

Service Manual

Cordless Impact Wrench

Model No. **EYFLA9C**

Model No. **EYFMA2C**

Model No. **EYFLA9P**

Model No. **EYFMA2P**

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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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).

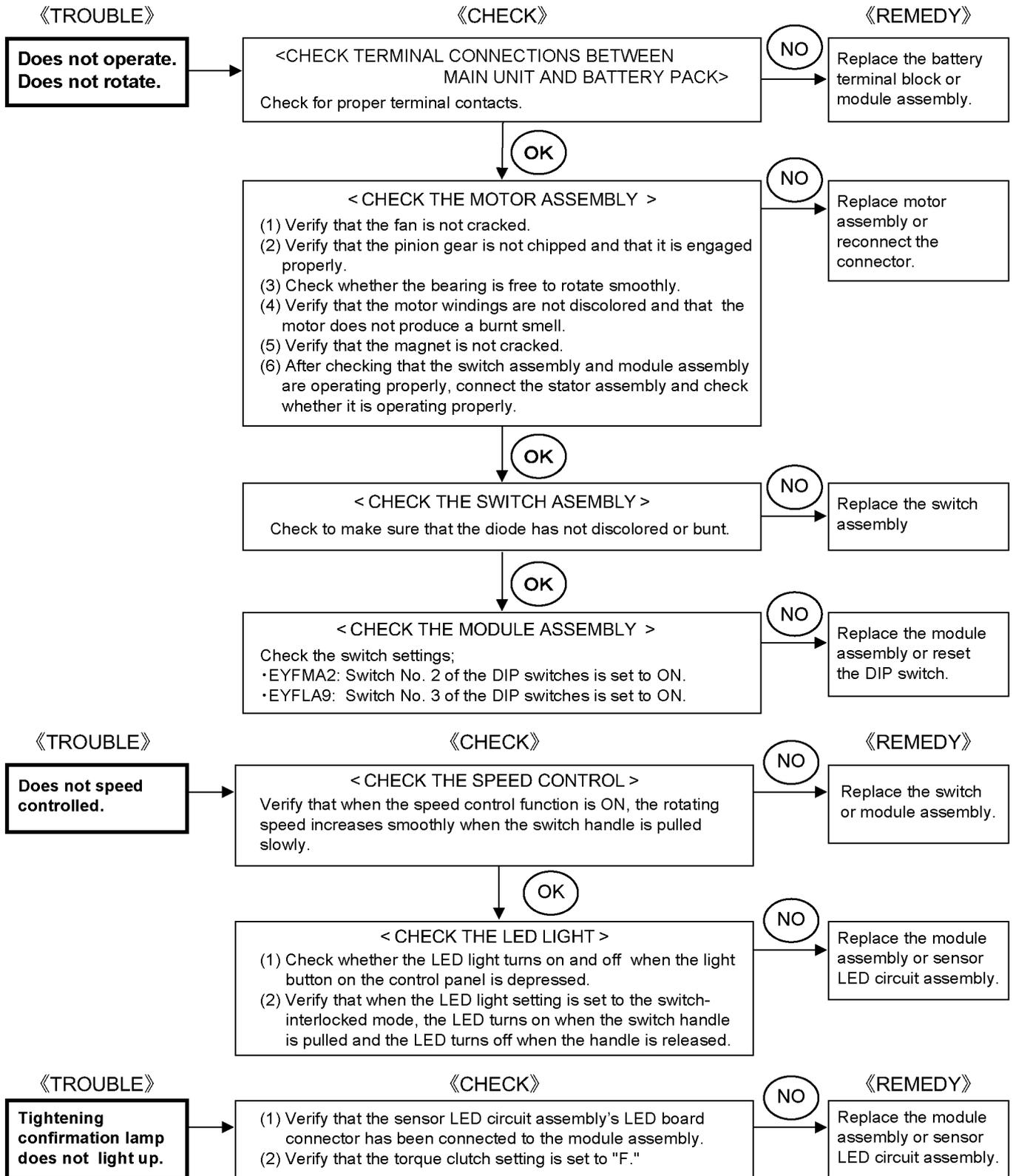
2 Specifications

MAIN UNIT

Model		EYFLA9C, EYFLA9P	EYFMA2C, EYFMA2P
Motor		10.8 V DC	14.4 V DC
Chuck size		□12.7 mm (1/2")	
No load speed	Stage	0 – 2300	
Impact per minute	Stage	0 – 2800	0 – 2900
Maximum torque		120 N·m (1224 kgf·cm, 1062 in·lbs)	185 N·m (1887 kgf·cm, 1637 in·lbs)
Torque control function operating range		Approx. 20 – 60 N·m (204 – 612 kgf·cm, 177 – 529 in·lbs)	Approx. 25 – 120 N·m (255 – 1223 kgf·cm, 310 – 1058 in·lbs)
Overall length		172 mm (6-25/32")	
Weight (with battery pack: EYFB30)		1.45 kg (3.2 lbs)	—————
Weight (with battery pack: EYFB32)		1.3 kg (2.9 lbs)	—————
Weight (with battery pack: EYFB41)		—————	1.4 kg (3.1 lbs)
Weight (with battery pack: EYFB42)		—————	1.6 kg (3.5 lbs)

3 Troubleshooting Guide

3.1. Troubleshooting Guide



《TROUBLE》

The tool is not producing adequate impact force.

《CHECK》

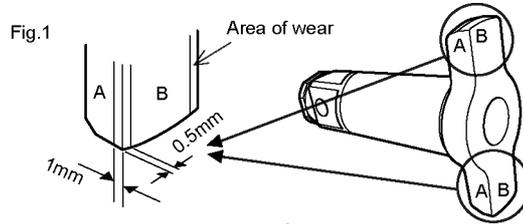
< CHECK THE ANVIL >

Check the amount of wear on the anvil. Wear is within acceptable bounds if wear in the area of contact with the output shaft and hammer is limited to an area 1mm or less from the corner on surface A and an area 0.5mm or less from the corner on surface B. (See Fig. 1)

NO

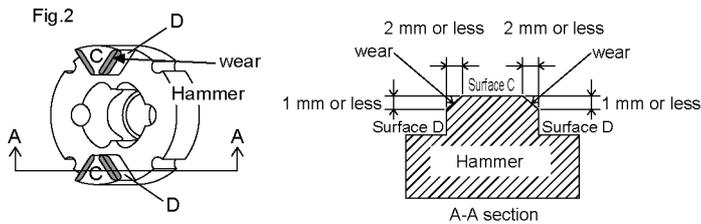
《REMEDY》

Replace the anvil.



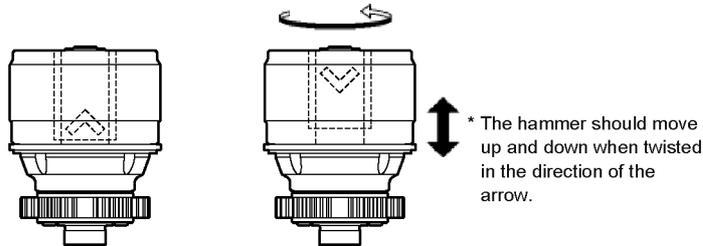
< CHECK THE DRIVING SHAFT ASSEMBLY >

- Check the amount of wear on the main hammer. Wear is within acceptable bounds if wear in the area of contact with the output shaft and hammer is limited to an area 2mm or less from the corner on surface C and an area 1mm or less from the corner on surface D. (See Fig. 2)



- Check whether the hammer twists and rotates smoothly, as shown in the following figure. (See Fig. 3)

Fig.3



Driving shaft assembly

NO

Replace the driving shaft assembly.

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.

3.2.2. Operation

- Check whether the tool speed increases continuously as the trigger is gradually engaged.
- Check whether the tool operates properly in both the forward and reverse directions.
- Set the LED light to switch-linked mode (L2) and check whether the LED light turns on when the trigger is engaged and that it turns off when the trigger is released.
- Set the buzzer to each of its three modes and verify that there is no buzzer in b0 mode, that the buzzer sounds when the green lamp is on in b1 mode, and that the buzzer sounds when the Red lamp is on in b2 mode.
- Check whether the ID setting has been properly configured after repair and reassembly.

[Method of confirmation]

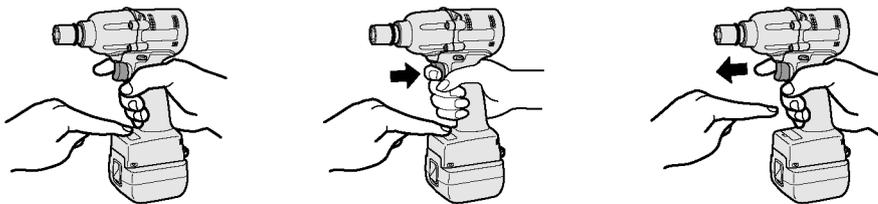
1. Press D button on the remote control
2. Confirm the operation panel display

Display	Tool circuit
H9	EYFLA9
H0	EYFMA2

- Initializing all settings (revert settings to factory defaults).

[Setting method]

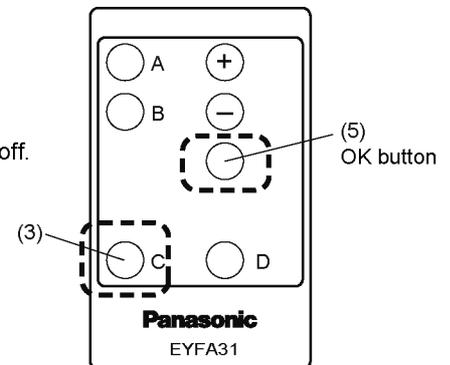
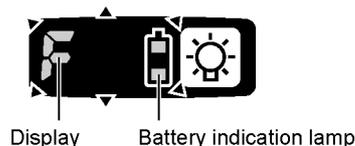
1. Turn off the control panel. (If the control panel is on, remove and then reinsert the battery pack).
2. Depress the switch while pushing the  button and then release both the  button and switch.



3. Press C button on the remote control.
4. The control panel will begin flashing.

Display : The letter "F" flashed on and off.

Battery indication lamp : The upper and lower bars of the battery flash on and off.



5. Press OK button on the remote control.
6. The control panel will stop flashing and light up.
This completes the setting initialization process.

(All the settings will have been reverted to their factory defaults.)



Initializing all settings

Factory settings

- Torque clutch setting: "F" (torque control function off)
- Snug point detection level → L1
- Cross thread reduction function → R0
- Rundown error detecting function → 0
- Tightening time reminder → 0
- Radio signal range limitation function → C0
- Buzzer setting → b0
- LED light setting → d1
- Speed control setting → P0
- Undetect time setting → J0
- Impact speed setting corresponding to the length of the socket used → h0

NOTE :

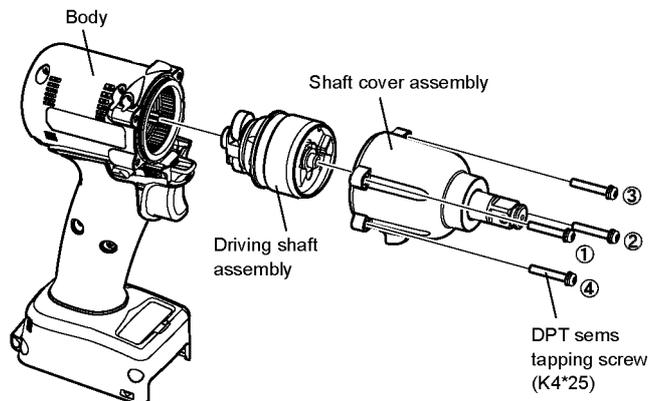
When the tool stops, the current setting value will be displayed for approximately 2 seconds. The setting status cannot be checked while the tool panel is off. Depress the trigger switch once to turn on the panel.

4 Disassembly and Assembly Instructions

* To reduce the risk of injury, always remove battery pack before removing/installing the tool.

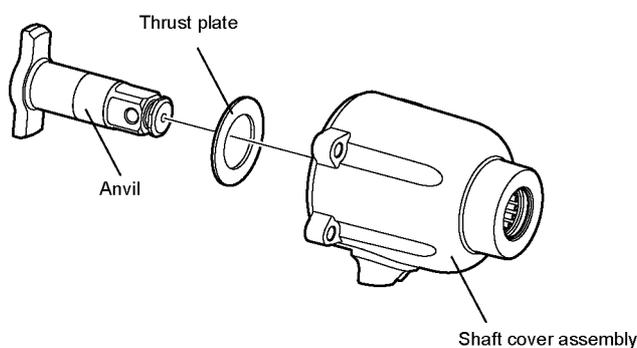
* To assemble the tool, start with 4-8 and proceed to 4-1

4.1. How to remove the Driving shaft assembly and Shaft cover assembly.



1. Remove 4 DPT sems tapping screws where tightening shaft cover assembly.
2. Pull off the shaft cover assembly.
3. Remove the Driving shaft assembly from the motor mounting plate.

4.2. How to remove the Thrust plate and Anvil.

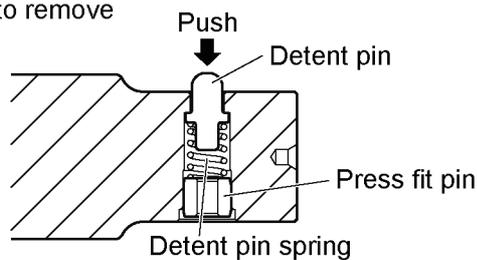


Remove the anvil from the shaft cover assembly and then remove thrust plate.

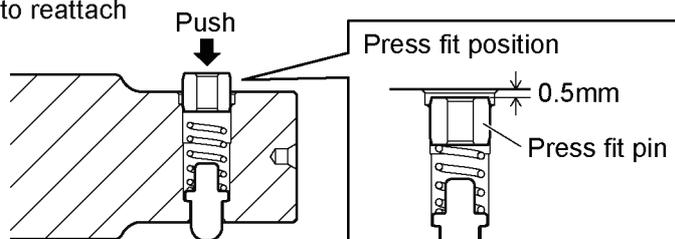
[FOR EYFLA9P/EYFMA2P]

Replacing detent pin, detent pin spring and press fit pin.

How to remove



How to reattach

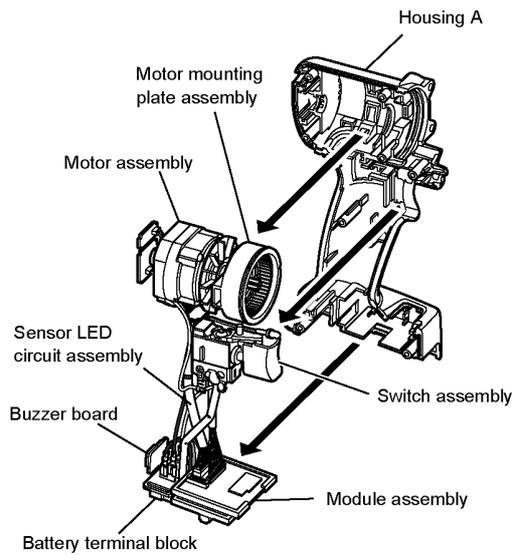


* When replacing the detent pin, replace the entire set (detent pin, press-fit pin and detent spring).

Note that Panasonic cannot guarantee that the replacement will fully recover the product performance.

We recommend the replacement of the anvil block.

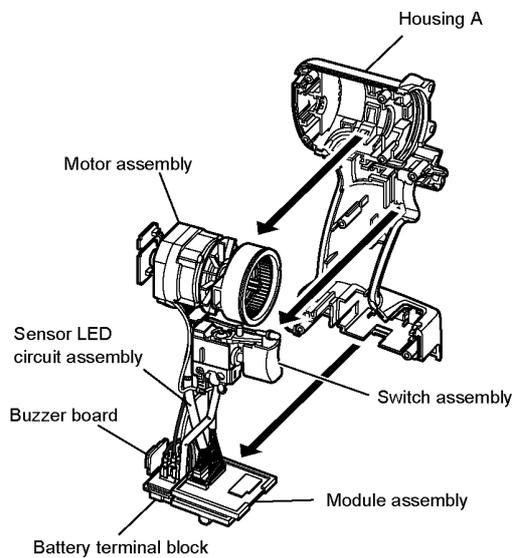
4.3. How to remove the Housing B.



Remove the interior components from the housing A.

Note: (when assembling)
Route the Sensor LED circuit lead wires and motor lead wire between the ribs on housing A.

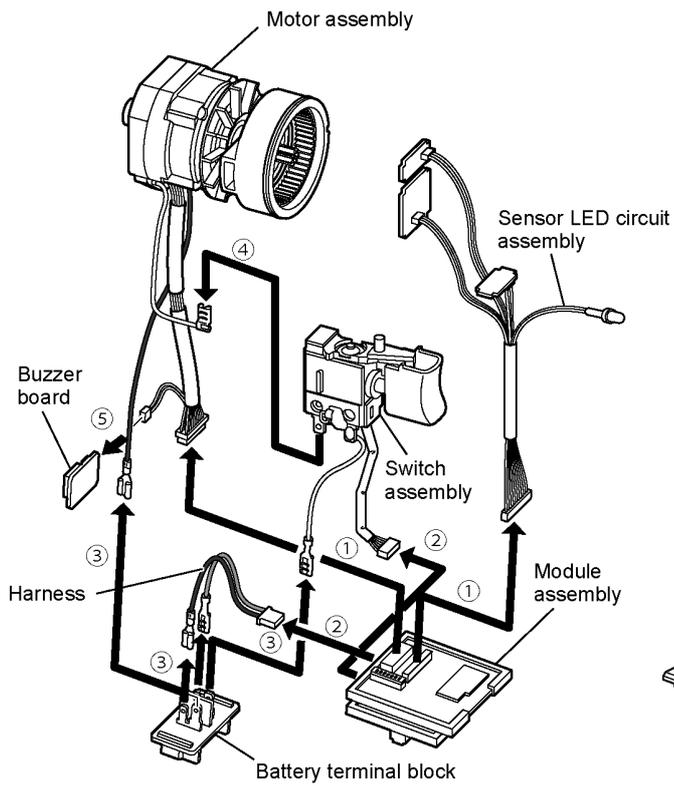
4.4. How to remove the Interior components.



Remove the interior components from the housing A.

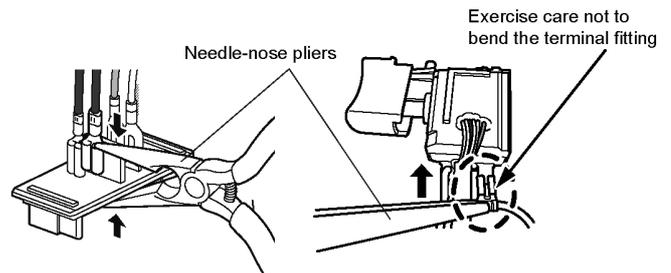
Note: (when assembling)
Route the Sensor LED circuit lead wires and motor lead wire between the ribs on housing A.

4.5. How to remove the Module assembly.

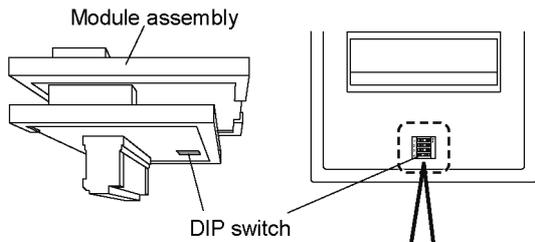


Disconnect the connectors or lead wires in order to (1) to (5).

NOTE: (When assembling)



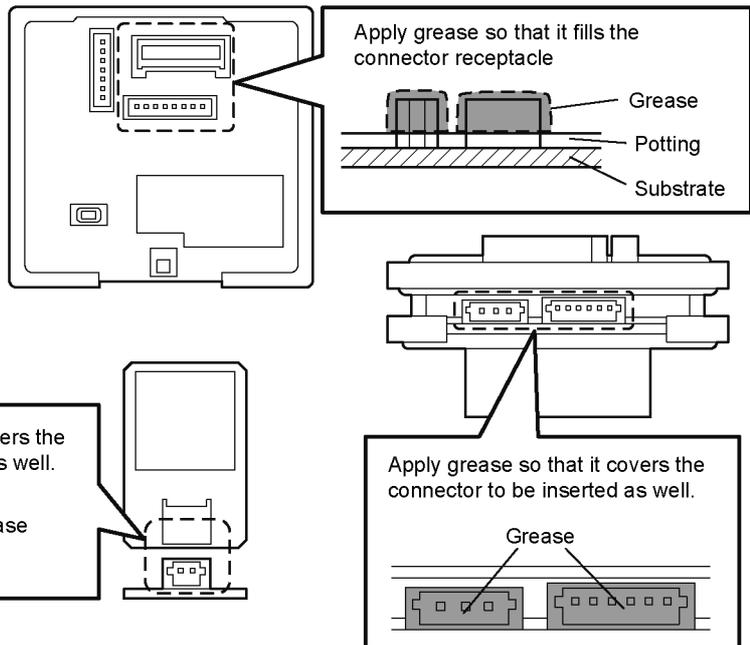
4.6. Checking and setting the Module assembly's DIP switches.



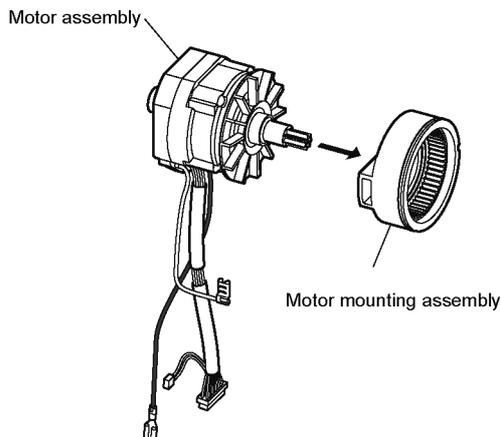
Check the settings of the DIP switches on the bottom of the module assembly's control switch.

Model: EYFLA9 <Condition>		Model: EYFMA2 <Condition>	
1	<input type="checkbox"/> OFF	1	<input type="checkbox"/> OFF
2	<input type="checkbox"/> OFF	2	<input type="checkbox"/> OFF
3	<input checked="" type="checkbox"/> ON	3	<input type="checkbox"/> OFF
4	<input type="checkbox"/> OFF	4	<input checked="" type="checkbox"/> ON

NOTE: (When assembling)
Apply grease to the Module assembly.



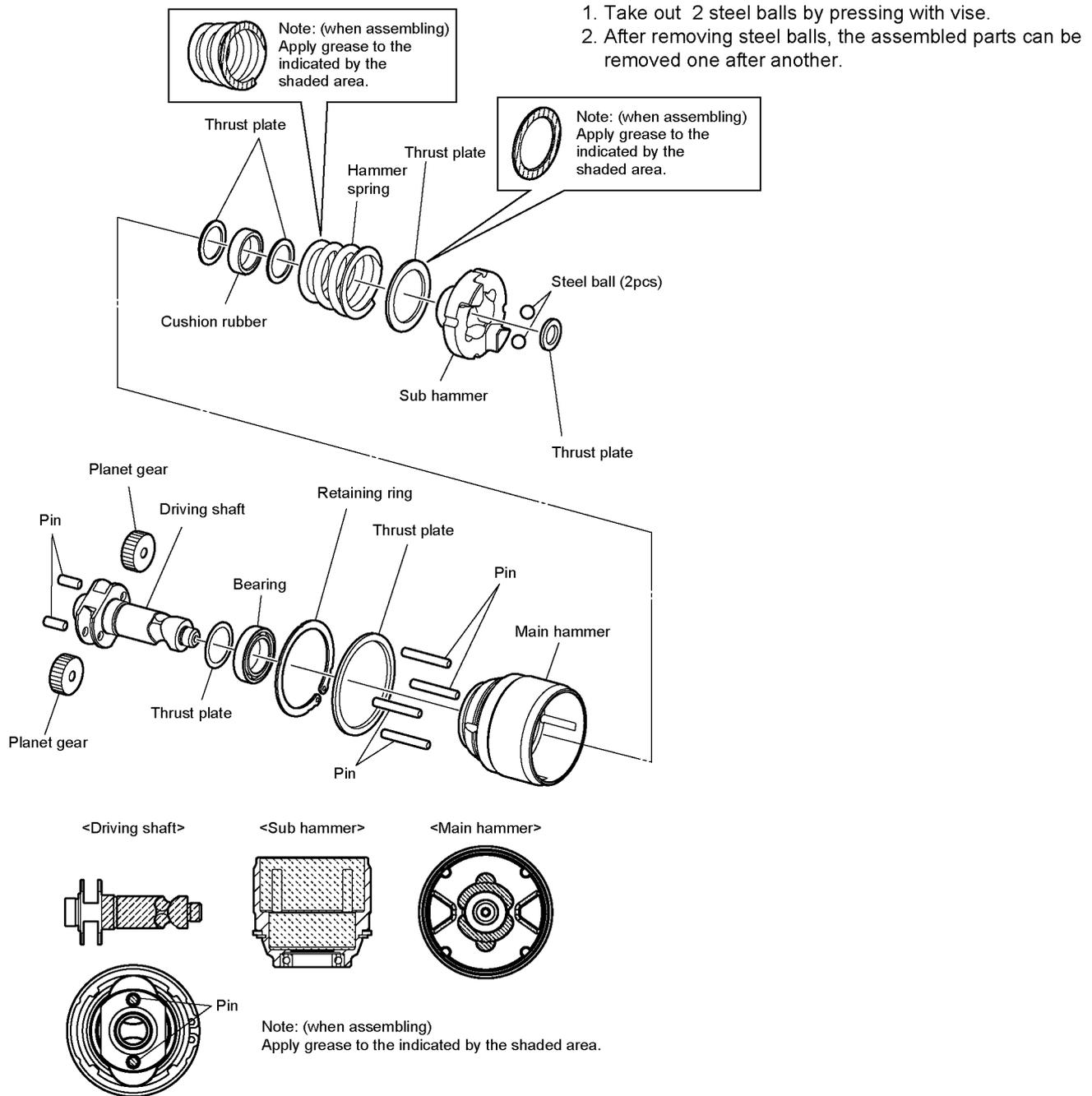
4.7. How to remove the Motor mounting plate assembly.



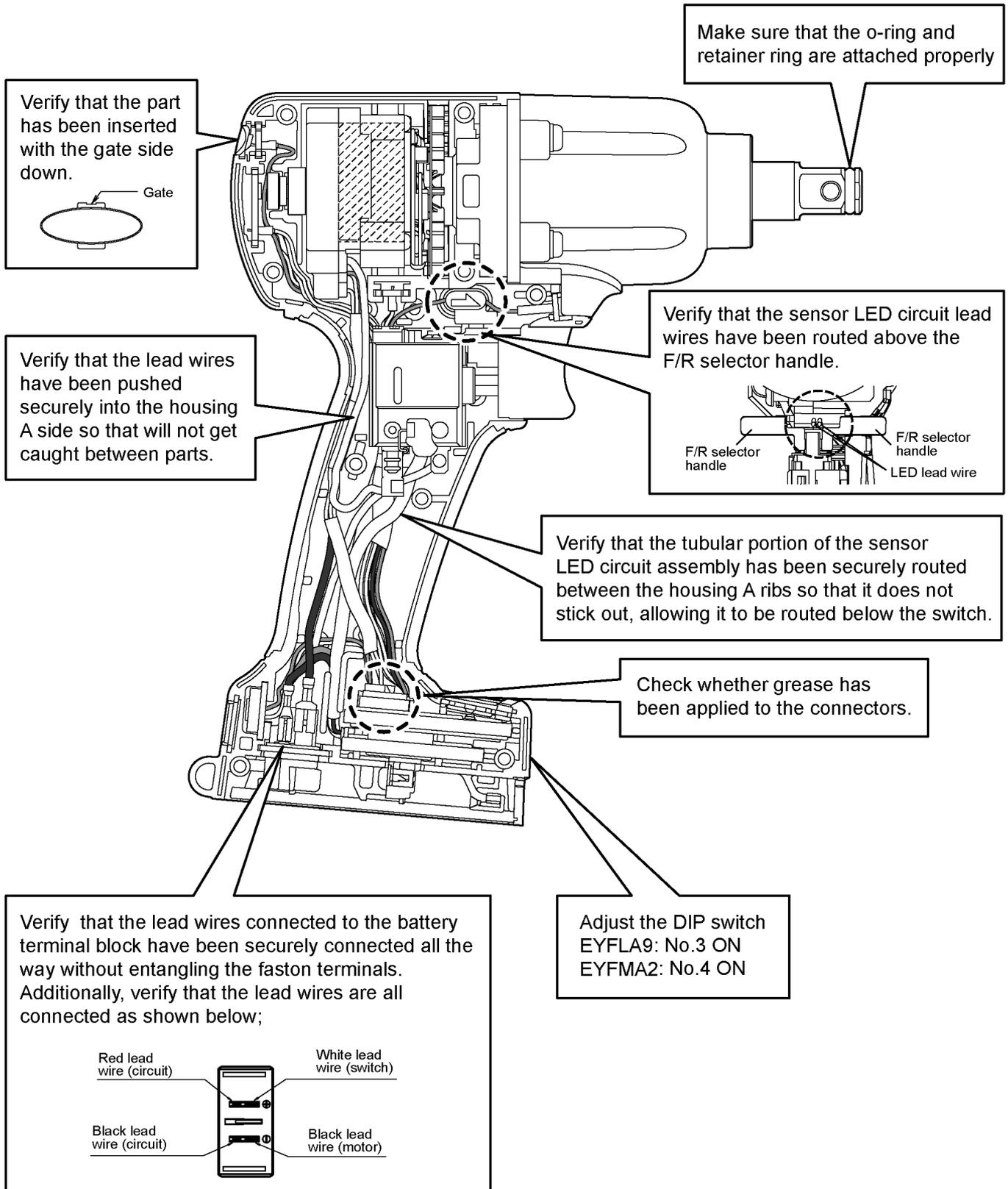
Remove the motor mounting assembly from the motor assembly.

- When installing the motor mounting plate to the motor assembly, attach it all the way the motor pinion until a clicking sound is produced.
- Check the motor assembly's pinion or magnet for chips and cracking.

4.8. How to remove the Driving shaft assembly.

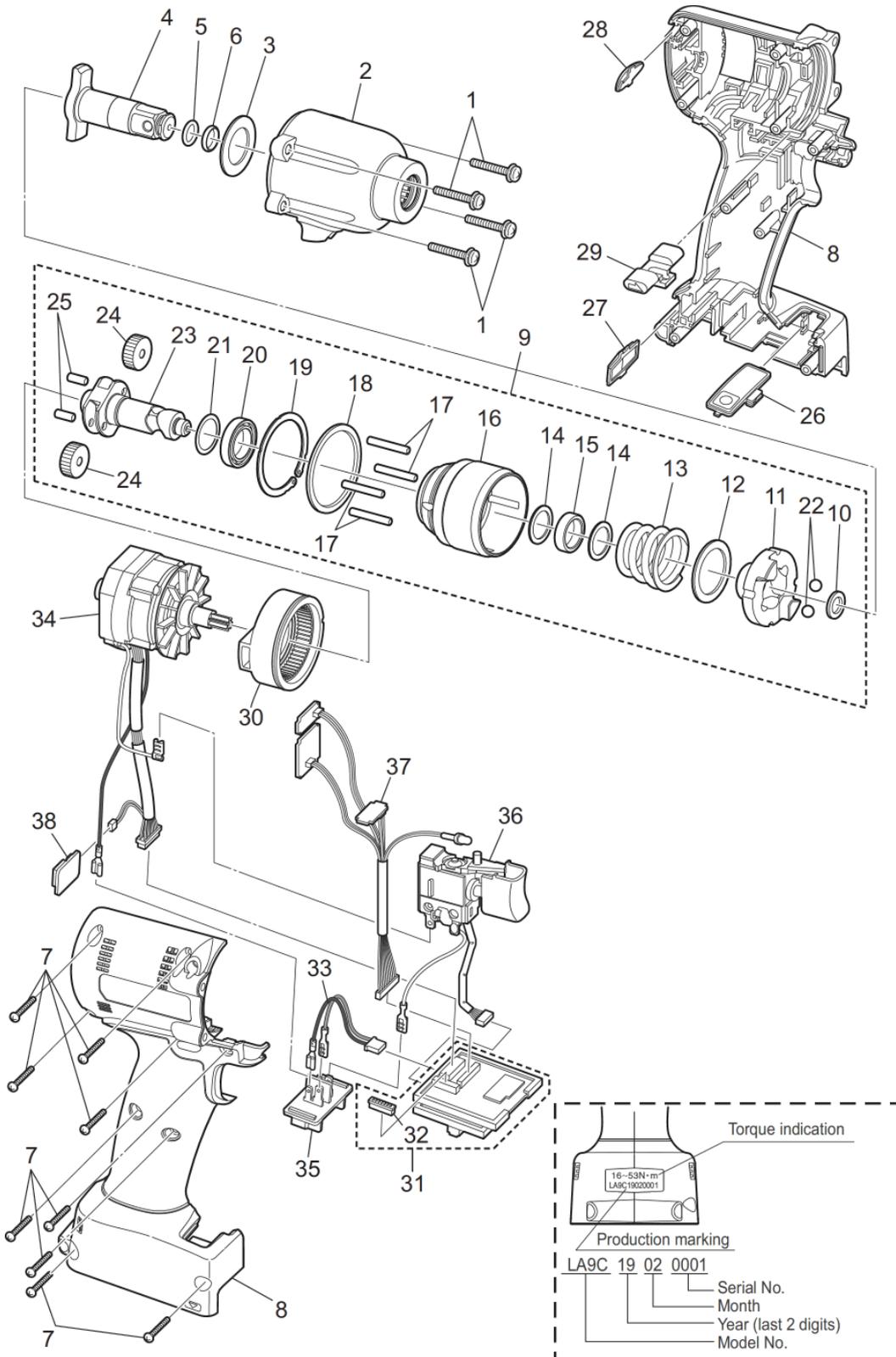


4.9. EYFLA9/EYFMA2 Wiring and Assembly Points.



5 Exploded View and Replacement Parts List

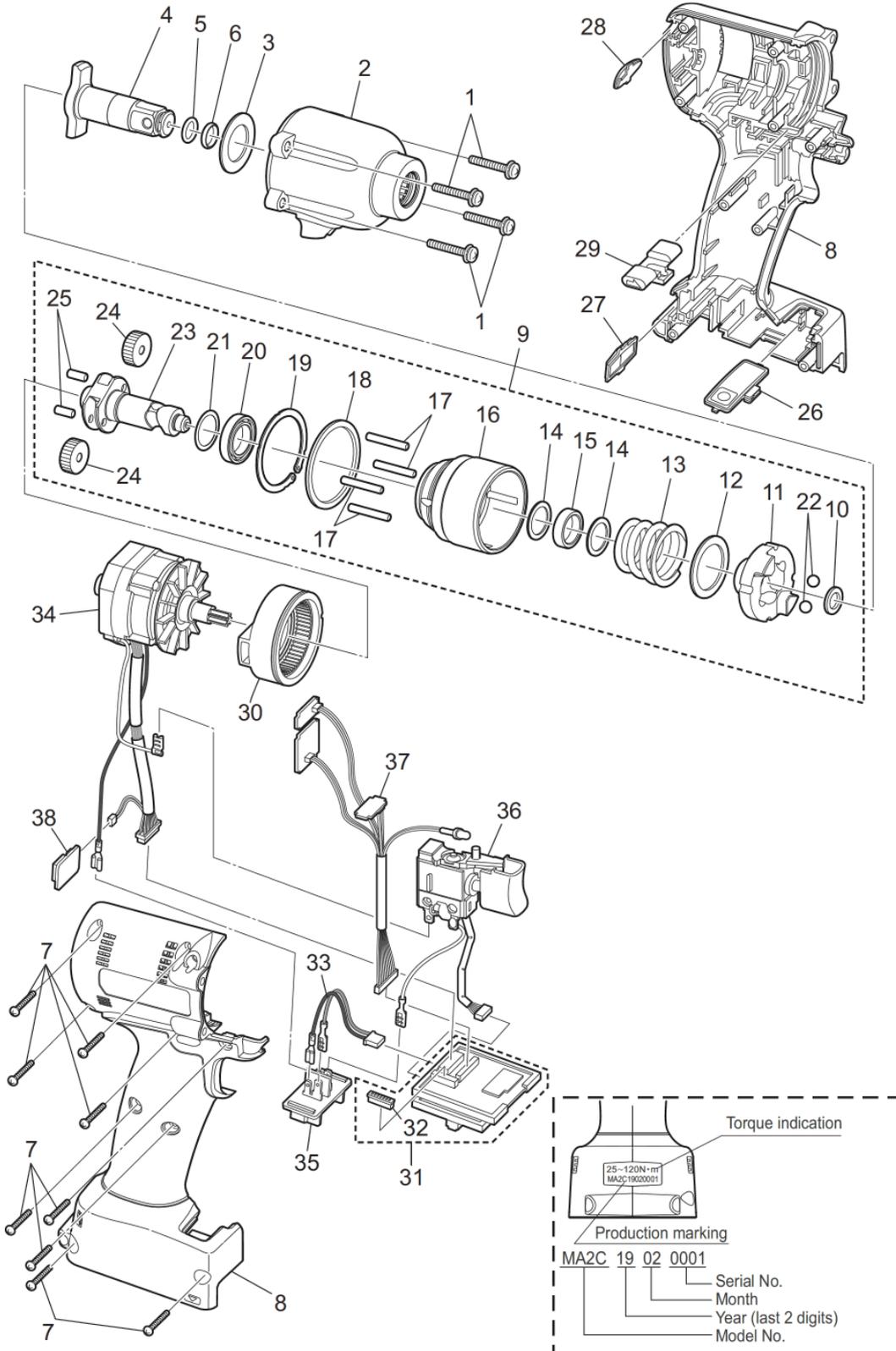
Model No. : EYFLA9C Exploded View



Model No. : EYFLA9C Parts List

Change	Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
EYFLA9C						
		1	WEYFMA2CK607	DPT SEMS TAPPING SCREW	4	(5PCS/PK)
		2	WEYFMA2CS337	SHAFT COVER ASSEMBLY	1	
		3	WEYFMA2CS047	THRUST PLATE	1	
		4	WEYFMA2CS127	ANVIL	1	
		5	WEY7552K0987	O-RING	1	
		6	WEY7552K0187	RETAINER RING	1	
		7	WEYFME1CK967	TAPPING SCREW	9	(5PCS/PK)
		8	WEYFLA9CK371	HOUSING AB SET	1	
		9	WEYFLA9CS137	DRIVING SHAFT ASSEMBLY	1	
		10	WEYFMA1JL087	THRUST PLATE	1	
		11	WEYFLA9CS117	MAIN HAMMER	1	
		12	WEYFMA2CS057	THRUST PLATE	1	
		13	WEY7541L0217	HAMMER SPRING	1	
		14	WEYFMA2CK057	THRUST PLATE	2	(2PCS/PK)
		15	WEYFLA3JL037	CUSHION RUBBER	1	
		16	WEYFLA9CS177	SUB HAMMER	1	
		17	WEYFMA2CS007	PIN	4	(4PCS/PK)
		18	WEYFMA2CK067	THRUST PLATE	1	
		19	WEYFMA2CS017	RETAINING RING	1	
		20	WEYFMA2CS467	BEARING	1	
		21	WEYFMA2CK087	THRUST PLATE	1	
		22	WEYFMA2CS147	STEEL BALL	2	(2PCS/PK)
		23	WEYFMA2CS157	DRIVING SHAFT	1	
		24	WEY6504L1357	PLANET GEAR	2	(2PCS/PK)
		25	WEY6506L1346	PIN	2	(2PCS/PK)
		26	WEYFGA1NK337	OPERATION PLATE ASSEMBLY	1	
		27	WEYFMA1JL337	DISCERNMENT PLATE	1	
		28	WEYFPA1JL377	TIGHTENING CONFIRMATION LAMP COVER	1	
		29	WEYFLA1AK327	F/R SELECTOR HANDLE	1	
		30	WEYFLA1AL007	MOTOR MOUNTING PLATE ASSEMBLY	1	
		31	WEYFMA2CL207	MODULE ASSEMBLY	1	
		32	WEYFGA1NW287	CONNECTOR	1	
		33	WEYFLA1AL297	HARNESS	1	
		34	WEYFMA9CL477	MOTOR ASSEMBLY	1	
		35	WEY7540L2157	BATTERY TERMINAL BLOCK	1	
		36	WEYFLA1AK207	SWITCH ASSEMBLY	1	
		37	WEYFMA2CL287	SENSOR LED CIRCUIT ASSEMBLY	1	
		38	WEYFME1CL267	BUZZER BOARD	1	
		-	WEY004X8967	CALFOREX	1	
		-	WEY001T8957	FLOIL GREASE	1	
		-	WEY002X8977	GREASE (DOUBREX)	1	

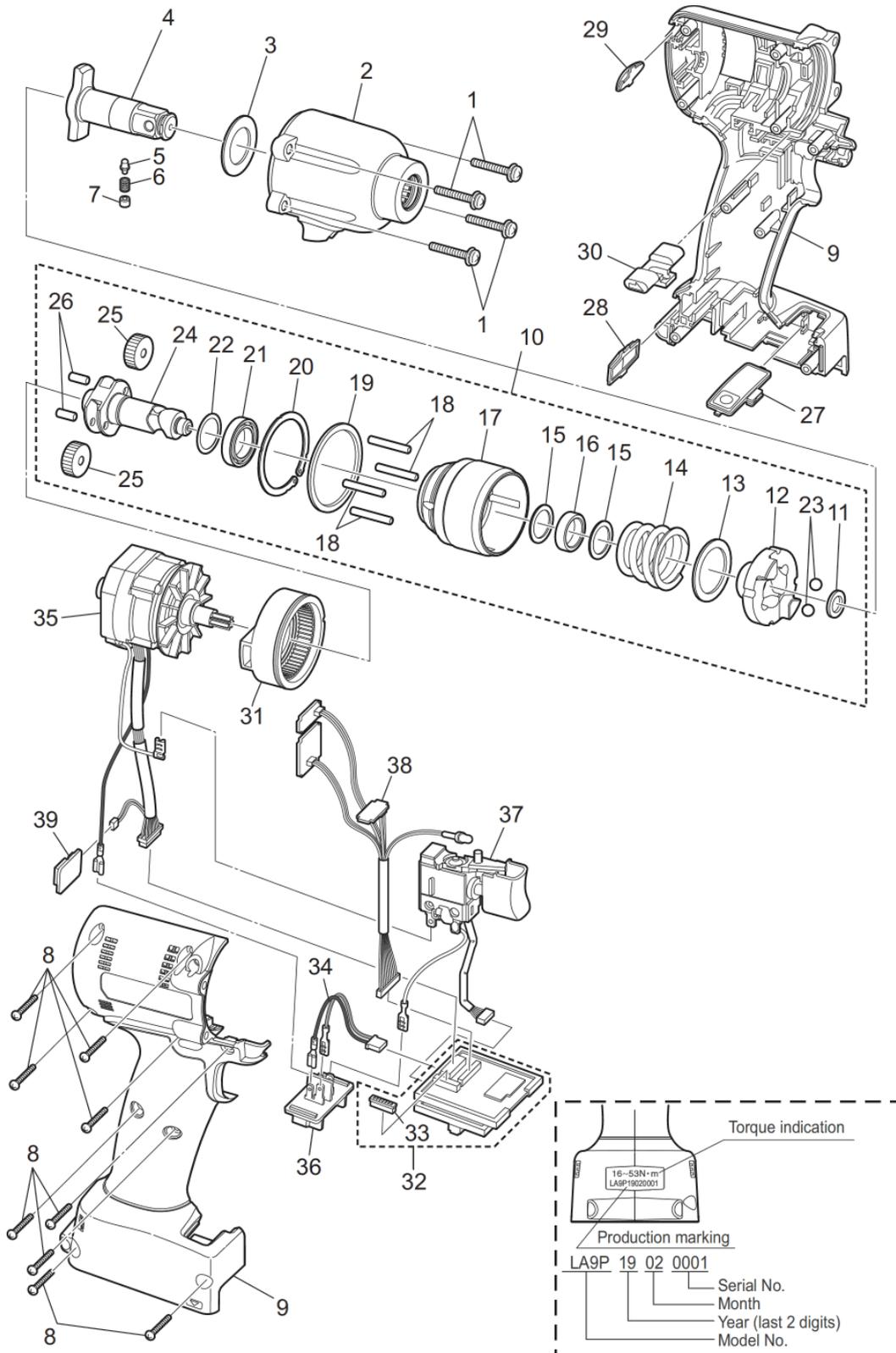
Model No. : EYFMA2C Exploded View



Model No. : EYFMA2C Parts List

Change	Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
EYFMA2C						
		1	WEYFMA2CK607	DPT SEMS TAPPING SCREW	4	(5PCS/PK)
		2	WEYFMA2CS337	SHAFT COVER ASSEMBLY	1	
		3	WEYFMA2CS047	THRUST PLATE	1	
		4	WEYFMA2CS127	ANVIL	1	
		5	WEY7552K0987	O-RING	1	
		6	WEY7552K0187	RETAINER RING	1	
		7	WEYFME1CK967	TAPPING SCREW	9	(5PCS/PK)
		8	WEYFMA2CK371	HOUSING AB SET	1	
		9	WEYFMA2CS137	DRIVING SHAFT ASSEMBLY	1	
		10	WEYFMA1JL087	THRUST PLATE	1	
		11	WEYFMA2CS117	MAIN HAMMER	1	
		12	WEYFMA2CS057	THRUST PLATE	1	
		13	WEY7541L0217	HAMMER SPRING	1	
		14	WEYFMA2CK057	THRUST PLATE	2	(2PCS/PK)
		15	WEYFLA3JL037	CUSHION RUBBER	1	
		16	WEYFMA2CS177	SUB HAMMER	1	
		17	WEYFMA2CS007	PIN	4	(4PCS/PK)
		18	WEYFMA2CK067	THRUST PLATE	1	
		19	WEYFMA2CS017	RETAINING RING	1	
		20	WEYFMA2CS467	BEARING	1	
		21	WEYFMA2CK087	THRUST PLATE	1	
		22	WEYFMA2CS147	STEEL BALL	2	(2PCS/PK)
		23	WEYFMA2CS157	DRIVING SHAFT	1	
		24	WEY6504L1357	PLANET GEAR	2	(2PCS/PK)
		25	WEY6506L1346	PIN	2	(2PCS/PK)
		26	WEYFGA1NK337	OPERATION PLATE ASSEMBLY	1	
		27	WEYFMA1JL337	DISCERNMENT PLATE	1	
		28	WEYFPA1JL377	TIGHTENING CONFIRMATION LAMP COVER	1	
		29	WEYFLA1AK327	F/R SELECTOR HANDLE	1	
		30	WEYFLA1AL007	MOTOR MOUNTING PLATE ASSEMBLY	1	
		31	WEYFMA2CL207	MODULE ASSEMBLY	1	
		32	WEYFGA1NW287	CONNECTOR	1	
		33	WEYFLA1AL297	HARNESS	1	
		34	WEYFMA2CL477	MOTOR ASSEMBLY	1	
		35	WEY7540L2157	BATTERY TERMINAL BLOCK	1	
		36	WEYFLA1AK207	SWITCH ASSEMBLY	1	
		37	WEYFMA2CL287	SENSOR LED CIRCUIT ASSEMBLY	1	
		38	WEYFME1CL267	BUZZER BOARD	1	
		-	WEY004X8967	CALFOREX	1	
		-	WEY001T8957	FLOIL GREASE	1	
		-	WEY002X8977	GREASE (DOUBREX)	1	

Model No. : EYFLA9P Exploded View



Model No. : EYFLA9P Parts List

Change	Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
EYFLA9P						
		1	WEYFMA2CK607	DPT SEMS TAPPING SCREW	4	(5PCS/PK)
		2	WEYFMA2CS337	SHAFT COVER ASSEMBLY	1	
		3	WEYFMA2CS047	THRUST PLATE	1	
		4	WEYFMA2PS127	ANVIL	1	
		5	WEYFNA1PL050	DETENT PIN	1	
		6	WEYFNA1PL097	DETENT PIN SPRING	1	
		7	WEYFNA1PL035	PRESS FIT PIN	1	
		8	WEYFME1CK967	TAPPING SCREW	9	(5PCS/PK)
		9	WEYFLA9PK379	HOUSING AB SET	1	
		10	WEYFLA9CS137	DRIVING SHAFT ASSEMBLY	1	
		11	WEYFMA1JL087	THRUST PLATE	1	
		12	WEYFLA9CS117	MAIN HAMMER	1	
		13	WEYFMA2CS057	THRUST PLATE	1	
		14	WEY7541L0217	HAMMER SPRING	1	
		15	WEYFMA2CK057	THRUST PLATE	2	(2PCS/PK)
		16	WEYFLA3JL037	CUSHION RUBBER	1	
		17	WEYFLA9CS177	SUB HAMMER	1	
		18	WEYFMA2CS007	PIN	4	(4PCS/PK)
		19	WEYFMA2CK067	THRUST PLATE	1	
		20	WEYFMA2CS017	RETAINING RING	1	
		21	WEYFMA2CS467	BEARING	1	
		22	WEYFMA2CK087	THRUST PLATE	1	
		23	WEYFMA2CS147	STEEL BALL	2	(2PCS/PK)
		24	WEYFMA2CS157	DRIVING SHAFT	1	
		25	WEY6504L1357	PLANET GEAR	2	(2PCS/PK)
		26	WEY6506L1346	PIN	2	(2PCS/PK)
		27	WEYFGA1NK337	OPERATION PLATE ASSEMBLY	1	
		28	WEYFLA3JL337	DISCERNMENT PLATE	1	
		29	WEYFPA1JL377	TIGHTENING CONFIRMATION LAMP COVER	1	
		30	WEYFLA1AK327	F/R SELECTOR HANDLE	1	
		31	WEYFLA1AL007	MOTOR MOUNTING PLATE ASSEMBLY	1	
		32	WEYFMA2CL207	MODULE ASSEMBLY	1	
		33	WEYFGA1NW287	CONNECTOR	1	
		34	WEYFLA1AL297	HARNESS	1	
		35	WEYFMA9CL477	MOTOR ASSEMBLY	1	
		36	WEY7540L2157	BATTERY TERMINAL BLOCK	1	
		37	WEYFLA1AK207	SWITCH ASSEMBLY	1	
		38	WEYFMA2CL287	SENSOR LED CIRCUIT ASSEMBLY	1	
		39	WEYFME1CL267	BUZZER BOARD	1	
		-	WEY004X8967	CALFOREX	1	
		-	WEY001T8957	FLOIL GREASE	1	
		-	WEY002X8977	GREASE (DOUBREX)	1	

Model No. : EYFMA2P Parts List

Change	Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
EYFMA2P						
		1	WEYFMA2CK607	DPT SEMS TAPPING SCREW	4	(5PCS/PK)
		2	WEYFMA2CS337	SHAFT COVER ASSEMBLY	1	
		3	WEYFMA2CS047	THRUST PLATE	1	
		4	WEYFMA2PS127	ANVIL	1	
		5	WEYFNA1PL050	DETENT PIN	1	
		6	WEYFNA1PL097	DETENT PIN SPRING	1	
		7	WEYFNA1PL035	PRESS FIT PIN	1	
		8	WEYFME1CK967	TAPPING SCREW	9	(5PCS/PK)
		9	WEYFMA2PK379	HOUSING AB SET	1	
		10	WEYFMA2CS137	DRIVING SHAFT ASSEMBLY	1	
		11	WEYFMA1JL087	THRUST PLATE	1	
		12	WEYFMA2CS117	MAIN HAMMER	1	
		13	WEYFMA2CS057	THRUST PLATE	1	
		14	WEY7541L0217	HAMMER SPRING	1	
		15	WEYFMA2CK057	THRUST PLATE	2	(2PCS/PK)
		16	WEYFLA3JL037	CUSHION RUBBER	1	
		17	WEYFMA2CS177	SUB HAMMER	1	
		18	WEYFMA2CS007	PIN	4	(4PCS/PK)
		19	WEYFMA2CK067	THRUST PLATE	1	
		20	WEYFMA2CS017	RETAINING RING	1	
		21	WEYFMA2CS467	BEARING	1	
		22	WEYFMA2CK087	THRUST PLATE	1	
		23	WEYFMA2CS147	STEEL BALL	2	(2PCS/PK)
		24	WEYFMA2CS157	DRIVING SHAFT	1	
		25	WEY6504L1357	PLANET GEAR	2	(2PCS/PK)
		26	WEY6506L1346	PIN	2	(2PCS/PK)
		27	WEYFGA1NK337	OPERATION PLATE ASSEMBLY	1	
		28	WEYFMA1JL337	DISCERNMENT PLATE	1	
		29	WEYFPA1JL377	TIGHTENING CONFIRMATION LAMP COVER	1	
		30	WEYFLA1AK327	F/R SELECTOR HANDLE	1	
		31	WEYFLA1AL007	MOTOR MOUNTING PLATE ASSEMBLY	1	
		32	WEYFMA2CL207	MODULE ASSEMBLY	1	
		33	WEYFGA1NW287	CONNECTOR	1	
		34	WEYFLA1AL297	HARNESS	1	
		35	WEYFMA2CL477	MOTOR ASSEMBLY	1	
		36	WEY7540L2157	BATTERY TERMINAL BLOCK	1	
		37	WEYFLA1AK207	SWITCH ASSEMBLY	1	
		38	WEYFMA2CL287	SENSOR LED CIRCUIT ASSEMBLY	1	
		39	WEYFME1CL267	BUZZER BOARD	1	
		-	WEY004X8967	CALFOREX	1	
		-	WEY001T8957	FLOIL GREASE	1	
		-	WEY002X8977	GREASE (DOUBREX)	1	