Service Manual

Cordless Impact Driver

EY7201-U1



SPECIFICATIONS

MAIN UNIT

MAIN ON I			
Motor	DC Motor 12V		
No load aroad	soft impact mode : 0-2200/min (rpm)		
No load speed	hard impact mode : 0-2600/min (rpm)		
Maximum torque	soft impact mode: 80.0Nm (820kgf-cm, 711in-lbs.)		
	hard impact mode : 120.0Nm (1220kgf-cm, 1060in-lbs.)		
	soft impact mode : 0-2100 ipm in Impact Mode		
Impact per minute	hard impact mode : 0-2800 ipm in Impact Mode		
Overall length	164mm (6-7/16")		
Weight (with battery pack)	1.8kg (3.9lbs.)		

⚠ 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.

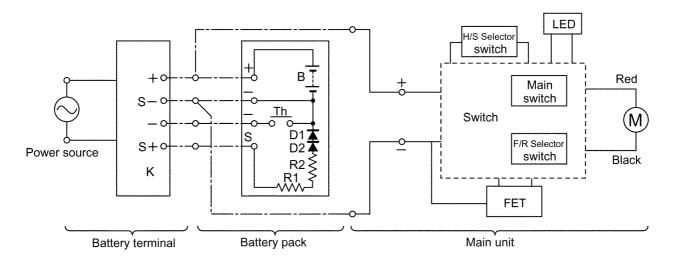
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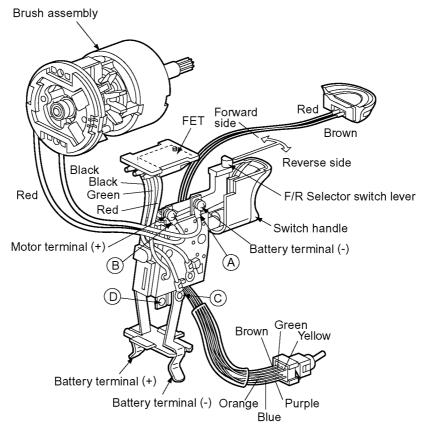
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1 SCHEMATIC DIAGRAM

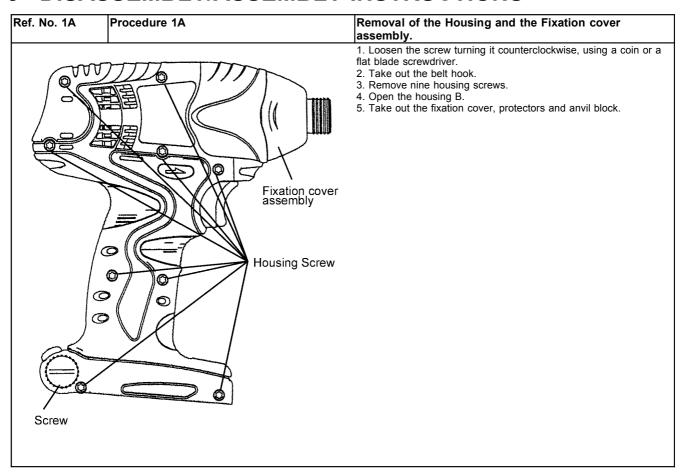


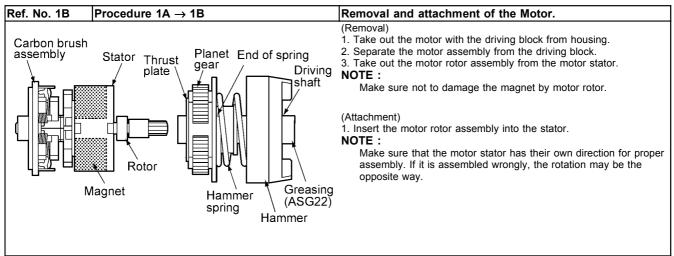
2 WIRING CONNECTION DIAGRAM

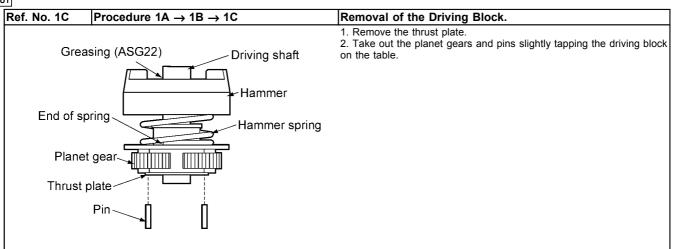


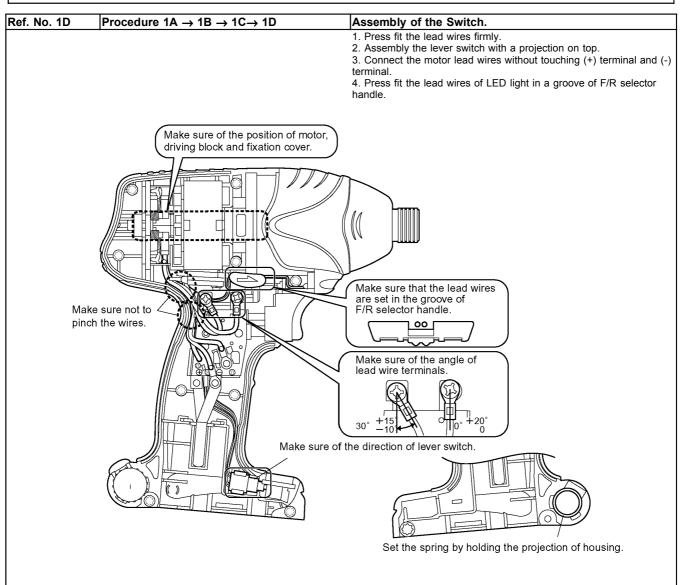
Switch with FET

3 DISASSEMBLY/ASSEMBLY INSTRUCTIONS









TROUBLESHOOTING GUIDE

(Refer to WIRING CONNECTION DIAGRAM)

< TROUBLE > < CHECK > Does not operate.

NOTE:

<CHECK BATTERY PACK.>

If no less than 12V DC is available across the (+) and (-) terminals, the battery pack is OK.

> 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.

< REMEDY >

Replace battery pack.

NO

Check for proper terminal contacts

↓ok

<CHECK SWITCH BLOCK.>

(See WIRING CONNECTION DIAGRAM.)

Check continuity between following terminals.

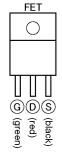
Inspection of the forward / reverse selection switch.

When switch handle is depressed all the way:

- There should be 0Ω between (B) (D) , when switch lever is set to forward side.
- There should be 0Ω between (A) (D), when switch lever is set to reverse side.

Contacts in switch block are defective.

Replace switch & FET block.



↓ok

<CHECK MOTOR BRUSH.>

- Check the condition of carbon brush. (Do not touch between brush holder and holding spring.)
- There should be 0Ω between motor lead wire and terminal of brush holder

Replace motor

brush assembly

↓ok

<CHECK MOTOR ROTOR.>

Check the condition of rotor if there is any wear, crack and deformation.

Replace motor

rotor assembly.

 \downarrow OK

<CHECK MOTOR STATOR.>

Check the condition of motor case if there is any crack and deformation.

Replace motor

stator.

< TROUBLE >

Does not speedcontrol. < CHECK > <

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

Remove the FET circuit block and check the lead wire terminals. These terminals are open normally when there is an open circuit ($\boldsymbol{\infty}$ $\Omega)$ between the green and red lead wires, and between the black and red lead wires.

or replace switch & FET block.

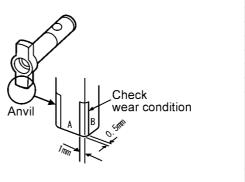
NOTE:

- * FET is weak against static electricity.
- ** The resistance value may be some differences depends on the measurement range.

Does not vibrate or weakness of vibration.

<CHECK ANVIL.>

Check wear condition of anvil. If no less than 1mm from the corner at (A) side or 0.5mm from the corner at (B) side,



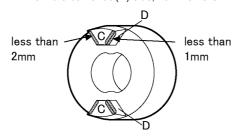
Replace anvil.

NO

↓ok

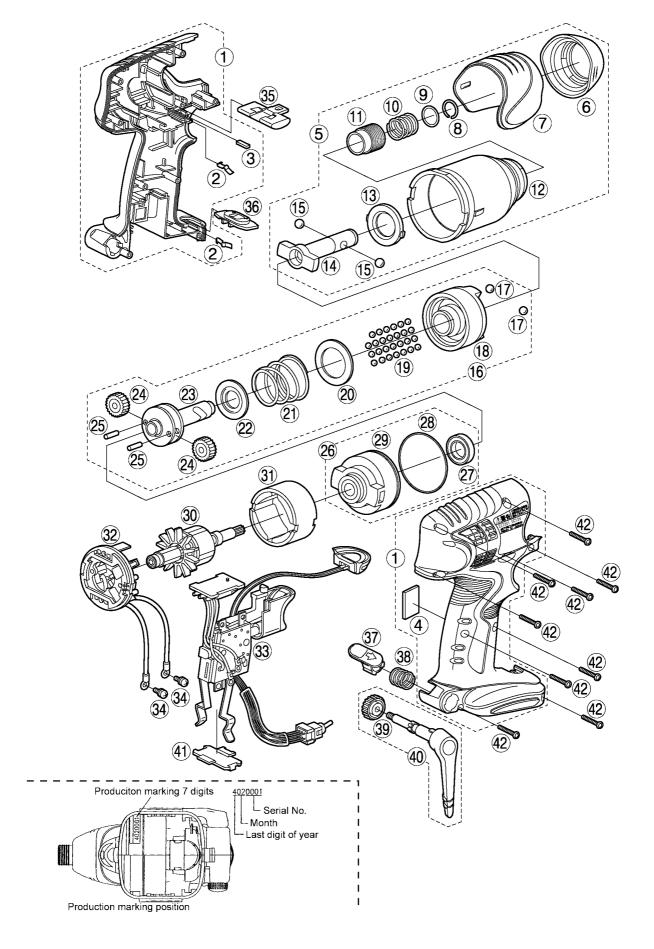
<CHECK HAMMER.>

Check wear condition of hammer. If no less than 2mm from the corner at (C) side or 1mm from the corner at (D) side, hammer is OK.



NO Replace hammer.

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	WEY7201K3078	HOUSING AB SET				1
2	EY6481L0177	CLICK SPRING	*C			2
3	WEY7201L0317	CUSHION	*B	(2PCS/PK) 4*10*2		2
4	WEY7201L0327	CUSHION		4.0*23*33		1
5	WEY7201H4057	FIXATION COVER ASSEMBLY				1
6	WEY7201K3107	NOSE PROTECTOR				1
7	WEY7201H3207	PROTECTOR				1
8	WEY6507K1167	C-TYPE RING				1
9	WEY6507L0857	THRUST PLATE				1
10	WEY6507L0197	BIT HOLDER SPRING				1
11	WEY6507K3717	BIT HOLDER				1
12	WEY7201S3307	FIXATION COVER				1
13	WEY6505L0867	SLIDER				1
14	WEY7201L1127	ANVIL				1
15	WEY6507L6977	STEEL BALL	*B	(2PCS/PK) \$\Phi\$ 5/32		2
16	WEY7201L1067	DRIVING SHAFT ASSEMBLY				1
17	WEY7201L6967	STEEL BALL	*B	(2PCS/PK) \$\Phi\$ 7/32		2
18	WEY7201L1377	HAMMER				1
19	WEY7300L6957	STEEL BALL	*B	(27PCS/PK)		27
20	WEY6505L0897	THRUST PLATE				1
21	WEY7201L0157	HAMMER SPRING				1
22	WEY6508L1147	SPRING FIXING PLATE				1
23	WEY7201L1137	DRIVING SHAFT				1
24	WEY6506L1357	PLANET GEAR	*B	(2PCS/PK)		2
25	WEY6506L1347	PIN	*B	(2PCS/PK)		2
26	WEY7201L0027	MOTOR MOUNTING PLATE ASSEMBLY				1
27	WEY7201L4957	BEARING				1
28	WEY7201L0987	O-RING		Ф 41		1
29	WEY7201L3747	MOTOR MOUNTING PLATE				1
30	WEY7201L1467	MOTOR ROTOR ASSEMBLY				1
31	WEY7201L1187	STATOR				1
32	WEY7201L2307	BRUSH ASSEMBLY				1
33	WEY7201K2007	SWITCH				1
34	EY6261B6027	SEMS SCREW	*C	K3-6		2
35	WEY7201Y3247	F/R SELECTOR HANDLE				1
36	WEY7201Y3257	IMPACT MODE SELECTOR SWITCH				1
37	WEY7201Y3267	BELT HOOK LOCK LEVER				1
38	WEY7201L0167	SPRING				1
39	WEY6470K3187	BELT HOOK BOLT				1
40	WEY7201Y3317	BELT HOOK				1
41	EY6230L0207	DUST PREVENTIVE PLATE			A	1
42	EY6230K9218	TORX TAPPING SCREW	*C	K3*20	A	9
-	WEY7201K8108	OPERATING INSTRUCTIONS			A	1

^{**}Battery Pack, and Tool Case are available as an optional accessory.

See the nearest sales dealer for details.

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

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