

MULTIPLE CHARGER

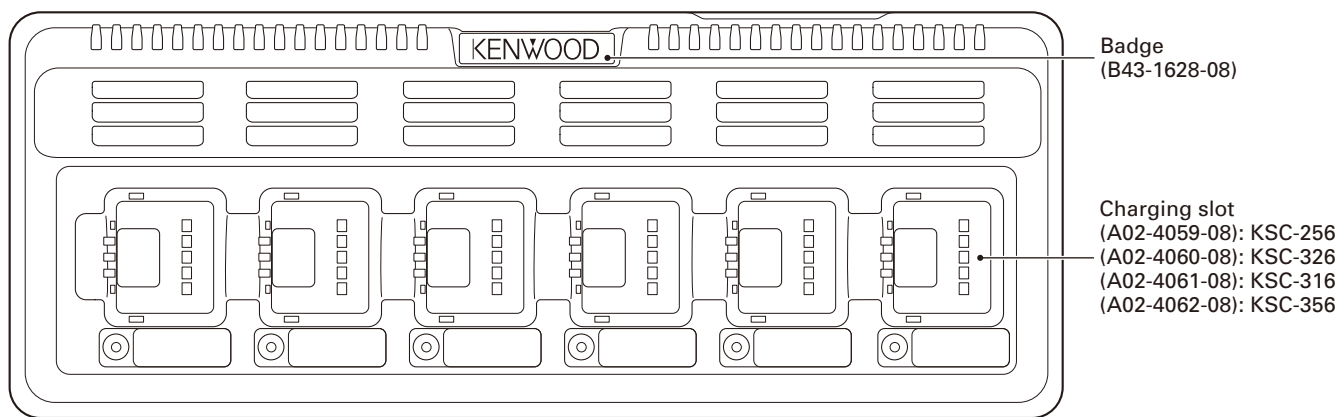
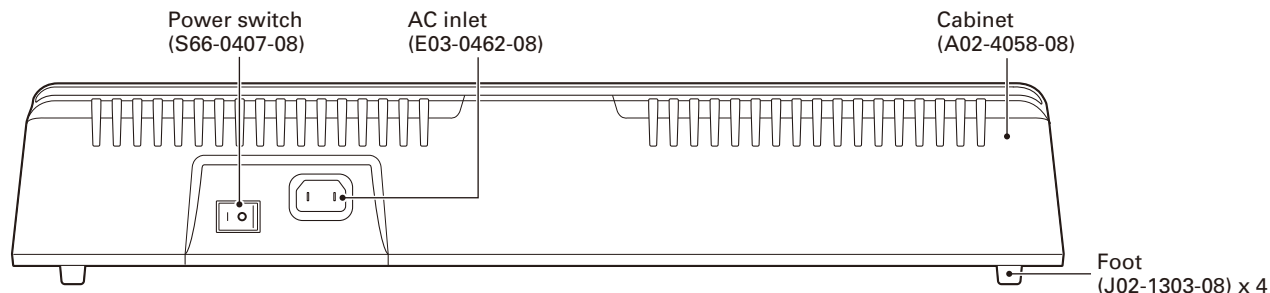
# KSC-256/316/326/356

## SERVICE MANUAL

# KENWOOD

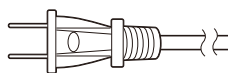
Kenwood Corporation

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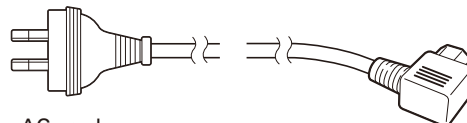


Note:  
The battery slots are molded for different model types.  
The illustration shows the KSC-256.  
The K type for KSC-356 and KSC-316 are not available.  
The X type for KSC-316 is not available.

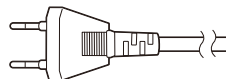
AC cord (E30-7668-08): K



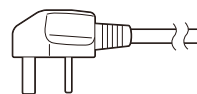
AC cord (E30-7669-08): X



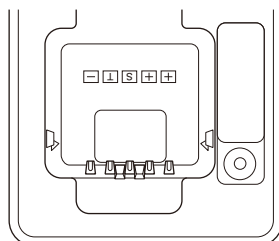
AC cord (E30-7670-08): E



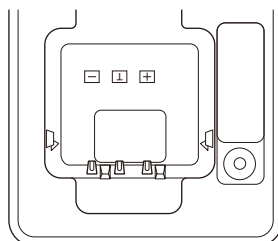
AC cord (E30-7671-08): T



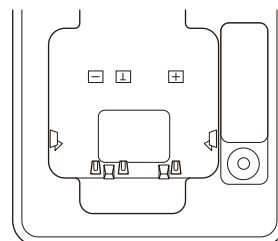
### Charging slot layout



KSC-256/KSC-326



KSC-356



KSC-316



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## DISASSEMBLY FOR REPAIR

### Note:

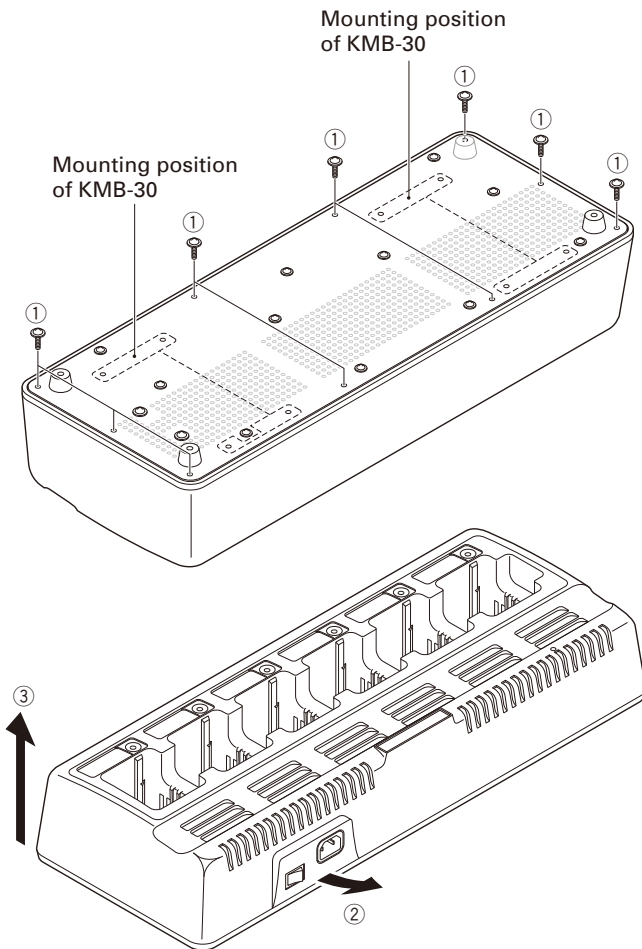
Replacements are not possible other than for those items listed in the bill of materials.

Other than the AC jack, the power switch, the fuse, and the LED indicator, you cannot replace the parts on the printed circuit board.

**Alert:** After the repairs have been completed, please perform a Megger insulation test on the ground side of the AC jack and the charger terminal. The standard is 2MΩ or more.

### Removing the Upper Case

1. Remove the 10 screws (①) from the upper case.
2. Raise the case while pulling forward underneath where the power switch hole is located (②,③).  
(When pulling on the case without raising it, it will catch where the power switch hole is located.)



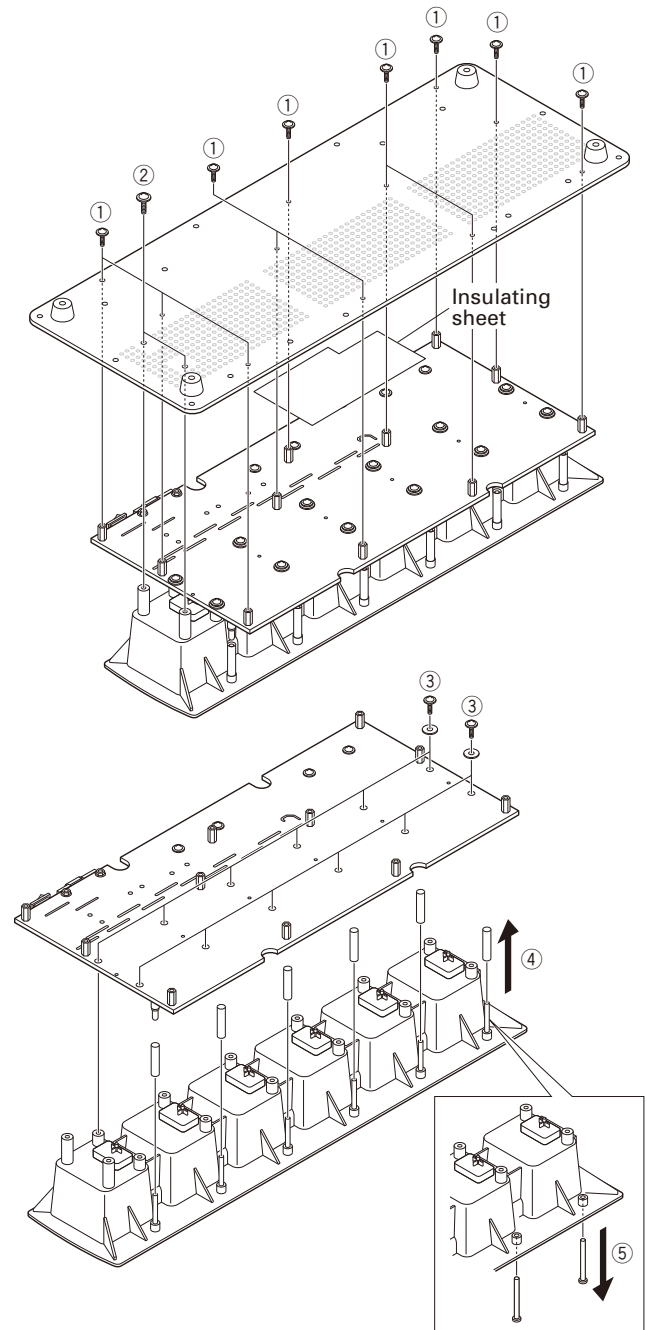
### Removing the Charging Slots

1. Remove the 11 screws (①) from the aluminum plate and the 2 screws (②) from the charging slots to remove the aluminum plate and insulating sheet.
2. Remove the 12 screws (③) holding the printed circuit board to the charging slots to remove the charging slots.

**Note:** Refer to figure (④) during the removal in order to retain the shading tubes of the LEDs.

### Removing the Illumination Guide

1. Push the illumination guides through the charging slot while the equipment is upside-down (⑤).

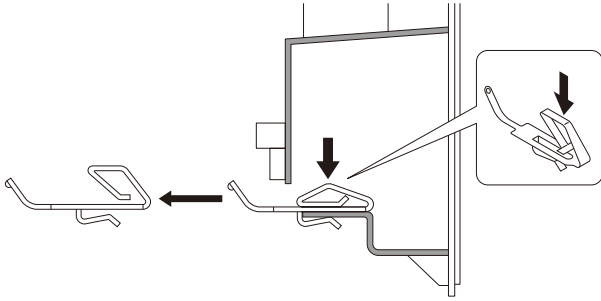


# KSC-256/316/326/356

## DISASSEMBLY FOR REPAIR

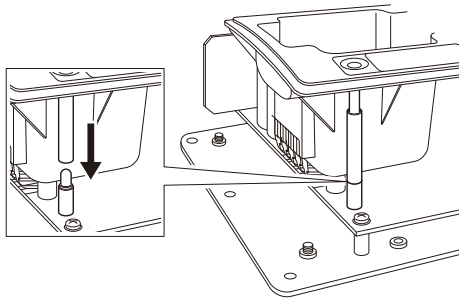
### Removing the Charging Terminal

1. While pushing down on the protruding charger terminal, slide the terminal out.  
**Note:** Clean the charger terminal landing by wiping it with an alcohol dampened cloth.



### Installing the Shading Tube

1. After installing the charging slots onto the printed circuit board, verify that the shading tubes cover the heads of the LEDs.

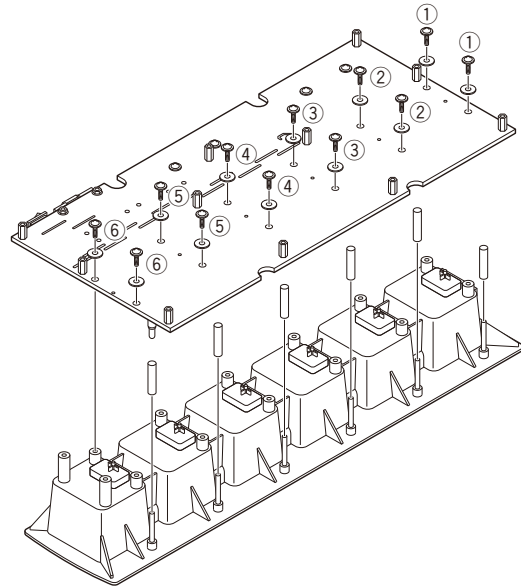


### Installing the LEDs

1. Install the LEDs onto the printed circuit board in the manner shown in Exploded view.

### Installing the Charging Slot

1. When installing the charging slot to the PCB, tighten the screw in the direction indicated (right edge).



## TROUBLE SHOOTING

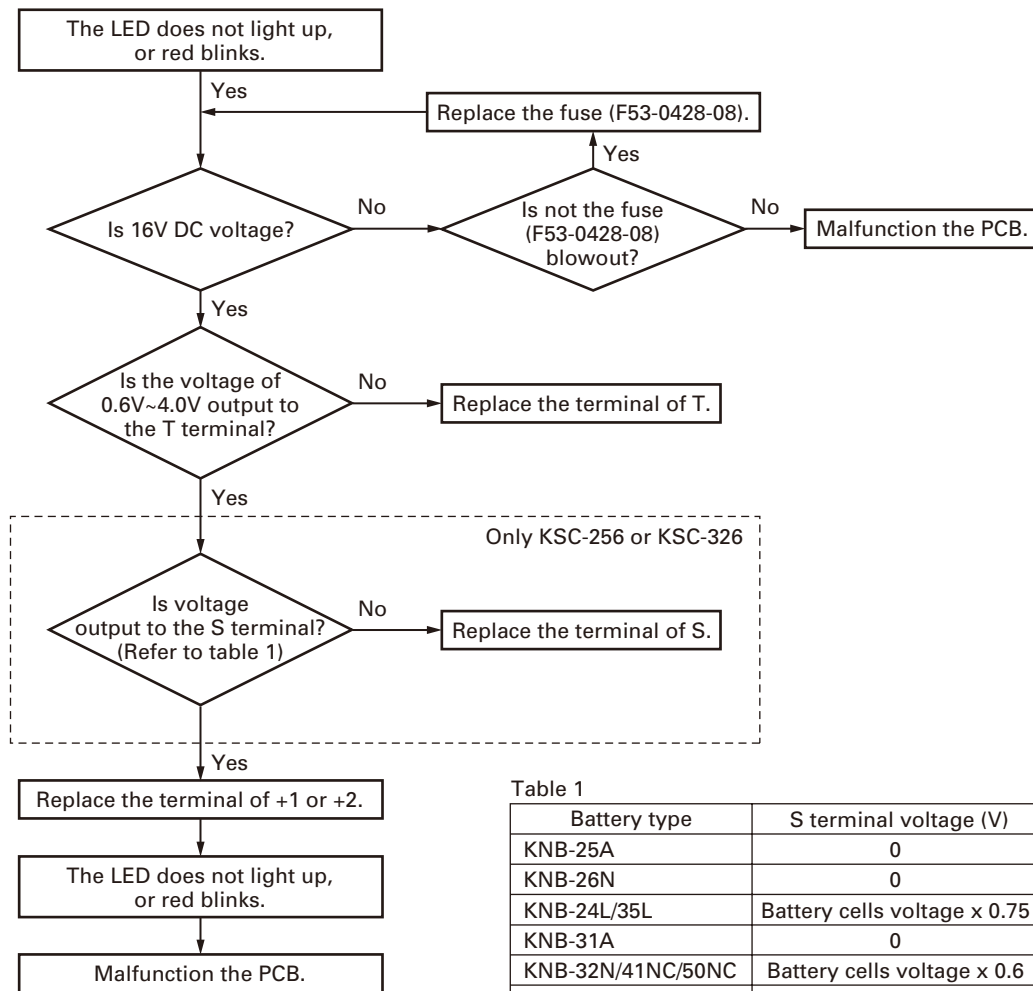


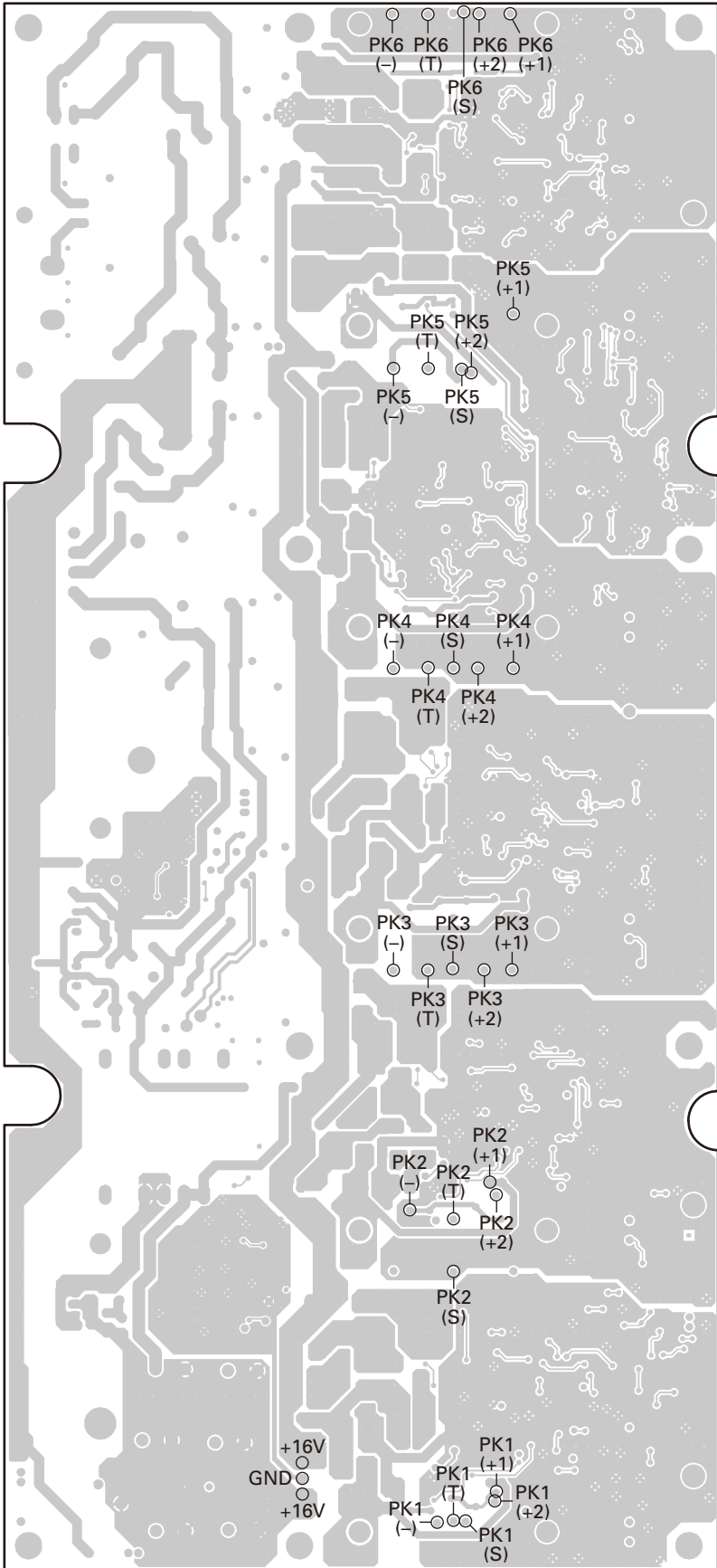
Table 1

Battery type	S terminal voltage (V)
KNB-25A	0
KNB-26N	0
KNB-24L/35L	Battery cells voltage x 0.75
KNB-31A	0
KNB-32N/41NC/50NC	Battery cells voltage x 0.6
KNB-33L/47/48L	Battery cells voltage x 0.75
KNB-29N/30A	-
KNB-45L	-

**Note:**

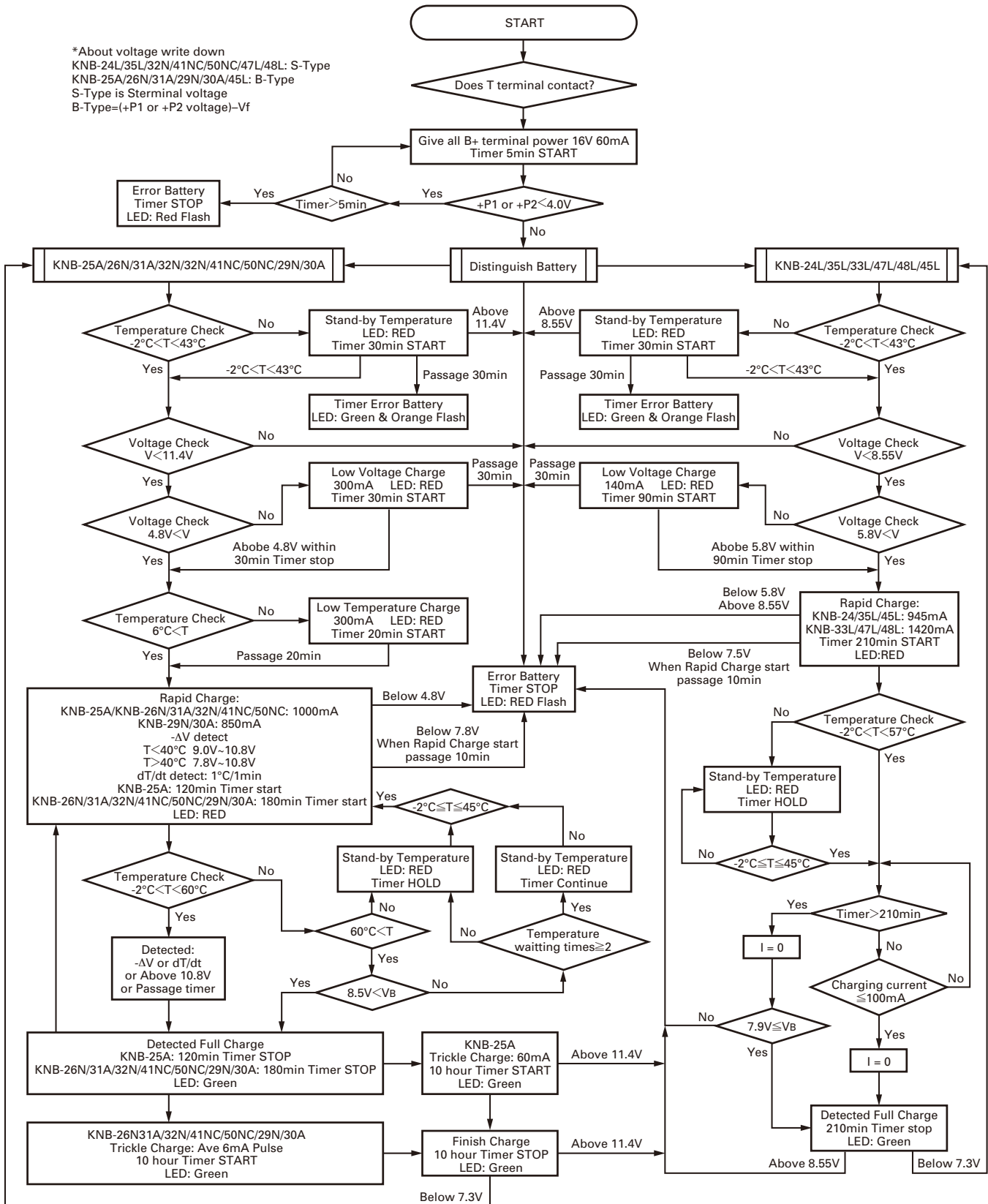
Measuring condition: With the charging slot installed to the PCB.

TROUBLE SHOOTING



## CHARGING FLOW CHART

\*About voltage write down  
 KNB-24L/35L/32N/41NC/50NC/47L/48L: S-Type  
 KNB-25A/26N/31A/29N/30A/45L: B-Type  
 S-Type is Sterminal voltage  
 B-Type=(+P1 or +P2 voltage)-Vf

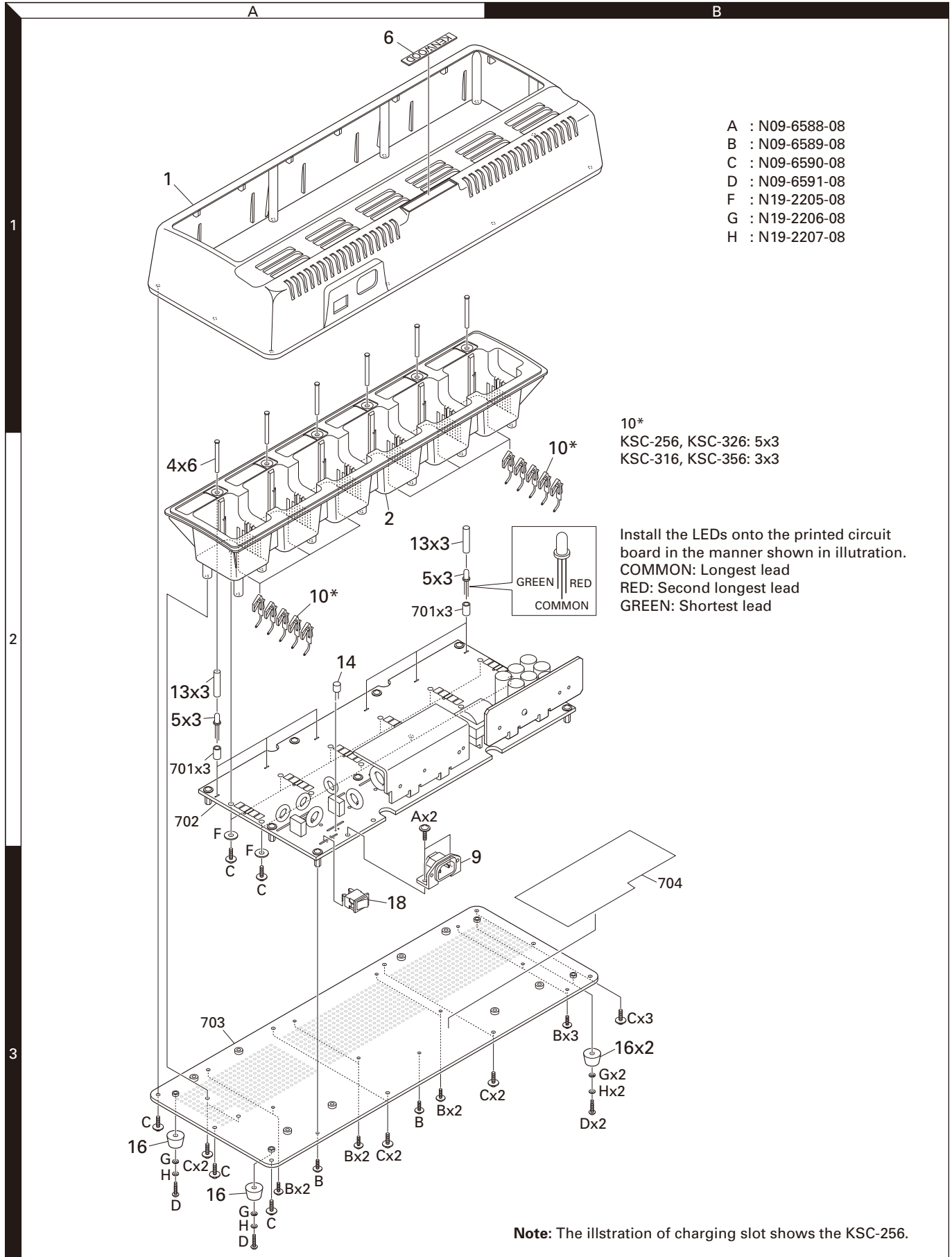


## PARTS LIST

Ref. No.	Address	New parts	Parts No.	Description	Destination
<b>KSC-256/326/316/356</b>					
1	1A	*	A02-4058-08	CABINET	
2	2A	*	A02-4059-08	CHARGING SLOT (KSC-256)	
2	2A	*	A02-4060-08	CHARGING SLOT (KSC-326)	
2	2A	*	A02-4061-08	CHARGING SLOT (KSC-316)	E,T
2	2A	*	A02-4062-08	CHARGING SLOT (KSC-356)	X,E,T
4	1A,2A	*	B11-1867-08	ILLUMINATION GUIDE	
5	2A	*	B30-2320-08	LED	
6	1A	*	B43-1628-08	BADGE (KENWOOD)	
-		*	B62-2118-00	INSTRUCTION MANUAL	K, X
-		*	B62-2119-00	INSTRUCTION MANUAL	E, T
9	3A	*	E03-0462-08	AC INLET	
10	2A,2B	*	E29-1223-08	TERMINAL (CHARGING)	
-		*	E30-7668-08	AC CORD	K
-		*	E30-7669-08	AC CORD	X
-		*	E30-7670-08	AC CORD	E
-		*	E30-7671-08	AC CORD	T
13	2A	*	F15-1018-08	SHADING TUBE	
14	2A	*	F53-0428-08	FUSE	
16	3A,3B	*	J02-1303-08	FOOT	
A	2A	*	N09-6588-08	SCREW (AC INLET)	
B	3A,3B	*	N09-6589-08	SCREW (PCB,BOTTOM)	
C	3A,3B	*	N09-6590-08	SCREW (PCB,SLOT,CABINET)	
D	3A,3B	*	N09-6591-08	SCREW (FOOT)	
F	2A,3A	*	N19-2205-08	WASHER (PCB-SLOT)	
G	3A,3B	*	N19-2206-08	WASHER (FOOT)	
H	3A,3B	*	N19-2207-08	SPRING WASHER (FOOT)	
18	3A	*	S66-0407-08	POWER SWITCH	



## EXPLODED VIEW



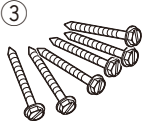
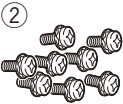
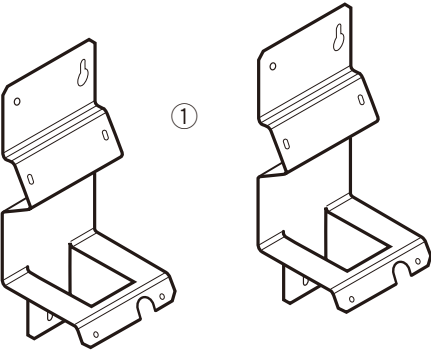
Parts with the exploded numbers larger than 700 are not supplied.

# KSC-256/316/326/356

## OPTIONAL ACCESSORY

### KMB-30 (BRACKET)

#### External View



#### Parts List

Ref. No.	New parts	Parts No.	Description
<b>KMB-30</b>			
①	*	J29-0746-08	BRACKET
②	*	N09-6586-08	PAN HEAD SCREW
③	*	N09-6587-08	SCREW (ANCHOR)

## SPECIFICATIONS

AC Voltage	K type	120V AC
	X,E,T type	100~240V AC
Dimensions (W x H x D) (charger only)		526 x 105 x 203 mm 20.7 x 4.1 x 8.0 inches
Weight (charger only)		Approx. 3kg / 106 oz

### Approximate Charging Time

	Li-ion		Ni-Cd		Ni-MH	
	Battery Pack	Charging Time	Battery Pack	Charging Time	Battery Pack	Charging Time
KSC-256	KNB-24L	150 minutes	KNB-25A	70 minutes	KNB-26N	130 minutes
	KNB-35L	170 minutes				
KSC-316	-		KNB-30A	120 minutes	KNB-29N	180 minutes
KSC-326	KNB-33L	140 minutes	KNB-31A	110 minutes	KNB-32N	170 minutes
	KNB-47L	140 minutes			KNB-41NC	170 minutes
	KNB-48L	170 minutes			KNB-50NC	140 minutes
KSC-356	KNB-45L	180 minutes	-		-	

# KSC-256/316/326/356

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