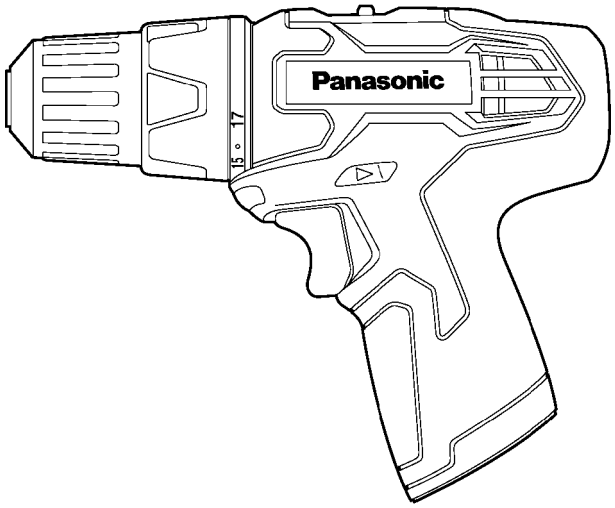
Order Number PTD1408E45CE

Service Manual

Drill driver

Model No. EY7430

Europe



⚠ 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.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by ⚠ in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

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Panasonic

1 Warning

Caution:

- Pb free solder has a higher melting point that standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a soldering iron with temperature control and adjust it to 750 ± 20°F (400 ± 10°C). In case of using high temperature soldering iron, please be careful not to heat too long.
- Pb free solder will tend to splash when heated too high (about 1100°F / 600°C).

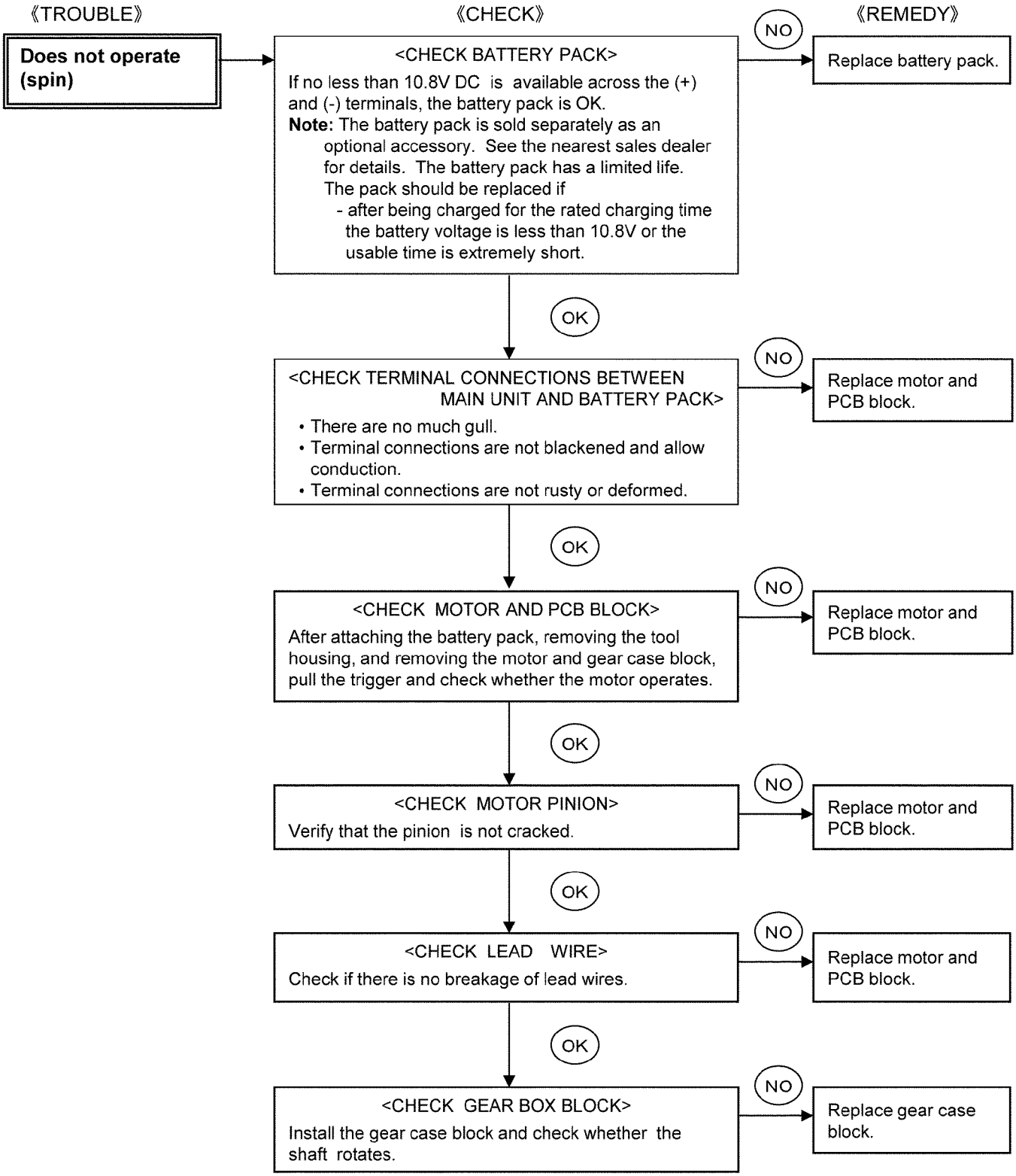
2 Specifications

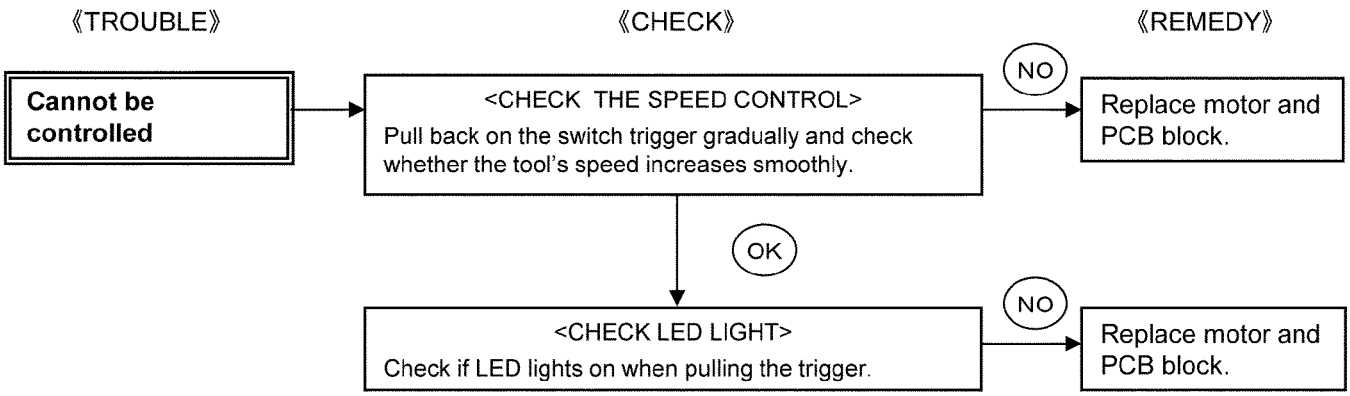
Model No.		EY7430
Battery voltage		DC 10.8 V
No load speed	1: Low	110 min^{-1} (rpm) ~ 400 min^{-1} (rpm)
	2: High	320 min^{-1} (rpm) ~ 1300 min^{-1} (rpm)
Chuck capacity		Φ1.5 mm ~ Φ10 mm
Overall length		209 mm
Weight		1.0 kg
Noise, Vibration		Typical Noise Emission Values according to EN 60745; Sound Pressure Level (L_{pA}) : 67 dB (A) Sound Power Level (L_{WA}) : 78 dB Uncertainty (K) : 3 dB Typical Vibration according to EN 60745 : < 2.5 m/s^2 Uncertainty (K) : 1.5 m/s^2

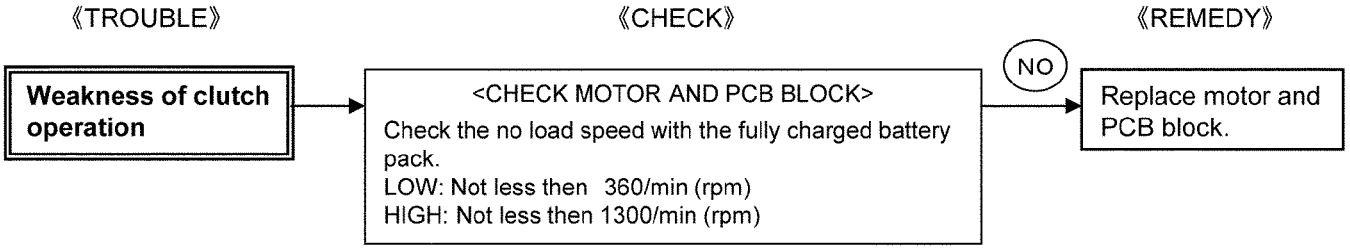
NOTE: Weight indication
Greater than or equal to 1kg : indicated by 0.05kg.
Less than 1kg : indicated by 0.01kg.

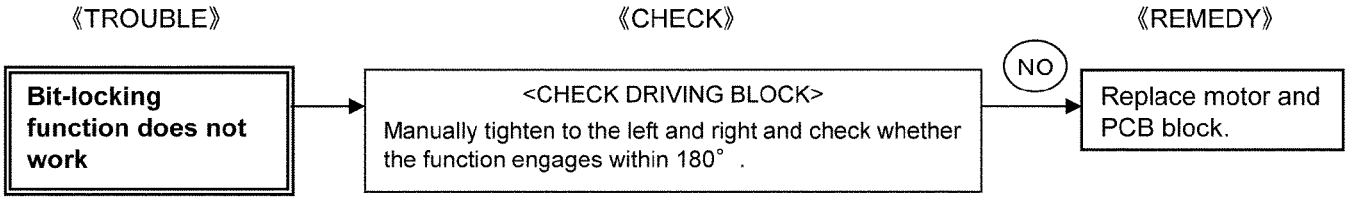
3 Troubleshooting Guide

3.1. Troubleshooting Guide




《TROUBLE》
《CHECK》
《REMEDY》
Cannot be controlled
<CHECK THE SPEED CONTROL>
Pull back on the switch trigger gradually and check whether the tool's speed increases smoothly.
NO
Replace motor and PCB block.
OK
<CHECK LED LIGHT>
Check if LED lights on when pulling the trigger.
NO
Replace motor and PCB block.


《TROUBLE》
《CHECK》
《REMEDY》
Weakness of clutch operation
<CHECK MOTOR AND PCB BLOCK>
Check the no load speed with the fully charged battery pack.
LOW: Not less then 360/min (rpm)
HIGH: Not less then 1300/min (rpm)
NO
Replace motor and PCB block.


《TROUBLE》
《CHECK》
《REMEDY》
Bit-locking function does not work
<CHECK DRIVING BLOCK>
Manually tighten to the left and right and check whether the function engages within 180° .
NO
Replace motor and PCB block.

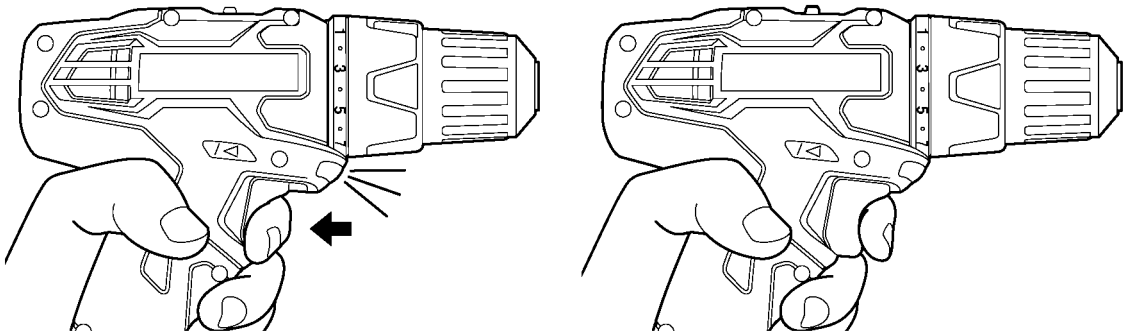
3.2. Trial Operation (After Checking Troubleshooting Guide)

3.2.1. Assembly

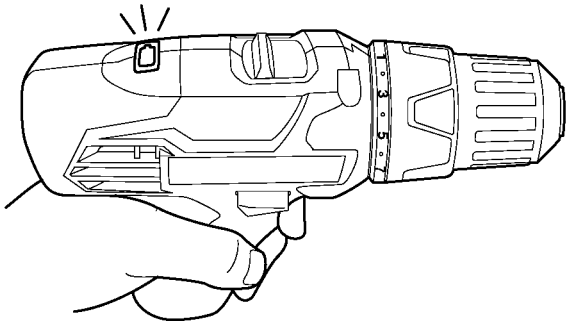
- Confirm if there is no gap between housing A and B by pinching lead wires.
- There is no dust or deformation on battery terminals.
- Confirm if there is no dirt when repairing.

3.2.2. Operation

- Check whether the tool operates properly in both the forward and reveres directions.
- Check whether the LED light illuminates when the trigger depressed and turns off when the trigger is released.



- Check whether the tool speed increases continuously as the trigger is gradually engaged.
- Check whether the tool speed is normal after repair and reassembly.
  1 (Low mode) 110 to 400 rpm
  2 (High mode) 320 to 1300 rpm
- Check whether the tool becomes hot in a short period of time under conditions of no load.
- Set the gradation on the clutch handle to “Off,” operate the tool under conditions of no load, and check whether the clutch operates with the chuck in the locked state.
- Rotate the keyless chuck and check whether the chuck’s three clips move.
- Rotate the clutch handle and check whether the clutch switches properly.
- Check whether the battery level indicator illuminates when the trigger depressed and turns off when the trigger is released.



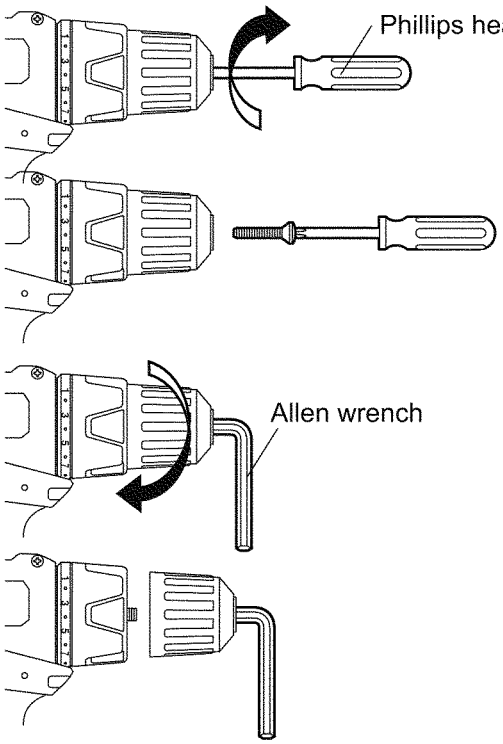
3.2.3. Integrity

- Confirm if the chuck is assembled firmly and chuck jaws operate normally.
- With the switch activated, shake the tool back and forth and up and down and verify that its sound does not change excessively.

4 Disassembly and Assembly Instructions

* To assemble the tool, start with 4-8 and proceed to 4-1.

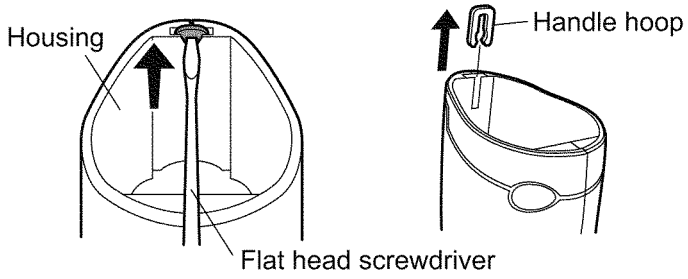
4.1. Removing the keyless chuck



1. Use a screwdriver to turn the chuck fastening screw inside the chuck clockwise direction, and remove the screw.

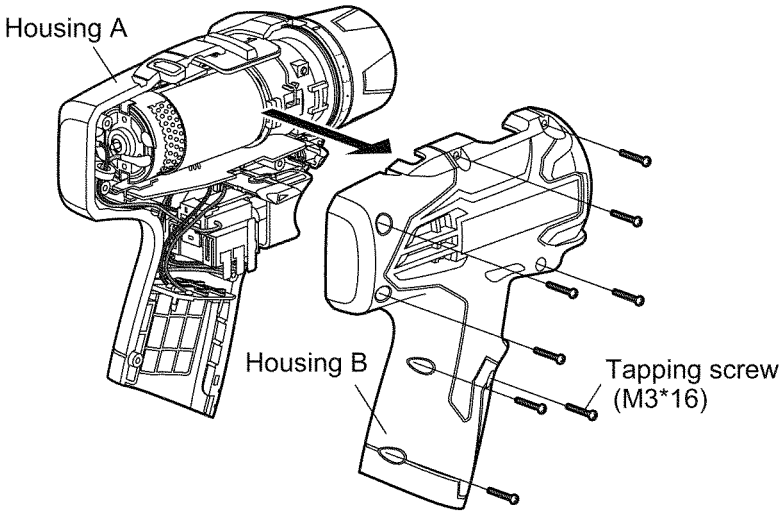
2. Insert an Allen wrench into the chuck and then turn the wrench counterclockwise with your right hand while holding the tool in place to loosen and remove the chuck. Alternatively, place the tool on a workbench or other surface and turn the Allen wrench counterclockwise to remove the chuck while holding the tool still with your left hand.

4.2. Removing the handle hoop



Pull on the handle hoop with a flat-blade screwdriver or other suitable tool and remove it from the housing.

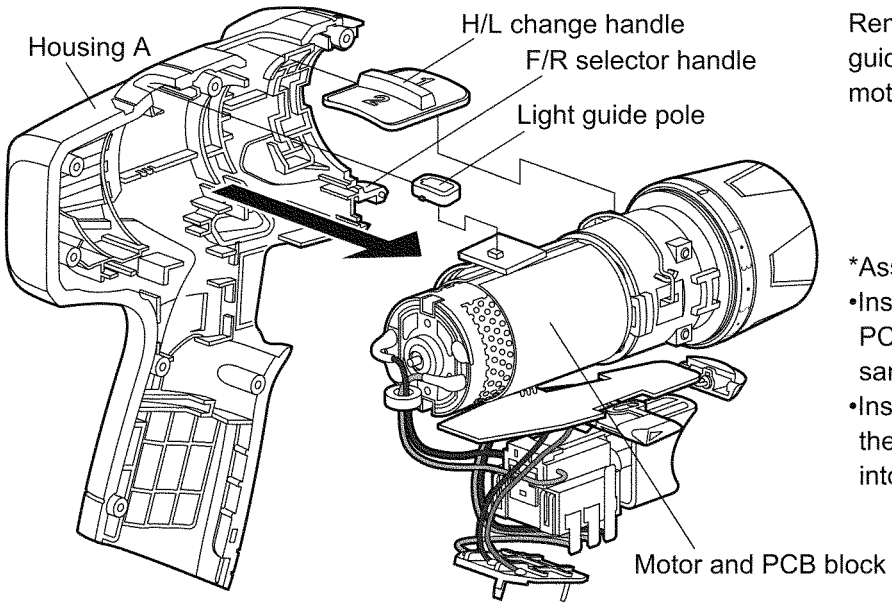
4.3. Removing the housing



1. Remove the eight screws.

2. Take out housing B from housing A.

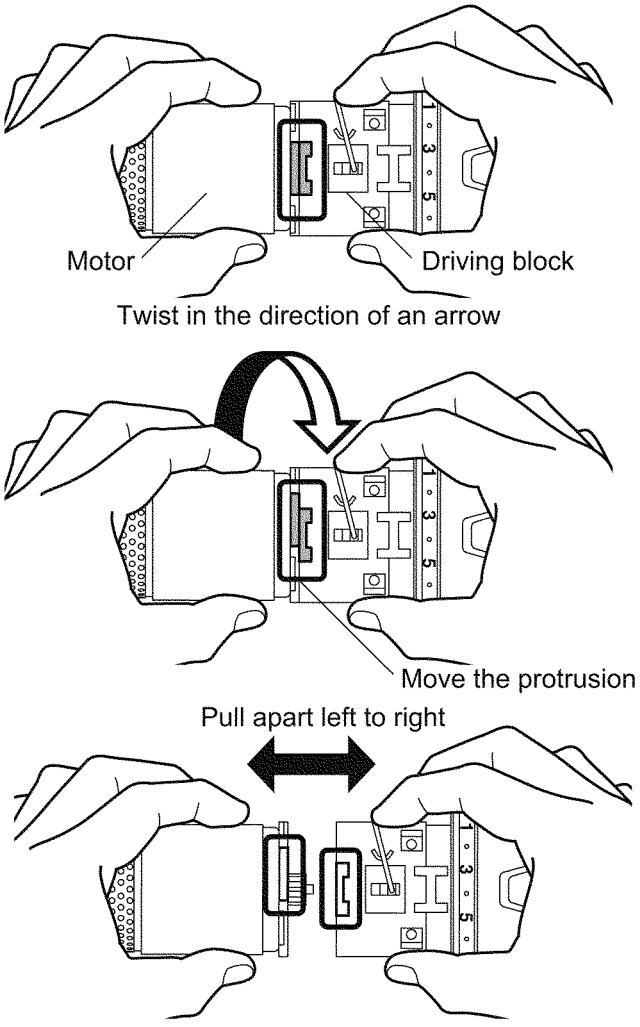
4.4. Removing the Motor and switch block



Remove the F/R selector handle, LED guide pole, H/L change handle and motor and PCB block from housing A.

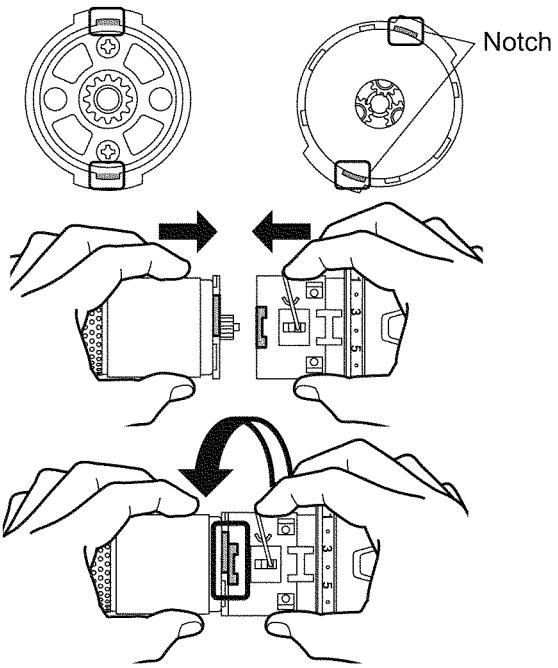
*Assembly precautions
•Insert the LED guide pole and LED PCB into the housing A groove at the same time.
•Insert the selector bracket (spring) into the F/R selection handle rib and insert into the housing A groove.

4.5. Removing the driving block and motor

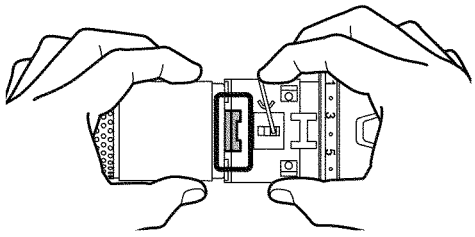


4.6. Attaching the driving block

*Because the motor mount is attached to the gear case block (WEY7530L4058) in order to keep internal parts from falling off, attach it to the motor after removing it from the block. (If there is no motor mount attached to the motor, use the motor mount on the driving block.)



Twist in the direction of an arrow

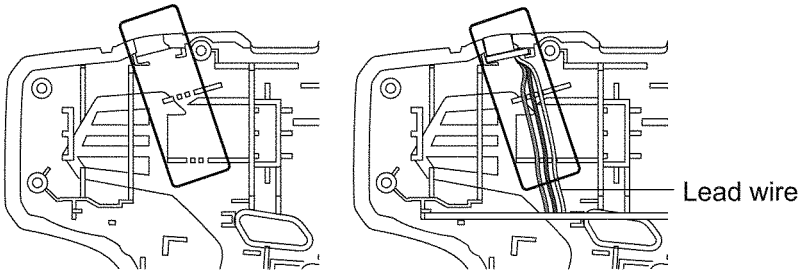


Align the notches on the driving block and motor.

Align the notches on the driving block and motor mount.

*Assembly precautions
Verify that an appropriate amount of grease has been applied to the tip of each tooth on the pinion gear. If not, apply an adequate amount.
* GREASE (Order No. WEY001T8907)

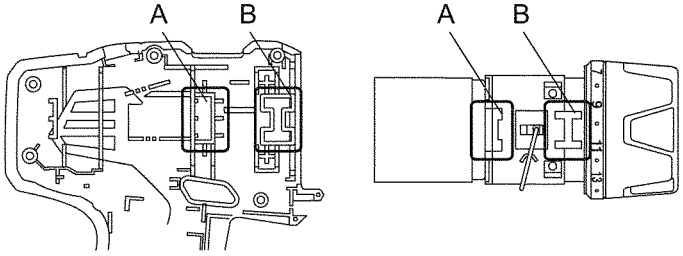
4.7. Attaching the LED PCB



Carefully route the three lead wires from the LED PCB, aligning them with the housing A rib.

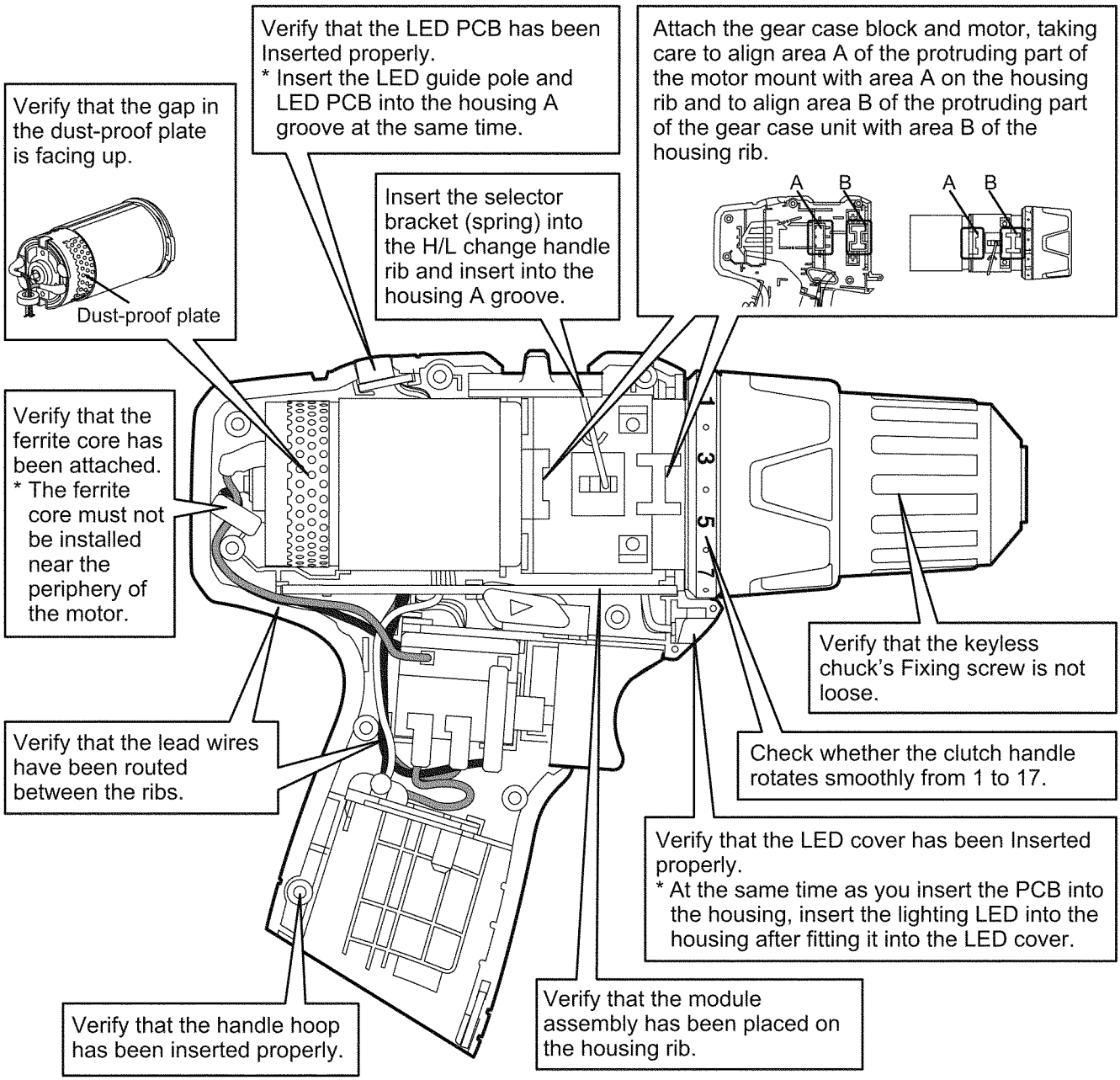
*Assembly precautions
Insert the LED PCB into housing A at the same time as you insert the LED guide pole into the housing.

4.8. Attaching the driving block and motor

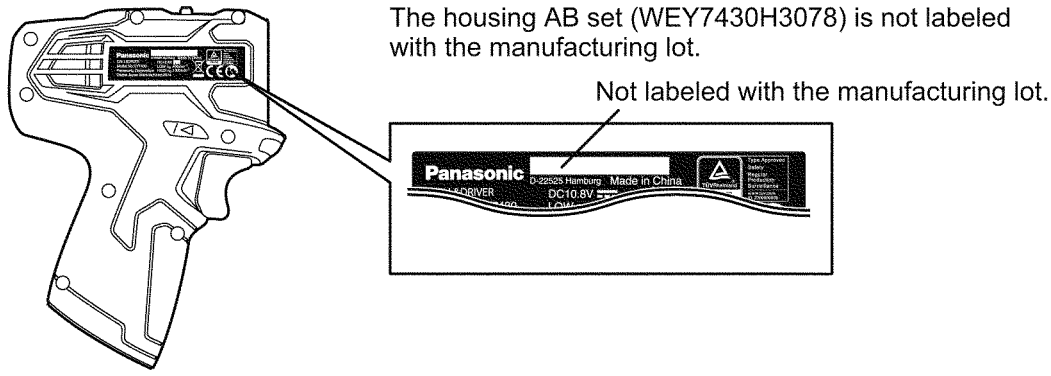


Attach the gear case block and motor, taking care to align area A of the protruding part of the motor mount with area A on the housing rib and to align area B of the protruding part of the gear case unit with area B of the housing rib.

4.9. Wiring and Assembly Points



*Housing AB set manufacturing lot



5 Wiring Connection Diagram

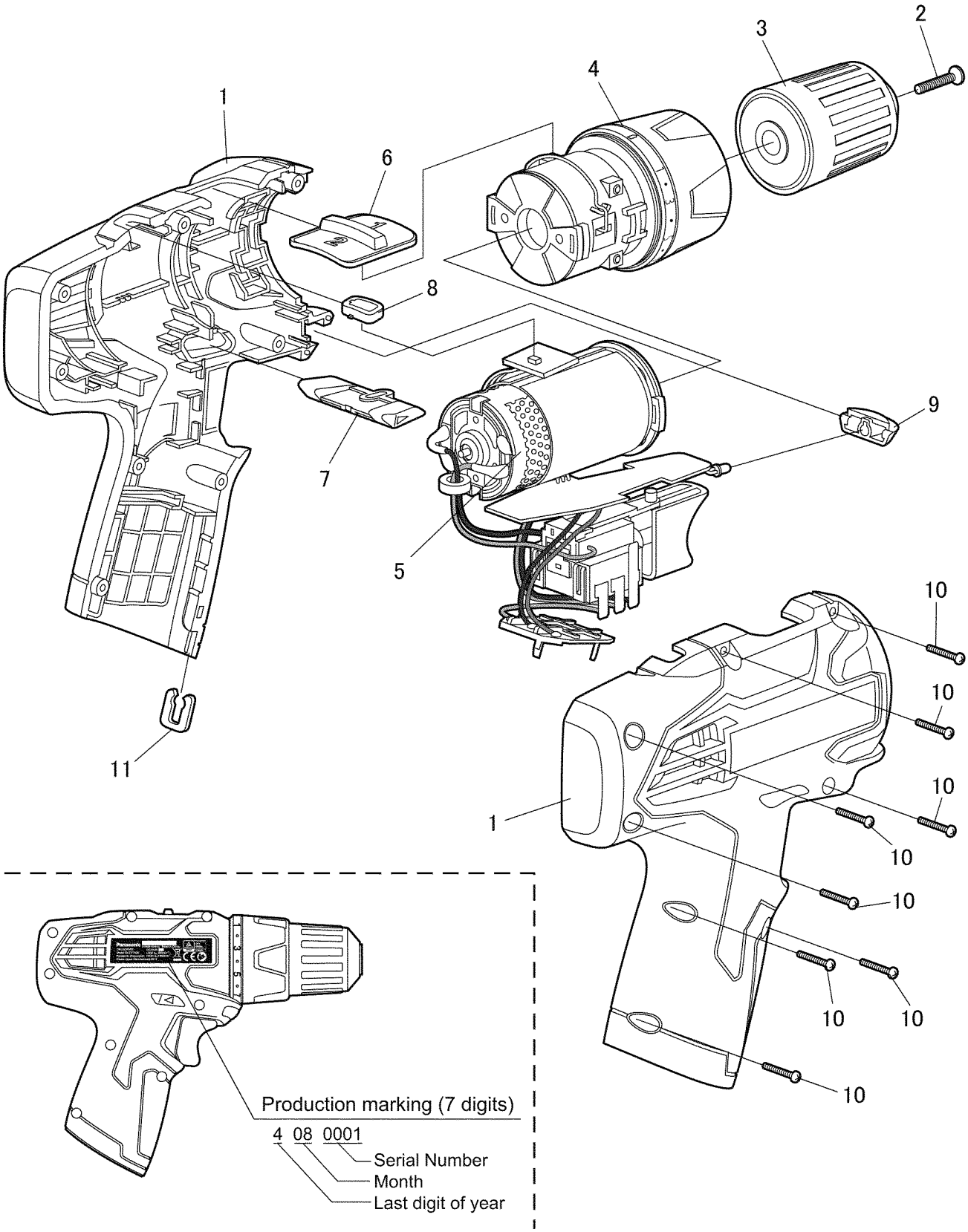
Omitted due to use of blocks.

6 Schematic Diagram

Omitted due to use of blocks.

7 Exploded View and Replacement Parts List

7.1. Exploded View



*The housing AB set (WEY7430H3078) is not labeled with the manufacturing lot.

7.2. Replacement Prts List

Safety	Ref. No.	Part No.	Part Name & Description	Quantity	Remarks
	1	WEY7430H3078	HOUSING AB SET	1	
	2	WEY7430L6808	CHUCKÄ@FASTENING SCREW	1	
	3	WEY7430K7918	KEYLESS CHUCK	1	
	4	WEY7430L1088	GEAR CASE BLOCK	1	
	5	WEY7430L1008	MOTOR AND PCB BLOCK	1	
	6	WEY7430H3238	H/L CHANGE HANDLE	1	
	7	WEY7430H3248	F/R SELECTOR HANDLE	1	
	8	WEY7430H0548	LED GUIDE POLE	1	
	9	WEY7430L0548	LED COVER	1	
	10	WEY7430K9038	TAPPING SCREW	8	(M3*16), (8PCS/PACK)
	11	WEY7430L0158	HANDLE HOOP	1	
	-	WEY7430K7018	TOOL CASE	1	(for SET)
	-	WEY7530K8108	OPERATING INSTRUCTIONS	1	
	-	WEY001T8907	GREASE (ALVANIA)	1	