

TRACTION BATTERY INTERNAL JUNCTION BOX: REMOVAL - REFITTING



Note, one or more warnings are present in this procedure



- ▣ Locations and specifications (tightening torques, parts always to be replaced, etc.) ([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) ([see 19E, Traction battery, Traction battery housing assembly : Exploded view](#)) .

WARNING



- ▣ To avoid all risk of damage to the systems, apply the safety and cleanliness instructions and operation recommendations before carrying out any repair:

- [\(see 19E, Traction battery, Traction battery : Precautions for the repair\)](#) ,
- [Vehicle: Precautions for the repair](#) .

WARNING

DANGER: HIGH VOLTAGE VEHICLE.



Risks of serious burns or electric shocks that may prove fatal.

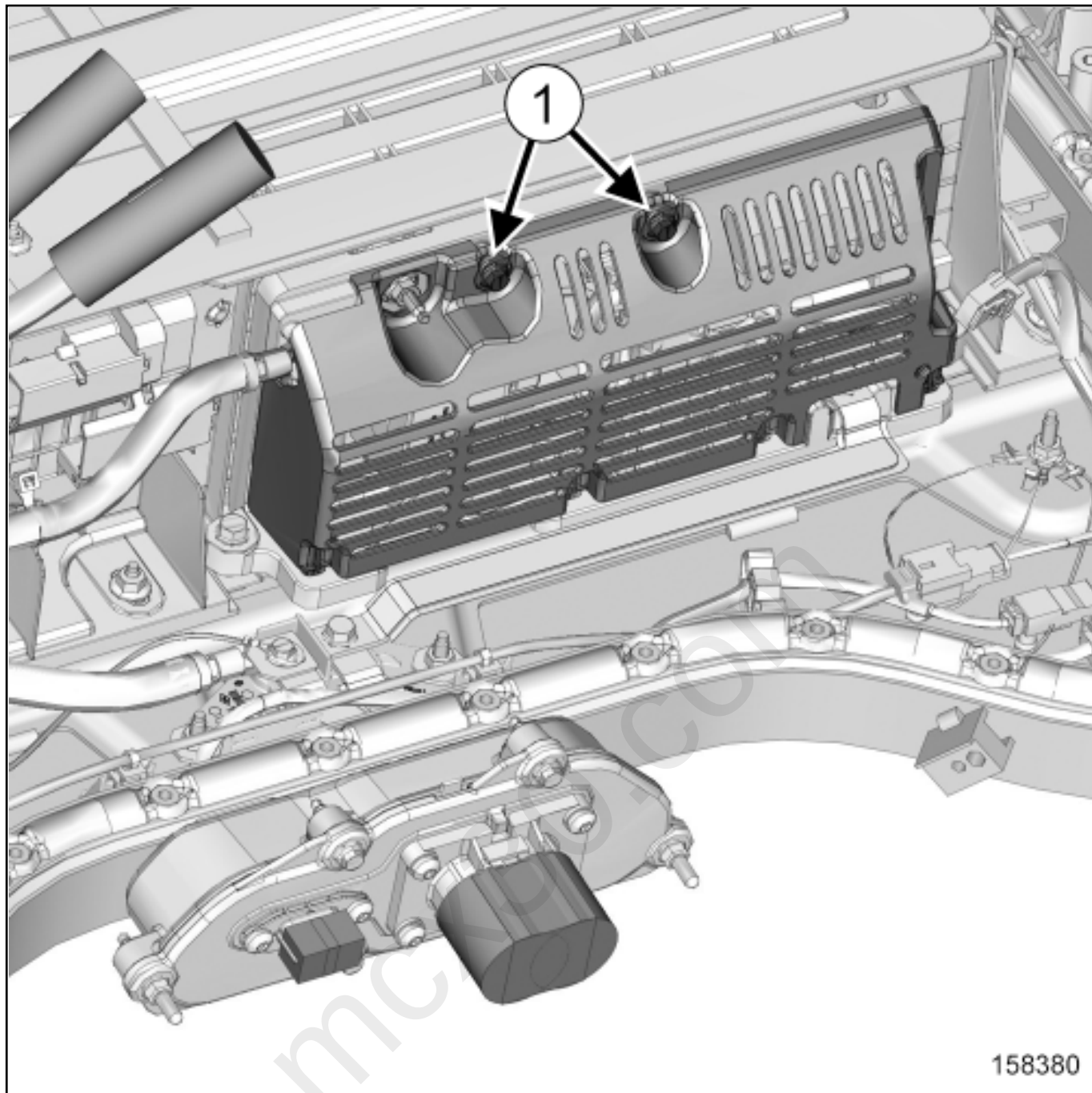
Before carrying out any work on the vehicle, it is essential that you follow the instructions regarding vehicle lockout. This work must be carried out by an employee who is qualified and authorised to work on a high-voltage onboard network.

REMOVAL

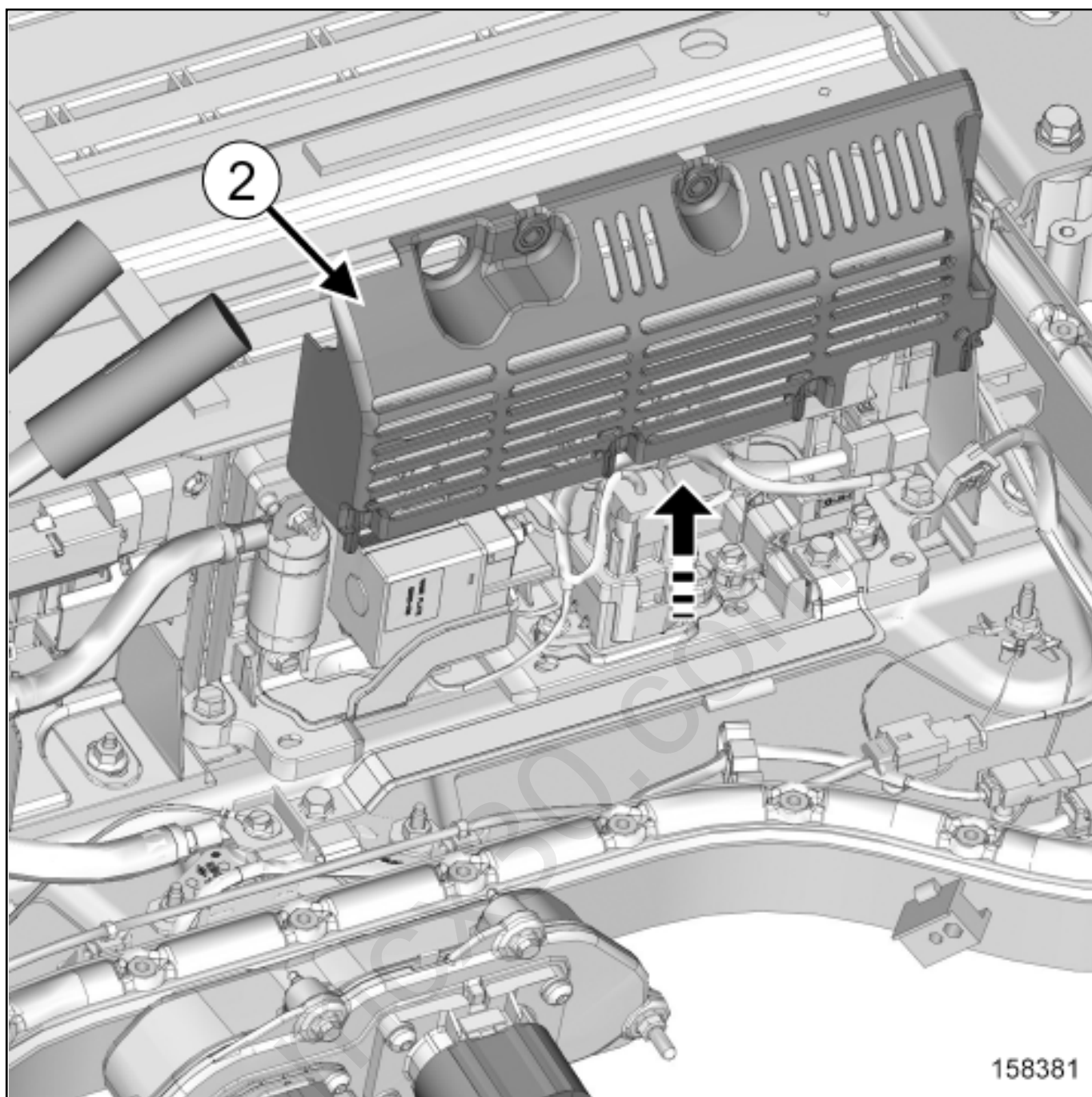
1. REMOVAL PREPARATION OPERATION

- ▣ Remove the traction battery upper cover ([see 19E, Traction battery, Traction battery housing assembly : Exploded view](#)) .

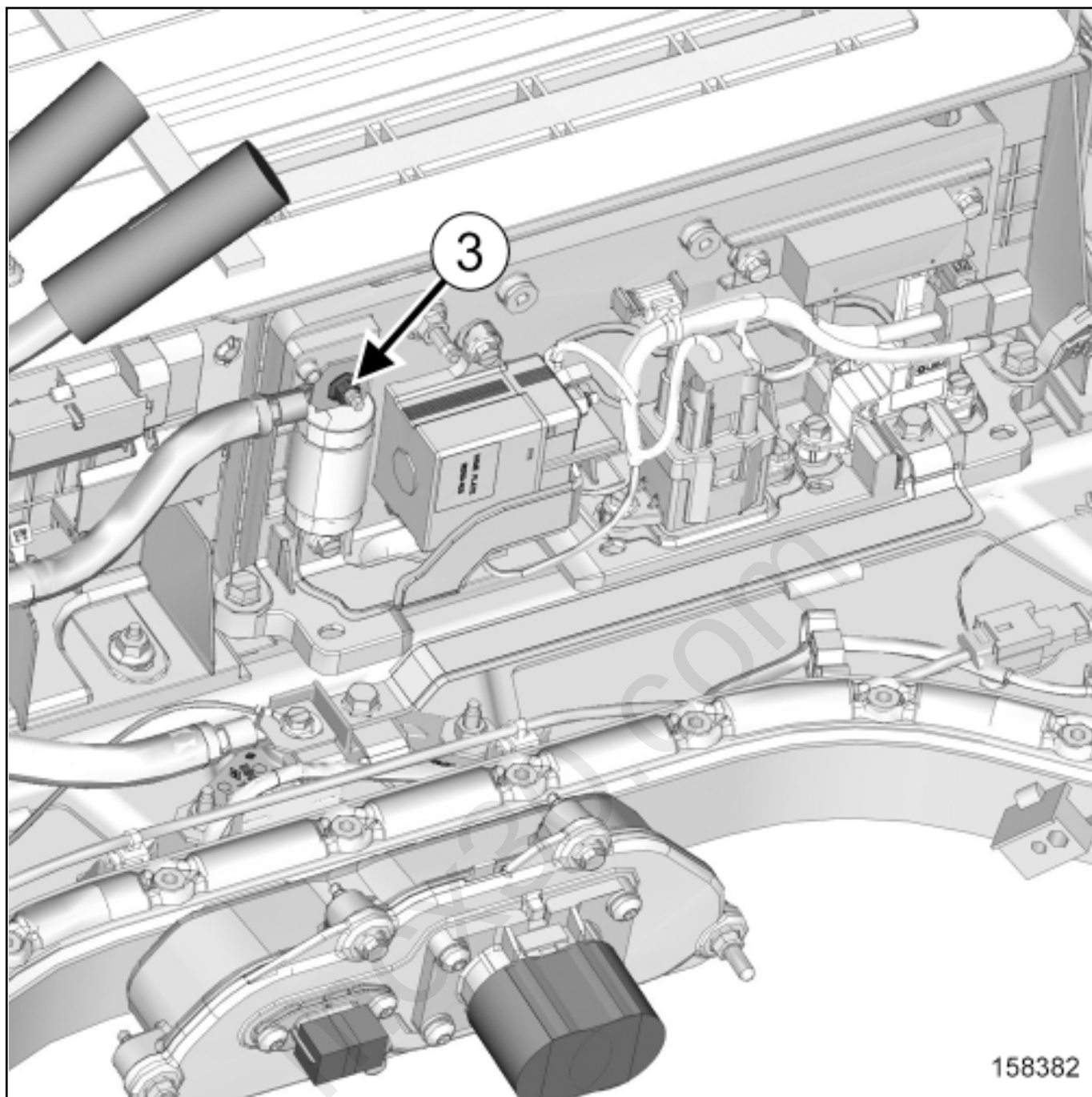
2. REMOVAL OPERATION



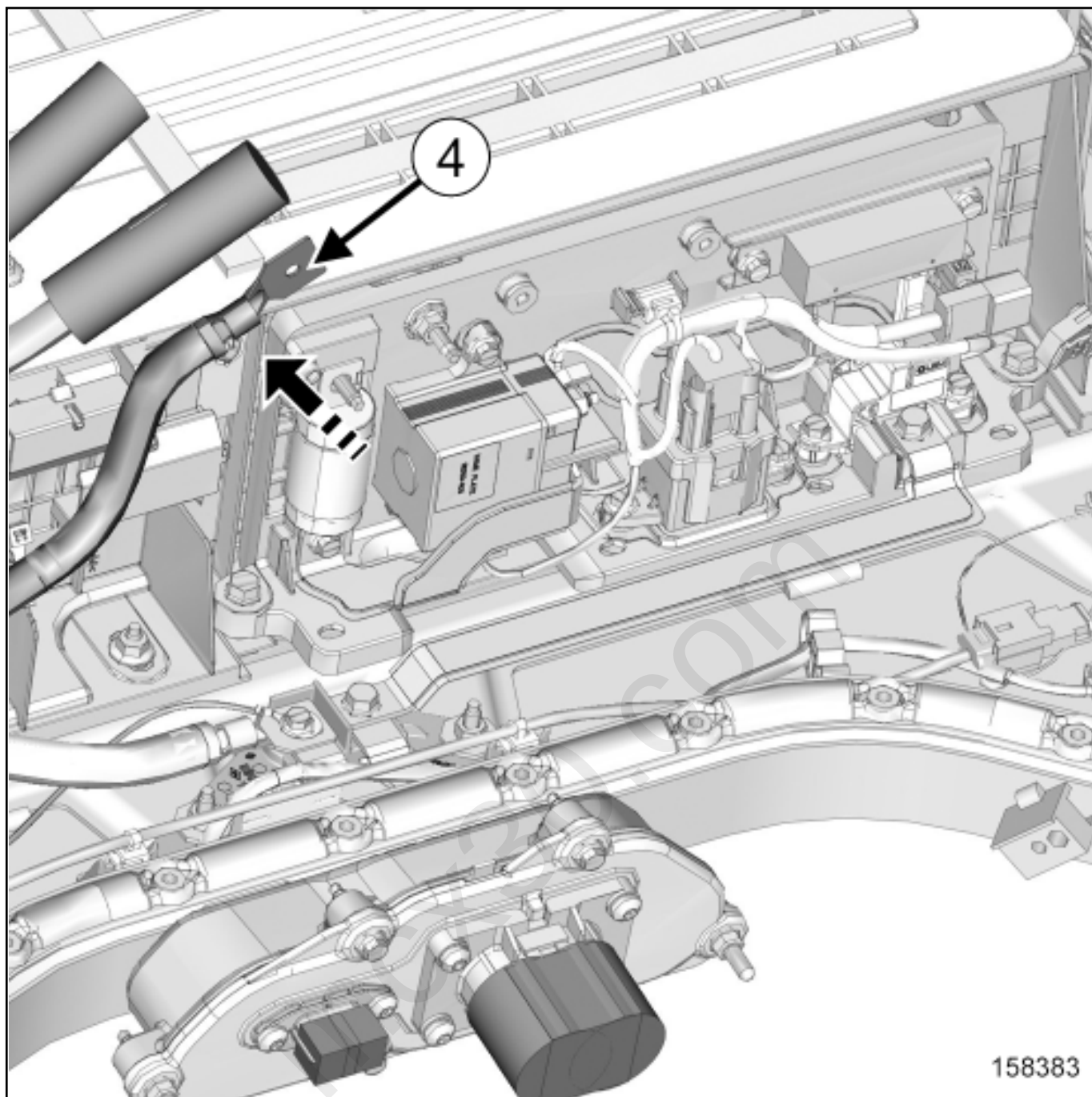
- Remove the internal junction box cover screws(1) using an insulated magnetic socket([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



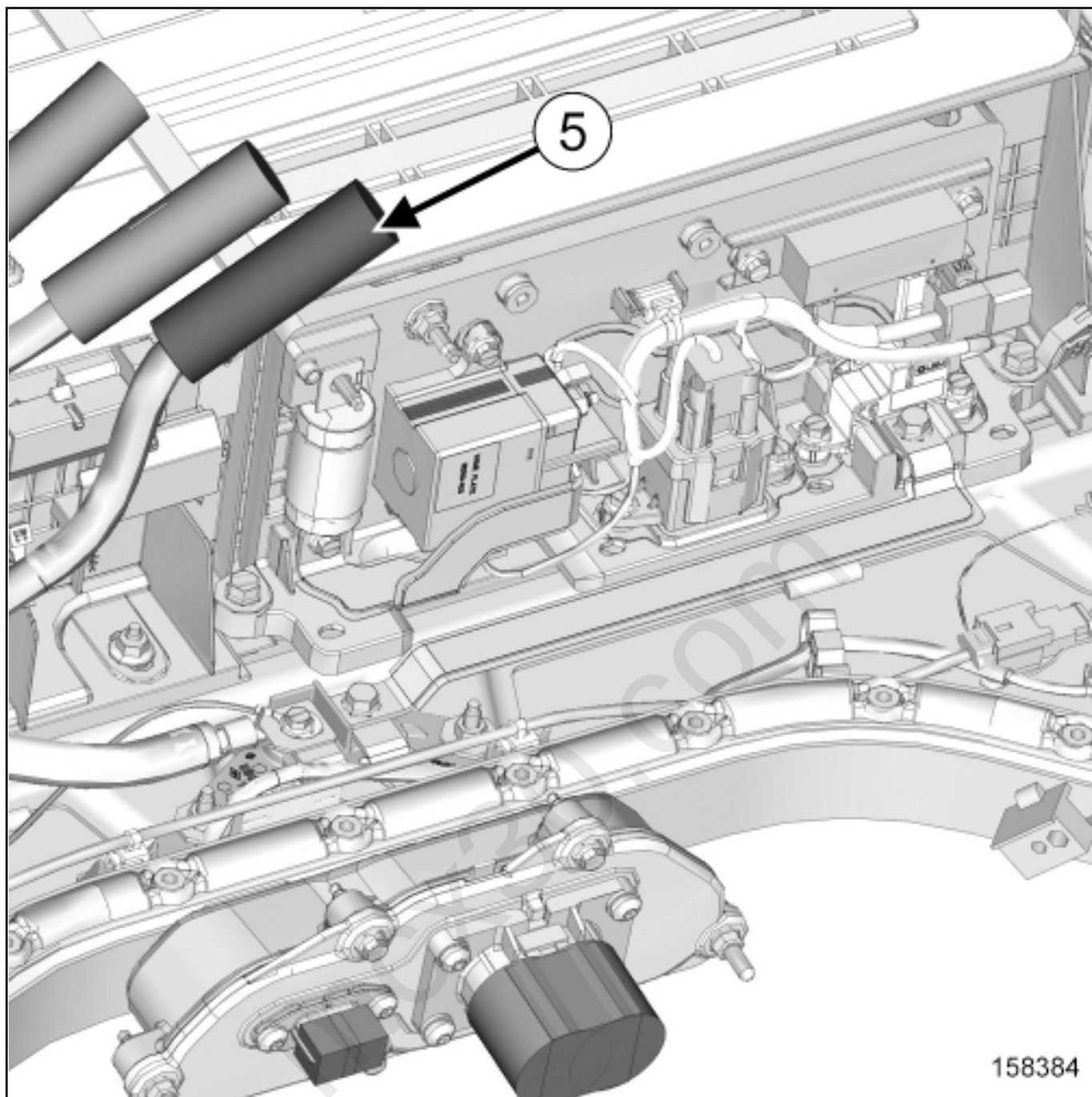
■ Remove the internal junction box cover(2) ([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



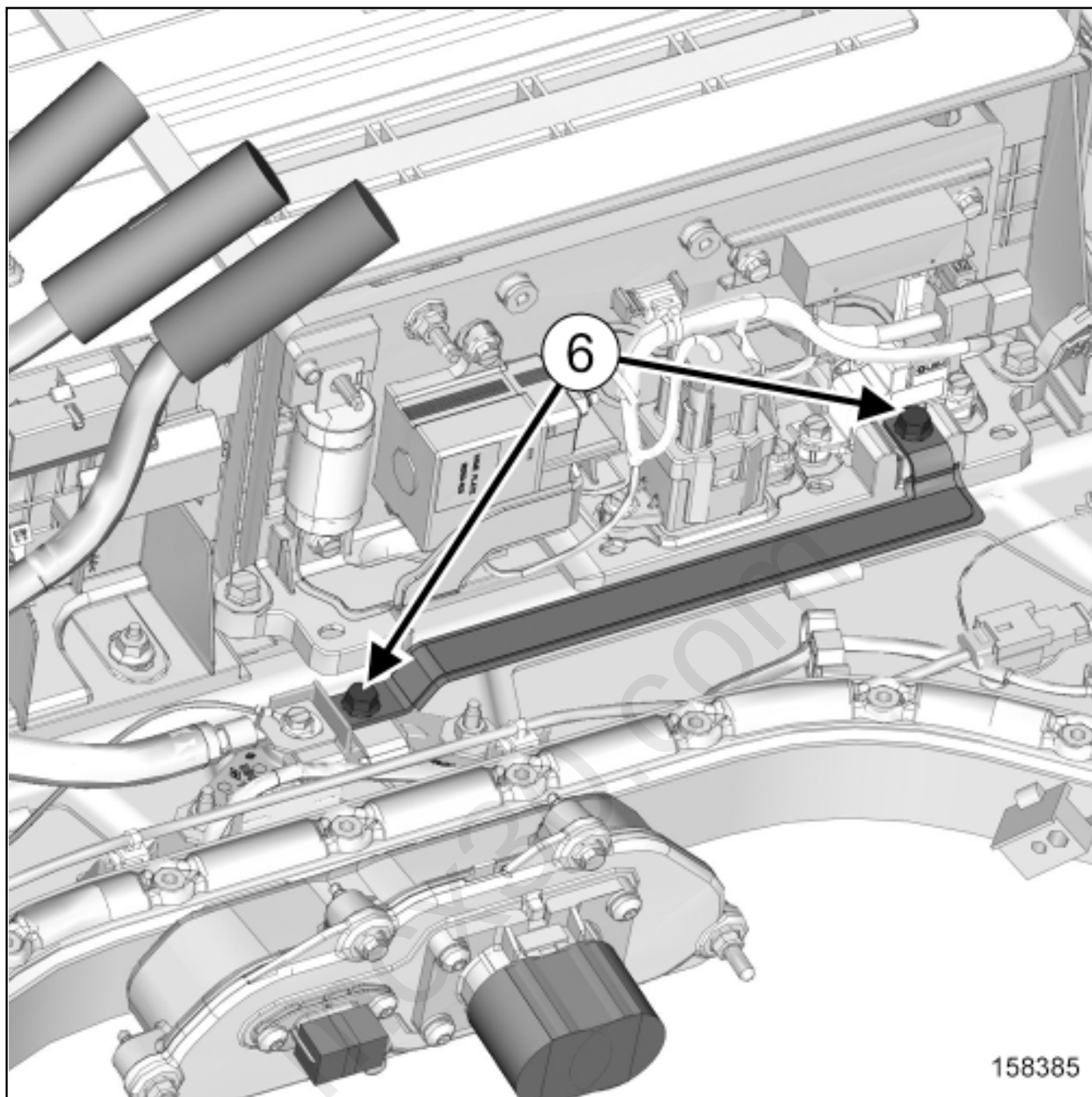
- Remove the power wire number 3 connection nut(3) using an insulated magnetic socket([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



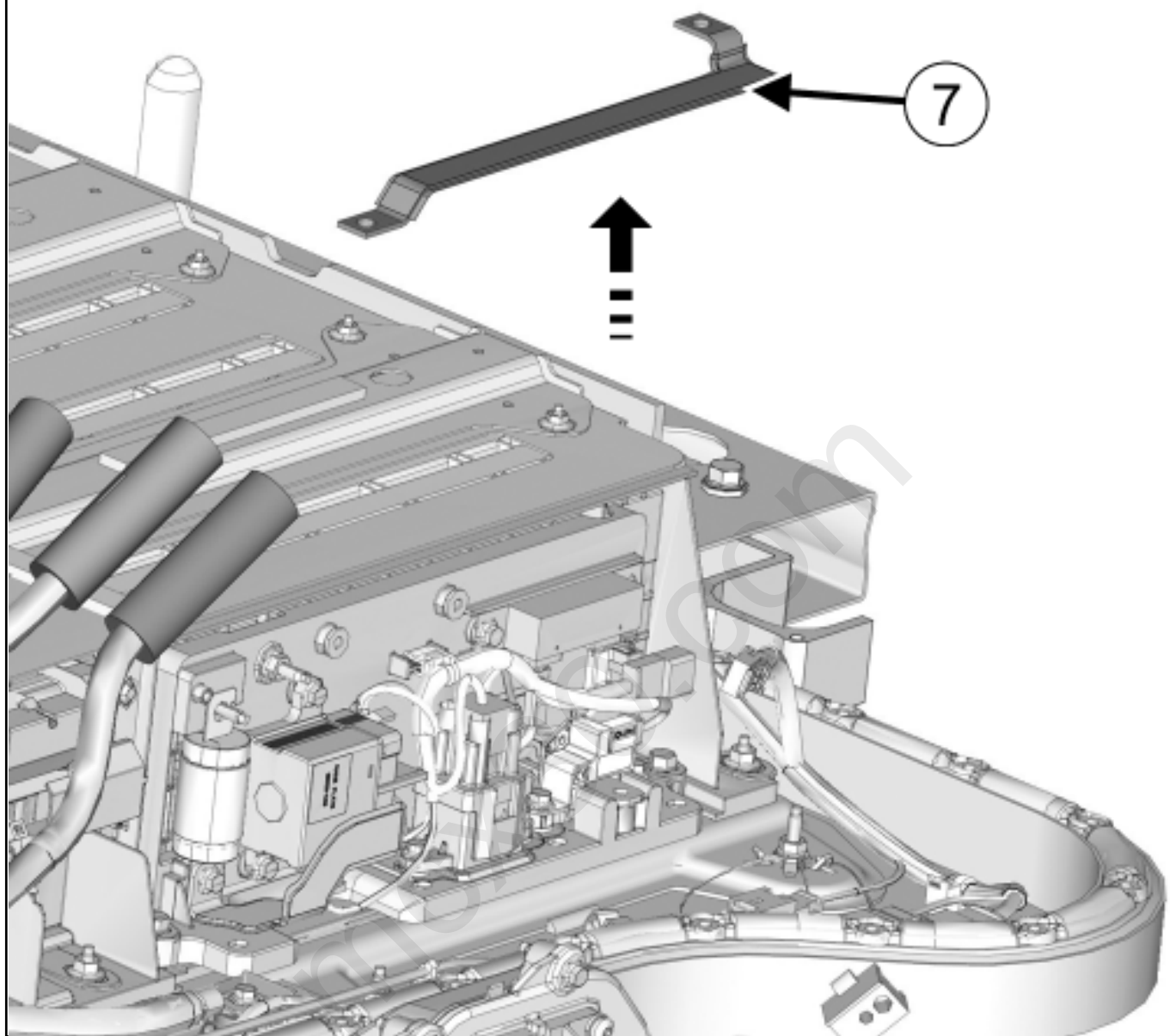
Move the power wire number 3(4) .



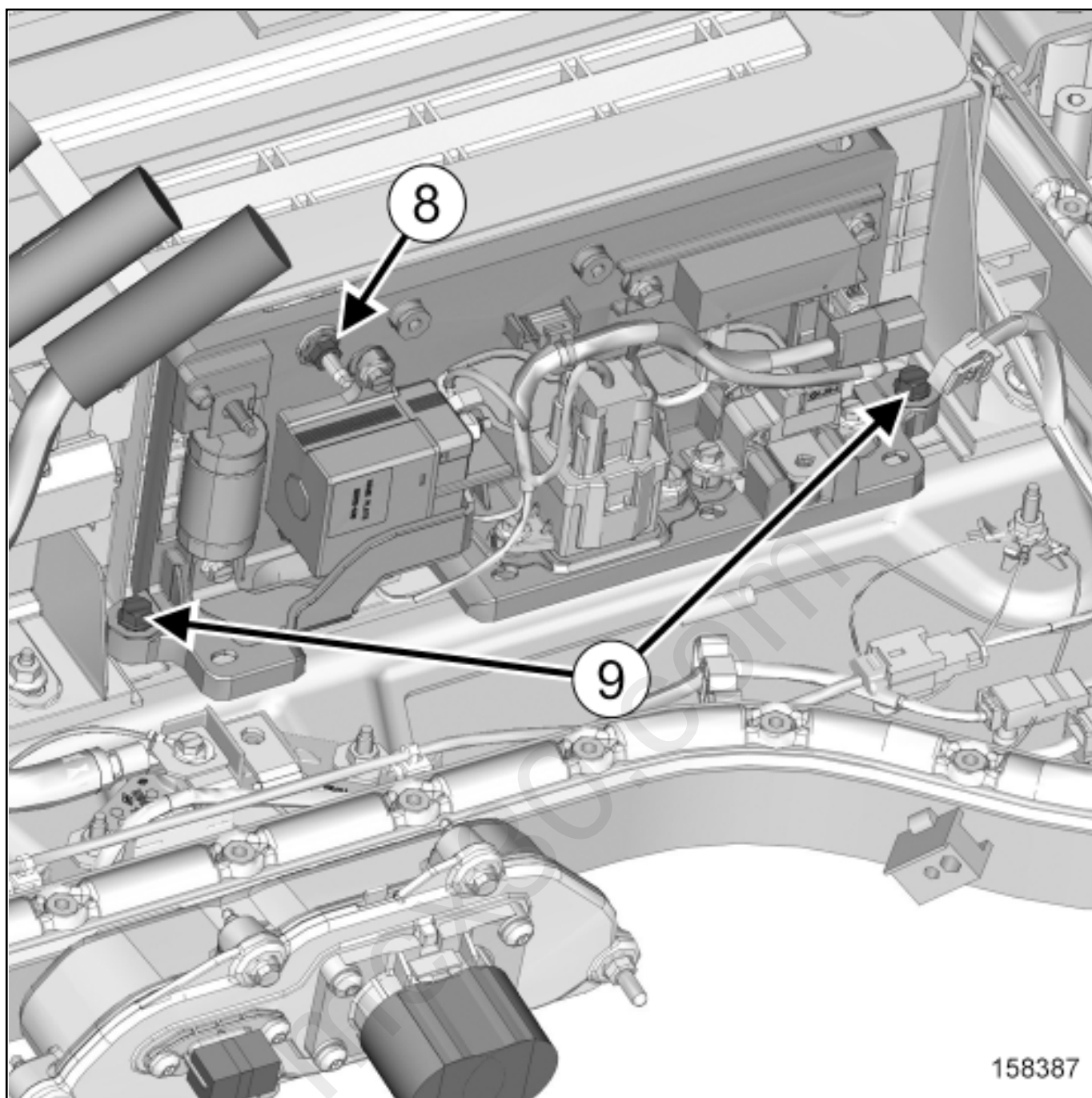
Insulate the power wire number 3 lug(5) .



Remove the bus bar screws(6) using an insulated magnetic socket([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



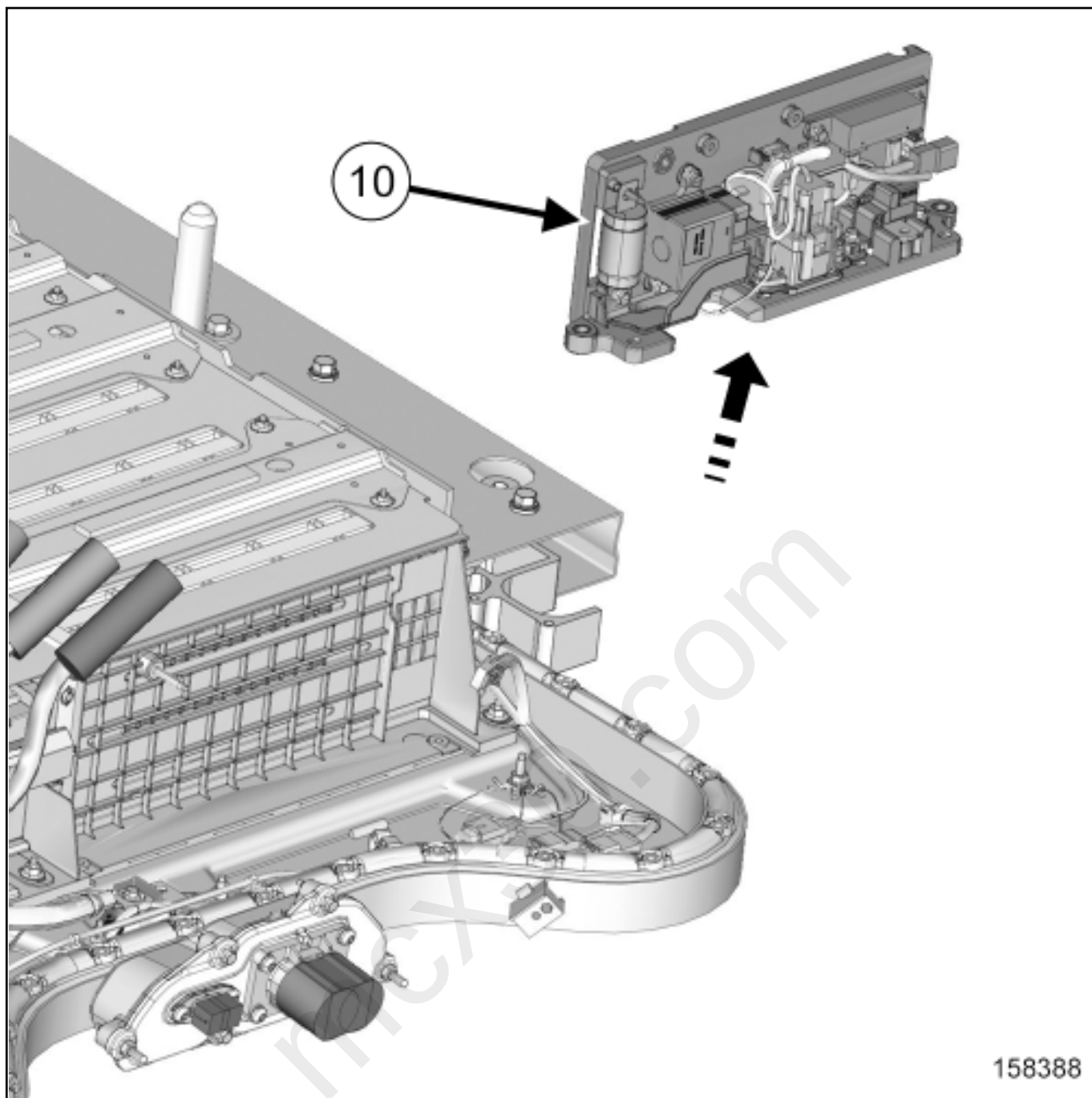
Remove the bus bar(7) ([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



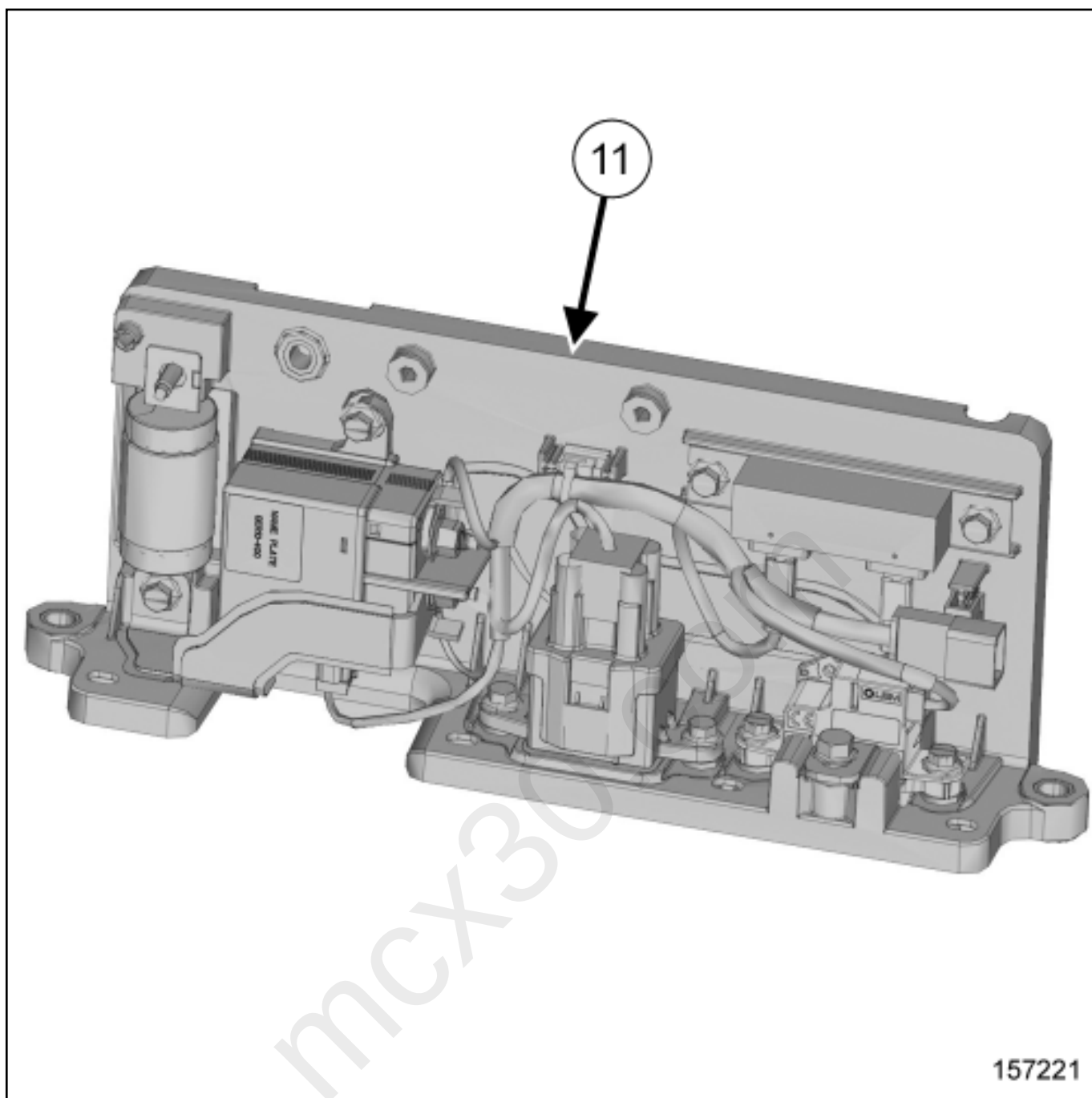
Remove [\(see 19E. Traction battery. Traction battery module stack assembly : Exploded view\)](#) :

- the internal junction box nut(8) using an insulated magnetic socket,

- the internal junction box screws(9) using an insulated magnetic socket.



Remove the internal junction box(10) ([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



Note:

Fit the internal junction box(11) on a clean area.

REFITTING

1. REFITTING OPERATION

Parts always to be replaced ([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) :



the junction box cover screws,



the junction box screws.

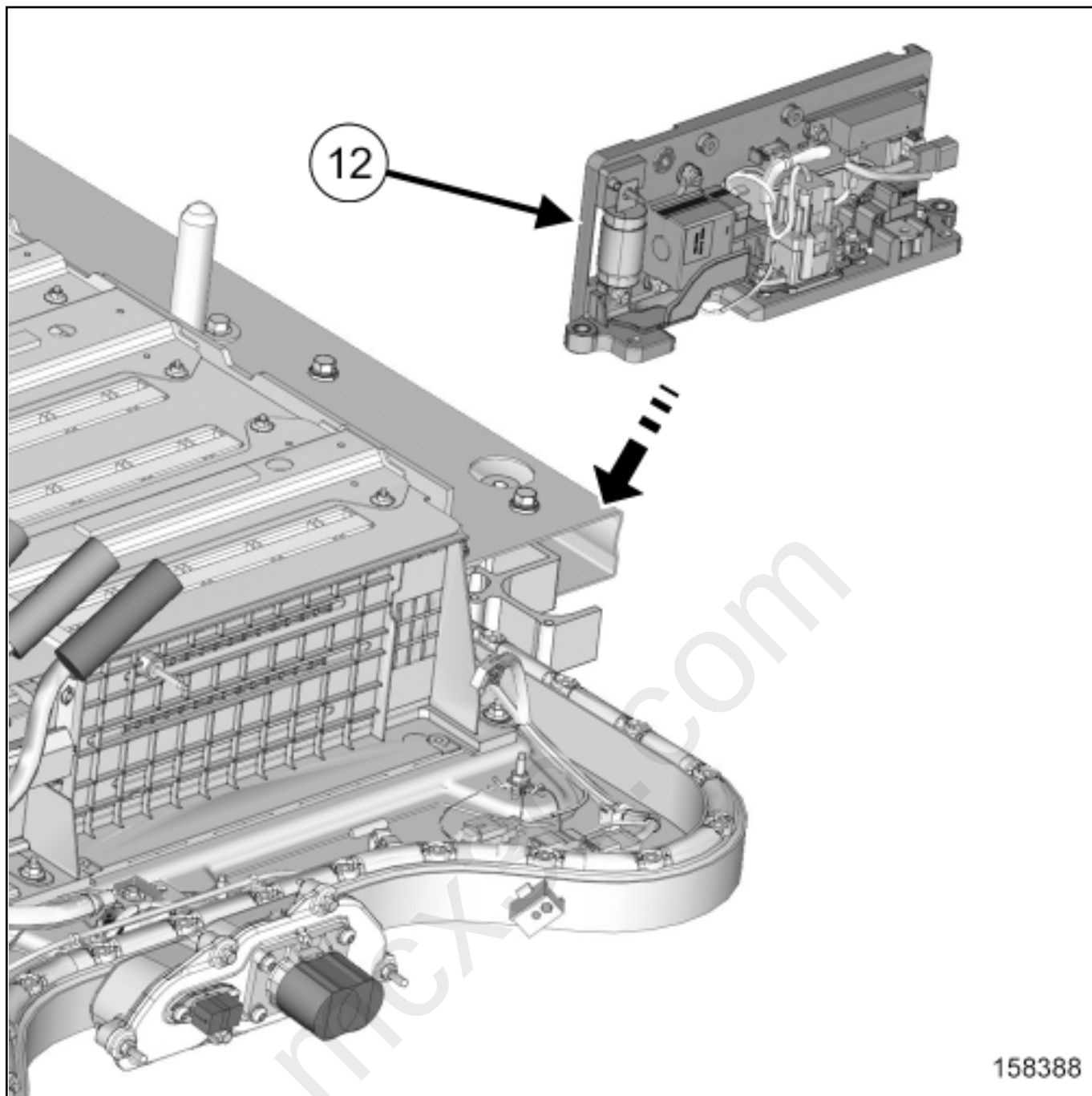
Note:



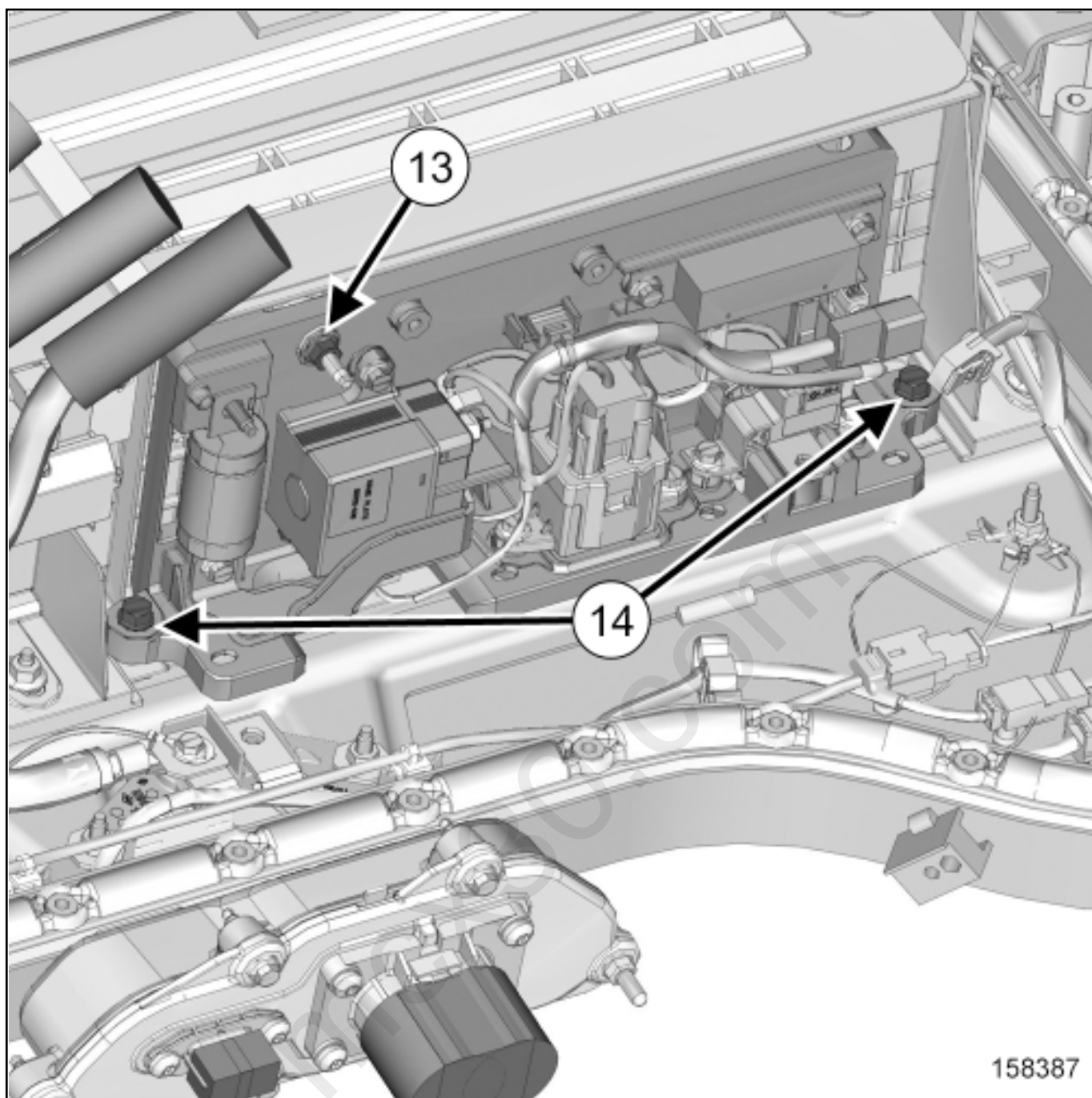
Check the state of the bus bar and terminals (no black marks, no corrosion, no trace of electrolysis, no tapping damages, no deformation of the contacts, no sign of breakage, or cracking on the plastic endings). Replace it in case of damage and analyse the origin.



Clean vacuum cleaner with plastic tip, the tappings of the cover screws and internal junction box screws.



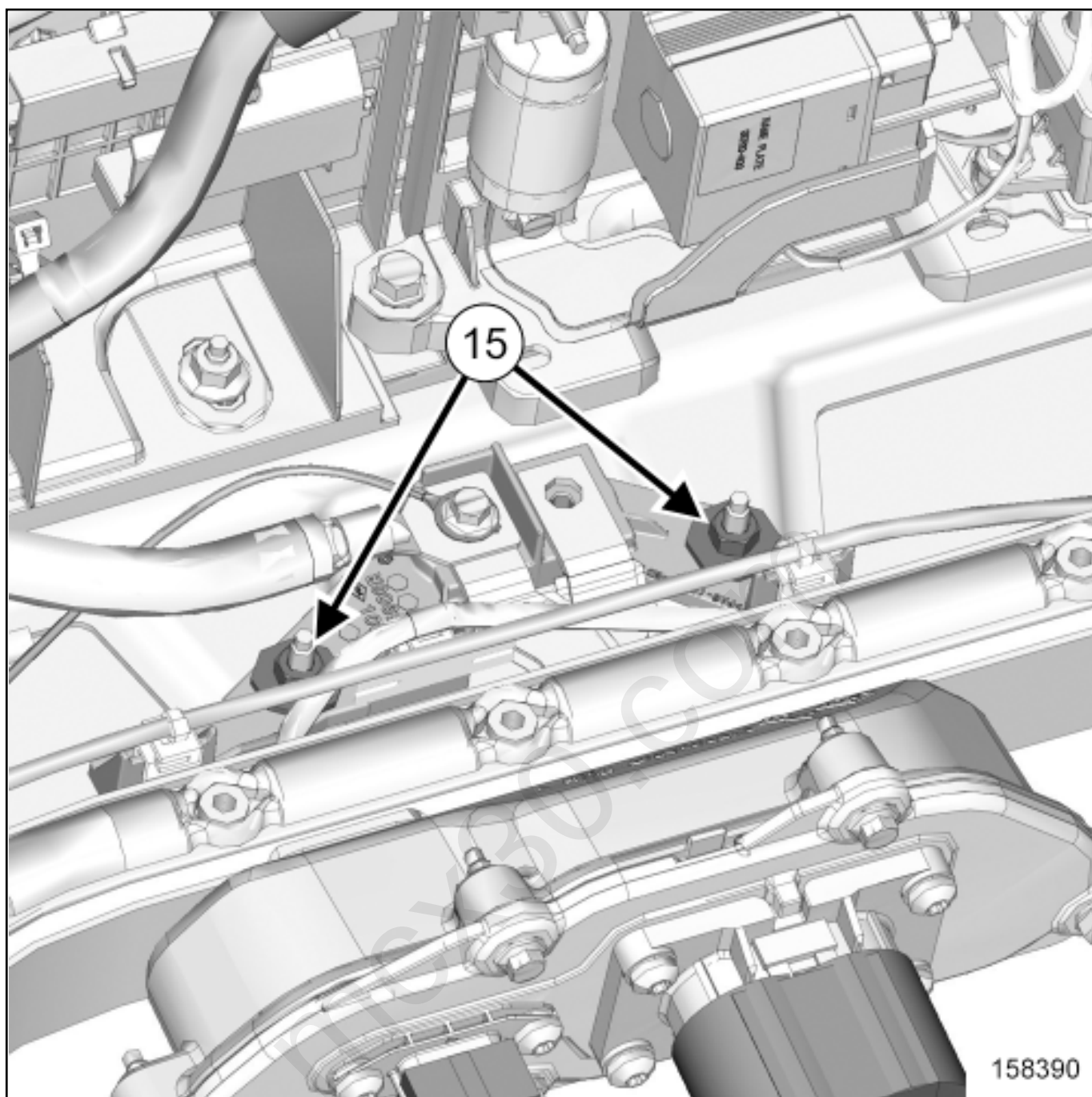
Refit the internal junction box(12) ([see 19E, Traction battery, Traction battery module stack assembly: Exploded view](#)) .



Refit ([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) :

- the internal junction box nut(13) using an insulated magnetic socket,

- the internal junction box new screws(14) using an insulated magnetic socket.

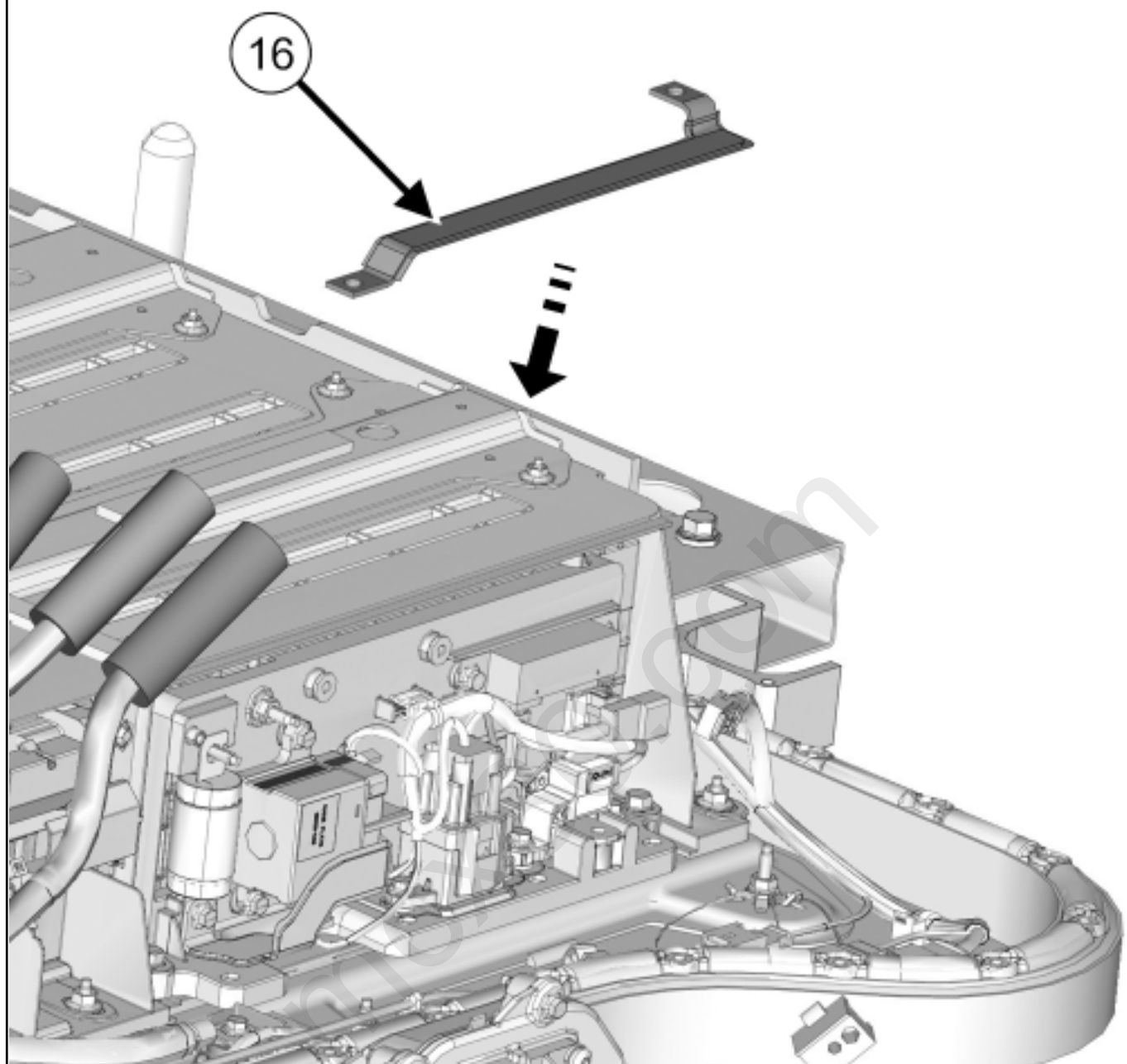


Loosen the insulated support screws(15) ([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .

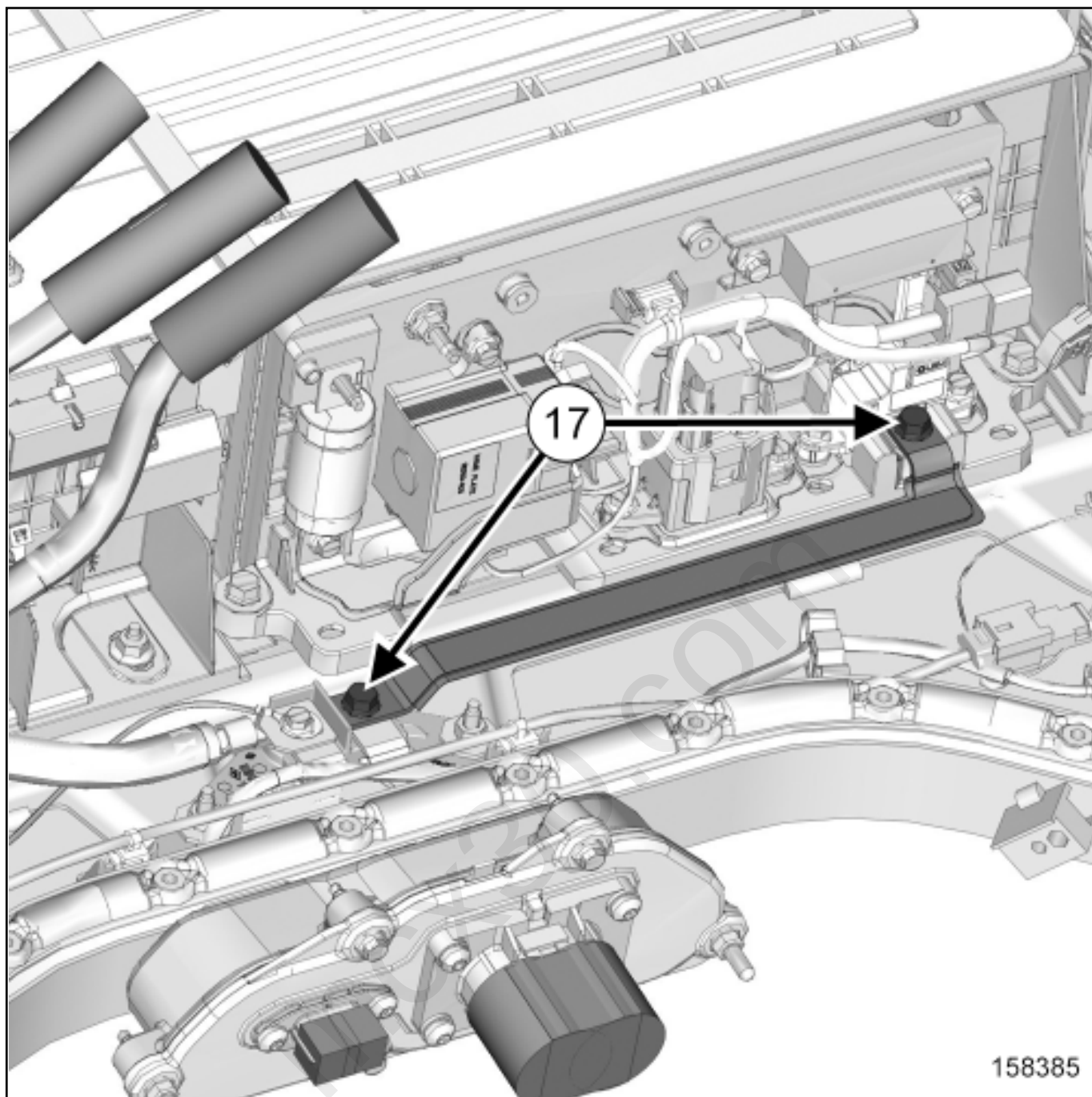


Note:

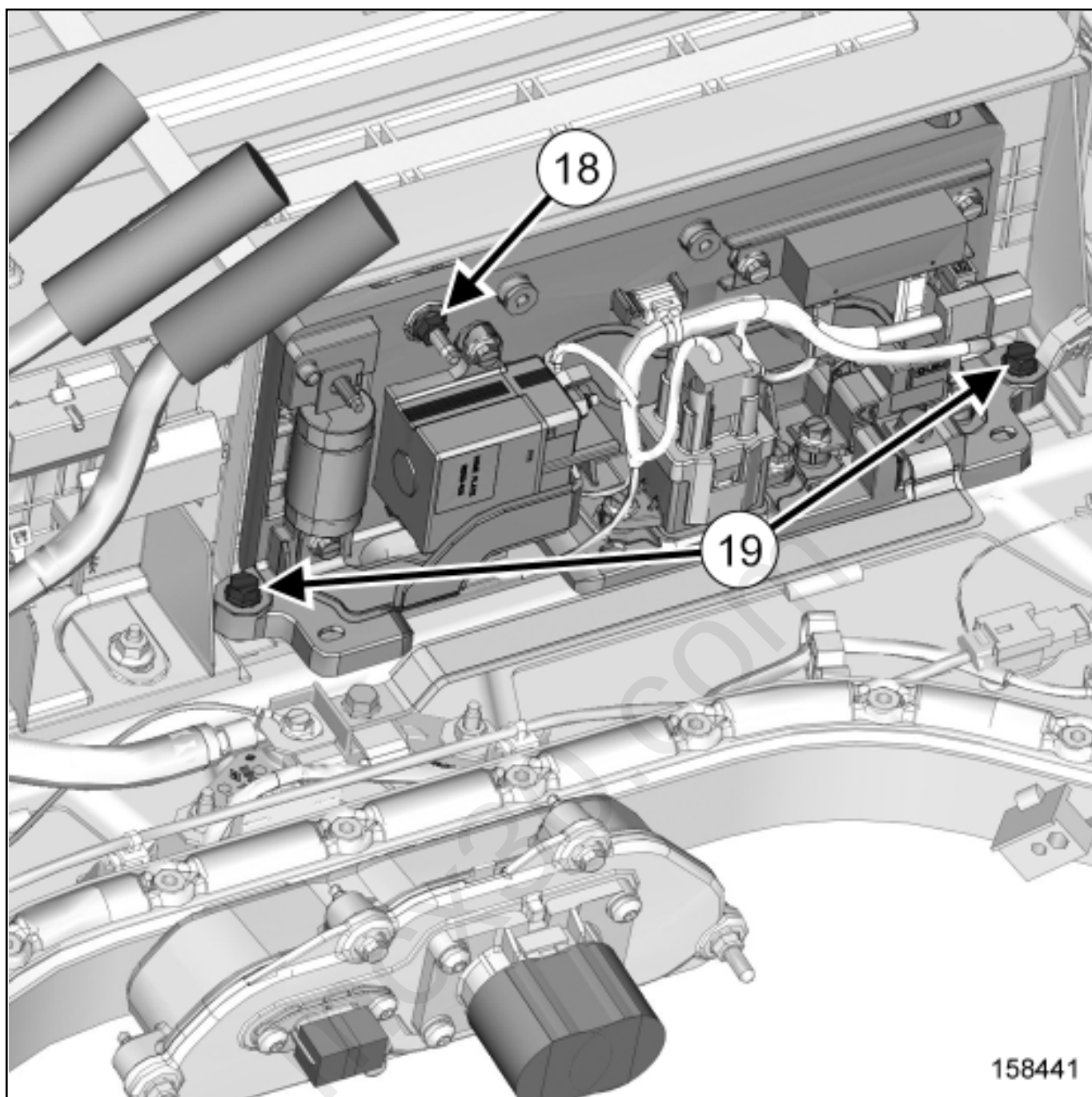
For adjust the bus bar.



Refit the bus bar(16) ([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



Refit the bus bar screws(17) using an insulated magnetic socket([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



Torque tighten(see [19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) :

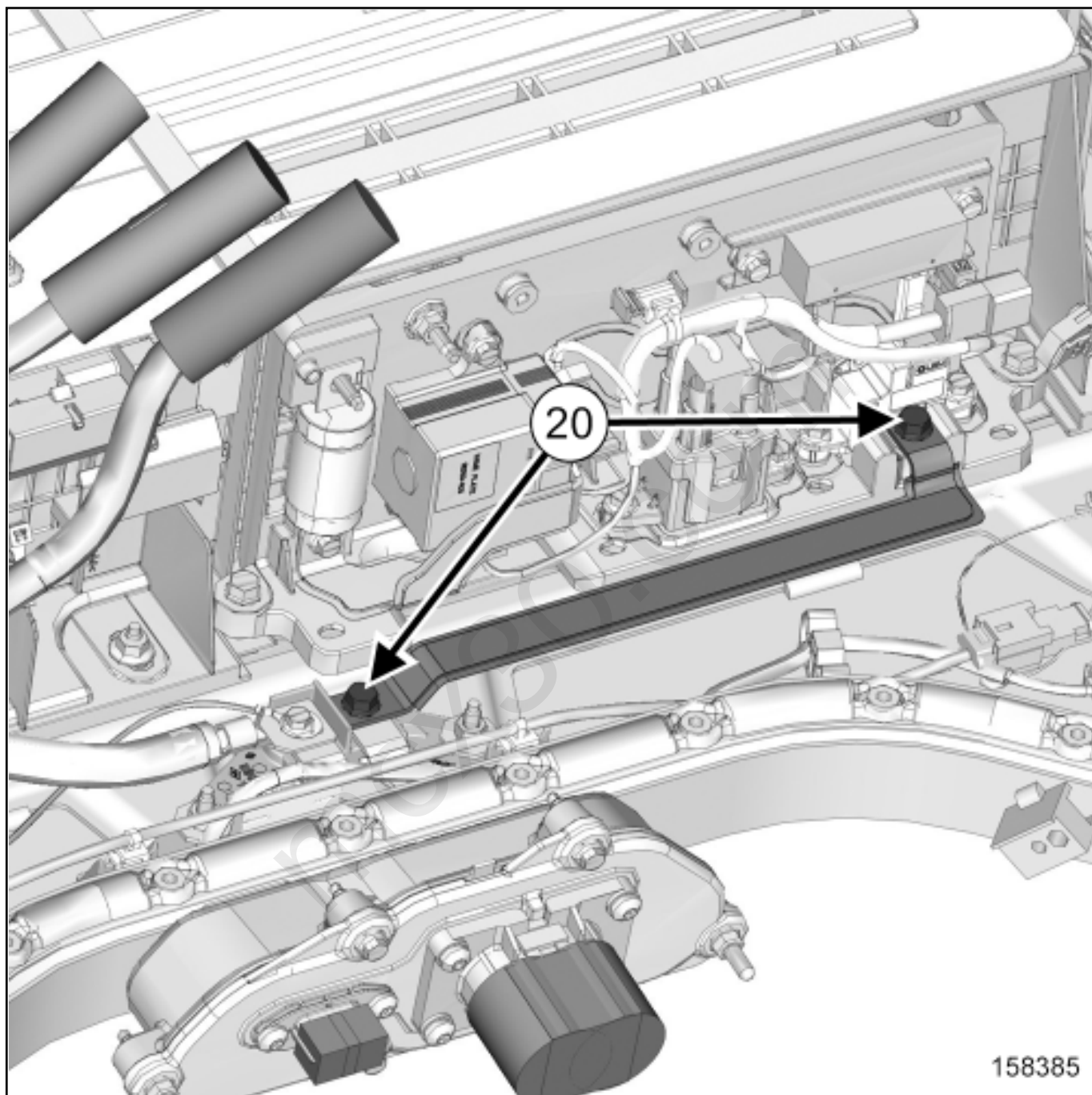
- the internal junction box nut(18) using an insulated magnetic socket,

- the internal junction box new screws(19) using an insulated magnetic socket.

Mark always :

the nut with a PAINT MARKER of a color different from the original,

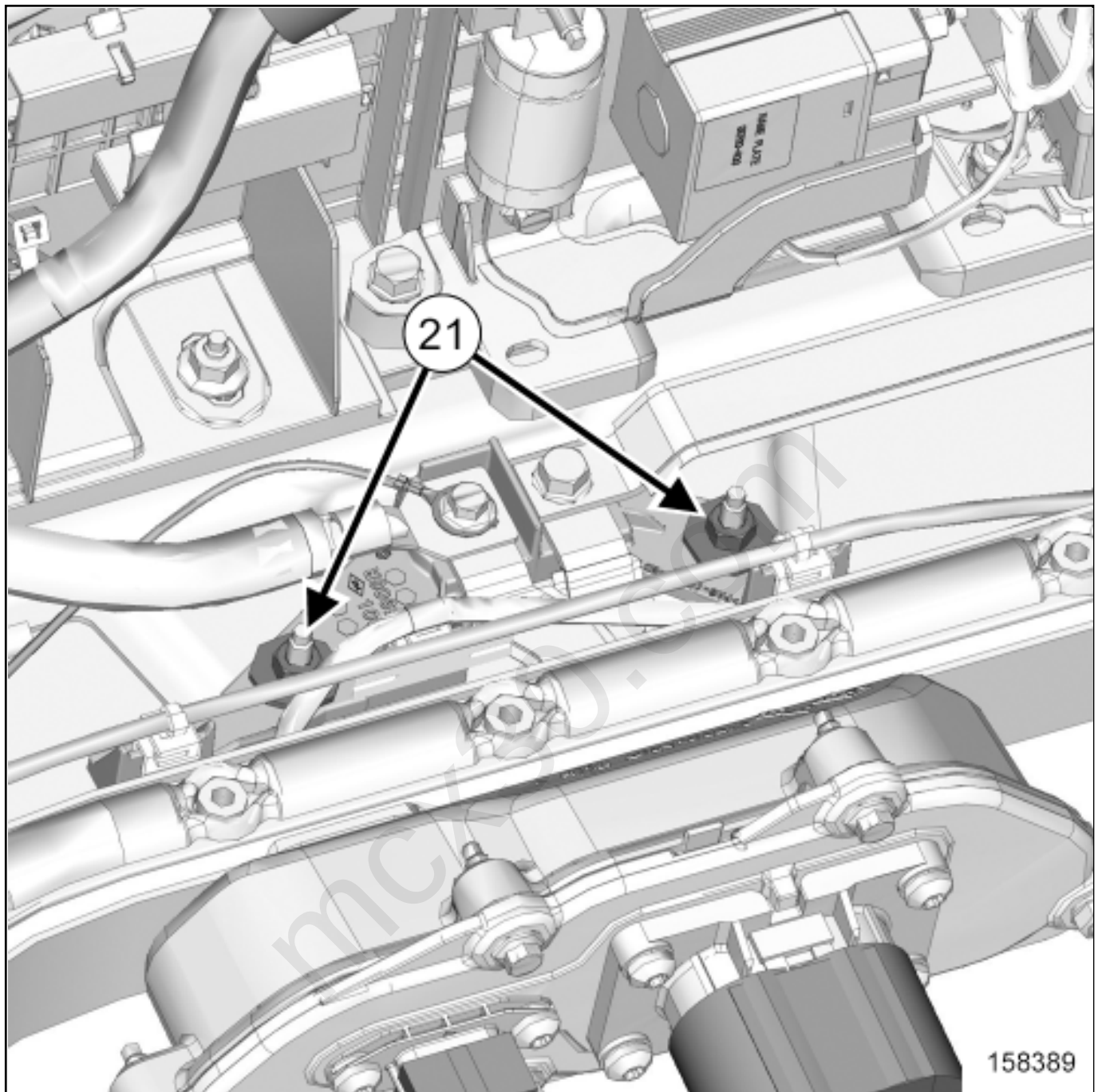
the screws with a PAINT MARKER of a color different from the original.



Torque tighten the bus bar screws(20) using an insulated magnetic socket([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



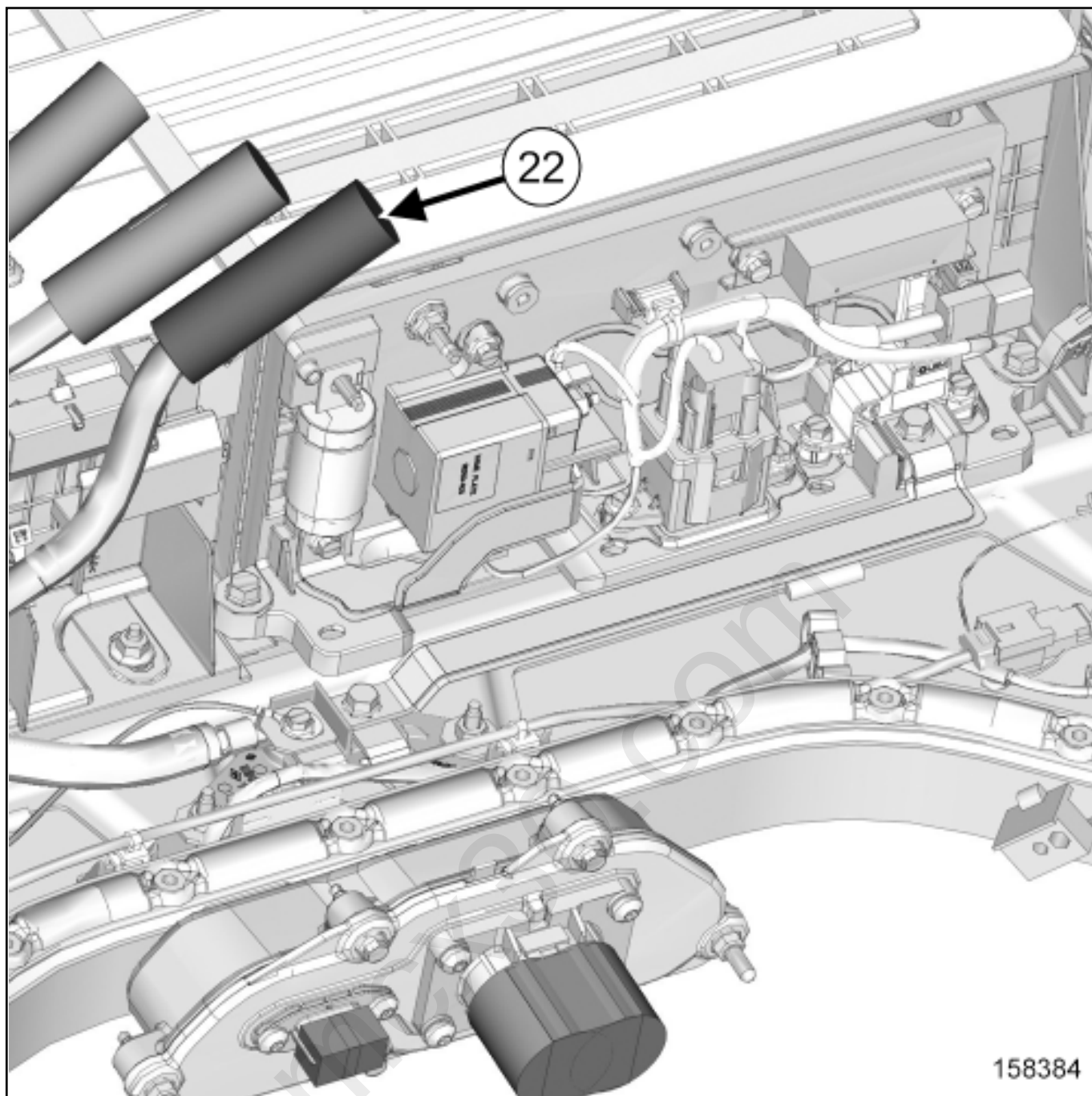
Mark always the screws with a PAINT MARKER of a color different from the original.



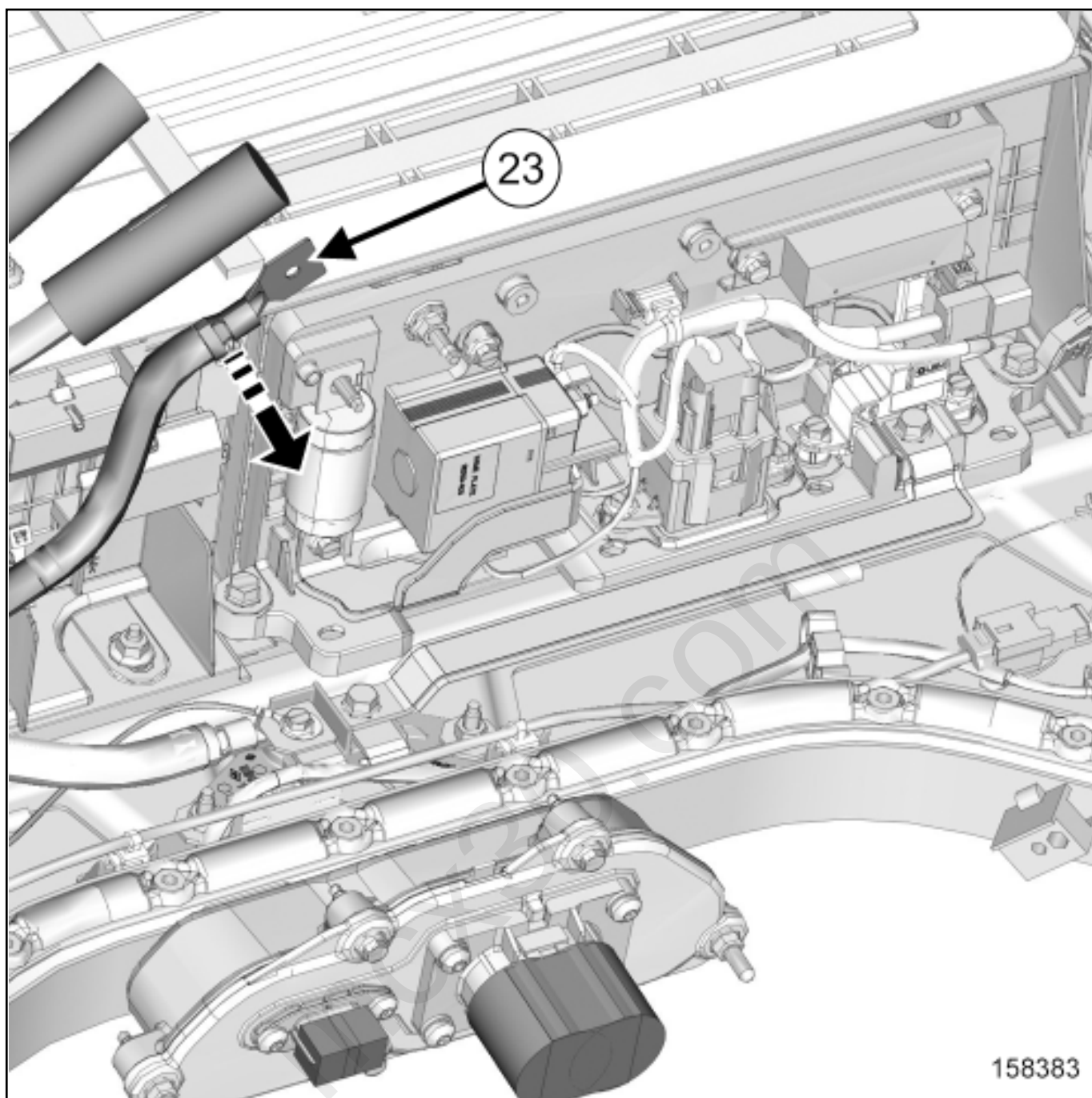
Torque tighten the insulated support screws(21) ([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



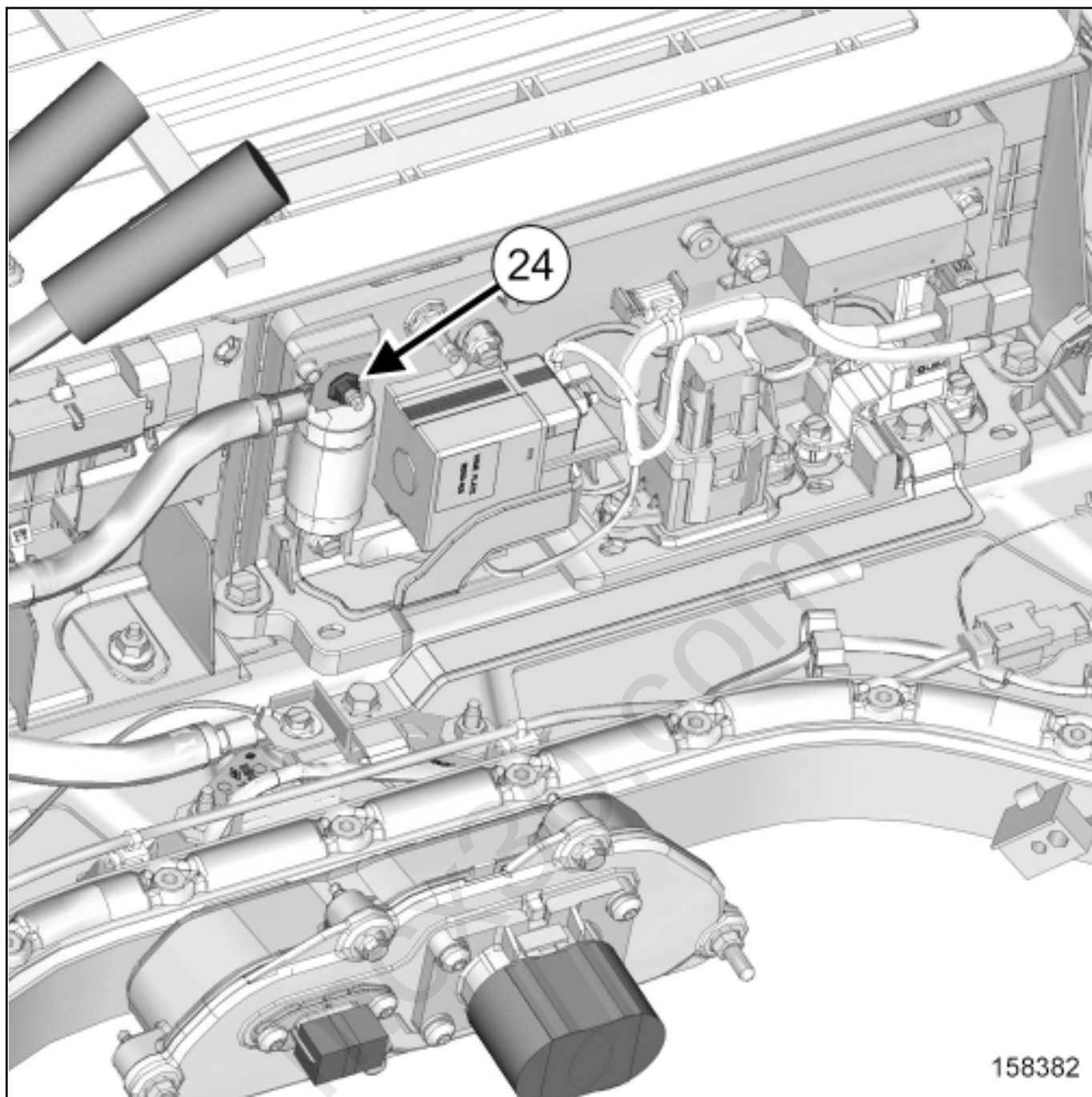
Mark always the screws with a PAINT MARKER of a color different from the original.



Remove the insulated cover from the power wire number 3 lug(22) .



Refit the power wire number 3(23) .



Refit the power wire number 3 connection nut(24) using an insulated magnetic socket([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



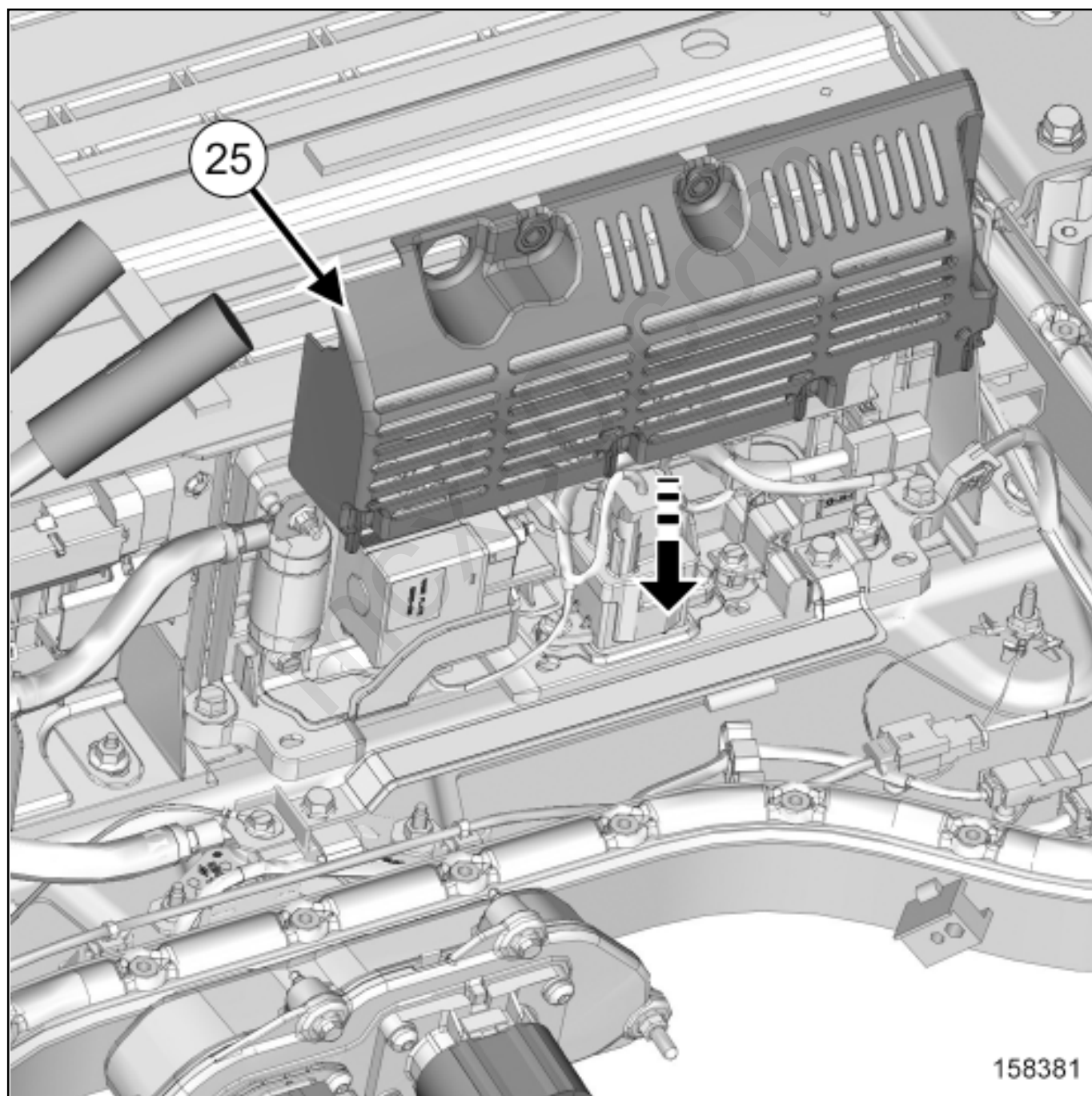
Torque tighten the power wire number 3 connection nut using an insulated magnetic socket([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



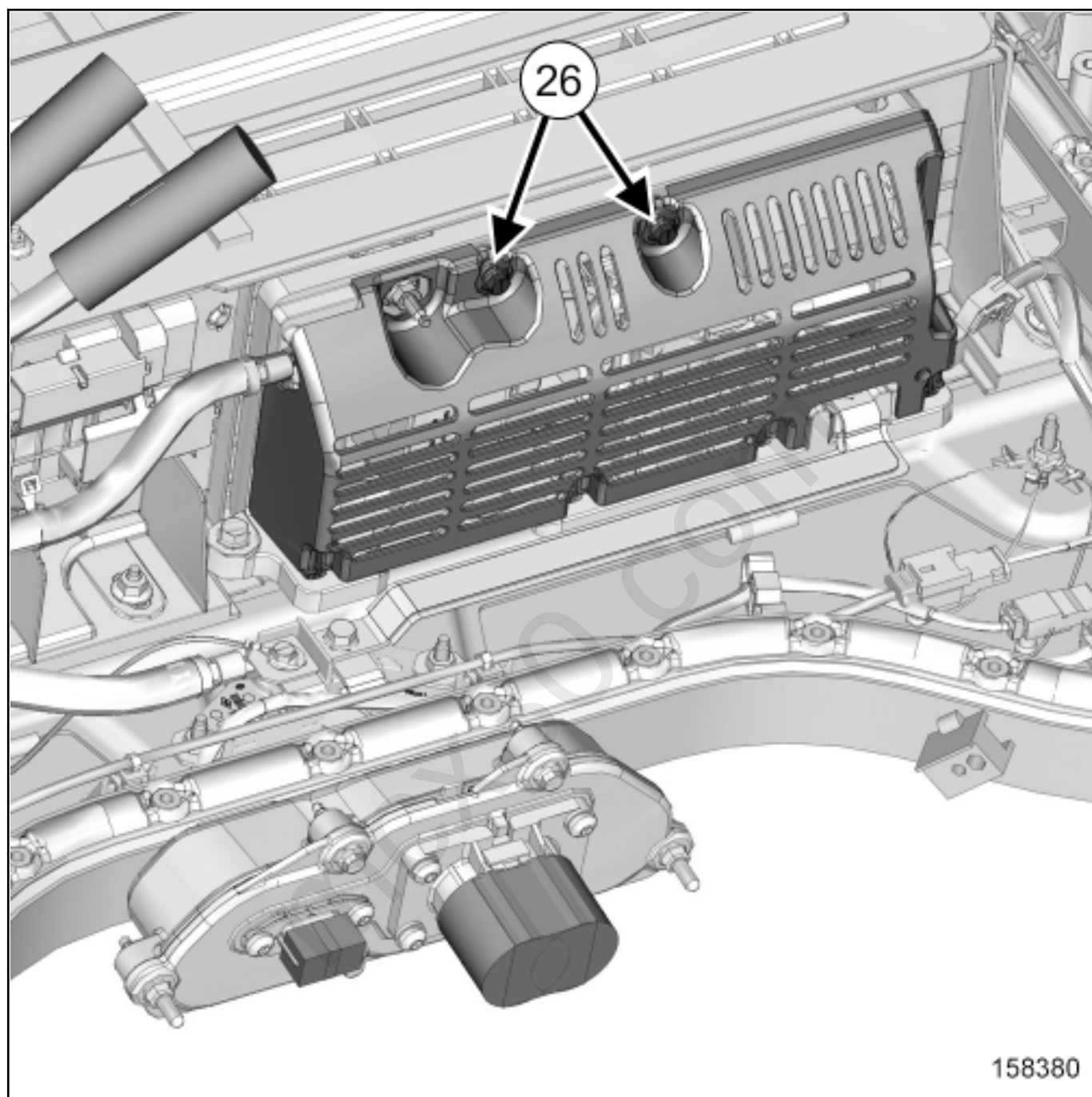
Note:

Anti-rotation lug.

Mark always the screws with a PAINT MARKER of a color different from the original.



Refit the internal junction box cover(25) ([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



Refit the internal junction box cover new screws(26) using an insulated magnetic socket([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



Torque tighten the internal junction box cover new screws using an insulated magnetic socket([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



Mark always the screws with a PAINT MARKER of a color different from the original.

2. FINAL OPERATION



Proceed in the inverse order to removal.



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