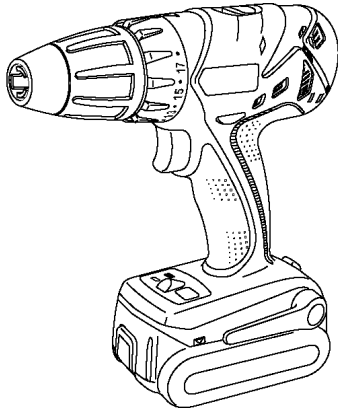


Service Manual

Cordless Drill & Driver

EY7440-X8



SPECIFICATIONS

MAIN UNIT

Motor		14.4V DC
No load speed	LOW	60 ~ 400/min (rpm)
	HIGH	200 ~ 1350/min (rpm)
Chuck capacity		ϕ 1.5 ~ 13mm (1/16" ~ 1/2")
Maximum torque	LOW	26.0N·m (265kgf-cm)
	HIGH	8.8N·m (90kgf-cm)
Clutch torque		Approx. 0.5Nm (5.0kgf-cm, 4.4in-lbs) – 4.4Nm (45.0kgf-cm, 39.0in-lbs)
Overall length		191mm (7-1/2")
Weight (with battery pack EY9L40)		1.6kg (3.5lbs)

WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

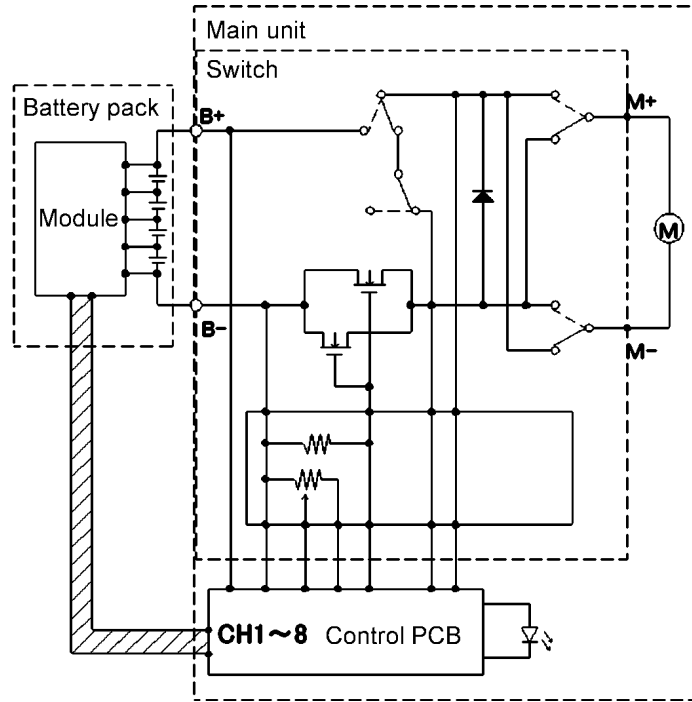
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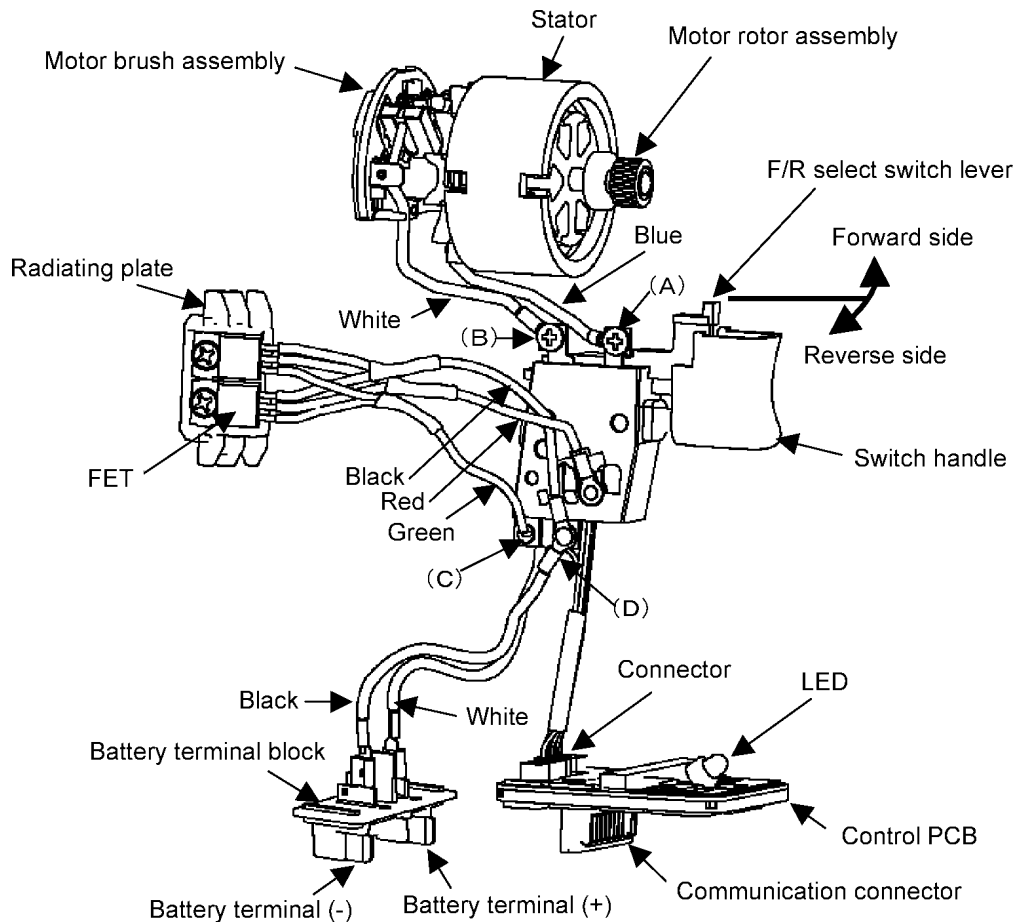
Panasonic

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1 SCHEMATIC DIAGRAM

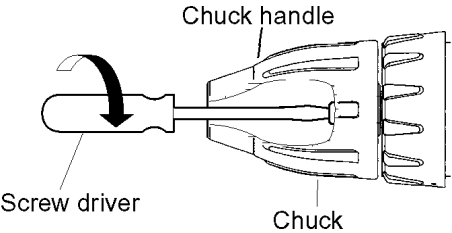
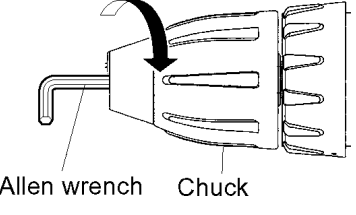
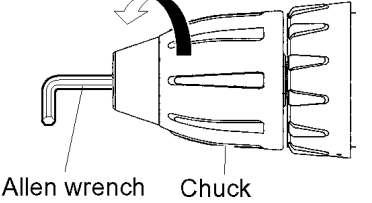



2 WIRING CONNECTION DIAGRAM



3 DISASSEMBLY/ASSEMBLY INSTRUCTIONS

■ HOW TO DISASSEMBLE KEYLESS CHUCK.

Ref. No. 1A	Procedure 1A	Removal of the Keyless Drill Chuck.
	 <p data-bbox="220 324 673 555">Chuck handle Screw driver Chuck</p> <p data-bbox="466 577 523 600">Fig. 1</p>  <p data-bbox="316 627 673 840">Allen wrench Chuck</p> <p data-bbox="466 851 523 873">Fig. 2</p>  <p data-bbox="300 907 673 1108">Allen wrench Chuck</p> <p data-bbox="466 1153 523 1176">Fig. 3</p>	<p data-bbox="850 273 938 295">NOTE :</p> <p data-bbox="887 297 1505 347">When attaching or removing a bit, disconnect battery pack from tool.</p> <ol data-bbox="850 358 1505 504" style="list-style-type: none"> 1. Set the clutch handle to position  and select "LOW" position. 2. Turn the lock collar counterclockwise (looking from the front) to open the chuck jaws. 3. Use a screwdriver to turn the chuck fastening screw inside the chuck clockwise direction of the arrow, and remove the screw. (See Fig. 1) <p data-bbox="850 504 938 526">NOTE :</p> <p data-bbox="887 528 1489 627">If the chuck fastening screw will not come loose, insert the allen wrench into the chuck and lightly tap in the clockwise direction with a hammer to tighten the chuck, and then loosen the chuck fastening screw. (See Fig. 2)</p> <p data-bbox="887 638 1489 705">Insert the allen wrench into the chuck, and turn counterclockwise direction in the arrow with holding the unit by the vise to remove the chuck. (See Fig. 3)</p>

■ HOW TO DISASSEMBLE MAIN UNIT.

Ref. No. 2A

Procedure 2A

Removal of the Housing.

1. Remove 8 housing screws.

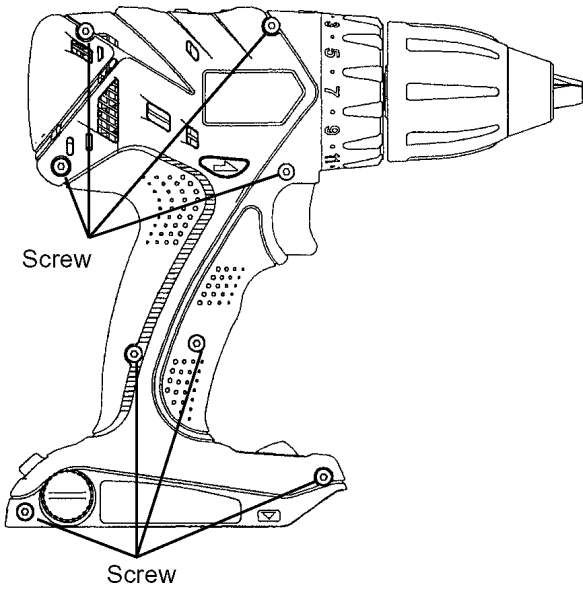


Fig. 4

Ref. No. 2B

Procedure 2A → 2B

Removal of the Motor.

(Removal)

1. Take out the motor with the gear box block from housing.
2. Separate the motor from the gear box block by twisting the motor to unlock tabs.

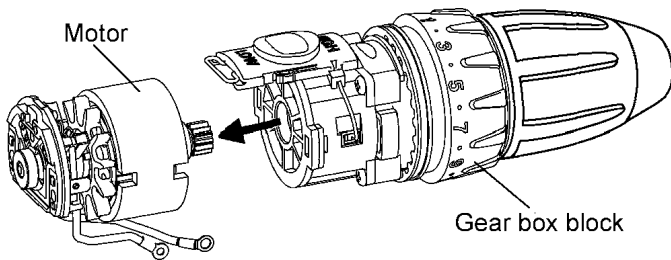


Fig. 5

Ref. No. 2C

Procedure 2A → 2B → 2C

Removal or attachment of the Gear Box Block.

(Removal)

1. Turn the thrust plate to remove.
2. The internal parts of gear box block can be removed one after another. (See Fig. 6)

(Attachment)

1. Start from inserting 6 pins into the driving block as shown in the Fig. 7.
2. Assemble the other parts in reverse order as shown in the Fig. 6.

NOTE :

Carriers and Ring Gears have their own correct directions for proper reassembly.

3. Insert 2 pieces of steel ball into each 6 holes of gear case.

4. Set clutch plate and clutch spring.

NOTE :

Clutch plate has its own correct direction for proper reassembly.

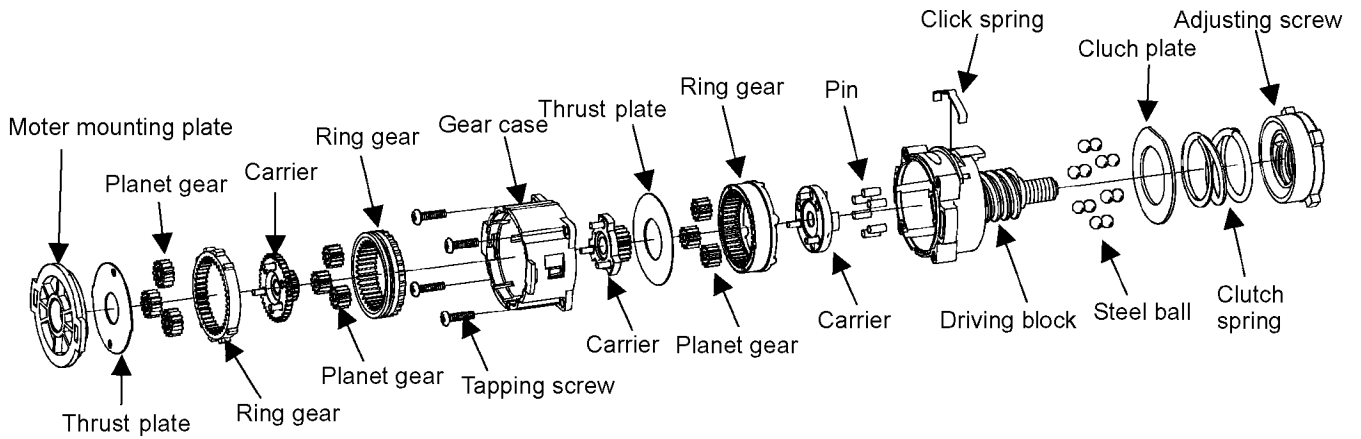


Fig. 6

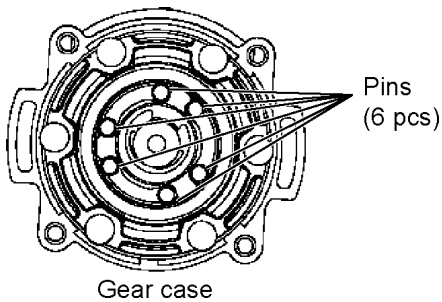
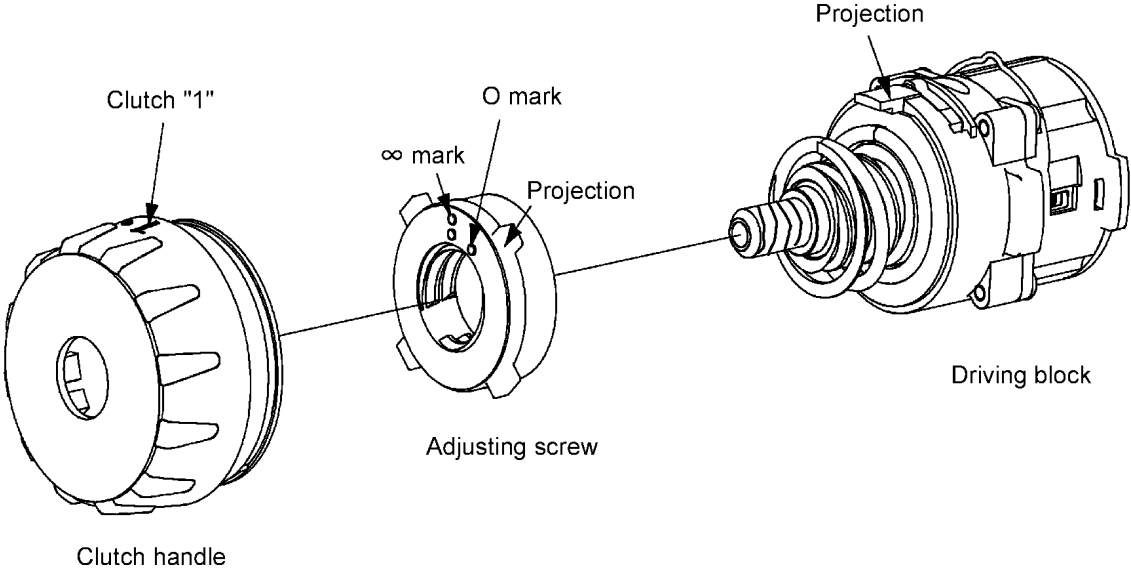
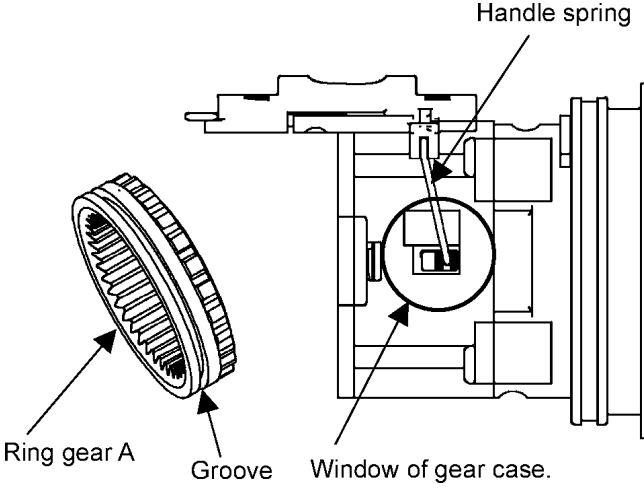


Fig. 7

Ref. No. 2D	Procedure 2A → 2B → 2C → 2D	Assembly of the Adjusting Screw and the Clutch Handle.
		<ol style="list-style-type: none"> 1. Align the O mark of adjusting screw with the projection (A) of driving block. 2. Turn the adjusting screw into the driving block about one rotation for clockwise direction. 3. Align the ∞ mark of adjusting screw with the projection (A) of driving block. 4. Set the clutch handle with position 1 on top. (Align the position 1 of clutch handle with the projection (A) of driving block.) 5. Insert the clutch handle with adjusting the tabs of adjusting screw to the groove of inside clutch handle.
		
Fig. 8		

Ref. No. 2E	Procedure 2A → 2B → 2C → 2D → 2E	Attachment of the H/L Change Handle.
		<ol style="list-style-type: none"> 1. Insert the both side of handle spring into the groove of Ring gear A.
		

Ref. No. 2F

Procedure 2A → 2B → 2C → 2D → 2E → 2F

Attachment of the Switch.

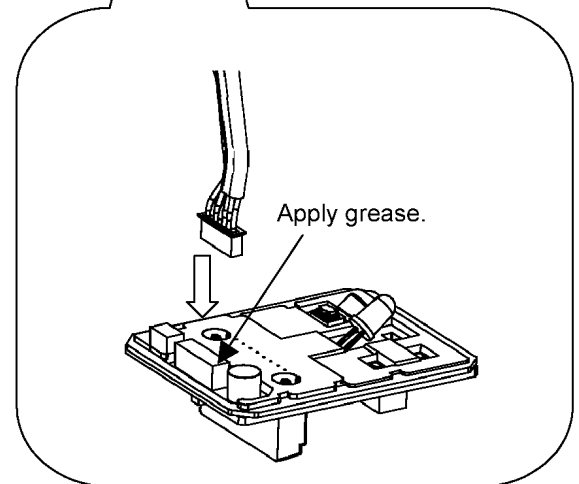
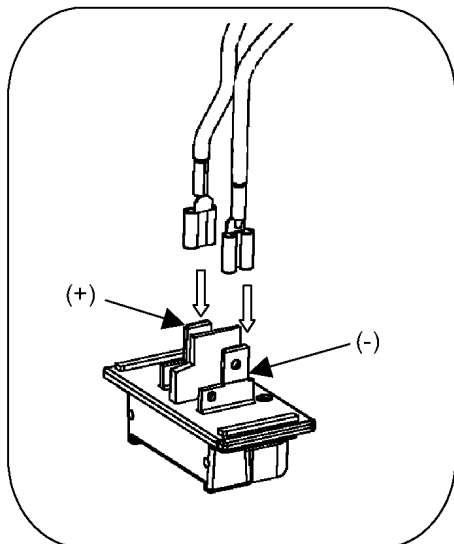
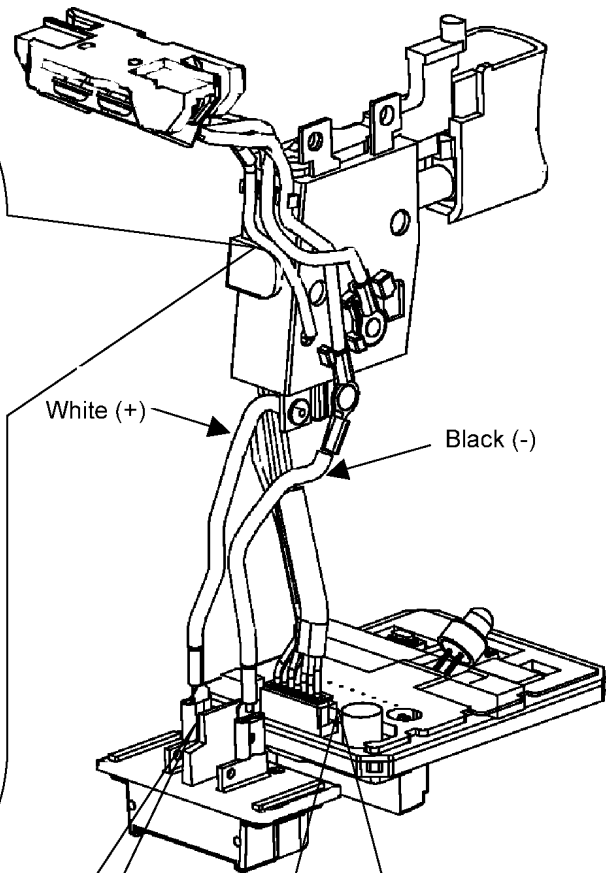
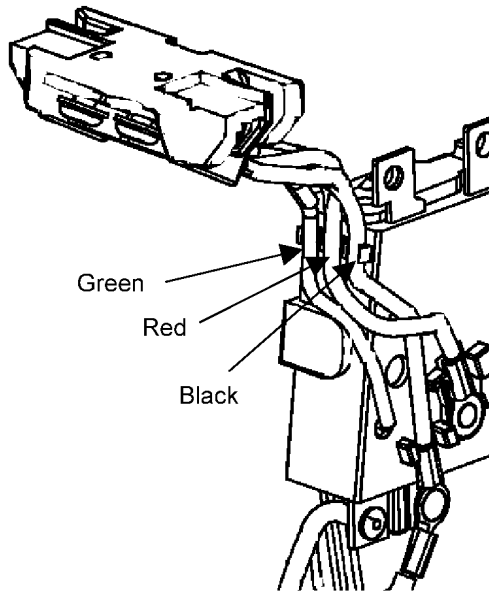
1. Insert the connectors into battery terminal and control PCB.

NOTE :

Do not connect (+) and (-) terminal wrongly.

Apply the grease (FLOIL) on the places where insert into the connectors.

Place the lead wires into the ribs firmly.



Ref. No. 2G

Procedure 2A → 2B → 2C → 2D → 2E → 2F → 2G

Attachment of the Housing.

1. Place the driving block onto the housing A and place the spring for release lever and the hook release lever.
2. Place the switch assembly, operation panel, click spring and F/R selector handle onto the housing A.

NOTE :

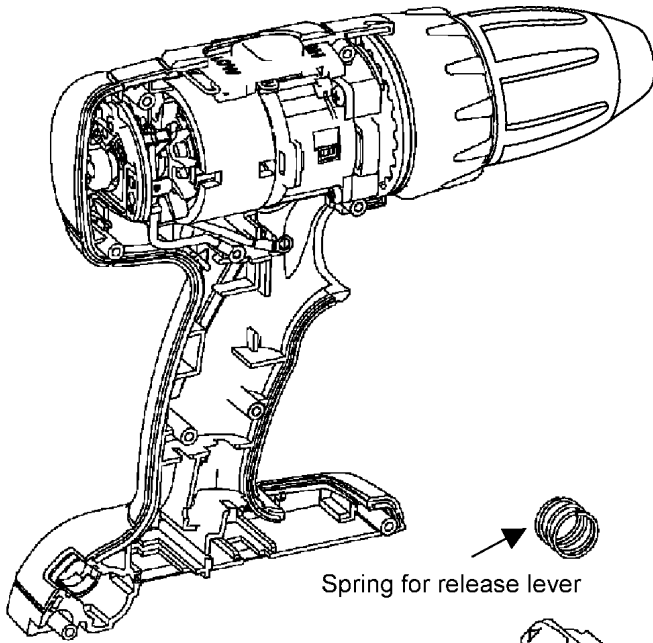
Make sure that the lead wires are pressed fit firmly.

3. Close the housing A and B with pushing the radiating plate on the direction of the arrow and tighten 8 housing screws.

NOTE :

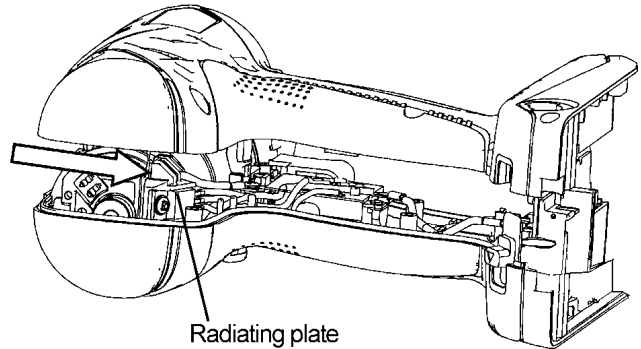
Confirm to set the radiating plate properly. If the radiating plate lean toward the motor brush side, the housing B can not be closed.

4. Place the H/L change handle into the rail properly.
5. Insert the belt hook into the housing and tighten with hook bolt.

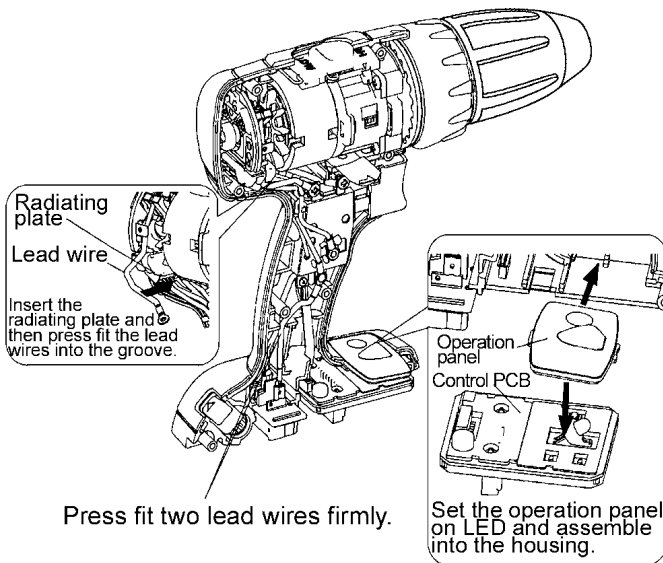


Spring for release lever

Hook release lever



Radiating plate



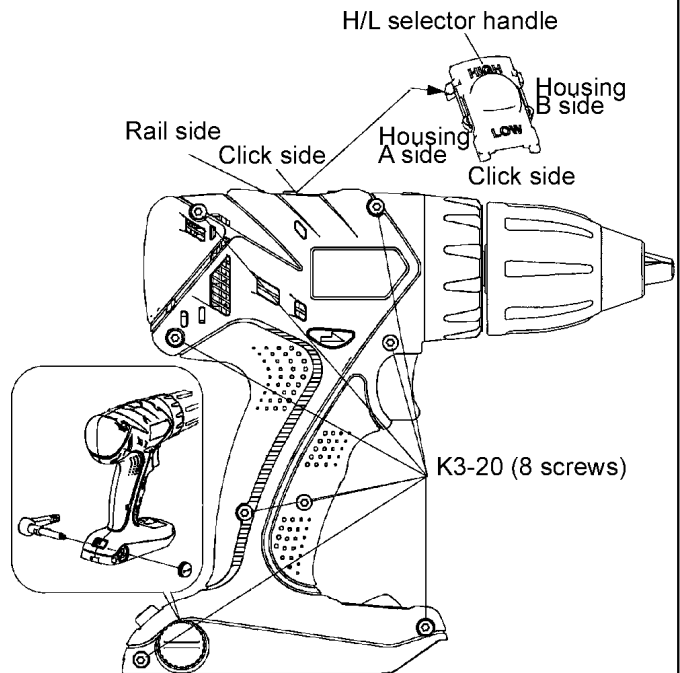
Radiating plate
Lead wire

Insert the radiating plate and then press fit the lead wires into the groove.

Operation panel
Control PCB

Set the operation panel on LED and assemble into the housing.

Press fit two lead wires firmly.



H/L selector handle

Rail side

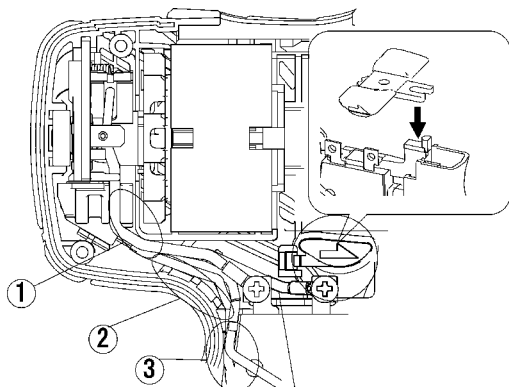
Click side

Housing A side

Housing B side

Click side

K3-20 (8 screws)

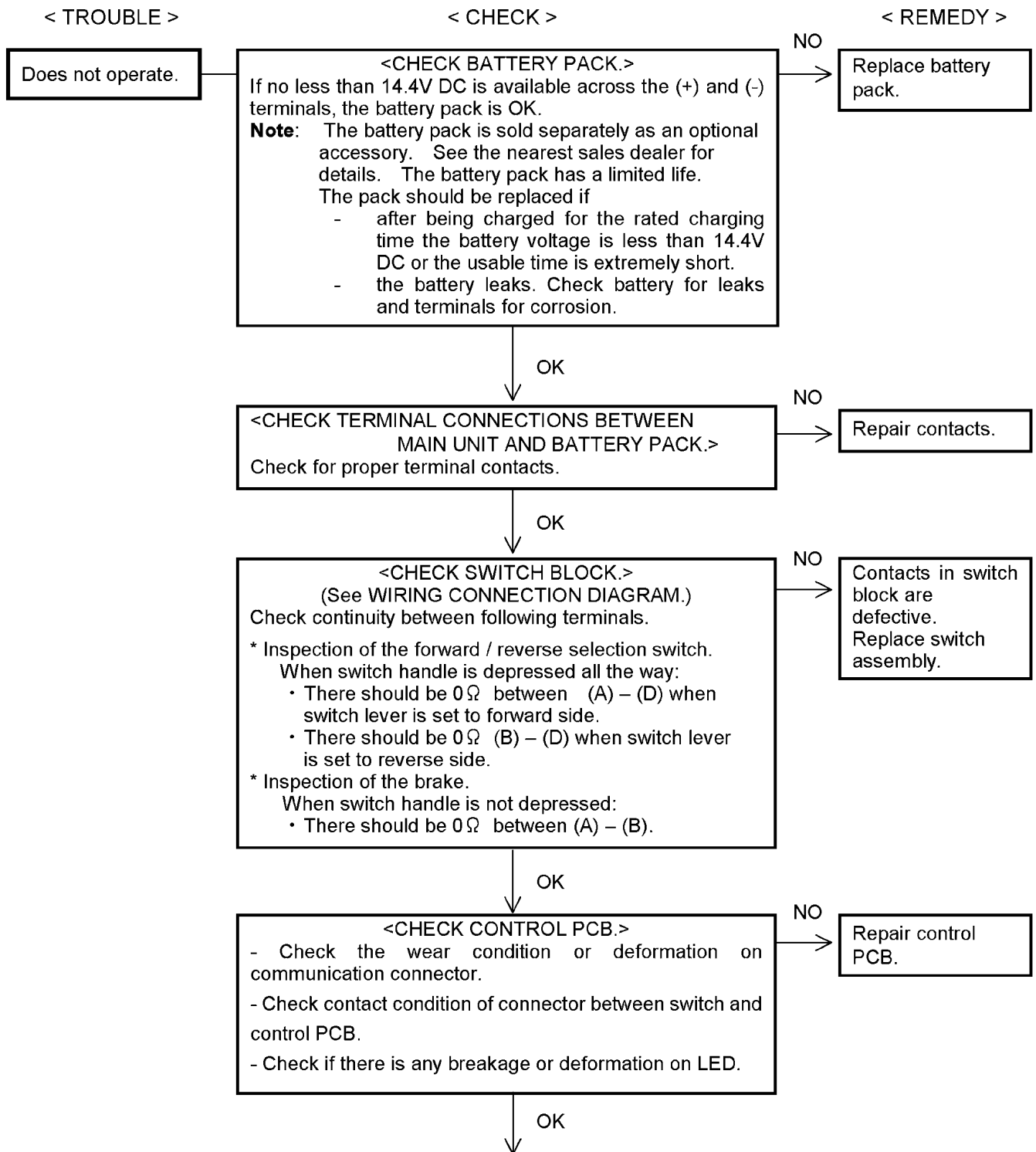


This lead wire should be set inside.

NOTE: Make sure no to pinch the lead wires.

4 TROUBLESHOOTING GUIDE

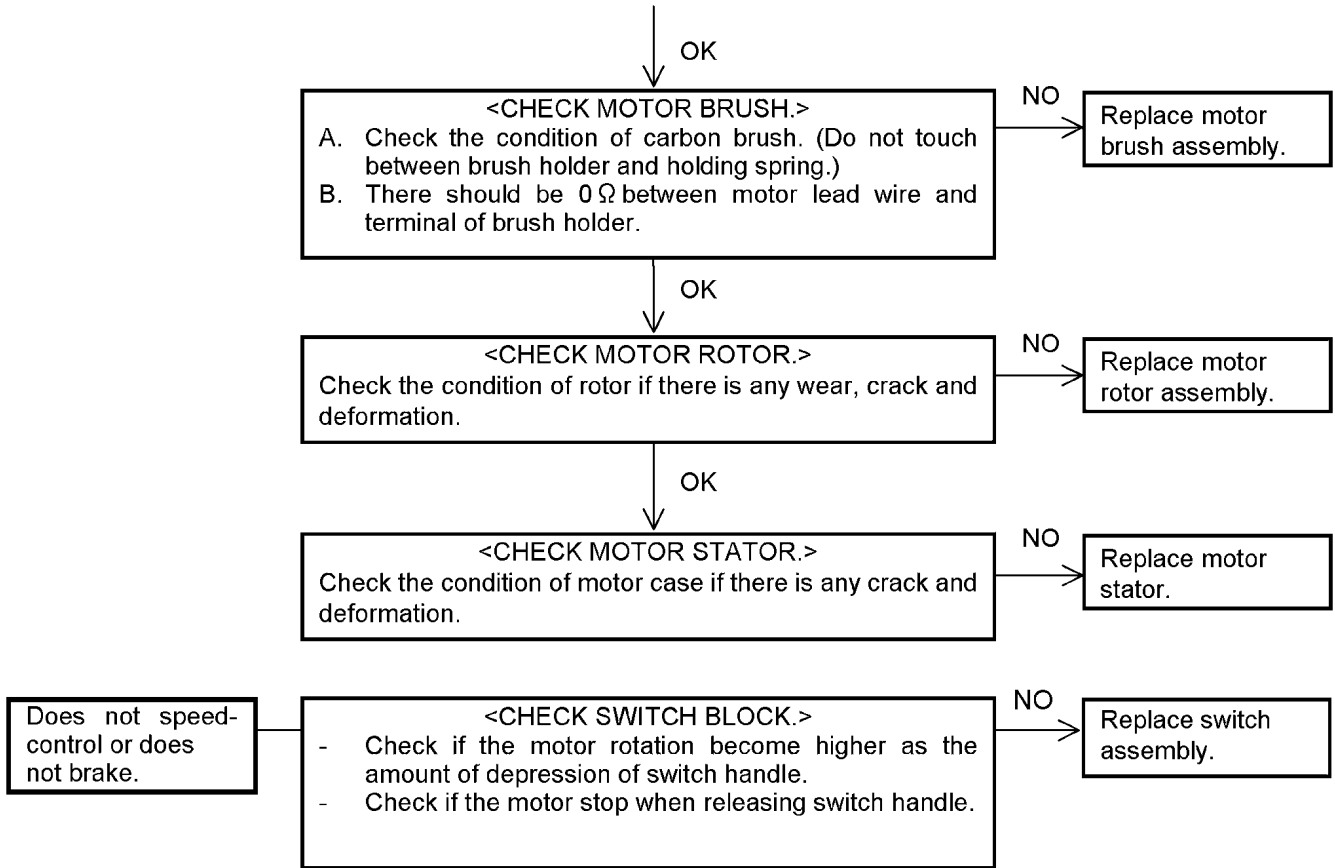
(Refer to WIRING CONNECTION DIAGRAM)



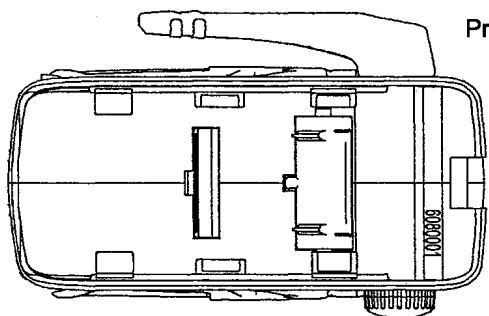
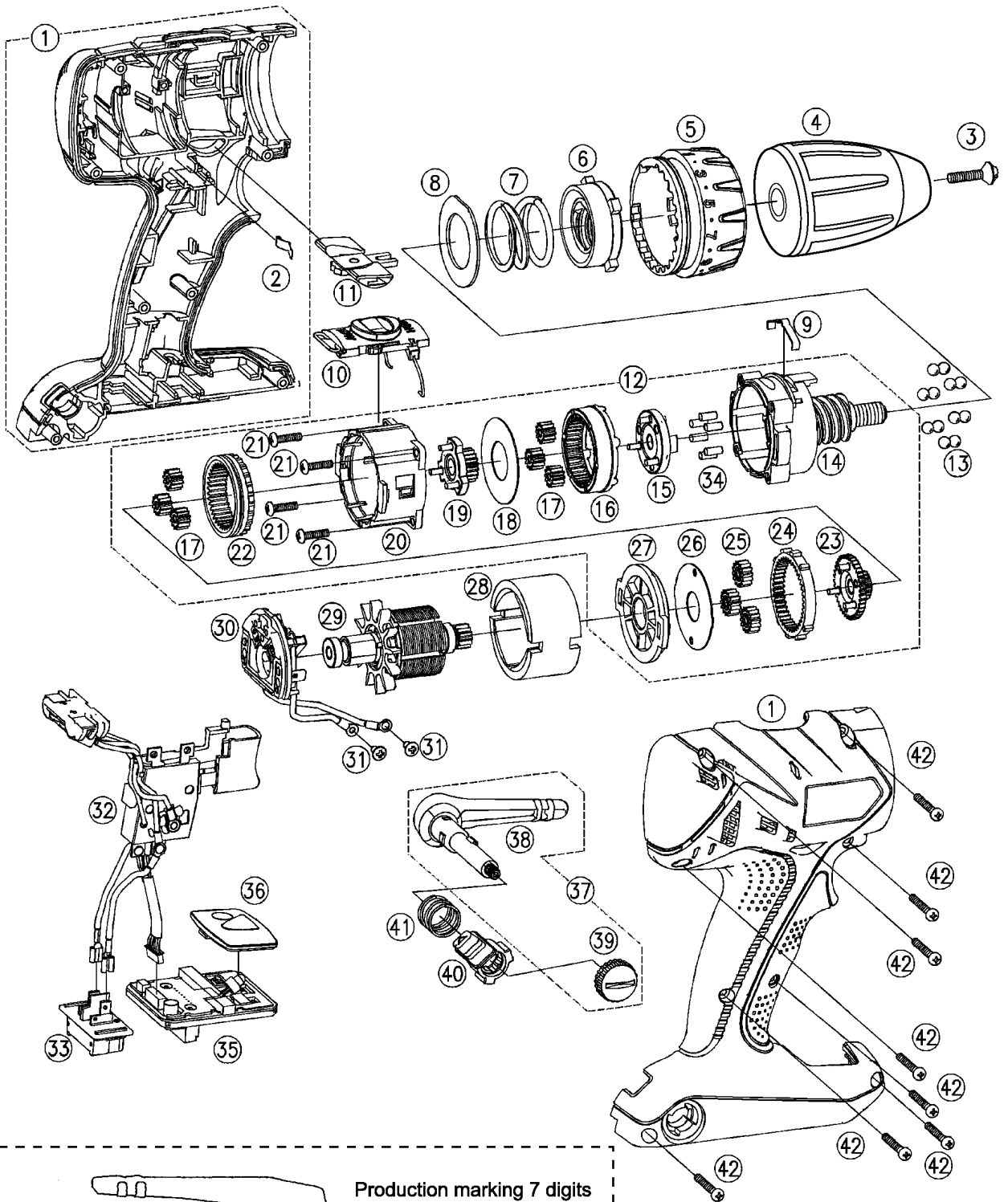
< TROUBLE >

< CHECK >

< REMEDY >



5 EXPLODED VIEW



Production marking 7 digits

6 08 0001

Serial No.
Month
Year (Last digits)

6 REPLACEMENT PARTS LIST

NOTE:

*B=only available as set

*C=available individually

Ref.No.	Part No.	Part Name & Description	Remarks		Per Unit
1	WEY7440K3079	HOUSING AB SET		for EUROPE	1
1	WEY7440K3070	HOUSING AB SET		for OCEANIA	1
2	WEY6481L0176	CLICK SPRING			1
3	WEYT103L6806	CHUCK FASTENING SCREW			1
4	WEY7440K7918	KEYLESS CHUCK		(SH)	1
5	WEY7440H3227	CLUTCH HANDLE			1
6	WEY7000L0637	ADJUSTING SCREW			1
7	WEY7000L0177	CLUTCH SPRING			1
8	WEY7000L0577	CLUTCH PLATE			1
9	WEYT107L0457	CLICK SPRING A			1
10	WEY7440H1557	H/L CHANGE HANDLE			1
11	WEY7440H3247	F/R SELECTOR HANDLE			1
12	WEY7440L1067	DRIVING BLOCK A			1
13	WEY7000L6967	STEEL BALL	*C	(12PCS/PK)	12
14	WEY7440L1087	DRIVING BLOCK			1
15	WEY7000L1137	CARRIER			1
16	WEY7440L1427	RING GEAR			1
17	WEY7000L1347	PLANET GEAR	*B	(3PCS/PK)	6
18	WEY7000L0857	THRUST PLATE			1
19	WEY7000L1117	CARRIER			1
20	WEY7440L1767	GEAR CASE			1
21	WEY508Ca9627	TAPPING SCREW	*C	K3-12	4
22	WEY7440L1457	RING GEAR A			1
23	WEY7000L1127	CARRIER B			1
24	WEY7000L1467	RING GEAR B			1
25	WEY7000L1367	PLANET GEAR B	*B	(3PCS/PK)	3
26	WEY7000L0887	THRUST PLATE			1
27	WEY7440L3967	MOTOR MOUNTING PLATE			1
28	WEY7440L1187	STATOR			1
29	WEY7440L1467	MOTOR ROTOR ASSEMBLY			1
30	WEY7440L2307	MOTOR BRUSH ASSEMBLY			1
31	WEY6802S6187	SCREW	*C	B3-5	2
32	WEY7440L2007	SWITCH ASSEMBLY		(SH)	1
33	WEY7540L2157	BATTERY TERMINAL BLOCK			1
34	WEY6705L0376	ROLLER SET	*B	(6PCS/PK)	6
35	WEY7440L2117	CONTROL PCB			1
36	WEY7440K3958	OPERATION PANEL			1
37	WEY7540K3217	BELT HOOK SET			1
38	WEY7540K3187	BELT HOOK			1
39	WEY6470K3186	BELT HOOK BOLT			1
40	WEY7540H0407	HOOK RELEASE LEVER			1
41	WEY7540L0167	SPRING FOR RELEASE LEVER			1
42	WEY7440K9038	TAPPING SCREW	*C	K3*20	8
-	WEY9633K7018	TOOL CASE		(SH)	1
-	WEY7440K8109	OPERATING INSTRUCTIONS		(SH)	1

**Battery Pack is available as an optional accessory. See the nearest sales dealer for details.

***For replacement parts of charger, see the charger service manual.

Charger complete set is available as an optional accessory. See the nearest sales dealer for details.