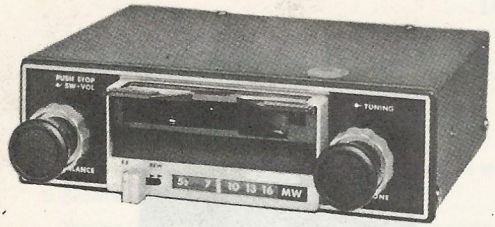


CASSETTE CAR STEREO
WITH AM RADIO
MODEL CS805

SERVICE MANUAL

SPECIFICATION

TUNING RANGE:	530 – 1605 KHz (I.F. 455 KHz)
SUPPLY VOLTAGE:	14.0 VOLT DC. (NEG. TO MASS)
CURRENT CONSUMPTION:	1.5A AT MAX. OUTPUT
FUSE:	2A
OUTPUT IMPEDANCE:	4 – 8 OHM
TRACK SYSTEM:	4 TRACK 2 CHANNEL
TAPE SPEED:	1-7/8 IPS (4.75 cm/S)
DIMENSIONS:	50 mm (H) x 180 mm (W) x 130 mm (D)

WARNING:
CONNECT POWER LEAD OF RECEIVER TO POSITIVE BATTERY TERMINAL ONLY. RECEIVER WILL BE DAMAGED IF CONNECTED TO INCORRECT POLARITY.

NOTE:
ADJUST ANTENNA TRIMMER ON CONCLUSION OF INSTALLATION.

PHILIPS CONSUMER PRODUCTS CAR-RADIO SALES

1092 CENTRE ROAD, CLAYTON, VIC.,3168. Ph.544.2444

DIAL CORD STRINGING

Refferring to Fig. 8, loop the dial cord in the direction of arrows.

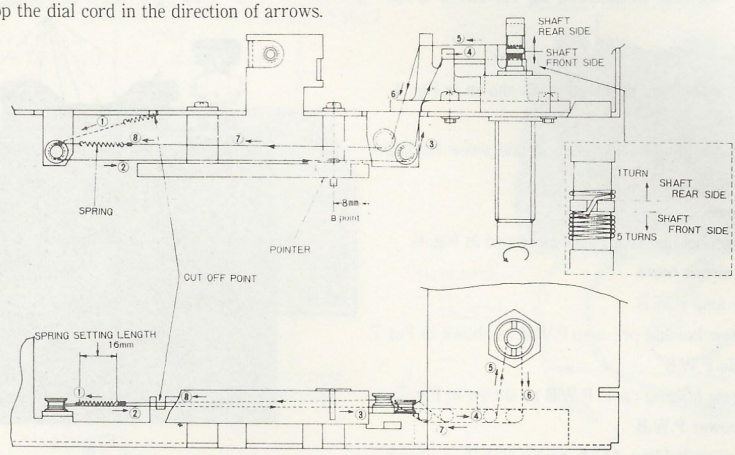


Fig. 8

LUBRICATION

One or two drops of machine oil may be applied to the points Ⓜ (rotating parts), grease be may applied to the points Ⓖ (sliding surfaces) as shown in Fig. 9.

Ⓜ : Machine oil

Ⓖ : Grease

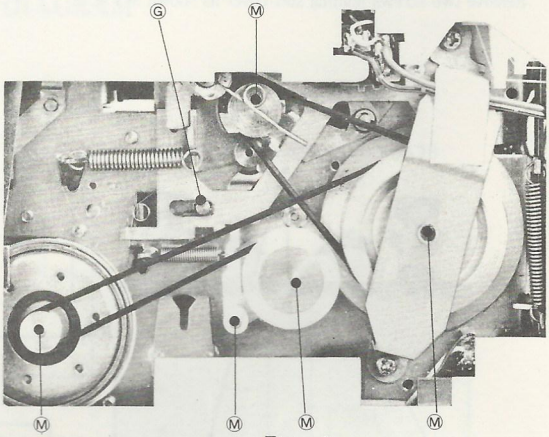


Fig. 9

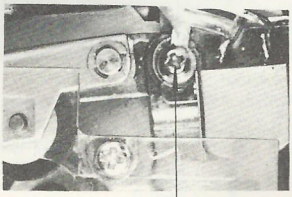
ADJUSTMENT OF TAPE PLAYER

1. Adjustment of head angle (See Fig. 10)

Set the tone control knob to maximum and balance control knob to medium position .

Prepare a standard tape for head angle adjustment (10 kHz).

After adjust volume control so that the output may be 1 volt or less, adjust the screw for head angle adjustment so that the output may be maximum both L-CH and R-CH.



HEAD ANGLE ADJUSTMENT SCREW

Fig. 10

2. Adjustment of gain control

Set the tone and volume control knobs to maximum and balance control knob to medium position.

Playback a standard tape (1 kHz, −20 dB) and adjust RT801 A,B so that the output may be 1.5 ± 0.1 V.

ADJUSTMENT OF RADIO

1. Adjustment of antenna trimmer (C151) (See Fig. 11)

To adjust the antenna trimmer in the following procedures.

(1) Pull out the telescopic antenna for car use to its full length.

(2) Set the dial pointer near 1,000 kHz where any broadcast is not obtained.

(3) Adjust the antenna trimmer with an insulated screw driver until the noise comes to be maximum.

2. Adjustment of RF and IF circuit

(1) When the radio is turned on (with no signal), check the supply voltage, voltage should be kept in 13.2 V.

(2) Turn the volume control knob to maximum.

(3) Connect the output terminal of signal generator (modulated by 400 Hz or 1,000 Hz 30 %) to such the dummy antenna as shown in Fig. 12.

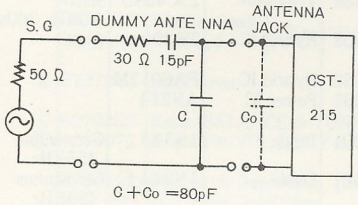


Fig. 12

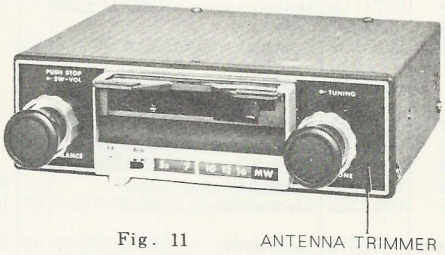


Fig. 11

(4) Connect V.T.V.M (with AC 3V or less scale) to speaker terminal.

(5) Make the following adjustments to gain maximum on V.T.V.M. with an insulated screw driver to prevent body effect.

(6) Adjust the output of S.G so that the reading on V.T.V.M may drop to minimum adjustable, as it rises according to adjustment.

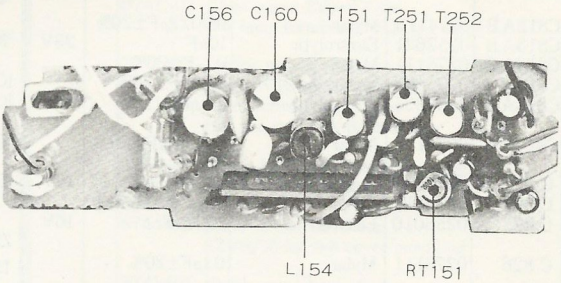


Fig. 13

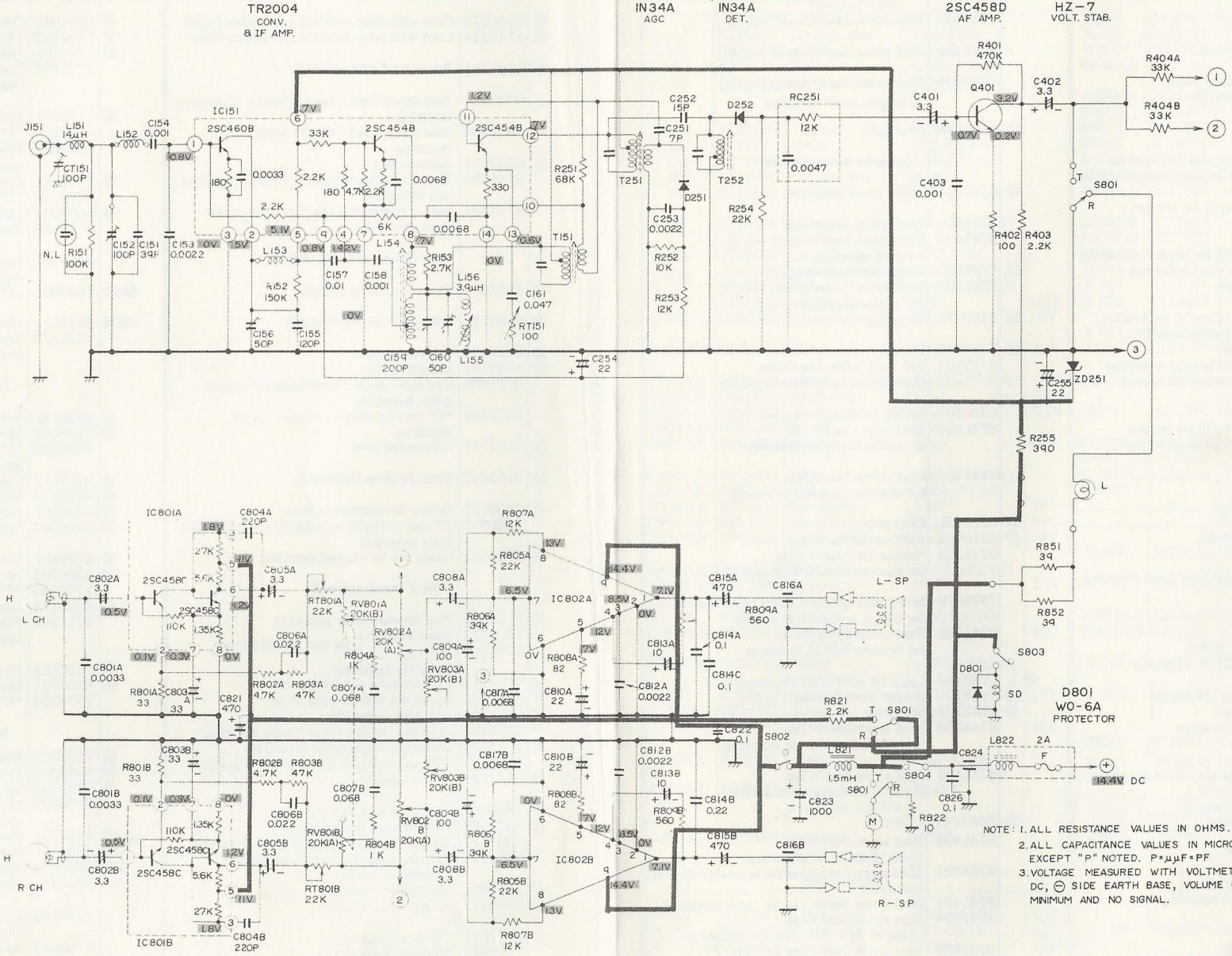
Step	Sig. Gen. Output	Dial Pointer Setting	Adjustment for Max. Output
①	455 kHz	High freq. end	T252, T251, T151
②	Repeat step ①		
③	520 kHz	Low freq. end	L154
④	1,650 kHz	High freq. end	C160
⑤	Repeat steps ③ and ④		
⑥	1,000 kHz	1,000 kHz signal	C151 (antenna trimmer)
⑦	1,000 kHz	1,000 kHz signal	C156
⑧	Repeat steps ⑥ and ⑦		

Symbol No.	Stock No.	Description
㉓	5740576	Cord with relay terminal for speaker (right)
㉔	5740224	Cord with relay terminal for speaker (left)
㉕	5741611	Power cord with terminal
	8741404	Bind screw-3mmφ×4mm for holder (capacitor) mounting
	8741404	Bind screw-3mmφ×4mm for holder (cord) mounting
㉖	0543213	Antenna jack
	8741404	Bind screw-3mmφ×4mm (2 req'd) for antenna jack mounting
	8744404	Bind screw-3mmφ×4mm (2 req'd) for rear cover mounting
		for Chassis assembly (MS-1A)
㉗	7152684	Rink (A) assembly (upper)
㉚	6306142	Spring for cassette stopper
㉘	6729453	Cassette stopper
㉙	6729131	Cassette guide
	0711308	Pan head screw-2.6mmφ×8mm for casstte guide mounting
	7778394	"E" ring for cassette stopper spring mounting
㉛	7152741	Connection lever
㉜	7152842	Rink (B) assembly (right)
㉝	6300121	Spring for connection lever
	7230902	"E" ring (3 req'd) for rink (B) and connection lever mounting
㉞	7536161	Guide pin for chassis mounting
		for F chassis assembly
㉟	7152662	Fast forward lever assambly
	7601314	Fiber washer } for fast forward lever
	7778395	"E" ring } for fast forward lever
		assembly mounting
㊱	7152713	Fast forward slider assembly
㊲	6300131	Spring for fast forward slider
㊳	6411261	Turntable assembly
	7778852	Polyester washer for turntable mounting
㊴	6320731	Backtension spring for turntable
	7778393	"E" ring (2 req'd) for turntable mounting
㊵	6381021	Idler assembly
㊶	6306081	Spring for fast forward idler
㊷	6971562	Fast forward arm assembly
	7601312	Washer-3mmφ for function lever mounting
	7778395	"E" ring-2mmφ for fast forward arm assembly mounting
㊸	7152801	Eject slider assembly
㊹	6300111	Spring for eject slider
㊺	6372081	Flywheel assembly
	7778852	Polyslide washer } for flywheel assembly
	0948831	Polyesster washer } for flywheel assembly
		mounting
㊻	6411252	Take up arm assembly
㊼	6300142	Spring for take up arm
㊽	6354031	Belt for take up

Symbol No.	Stock No.	Stock Description
㊾	6354041	Belt for flywheel
㊿	7152752	Flywheel plate
(51)	7777501	Holder for flywheel
	7771873	Pan head screw with spring washer--3mmφ× 6mm (2 req'd) for flywheel plate mounting
(52)	7152901	Eject assembly
	7778395	"E" ring-2mmφ } for eject arm
	0948482	Fiber washer (2 req'd) } for eject arm
		assembly mounting
(53)	7152881	Eject lever
	7778395	"E" ring-2mmφ for eject lever mounting
(54)	5603032	Leaf switch for muting
	8115108	Pan head screw-2mmφ×8mm } for leaf switch
	8815121	Lock washer-2mmφ } for leaf switch
		mounting
(55) SD	5642061	DC solenoid
(56) M	5572121	Motor assembly (140g, 23mW)
	7771873	Screw with spring washer-3mmφ×6mm (3 req'd) for motor assembly mounting
		for M chassis assembly
(57)	6306072	Spring for head plate
(58)	7126102	Movable chassis assembly
	7230902	"E" ring-3mmφ for spring (Head plate) mounting
(59)	6729112	Guide rail (right)
(60)	6729122	Guide rail (left)
(61)	6729201	Holder for cassette
(62)	6306062	Spring for holder (cassette)
(63)	6729191	Lock arm
(64)	6306094	Spring for lock arm
	7778395	"E" ring-2mmφ for lock arm mounting
(65)	6729174	Upper cover assembly
	0711305	Pan head screw-2.6mmφ×5mm (4 req'd) for upper cover mounting
(66)	7536581	Stop pin
(67)	6303301	Spring for stop pin
	7778394	"E" ring for stop pin mounting
		for head plate assembly
(68)	7152793	Head plate assembly
(69)	6383013	Pressure roller arm assembly
(70)	6306041	Spring for pressure roller
	7778395	"E" ring-2mmφ (2 req'd) for pressure roller arm assembly mounting
(71)	7152774	Pick up arm assembly
(72)	6306101	Spring for pick up arm
(73) H	0636553	Washer for pick up arm assembly mounting
	5441441	Head
	8715105	Pan head screw-2mmφ×5mm for head angle adjustment
	7780553	Screw-2mmφ×6mm } for head mounting
	8811231	Washer-2mmφ } for head mounting
(74)	6321191	Spring for head angle adjustment
(75)	5603032	Leaf switch for auto stop
(76)	6729161	Switch stand for leaf switch

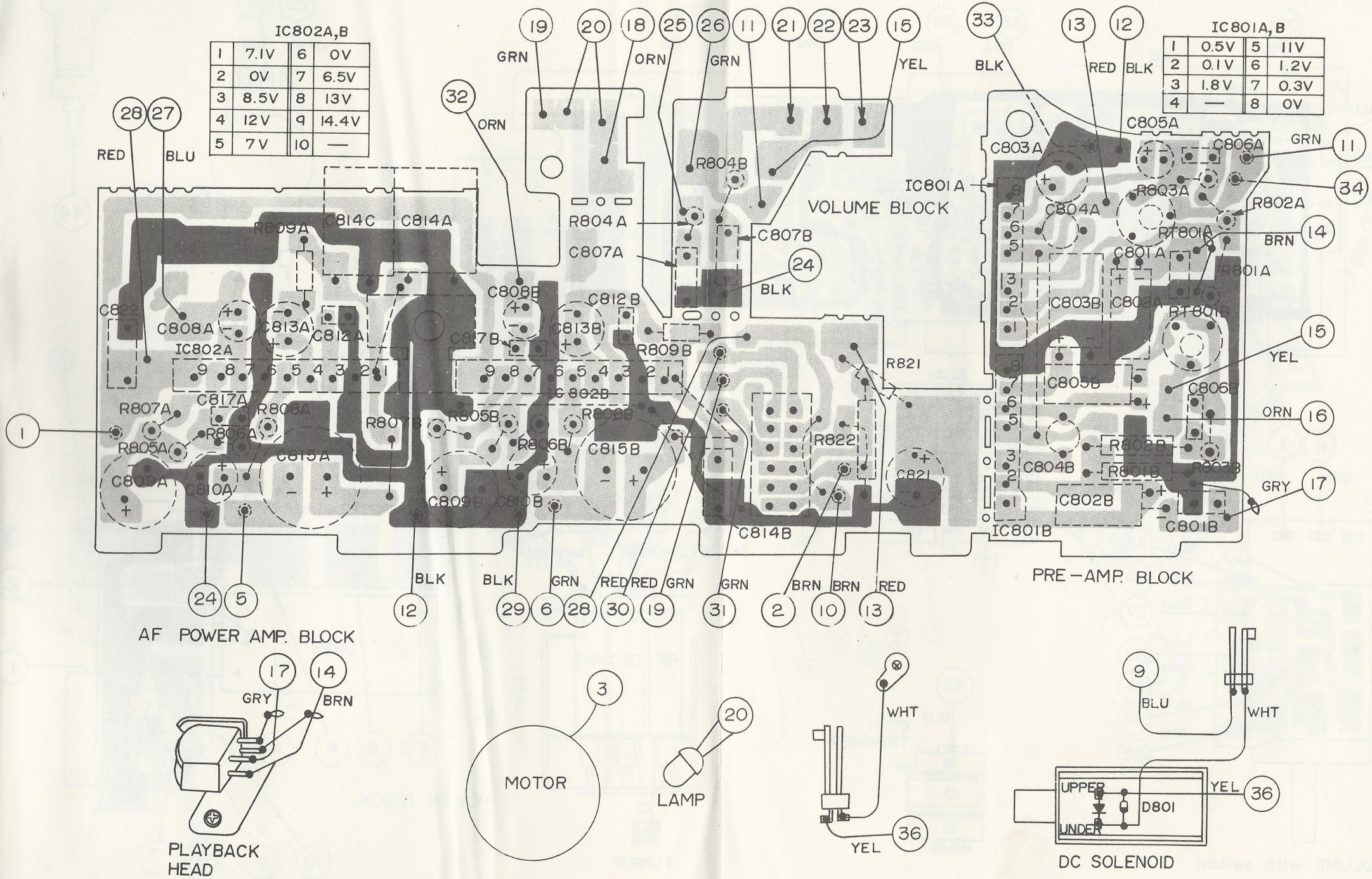
Symbol No.	Stock No.	Description
	8815121	Lock washer-2mmφ } for leaf
	8715110	Pan head screw-2mmφ×10mm } for leaf switch mounting
		for P.W.B. assembly
N L	0594094	Neon lamp
	8741408	Bind screw-3mmφ×8mm (4 req'd) for between radiator & IC
	8741405	Bind screw-3mmφ×5mm for P.W.B. mounting

Symbol No.	Stock No.	Description
	8815124	Lock washer-3mmφ for P.W.B mounting
S 801	5630835	Push switch for radio / tape selector

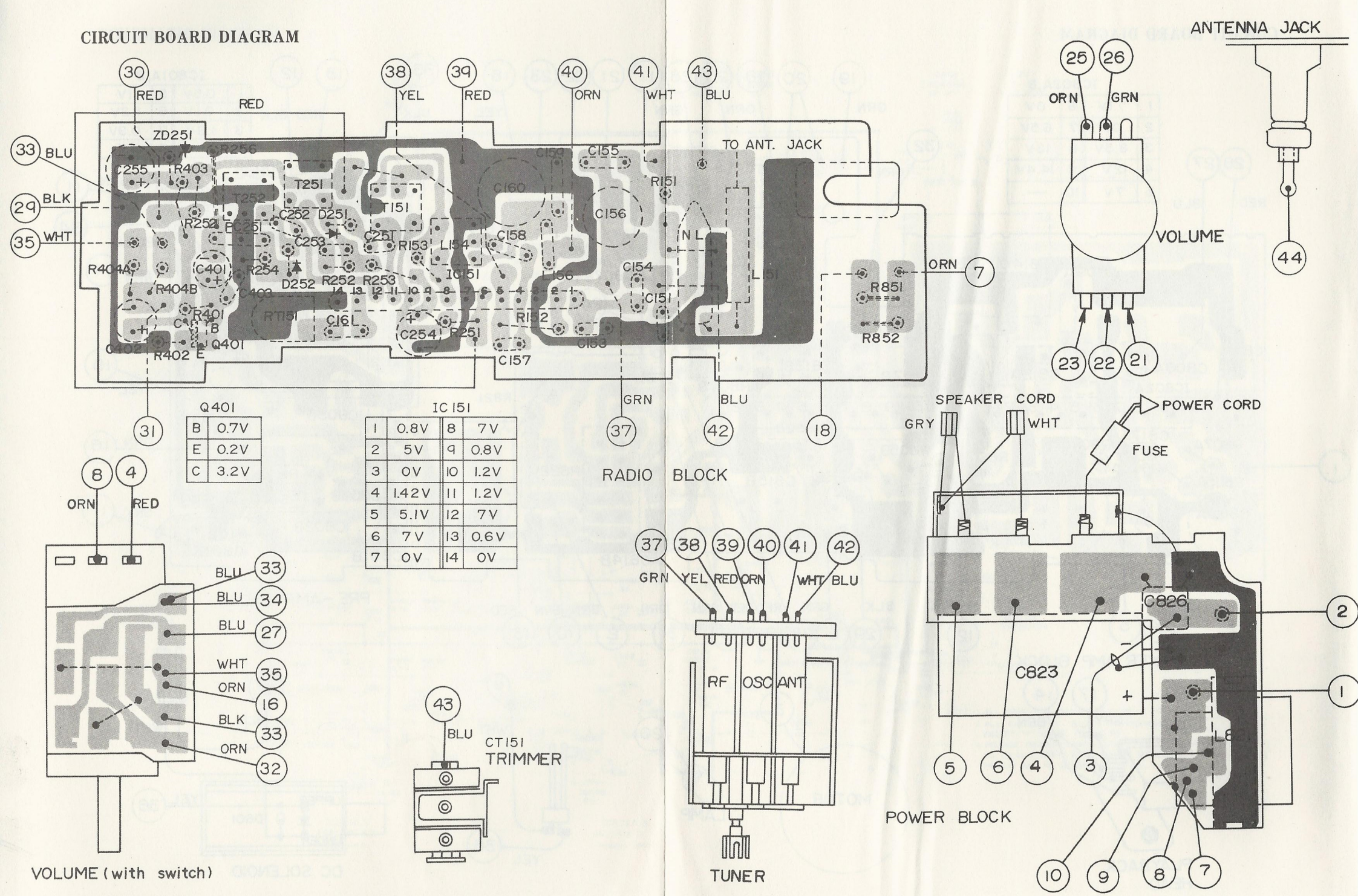


NOTE: 1. ALL RESISTANCE VALUES IN OHMS. K=1000
2. ALL CAPACITANCE VALUES IN MICROFARAD(μF) EXCEPT "P" NOTED. P=μμF=PF
3. VOLTAGE MEASURED WITH VOLTMETER AT 14.4V DC, ⊖ SIDE EARTH BASE, VOLUME CONTROL AT MINIMUM AND NO SIGNAL.

CIRCUIT BOARD DIAGRAM



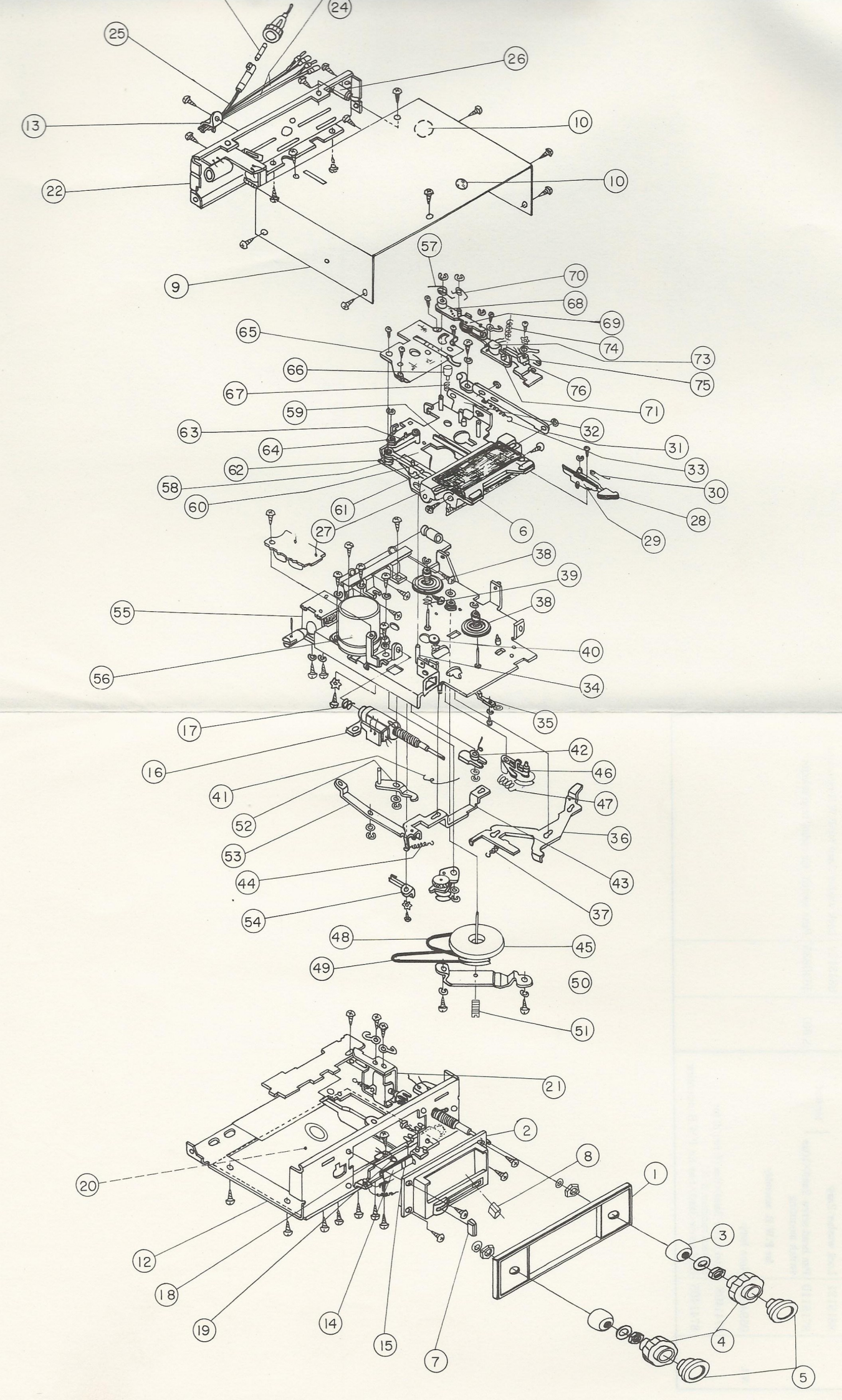
CIRCUIT BOARD DIAGRAM



RADIO BLOCK

Q401	
B	0.7V
E	0.2V
C	3.2V

IC 151			
1	0.8V	8	7V
2	5V	9	0.8V
3	0V	10	1.2V
4	1.42V	11	1.2V
5	5.1V	12	7V
6	7V	13	0.6V
7	0V	14	0V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