

SB, Retrofit kit - Motor holder and Cable fix, BV 30i, 2024-04

SYMPTOM/DESCRIPTION

In the original design, the cable connection was on the front of the control unit cover. This meant that operators often hit it accidentally when carrying the product.



AFFECTED UNITS

SN's affected - from SN 20210100078 through SN 202336100137.

CORRECTIVE ACTION

A design change was implemented from SN 202407100264. The Cable connector position was moved to the Motor housing, pointing down and thus avoiding the above mentioned problem. This required a change in the Motor housing, the Controller cover and the Cable connector itself. For all the affected SNs, it is possible to replace these parts using a Retrofit kit 547652001 – Motor holder & Cable fix BV 30i, consisting of the new design versions. Follow the instructions on how to do this, see Appendix to this SB.

PROCEDURE

If you wish to change the position of the Cable connector on your previous design BV 30i according to the new design, order the Retrofit kit 547652001 – Motor holder & Cable fix BV 30i and replace the parts following the Instructions in Appendix.



PARTS INFORMATION

Q and A:

- What parts to order and how – The Retrofit kit 547652001, Motor holder & Cable fix BV 30i.
- Scrap parts in local stock? - Scrap the replaced parts and the old design parts in local stock.
- Update products in local stock? – Yes.
- Recall products from customers and update – No.
- Update sold products during next service if part caused problem or anyway? – If part caused problem.

WARRANTY INFORMATION

The normal warranty policy applies.

APPENDIX

BV 30i Service training:

BV 30i Battery compartment, Cable connector, Motor housing and Controller cover replacement

Revision History

Rev.	Date	Order id.	Description
A	2024-04	00041994	Created



BV 30i Battery compartment, Cable connector, Motor housing and Controller cover replacement

BV 30i Service training

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Product Service specialist

Concrete Placement – who to contact



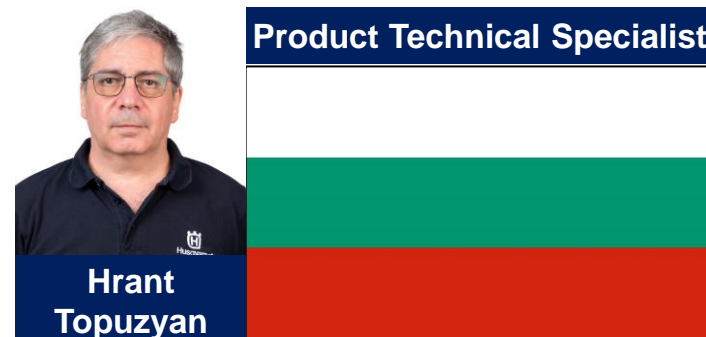
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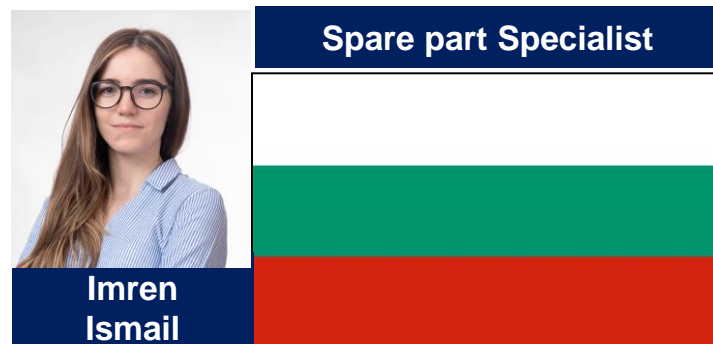
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BV 30i Battery compartment, Cable connector, Motor housing and Controller cover replacement

This presentation explains the steps and the sequence of action when disassembling the BV 30i battery powered Beam for the Battery compartment, Cable connector, Motor housing and Controller cover replacement.

It is intended for Husqvarna technicians and service personnel doing this replacement.



BV 30i Battery compartment, Cable connector, Motor housing and Controller cover replacement

The initial design of the Cable control position of BV 30i Beam, led to cases where the operators were unintentionally hitting it while caring the product.

There were also reports about difficulties experienced when removing the battery.

Design changes were introduced from SN 202407100264 to address these issues. It is possible to replace the parts affected by those design changes, of the existing on the market machines prior to that SN.

Two Retrofit kits were created in this regard.



BV 30i Battery compartment, Cable connector, Motor housing and Controller cover replacement

- 546298601 - BLi 200 Removal fix kit - includes new Battery compartment, Spring, Insert, Push-out button and the Husqvarna crown decal – implemented from SN 202407100264
- 547652001 - RETROFIT KIT BV 30i MOTOR HOLDER & CABLE Fix – includes the new Motor housing, Controller cover and Cable connector.



Tools used in the affected parts replacement

Replacement of the parts affected by these design changes, requires only four tools.

- Hexagon bit size H3
- Screwdriver size PH2x50
- TORX long screwdriver size T20
- TORX screwdriver size T27
- Suitable small Ratchet wrench



Steps and actions to be performed in the BV 30i disassembly

Step 1

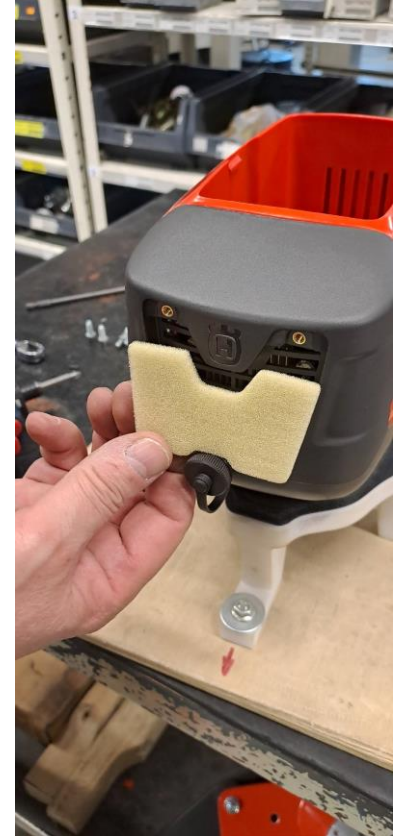
- Place the BV 30i Beam on a table and remove the small screws holding the so-called Motor Bottom Flange to the grey plastic Motor Housing .
- Use the Hexagon bit size H3 and a small ratchet wrench.



Steps and actions to be performed in the BV 30i disassembly

Step 2

- Remove the screws holding the Air filter element cover.
- Take out the Cover and the Air filter element.
- Use the Screwdriver PH2x50.



Steps and actions to be performed in the BV 30i disassembly

Step 3

- Remove the screws that affix the orange Battery compartment to the Motor housing.
- Remove the two screws that affix the Controller cover.
- Use the long TORX T20 screwdriver.



Steps and actions to be performed in the BV 30i disassembly

Step 4

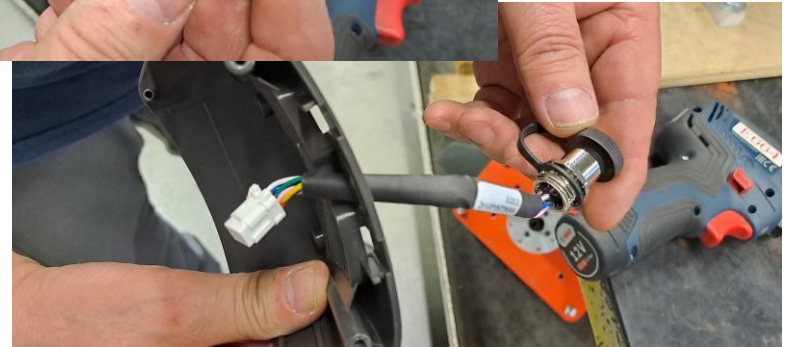
- Remove the Controller cover.
- Carefully disconnect the coupling of the cable connector from the Controller.



Steps and actions to be performed in the BV 30i disassembly

Step 5

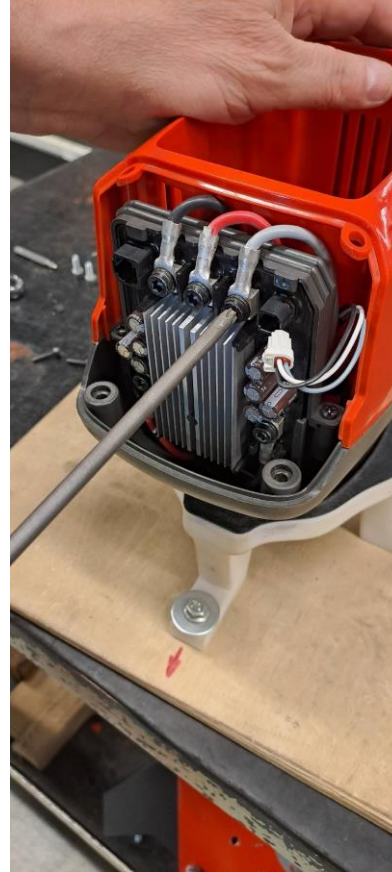
- Use pliers to unwind the nut that holds the Cable connector to the Controller cover.
- Remove the nut.
- Remove the cable from the Cover.
- Scrap the parts.



Steps and actions to be performed in the BV 30i disassembly

Step 6

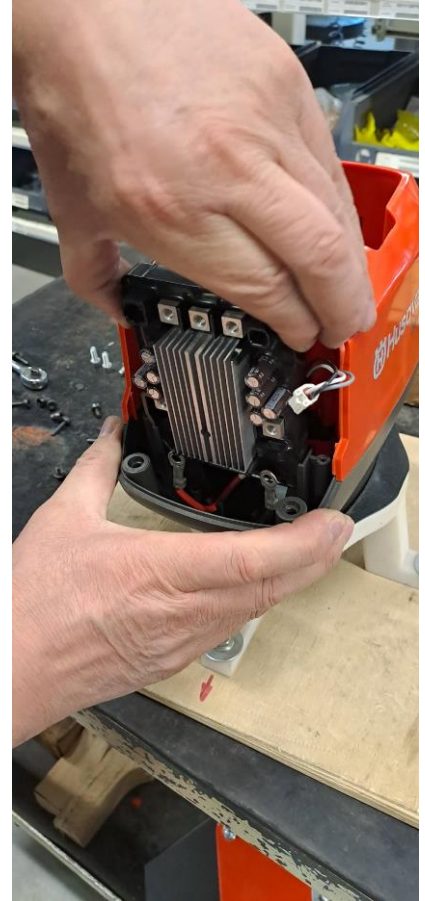
- Remove the coupling that connects the thin white, grey and black cables to the Controller.
- Remove the three screws that affix the thick grey, red and black cables to the Controller.
- Remove the two screws that affix the Battery connector cables to the Controller.



Steps and actions to be performed in the BV 30i disassembly

Step 7

- Remove the two vertical screws that hold the Controller bracket.
- Use PH2x50 screwdriver.
- Take out the Bracket.
- Remove the Controller from the Motor Housing.



Steps and actions to be performed in the BV 30i disassembly

Step 8

- Remove the four screws that affix the Battery compartment to the Motor housing.
- Remove the Battery compartment.



Steps and actions to be performed in the BV 30i disassembly

Step 9

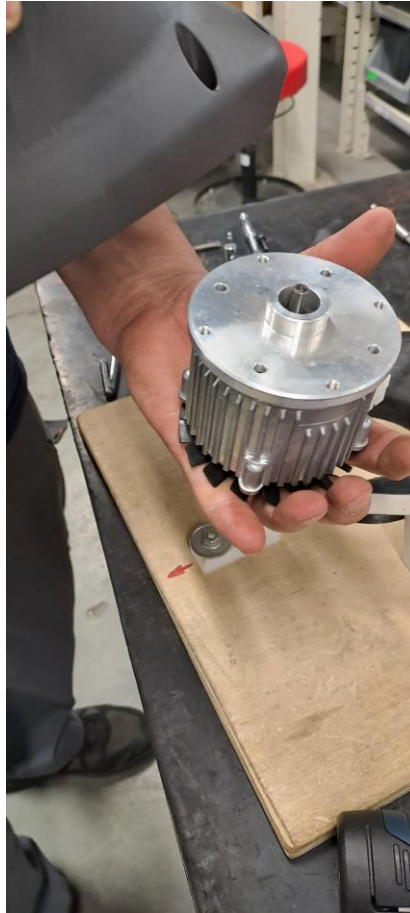
- Disconnect the connector of the three thick cables from the EI. Motor's cable connector.
- Holding the motor, remove the four screws that affix the EI. Motor's flange to the Motor housing. Be careful not to lose the copper washers and not to drop the motor.



Steps and actions to be performed in the BV 30i reassembly – Retrofit kit Motor Holder & Cable fix

Step 10

- Place the motor on the table.
- Take the new version of the Cable and make sure it is with 599626401-D designation.
- The new Cable alone is implemented from SN 202407100264 through SN 202407100293, together with 3D printed new Motor housing and Controller cover.



Steps and actions to be performed in the BV 30i reassembly – Retrofit kit Motor Holder & Cable fix

Step 11

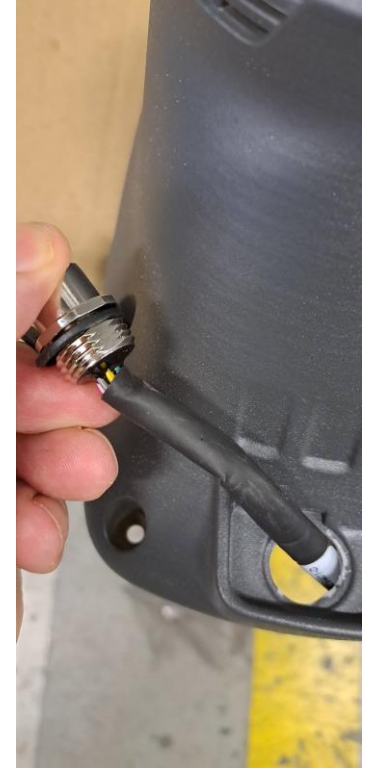
- Remove the nut of the Cable connector and leave the rubber seal with cap over the thread.
- Open the protective cap of the Coupling. Look for the keyway in it. **It is important how this keyway is oriented when the cable is mounted in the housing.**



Steps and actions to be performed in the BV 30i reassembly - Retrofit kit Motor Holder & Cable fix

Step 12

- Look for the Cable connector opening in the new Motor housing. There are two opposite flats in it.
- There are also two opposite flats on the thread of the Cable connector. Push the white coupling of the new cable through the opening of the Housing



Steps and actions to be performed in the BV 30i reassembly - Retrofit kit Motor Holder & Cable fix

Step 13

- Orient the Cable connector in such way, that the keyway in its black plastic coupling points to the right and upward.
- Failure to orient it this way, will result in impossibility to connect the cable from the Handle to this Connector.



Steps and actions to be performed in the BV 30i reassembly - Retrofit kit Motor Holder & Cable fix

Step 14

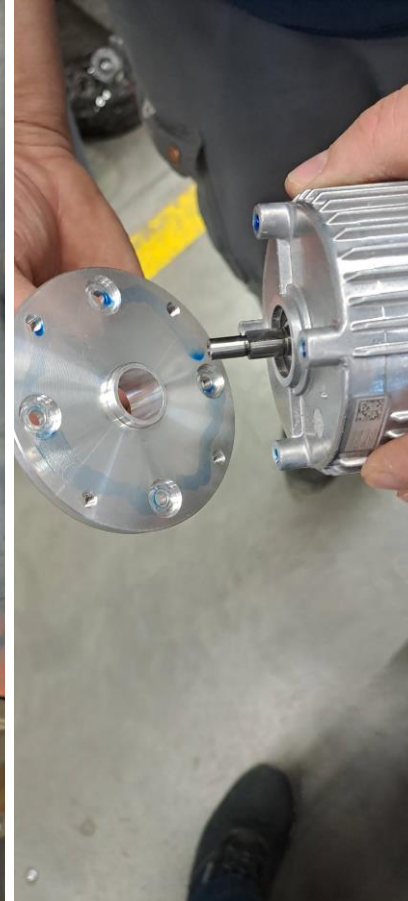
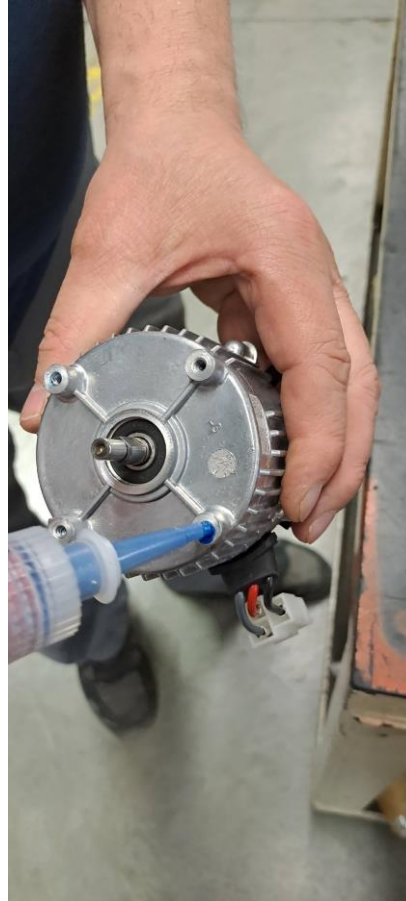
- Put a drop of Loctite 243 on the Connector's thread and tighten the nut over it with the pliers.
- Keep the orientation of the coupling as it was described above.



Steps and actions to be performed in the BV 30i reassembly - Retrofit kit Motor Holder & Cable fix

Step 15

- Apply Loctite 243 in the threaded holes of the Electrical motor.
- Use TORX 20 screwdriver to affix the Flange to the Motor.
- The screws should be going through the holes in the Flange without threads.



Steps and actions to be performed in the BV 30i reassembly - Retrofit kit Motor Holder & Cable fix

Step 16

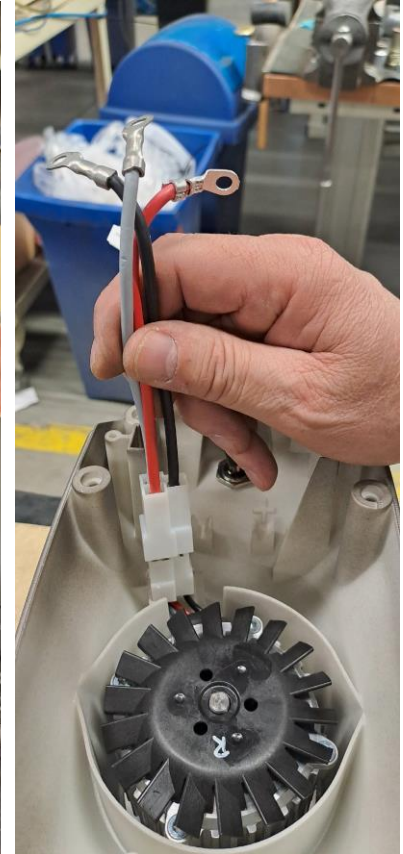
- Position the El. Motor and Flange vertically and orient the Housing over it as is shown on the picture.
- Place the Housing carefully on the Flange and try to make the holes in them coaxial.
- Tighten two of the screws with the copper washers. These screws should go through the holes in the Flange that have threads.



Steps and actions to be performed in the BV 30i reassembly - Retrofit kit Motor Holder & Cable fix

Step 17

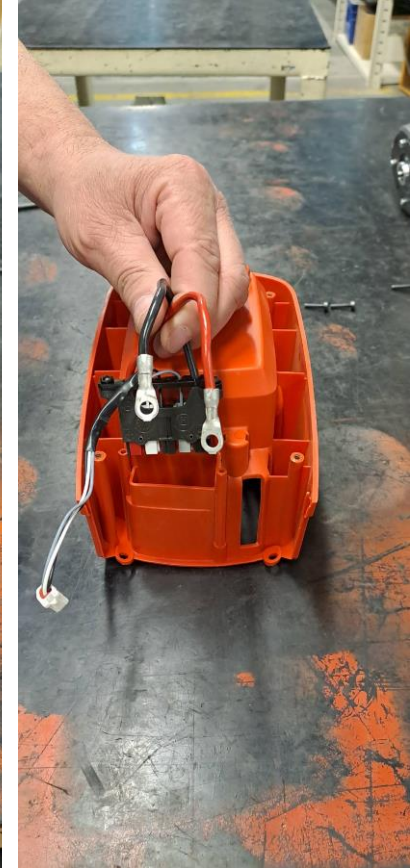
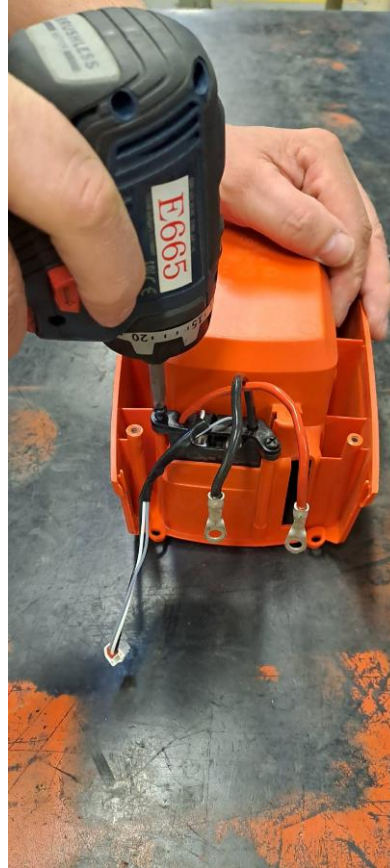
- Turn the Housing and check for the El. Motor Cable and white Coupling position.
- Affix the other two screws.
- Attach the grey, red and black cable with a white coupling, to the coupling of the El. Motor cables.



Steps and actions to be performed in the BV 30i disassembly – Retrofit kit BLi 200 Removal fix

Step 18

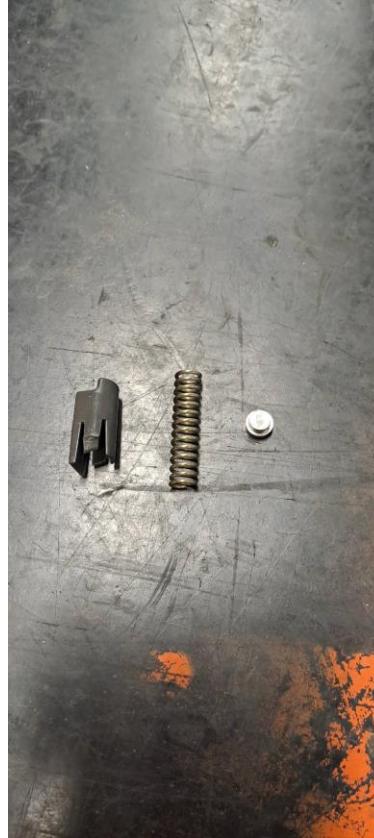
- This step is to be performed only if there's a need to replace the Battery compartment.
- Remove the two screws that affix the battery Power Cable to the battery compartment.
- If the product is with SN prior to 202407100264 scrap the Battery compartment together with the Push out button and it's spring.



Steps and actions to be performed in the BV 30i reassembly – Retrofit kit BLi 200 Removal fix

Step 19

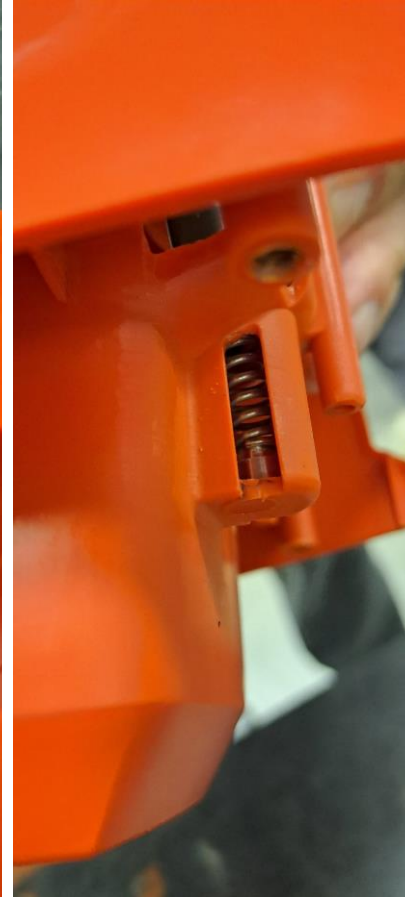
- Take the new Push out button, the new Spring, the Insert and the new Battery compartment from the Retrofit kit.
- Place the Insert into the one end of the Spring, and the Push out button over the other end.
- Orient the button so to be able to place it in the cavity.



Steps and actions to be performed in the BV 30i reassembly – Retrofit kit BLi 200 Removal fix

Step 20

- Place the button in the cavity.
- Holding it with a finger, check if the Insert is in its place in the Spring.
- Push the Button down until its hooks click into the cavity.
- Check again for the Insert in the Spring.



Steps and actions to be performed in the BV 30i reassembly – Retrofit kit BLi 200 Removal fix

Step 21

- Place the battery in the Battery compartment.
- Install the battery Power Cable in its cavity and connect it with the Battery.
- Tighten the screws that affix the Connector to the Battery compartment.



Steps and actions to be performed in the BV 30i reassembly – Retrofit kit BLi 200 Removal fix

Step 22

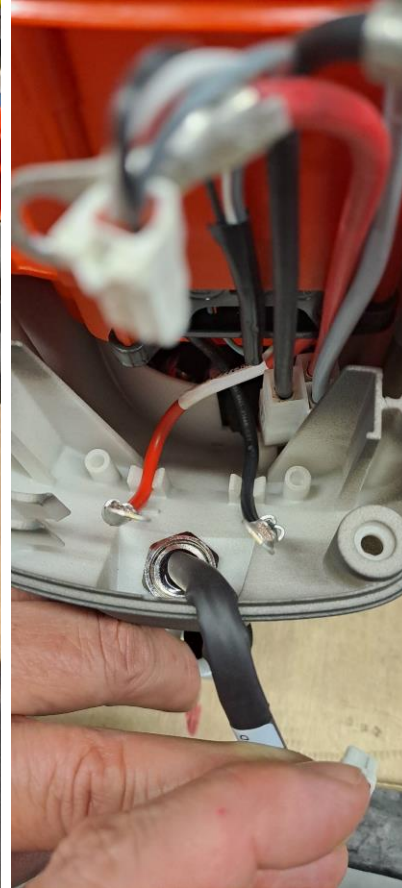
- Position the Battery compartment above the Motor housing.
- Make sure the red cable, the black cable and the thinner cables with white coupling are oriented as in the picture .
- Place the battery compartment on the Housing and tighten the two inner screws.



Steps and actions to be performed in the BV 30i reassembly – Retrofit kit BLi 200 Removal fix

Step 23

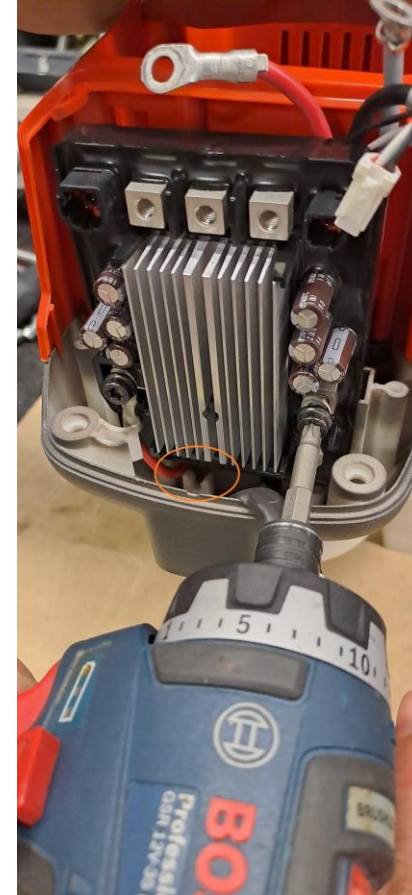
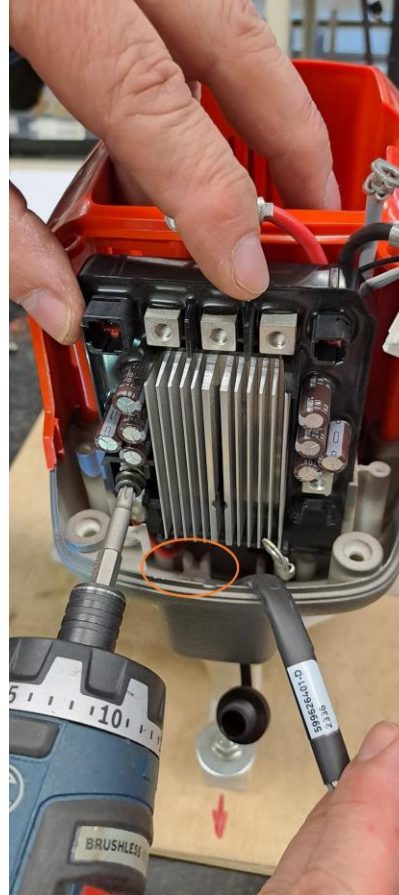
- Affix the Battery compartment to the Housing by tightening the 4 screws.
- Place the red and black cables from the battery connector into the holding clamps of the Housing.
- Place the Controller into the holding shapes of the Housing.



Steps and actions to be performed in the BV 30i reassembly

Step 24

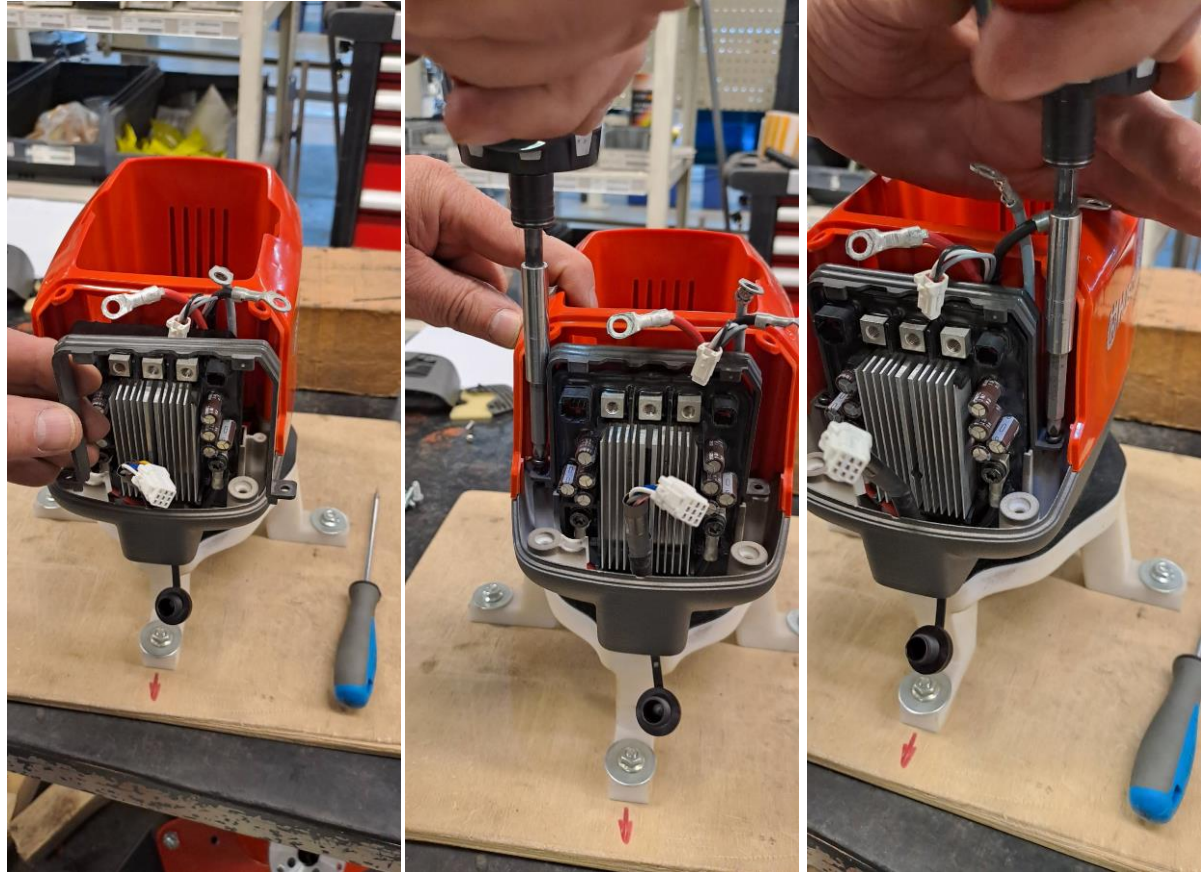
- Affix the red and black cables coming from the battery connector.
- Be careful not to get the cables out of the clamps in the Housing.
- Push them back in the clamps in case they got out. Use an Allen key or longer stick without sharp edges.



Steps and actions to be performed in the BV 30i reassembly

Step 25

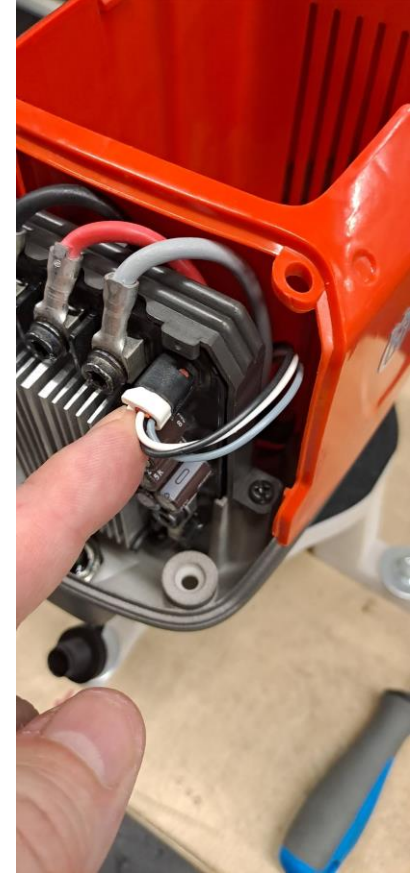
- Orient the Controller bracket correctly.
- Affix it with the two screws over the Controller and to the Housing.



Steps and actions to be performed in the BV 30i reassembly

Step 26

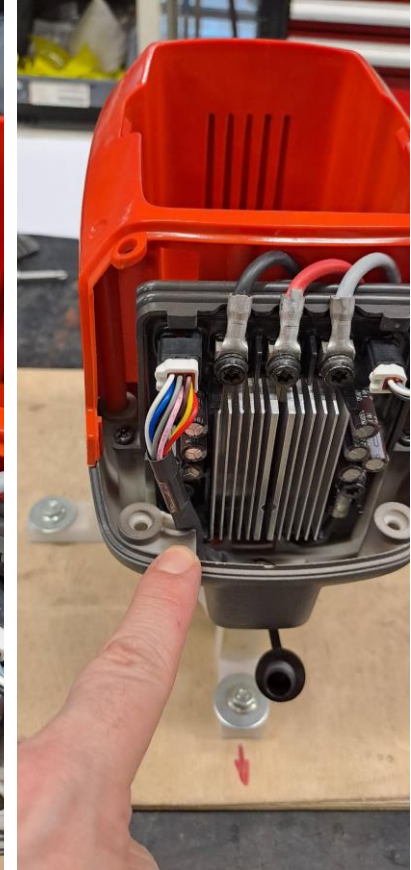
- Orient the grey, red and black cables and the thinner cables with the white coupling behind them.
- Affix the cables to the Controller and attach the white Coupling to the respective connector.



Steps and actions to be performed in the BV 30i reassembly

Step 27

- Orient the Coupling of the Cable connector and attach it to the respective Coupling of the Controller.
- Push the cable harness into the clamp of the Housing.



Steps and actions to be performed in the BV 30i reassembly

Step 28

- Prepare the new Controller cover, Air filter element, the Grid and put the screws from the Retrofit kit.
- Place the Washers from the kit over the screws on the back of the Grid.
- Affix the Grid to the Controller cover.



Steps and actions to be performed in the BV 30i reassembly

Step 29

- Use the front panel and the air filter element of the product and assemble them to the new Controller cover.



Steps and actions to be performed in the BV 30i reassembly

Step 30

- Cut some 70mm of 3M VHB Tape and glue it to the designated place on the inner top side of the Controller cover.



Steps and actions to be performed in the BV 30i reassembly

Step 31

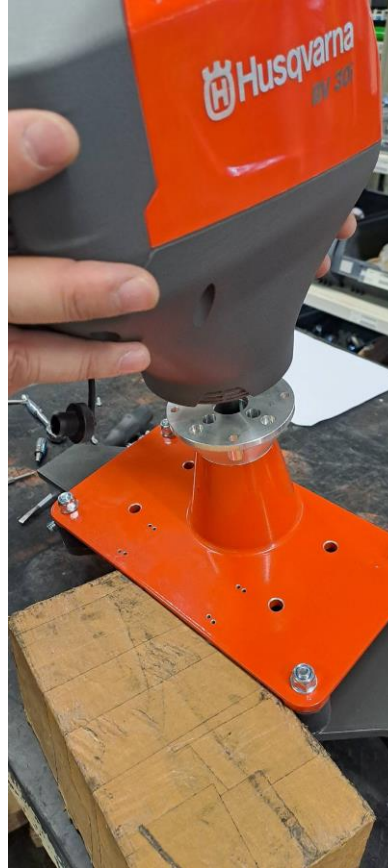
- Position the Controller cover to the Housing and the Battery compartment.
- Affix it with the two screws.



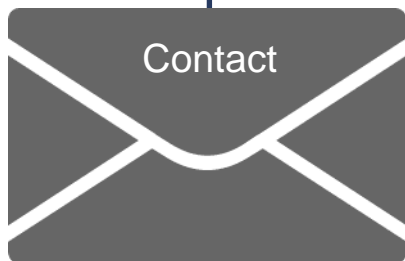
Steps and actions to be performed in the BV 30i reassembly

Step 32

- Place thus assembled subassembly on the so-called Motor bottom flange.
- Affix it with its four screws.



QUESTIONS :



If you would have further questions, please do not hesitate to contact:

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