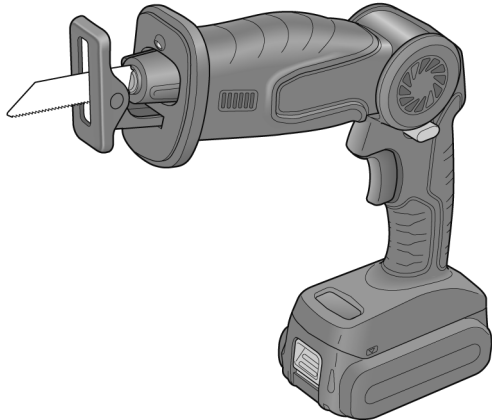


Service Manual

Cordless Reciprocating Saw

Model No. EY47A1

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.

TABLE OF CONTENTS

	PAGE	PAGE
1 Warning -----	2	
2 Specifications -----	2	
3 Troubleshooting Guide -----	3	
4 Disassembly and Assembly Instructions -----	5	
5 Exploded View and Replacement Parts List -----	10	

Panasonic

© Panasonic Corporation 2020. All rights reserved.
Unauthorized copying and distribution is a violation
of law.

1 Warning

Caution:

- Pb free solder has a higher melting point than 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).

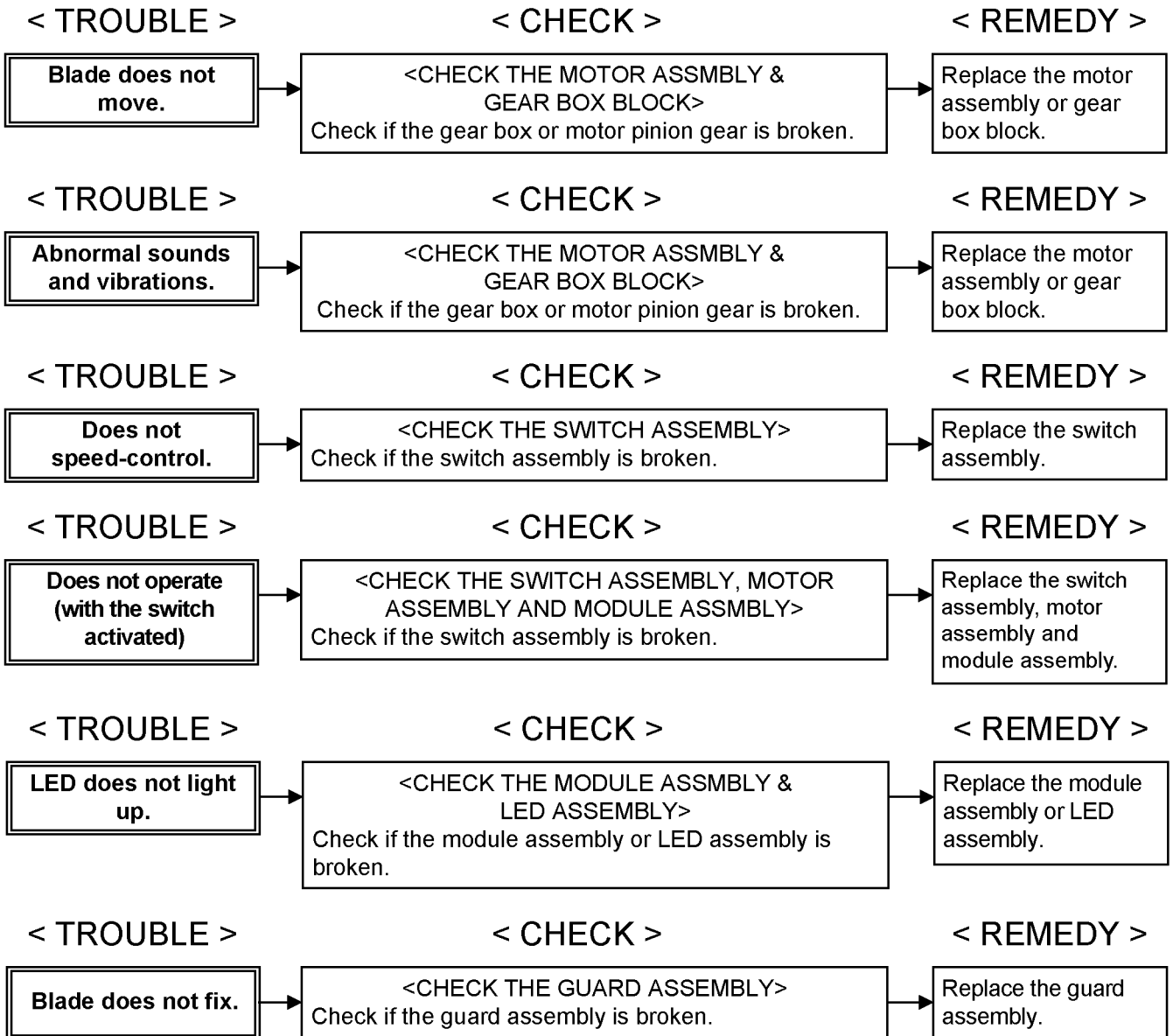
2 Specifications

MAIN UNIT

Model	EY47A1	
Motor	14.4 V DC	18 V DC
Thickness of mounting blade	0.9 mm - 1.6 mm	
Length of strokes	14 mm	
Strokes per minute	0 - 3000 min ⁻¹	0 - 3200 min ⁻¹
Maximum cutting capacities	Wood	50 mm
	Mild steel	50 mm
Overall length	455 mm	
Weight (with battery pack: EY9L45)	1.9 kg	—
Weight (with battery pack: EY9L47)	1.7 kg	—
Weight (with battery pack: EY9L51)	—	2.0 kg
Weight (with battery pack: EY9L52)	—	1.8 kg
Weight (with battery pack: EY9L53)	—	1.8 kg
Weight (with battery pack: EY9L54)	—	2.05 kg

3 Troubleshooting Guide

3.1. Troubleshooting Guide



3.2. Trial Operation (after checking Troubleshooting Guide).

3.2.1. Assembly

- Confirm if there is no gap between housing L and R by pinching lead wires.
- Check the smooth movement of blade.
- Slide the handle lock release lever and verify that the handle angle can be switched among its four settings.
- Check if the shoe position can be adjusted by internal shoe adjustment screw.
- Check the smooth movement of switch lock release lever.

3.2.2. Operation

- Check if the motor rotation become higher as the amount of depression of switch handle and make sure that the LED turns on.
- Confirm if the rotation stops immediately when releasing the switch handle and make sure that the LED turns off.
- Confirm if the blade moves properly and there should be no metallic or abnormal sound and abnormal vibration.

3.2.3. Integrity

- With the switch activated, shake the tool back and forth and up and down and verify that its sound does not change excessively.
- Check for the presence of any dirt or foreign matter from the repair process on the outside of the tool.
- There is no dust or deformation on battery terminals.

4 Disassembly and Assembly Instructions

* To reduce the risk of injury, always remove battery pack before removing/installing the tool.
 * To assemble the tool, start with 4-7 and proceed to 4-1.

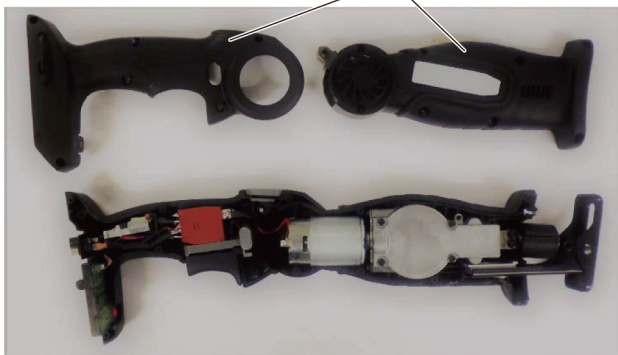
4.1. Removing the Housing Set.



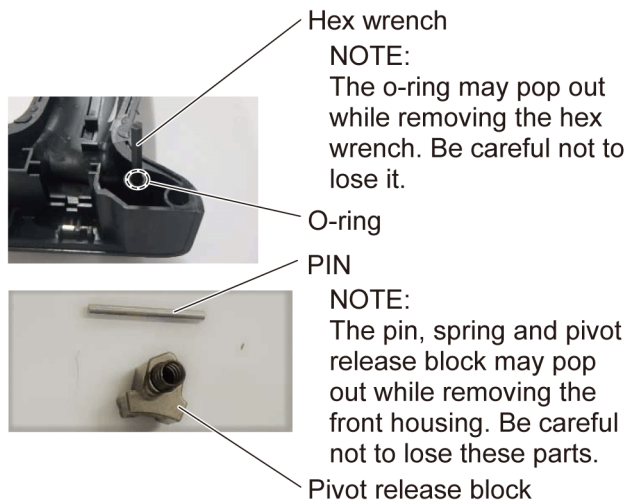
Torx screw (3*14, 14pcs)

1. Remove 14 torx screws that attach housings.

Back housing set (R and L)



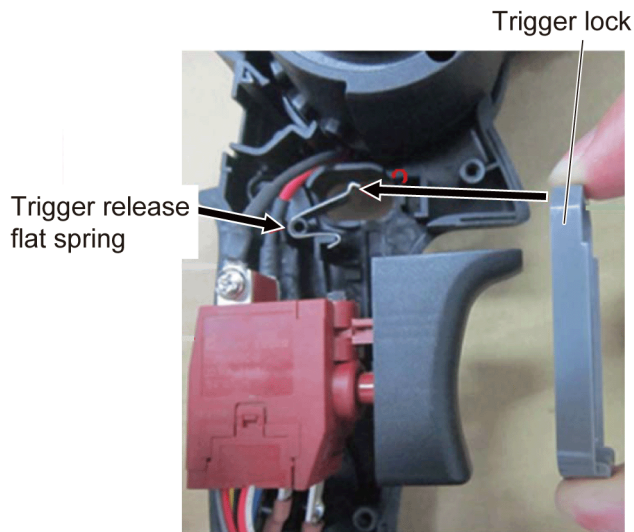
2. Remove back housings (R) and (L) from front housing set.



NOTE: (When assembling)
 Apply grease (SUNLIGHT WEY6705X5527) to the indicated by the shaded area. Do not apply the grease to the dotted line area.



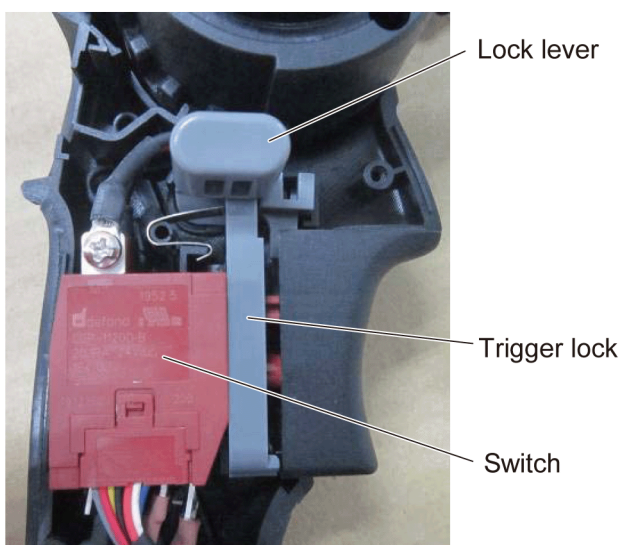
4.2. Precautions when attaching the Switch.



1. Attach the trigger release flat spring into the housing like the picture and then insert the trigger lock.



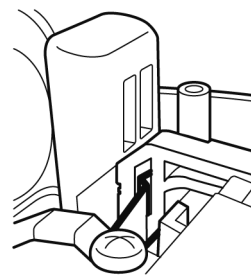
2. Attach the trigger release flat spring to trigger lock.



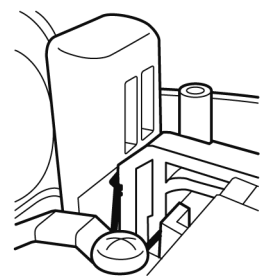
3. Insert the Lock lever into the housing while pulling the trigger lock down.

* Check to make sure that the trigger lock moves up and down smoothly while hold the lock lever and the switch.

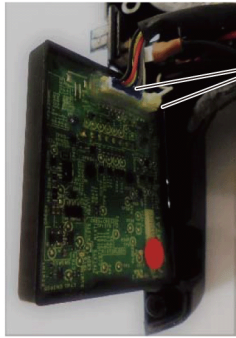
○ Trigger release flat spring is in the groove of the trigger lock.



✗ Trigger release flat spring is out of the groove of the trigger lock.



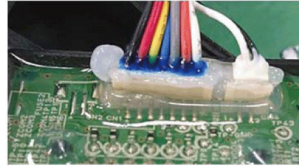
4.3. Removing the Module Assembly and Connectors.



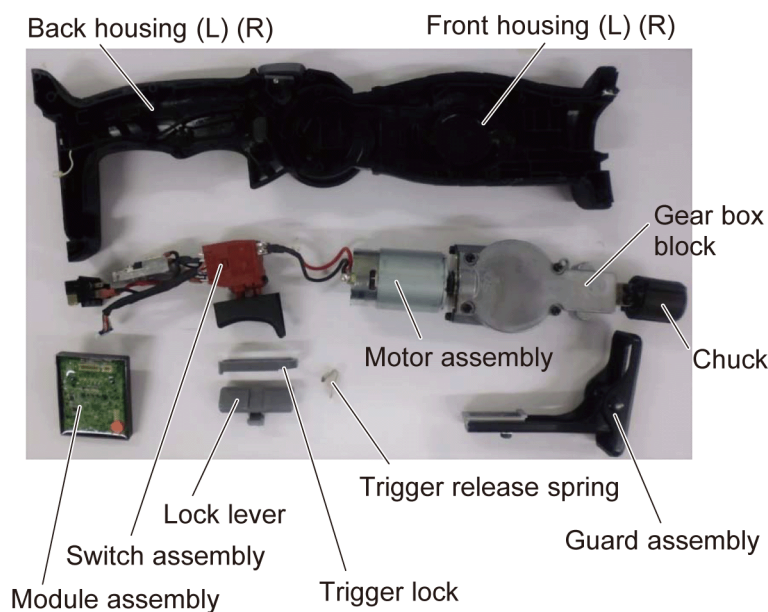
Pull a connector out holding the base unit.

Remove the module assembly from front housing and then remove the switch's 8-pin connector and LED's 3-pin connector from the module assembly's control circuit board.

NOTE: (When assembling)
Apply grease so its completely fills the connector.

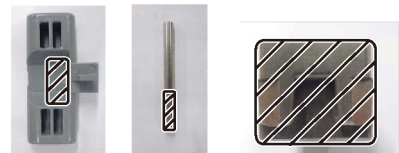


4.4. Removing the Gear Box Block and Associated Parts.

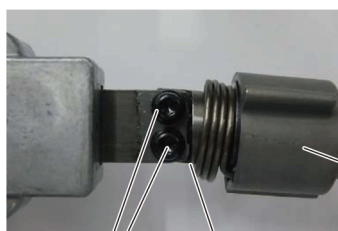


Remove the motor assembly, gear box block, switch assembly and guard assembly from the front/back housing.

NOTE: (When assembling)
Apply grease to the indicated by the shaded area.



4.5. Removing the Chuck.

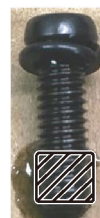


Remove 2 torx screws.

Check to make sure that there is no gap between chuck and gear box block.

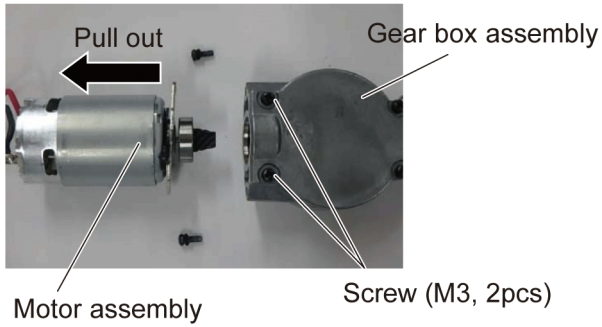
Torx screw (2pcs)

*Tightening torque value;
2.45-2.94N·m



NOTE: (When assembling)
Apply loctite to the indicated by the shaded area.

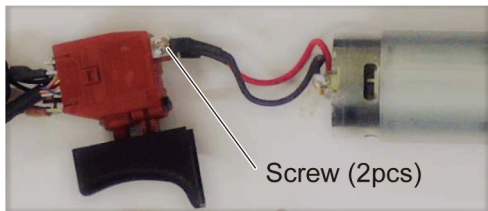
4.6. Removing the Motor Assembly from the Gear Box Assembly.



1. Remove two screws holding the motor using phillips screw driver.

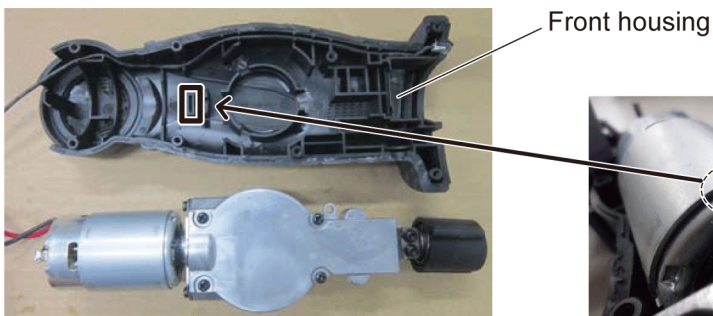


NOTE: (When assembling)
Apply loctite to the indicated by the shaded area.

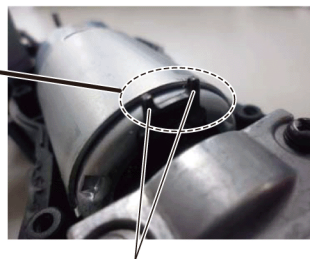


2. Unscrew the two screws that secure the lead wires from the motor assembly and remove them from the switch assembly.

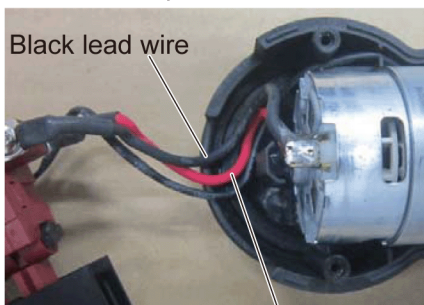
4.7. Precautions when attaching the Motor Assembling into the Front Housing.



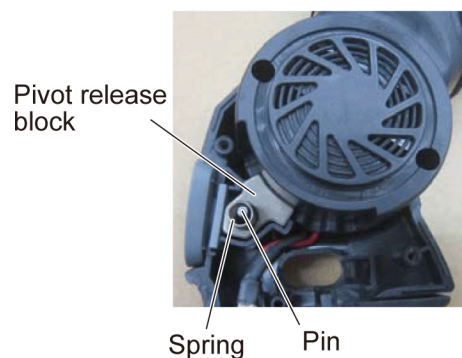
Verify that the two protrusions on the motor assembly attached to the recess of the front housing.



Make sure to place the black lead wire on top.

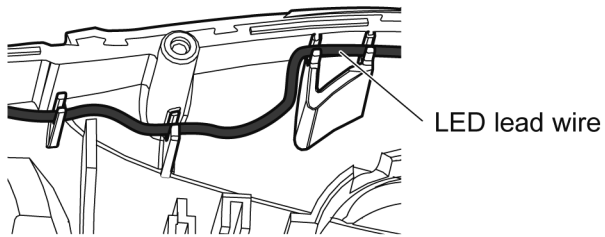


Do not forget to mount pivot release block, spring and pin onto housing.

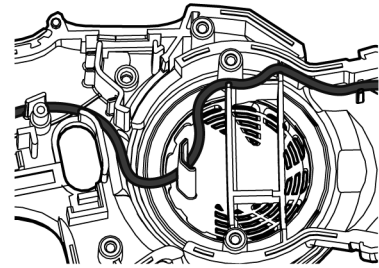


4.8. Wiring and Assembly Points.

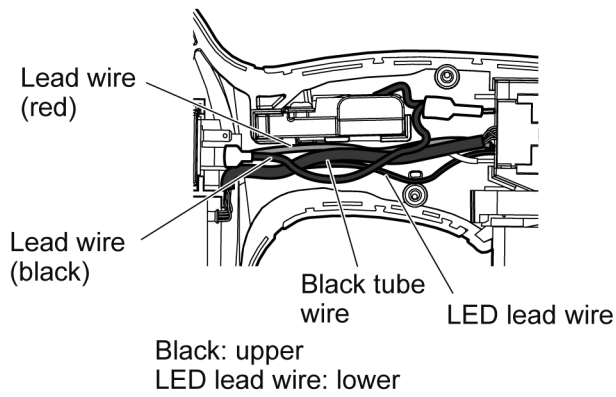
Pass the LED lead wire between the ribs as shown in the diagram below.



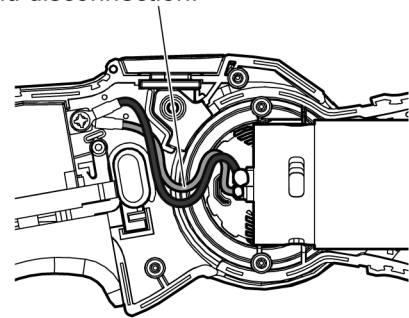
Route the lead wires like the below diagram.



Pass the 4 lead wires from the switch assembly between the ribs as shown in the diagram below. (pass the LED lead wire, red read wire, black tube wire and black lead wire between the ribs in that order).

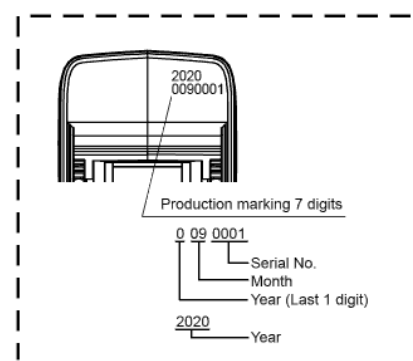
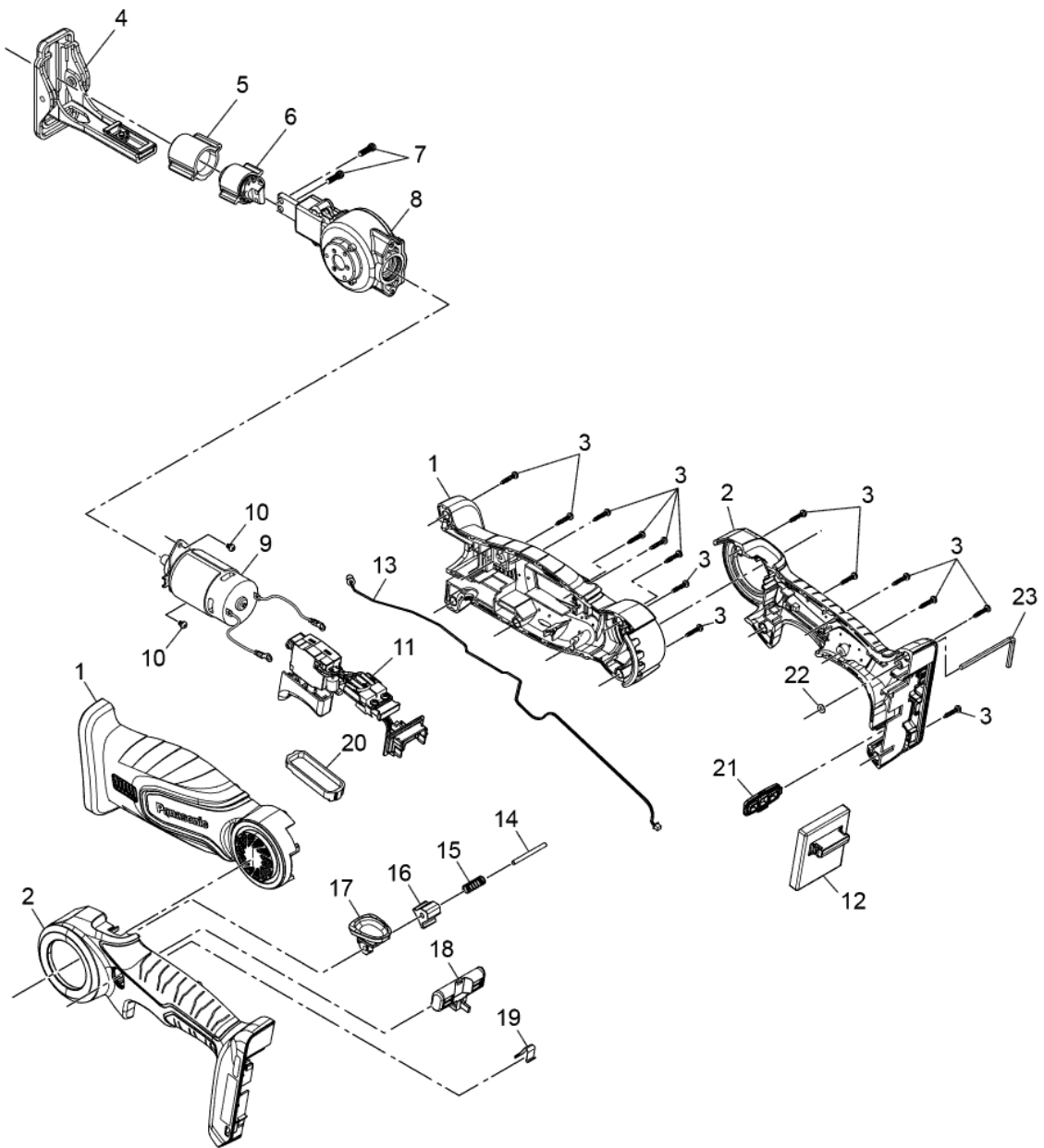


Please keep the lead wires (red/black) slack to avoid disconnection.



5 Exploded View and Replacement Parts List

Model No. : EY47A1 Exploded View



Model No. : EY47A1 Parts List

Change	Safe	Ref.No.	Part No.	Part Name & Description	Quantity	Remarks
		1	WEY47A1K3002	FRONT HOUSING SET	1	
		2	WEY47A1K3101	BACK HOUSING SET	1	
		3	WEY46A5K6301	TORX SCREW	14	(3-14), (5PCS/PK)
		4	WEY47A1L1101	GUARD ASSEMBLY	1	
		5	WEY47A1L0001	PROTECTIVE BOOT	1	
		6	WEY47A1L1201	CHUCK	1	
		7	WEY47A1L6001	TORX SCREW	2	(M4*12), (2PCS/PK)
		8	WEY47A1L1001	GEAR BOX BLOCK	1	
		9	WEY47A1L2202	MOTOR ASSEMBLY	1	
		10	WEY47A1L6201	SEMS SCREW	2	(M3), (2PCS/PK)
		11	WEY47A1L2001	SWITCH ASSEMBLY	1	
		12	WEY47A1L2301	MODULE ASSEMBLY	1	
		13	WEY47A1L2101	LED ASSEMBLY	1	
		14	WEY47A1L6301	PIN	1	
		15	WEY47A1L6401	SPRING	1	
		16	WEY47A1L0101	PIVOT RELEASE BLOCK	1	
		17	WEY47A1L0201	PIVOT RELEASE SLIDER	1	
		18	WEY47A1L0301	LOCK LEVER	1	
		19	WEY47A1L6501	TRIGGER RELEASE SPRING	1	
		20	WEY47A1L0401	TRIGGER LOCK	1	
		21	WEY47A1L0502	DISPLAY PANEL	1	
		22	WEY3571L0967	O RING	1	
		23	WEY47A1F7001	HEX WRENCH	1	
		-	WEY6705X5527	SUNLIGHT GREASE	1	
		-	WEY003W8957	GREASE (PERMALUB)	1	