Service Manual

Cordless Drill & Driver

EY6105-U1



SPECIFICATIONS

MAIN UNIT

Motor		DC Motor 12V		
No load speed	LOW	45 ~ 300/min (rpm)		
	HIGH	165 ~ 1100/min (rpm)		
Chuck capacity		φ 0.8 ~ 1.0mm (0 ~ 3/8")		
Maximum torque	LOW	19.6Nm (200kgf-cm)		
	HIGH	5.9Nm (60kgf-cm)		
Clutch torque	Stage 1-18	Approx. 0.5Nm (5kgf-cm, 4.3in-lbs.) – 4.4Nm (45kgf-cm, 39.0in-lbs.)		
	K 02	For powerful driving and drilling		
Overall length		199mm (7-13/16")		
Weight (with battery pack)		1.4kg (3.1lbs.) with EY9005		

⚠ 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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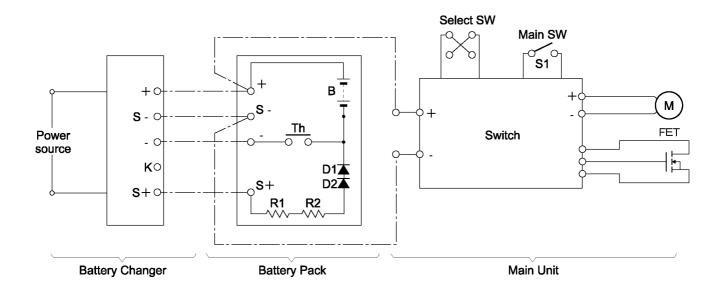
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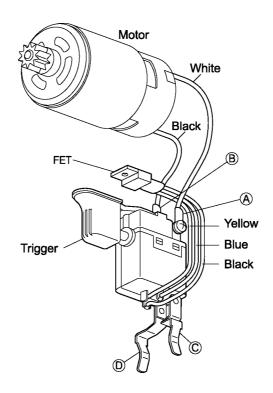
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EY6105-U1

1 SCHEMATIC DIAGRAM

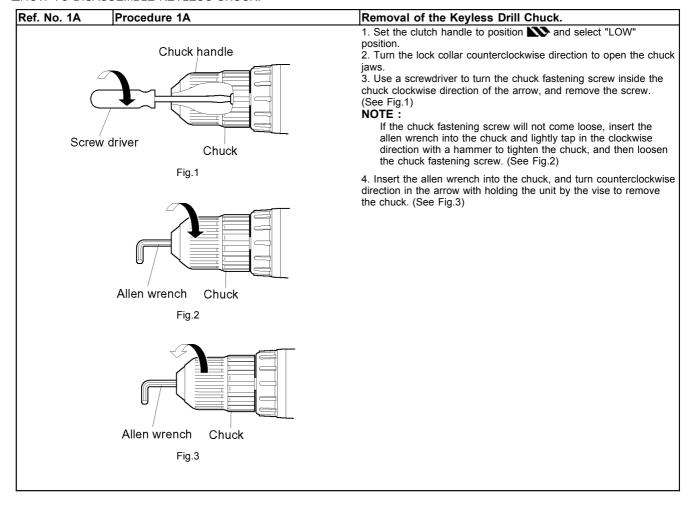


2 WIRING CONNECTION DIAGRAM

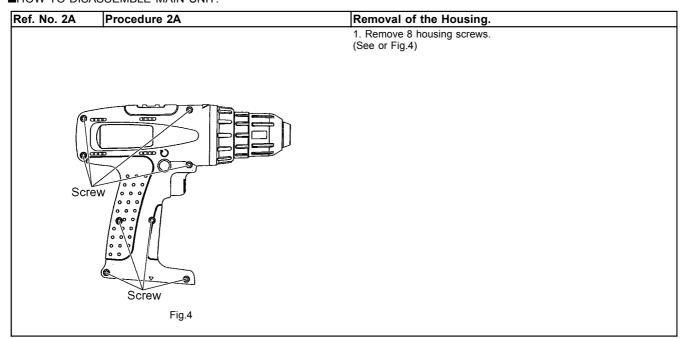


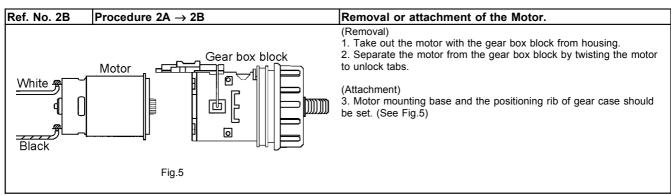
3 DISASSEMBLY/ASSEMBLY INSTRUCTIONS

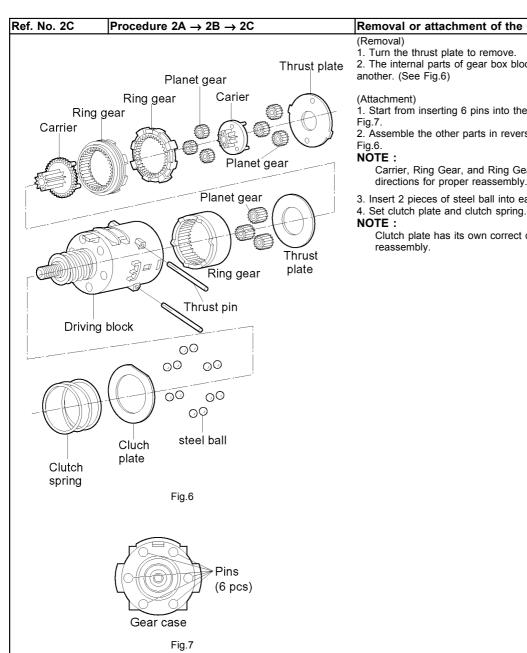
■HOW TO DISASSEMBLE KEYLESS CHUCK.



■HOW TO DISASSEMBLE MAIN UNIT.







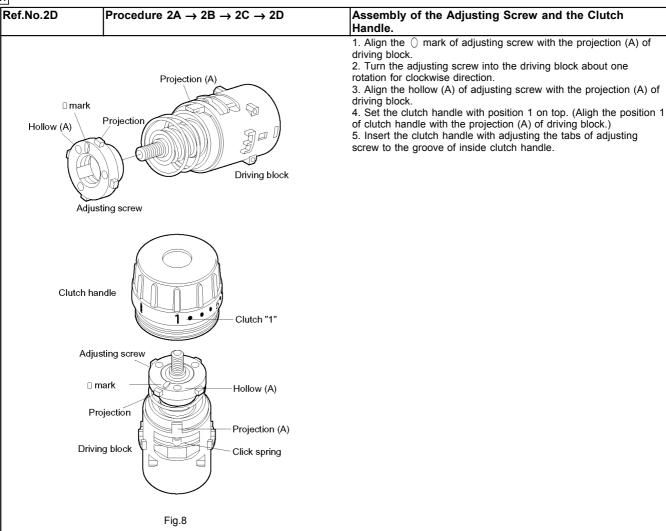
Removal or attachment of the Gear Box Block.

- 1. Turn the thrust plate to remove.
- 2. The internal parts of gear box block can be removed one after
- (Attachment)
 1. Start from inserting 6 pins into the driving block as shown in the
- 2. Assemble the other parts in reverse order as shown in the

Carrier, Ring Gear, and Ring Gear A have their own correct directions for proper reassembly.

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

Clutch plate has its own correct direction for proper



4 TROUBLESHOOTING GUIDE

(Refer to WIRING CONNECTION DIAGRAM)

< TROUBLE >

< CHECK >

< REMEDY > Replace battery pack.

NO

Does not operate.

<CHECK BATTERY PACK.>
If no less than 12V DC is available across the (+) and (-) terminals,

the battery pack is OK.

NOTE: The battery pack is sold separately as an optional accessory.

See the nearest sales dealer for details. The battery pack has a limited life.

The pack should be replaced if;

- after being charged for the rated charging time the battery voltage is less than 12V DC or the usable time is extremely short.
- the battery leaks. Check battery for leaks and terminals for corrosion.

↓OK

<CHECK TERMINAL CONNECTIONS BETWEEN MAIN UNIT

AND BATTERY PACK.>

NO Repair contacts.

Check for proper terminal contacts.

↓OK

<CHECK SWITCH BLOCK.>

(See .WIRING CONNECTION DIAGRAM.)

Check continuity between following terminals.

* Inspection of the forward / reverse selection switch.

When switch handle is depressed all the way:

- There should be 0Ω between (A) (D) , and between (B) (C) ; when switch lever is set to forward side.
- There should be 0Ω between (A) (D) , and between (B) (C) ; when switch lever is set to foward side.
- * Inspection of the brake.

When switch handle is not depressed:

- There should be 0Ω between (A) - (B)

NO Contacts in switch block are defective.

Replace switch & FET block.

↓OK

<CHECK MOTOR.>

It is OK if motor rotates $22,200 \pm 2,800$ rpm with no-load operation and no-load current is 2.6A or less when connecting 12V DC between white (+) and black (-) lead wires.

NOTE: It is OK if motor rotates slowly when connecting 3V DC between white and black lead wires.

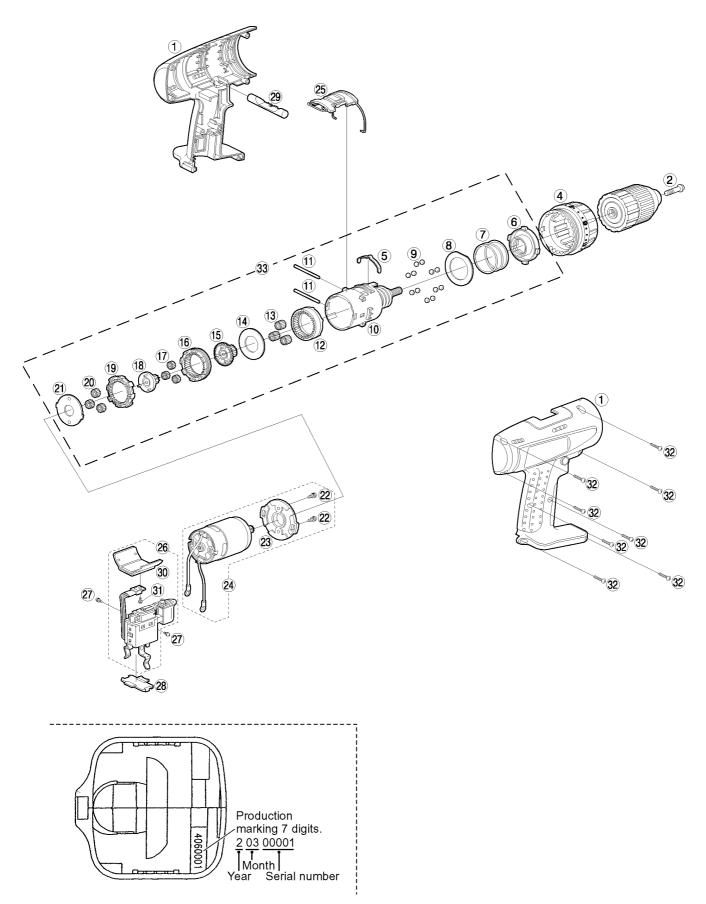
NO Replace motor.

Does not speedcontrol or does not brake. <CHECK FET.>

Even if FET block is defective, it can not be replaced individually. Replace whole switch block.

NO Repair the contact or replace switch & FET block.

5 EXPLODED VIEW



6 REPLACEMENT PARTS LIST

NOTE:

*B=only available as set

*C=available individually

Ref.No.	Part No.	Part Name & Descriptions		Remarks		
1	WEY6105K3078	HOUSING AB SET			A	1
2	EYT103L6807	CHUCK FASTENING SCREW			A	1
4	EY6406Y3228	CLUTCH HANDLE			A	1
5	WEYT107L0457	CLICK SPRING A			A	1
6	WEYT107L0637	ADJUSTING SCREW			A	1
7	WEYT107L0167	CLUTCH SPRING			A	1
8	EY6406L0578	CLUTCH PLATE			A	1
9	WEY7000L6967	STEEL BALL	*B	Ф 5 (12pcs/PK)	A	12
10	WEYT107L1067	DRIVING BLOCK			A	1
11	EY6481L0357	THRUST PIN SET	*C	Ф 2.5*33.6		2
12	WEY6105L1468	RING GEAR			A	1
13	WEY6105L1368	PLANET GEAR B	*B	(3pcs/PK)	A	3
14	EY6200B0857	THRUST PLATE				1
15	WEYT104L1357	CARRIER B			A	1
16	WEY6481L1458	RING GEAR A			A	1
17	WEYT107L1357	PLANET GEAR	*B	(3pcs/PK)	A	3
18	WEYT104L1107	CARRIER A			A	1
19	EY6101L1477	RING GEAR B				1
20	WEY6105L1378	PLANET GEAR A	*B	(3pcs/PK)	A	3
21	EY6481L0887	THRUST PLATE				1
22	EY6230L6027	SCREW	*C	K3-6		2
23	WEYT104L0027	MOTOR MOUNTING PLATE			A	1
24	WEY6105L1008	DC MOTOR			A	1
25	WEYT107Y3237	H/L CHANGE HANDLE			A	1
26	WEYT107Y2007	SWITCH			A	1
27	EY6230L6037	SCREW	*C	K3*5		2
28	EY6481L0207	DUST PREVENTIVE PLATE				1
29	WEYT602Y3247	F/R SELECTOR HANDLE			A	1
30	WEYT107L2567	HEAT SINK			A	1
31	WEY6403L6007	TAPPING SCREW		2.6*5	A	1
32	WEY6105K9038	TORX TAPPING SCREW	*C	K3*18	A	8
33	WEY6105L1458	GEAR BOX BLOCK			A	1
-	WEY6405K7018	TOOL CASE			A	1
	WEY6105K8108	OPERATING INSTRUCTIONS			A	1

^{**}Battery Pack, and Keyless Chuck are 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.