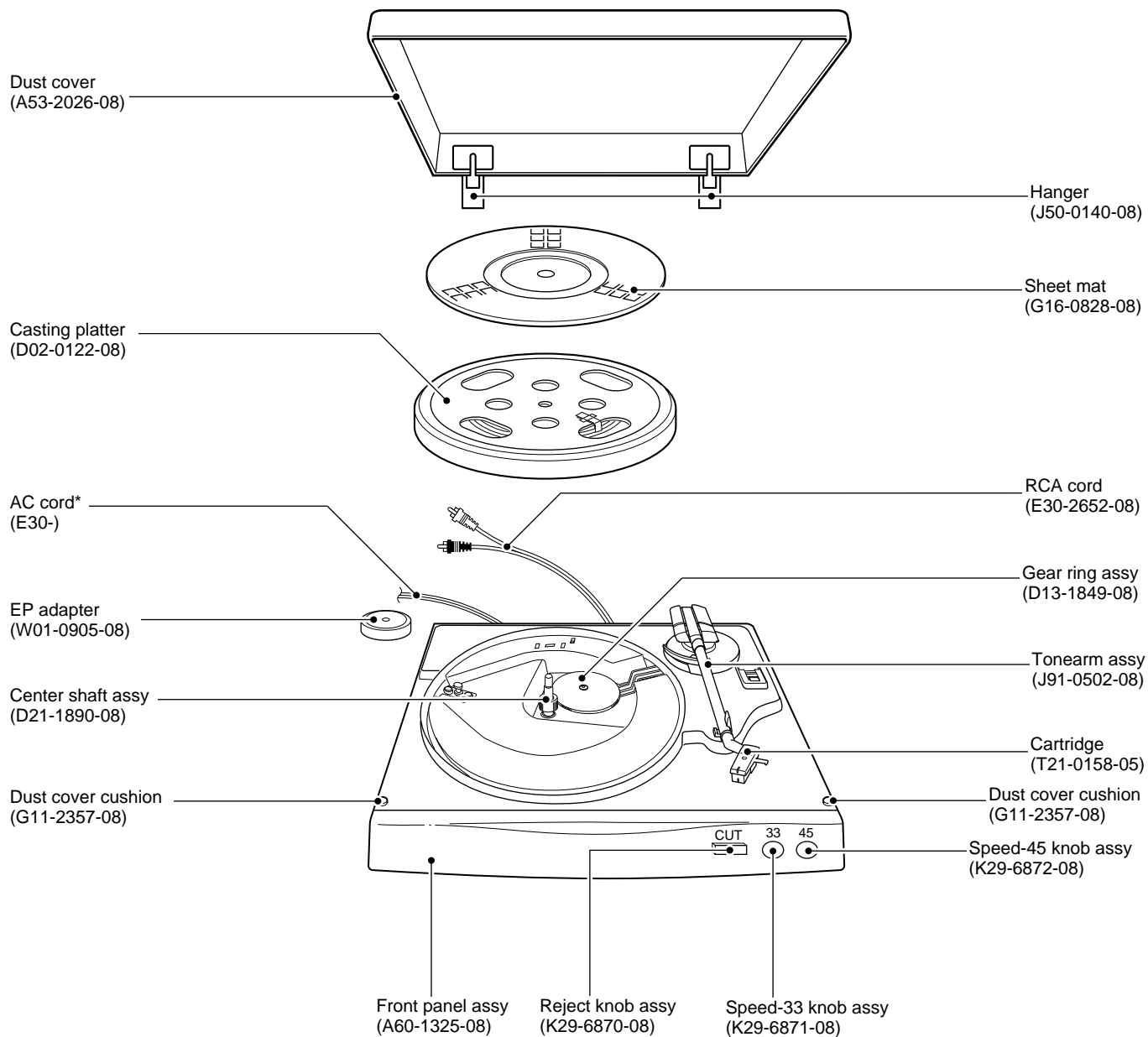


# P-T400

## SERVICE MANUAL



\* Refer to parts list on page 6.



# P-T400

## CONTENTS

### Contents

CONTENTS / ADJUSTMENT .....	2	PARTS LIST .....	6
PC BOARD .....	3	PARTS DESCRIPTIONS .....	7
SCHEMATIC DIAGRAM .....	4	SPECIFICATIONS .....	Back cover
EXPLODED VIEW .....	5		

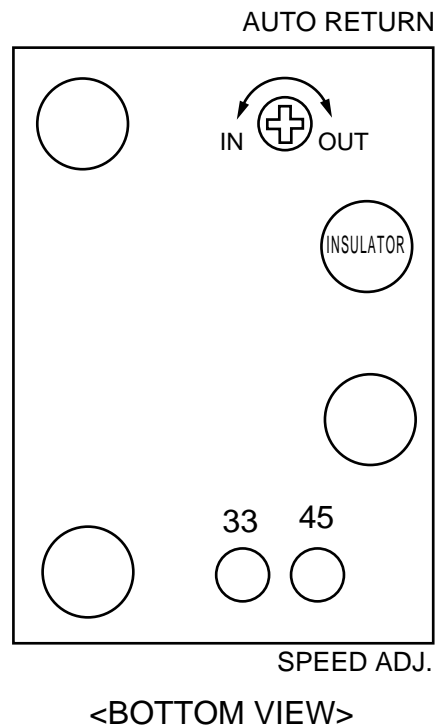
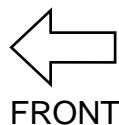
## ADJUSTMENT

### 1. Auto-return position adjustment.

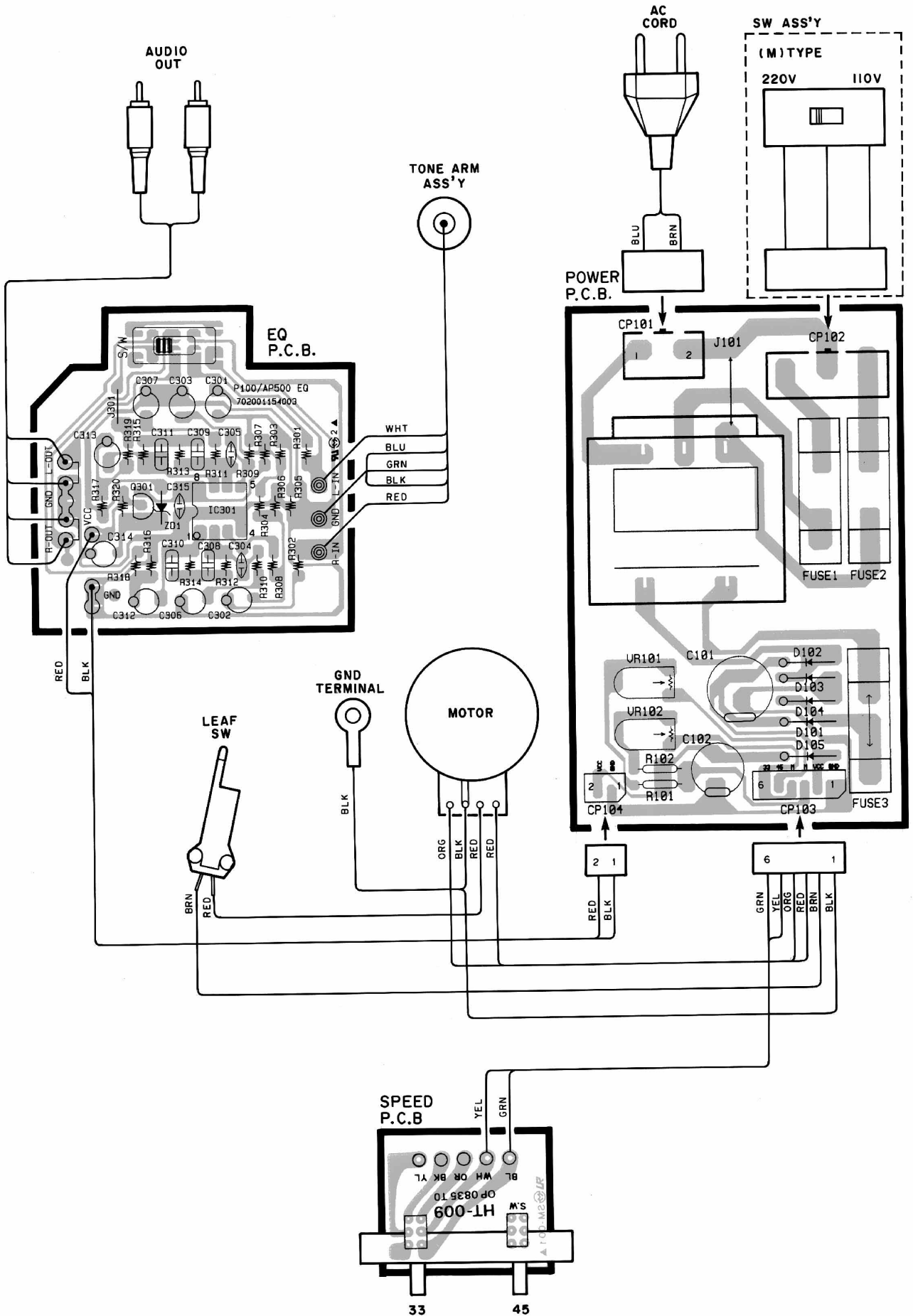
For this, adjust the cam as shown on the right.

### 2. Speed adjustment

First, adjust the 33 RPM by VR102, then the 45 RPM by VR101.



# PC BOARD(Component side view)

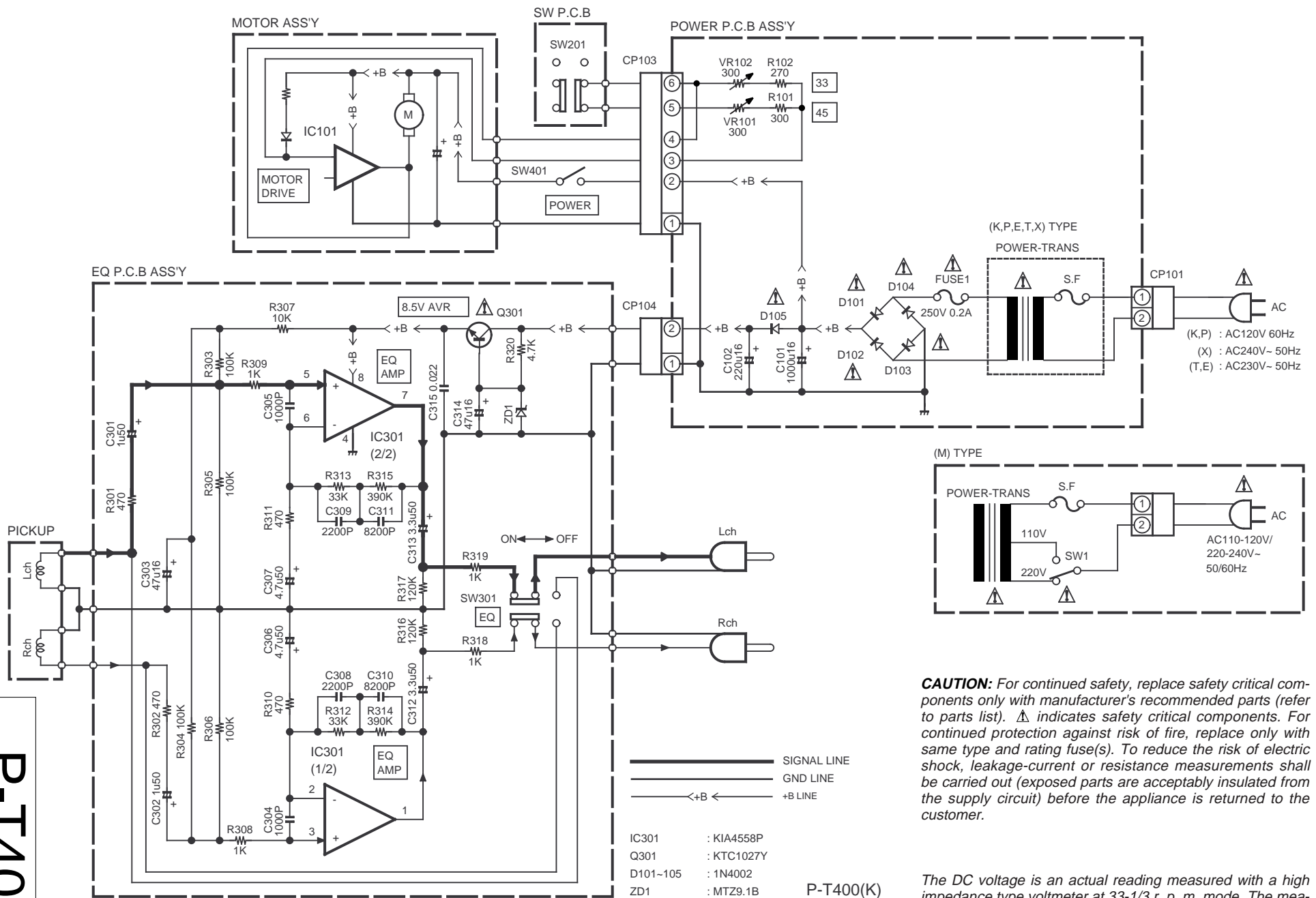


Refer to the schematic diagram for the value of resistors and capacitors.

Y21-3350-10

# P-T400

KENWOOD

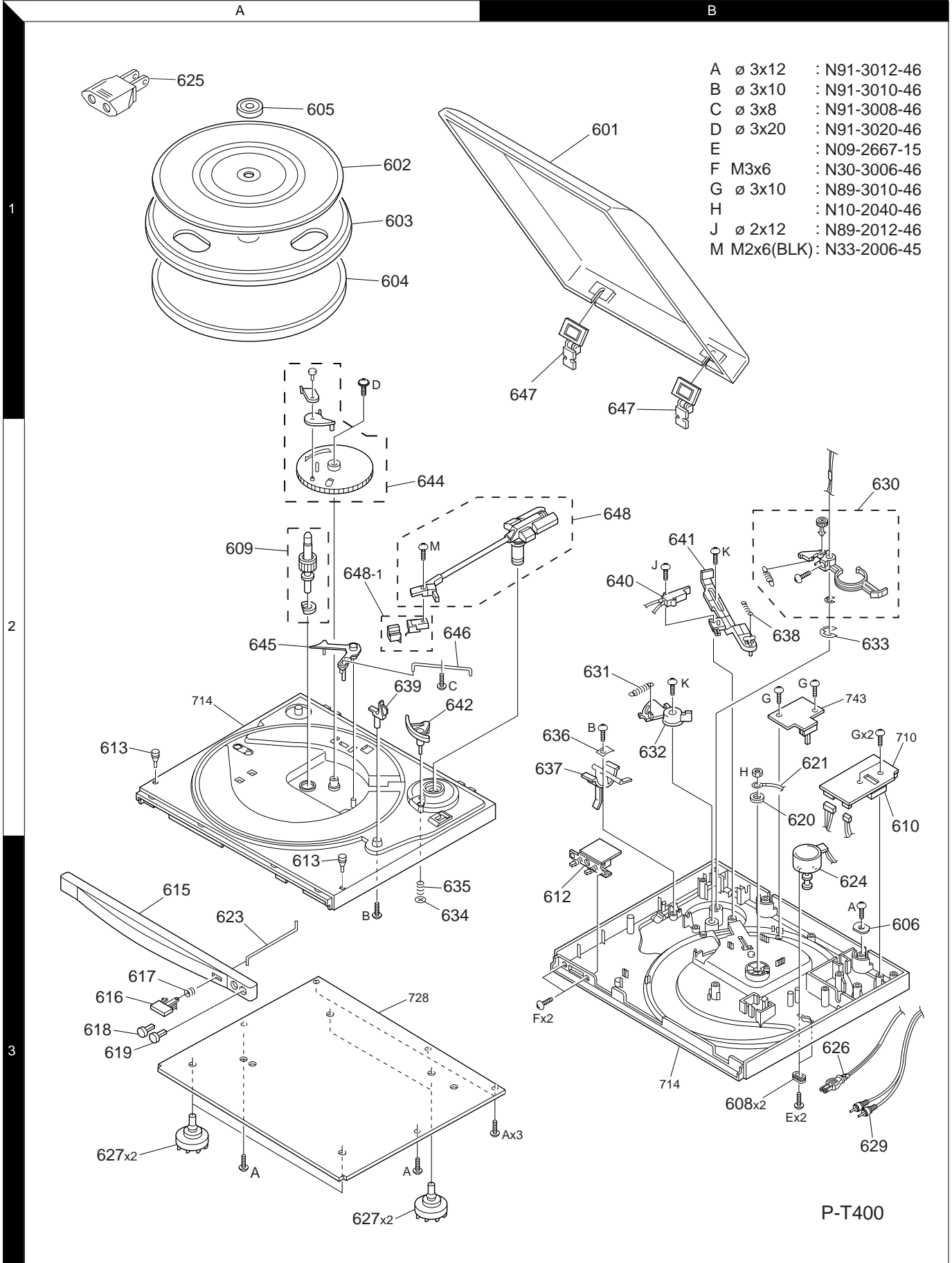


**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

The DC voltage is an actual reading measured with a high impedance type voltmeter at 33-1/3 r. p. m. mode. The measurement value may vary depending on the measuring instruments used or on the product.

P-T400(K)

## EXPLODED VIEW



Parts with the exploded numbers larger than 700 are not supplied.

\* New Parts  
 Parts without **Parts No.** are not supplied.  
 Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.  
 Teile ohne **Parts No.** werden nicht geliefert.

①

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
<b>P-T400</b>						
601	1B	*	A53-2026-08	COVER,DUST		
602	1A		G16-0828-08	MAT,SHEET		
603	1A		D02-0122-08	PLATTER,CASTING		
604	1A		D16-0317-08	BELT		
605	1A	*	W01-0950-08	COUPLER,ABS BK/EP		
606	3B		J19-3414-08	STOPPER		
608	3B		G11-2058-08	CUSHION		
609	2A	*	D21-1890-08	SHAFT ASSY,CENTER		
△ 610	2B	*	L07-0324-08	POWER TRANSFORMER	ET	
△ 610	2B	*	L07-2488-08	POWER TRANSFORMER	X	
△ 610	2B	*	L07-2489-08	POWER TRANSFORMER	KP	
△ 610	2B	*	L07-2490-08	POWER TRANSFORMER	M	
612	3B	*	S68-0086-08	SW,PUSH		
613	2A,3A	*	G11-2357-08	CUSHION,DUST COVER		
615	3A	*	A60-1325-08	PANEL ASSY,FRONT		
616	3A	*	K29-6870-08	KNOB ASSY,REJECT		
617	3A	*	G01-4039-08	SPRING,RETURN		
618	3A	*	K29-6871-08	KNOB ASSY,SPEED-33		
619	3A	*	K29-6872-08	KNOB ASSY,SPEED-45		
620	2B	*	N19-1446-08	WASHER		
621	2B	*	E35-2022-08	RING TERMINAL WIRE		
623	3A	*	D10-3771-08	LINK,REJECT		
624	3B	*	T42-0902-08	MOTOR ASSY		
625	1A	*	E40-9981-08	PLUG,CONVERSION	M	
△ 626	3B	*	E30-2871-08	CORD,AC	KP	
△ 626	3B	*	E30-2872-08	CORD,AC	X	
△ 626	3B	*	E30-2873-08	CORD,AC	ME	
△ 626	3B	*	E30-2874-08	CORD,AC	T	
627	3A	*	J02-1071-08	CUSHION,FOOT RUBBER		
629	3B	*	E30-2652-08	CORD,RCA		
630	2B	*	D10-3772-08	ARN ASSY,FEED		
631	2B	*	G01-3358-08	SPRING		
632	2B	*	D12-0130-08	LIFTER,ELEVATION		
633	2B	*	N29-0269-08	RING		
634	3A	*	N19-1447-08	WASHER		
635	3A		G01-3360-08	SPRING		
636	2B		J21-5730-08	HOLDER,LEVER		
637	2B		K27-2027-08	HANDLE,LIFTER		
638	2B		G01-3359-08	SPRING		
639	2A		J19-3416-08	ARM,STAND		
640	2B	*	S74-0002-08	SW,LEAF(SW401)		
641	2B	*	D10-3773-08	ARM,ACTUATING		
642	2A	*	J99-0508-08	ARM,ELEVATION		
644	2A	*	D13-1849-08	RING ASSY,GEAR		
645	2A	*	D10-3138-08	LEVER,REJECT		
646	2A	*	D10-3774-08	LINK,CUT		
647	1B	*	J50-0140-08	HANGER		
648	2B	*	J91-0502-08	TONEARM ASSY		
648 -1	2A	*	T21-0158-08	CARTRIDGE		
-			B46-0096-53	WARRANTY CARD	X	
-			B46-0310-03	WARRANTY CARD	TE	
-			B46-0330-03	WARRANTY CARD	K	
-			B46-0336-03	WARRANTY CARD	P	

L : Scandinavia    K : USA    P : Canada    R : Mexico  
 Y : PX(Far East, Hawaii)    T : Europe    E : Europe    G : Germany  
 Y : AAFES(Europe)    X : Australia    M : Other Areas

△ indicates safety critical components.

②

\* New Parts  
 Parts without **Parts No.** are not supplied.  
 Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.  
 Teile ohne **Parts No.** werden nicht geliefert.

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
-		*	B60-3529-08	INSTRUCTION MANUAL(ENG)		KPTMX
-		*	B60-3530-08	INSTRUCTION MANUAL(FRN)		PE
-		*	B60-3531-08	INSTRUCTION MANUAL(G,N,I)		E
-		*	B60-3532-08	INSTRUCTION MANUAL(SPN)		EM
-		*	B60-3533-08	INSTRUCTION MANUAL(TWN)		M
-		*	G16-0900-08	PE SHEET,PROTECT		
-		*	H10-5488-08	CUSHION,SNOW		
-		*	H25-1626-08	POLY BAG,NO-SILK		
-		*	H25-1627-08	POLY BAG,NO-SILK		
-		*	H50-2609-08	BOX,GIFT		KPETX
-		*	H50-2610-08	BOX,GIFT		M
-		*	J60-0029-08	RIBBON		
A			N91-3012-46	SCREW		B010230121W1
B			N91-3010-46	SCREW		
C			N91-3008-46	SCREW		
D			N91-3020-46	SCREW		
E			N09-2667-15	SCREW		
F			N30-3006-46	SCREW		B000030061P1
H			N10-2040-46	NUT		
J			N89-2012-46	SCREW		B010220101P1
M			N33-2006-45	SCREW		
<b>ELECTRIC PARTS</b>						
C101			CE04KW1C102M	ELECTRO	1000UF	16WV
C102			CE04KW1C221M	ELECTRO	220UF	16WV
C301,302			CE04KW1H010M	ELECTRO	1.0UF	50WV
C303			CE04KW1C470M	ELECTRO	47UF	16WV
C304,305			CK45FB1H102K	CERAMIC	1000PF	K
C306,307			CE04KW1H4R7M	ELECTRO	4.7UF	50WV
C308,309			CF92FV1H222J	MF-C	2200PF	J
C310,311			CF92FV1H822J	MF-C	8200PF	J
C312,313			CE04KW1H3R3M	ELECTRO	3.3UF	50WV
C314			CE04KW1C470M	ELECTRO	47UF	16WV
C315			CK45FB1H223K	CERAMIC	0.022UF	K
CP101			E35-1608-08	CN.WAFER		
CP103		*	E40-1607-08	CN.WAFER		
CP104			E40-9970-08	CN.WAFER		
△ FUSE1			F50-0008-08	FUSE,250V0.2A		TEMX
△ FUSE1			F50-0135-08	FUSE,250V0.2A		KP
VR101,102		*	R32-0068-08	TRIMMING POT		
△ SW1			S62-0004-08	SW,SLIDE (VOLTAGE SELECT)		M
SW301		*	S62-0071-08	SW,SLIDE (EQ)		
△ D101-105			1N4002A	DIODE		
IC301		*	KIA4558P	IC		
△ Q301		*	KTC1027Y	TRANSISTOR		
ZD1		*	MTZ9.1B	ZENER DIODE		

L : Scandinavia    K : USA    P : Canada    R : Mexico  
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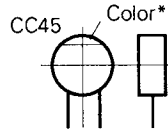
△ indicates safety critical components.

## PARTS DESCRIPTIONS

### CAPACITORS

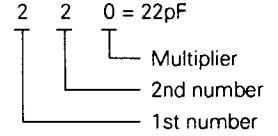
CC 45 TH 1H 220 J  
 1 2 3 4 5 6

- 1 = Type ... ceramic, electrolytic, etc.
- 2 = Shape ... round, square, ect.
- 3 = Temp. coefficient
- 4 = Voltage rating
- 5 = Value
- 6 = Tolerance



#### Capacitor value

- 010 = 1pF
- 100 = 10pF
- 101 = 100pF
- 102 = 1000pF = 0.001μF
- 103 = 0.01μF



#### Temperature coefficient

1st Word	C	L	P	R	S	T	U
Color*	Black	Red	Orange	Yellow	Green	Blue	Violet
ppm/°C	0	-80	-150	-220	-330	-470	-750

2nd Word	G	H	J	K	L
ppm/°C	±30	±60	±120	±250	±500

Example : CC45TH = -470 ± 60ppm/°C

#### Tolerance (More than 10pF)

Code	C	D	G	J	K	M	X	Z	P	No code
(%)	±0.25	±0.5	±2	±5	±10	±20	+40 -20	+80 -20	+100 -0	More than 10μF -10 ~ +50 Less than 4.7μF -10 ~ +75

#### (Less than 10pF)

Code	B	C	D	F	G
(pF)	±0.1	±0.25	±0.5	±1	±2

#### Voltage rating

2nd word \ 1st word	A	B	C	D	E	F	G	H	J	K	V
0	1.0	1.25	1.6	2.0	2.5	3.15	4.0	5.0	6.3	8.0	-
1	10	12.5	16	20	25	31.5	40	50	63	80	35
2	100	125	160	200	250	315	400	500	630	800	-
3	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	-

#### Chip capacitors

(EX) C C 7 3 F S L 1 H 0 0 0 J  
 1 2 3 4 5 6 7

(Chip) (CH, RH, UJ, SL)

(EX) C K 7 3 F F 1 H 0 0 0 Z  
 1 2 3 4 5 6 7

(Chip) (B, F)

Refer to the table above.

- 1 = Type
- 2 = Shape
- 3 = Dimension
- 4 = Temp. coefficient
- 5 = Voltage rating
- 6 = Value
- 7 = Tolerance

#### Dimension (Chip capacitors)

Dimension code	L	W	T
Empty	5.6 ± 0.5	5.0 ± 0.5	Less than 2.0
A	4.5 ± 0.5	3.2 ± 0.4	Less than 2.0
B	4.5 ± 0.5	2.0 ± 0.3	Less than 2.0
C	4.5 ± 0.5	1.25 ± 0.2	Less than 1.25
D	3.2 ± 0.4	2.5 ± 0.3	Less than 1.5
E	3.2 ± 0.2	1.6 ± 0.2	Less than 1.25
F	2.0 ± 0.3	1.25 ± 0.2	Less than 1.25
G	1.6 ± 0.2	0.8 ± 0.2	Less than 1.0

### RESISTORS

#### Chip resistor (Carbon)

(EX) R K 7 3 E B 2 B 0 0 0 J  
 1 2 3 4 5 6 7

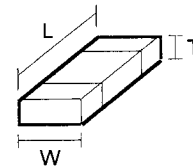
(Chip) (B, F)

#### Carbon resistor (Normal type)

(EX) R D 1 4 B B 2 C 0 0 0 J  
 1 2 3 4 5 6 7

- 1 = Type
- 2 = Shape
- 3 = Dimension
- 4 = Temp. coefficient
- 5 = Rating wattage
- 6 = Value
- 7 = Tolerance

#### Dimension



#### Dimension (Chip resistor)

Dimension code	L	W	T
E	3.2 ± 0.2	1.6 ± 0.2	1.0
F	2.0 ± 0.3	1.25 ± 0.2	1.0
G	1.6 ± 0.2	0.8 ± 0.2	0.5 ± 0.1

#### Rating wattage

Code	Wattage	Code	Wattage	Code	Wattage
1J	1/16W	2C	1/6W	3A	1W
2A	1/10W	2E	1/4W	3D	2W
2B	1/8W	2H	1/2W		

# P-T400

## SPECIFICATIONS

### Motor and turntable

Drive system.....	Belt-drive system
Motor.....	DC servo motor
Turntable platter.....	29.5 cm diameter
Speeds.....	2 speeds ; 33-1/3 and 45 rpm.
Wow & flutter.....	Less than 0.05 % (WRMS)
S/N (rumble).....	DIN : 65 dB (DIN B)

### Tonearm

Type.....	Integrated straight tonearm
Effective arm length.....	215 mm (8-7/16")

### Cartridge

Type.....	MM type (V-76)
Stylus.....	N-76 with 0.6 mill diamond
Frequency response.....	20 Hz to 20 kHz
Output voltage.....	2.5 mV (1kHz, 3.54 cm/sec.)

### Equalizer amplifier

Output voltage (RIAA EQ ON).....	200 mV (1kHz, 3.54 cm/sec.)
-------------------------------------	-----------------------------

### General

Power consumption.....	4 W
Dimensions.....	W : 400 mm (15-3/4") H : 103 mm (4-1/16") D : 380 mm (14-15/16")
Weight (net).....	3.0 kg (6.6lb)

### Note:

KENWOOD follows a policy of continuous advancements. For this reason specifications may be changed without notice.

### Note:

Component and circuit are subject to modification to insure best operation under differing local conditions. This manual is based on Europe (E) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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