

Chainsaw 82CS34 Service and repair information

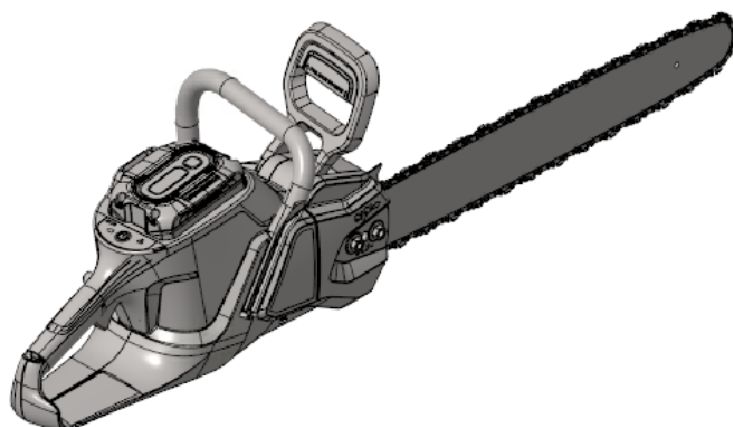
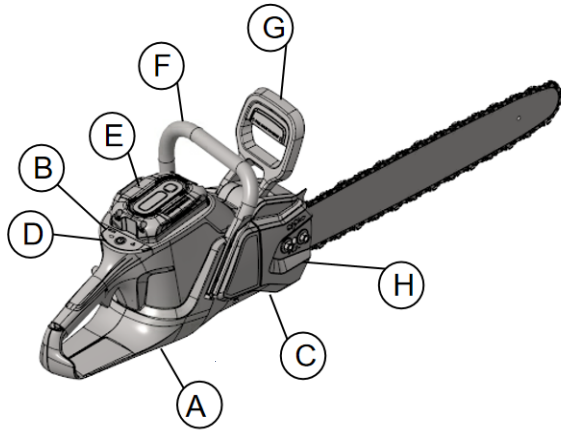


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1 Component location

Component locations



- A) Cover right
- B) Cover left
- C) Mg bottom
- D) HMI panel
- E) Battery box
- F) Front handle
- G) Chain break handle
- H) Break cover

2 Preparations

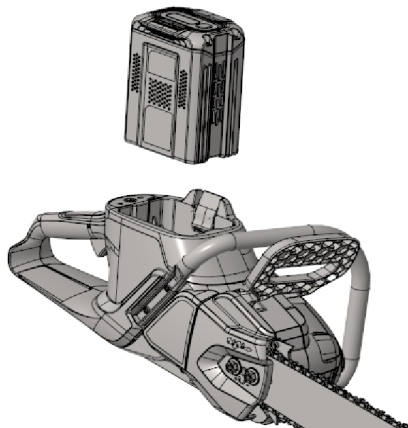
- Tools**
-  1) Protective gloves
 -  2) ESD bracelet
 -  3) Torx wrench
 -  4) Screw driver
 -  5) Socket wrench
 -  6) Shrink tubes for connectors
- Electrostatic sensitive devices

Function test

After service and repair always conduct the following function tests:

- Check for error messages
- Check that chain is running freely
- Check chain lubrication
- Check the chain brake

Remove the battery

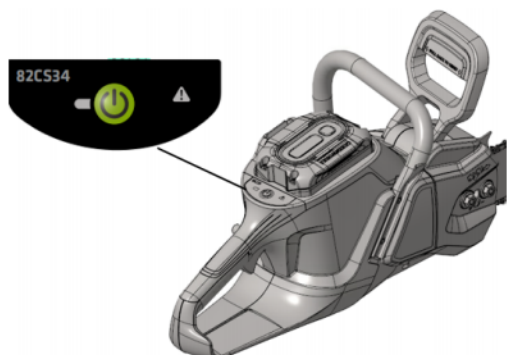


⚠ Always remove the battery before working on the chainsaw.

3 Trouble shooting

Error codes by flashing light on HMI

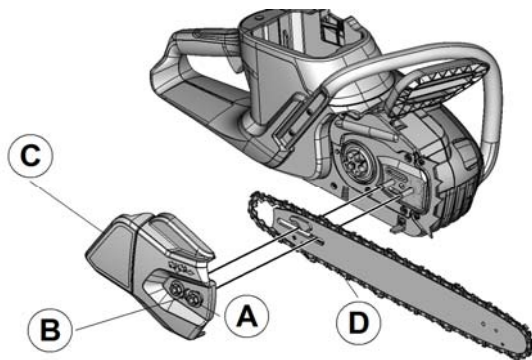
Steady flashing light ●-●-●- Chain break is engaged



Protection issues	Blinking times	Details
Self-checked failed	2	The control board does not pass the self-test, stops the motor and reports an error.
Battery pack communication abnormality	3	The communication between the battery pack and the control board is not connected. Or the connection is abruptly interrupted during normal communication.
Overcurrent protection	4	When the motor is running, the phase current exceeds the setpoint protection value. Or the bus current exceeds the set protection value.
Low-voltage protection	5	The battery pack voltage is lower than the motor start voltage, or the battery voltage is less than the minimum operating voltage during motor operation.
MOS over-temperature	6	The operating temperature of the control board exceeds the set protection value.
Motor stalling, motor out of step, motor hall signals abnormality	7	When the motor starts or runs, it encounters resistance and the motor fails to continue running. The communication is wrong when the motor is started or running, and the motor cannot continue to operate. Hall sensor motor, Hall signal is abnormal.
Switch logic abnormality	8	The brake has been on. The starting sequence of the motor is incorrect.
Software certification abnormality	9	MCU exception detected during software certification code run.
Motor over-temperature	10	When the motor works or starts, the motor temperature exceeds the set protection value.
Battery over-temperature	11	The battery pack temperature exceeds the set protection value when the control board is working.

4 Chain disassembly

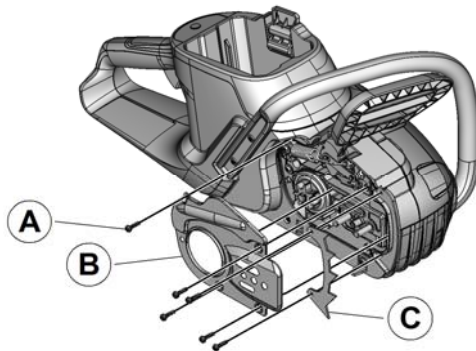
Chain disassembly



⚠ CAUTION!: SHARP OBJECTS. GLOVES REQUIRED.

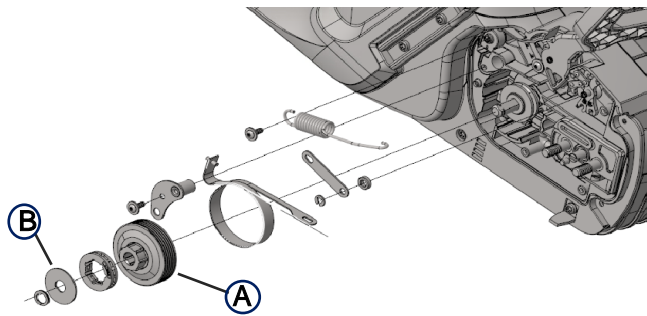
- 1) Loosen the captive nuts (A).
- 2) Untighten the chain (B).
- 3) Remove the cover (C).
- 4) Remove the chain and blade (D).

Chain break steel cover and spikes



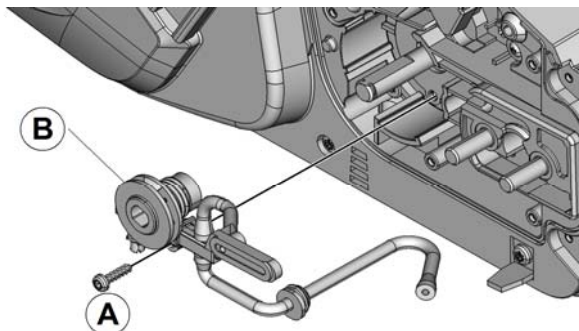
- 1) Remove the 6 screws (A).
- 2) Remove the steel plate (B) and spikes (C).

Chain break assy and sprocket



- 1) Deactivate the brake
- 2) Remove the sprocket (A).
- 3) Activate the brake
- 4) Remove the washer (B).

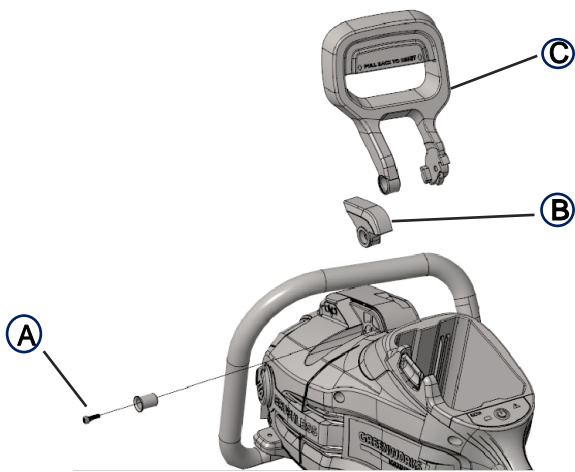
Oil pump and hose



- 1) Remove the screw (A).
- 2) Remove the oil pump and hose (B).

4 Chain disassembly

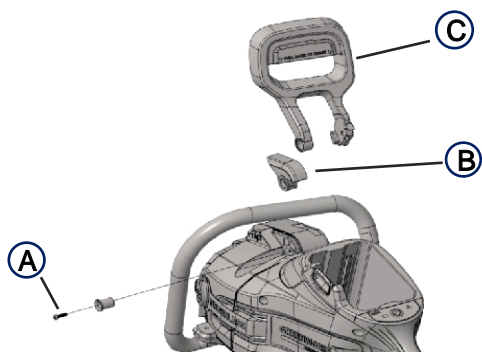
Break handle



- 1) Remove the screw (A).
- 2) Remove the spacer (B).
- 3) Remove the break handle (C).

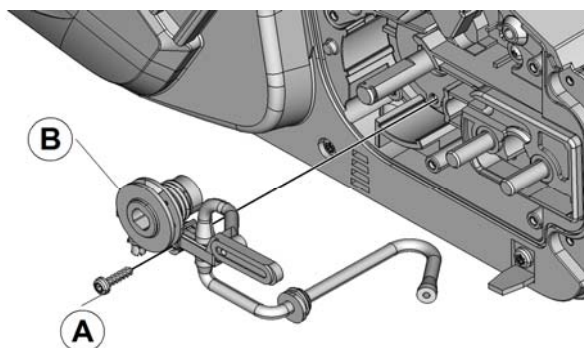
5 Chain assembly

Break handle



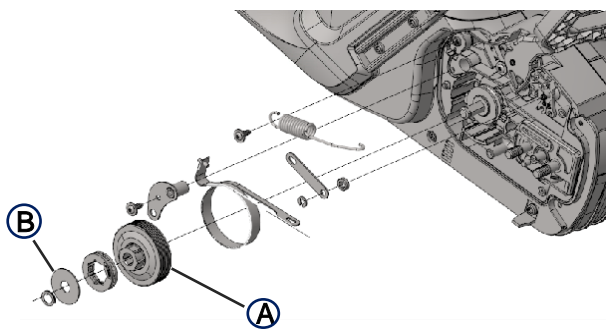
- 1) Fit the break handle (C).
- 2) Fit the break handle spacer (B).
- 3) Fit the screw (A): 1,0 Nm

Oil pump and hose



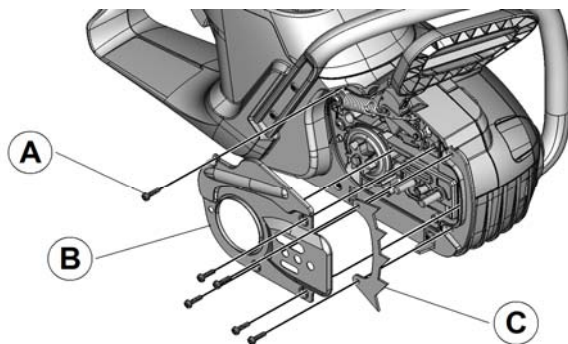
- 1) Fit the oil pump and hose (B).
- 2) Fit the screw (A): 1,0 Nm

Chain break assy and sprocket



- 1) Activate the brake
- 2) Fit the washer (B).
- 3) Deactivate the brake
- 4) Fit the sprocket (A).

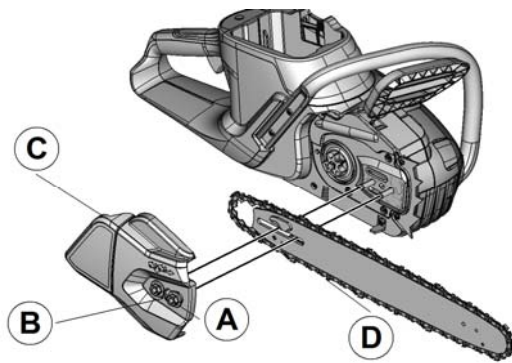
Chain break steel cover and spikes



- 1) Fit the steel plate (B) and spikes (C).
- 2) Fit the 6 screws (A) : 1,0 Nm

5 Chain assembly

Chain assembly

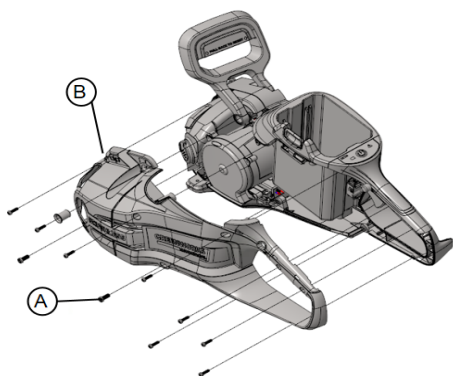


⚠ CAUTION!: SHARP OBJECTS. GLOVES REQUIRED.

- 1) Fit the chain and blade (D).
- 2) Fit the cover (C).
- 3) Tighten the chain (B).
- 4) Tighten the 2 captive nuts (A): : 2,0 Nm

6 Motor disassembly

Left cover



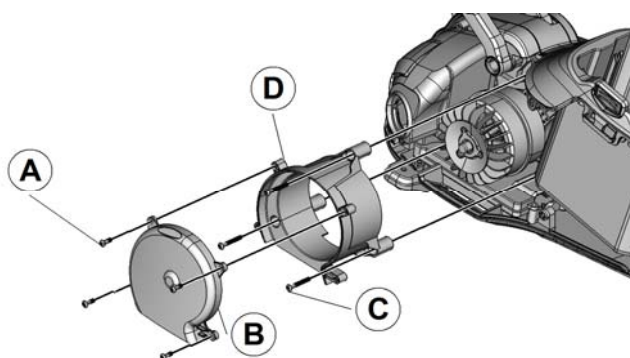
Remove the chain assembly according to

Chapter: "Chain disassembly"

1) Remove the 10 screws (A).

2) Remove the left cover (B).

Motor cover



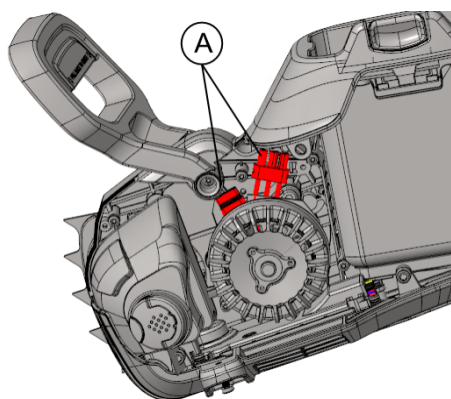
1) Remove the 4 screws (A).

2) Remove the fan cover (B).

3) Remove the 3 screws (C).

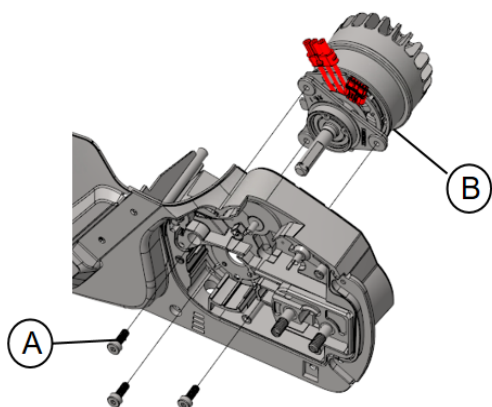
4) Remove the motor cover (D).

Connectors



Disconnect the connectors (A) from the motor

Motor

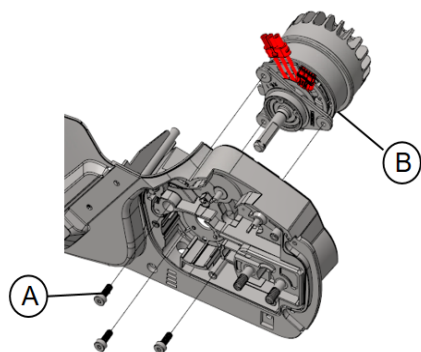


1) Remove the 3 screws (A).

2) Remove the motor (B).

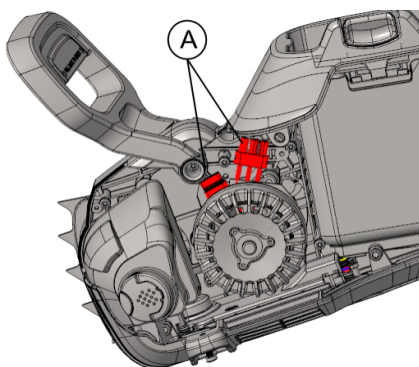
7 Motor assembly

Motor



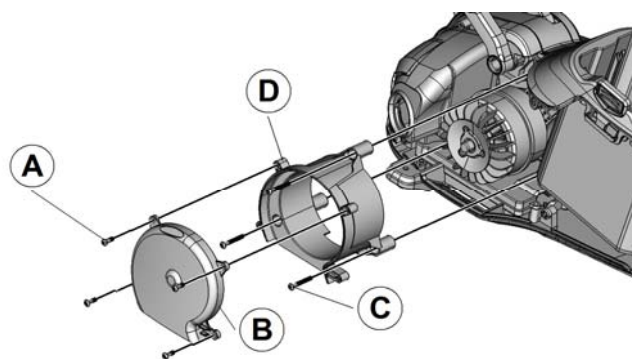
- 1) Fit the motor (B).
- 2) Fit the 3 screws (A): : 1,4 Nm

Connectors



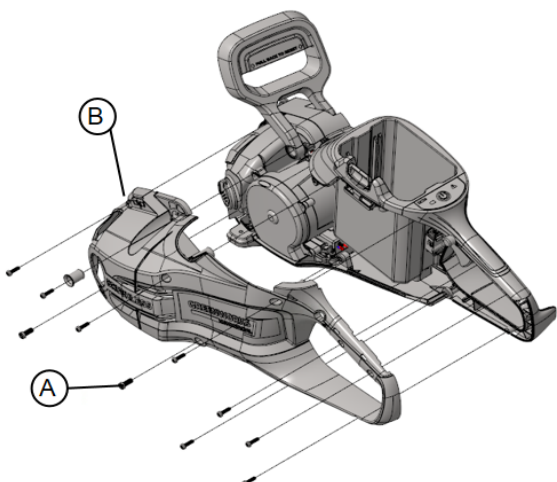
Fit the connectors.

Motor cover



- 1) Fit the motor cover (D).
- 2) Fit the screws (C): 1,0 Nm
- 3) Fit the fan cover (B).
- 4) Fit the screws (A): 1,0 Nm

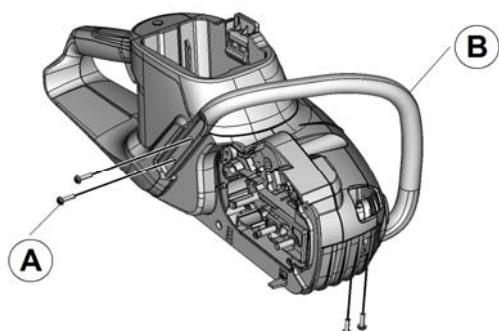
Left cover



- 1) Fit the left cover (B).
 - 2) Fit the screws the 10 screws (A): 1,2 Nm
- Nm Fit the chain assembly according to Chapter "Chain assembly"

8 Right cover

Front handle



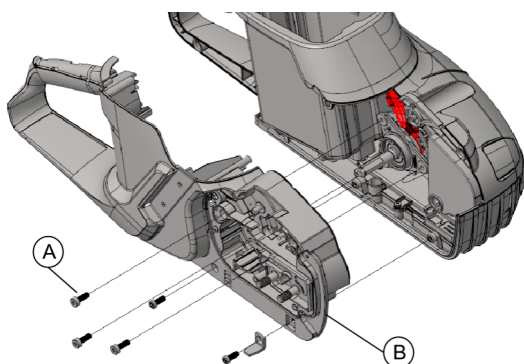
Remove the chain assembly according to

Chapter "Chain disassembly"

1) Remove the 4 screws (A).

2) Remove the handle (B).

Cover right



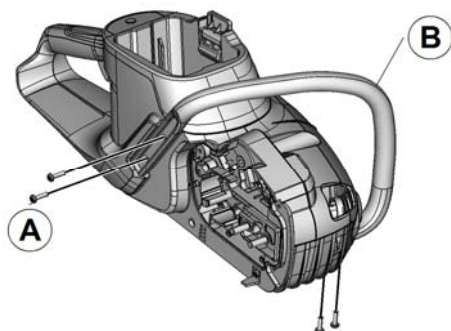
1) Remove the 5 screws (A).

2) Remove the right cover (B).

3) Fit the cover (B).

4) Fit the 4 screws (A): 1,2 Nm

Front handle



1) Fit the handle (B).

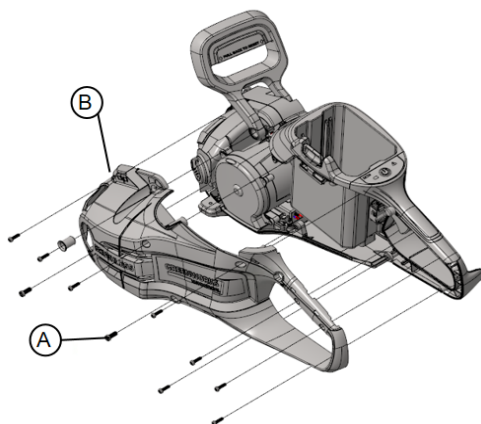
2) Fit the 4 screws (A): 1,6±0,1 Nm

Fit the chain assembly according to

Chapter "Chain assembly"

9 Battery box

Remove left cover

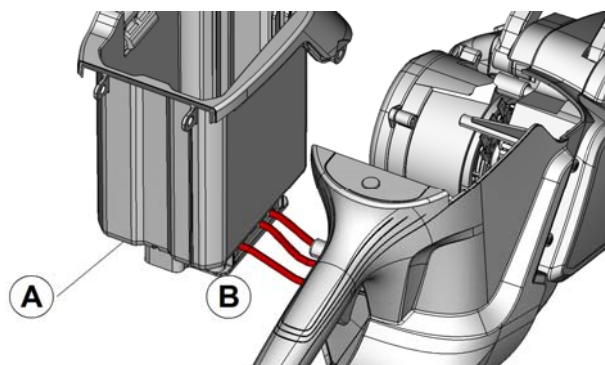


Remove the chain assembly according to

Chapter "Chain disassembly"

- 1) Remove the 10 screws (A).
- 2) Remove the left cover (B).

Replace the battery box



- 1) Move the battery box (A) to uncover connectors.

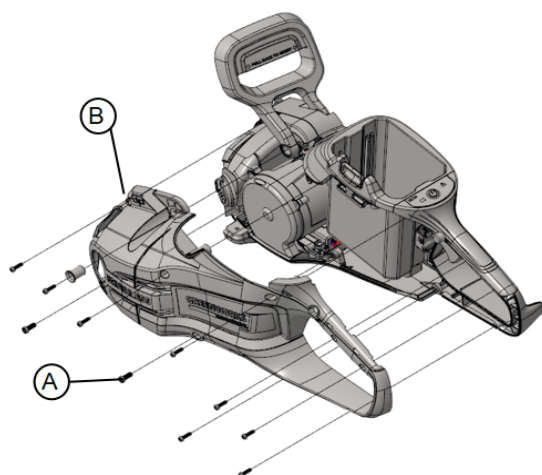
- 2) Disconnect the cables (B).

- 3) Replace the battery box (A).

- 4) Connect the cables (B).

- 5) Fit the battery box (A).

Fit the left cover



- 1) Fit the left cover.

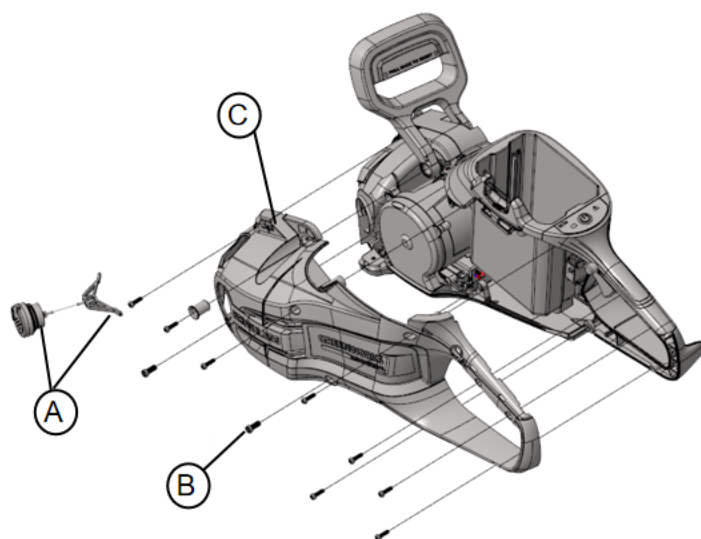
- 2) Fit the 10 screws: : 1,2 Nm

Fit the chain assembly according to

Chapter "Chain assembly"

10 Oil tank

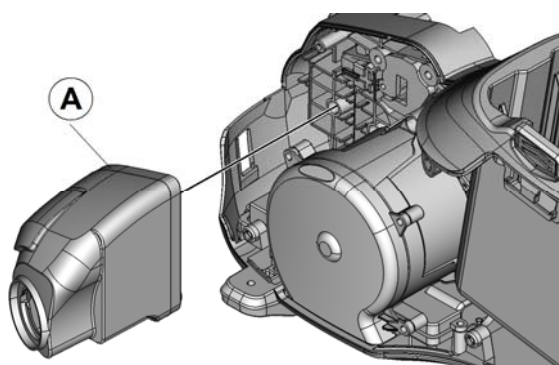
Remove oil tank lid and left cover



Remove the chain assembly according to Chapter "Chain disassembly"

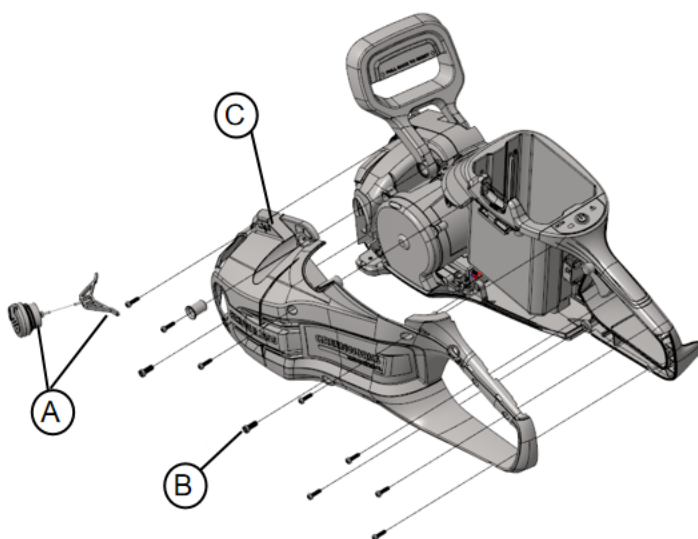
- 1) Remove the oil lid (A).
- 2) Drain the oil tank.
- 3) Remove the screws (B).
- 3) Remove the left cover (C).

Replace the oil tank



Replace the oil tank (A).

Fit the oil tank lid and left cover

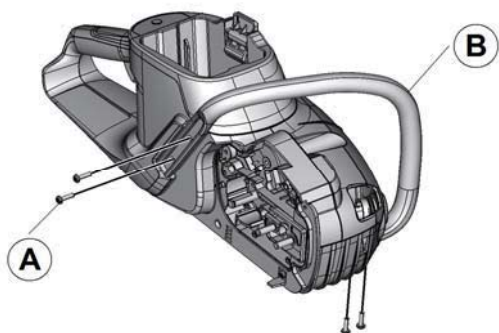


- 1) Fit the cover (C).
- 2) Fit the screws (B) : 1,2 Nm
- 3) Fill the oil tank.
- 4) Fit the oil tank lid (A).

Fit the chain assembly according to Chapter "Chain assembly"

11 PCB+Mg Bottom

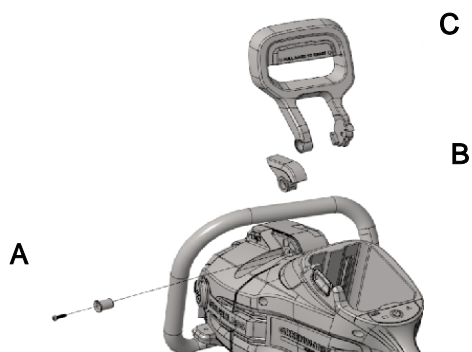
Front handle



Remove the chain assembly according to Chapter "Chain disassembly"

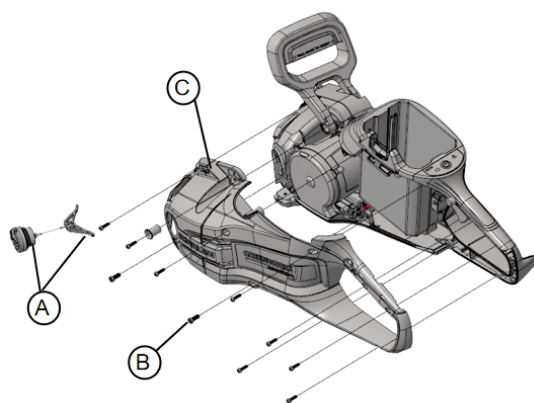
- 1) Remove the 4 screws (A).
- 2) Remove the handle (B).

Break handle



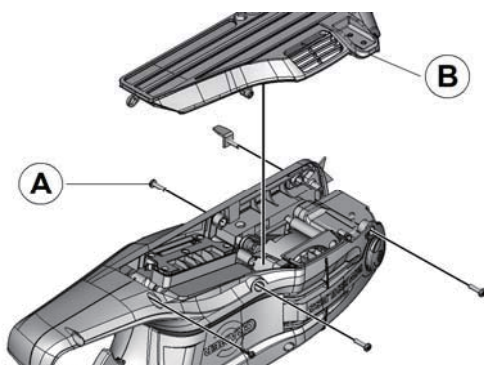
- 1) Remove the screw (A).
- 2) Remove the spacer (B).
- 3) Remove the break handle (C).

Remove oil tank lid and left cover



- 1) Remove the oil lid (A).
- 2) Drain the oil tank.
- 3) Remove the screws (B).
- 3) Remove the left cover (C).

Remove the Mg bottom



Remove:

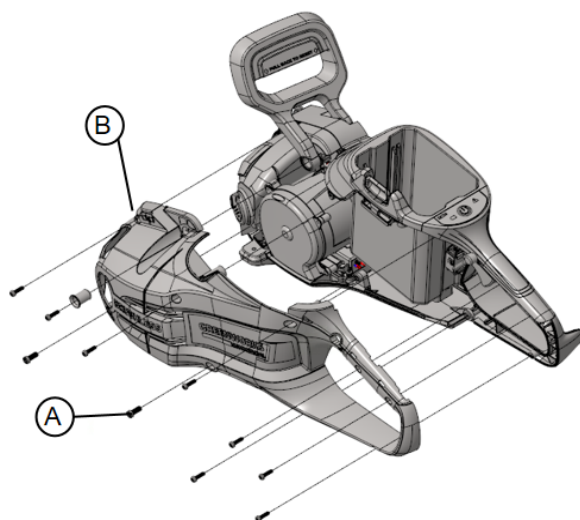
- 1) Remove the screws (A).
- 2) Remove the Mg bottom (B).

Fit:

- 1) Fit the Mg bottom
- 2) Fit the screws: : 1,2 Nm

12 ON/OFF button

Remove the left cover

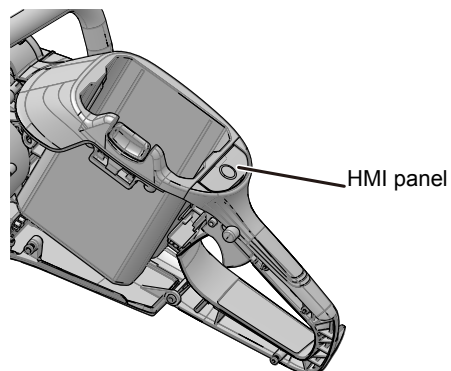
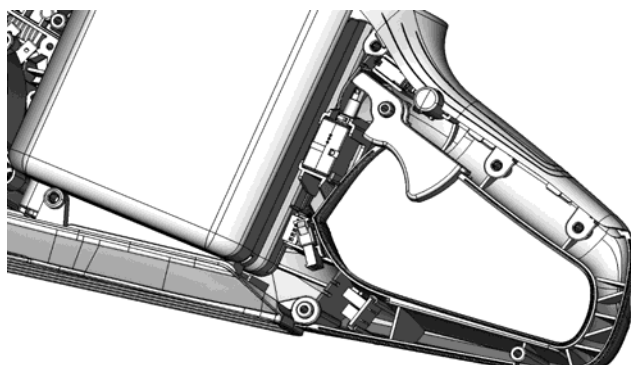


Remove the chain assembly according to

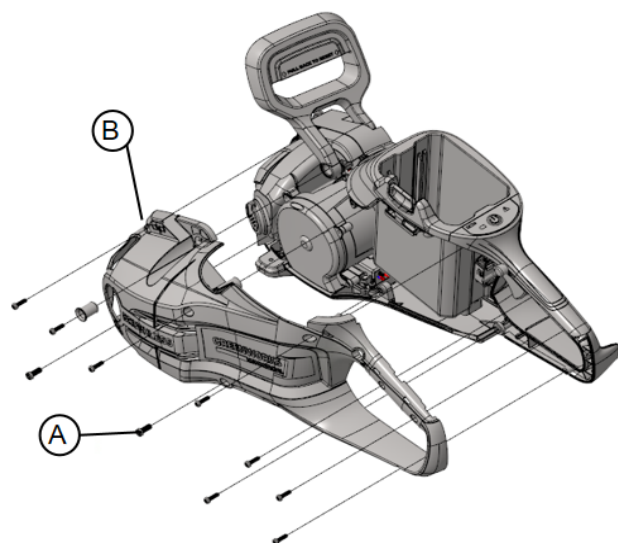
Chapter "Chain disassembly"

- 1) Remove the screws.
- 2) Remove the left cover.

Replace the HMI panel(ON/OFF button)



Fit the left cover



1) Fit the left cover (B).

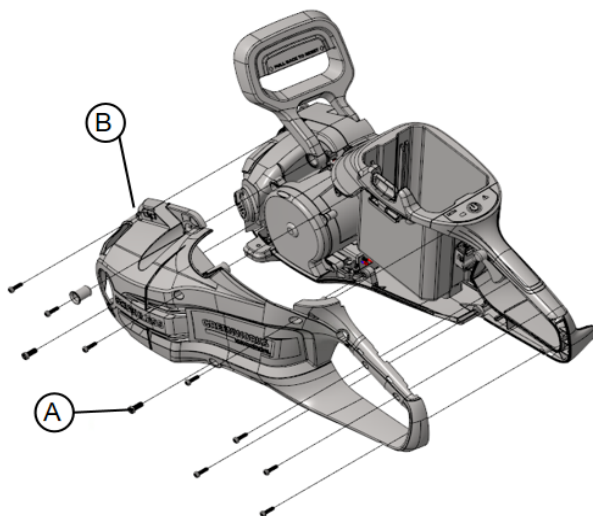
2) Fit the screws (A): 1,2 Nm

Fit the chain assembly according to

Chapter "Chain assembly"

13 Triggers and Potentiometers

Remove the left cover

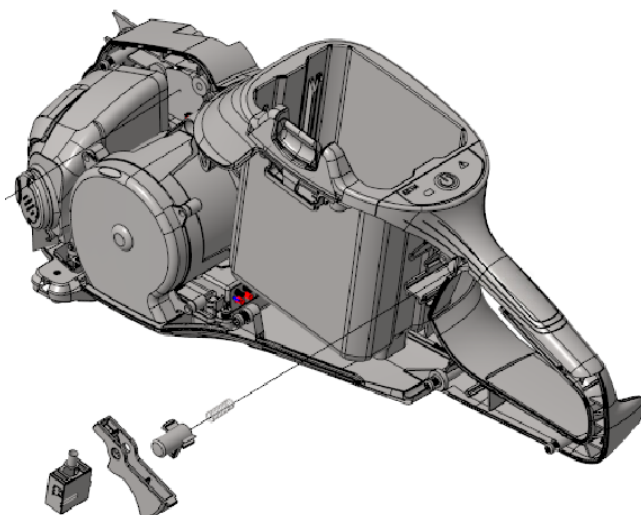


Remove the chain assembly according to

Chapter "Chain disassembly"

- 1) Remove the screws (A).
- 2) Remove the left cover (B).

Replace trigger system

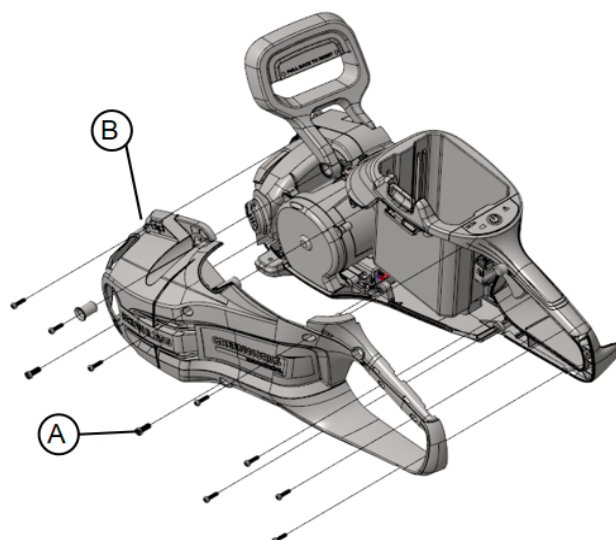


1) Disconnect the cables.

2) Replace the trigger.

3) Connect the cables.

Fit the left cover



1) Fit the left cover.

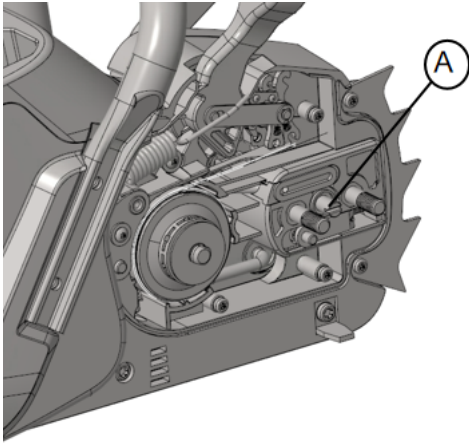
2) Fit the screws: : 1,2 Nm

Fit the chain assembly according to

Chapter "Chain assembly"

14 Lubrication

Chain tensioner



Grease:
Eni Grease LP (NLGI 2), or similar.

Positions:
1. Sprocket to chain tensioner (A).

Wiring diagram

