Service
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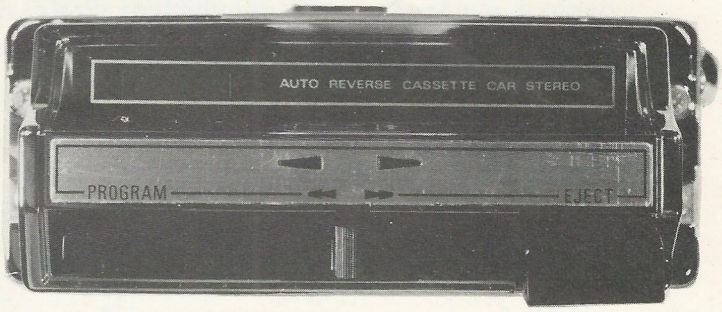


Service Manual

12 V

SPECIFICATIONS

TAPE	CASSETTE TAPE
TAPE SPEED	4.75 cm/sec.
Programme change system	Auto reverse and push buttons
Playback system	4 track 2 channel 2 programme stereo
Semi conductors	3 IC's 3 Transistors 5 Diodes
Power supply	12 V.d.c. negative earth
Current consumption	0.5A
Dimensions	55 Hx140Wx188mm
Weight	1.7 Kg.

Subject to modification

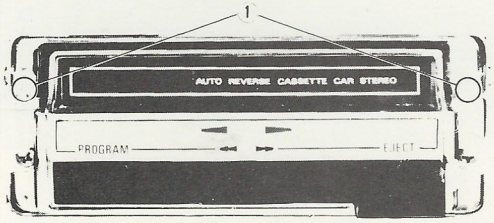
4802 725 17018

PHILIPS

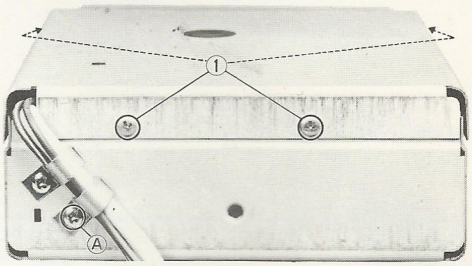
DISMANTLING PROCEDURE

Remove encircled screws when dismantling.

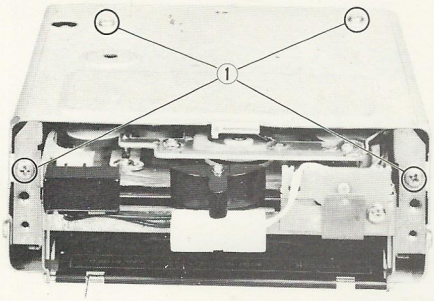
1. Escutcheon



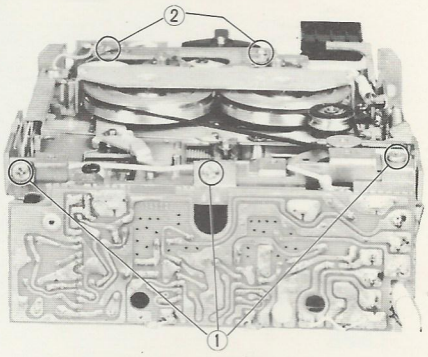
2. Upper cover



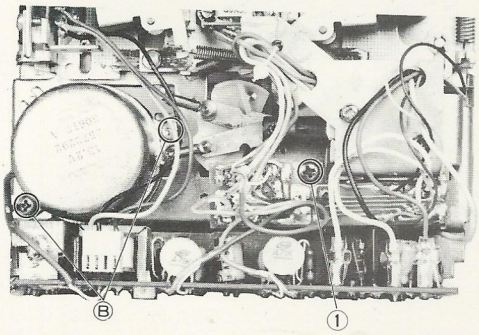
3. Bottom cover



4. Main P.C.B.



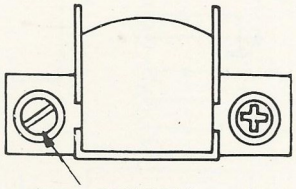
5. Switch P.C.B.



LUBRICATION

Every 1000 hours running time or once a year, lubricate with one or two drops of machine oil to the motor shaft bearing, capstan shaft bearing and the pinch shaft bearing.

Playback Head Adjustment (Azimuth)



Normally the adjustment is precisely set at the factory and further adjustment should not be required unless the playback head or its mounting components are replaced.

Incorrect adjustment will cause a reduction in performance.
If the azimuth is moved, then carefully adjust the azimuth screw as shown in the illustration.

Using a Test Tape for Azimuth Adjustment

Insert a test tape and set the control knob as follows:-

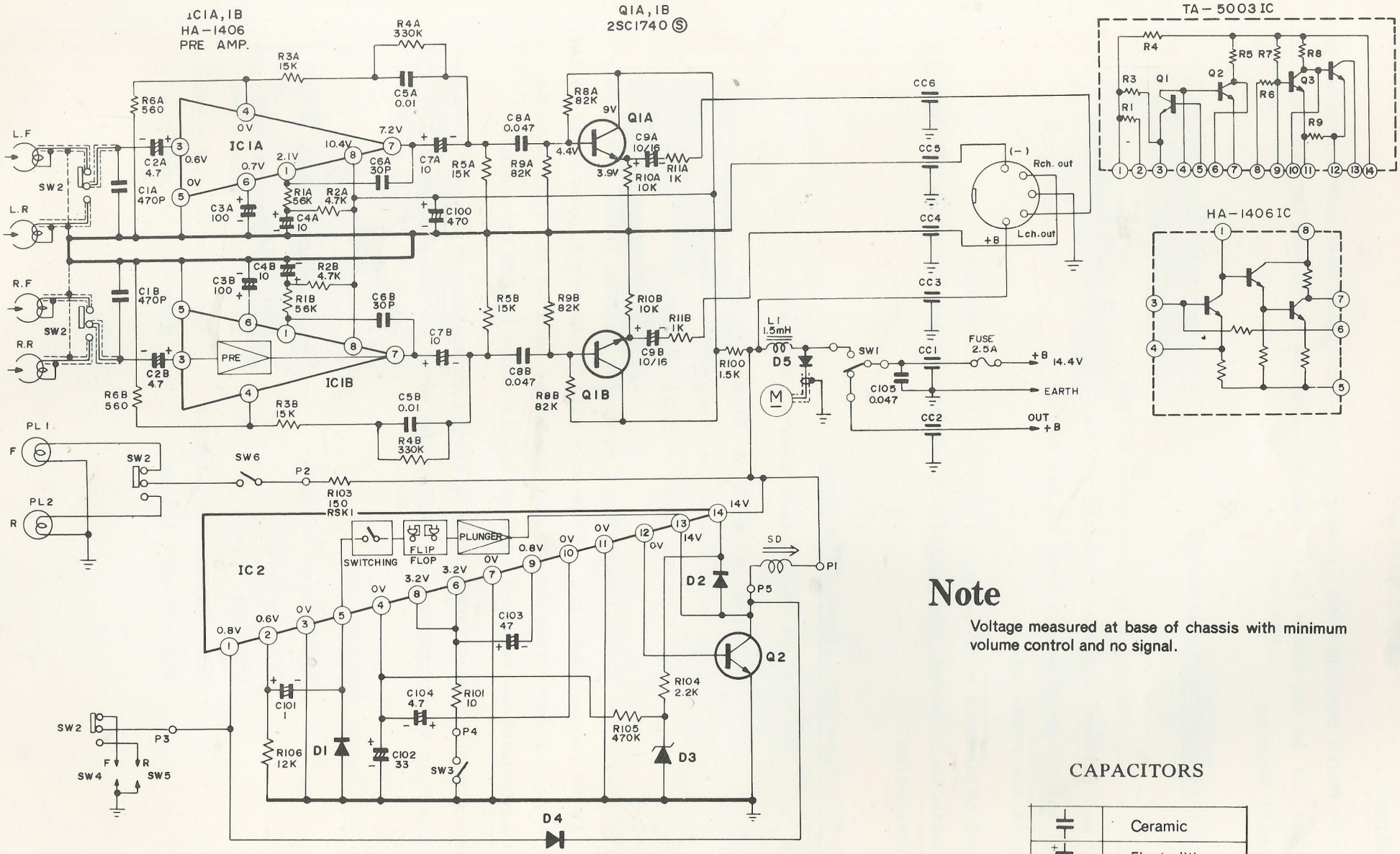
Vol. control knob	-	Normal Volume
Bal. control knob	-	Centre position
Tone control knob	-	Fully clockwise

Carefully adjust the azimuth adjustment screw for maximum volume and treble tones. It is recommended that a VTVM or a circuit tester is connected to the speaker terminal for obtaining the maximum value because the test tape for azimuth adjustment is recorded in high treble tones (6,300 Hz ordinary).

If a test tape is not available, use a stereo music tape with some treble tones (piano or violin music) and follow the same procedure as above.

Tension and Torque details

Pinchroller tension	300-400 grams
Take up torque	50-70 grams
Playback torque	Less than 4 gram - cm.
Fast forward back torque	Less than 4 gram - cm.
Fast forward torque	More than 60 gram-cm.



Note

Voltage measured at base of chassis with minimum volume control and no signal.

CAPACITORS

	Ceramic
	Electrolitic
M	Mylar
P	Polyester
S	Styrol

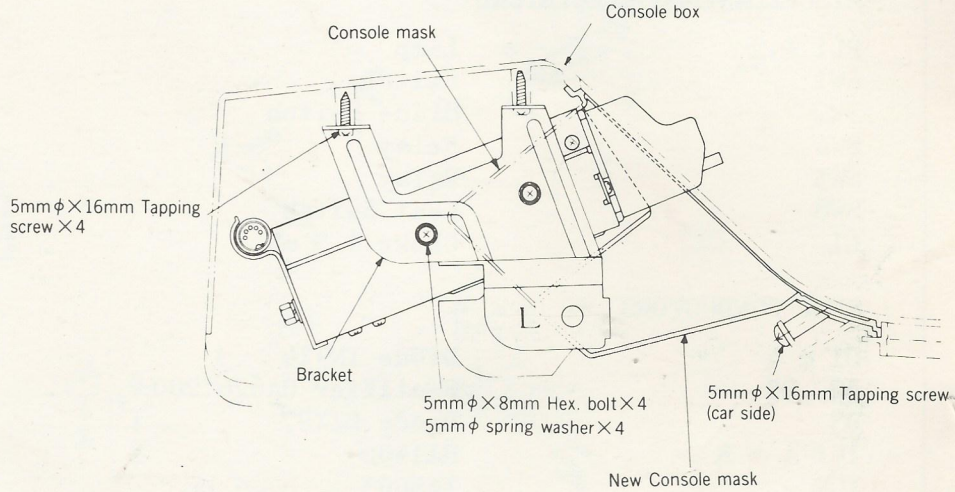
REPLACEMENT PARTS LIST

REF. NO.	DESCRIPTION	SERVICE CODE
MISCELLANEOUS ELECTRICAL		
PL1 & 2	Lamp	4802 134 47072
SW1	Switch	4802 271 37019
SW2	Slide Switch	4802 277 27047
SW4	Relay	4802 280 27005
SW5	Relay	4802 280 27004
SW6	Leaf Switch	4802 278 57002
L1	Choke 1.5 mH	4802 152 27005
SEMI CONDUCTORS		
D1 & 4	Diode IN914	4822 130 30009
D2, D5	Rectifier OA626.200	4802 130 37033
D3	Diode BZX87	4802 130 37156
IC1 A & B	HA1406	4802 209 87077
IC2	TA5003	4802 209 87127
Q1 A & B	2SC1740S (BC337)	4822 130 40855
Q2	2SC1061 (BD203)	4822 130 44325
MISCELLANEOUS MECHANICAL		
3	Escutcheon Assembly	4802 459 57027
4	Button Program	4802 410 27093
5	Cassette Door	4802 459 27097
6	Shaft Flap	4802 435 77081
7	Spring Flap	4802 492 47036
11	Knob FF/RW	4802 411 57025
12	Button Eject	4802 410 27092
CHASSIS ASSEMBLY		
15	Pressure Roller Arm Assy. L.	4802 403 47031
16	Pressure Roller Arm Assy. R.	4802 403 47029
	Spring	4802 492 37235
	E Ring	4802 530 77024
17	Stereo Head	4802 249 37009
25	FF Arm Assy. R.	4802 403 47028
26	FF Arm Assy. L.	4802 403 47027
32	Cassette Holder Assy.	4802 443 67052
34	Eject Arm	4802 407 17009
35	Take up Gear Assy.	4802 528 17083
37	Belt Flywheel	4802 358 37039
38	Belt Take Up	4822 358 30065
40	Turn Table Assy.	4802 452 17082
41	Magnet Assy.	4802 526 27004
	Polyester Washer	4802 532 57013
44	Solenoid Assy.	4802 281 57009
52	Motor)	4802 361 27039
	Use Pulley)	4802 528 87073

NOTE: All capacitors and resistors are standard values and tolerances unless specified otherwise.

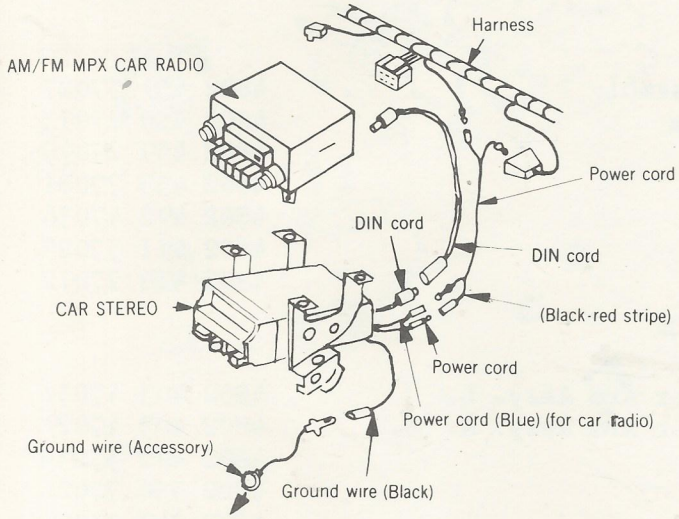
SET INSTALLATION

1. Remove the console box from the car body.
2. Remove the 5mm x 16mm screw and remove the console mask from the console box. Replace the mask with the new one provided using the 5mm x 16 mm screw.
3. Attach the bracket with 5mm x 8mm Hex. bolt to the car stereo and install in the console box with 5mm x 16mm tapping screw.
4. For connection, see diagram.
5. Install the console box in reverse order.

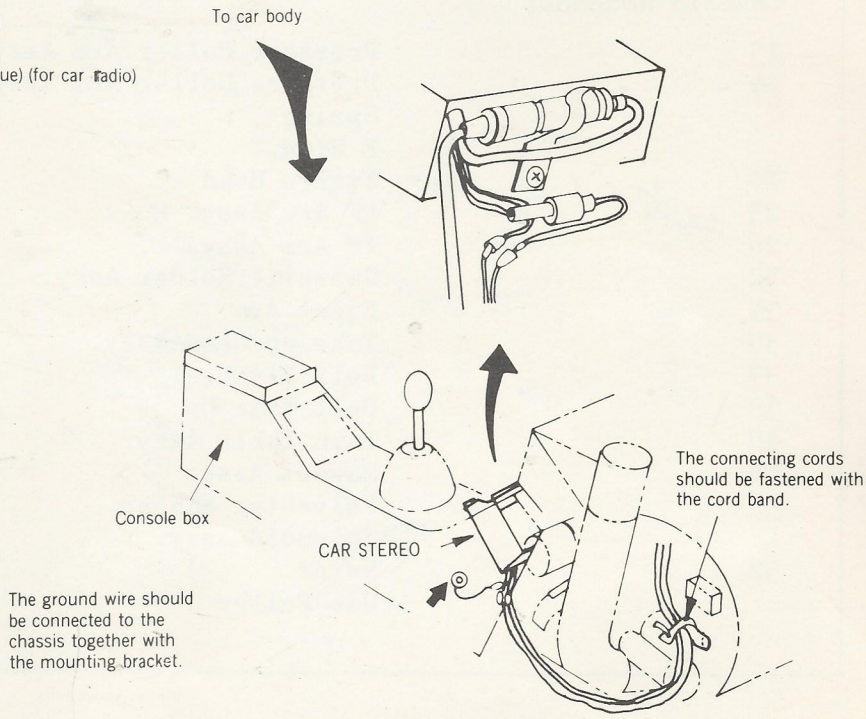


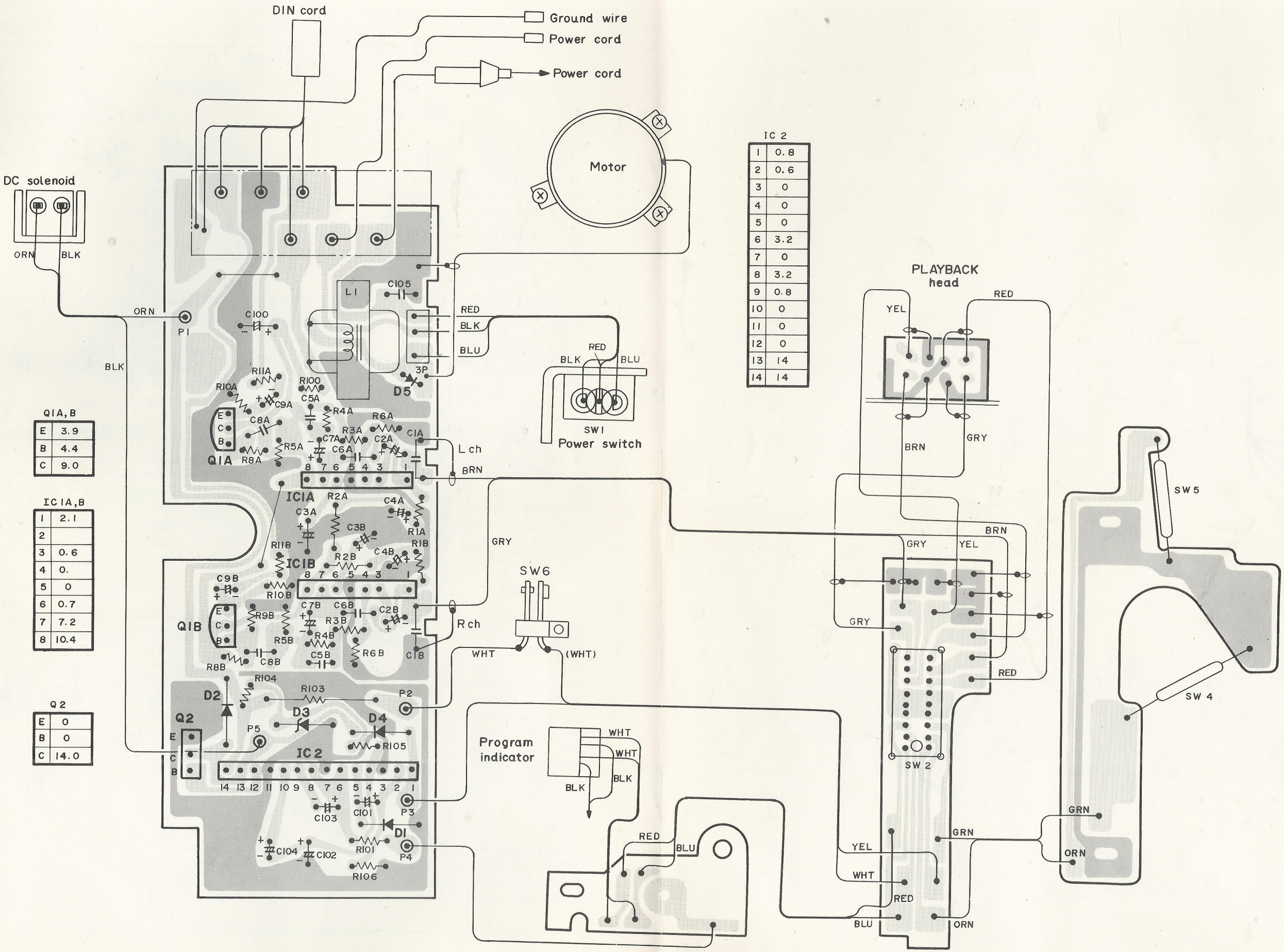
NOTE: To avoid damaging the unit be sure to use the correct length hex.bolts.

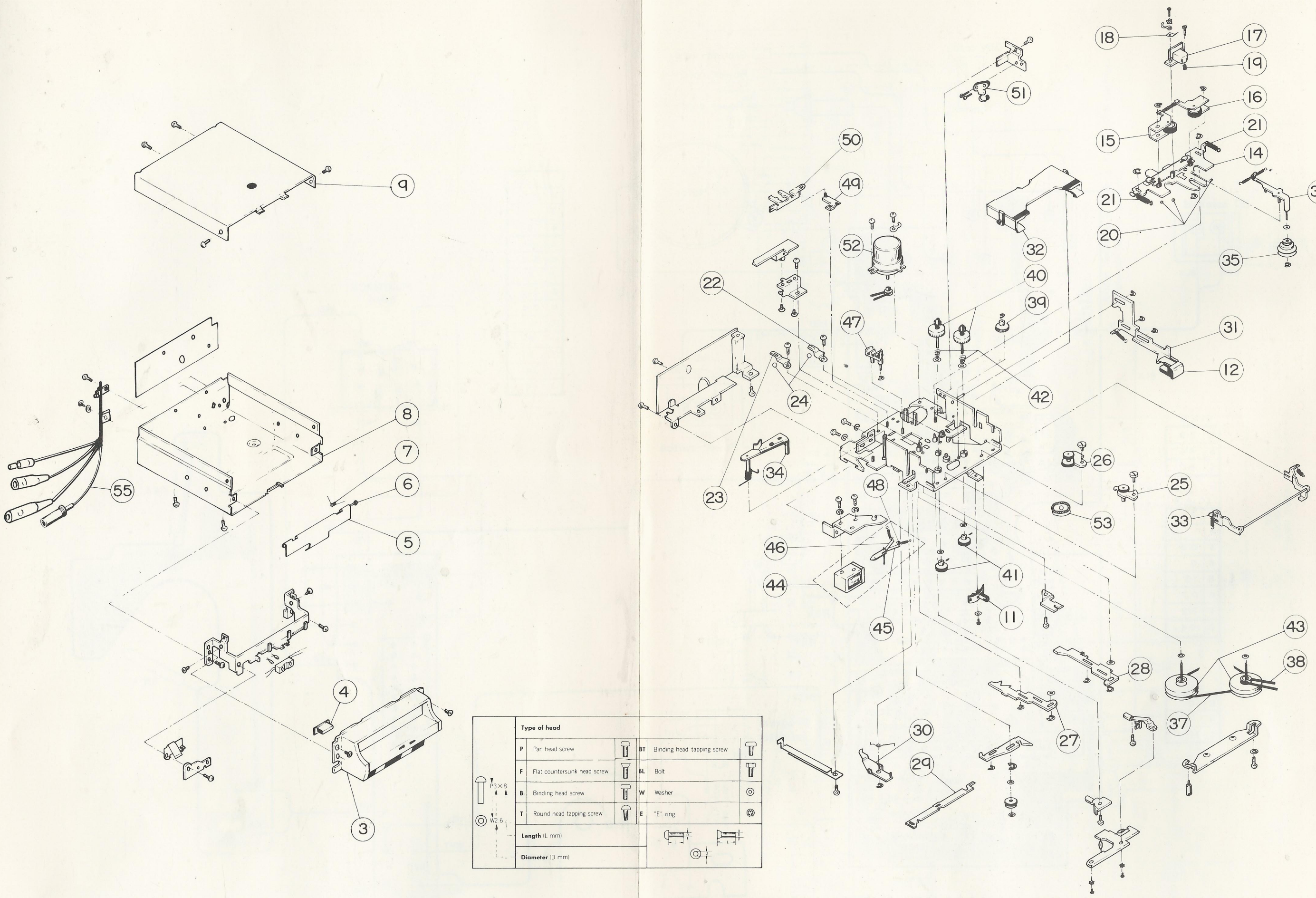
CONNECTIONS



EARTH




DIN cord
Ground wire
Power cord
Power cord
Motor
DC solenoid
ORN
BLK
ORN
P1
BLK
C100
L1
C105
RED
BLK
BLU
3P
D5
R11A
R10A
R10B
C9A
C5A
R4A
R6A
C8A
R3A
C1A
C7A
C2A
C6A
R5A
R8A
Q1A
8 7 6 5 4 3 1
L ch
BRN
IC1A
R2A
C4A
C3A
C3B
R1A
R11B
R1B
C4B
IC1B
R2B
8 7 6 5 4 3 1
C9B
R10B
C7B
C6B
C2B
R9B
R3B
Q1B
R5B
R4B
R6B
C1B
R8B
C8B
C5B
R Ch
WHT
(WHT)
SW6
R104
R103
D2
P2
D3
D4
Q2
P5
R105
IC2
14 13 12 11 10 9 8 7 6 5 4 3 2 1
C103
C101
P3
D1
C104
C102
R101
P4
R106
Program indicator
WHT
WHT
BLK
BLK
RED
BLU
IC 2
1 0.8
2 0.6
3 0
4 0
5 0
6 3.2
7 0
8 3.2
9 0.8
10 0
11 0
12 0
13 14
14 14
Q1A, B
E 3.9
B 4.4
C 9.0
IC1A, B
1 2.1
2
3 0.6
4 0.
5 0
6 0.7
7 7.2
8 10.4
Q2
E 0
B 0
C 14.0
RED
BLK
BLU
SW1
Power switch
PLAYBACK head
YEL
RED
BRN
GRY
BRN
GRY
YEL
GRY
RED
SW 2
YEL
WHT
RED
BLU
ORN
GRN
GRN
ORN
SW 5
SW 4



	Type of head				
	P	Pan head screw	BT	Binding head tapping screw	
	F	Flat countersunk head screw	BL	Bolt	
P3×8	B	Binding head screw	W	Washer	
W2.6	T	Round head tapping screw	E	"E" ring	
	Length (L mm)				
	Diameter (D mm)				