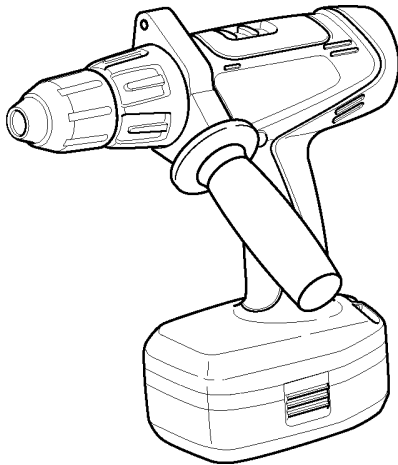


Service Manual


Cordless Drill & Driver

EY6450-X8



SPECIFICATIONS

MAIN UNIT

Motor		DC Motor 18V
No load speed	LOW	70-430/min (rpm)
	HIGH	240-1500/min (rpm)
Chuck capacity		ϕ 0.5 – ϕ 13mm (0 – 1/2")
Chuck stage	Stage 1-15	Approx. 2Nm (20kgf-cm, 18in-lbs.) - 12Nm (122kgf-cm, 106in-lbs.)
		For powerful driving and drilling.
Overall length		250mm (9-13/16")
Weight (with battery pack)		2.6kg (5.7lbs.)

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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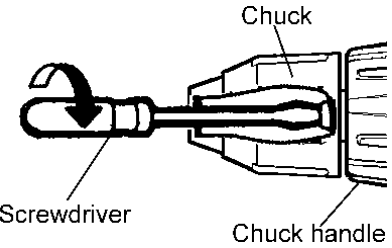
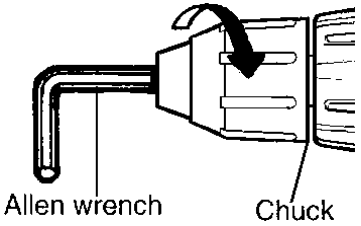
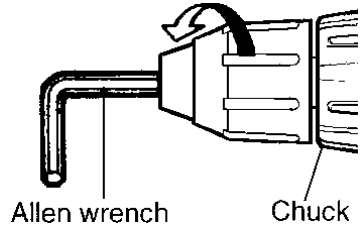
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Panasonic

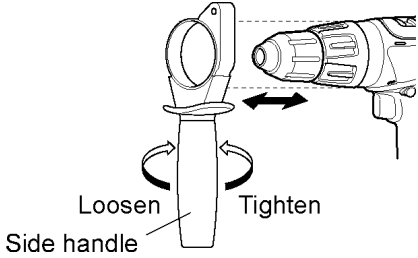
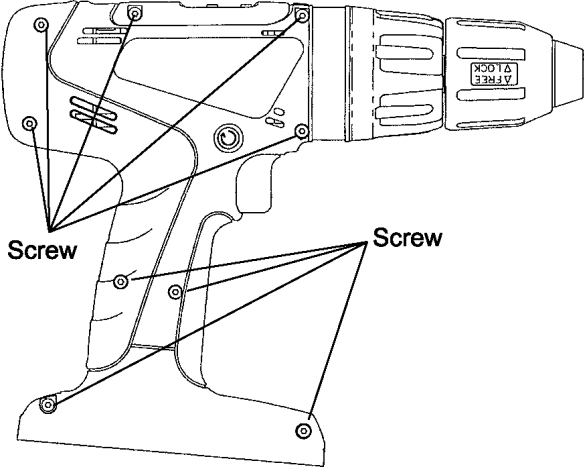
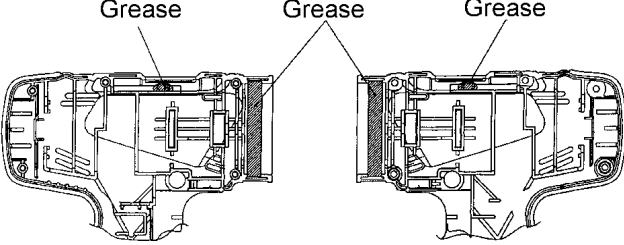
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3 DISASSEMBLY/ASSEMBLY INSTRUCTIONS

■HOW TO DISASSEMBLE KEYLESS CHUCK.

Ref. No. 1A	Procedure 1A	Removal of the Keyless Drill Chuck.
	 <p data-bbox="464 577 520 607">Fig. 1</p>  <p data-bbox="464 887 520 916">Fig. 2</p>  <p data-bbox="464 1198 520 1227">Fig. 3</p>	<p data-bbox="850 239 1268 264">Removal of the Keyless Drill Chuck.</p> <ol data-bbox="850 273 1513 414" style="list-style-type: none"> 1. Set the clutch handle to position 1 and select "LOW" position. 2. Turn the lock collar counterclockwise direction 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="850 416 938 445">NOTE :</p> <p data-bbox="887 443 1489 539">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> <ol data-bbox="850 548 1513 622" style="list-style-type: none"> 4. 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)

■HOW TO DISASSEMBLE MAIN UNIT.

Ref. No. 2A	Procedure 2A	Removal of the Housing.
	 <p data-bbox="405 555 459 584">Fig. 4</p>  <p data-bbox="405 1111 459 1140">Fig. 5</p>	<p data-bbox="791 208 1078 237">Removal of the Housing.</p> <ol data-bbox="791 244 1230 293" style="list-style-type: none"> 1. Remove the side handle. (See Fig. 4) 2. Remove nine housing screws. (See Fig. 5) <p data-bbox="791 315 874 344">NOTE :</p> <p data-bbox="831 338 1445 387">Grease rubbing part of housing with Shell Alvania for assembly. (See Fig. 6)</p>  <p data-bbox="1098 680 1152 710">Fig. 6</p>
Ref. No. 2B	Procedure 2A → 2B	<p data-bbox="783 1189 1203 1218">Removal or attachment of the Motor.</p> <p data-bbox="783 1225 874 1254">(Removal)</p> <ol data-bbox="783 1247 1433 1319" style="list-style-type: none"> 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. (See Fig. 7) <p data-bbox="783 1341 900 1370">(Attachment)</p> <ol data-bbox="783 1364 1426 1413" style="list-style-type: none"> 3. Motor mounting base and the positioning rib of gear case should be set.

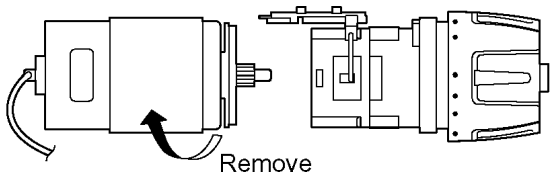


Fig. 7

Ref. No. 2C

Procedure 2A → 2B → 2C

Removal or attachment of the Gear Box Block.

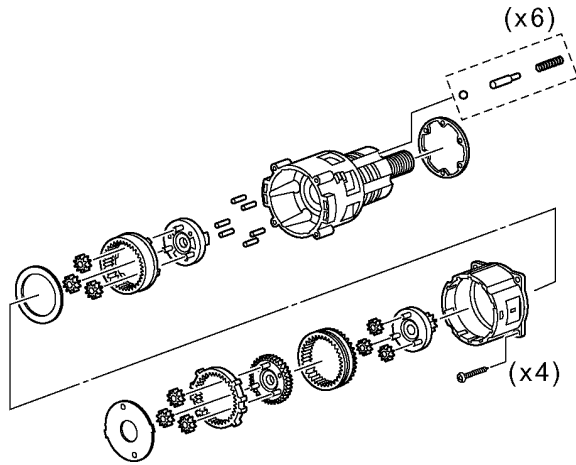


Fig. 8

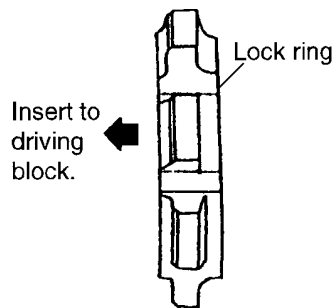
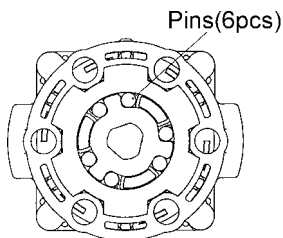


Fig. 9



Driving block

Fig. 10

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. 8)

(Attachment)

1. If the lock ring comes out, reassemble in the correct direction. (See Fig. 9)
2. Start from inserting 6 pins into the driving block as shown in the Fig. 10.
3. Assemble the other parts in reverse order as shown in the Fig. 8.
4. Install steel balls, pins and clutch springs into 6 holes. (See Fig. 11)

NOTE :

Carrier, Ring gear, and Clutch plate have their own correct directions for proper assembly.

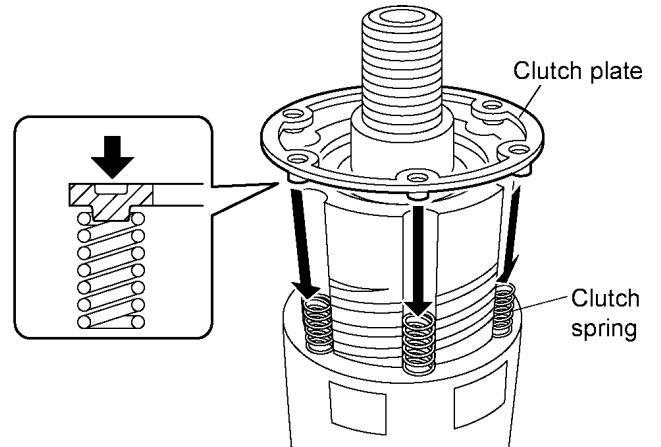
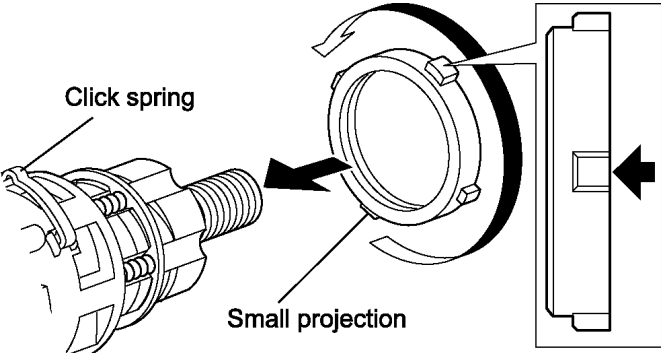
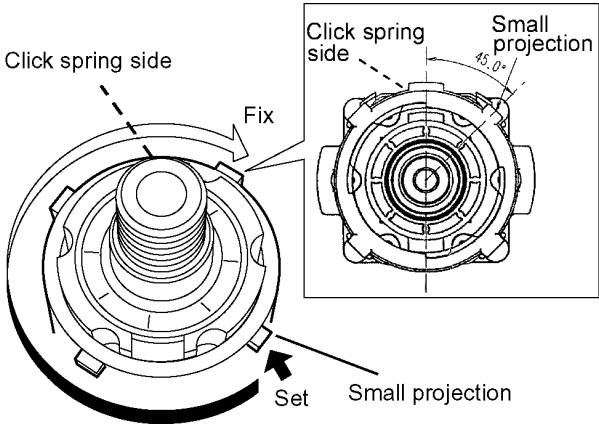
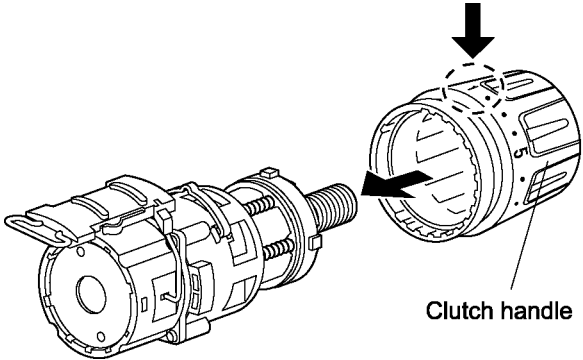
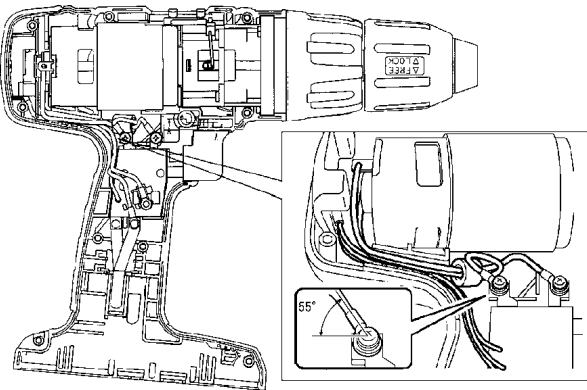


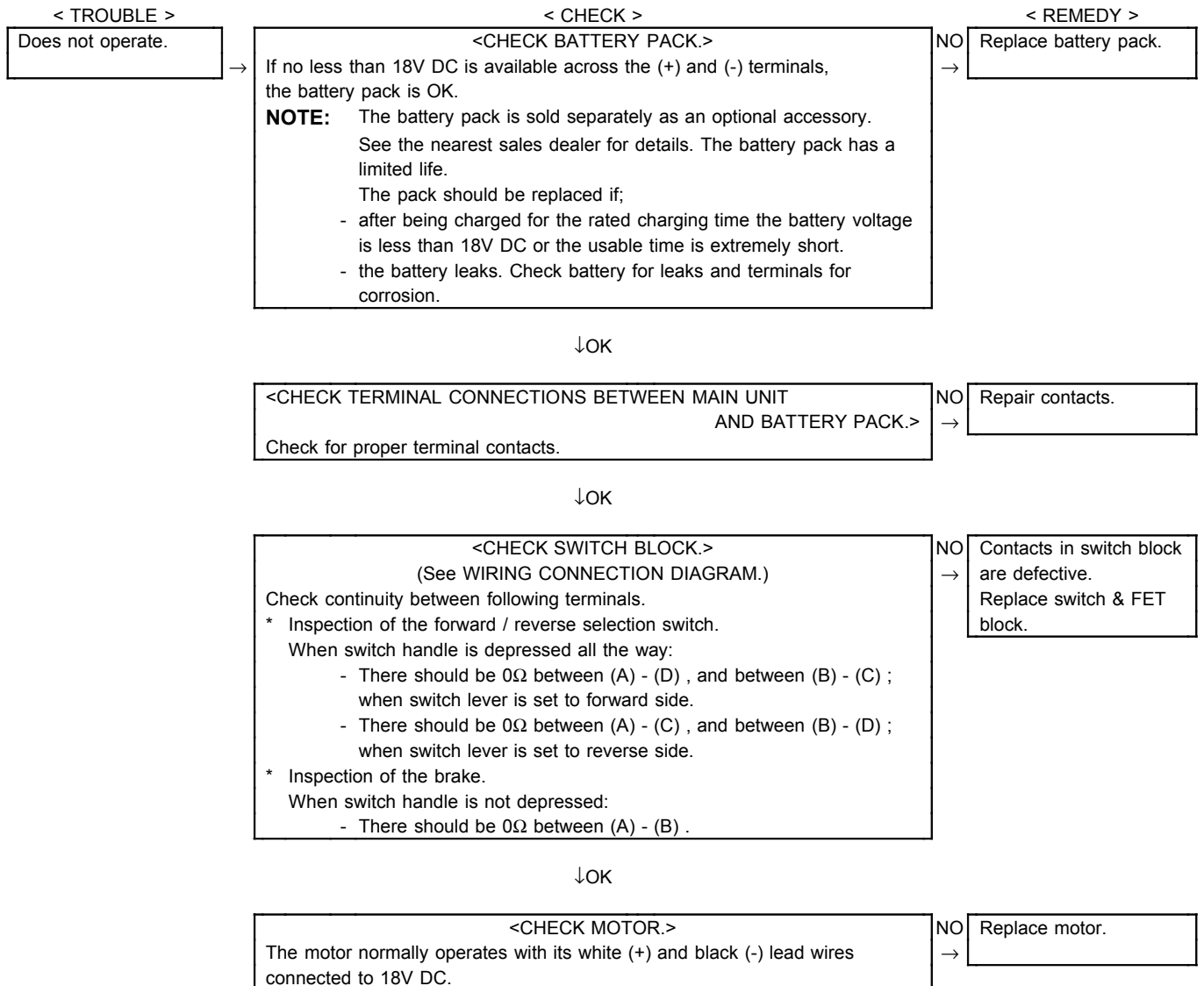
Fig. 11

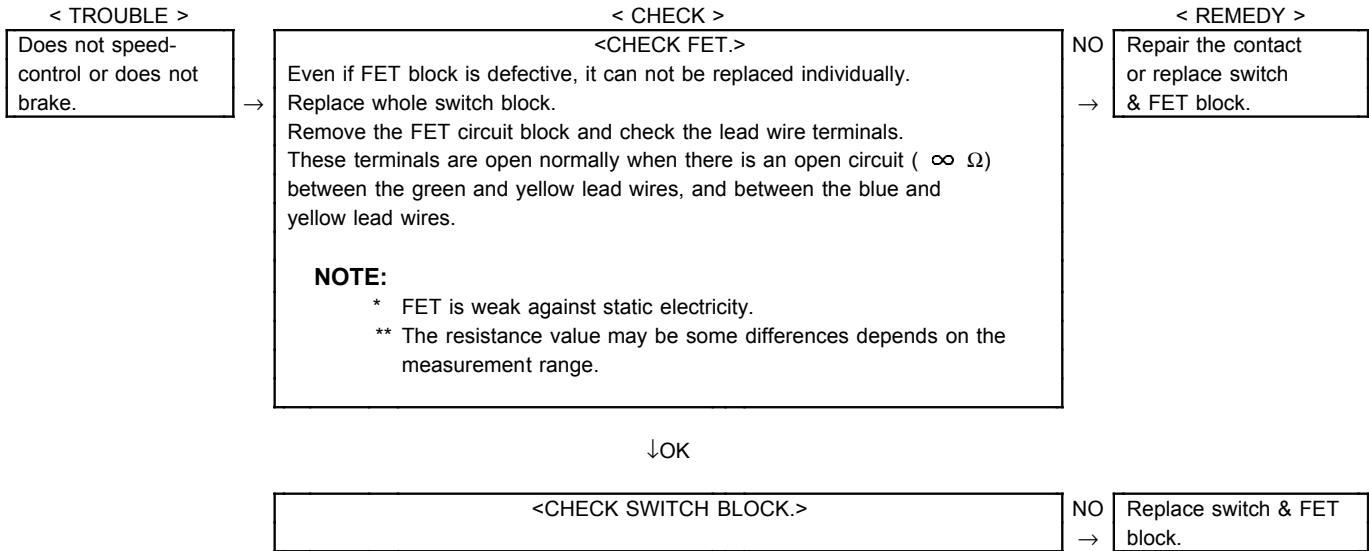
Ref.No.2D	Procedure 2A → 2B → 2C → 2D	Assembly of the Adjusting Screw and the Clutch Handle.
 <p data-bbox="403 573 472 600">Fig. 12</p>  <p data-bbox="403 1099 472 1126">Fig. 13</p>		<p data-bbox="799 165 1465 235">1. Hold the driving block with the click spring on top, and align the smallest projection of adjusting screw with the driving block at 5 o'clock position.</p> <p data-bbox="799 237 879 264">NOTE:</p> <p data-bbox="836 266 1465 336">Make sure that the adjusting screw has its own correct direction for proper assembly. Failure to do so, the clutch handle does not rotate properly. (See Fig. 12)</p> <p data-bbox="799 338 1465 407">2. Turn the adjusting screw into the driving block about 255° rotation (to 2 o'clock position) for clockwise direction. (See Fig. 13)</p> <p data-bbox="799 409 1385 436">3. Set the clutch handle with position 1 on top. (See Fig. 14)</p>  <p data-bbox="1098 860 1166 887">Fig. 14</p>

Ref.No.2E	Procedure 2A → 2B → 2C → 2D → 2E	Assembly of the Switch.
 <p data-bbox="403 1637 472 1664">Fig. 15</p>		<p data-bbox="799 1173 1086 1202">Assembly of the Switch.</p> <p data-bbox="799 1209 1465 1236">1. Press fit the lead wires firmly and set the black lead wire on top.</p> <p data-bbox="799 1238 1465 1285">2. Connect the switch with the white and black lead wire at 55° position. (See Fig. 15).</p>

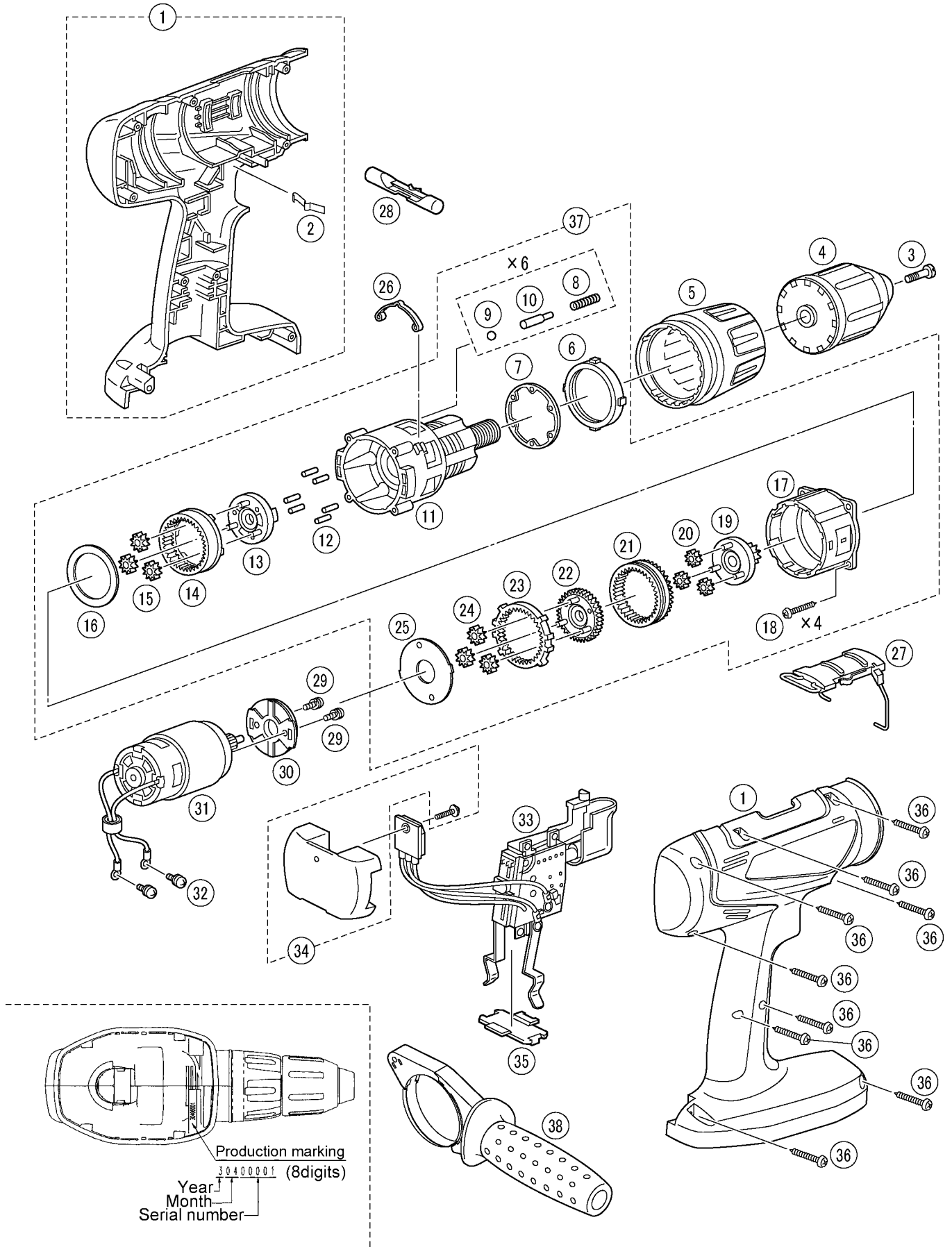
4 TROUBLESHOOTING GUIDE

(Refer to WIRING CONNECTION DIAGRAM)





5 EXPLODED VIEW



6 REPLACEMENT PARTS LIST

NOTE:

*B=only available as set

*C=available individually

Ref.No.	Part No.	Part Name & Description	Remarks		Per Unit
1	WEY6450K3079	HOUSING AB SET	for EUROPE	▲	1
1	WEY6450K3070	HOUSING AB SET	for OCEANIA	▲	1
2	WEY6481L0177	CLICK SPRING			1
3	WEY6450L6808	CHUCK FASTENING SCREW		▲	1
4	WEY6450K7918	KEYLESS CHUCK		▲	1
5	WEY6450Y3228	CLUTCH HANDLE		▲	1
6	WEY6450L0638	ADJUSTING SCREW		▲	1
7	WEY6450L0578	CLUTCH PLATE		▲	1
8	WEY6450L0168	CLUTCH SPRING	(6pcs/PK)	▲	6
9	WEY6813L1927	STEEL BALL	(6pcs/PK) Ø 5	▲	6
10	WEY6450L0388	PIN	(6pcs/PK) Ø 5.3*20.3	▲	6
11	WEY6450L1078	DRIVING BLOCK		▲	1
12	WEY6283L0377	PIN	(6pcs/PK) Ø 3.175*7.2		6
13	WEY6901L1107	CARRIER			1
14	WEY6450L1488	RING GEAR		▲	1
15	WEY6450L1348	PLANET GEAR	(3pcs/PK)	▲	3
16	WEY6450L0858	THRUST PLATE		▲	1
17	WEY6450L1768	GEAR CASE		▲	1
18	WEY6406K9038	TORX TAPPING SCREW	*C K3-12	▲	4
19	WEY6450L1128	CARRIER A		▲	1
20	WEY6450L1358	PLANET GEAR A	(3pcs/PK)	▲	3
21	WEY6200B1468	RING GEAR B		▲	1
22	WEY6450L1118	CARRIER		▲	1
23	WEY6450L1478	RING GEAR		▲	1
24	WEY6200B1367	PLANET GEAR	(3pcs/PK)		3
25	WEY6450L0868	THRUST PLATE		▲	1
26	WEY6450L0178	CLICK SPRING A		▲	1
27	WEY6406Y3238	H/L CHANGE HANDLE		▲	1
28	WEY6405Y3248	F/R SELECTOR HANDLE		▲	1
29	WEYT184L6077	SCREW	*C K4-6		2
30	WEY6450L0028	MOTOR MOUNTING PLATE		▲	1
31	WEY6450L1009	DC MOTOR		▲	1
32	WEY6450S6028	SEMS SCREW	*C K3-5	▲	2
33	WEY6450Y2008	SWITCH		▲	1
34	WEY6406L2568	HEAT SINK	with a screw	▲	1
35	WEY6230L0207	DUST PREVENTIVE PLATE		▲	1
36	WEY6230K9218	TORX TAPPING SCREW	*C K3-20	▲	9
37	WEY6450L1458	GEAR BOX BLOCK		▲	1
38	WEY6450K4628	SIDE HANDLE		▲	1
-	WEY9517K7018	TOOL CASE		▲	1
-	WEY6450K8109	OPERATING INSTRUCTIONS		▲	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.