# Service Manual

Cordless Impact Driver E Y 6 5 8 8

#### **SPECIFICATIONS**

DRIVER

Motor voltage : 9.6V DC

No load speed :  $0 \sim 2200 \text{ min}^{-1}$  (RPM) Impact per Minute :  $0 \sim 3300 \text{ Impact/Min.}$ 

Maximum torque : 73.5Nm (750kg-cm, 650in.1bs.)

Overall length : 175mm (6-7/8") Mass (Weight) : 1.35kg (2.971bs.)

(with battery pack)

BATTERY PACK

Storage battery : Ni-Cd battery

Battery voltage : 9.6V DC (  $1.2V \times 8$  cells)

Battery Capacity : 1200mAh

BATTERY CHARGER

Input : 120, 230, 240V AC

separately available

Mass (Weight) : 0.66kg (1.45lbs.)

Charging time : Approx. 15 min.

STANDARD EQUIPMENT

Battery charger, Battery pack, Phillips bit #2 (65mm)

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#### **⚠ WARNING**

This service literature 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.

## **Panasonic**

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#### DISASSEMBLY / ASSEMBLY INSTRUCTIONS

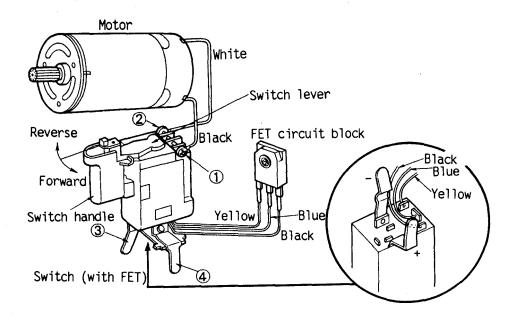
Ref. No. 1	Procedure 1A	Removal of the housings.
	•	
·		
,		
1. Remove 2 s	crews for each cover of driving block,	case cover and 8 screws for housing.
Ref. No. 2	Procedure 1A → 2	Removal of the driving block.
		Driving shaft
		Hammer
	Vibrationproof rubber	— Hammer spring —— Pin
	Planet gear	
	Coon shaft	
	Gear shaft	U .

1. Remove the 2 set of planet gear and gear shaft by lightly tapping it on the desk.

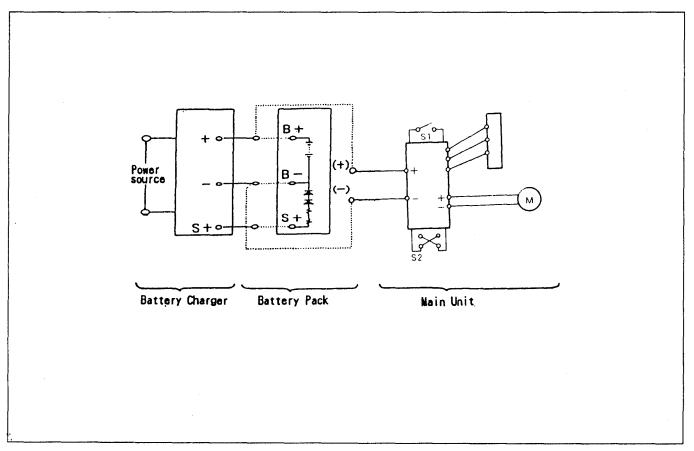
Ref. No. 3	Procedure 1B	Removal or attachment of the battery charger.
	the battery charger.) lousing screws.	<ul> <li>(Attachment for the battery charger.)</li> <li>2. Reassemble the module block (power cord, power transformer, and module) to housing A, be certain that LED appears through the hole in housing A.</li> <li>3. Set the bushing for power cord to the housing A.</li> <li>NOTE: Avoid pinching lead wires, dress into housing recess and around screw posts etc.</li> <li>4. After assembly, test for proper voltage. Measure the battery terminals between (S) and (-).  It is OK, if it is approx. 3V DC.</li> </ul>

#### WIRING CONNECTION DIAGRAM

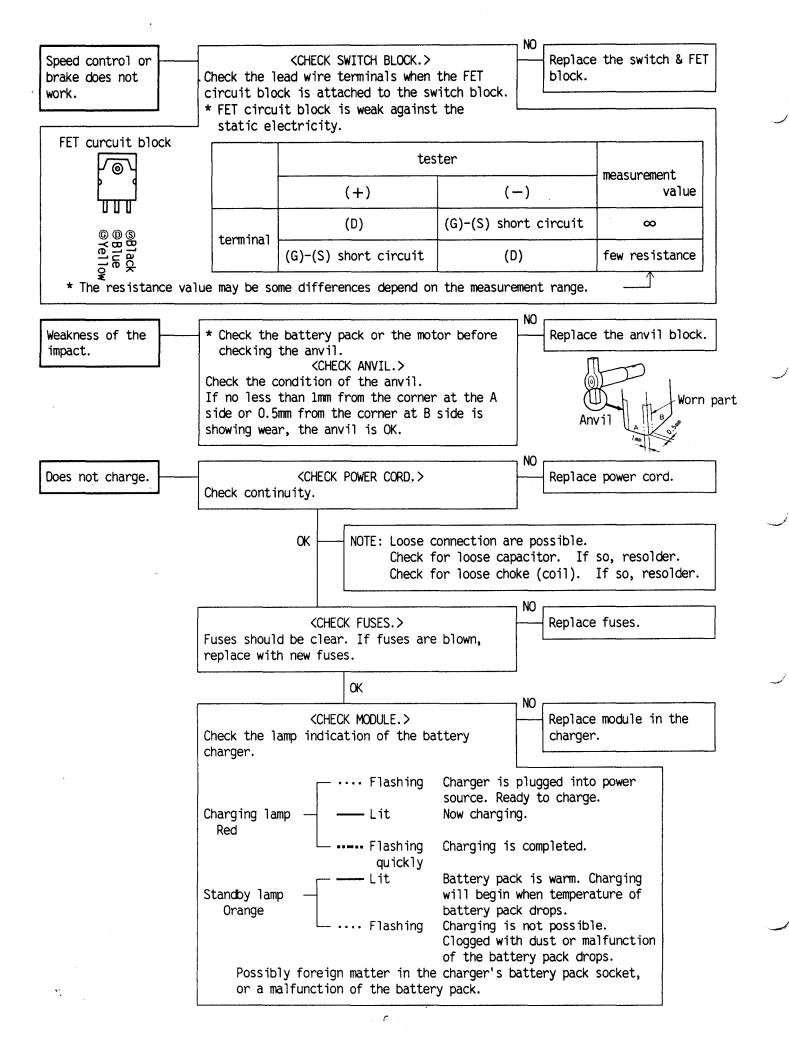
#### Main unit



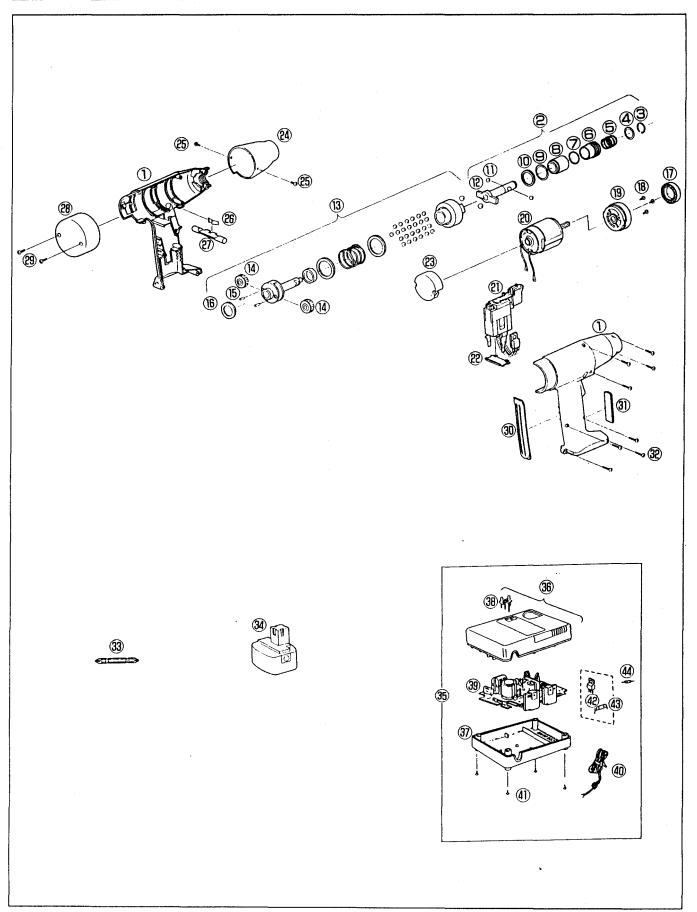
#### SCHEMATIC DIAGRAM



#### TROUBLESHOOTING GUIDE ( Refer to WIRING CONNECTION DIAGRAM ) < TROUBLE > < CHECK > < REMEDY > NO <CHECK BATTERY PACK.> Does not Replace battery pack. operate. If no less than 9.6V DC is available across the (+) and (-) terminals, the battery pack is OK. Note: The battery pack is sold separately as shown in REPLACEMENT PARTS LIST. 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 9.6V DC or the usable time is extremely short. - the battery leaks. Check battery for leaks and terminals for corrosion. OK NO <CHECK TERMINAL CONNECTIONS BETWEEN</p> Repair the contacts. MAIN UNIT AND BATTERY PACK.> Check for proper terminal contacts. OK NO <CHECK MOTOR.> Replace the motor. The motor normally operates with its white (M+) and black (M-) lead wires connected to 9.6V DC. OK NO <CHECK SWITCH BLOCK.> Contacts in the switch ( See WIRING CONNECTION DIAGRAM. ) block are defective. With touching (+) terminal of Volt-Ohm meter, Replace the switch. check continuity between following terminals. \* Inspection of the forward / reverse selection switch. (a) When the switch handle is depressed all the way: • There should be 0 ○ between (1) - (3), and between 2 - 4; when the switch lever is set to the forward side. • There should be $0\Omega$ between (1) - (4), and between 2 - 3; when the switch lever is set to the reverse side. \* Inspection of the brake. (b) When the switch handle is not depressed: • There should be $0\Omega$ between 1 - 2.



### EXPLODED VIEW



#### REPLACEMENT PARTS LIST

Note: \*A ··· available as an optional accessory

\*C ... available individually

\*B ... only available as set

Ref N	lo.	Parts No.	Parts Name & Descriptions	Per set	Remarks
		EY6588K3078	HOUSING AB SET	1	
		EY6581L1107	ANVIL BLOCK	1	
		EY574B1167	C-TYPE RING	1	
		EY574B0857	THRUST PLATE	1	
		EY6600B0197	HOLDER SPRING	1	
		EY6600B3717	BIT HOLDER	1	
		EY6602K0977	O-RING	1	
		EY6581L0387	HOLDER COLLAR	1	
		EY6581L0318	CUSHION	1	
		EY6602K0637	THRUST RING	_ 1	
		EY507B6957	STEEL BALL A	25	*B
		EY6581L1127	ANVIL	1	
		EY6581L1067	DRIVING BLOCK	1	
	_	EY6600B1357	PLANET GEAR	2	*B
		EY6602K1347	GEAR SHAFT	2	<b>*</b> B
		EY574B0847	THRUST PLATE B	1	
		EY6581L4957	COLLAR	1 3	*C
		EY6581L6098	SCREW	1	^C
		EY6581L0027	MOTOR MOUNTING PLATE MOTOR	1	*
		EY6588L1008 EY6588Y2008	SWITCH BLOCK	1	
		EY6481L0207	DUST PREVENTIVE PLATE	1	
-		EY6481L2567	RADIATING PLATE (W/SCREW)	1	
		EY6581H0547	DRIVING COVER	1	
		EY6605K6077	SCREW COVER	2	*C
		EY6481L0177	CLICK SPRING	1	
		EY6481H3247	SELECTOR HANDLE	1	
		EY6481H3108	HOUSING COVER	1	
		EY6261B9057	TAPPING SCREW	Ž	*C
		EY6481H3937	GRIP B	1	*C
		EY6481H3947	GRIP A	1	
		EY6605K9037	SCREW	8	*C
		EY574B7927	PHILLIPS BIT #2	1	~C
		EY9086	BATTERY PACK	1	4.8
		EY0202	BATTERY CHARGER	1	*A
		EY0202B3098	HOUSING A FOR CHARGER	1	*A
		EY0202B307B	HOUSING B FOR CHARGER	1	
		EY0200C0547	LAMP COVER	ī	
		EY0202B212B	MODULE	î	
		EY0202B2058	POWER CORD	1	
		EY0001B6237	TAPPING SCREW FOR CHARGER	4	*C
		EY0202B5258	FUSE	1	
4	43	EY0202B502B	FÜSE & FET SET	1	
	1. 1.	EY0202B5098	ZENER DIODE	1	