($6\frac{19}{64}$'') H: 50 mm ($\frac{31}{32}$'')
D: 80 mm ($3\frac{5}{32}$'')
Weights:
0.7 kg (1.5 lbs)

Antenna and Tuner:

Item \ Model	AR-3155SE-II	AR-3155SUB-II SUB-YII
Antenna Type	Pole	Trank lid
Tuning Capacitance	80PF	485PF

MITSUBISHI ELECTRIC CORPORATION
Head Office : 2-3 Marunouchi 2-Chome, Chiyodaku, Tokyo, Japan Cable Address : MELCO TOKYO

ALIGNMENT PROCEDURES

AM (IF, RF) Alignment)Power Source Voltage DC 13.2V)

Procedures	Circuit	Signal generator connection	Signal generator frequency	Radio dial setting	Indicator connection	Adjust	Remarks
1	IF	Fig. 1	455 KHz	High freq. end stop	Fig.2	T2~T5	Try to get the maximum voltage and equalize the degree of diminution near ± 3 KHz
2							
3							
4	RF	Fig.3	1630 KHz	High freq. end stop	"	VC3	Tune in
5			1400 KHz	1400 KHz	"	VC1, VC2	Adjust VC1, VC2 and get the maximum voltage of the output.
6			600 KHz	600 KHz	"	T1	Turn T1 gradually and find the maximum sensitivity near 600 KHz.
7					"	Repeat procedures 5–6	
8				Low freq. end stop			Check the range of the frequency of the received wave. This is the end of the adjustment.

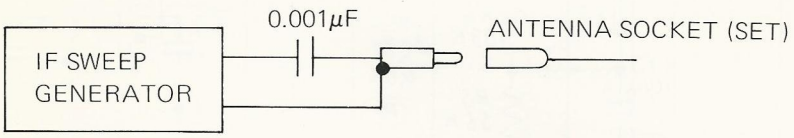


Fig. 1

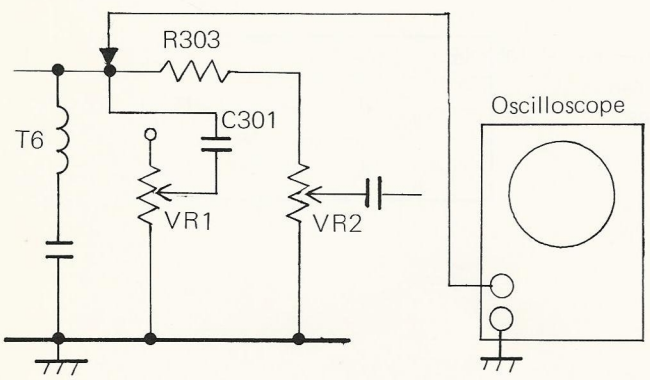


Fig. 2

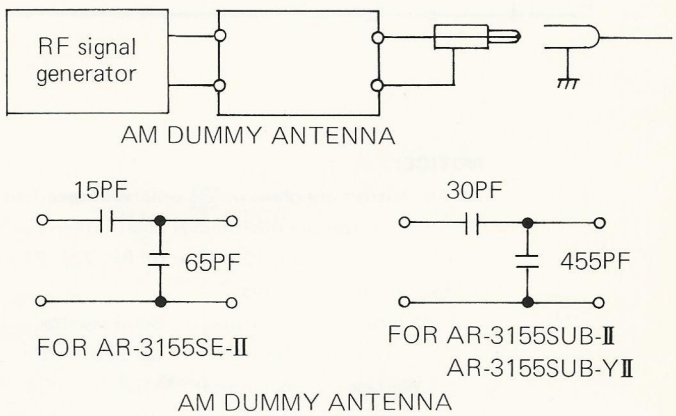
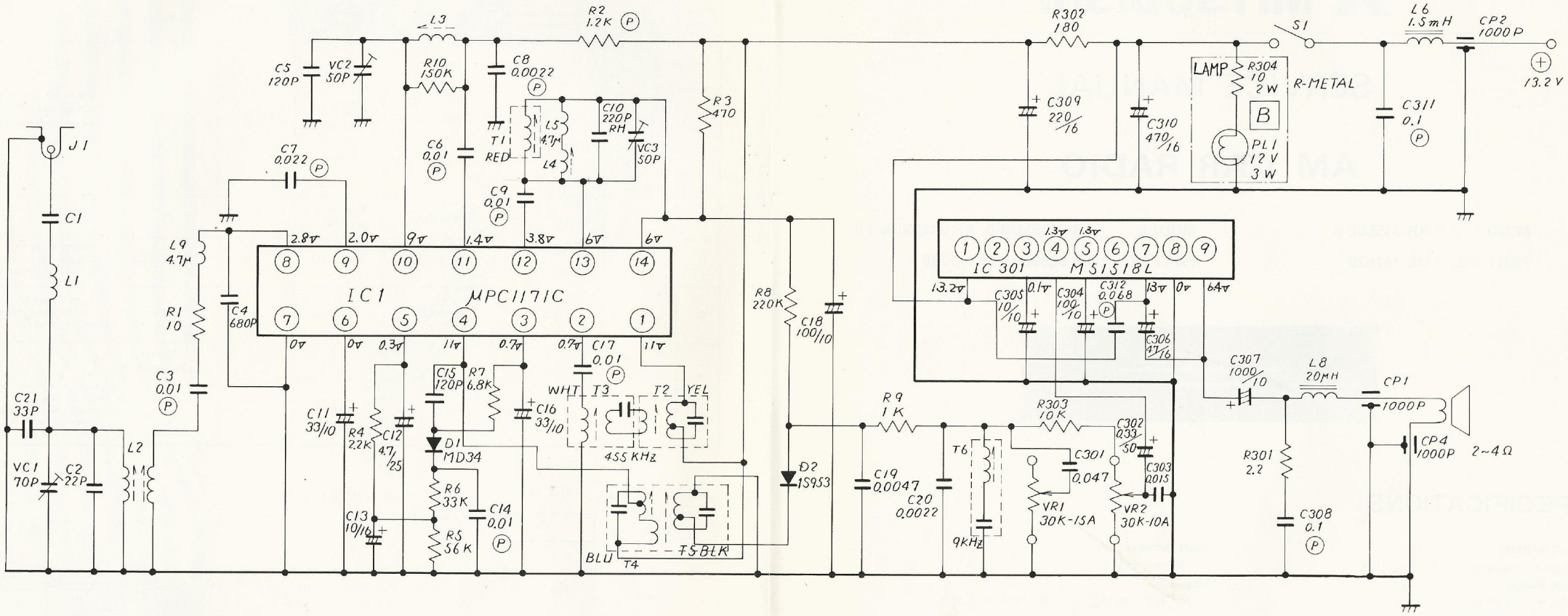


Fig. 3

SCHEMATIC DIAGRAM

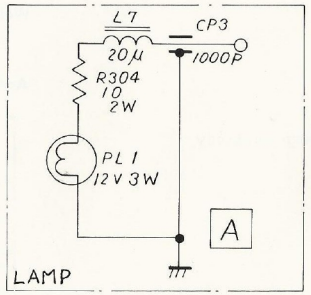
MODEL : AR–3155S–II



NOTICE:

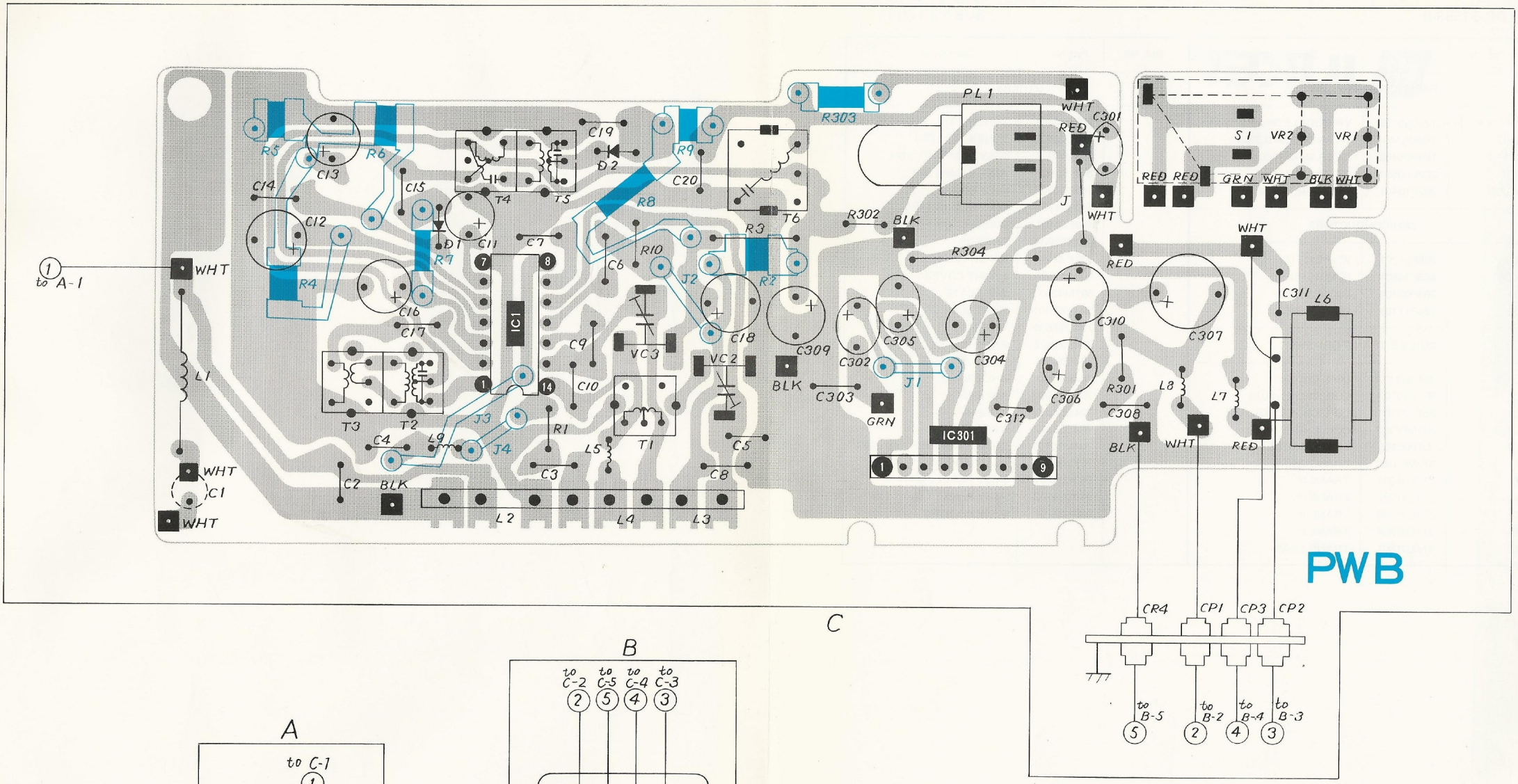
1. All resistors are ohms unless otherwise specified K=10^3 ohm, M=10^6 ohm.
2. All capacitors are microfarads unless otherwise specified.
   P=10^{-6} microfarad, 102=10 x 10^2 PF, 223=22 x 10^3 PF
3. Expression of resistors
   - Kinds: (S) mark Solid resistor; No mark Carbon resistor
   - Wattage: No indication=¼W
   - Tolerance: J= ±5%, K= ±10%
4. Expression of capacitors
   - Kinds: (S) mark Styrol condenser; (P) mark Polyester film condenser; (BC) mark Semiconductor ceramic condenser; No mark Ceramic condenser
   - Tolerance: C=±0.25PF, D=±0.5 PF, J=±5% K=±10% M=±20% Z=$^{+80}_{-20}$% No indication=$^{+100}_{-0}$ %
5. Voltages shown are at no signal is given.
6. Sypply voltage maintained at rated value for voltage readings. (13.2 V)

ITEM	SET	L1	C1	LAMP	C21
1	AR-3155SE-II	5.2μH	——	B	——
2	−SUB-II −SUB-YII	3.2μH	1000P	A	○



PRINTED CIRCUIT BOARD (Printed Side)

MODEL : AR-3155S-II



PARTS LIST

AR-3155S-II

NOTICE: **SE-II (①)**
SUB-II (②)
SUB-YII (③)

Ref. No.	Part No.	Description
	RESISTORS & CAPACITORS	
VR1, 2	122L05705	VR-DOUBLE SHAFT
C302	189M01404	C-TANTALUM 0.33μF
CP1~4	189P05402	C-CERAMIC 1000pF
VC1	202L00501	C-TRIMMER 70pF
VC2, 3	202P10401	C-TRIMMER 50pF
	SEMICONDUCTORS	
IC1	266P01201	IC μPC1171C
IC301	266P34801	IC M51518L
D1	264P00401	DIODE MD34
D2	264P11701	DIODE 1S953
	COILS & TRANSFORMERS	
L5, 9	351D02103	COIL CHOKE
L1	351L00103	COIL CHOKE (①)
L1	351L00101	COIL CHOKE (② , ③)
L7, 8	351M00201	COIL CHOKE
L6	351P00108	TRANS CHOKE
T1	373M00101	TRANS OSC
T3	374L01201	TRANS IF
T2	374L01202	TRANS IF
T4	374L01203	TRANS IF
T5	374L01204	TRANS IF
T6	374L01301	TRANS TRAP

Ref. No.	Part No.	Description
	OTHERS	
	295K05601	TUNER (①)
	295K05602	TUNER (② , ③)
	253L00801	ASSY LAMP (① , ②)
	253L00805	ASSY LAMP (③)
	449D00302	SOCKET ANT
	452L04102	CONNECTOR (①)
	452L04101	CONNECTOR (② , ③)
	560K08501	CHASSIS
	590K23101	UPPER COVER
	590L77801	FRONT COVER
	591M42603	TAP PLATE
	591M61801	HEAT SINK
	704D91805	KNOB
	704D91806	KNOB
	704L07401	KNOB-A
	704L07501	KNOB-B
	704M01903	KNOB-B
	704L03202	KNOB-A
	704L03302	KNOB-B
	704M15701	SHAFT TRIMMER (② , ③)
	707L04504	DIAL (①)
	943L55201	ASSY PANEL (②)
	943L55202	ASSY PANEL (③)
	986L02101	ASSY POINTER