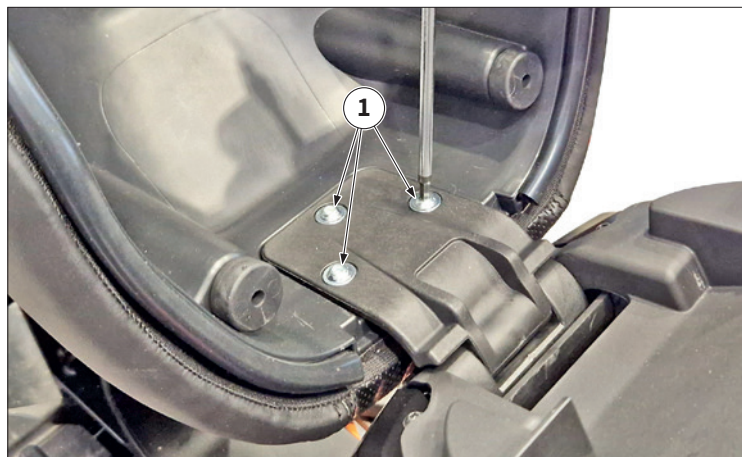




10.1 SEAT

Preliminary operation:

- Open the seat.

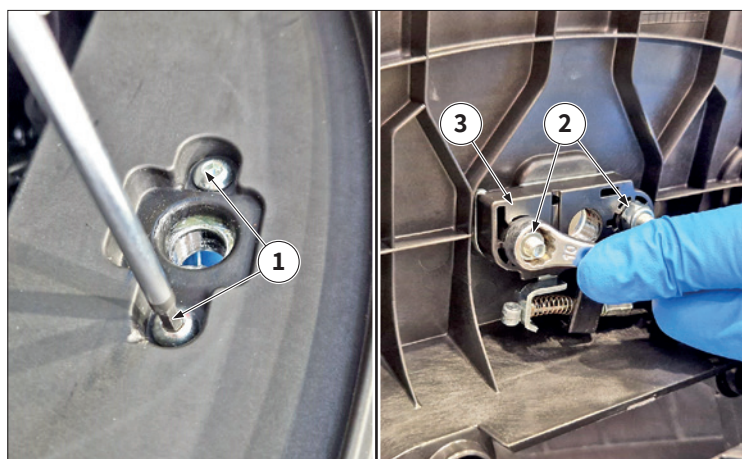
Remove the three screws "1".

 **Tightening torque**
 Screws M6x16 (8.8) TBFL "1": 5 Nm (0.51 m•kgf, 3.7 ft•lbf)



Remove seat "2" from the vehicle.

 **For the reassembly procedure, proceed in the reverse order.**



10.1.1 Seat lock

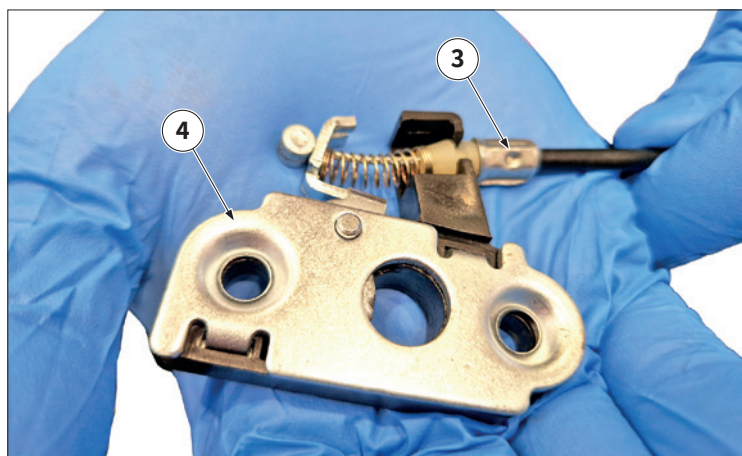
Preliminary operation:

- Remove the structural luggage rack (as described on page 63).

Remove the two screws "1" and the two nuts "2".

 **Tightening torque**
 Screws M6x25 (8.8) TBB "1": 7.5 Nm (0.76 m•kgf, 5.5 ft•lbf)

Remove the seat block "3" from the structural luggage rack.



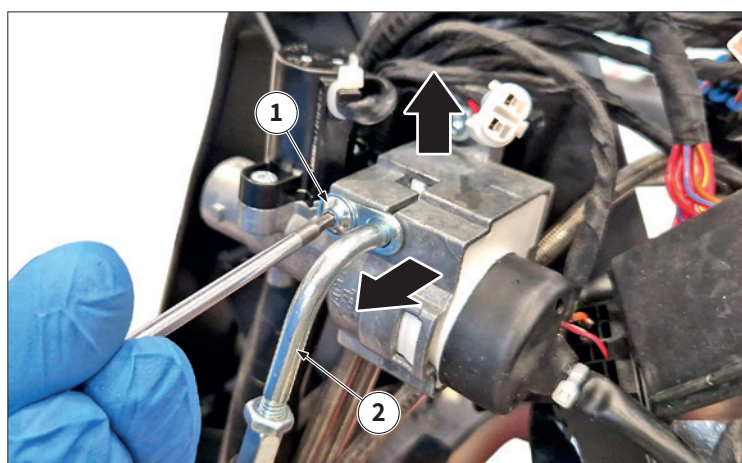
Remove the seat lock cable "3" from seat block "4"

 **For the reassembly procedure, proceed in the reverse order.**

10.1.2 Seat lock cable

Preliminary operations:

- Remove the seat lock (as described on page 59);
- Remove the front shield (as described on page 60);
- Remove the handle (as described on page 61);
- Remove the rear side panel (as described on page 62);
- Remove the right dumper (as described on page 66);
- Remove the right rear frame cover (as described on page 65).



Remove the screw "1".



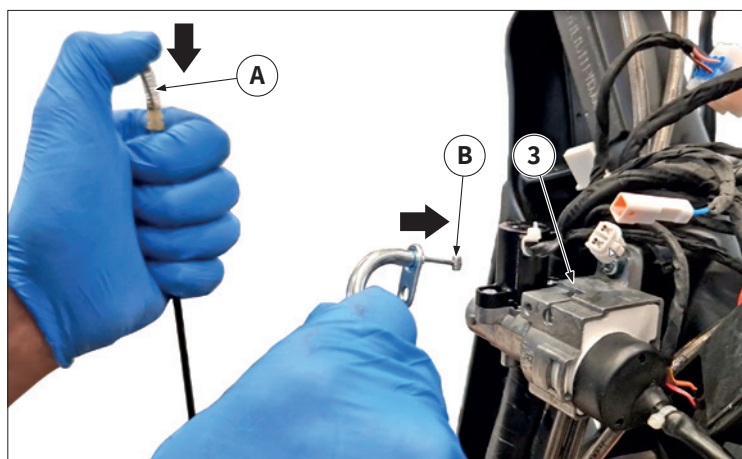
Tightening torque

Screw M5x16 (8.8) TBB "1": 5 Nm (0.51 m•kgf, 3.7 ft•lbf)

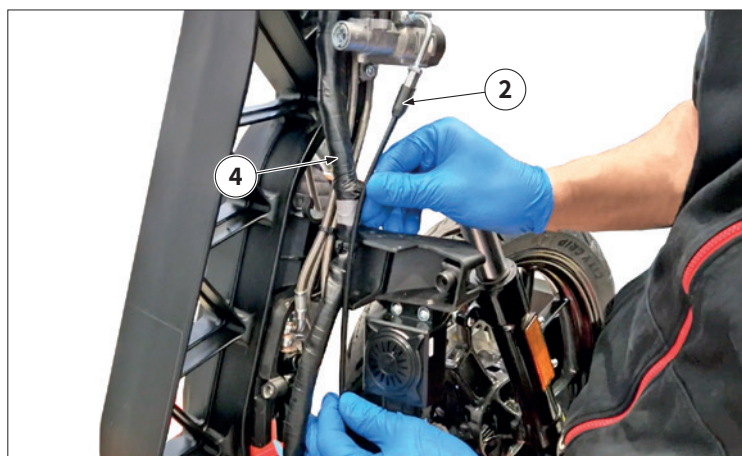
Release the seat lock cable "2", pulling it towards you and then upwards.

Remove the fastening clamps, if any.

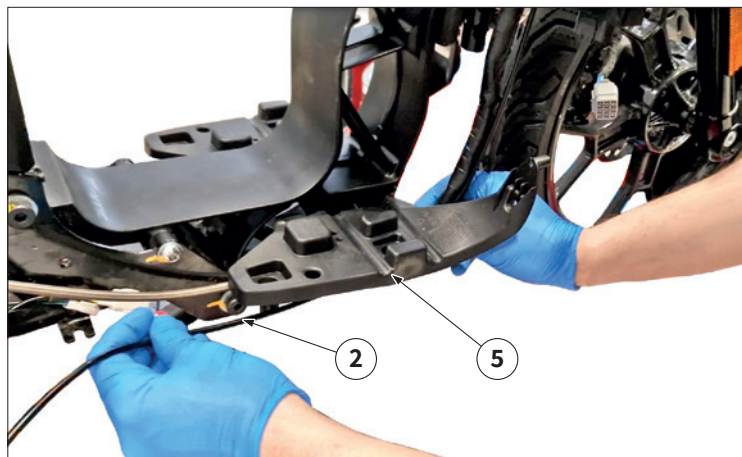
Remove the seat lock cable "2" from the vehicle.



In the reassembly procedure, in order to facilitate installation of the seat lock cable in the keyless lock block "3", apply continuous pressure to point "A" of the cable, so that it protrudes from point "B", then insert the cable into the block and release point "A".



Position the seat lock cable "2" next to the main cable harness "4" and fasten it with a plastic cable clamp.



Position the seat lock cable "2" below the right underbody "5".



Place the seat lock cable "2" in the slot under the lower rear frame "6" and connect it to the seat lock.



10.2 REAR SIDE PANEL ASSEMBLY

10.2.1 Handle

Remove the two screws "1" together with the nuts.

 **Tightening torque**
Screws M6x70 (8.8) TB "1": 5 Nm (0.51 m•kgf, 3.7 ft•lbf)

Remove the three screws "2" together with the nuts.

 **Tightening torque**
Screws M6x60 (8.8) TB "2": 5 Nm (0.51 m•kgf, 3.7 ft•lbf)

Remove handle "3" from the vehicle.

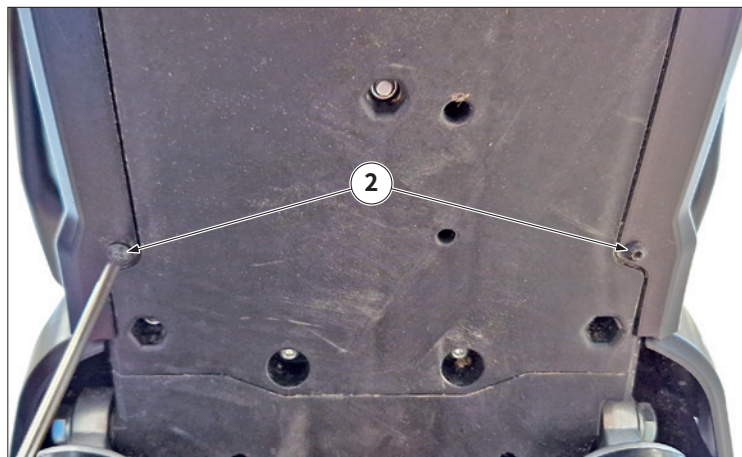
 **For the reassembly procedure, proceed in the reverse order.**



10.2.2 Luggage rack cover

Remove the two screws "1" together with the related nuts.

 **Tightening torque**
Screws M6x70 (8.8) TB "1": 5 Nm (0.51 m•kgf, 3.7 ft•lbf)



Remove the two self-tapping screws "2" located under the luggage rack base.

 **Tightening torque**
 Self-tapping screws Ø4x16 "2": 1.2 Nm (0.12 m•kgf, 0.9 ft•lbf)



Spread the two side ends and pull the luggage rack cover "3" towards you so that it is removed from the vehicle.

 **Do not use excessive force when removing the luggage rack cover, to ensure that it will not be damaged.**

 **For the reassembly procedure, proceed in the reverse order.**



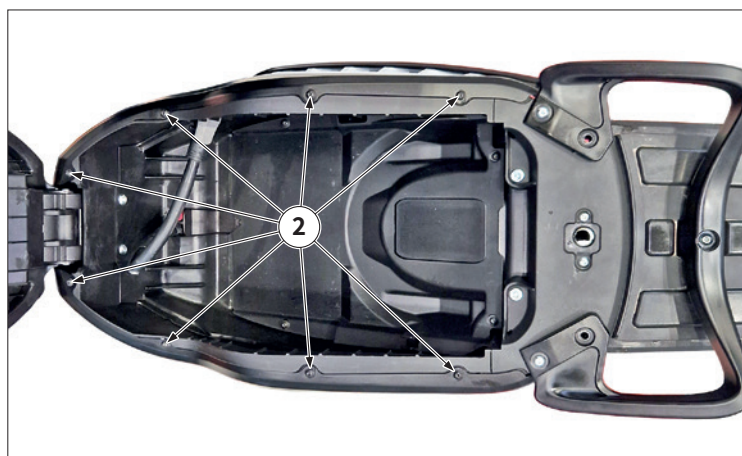
10.2.3 Rear side panel

Preliminary operations:

- Remove the right and left footboard (as described on page 62);
- Remove the seat (as described on page 59).

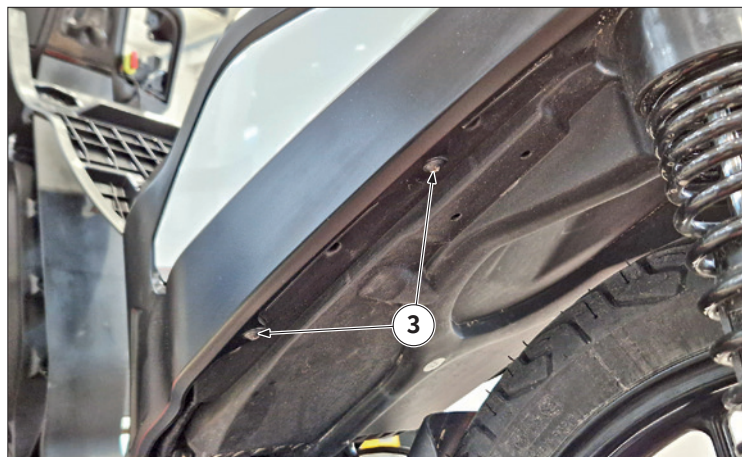
Remove the two screws "1" (one on each side).

 **Tightening torque**
 Screws M6x16 (8.8) TBFL "1": 5 Nm (0.51 m•kgf, 3.7 ft•lbf)



Remove the eight self-tapping screws (upper side) "2".

 **Tightening torque**
 Self-tapping screws Ø4x16 "2": 1.5 Nm (0.15 m•kgf, 1.1 ft•lbf)



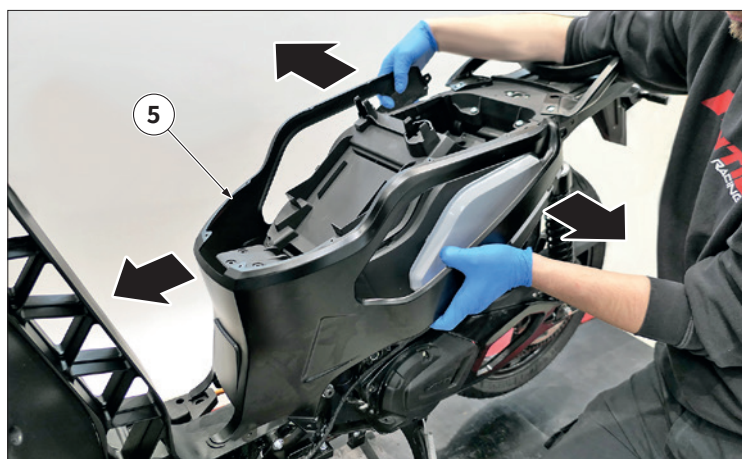
Remove the four self-tapping screws (lower side) "3" (two on each side).

 **Tightening torque**
 Self-tapping screws Ø4x16 "3": 1.2 Nm (0.12 m•kgf, 0.9 ft•lbf)



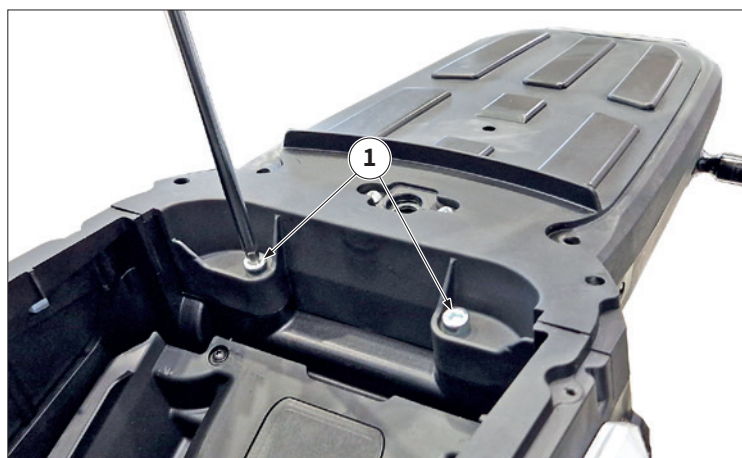
Remove the two self-tapping screws "4" (one on each side).

 **Tightening torque**
 Self-tapping screws Ø4x16 "4": 1.2 Nm (0.12 m•kgf, 0.9 ft•lbf)



Widen the two side ends and remove the rear side panel "5" towards the front of the vehicle.

-  **Do not use excessive force when removing the rear side panel, to ensure that it will not be damaged.**
-  **For the reassembly procedure, proceed in the reverse direction, taking care to position the main wiring harness between the rear side and the frame.**



10.2.4 Structural luggage rack

Preliminary operations:

- Remove the handle (as described on page 61);
- Remove the licence plate holder (as described on page 64).

Remove the two screws "1".

 **Tightening torque**
 Screws M8x50 (8.8) TCEI "1": 10 Nm (1.0 m•kgf, 7.4 ft•lbf)



Remove the two self-tapping screws "2" (one on each side), located underneath the luggage rack base, in the direction of the license plate holder.

 **Tightening torque**
 Self-tapping screws Ø4x45 "2": 1.2 Nm (0.12 m•kgf, 0.9 ft•lbf)



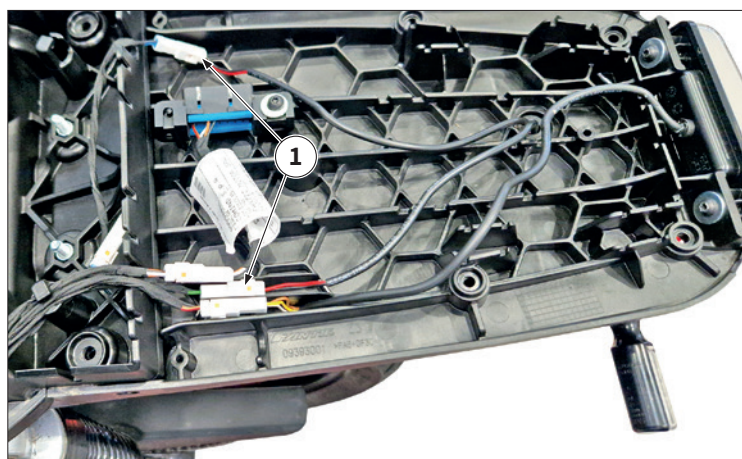
Release the structural luggage rack "3".

Lift it up slightly and remove the seat opener block (for further details see paragraph "10.1.1 Seat lock" on page 59).

Remove the structural luggage rack "3" and the two spacers "4" from the vehicle.

 **Do not use excessive force when removing the structural carrier, to ensure that it will not be damaged.**

 **For the reassembly procedure, proceed in the reverse order.**



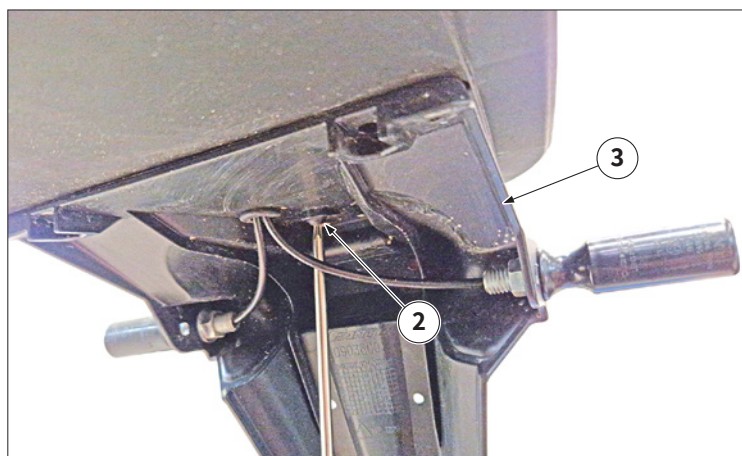
10.2.5 License plate holder

Preliminary operations:

- Remove the handle (as described on page 61);
- Remove the structural luggage rack (as described on page 63).

 **Handle the cables and connectors of electronic devices with extreme caution.**

Disconnect the two rear turn signal connectors "1".

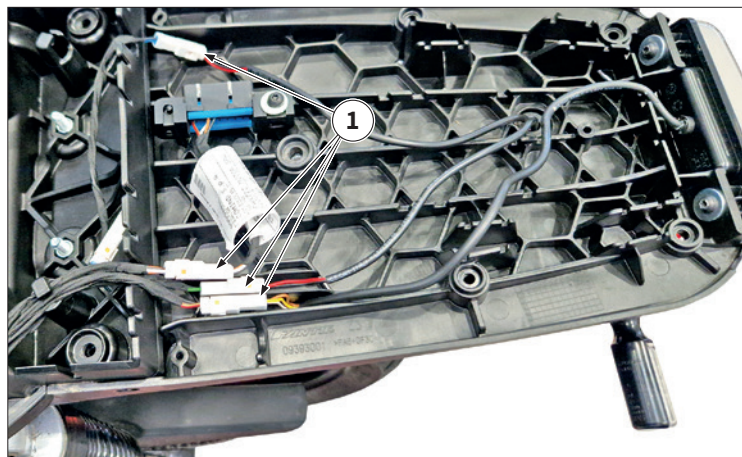


Remove self-tapping screw "2".

 **Tightening torque**
 Self-tapping screws Ø4x16 "2": 1.2 Nm (0.12 m•kgf, 0.9 ft•lbf)

Remove license plate holder "3" from the vehicle.

 **For the reassembly procedure, proceed in the reverse order.**



10.2.6 Luggage rack base

Preliminary operations:

- Remove the handle (as described on page 61);
- Remove the structural luggage rack (as described on page 63);
- Remove the licence plate holder (as described on page 64);
- Remove the tail light (as described on page 65).

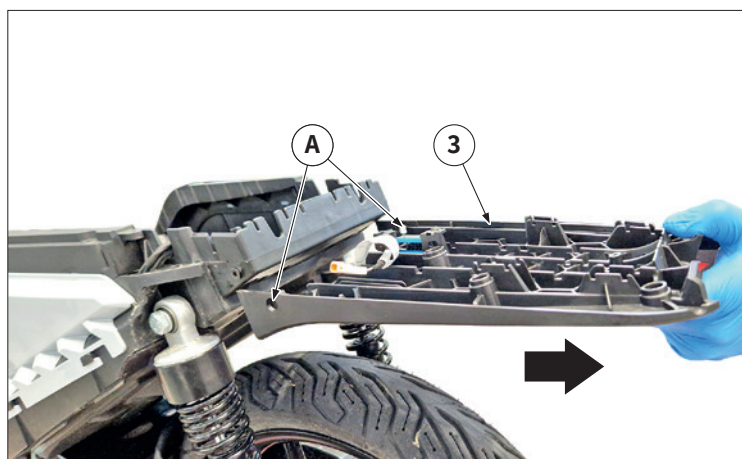
⚠ Handle the cables and connectors of electronic devices with extreme caution.

Disconnect the connectors "1".



Remove the two screws "2" with their nuts, located at the lower part of the luggage rack base.

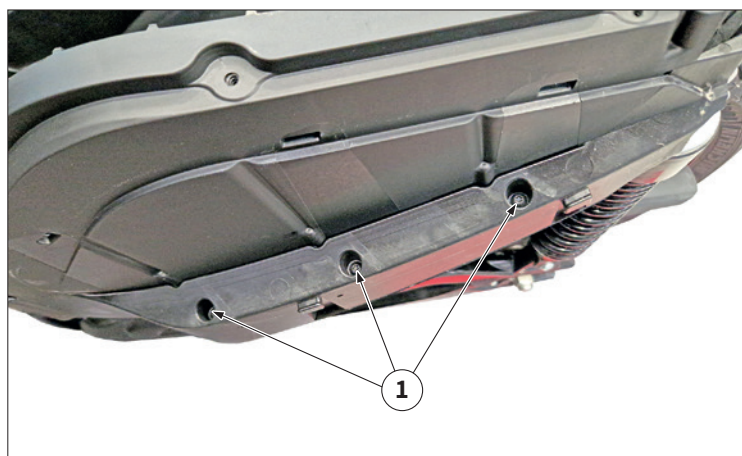
🔧 Tightening torque
Screws M6x25 (8.8) TBB "2": 7.5 Nm (0.76 m•kgf, 5.5 ft•lbf)



Remove the luggage rack base "3" from the vehicle by releasing the two side ends "A" using a screwdriver.

⚠ Do not use excessive force when removing the luggage rack base, to ensure that it will not be damaged.

i For the reassembly procedure, proceed in the reverse order.



10.2.7 Rear frame covers

Preliminary operation:

- Remove the rear side panel (as described on page 62).

i Procedure valid for left and right rear frame cover.

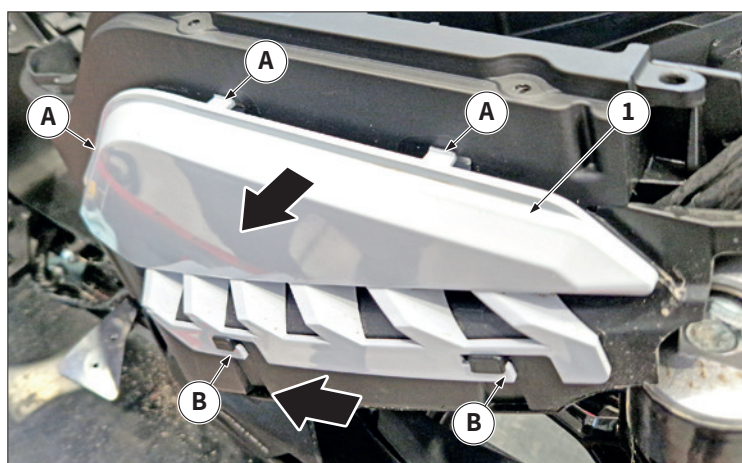
Remove the three self-tapping screws "1".

🔧 Tightening torque
Self-tapping screws Ø4x16 "2": 1.5 Nm (0.15 m•kgf, 1.1 ft•lbf)



Remove (downwards) the rear frame cover "2" from the vehicle.

- i** Do not use excessive force when removing the rear frame covers, to ensure that they will not be damaged.
- i** For the reassembly procedure, proceed in the reverse order.



10.2.8 Side dumpers

Preliminary operation:

- Remove the rear side panel (as described on page 62).

- i** Procedure valid for left and right side dumpers.

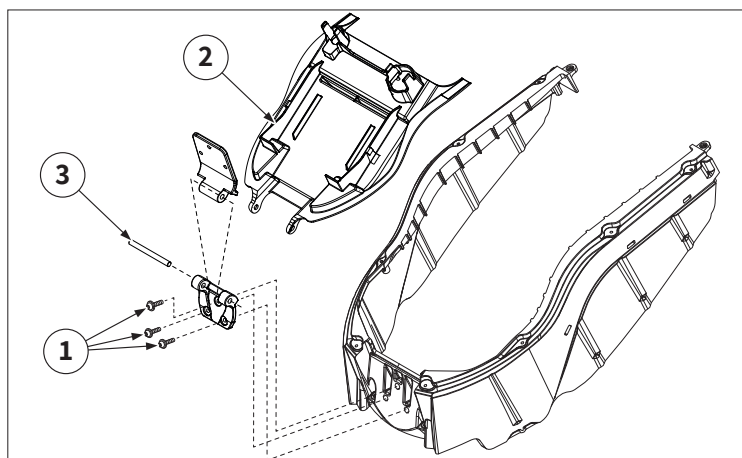
Slightly release outwards the side dumper "1" fastened to the frame by the three clips "A".

Then move the side dumper "1" towards the driver's side to release the two fins "B".

Remove the side dumper "1" from the vehicle.

- !** When removing the side dumpers, do not use high force, to ensure that they will not be damaged.

- i** For the reassembly procedure, proceed in the reverse direction, taking care that the two "B" tabs are positioned correctly.



10.2.9 Battery charger panel

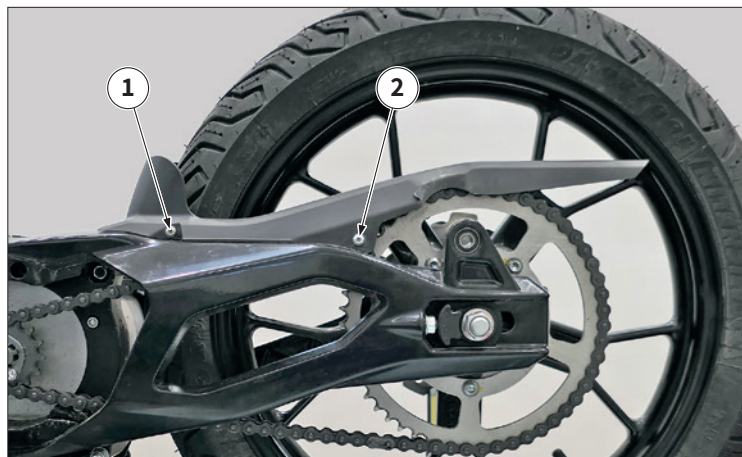
Remove the three screws "1".

- Tightening torque**
Screws M6x16 (8.8) TBFL "1": 7.5 Nm (0.76 m•kgf, 5.5 ft•lbf)

Remove the battery charger panel "2" from the vehicle.

Remove pin "3" to separate the upper and lower hinge.

- i** For the reassembly procedure, proceed in the reverse order.



10.3 CHAIN COVER

Remove screw "1" first.

 **Tightening torque**
 Screws M5x20 (8.8) TB "1": 2.5 Nm (0.25 m•kgf, 1.8 ft•lbf)

Remove screw "2" first.

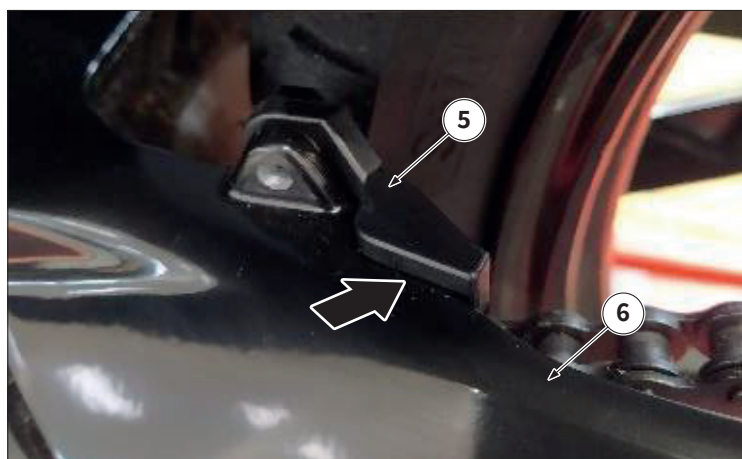
 **Tightening torque**
 Screws M5x10 (8.8) TBB "2": 2.5 Nm (0.25 m•kgf, 1.8 ft•lbf)



Then remove the two screws "3".

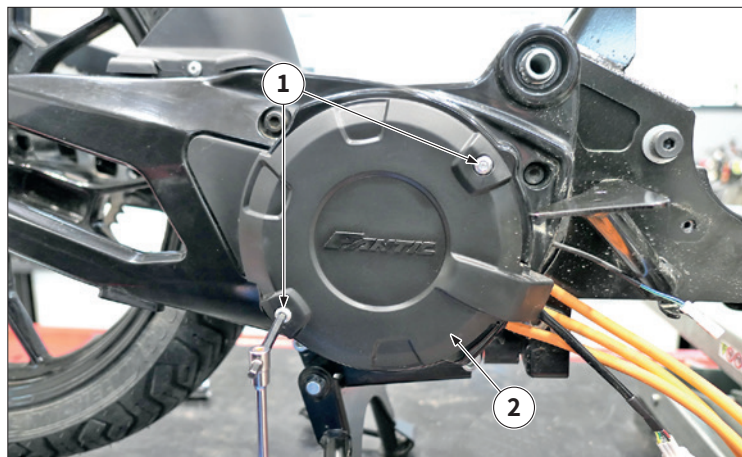
 **Tightening torque**
 Screws M5x10 (8.8) TBB "3": 2.5 Nm (0.25 m•kgf, 1.8 ft•lbf)

Remove the chain cover "4" from the vehicle.



i When removing the chain cover, the upper chain slider "5" is also released.

When reassembling make sure that the upper chain slider fin "5" goes into place on the swingarm "6", then install the chain cover in the reverse direction of disassembly.



10.4 MOTOR ACCESS COVERS

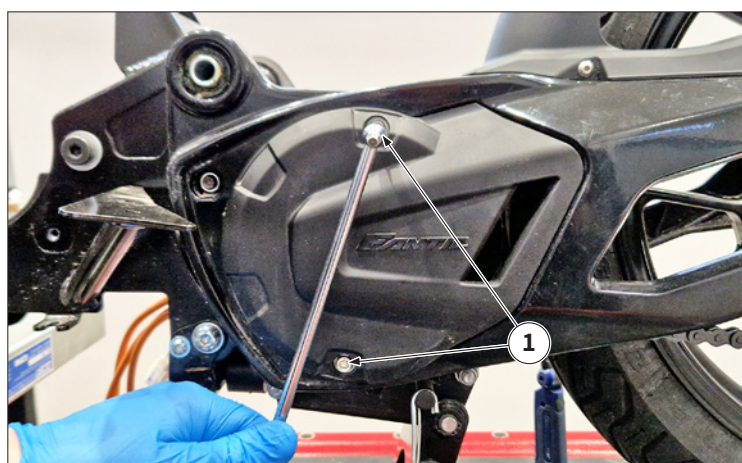
10.4.1 Right motor access cover

Remove the two screws "1".

 **Tightening torque**
 Screws M6x16 (8.8) TBB "1": 3 Nm (0.31 m•kgf, 2.2 ft•lbf)

Remove the right motor access cover "2" from the vehicle.

 **For the reassembly procedure, proceed in the reverse order.**



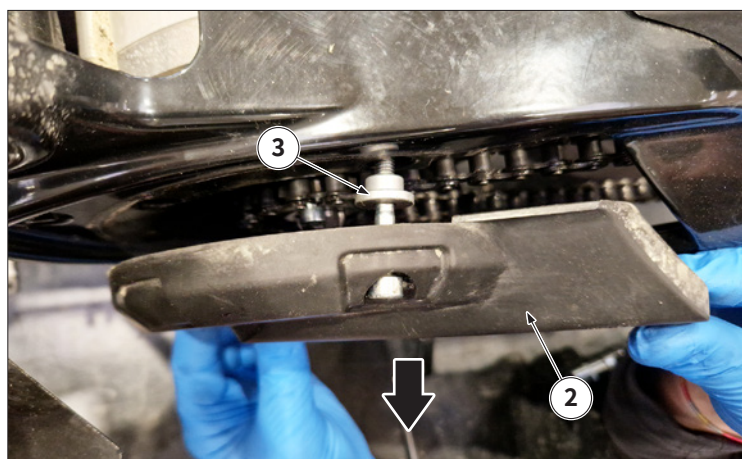
10.4.2 Left motor access cover

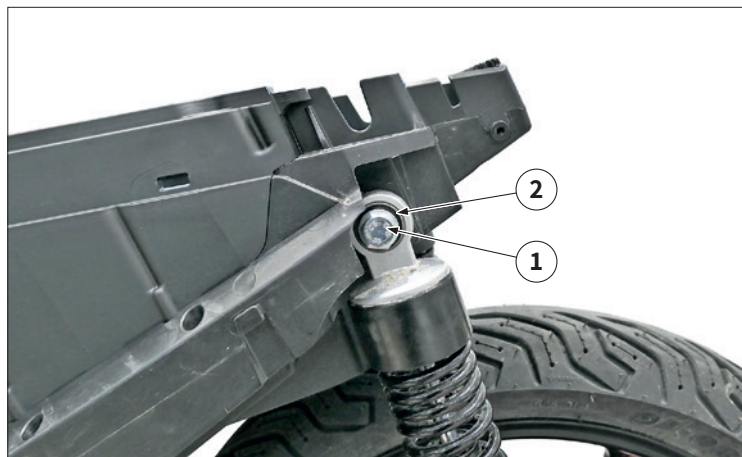
Remove the two screws "1" together with the related washers.

 **Tightening torque**
 Screws M6x45 (8.8) TCEI "1": 10 Nm (1.0 m•kgf, 7.4 ft•lbf)

Remove the left motor access cover "2" and the two bushes "3" from the vehicle.

 **For the reassembly procedure, proceed in the reverse order.**





11.1 REAR SHOCK ABSORBERS

Preliminary operations:

- Remove the Handle (as described on page 69);
- Remove the rear side panel (as described on page 69).

i Procedure valid for left and right rear shock absorber.

Remove screw "1" and washer "2".

Tightening torque
 Screw M10x45 (8.8) Hex head "1": 46 Nm (4.7 m•kgf, 34 ft•lbf)



Remove the screw "3".

! Apply medium threadlock (LOCTITE®) to the M8 screws.

Tightening torque
 Screws M8x30 (8.8) TBB "3": 25 Nm (2.5 m•kgf, 18 ft•lbf)

Remove rear shock absorber "4" from the vehicle.

i For the reassembly procedure, proceed in the reverse order.



12.1 REAR WHEEL

Preliminary operation:

- Remove the drive chain (as described on page 70).

Remove nut "1" while holding the rear wheel axle "2" on the opposite side.

Remove rear wheel axle "2".



Tightening torque

Wheel axle M14 (8.8) "2": 70 Nm (7.1 m•kgf, 52 ft•lbf)

Remove the rear wheel "3" from the vehicle together with its two spacers.



For the reassembly procedure, proceed in the reverse order.



12.2 REAR BRAKE DISC

Preliminary operation:

- Remove the rear wheel (as described on page 70).

Remove the three screws "1", then remove the rear brake disc "2".



Apply threadlock (LOCTITE®) to the M8 screws.



Tightening torque

Screws M8x20 TBB "1": 23 Nm (2.3 m•kgf, 17 ft•lbf)



For the reassembly procedure, proceed in the reverse order.



12.3 RIM

Preliminary operation:

- Remove the rear wheel (as described on page 70).

Remove the five screws "1", then remove the rim "2".



Apply threadlock (LOCTITE®) to the M8 screws.

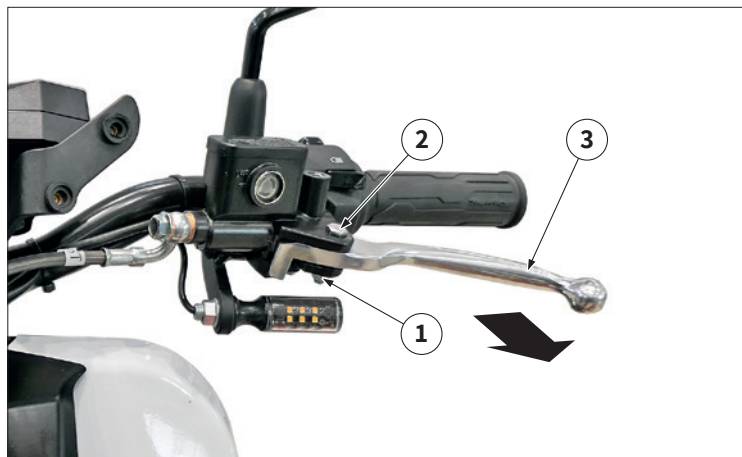


Tightening torque

Screws M8x20 TBB "1": 23 Nm (2.3 m•kgf, 17 ft•lbf)



For the reassembly procedure, proceed in the reverse order.



13.1 REAR BRAKE LEVER

Remove the brake lever pin nut "1".

Remove pin "2", then remove brake lever "3" from the vehicle.

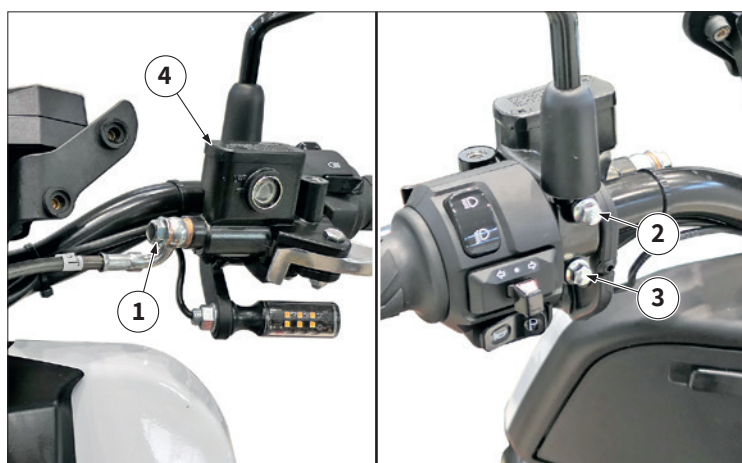


Tightening torque

Brake lever fastening pin "2": 10.5 Nm (1.1 m•kgf, 7.7 ft•lbf)



For the reassembly procedure, proceed in the reverse order.



13.2 REAR BRAKE MASTER CYLINDER

Preliminary operation:

– Remove the left mirror (as described on page 71).

Drain the oil from the brake system beforehand through the purge screw.

Remove screw "1" of the rear brake tube connection and retrieve the two sealing washers.



When reassembling, replace the sealing washers.

Remove screw "2" and "3" securing the upper collar.



Tightening torque

Screw M6x35 (8.8) "2": 10.5 Nm (1.1 m•kgf, 7.7 ft•lbf)

Screw M6x22 (8.8) "3": 10.5 Nm (1.1 m•kgf, 7.7 ft•lbf)

Remove the rear brake master cylinder "4" from the handlebar.



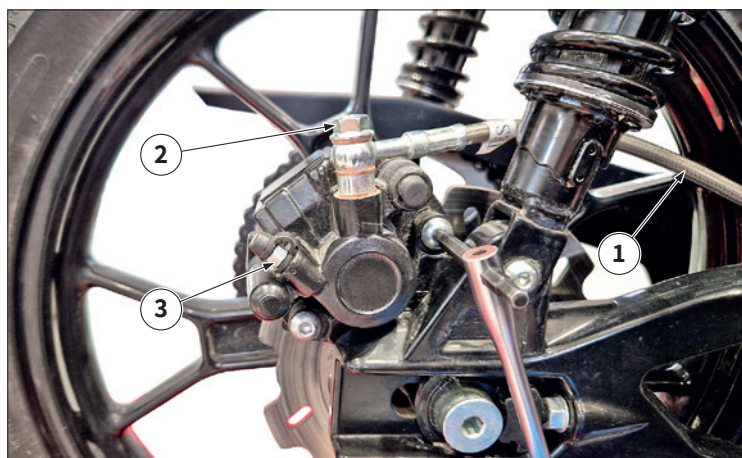
Recover the oil in a container and dispose of it properly.



For the reassembly procedure, proceed in the reverse order.



After reassembly, purge the brake system.



13.3 REAR BRAKE CALLIPER

Check that brake tube "1" is in good condition.

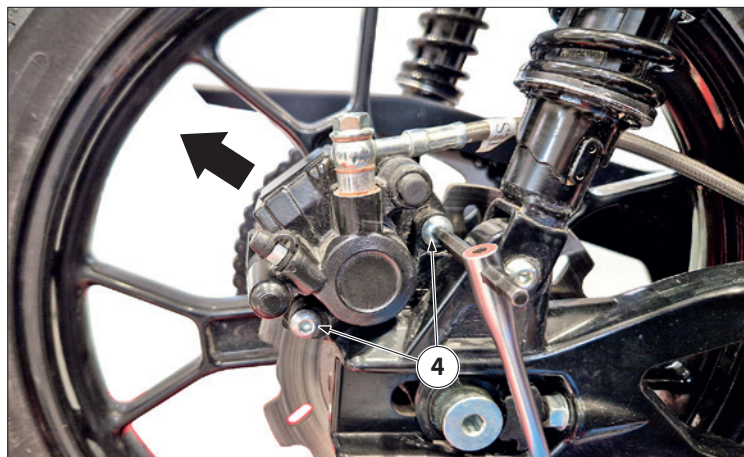
If it is worn out/damaged or leaks, check the source and replace the defective component.

Drain the oil from the brake system beforehand through the dedicated purging screw "2".

Remove screw "3" of the tube /brake calliper connection and retrieve the two sealing washers.



When reassembling, replace the sealing washers.



Remove the two screws "4" fastening the brake calliper to the rear brake support.

Remove the brake calliper from the vehicle.

(i) For the reassembly procedure, proceed in the reverse order.

! Apply threadlock (LOCTITE®) to the M8 screws.

Tightening torque
 Screws M8x20 (8.8) TBB "4": 25 Nm (2.5 m•kgf, 18 ft•lbf)

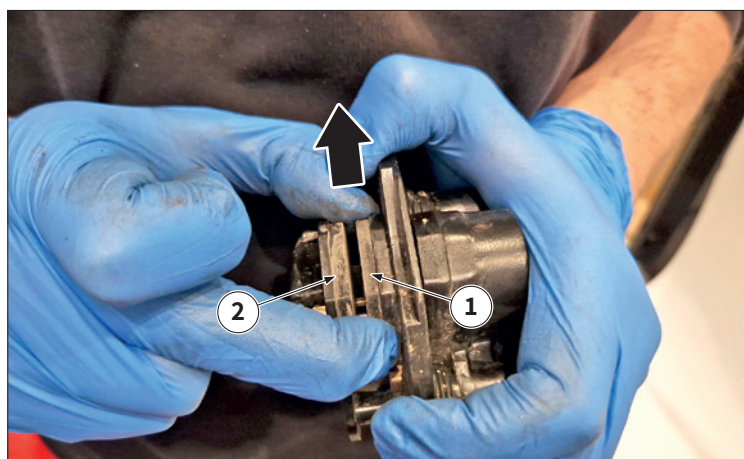
! After reassembly, purge the brake system.

13.3.1 Rear brake pads

(i) Perform the check following the times indicated in the scheduled maintenance table.

! Minimum friction material thickness = 1.5 mm. Always replace pads in pairs and ensure they are correctly positioned inside the brake calliper. In the case of uneven wear of the pads, replace them when the difference in friction material thickness is 0.5 mm.

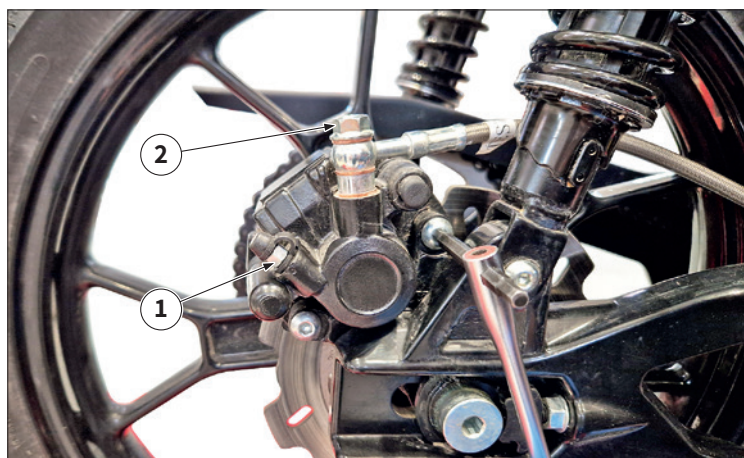
Remove the rear brake calliper without disconnecting the brake system tube fitting.



First remove pad "1" and then pad "2" from the rear brake calliper.

! Once the pads have been removed, DO NOT operate the rear brake lever. When acting on the brake lever, the brake calliper pistons could come out of their seat, resulting in brake fluid leakage.

(i) For the reassembly procedure, proceed in the reverse order.



13.4 REAR BRAKE TUBE

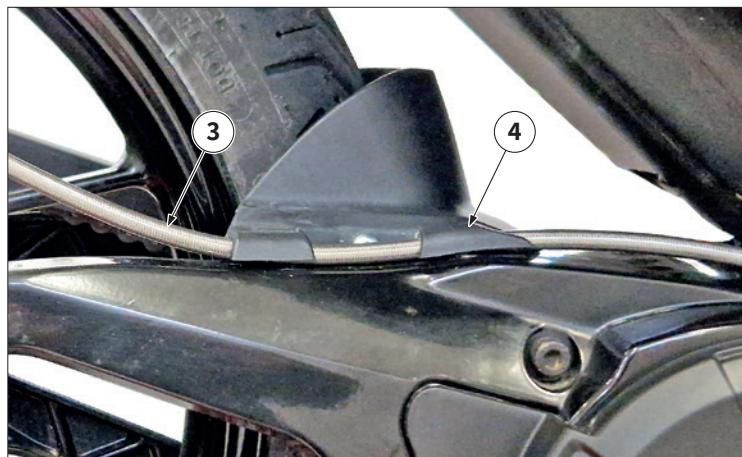
Preliminary operations:

- Remove the windshield and front cover (as described on page 39);
- Remove the front shield (as described on page 40);
- Remove the underbody (as described on page 47).

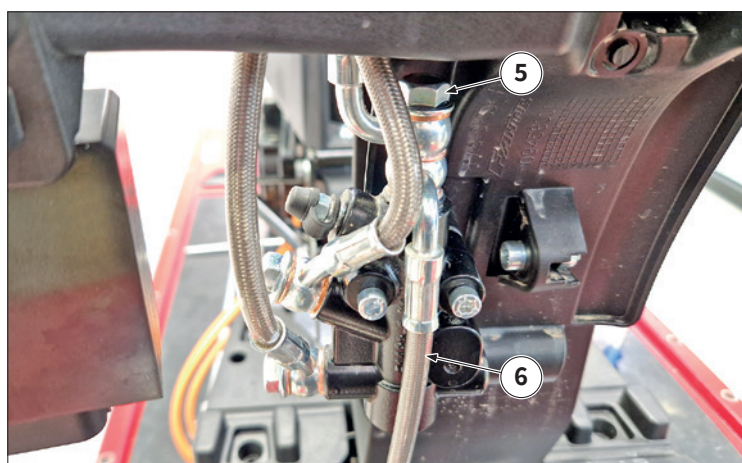
Drain the oil from the brake system beforehand through the dedicated purging screw "1".

Remove screw "2" of the tube /calliper connection and retrieve the two sealing washers.

! When reassembling, replace the sealing washers.



Release the tube/calliper "3" from chain cover "4".



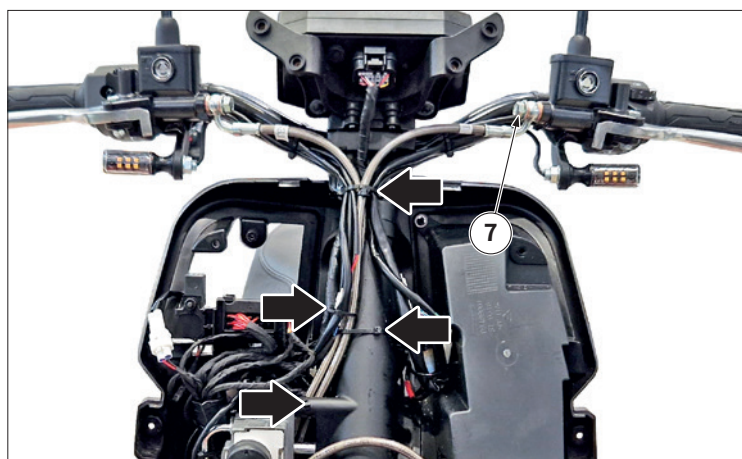
Remove screw "5" of the tube /braking distributor and retrieve the two sealing washers.

 **When reassembling, replace the sealing washers.**

Remove the plastic clamps, if any.

Remove tube "6" from the vehicle.

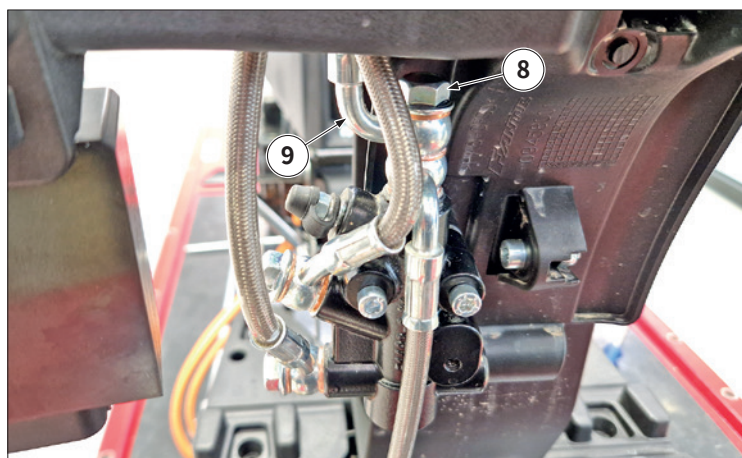
 **Recover the oil in a container and dispose of it properly.**



Remove screw "7" from the tube /pump connection and retrieve the two sealing washers.

 **When reassembling, replace the sealing washers.**

Remove the plastic clamps.



Remove screw "8" of the tube /braking distributor and retrieve the two sealing washers.

 **When reassembling, replace the sealing washers.**

Remove the plastic clamps, if any.

Remove tube "9" from the vehicle.

 **Recover the oil in a container and dispose of it properly.**

 **For the reassembly procedure, proceed in the reverse order.**

 **After reassembly, purge the brake system.**

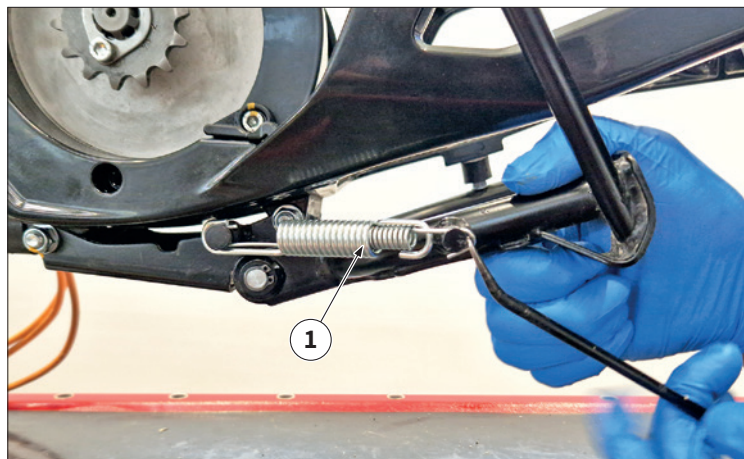


13.5 REAR BRAKE FLUID LEVEL CHECK

The rear brake fluid reservoir is equipped with inspection windows to check the fluid level inside the reservoir.

If the brake fluid level is low or insufficient, **NEVER** top up the reservoir but check the wear condition of the brake pads and brake disc and check the brake circuit for leaks.

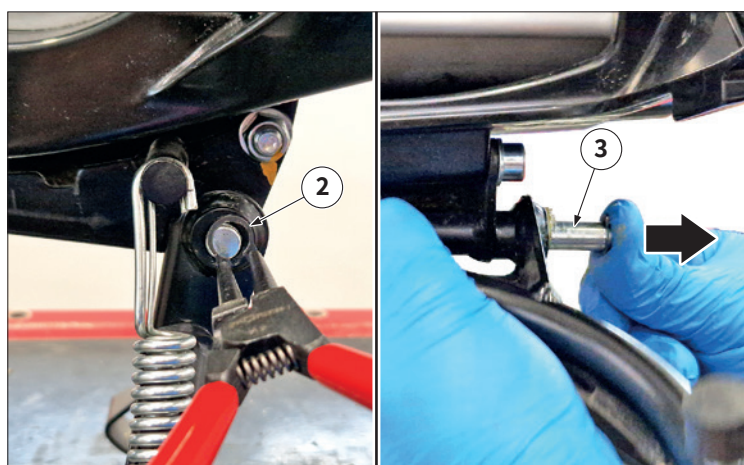
- ⚠ **The brake fluid is hygroscopic, i.e. It absorbs moisture from the surrounding air. If the moisture in the fluid exceeds a certain value, braking will be inefficient.**
- ⚠ **It is advisable to have the fluid replaced every 2 years, never use brake fluid contained in already opened or partially used containers.**
- ⚠ **Make sure that only DOT 4-rated brake fluid is used.**
- ⚠ **Brake circuit fluid has a high corrosive power. Avoid contact with skin or painted parts. In case of contact with the skin, wash thoroughly with water.**



14.1 CENTRAL KICKSTAND

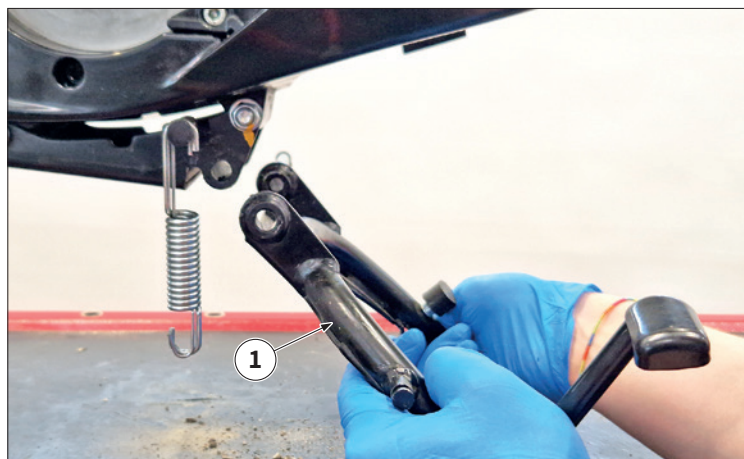
Properly support the vehicle using a suitable stand.

Working on the left side of the vehicle, unhook the two central kickstand return springs "1", using a suitable spring puller tool.



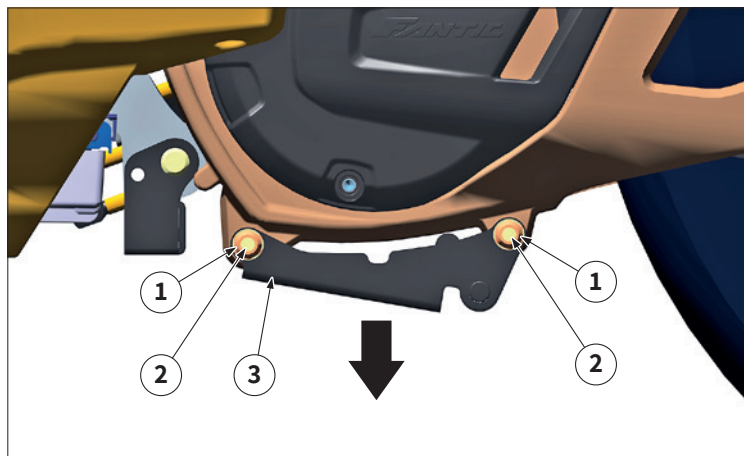
Remove the seeger ring "2" retaining the stand pin.

Then remove the kickstand pin "3" from its seat by pushing it from right to left.



Remove the central kickstand "4" from the vehicle.

i For the reassembly procedure, proceed in the reverse direction, making sure that grease is applied to kickstand pin "3" and that the seeger ring "2" is not over-extended, so as not to cause a leak.



14.2 CENTRAL KICKSTAND BRACKET

Preliminary operation:

– Remove the central kickstand (as described on page 75).

Remove the two nuts "1" by locking the two screws "2" on the opposite side.

Remove the two screws "2" and central kickstand bracket "3" from the vehicle.

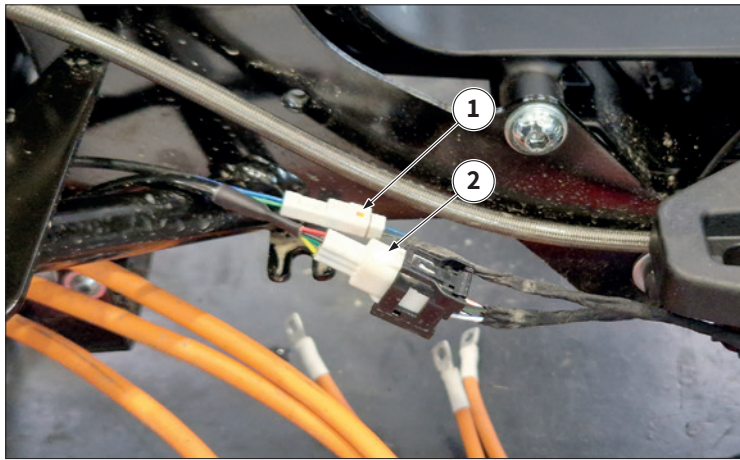
Tightening torque
Screws M8x120 (8.8) TCEI "2": 25 Nm (2.5 m•kgf, 18 ft•lbf)

i For the reassembly procedure, proceed in the reverse order.

15.1 SWINGARM

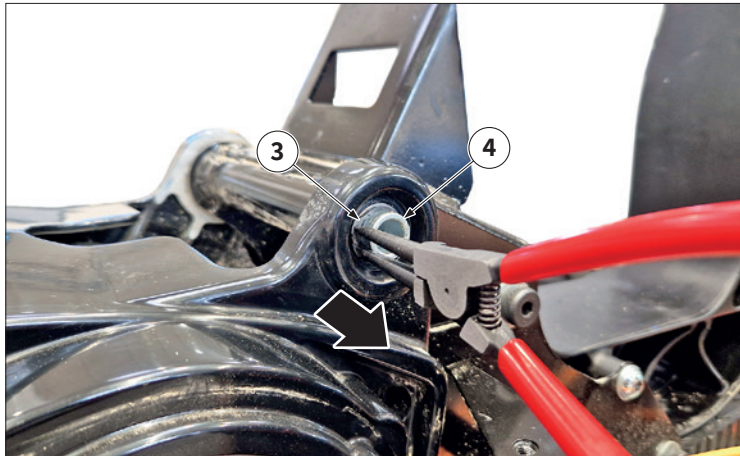
Preliminary operations:

- Remove the seat (as described on page 59);
- Remove the right and left footboard (as described on page 45);
- Remove the handle (as described on page 61);
- Remove the rear side panel (as described on page 62);
- Remove the side dumpers (as described on page 66);
- Remove the rear shock absorbers (as described on page 69);
- Remove the rear frame (as described on page 78);
- Remove the inverter (as described on page 92).



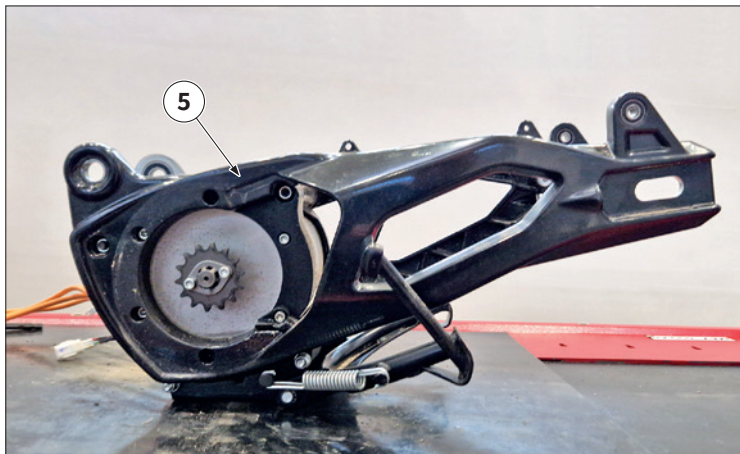
⚠ Handle the cables and connectors of electronic devices with extreme caution.

Disconnect connectors "1" and "2" of the electric motor.



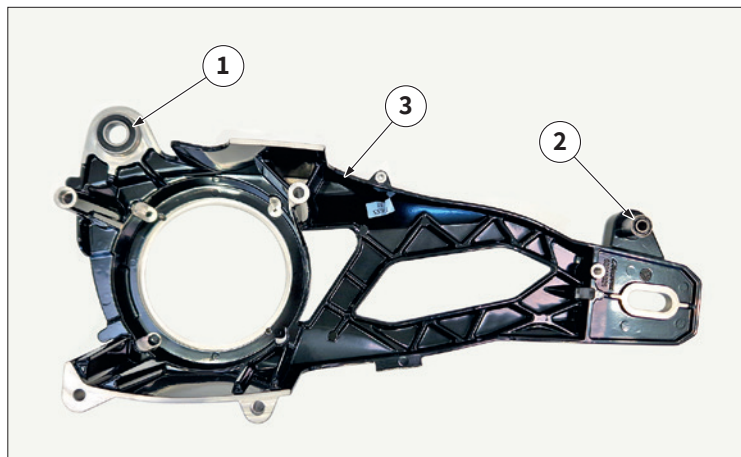
Remove the swingarm pivot seeger ring "3".

Then remove swingarm pivot "4" from its housing by pushing it from right to left.



Remove swingarm "5" from the vehicle and place it on the bench.

i For the reassembly procedure, proceed in the reverse direction, making sure that grease is applied to swingarm pivot "4" and that the seeger ring "3" is not over-extended, so as not to cause a leak.

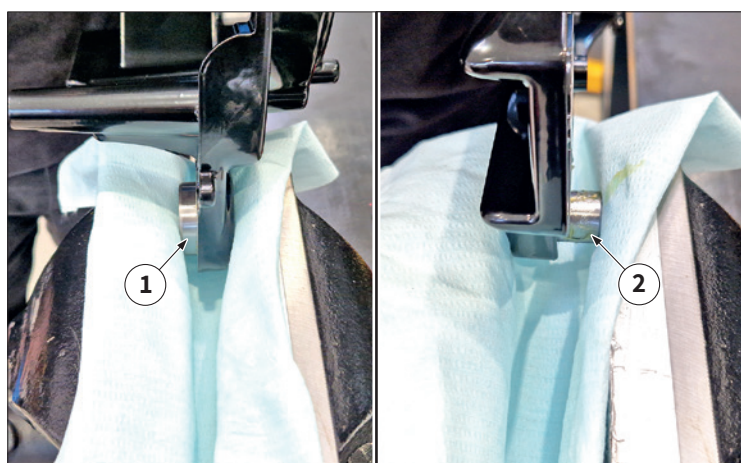


15.2 REAR SWINGARM BEARING AND SILENTBLOCK

Preliminary operations:

- Remove the swingarm (as described on page 76);
- Remove the electric motor (as described on page 84).

Remove bearing "1" and silentblock "2" from the right swingarm "3" using a press.



In the reassembly procedure, insert (with press/clamp) bearing "1" and silentblock "2" into their respective housings on the right rear swingarm "3", making sure to have previously applied bearing grease.



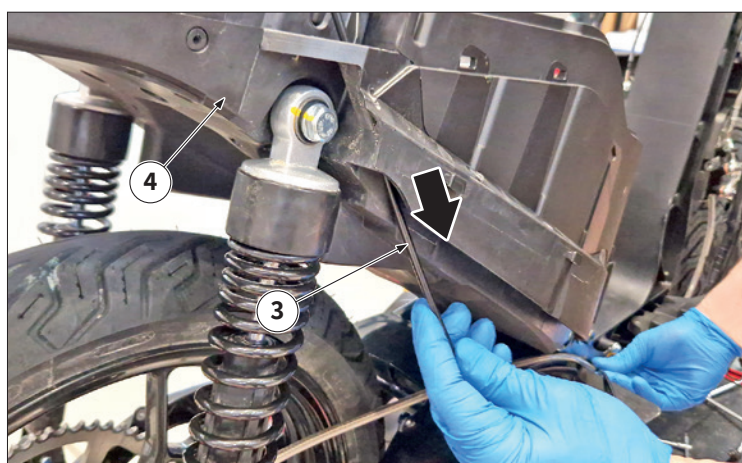
16.1 REAR FRAME

Preliminary operations:

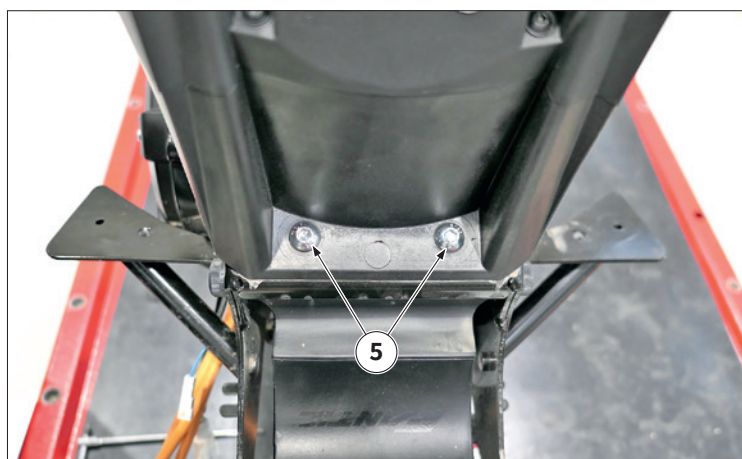
- Remove the luggage rack base (as described on page 65);
- Remove the rear frame covers (as described on page 65);
- Remove the side dumpers (as described on page 66);
- Remove the inverter (as described on page 92).

⚠ Handle the cables and connectors of electronic devices with extreme caution.

Pull the wiring harness "1" off the rear frame "2".



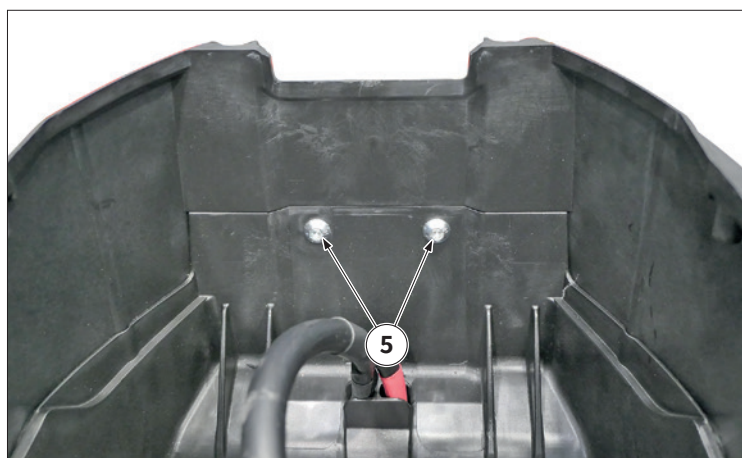
Remove the seat lock cable "3" from the rear frame "4".

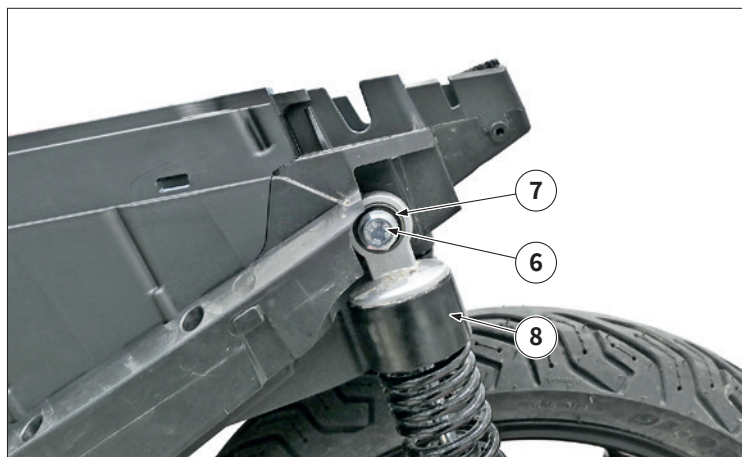


Remove the four screws "5".

⚠ Apply threadlock (LOCTITE®) to the M8 screws.

🔧 Tightening torque
 Screws M8x20 (8.8) TBB "5": 18 Nm (1.8 m•kgf, 13 ft•lbf)



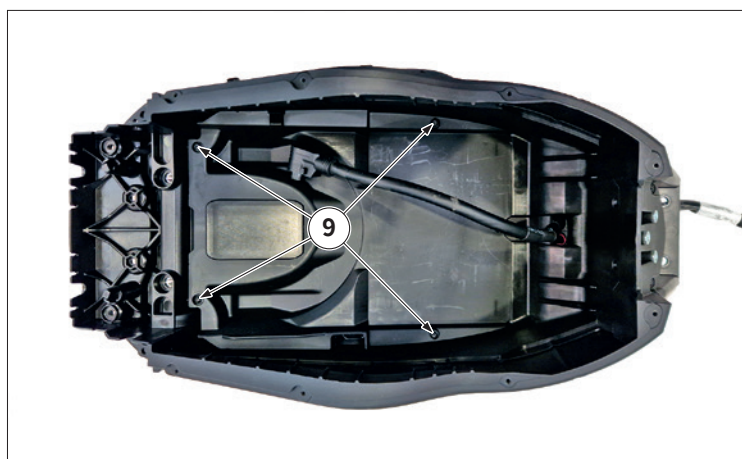


Remove screw "6" and washer "7" from the left rear shock absorber "8" (shown in the figure) and the right one.

 **Tightening torque**
Screw M10x45 (8.8) Hex head "6": 46 Nm (4.7 m•kgf, 34 ft•lbf)



Remove rear frame "3" from the vehicle.

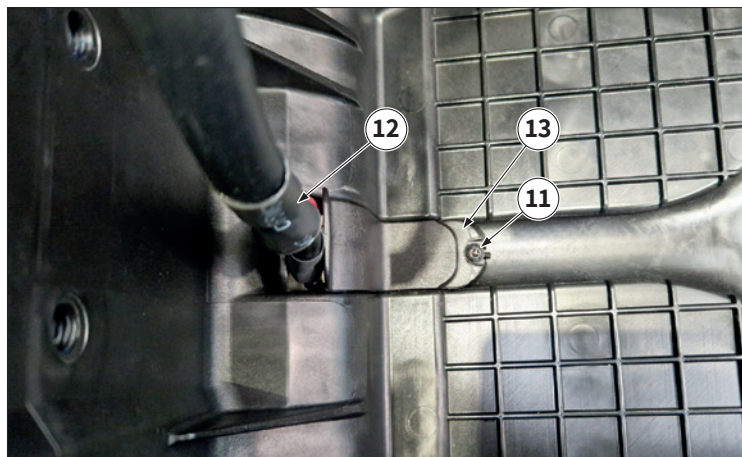


With the rear frame on the bench, remove the four screws "9".

 **Tightening torque**
Self-tapping screws Ø4x16 "9": 1.5 Nm (0.15 m•kgf, 1.1 ft•lbf)



Remove the rear compartment cover "10" from the rear frame.



Remove the screw "11".

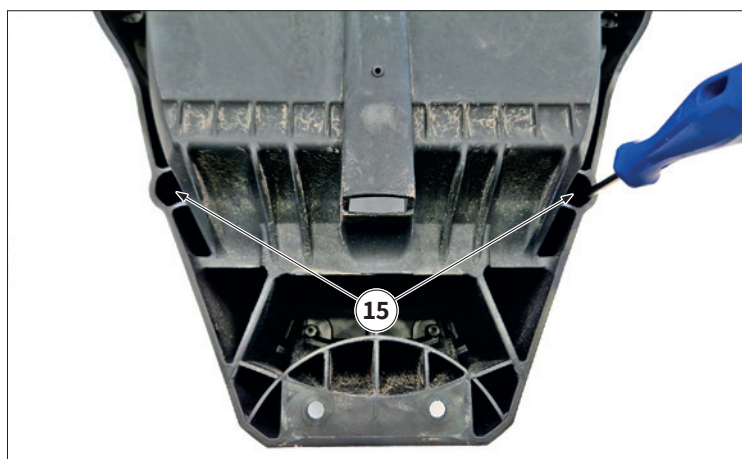
 **Tightening torque**
Self-tapping screws Ø4x16 "11": 1.5 Nm (0.15 m•kgf, 1.1 ft•lbf)

Remove the battery cable "12" including connection node "13" from the rear frame (refer to "18.7 Inverter" a pagina 80).



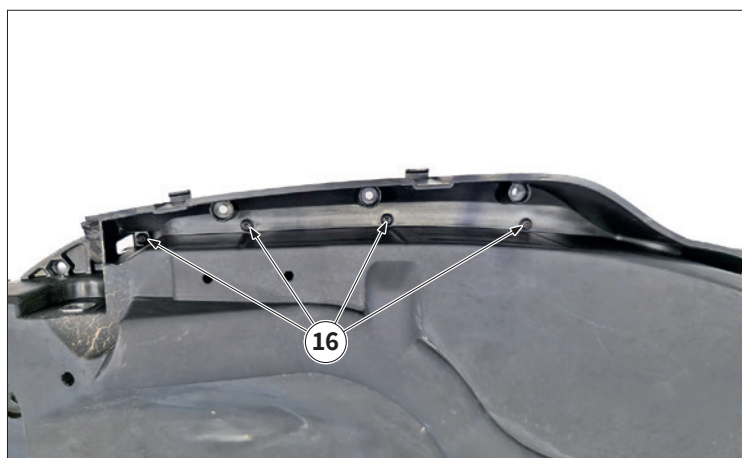
Remove the two screws "14".

 **Tightening torque**
Self-tapping screws Ø4x16 "14": 1.5 Nm (0.15 m•kgf, 1.1 ft•lbf)



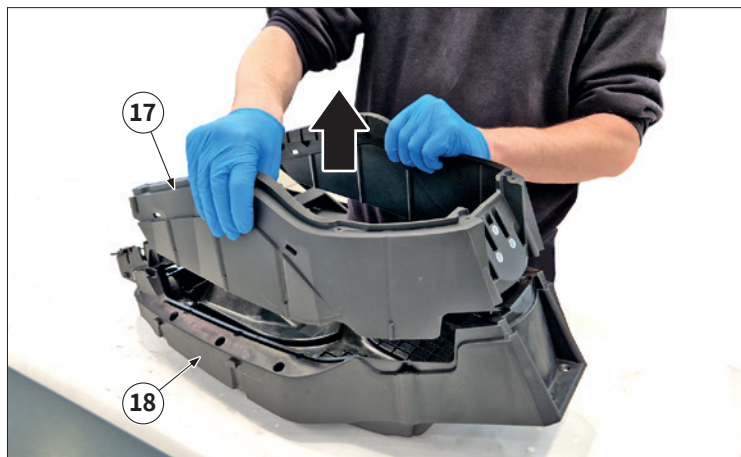
Remove the two screws "15" located under the rear frame.

 **Tightening torque**
Self-tapping screws Ø4x16 "15": 1.5 Nm (0.15 m•kgf, 1.1 ft•lbf)



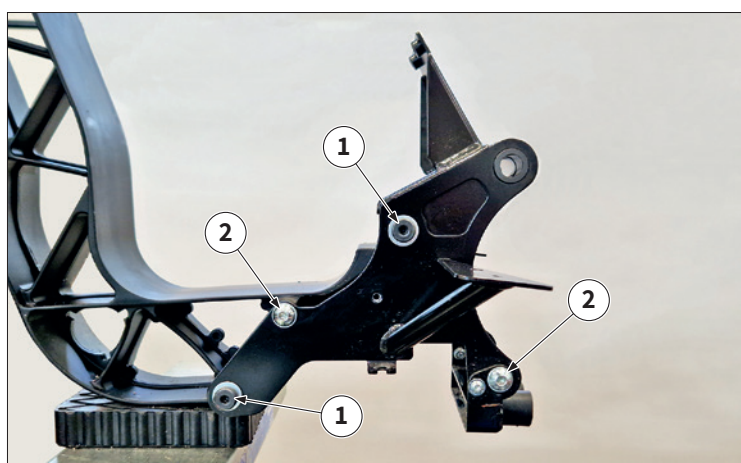
Remove the eight screws "16" (four on each side) located under the rear frame.

 **Tightening torque**
Self-tapping screws Ø4x16 "16": 1.5 Nm (0.15 m•kgf, 1.1 ft•lbf)



Separate the upper rear frame "17" from the lower rear frame "18".

i For the reassembly procedure, proceed in the reverse order.



16.2 FRAME FASTENING BRACKET

Preliminary operations:

- Remove the underbody (as described on page 81);
- Remove the rear frame (as described on page 78).

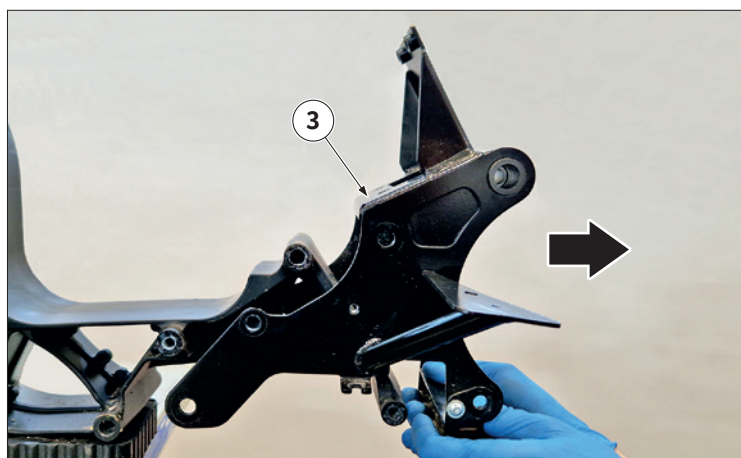
Remove the four grinded screws "1" (two on each side), with the related washers.

 **Tightening torque**
Grinded screws M10x12x15 (8.8) "1": 36 Nm (3.7 m•kgf, 27 ft•lbf)

Remove the four screws "2" (two on each side), with the related washers.

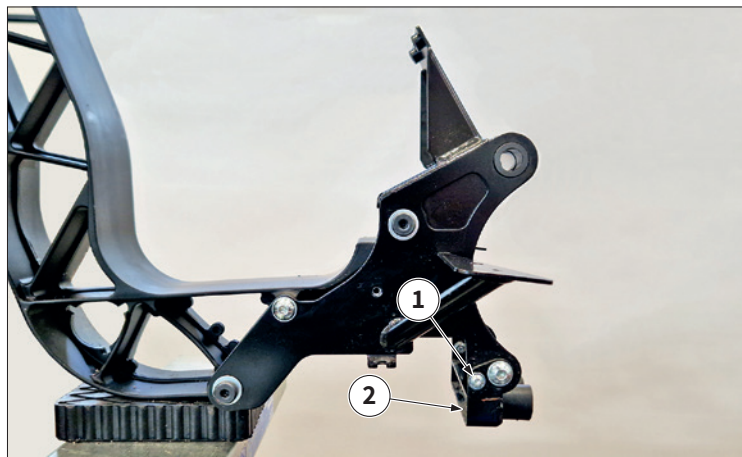
 **Apply medium threadlock (LOCTITE®) to the M10 screws.**

 **Tightening torque**
Screws M10x40 (8.8) TBB "2": 36 Nm (3.7 m•kgf, 27 ft•lbf)



Remove the frames bracket "3" from the vehicle.

i For the reassembly procedure, proceed in the reverse order.



16.3 BUFFER BRACKET

Preliminary operations:

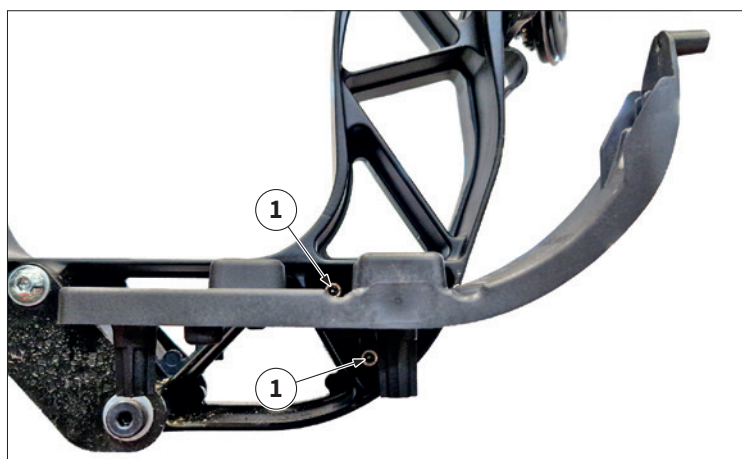
- Remove the underbody (as described on page 82);
- Remove the rear frame (as described on page 78).

Remove the two screws "1" (one on each side), with the related washers and nuts.

 **Tightening torque**
 Screws M6x16 (8.8) TBFL "2": 10.5 Nm (1.1 m•kgf, 7.7 ft•lbf)

Remove the buffer bracket "2" from the vehicle.

 **For the reassembly procedure, proceed in the reverse order.**



16.4 LEFT AND RIGHT UNDERBODY SUPPORTS

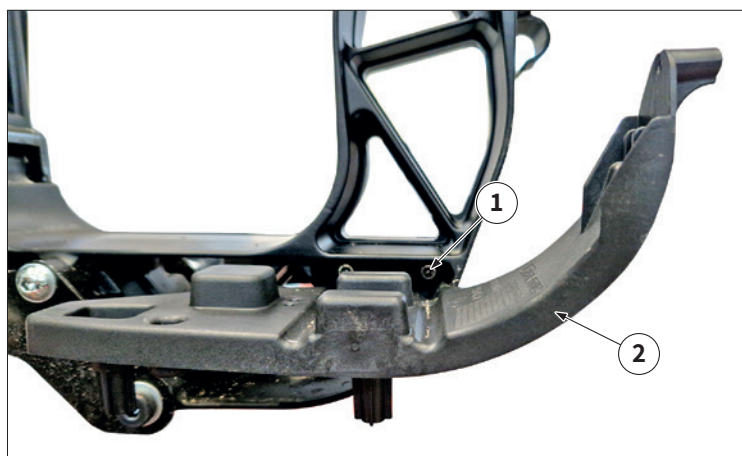
Preliminary operation:

- Remove the underbody (as described on page 82).

 **Procedure valid for right and left underbody support.**

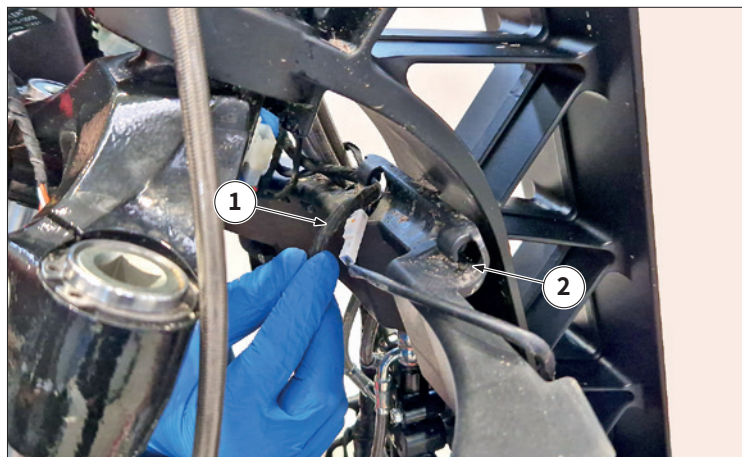
Remove the three screws "1" and related nuts.

 **Tightening torque**
 Screws M6x25 (8.8) TCEI "1": 7.5 Nm (0.76 m•kgf, 5.5 ft•lbf)



Remove the right underbody "2" from the vehicle.

 **For the reassembly procedure, proceed in the reverse order.**

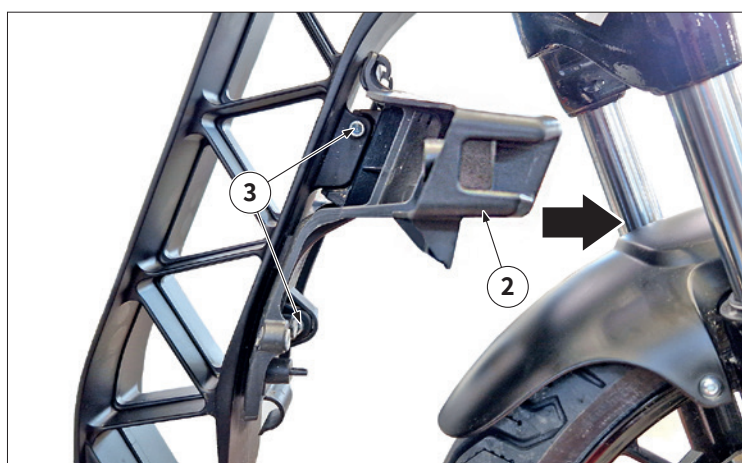


16.5 FRONT SHIELD SUPPORT

Preliminary operations:

- Remove the inner shield (as described on page 42);
- Remove the braking distributor (as described on page 56);
- Remove the horn (as described on page 96);
- Remove the keyless control unit (as described on page 96).

Move cable "1" away from the front shield support "2".

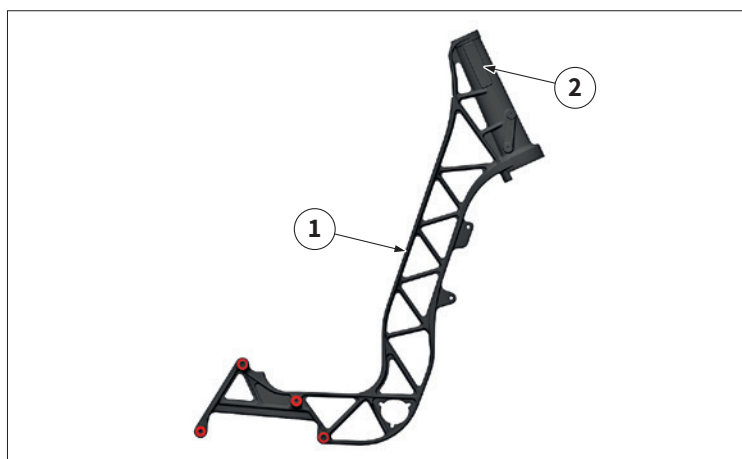


Remove the four screws "3" (two on each side).

 **Tightening torque**
M6x20 (8.8) Hexagon socket head cap screws "1": 7.5 Nm
(0.76 m•kgf, 5.5 ft•lbf)

Remove front shield support "2" from the vehicle.

i For the reassembly procedure, proceed in the reverse order.

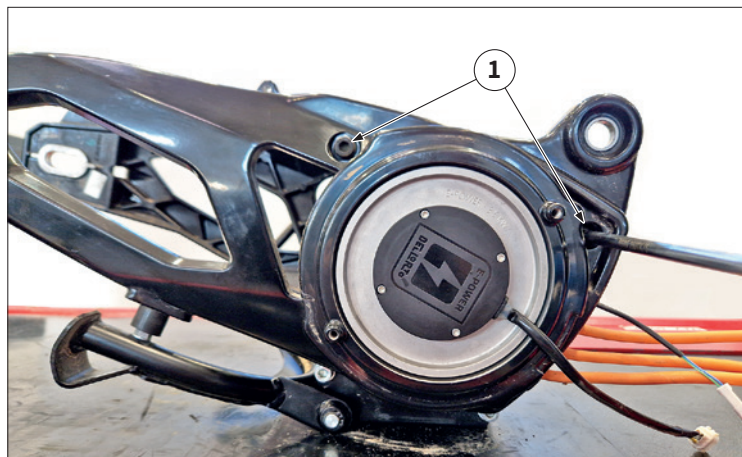


16.6 FRONT FRAME

i Before replacing the front frame, it is advisable to note down the VIN code "2".

To carry out the removal of the front frame "1" it is necessary to carry out all the operations documented in all chapters of this manual from No. 5 to No. 18.

i To reassemble the front frame it is necessary to carry out all the procedures in chapters No. 5 to No. 18 proceeding in the reverse direction, unless otherwise described.



17.1 ELECTRIC MOTOR

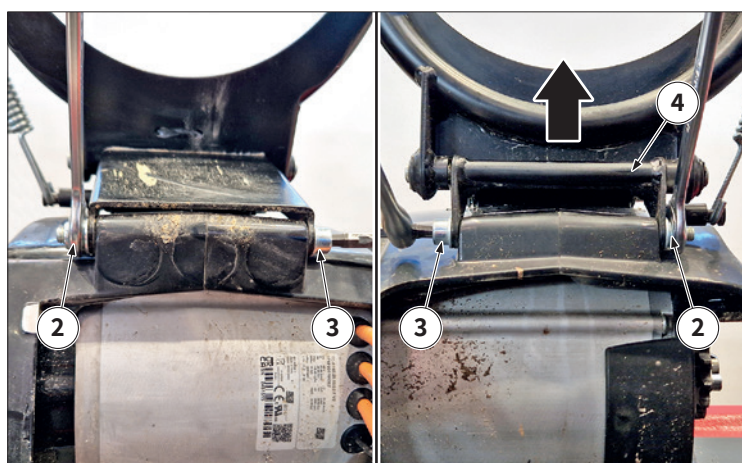
Preliminary operation:

- ⚠ **Disconnect the vehicle batteries before any other operation.**
- ⚠ **Handle the cables and connectors of electronic devices with extreme caution.**

– Remove the rear swingarm (as described on page 76).

Remove the two screws "1" and the related nuts in their seats (opposite side).

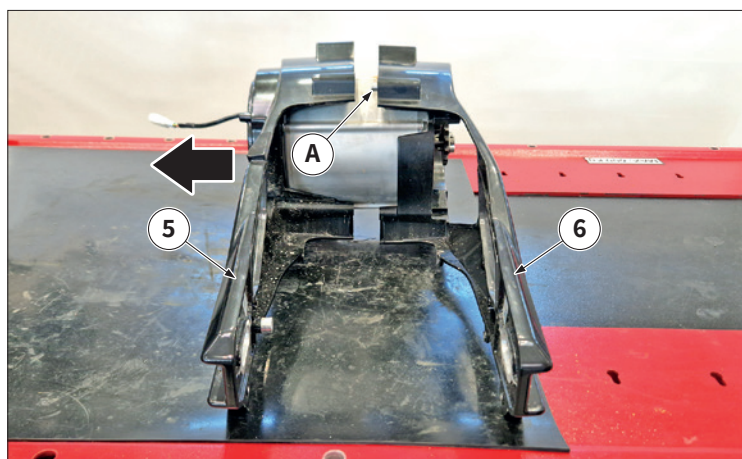
- 🔧 **Tightening torque**
Screws M8x155 (8.8) TCEI "1": 25 Nm (2.5 m•kgf, 18 ft•lbf)



Remove the two nuts "2" by locking the two screws "3" on the opposite side.

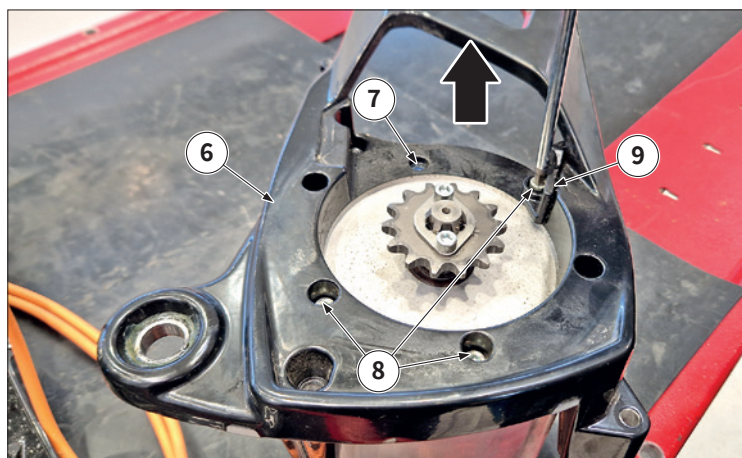
Remove the two screws "3" and central kickstand bracket "4" from the rear swingarm.

- 🔧 **Tightening torque**
Screws M8x120 (8.8) TCEI "2": 25 Nm (2.5 m•kgf, 18 ft•lbf)



Separate the right rear swingarm "5" from the left rear swingarm "6".

- ⓘ **When separating the rear right swingarm from the left swingarm, special care must be taken to ensure that the two centring bushings "A" are not lost or misplaced. If they are lost, they must be replaced.**



Remove the screw "7".

- ⚠ **Apply medium threadlock (LOCTITE®) to the M6 screws.**

- 🔧 **Tightening torque**
Screws M6x16 (8.8) TCEI "7": 10.5 Nm (1.1 m•kgf, 7.7 ft•lbf)

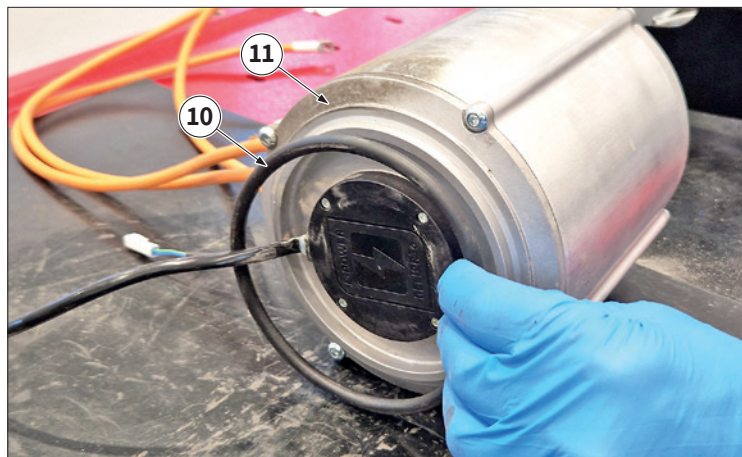
Remove the three screws "8".

- ⚠ **Apply medium threadlock (LOCTITE®) to the M6 screws.**

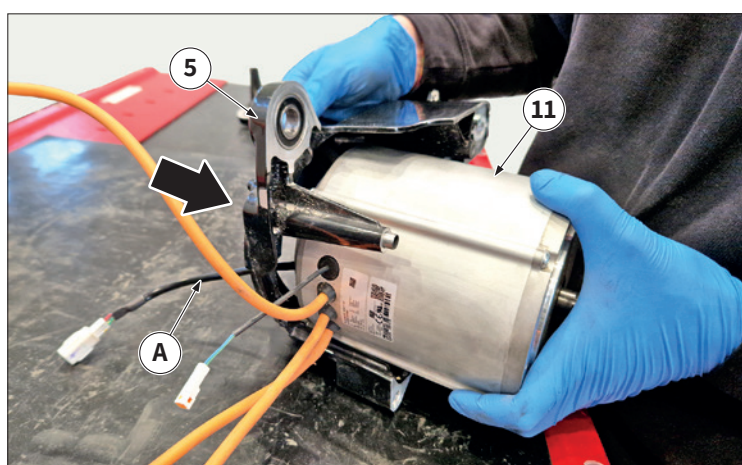
- 🔧 **Tightening torque**
Screws M6x25 (8.8) TCEI "8": 10.5 Nm (1.1 m•kgf, 7.7 ft•lbf)

Remove the lower chain slider "9" and the related bushing.

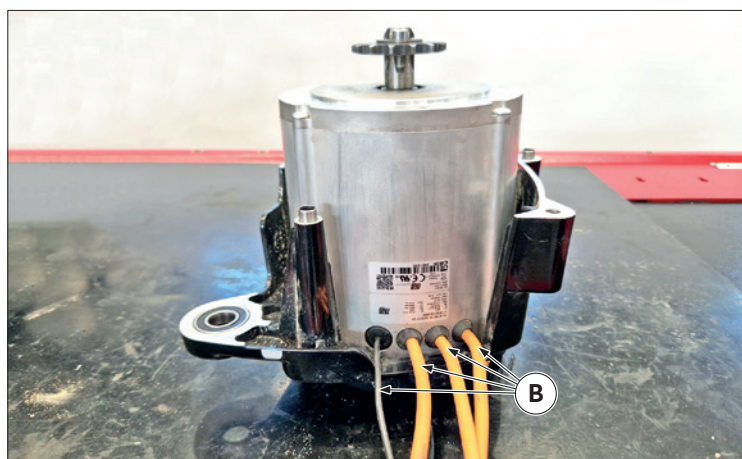
Remove the left rear swingarm "6" from the electric motor.



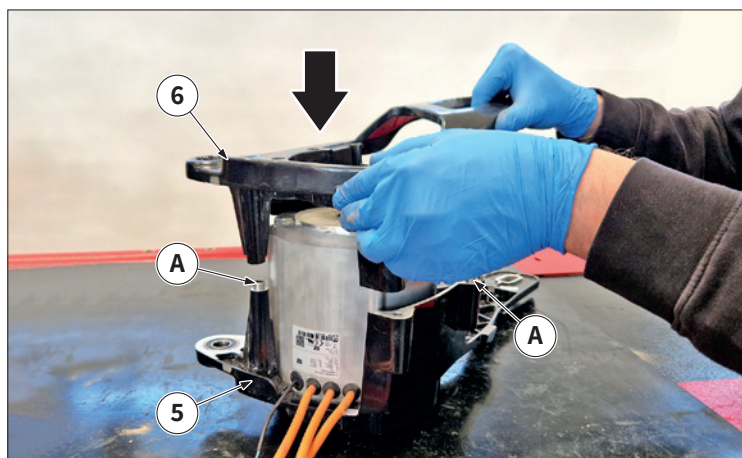
Remove the motor bottom o-ring "10" from electric motor "11".



In the reassembly procedure, place the electric motor "11" in the right rear swingarm housing "5", ensuring that cable "A" is positioned on the outside of the right rear swingarm.

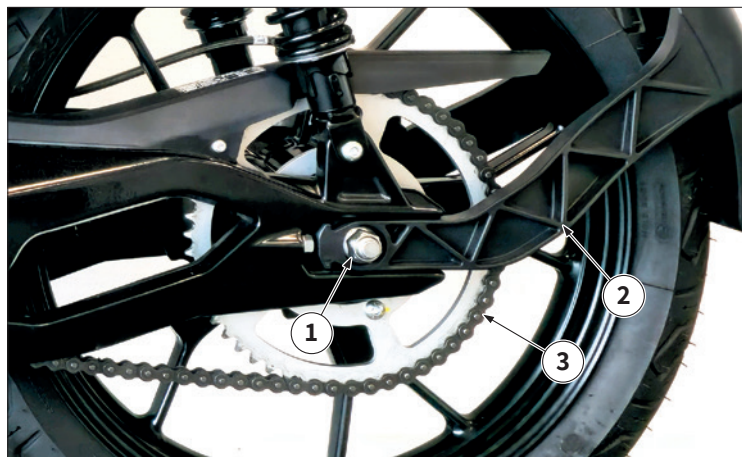


Make sure that the cables "B" are exactly in the position shown in the figure.



Position the left rear swingarm "6" on the right rear swingarm "5", making sure that the centring bushings "A" are correctly positioned in their respective housings.

i For subsequent reassembly procedures, proceed in the reverse direction, ensuring that the three motor cables are in the position indicated in the "inverter" chapter at page 92.



17.2 DRIVE CHAIN

Preliminary operations:

- Remove the chain cover (as described on page 67);
- Remove the left motor access cover (as described on page 68).

Remove wheel axle nut "1".

Remove rear mudguard "2".

Remove drive chain "3" from the vehicle.

i For subsequent reassembly procedures, proceed in the reverse direction, ensuring proper cleaning and subsequent lubrication of the drive chain.



17.2.1 Chain tensioning check

Place the moped on a flat, stable surface, ensuring that it is raised on the central kickstand so that the rear wheel is off the ground.

Check the chain to ensure that there are no signs of damage or wear and that it is not rusted. Also check for missing or damaged connections.

With the rear wheel raised, check the lowest point of the chain between the sprocket and the chainring. Gently press the chain upwards with your finger to see how much it lifts off the straight line between the sprocket and the chainring.

Wrench Transmission chain tension:
10.0 - 15.0mm (0.39 - 0.59 in)



17.2.2 Chain adjustment

Place the moped on a flat, stable surface, ensuring that it is raised on the central kickstand so that the rear wheel is off the ground.

Loosen the wheel axle nut "1".

Turn the adjustment bolt "2", on both sides, until the specified chain tension is achieved.

Once the correct tension is achieved, tighten the rear wheel axle nut to the specified torque.

i To maintain the correct alignment of the rear wheel, adjust by acting evenly on both adjusters.

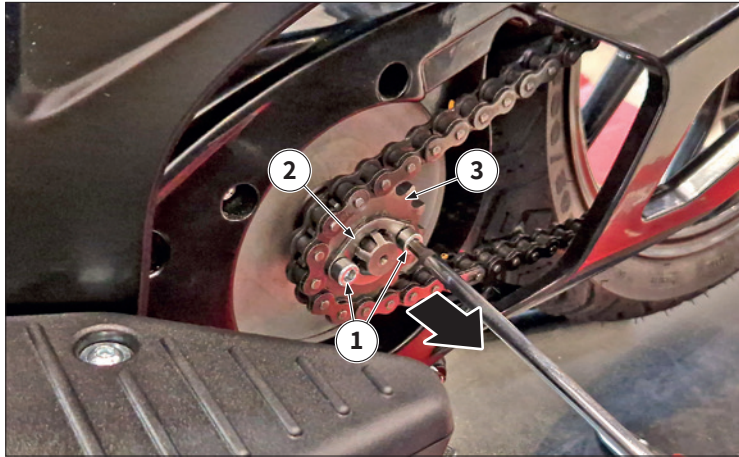


Measure distance "3" as shown in the figure, on both sides of the rear swingarm, checking that they are equivalent.

Tighten the locknuts of the drive chain adjusters.

While tightening the wheel axle nut, push the wheel forward to ensure that there is no clearance between the adjusters and the wheel axle plates.

Wrench Tightening torque
Wheel axle M14 (8.8): 70 Nm (7.1 m•kgf, 52 ft•lbf)



17.3 SPROCKET

Preliminary operations:

- Remove the chain cover (as described on page 67);
- Remove the left motor access cover (as described on page 68).

With the rear brake lever actuated, loosen the two screws "1".

Release the rear brake lever and remove the two screws "1" together with the sprocket safety plate "2".



Apply medium threadlock (LOCTITE®) to the M6 screws.



Tightening torque

Screws M6x16 (8.8) TCEI "1": 10.5 Nm (1.1 m•kgf, 7.7 ft•lbf)

Remove sprocket "3" from the vehicle.



For subsequent reassembly procedures, proceed in the reverse direction.