

CUTOFF DEVICE SOCKET OF THE TRACTION BATTERY : REMOVAL - REFITTING



Note, one or more warnings are present in this procedure



Special tooling required

Set of trim removal levers.

Car. 1363

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 shock that may prove fatal.

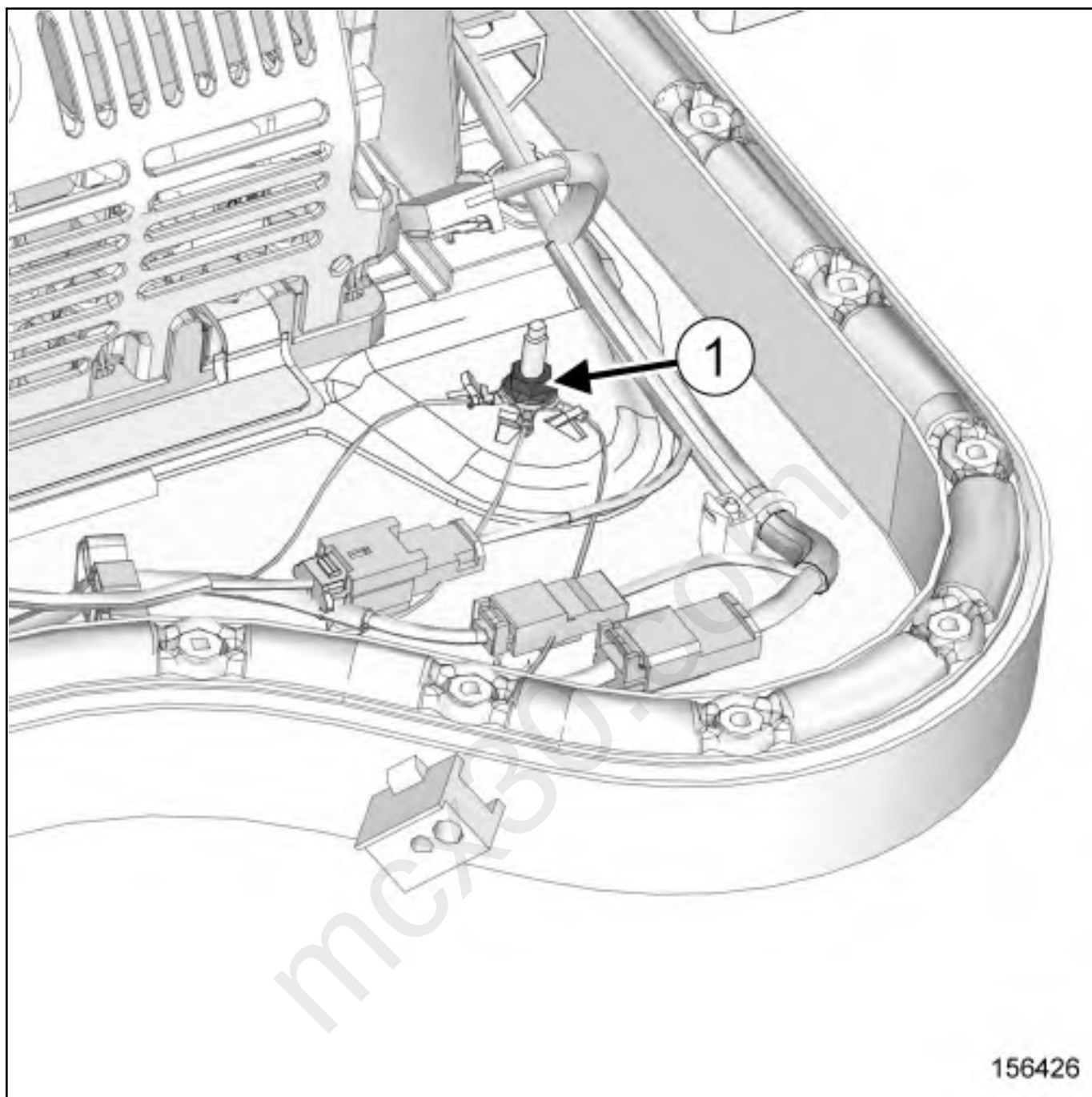
Before carrying out any work on the vehicle, it is essential that you adhere to the instructions regarding vehicle voltage cut-off. This work must be carried out by an employee who is qualified and authorized to work on a high-voltage onboard network.

REMOVAL

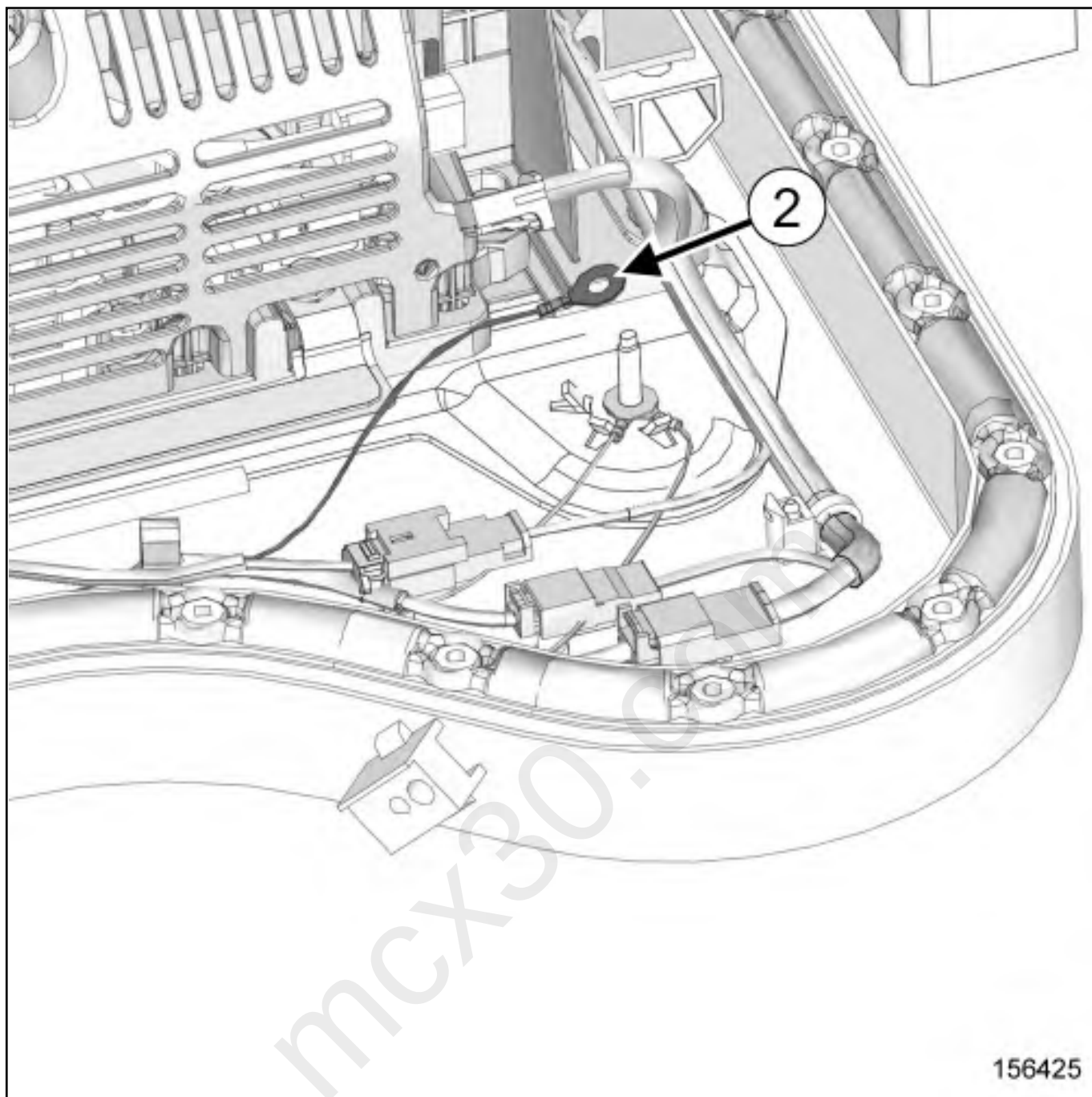
1. REMOVAL PREPARATION OPERATION

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

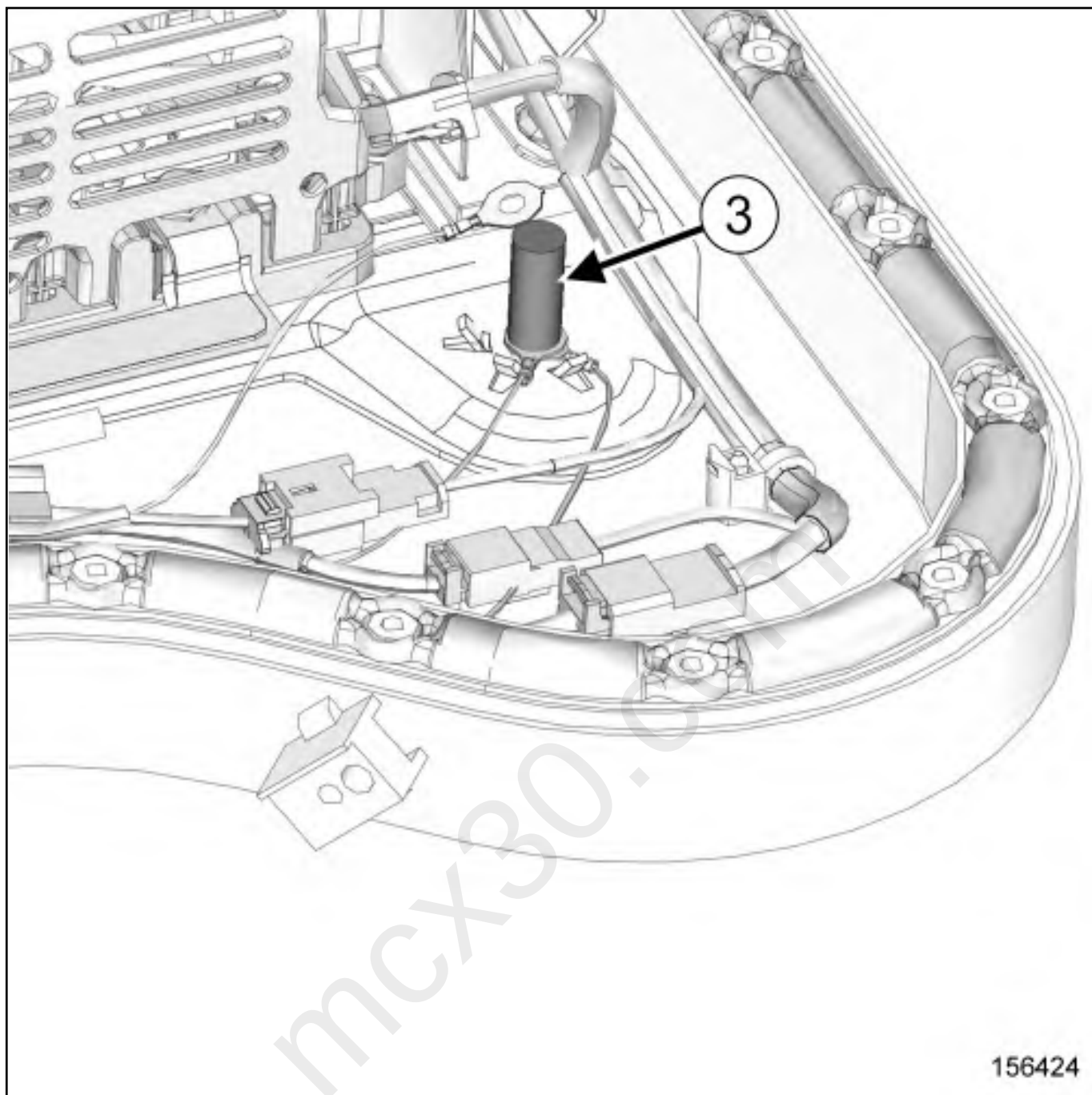
2. REMOVAL OPERATION



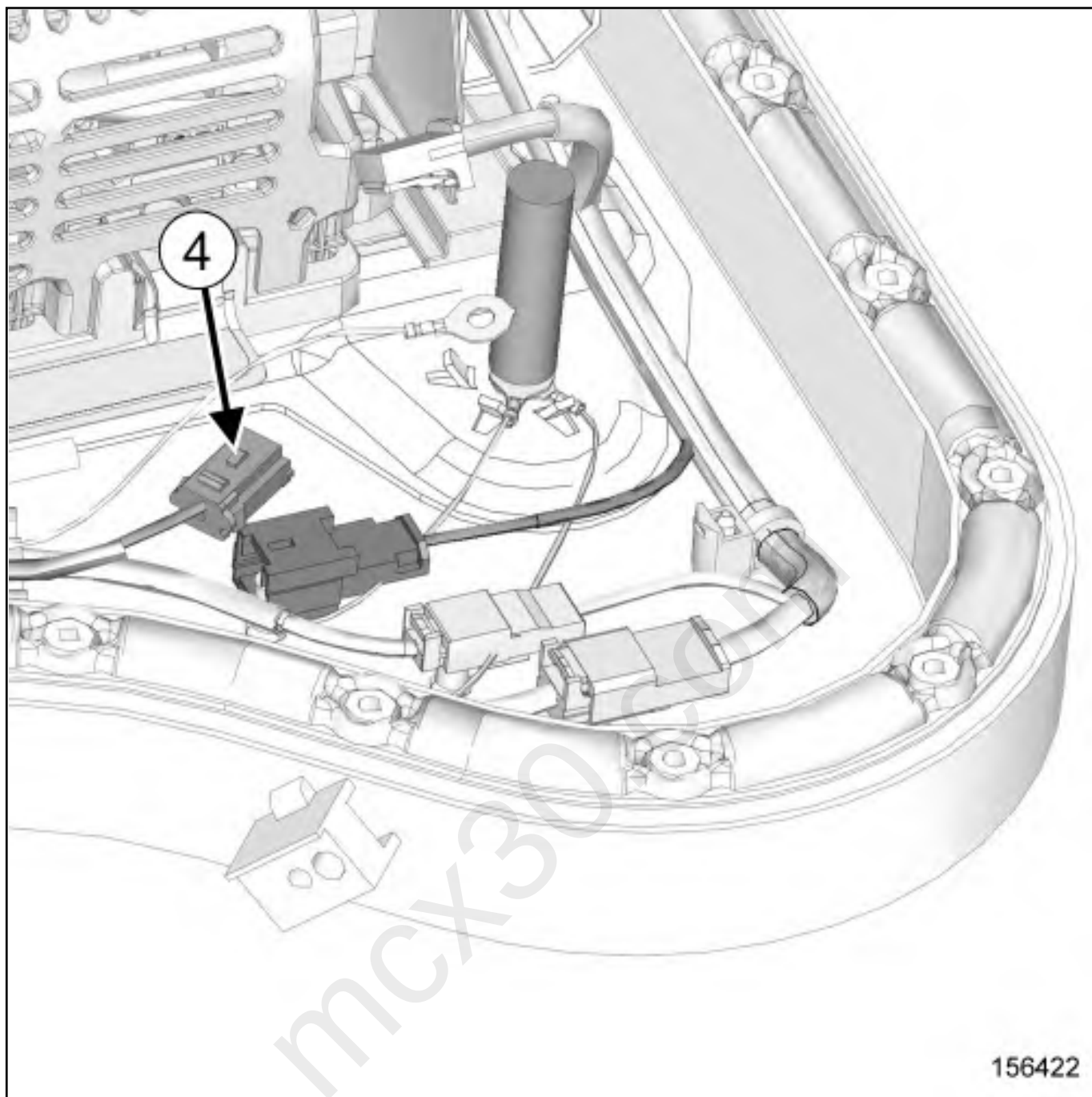
- Remove the earth electric connection nut(1) from the lower cover using an insulated magnetic socket ([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



■ Remove the electric earth lug(2) of the safety device switch socket interlock wire using the toolSet of trim removal levers.(Car. 1363) .

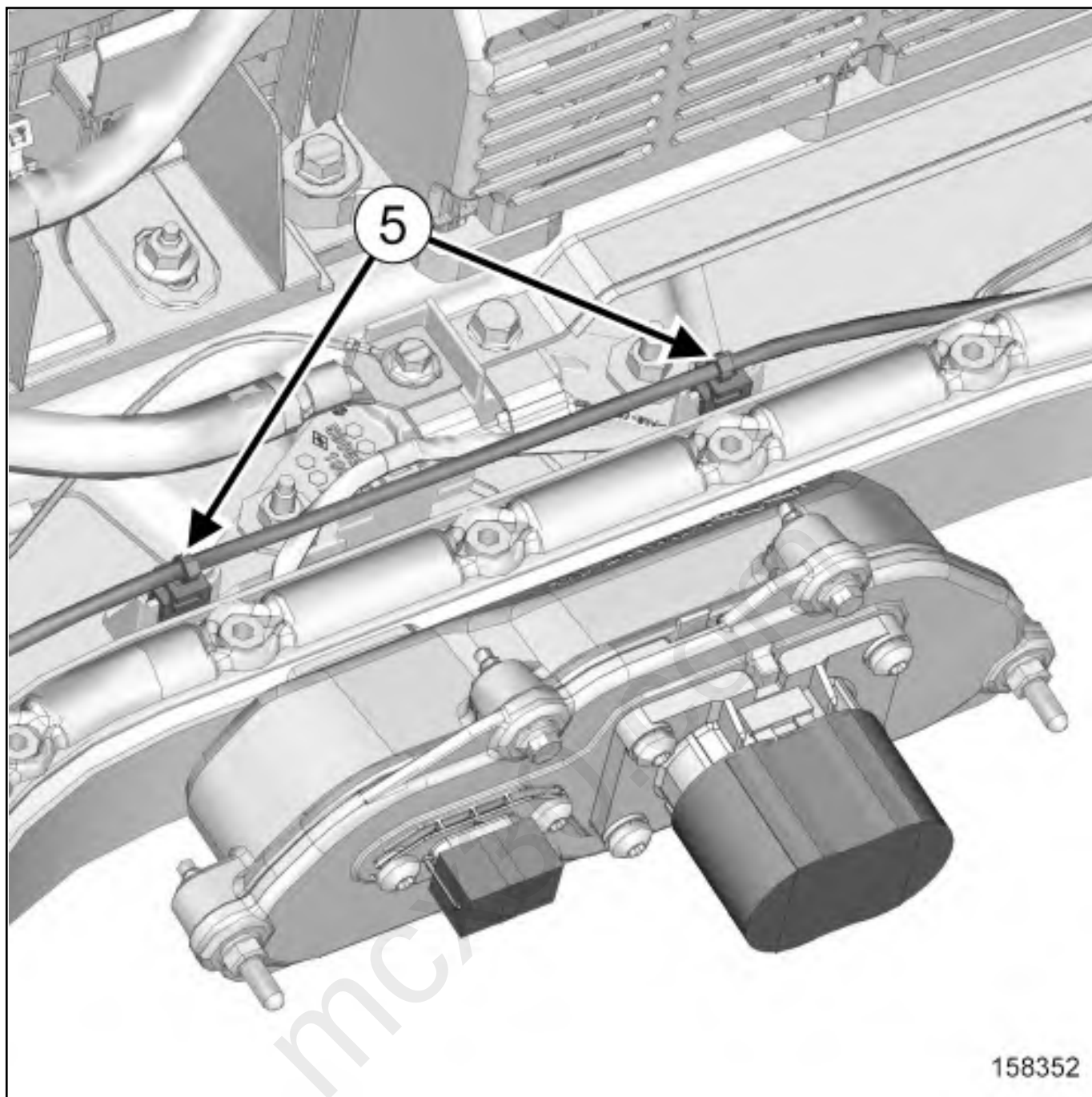


■ Insulate the electric earth stud(3) .



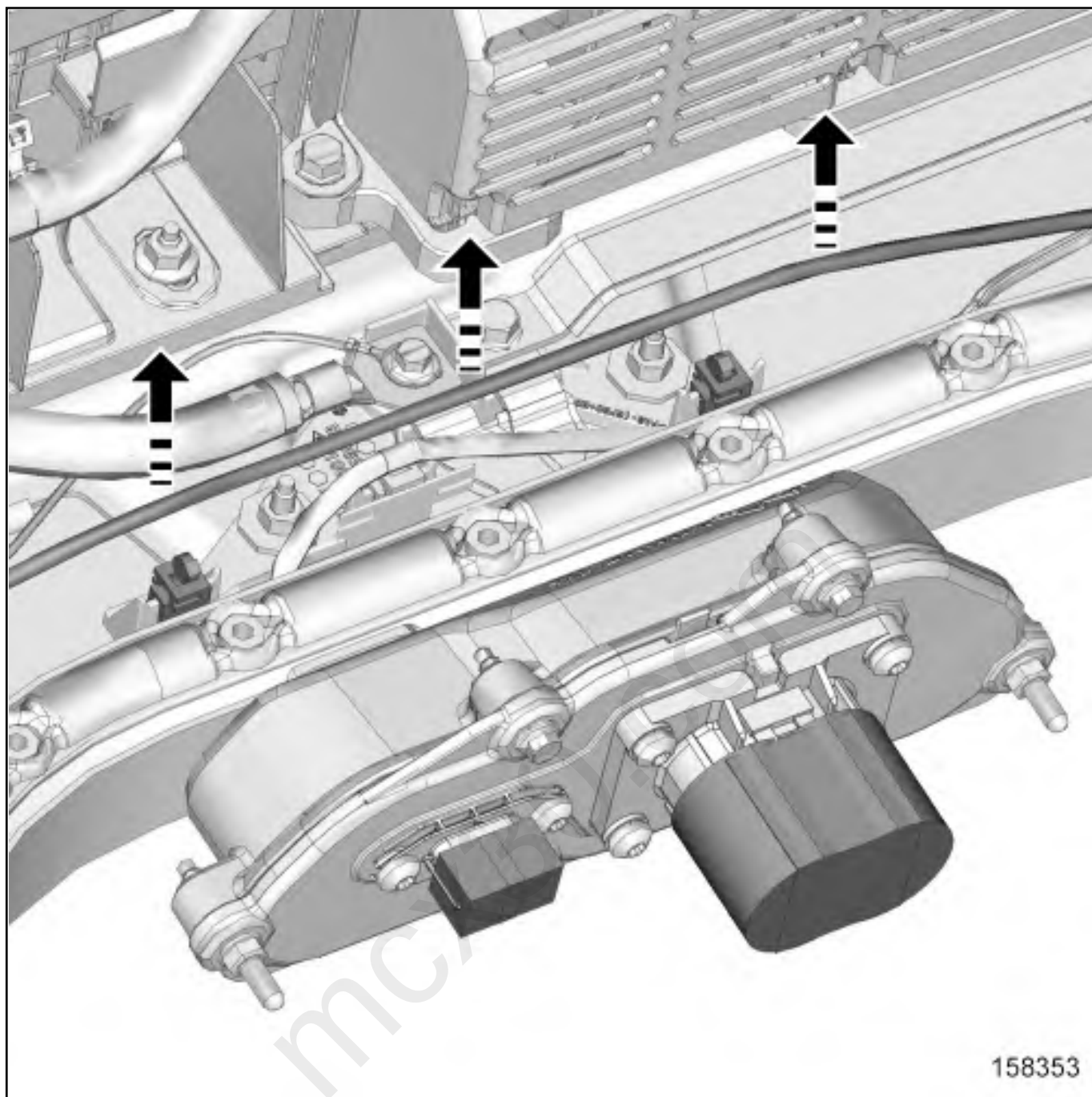
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■ Disconnect the safety device switch socket interlock wire plug(4) using the toolSet of trim removal levers. (Car. 1363) .



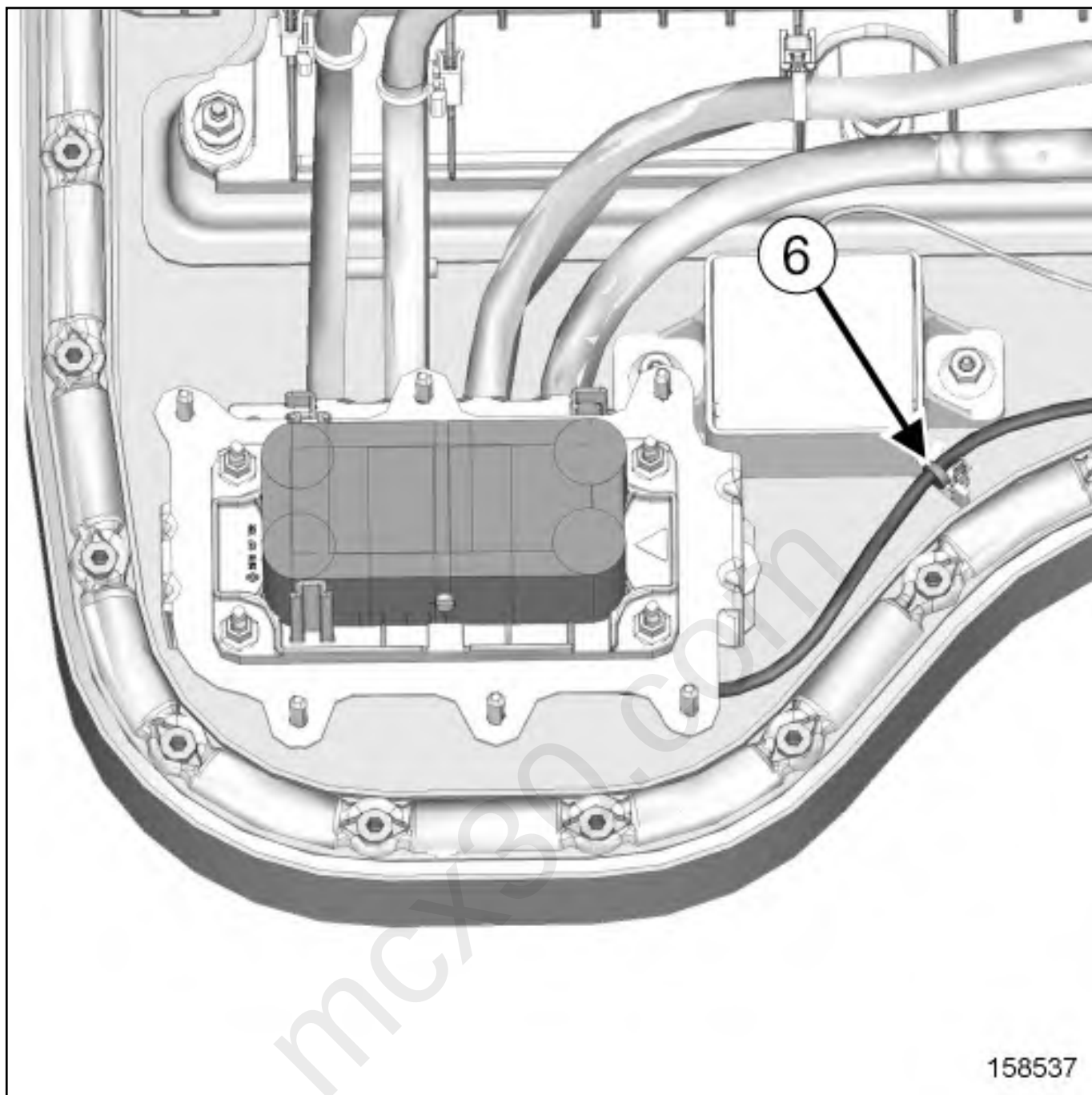
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- Mark the location of the clamps on the safety device switch socket interlock wire using a PAINT MARKER.
- Cut the clamps(5) on the safety device switch socket interlock wire using the insulated cutting pliers.



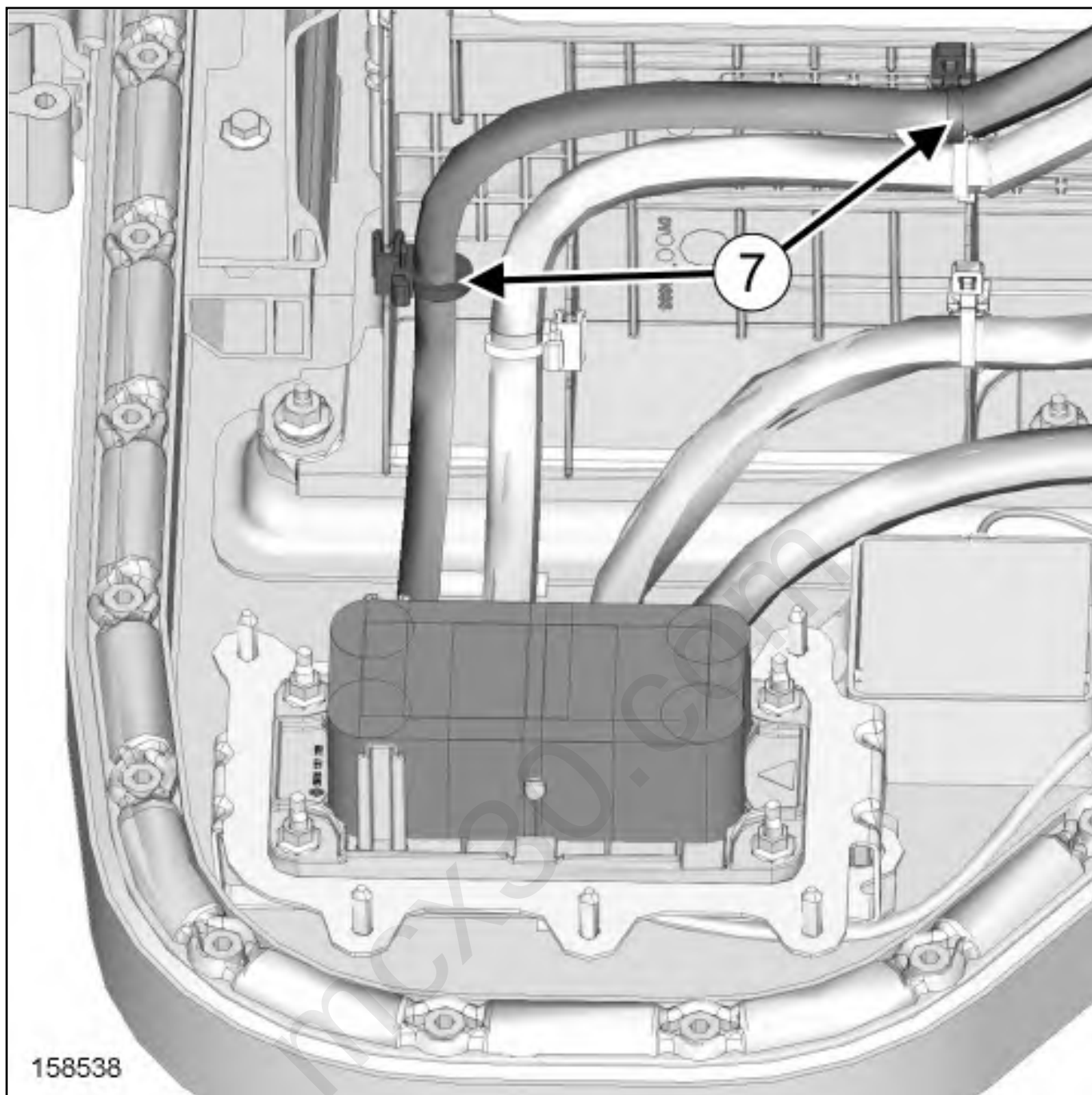
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- Move the safety device switch socket interlock wire.

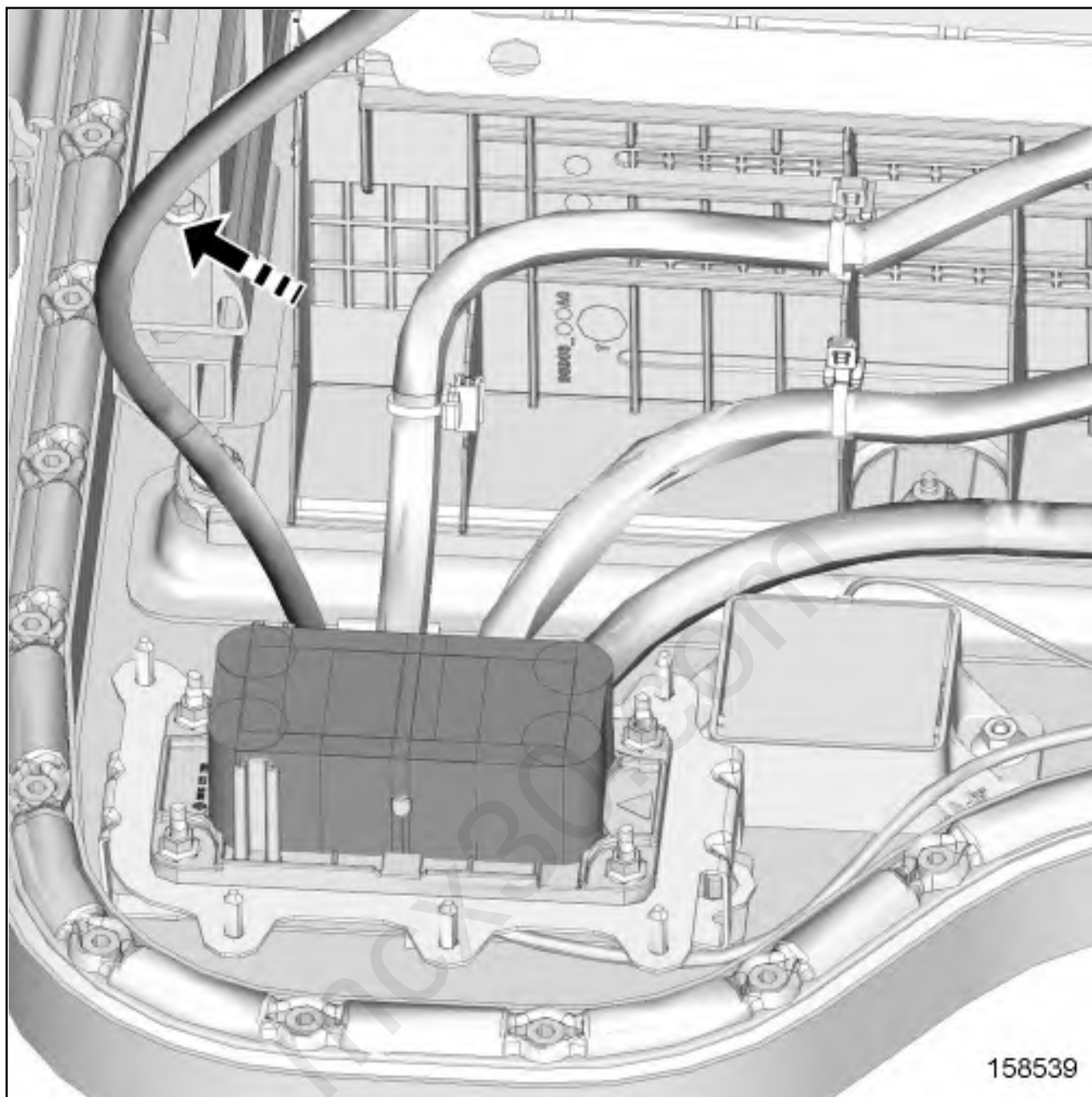


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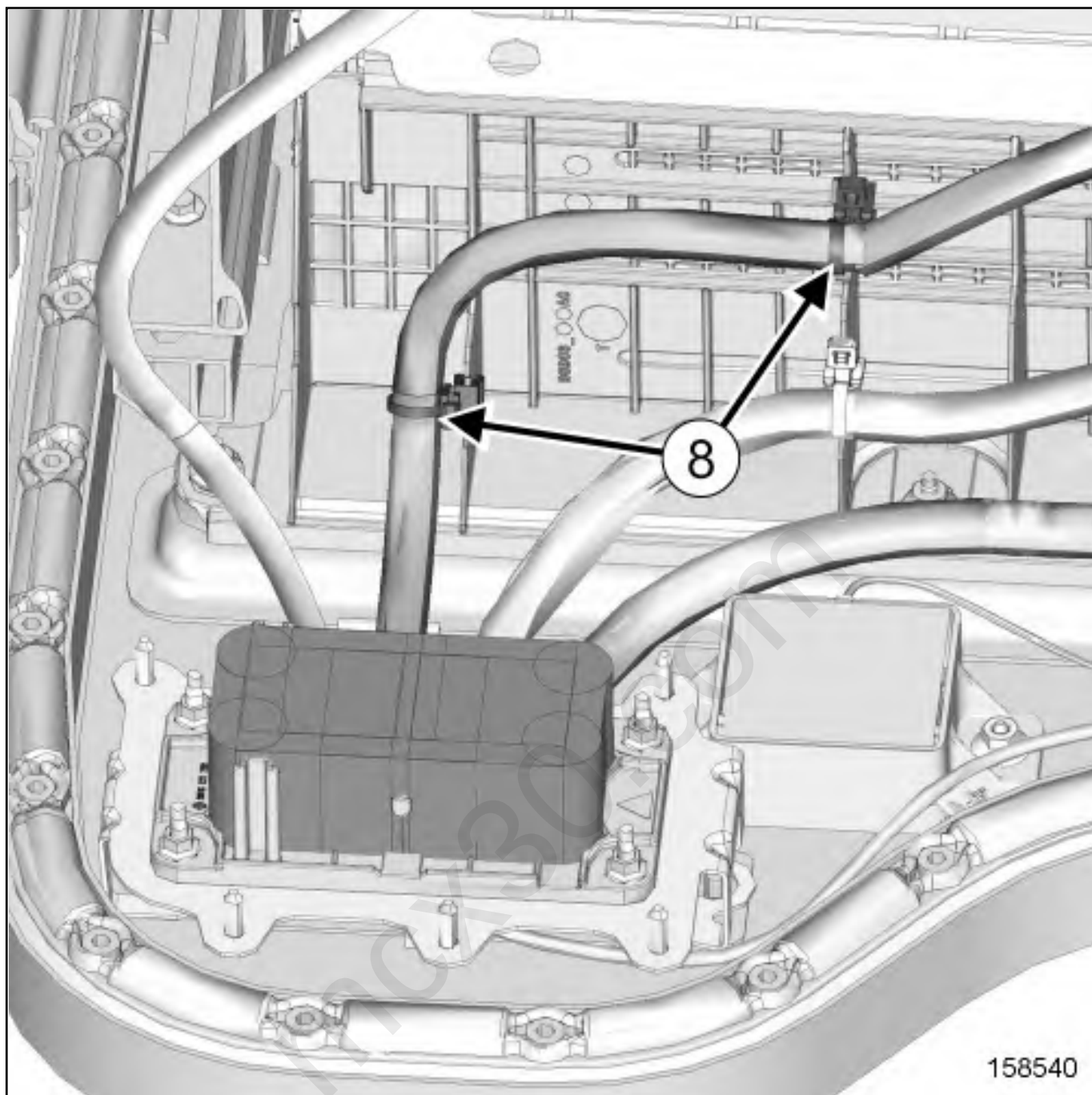
■ Unclip the clip(6) of the safety device switch socket interlock wire from the traction battery electronic filter using the toolSet of trim removal levers.(Car. 1363) .



- Mark the location of the clamps on the power wire number 1 using a PAINT MARKER.
- Cut the clips on the power wire number 1(7) using the insulated cutting pliers.

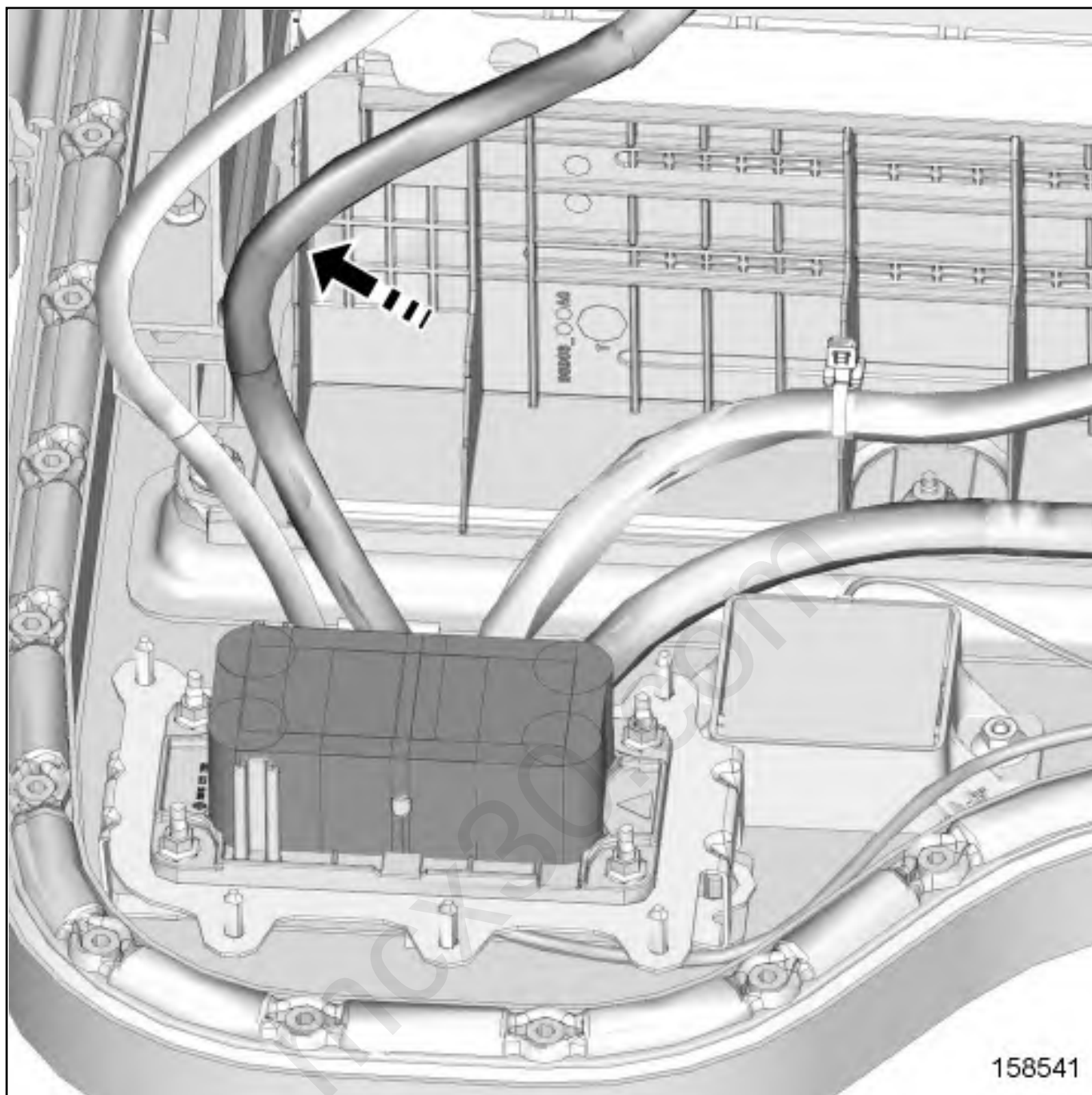


- Move the power wire number 1.

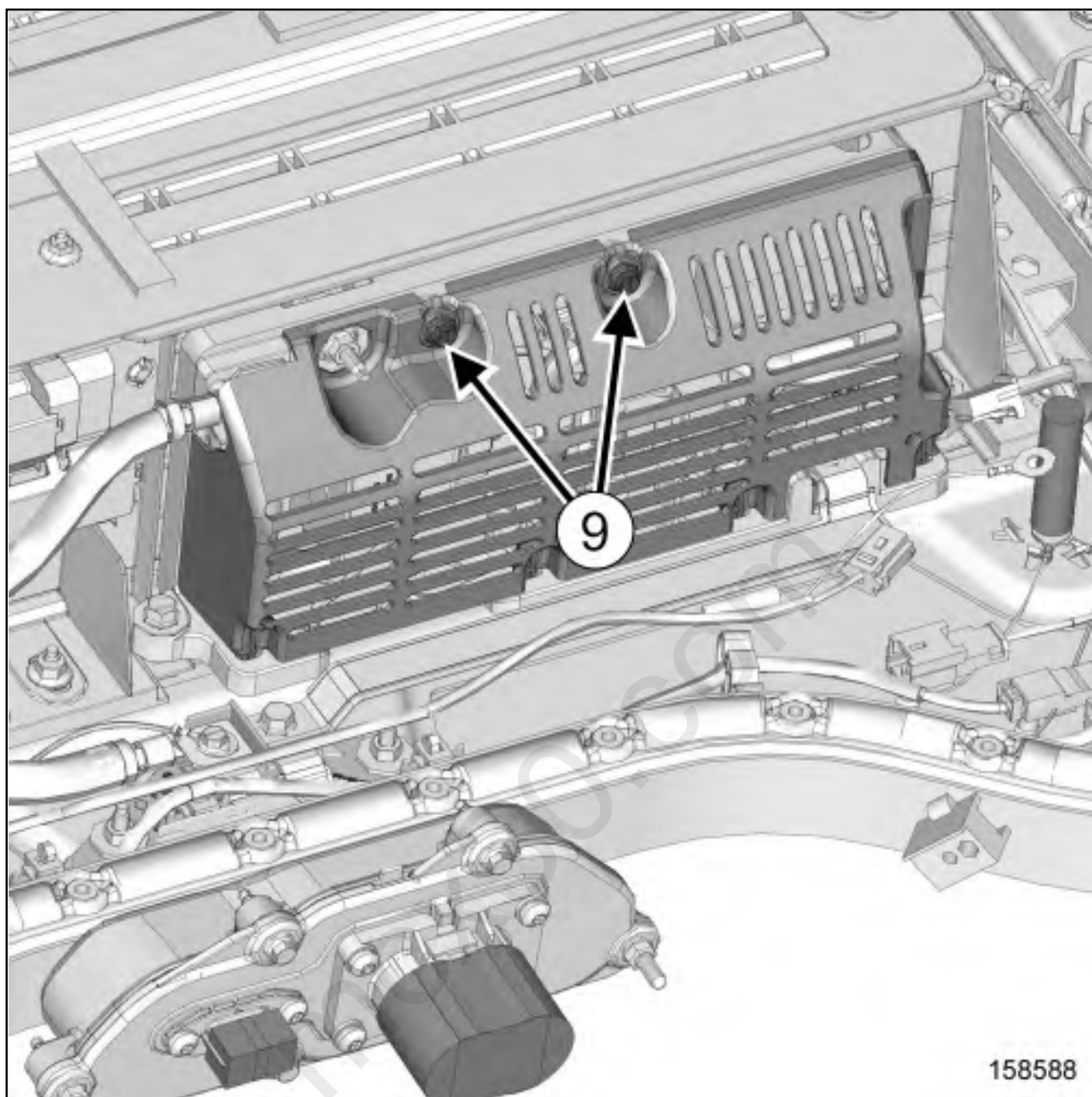


■ Mark the location of the clips on the power wire number 2 using a PAINT MARKER.

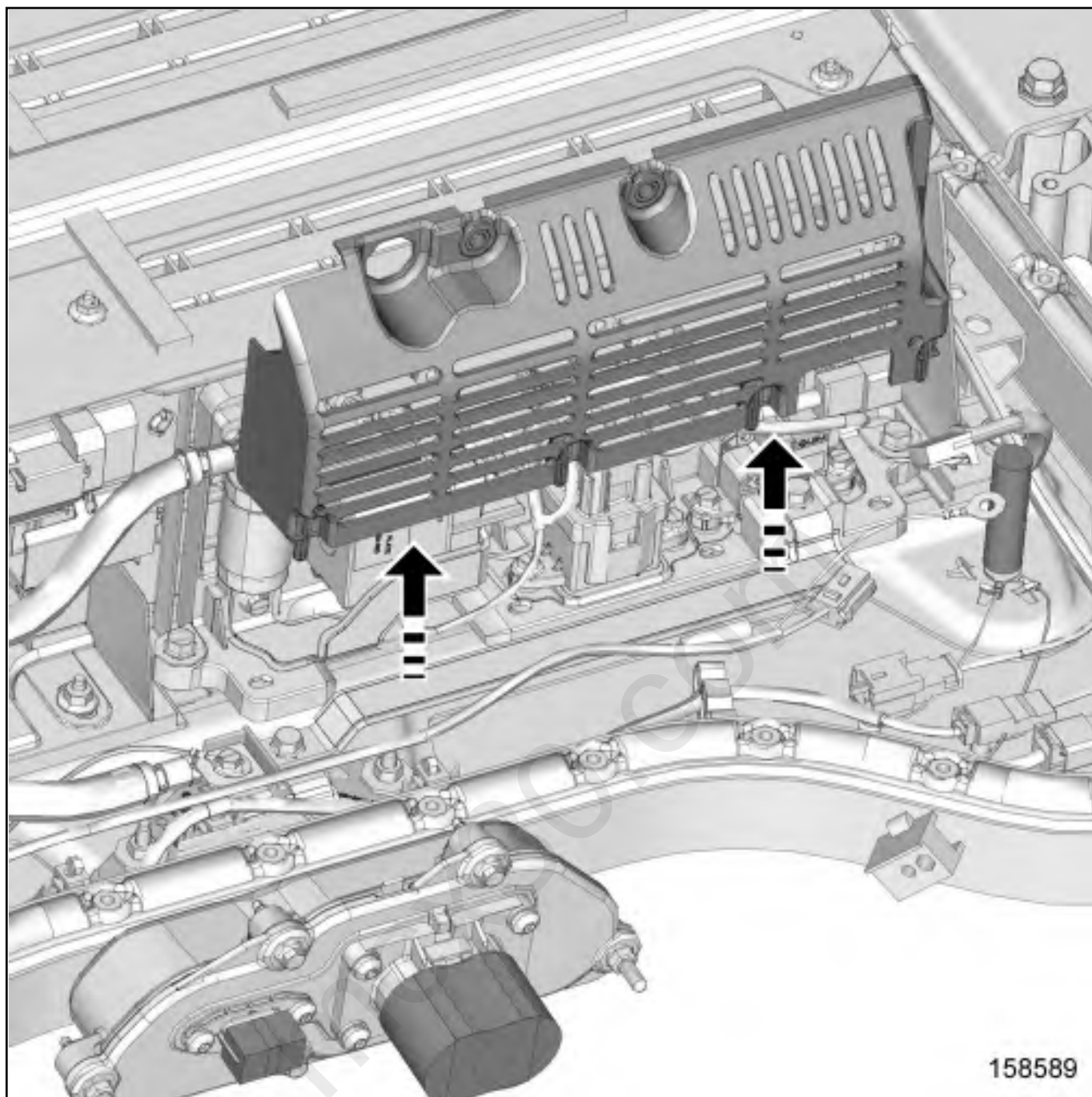
■ Cut the clips on the power wire number 2(8) using the insulated cutting pliers.



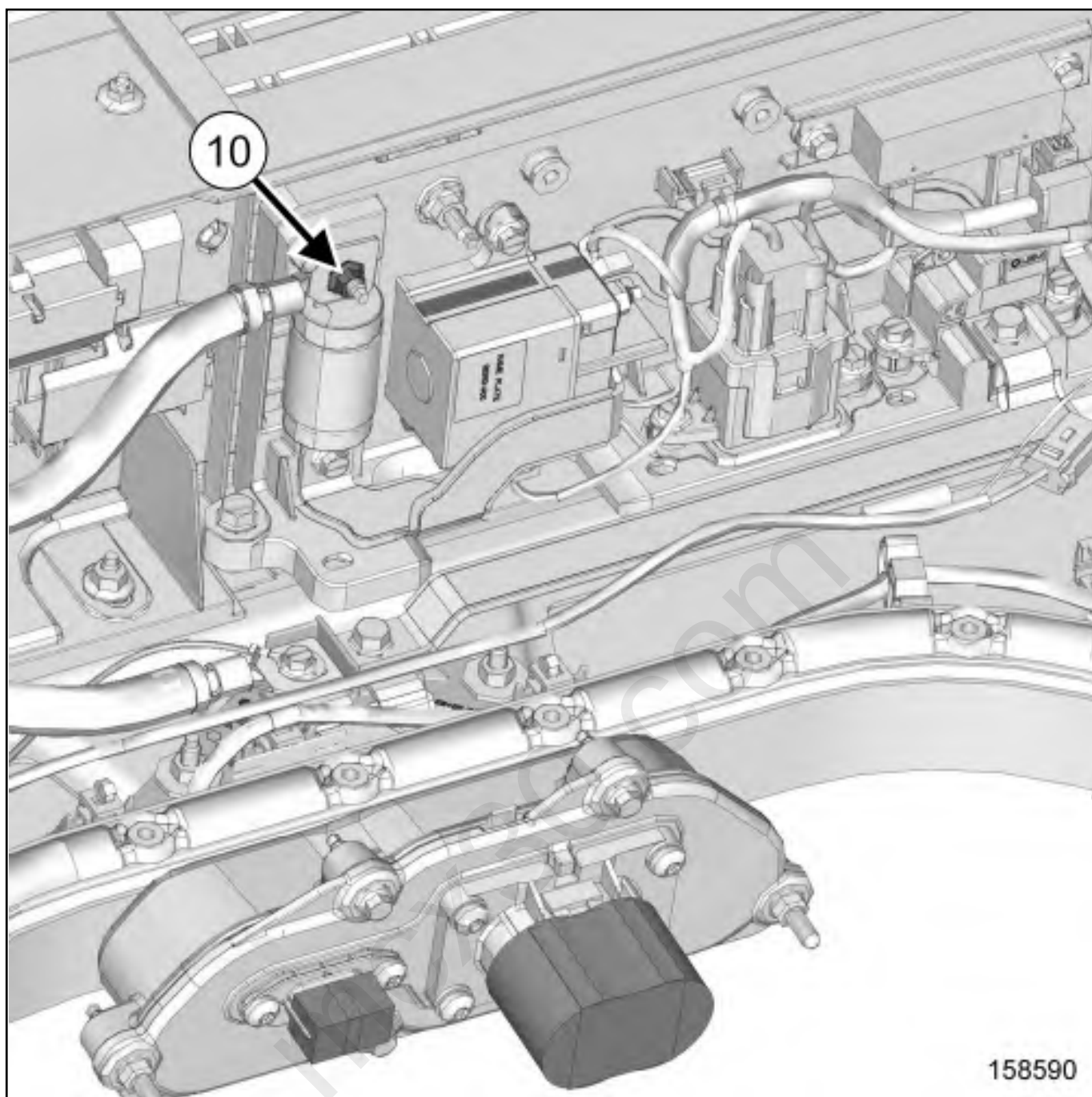
- Move the power wire number 2.



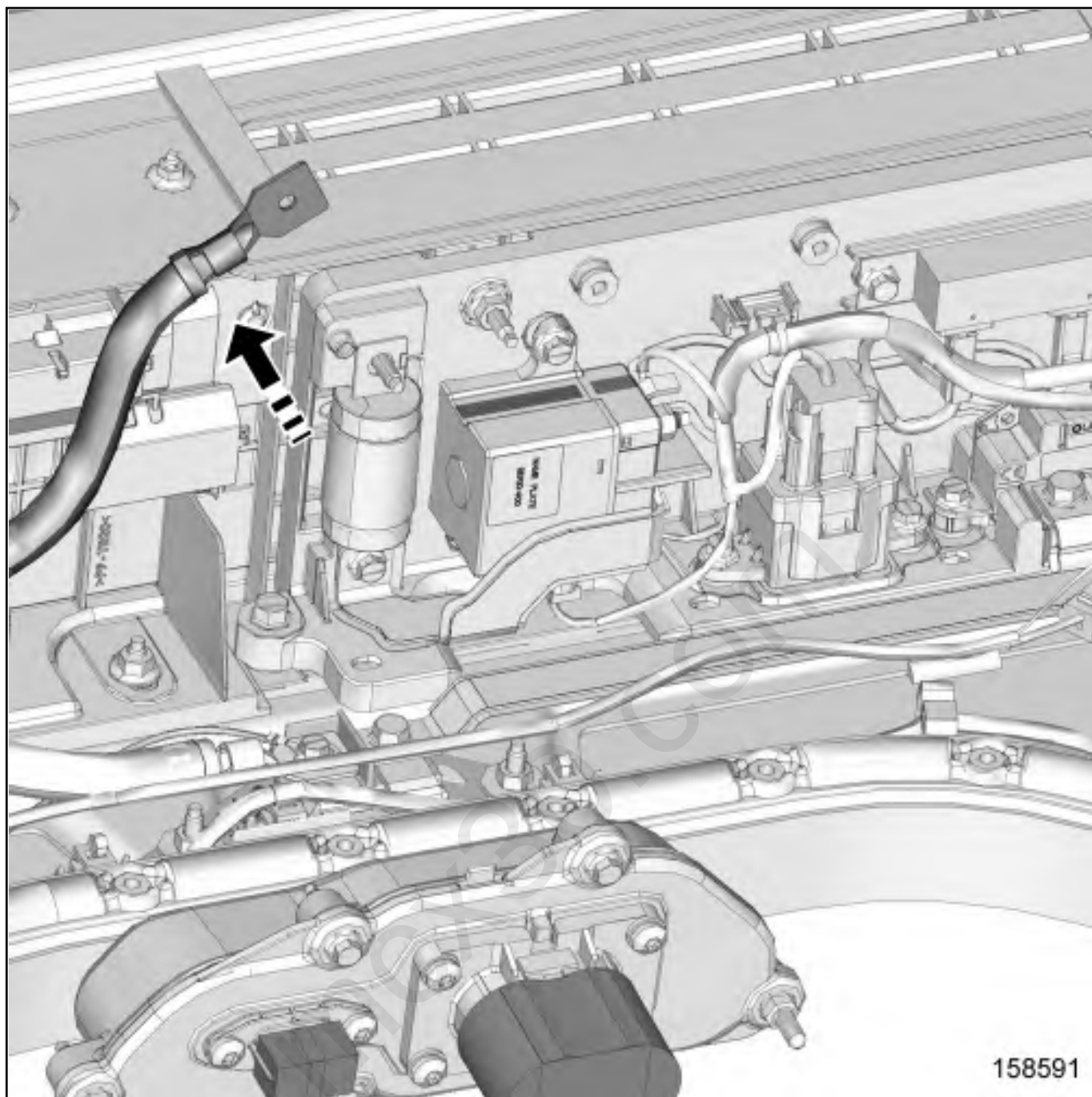
Remove the internal junction box cover screws(9) using an insulated magnetic socket([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



Remove the internal junctionbox cover.

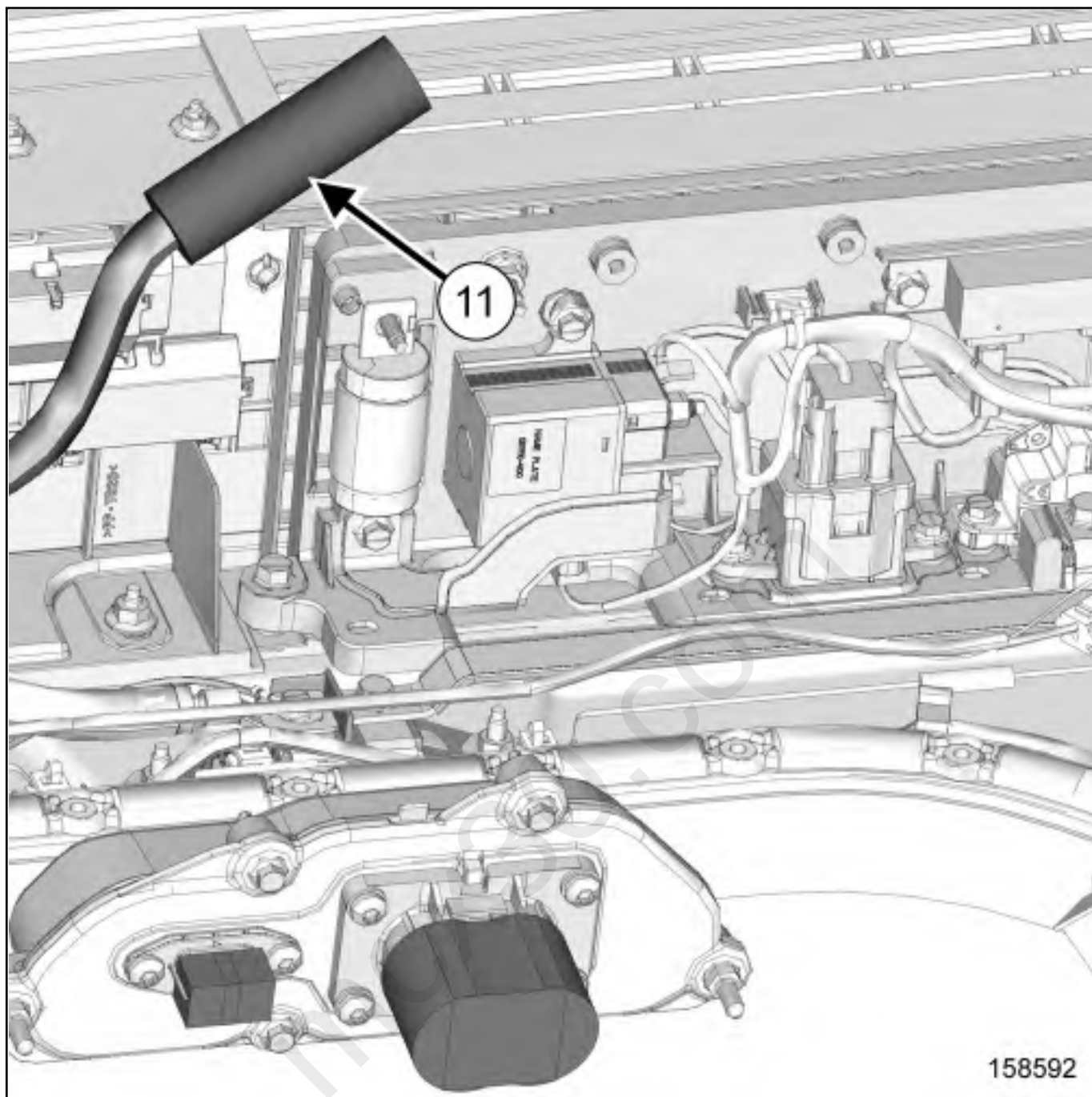


Remove the power wire number 3 connection nut(10) using an insulated magnetic socket([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .

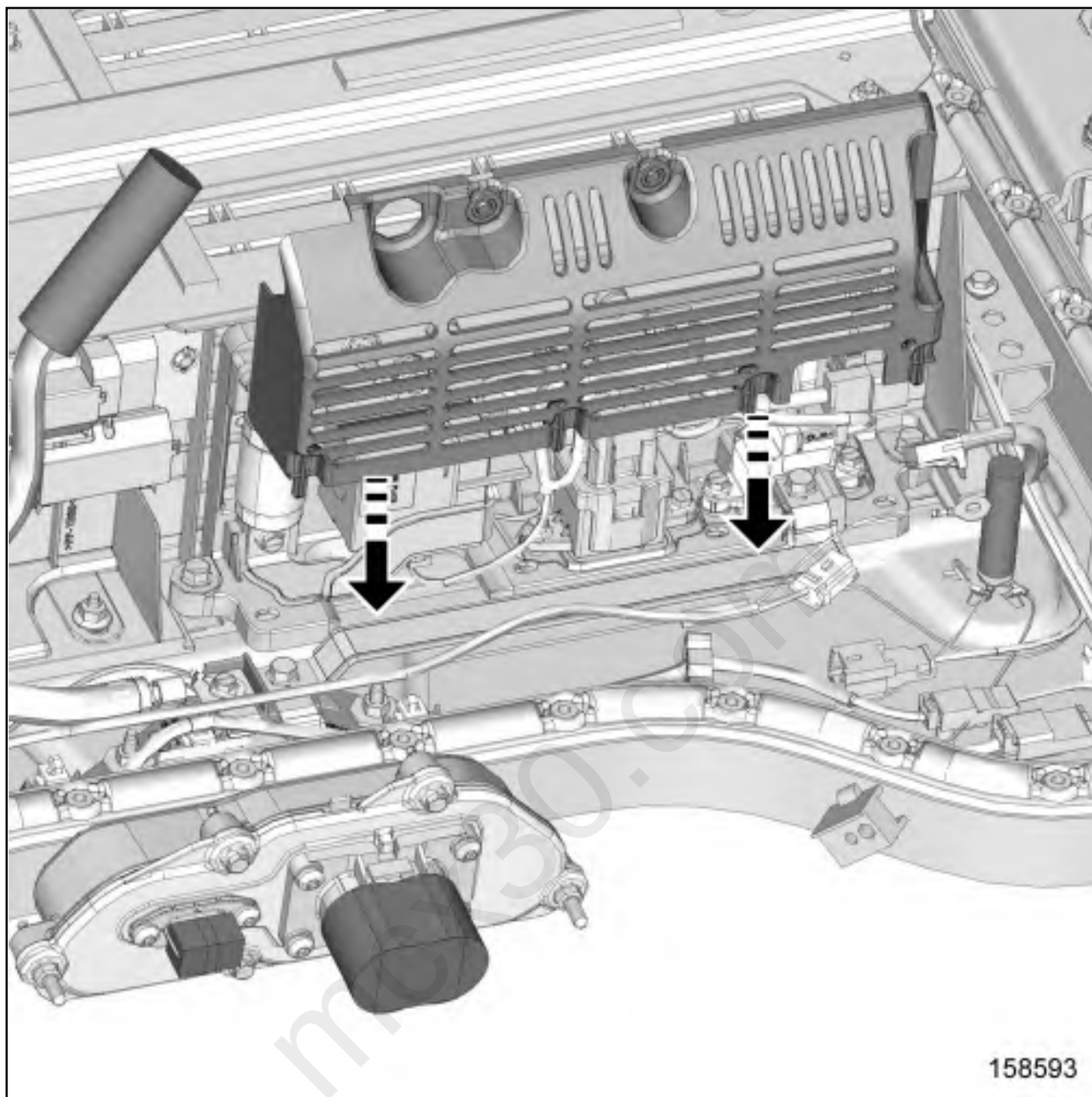


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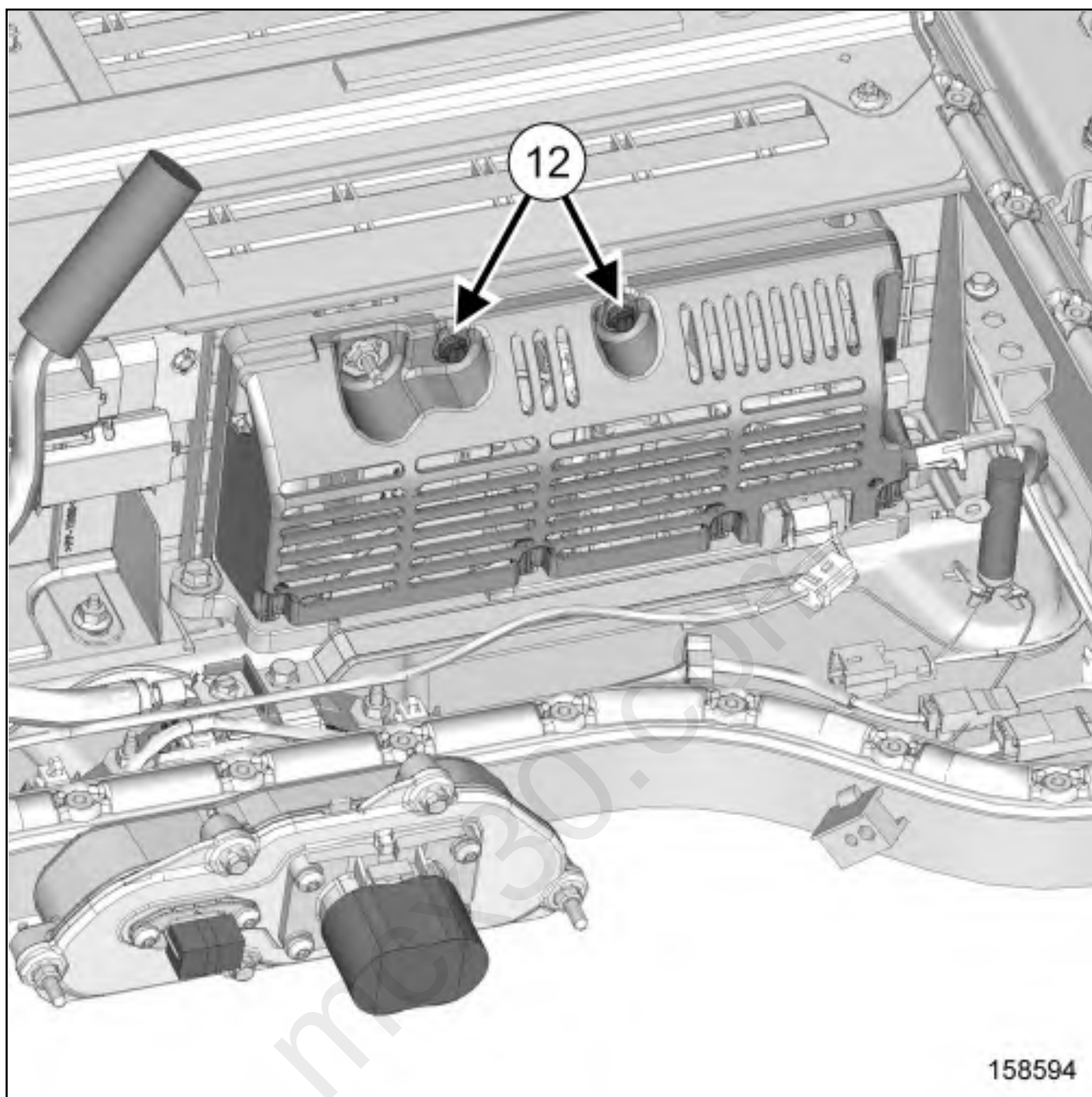
Move the power wire number 3.



Insulate the power wire number 3 lug with an insulated cover(11) .



Refit the internal junctionbox cover.



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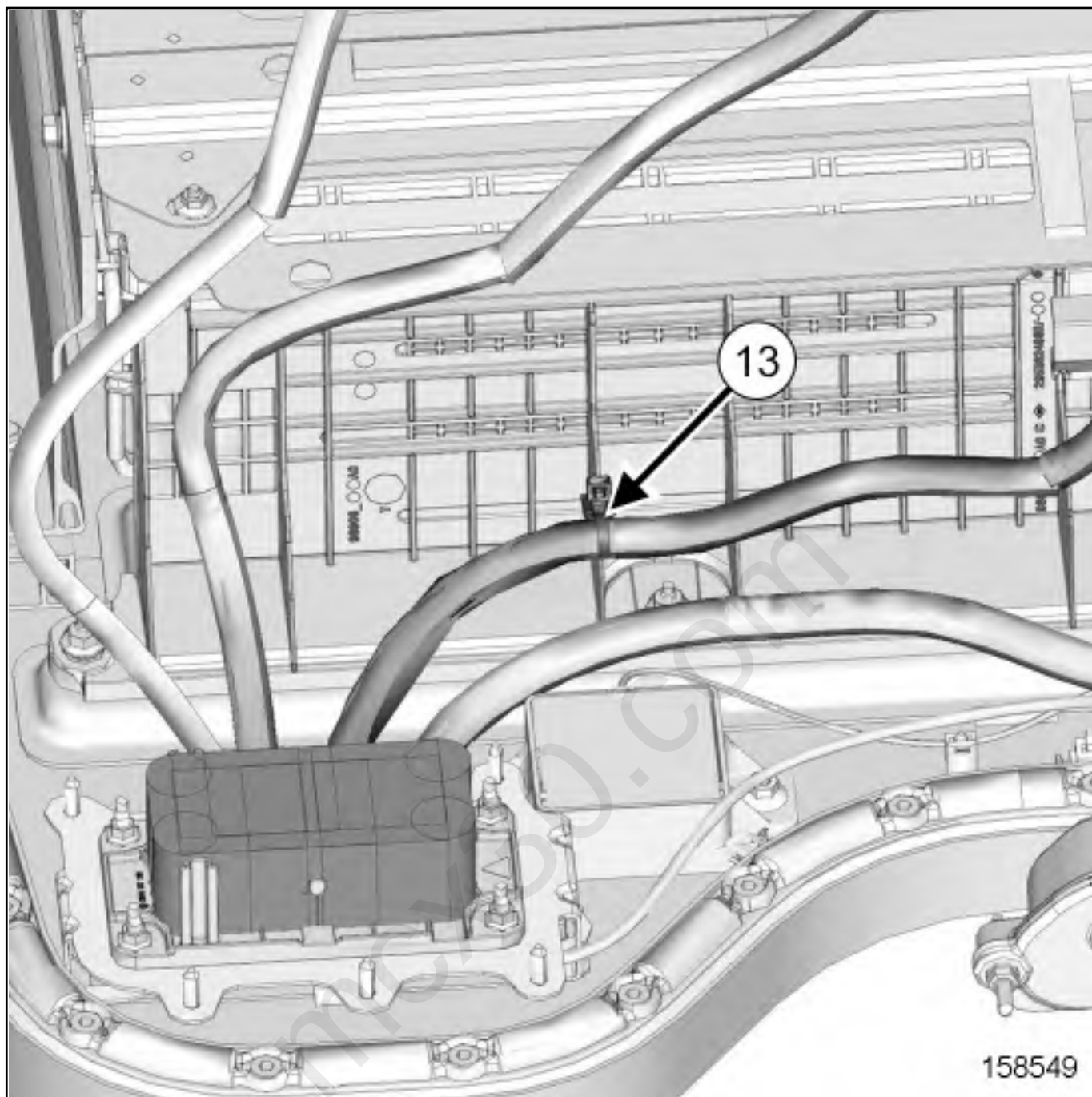


Refit the internal junction box cover screws(12) using an insulated magnetic socket([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



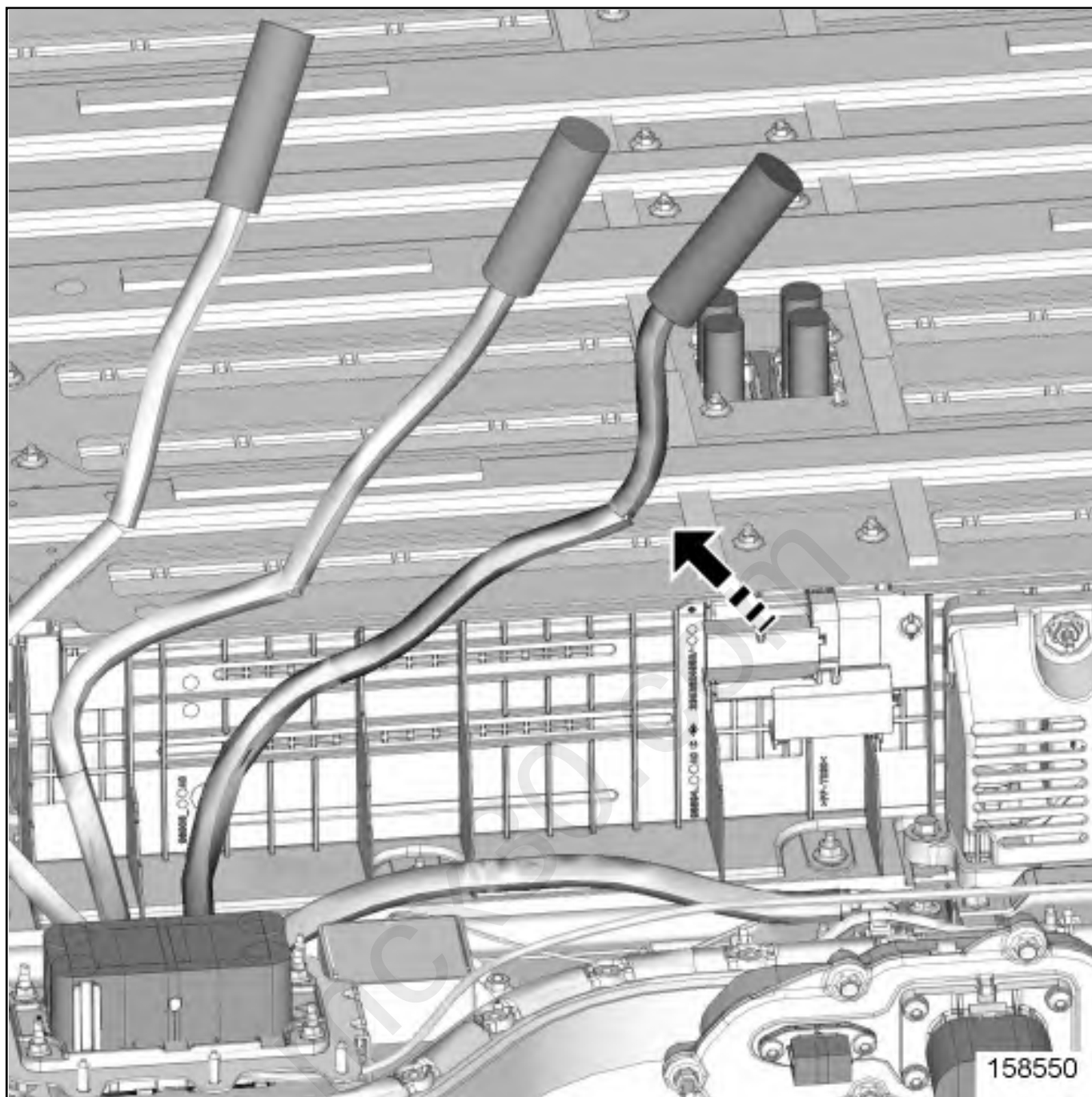
Note:

reusing old screws.

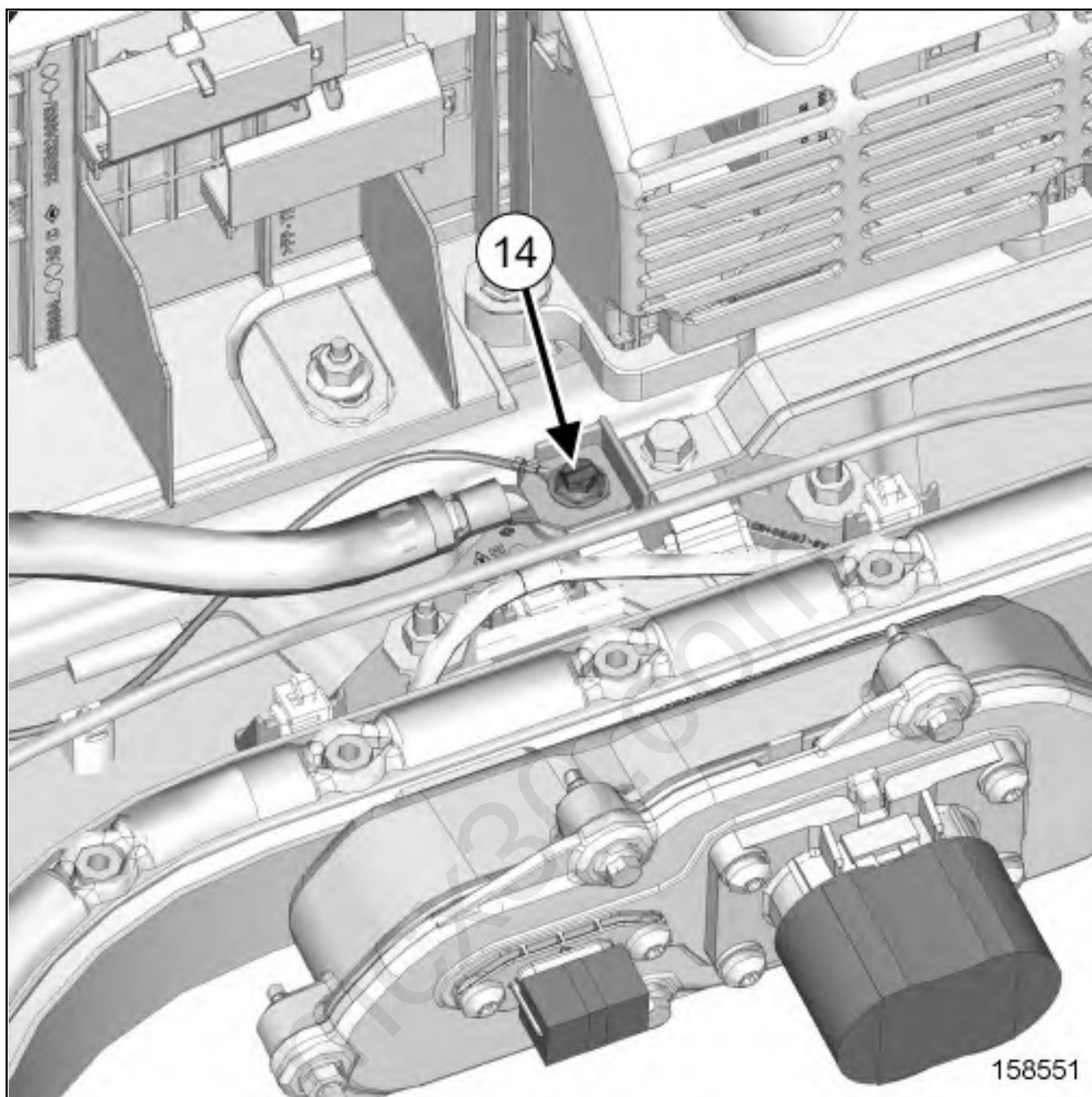


Mark the location of the clamp clip on the power wire 3 using a paint marker.

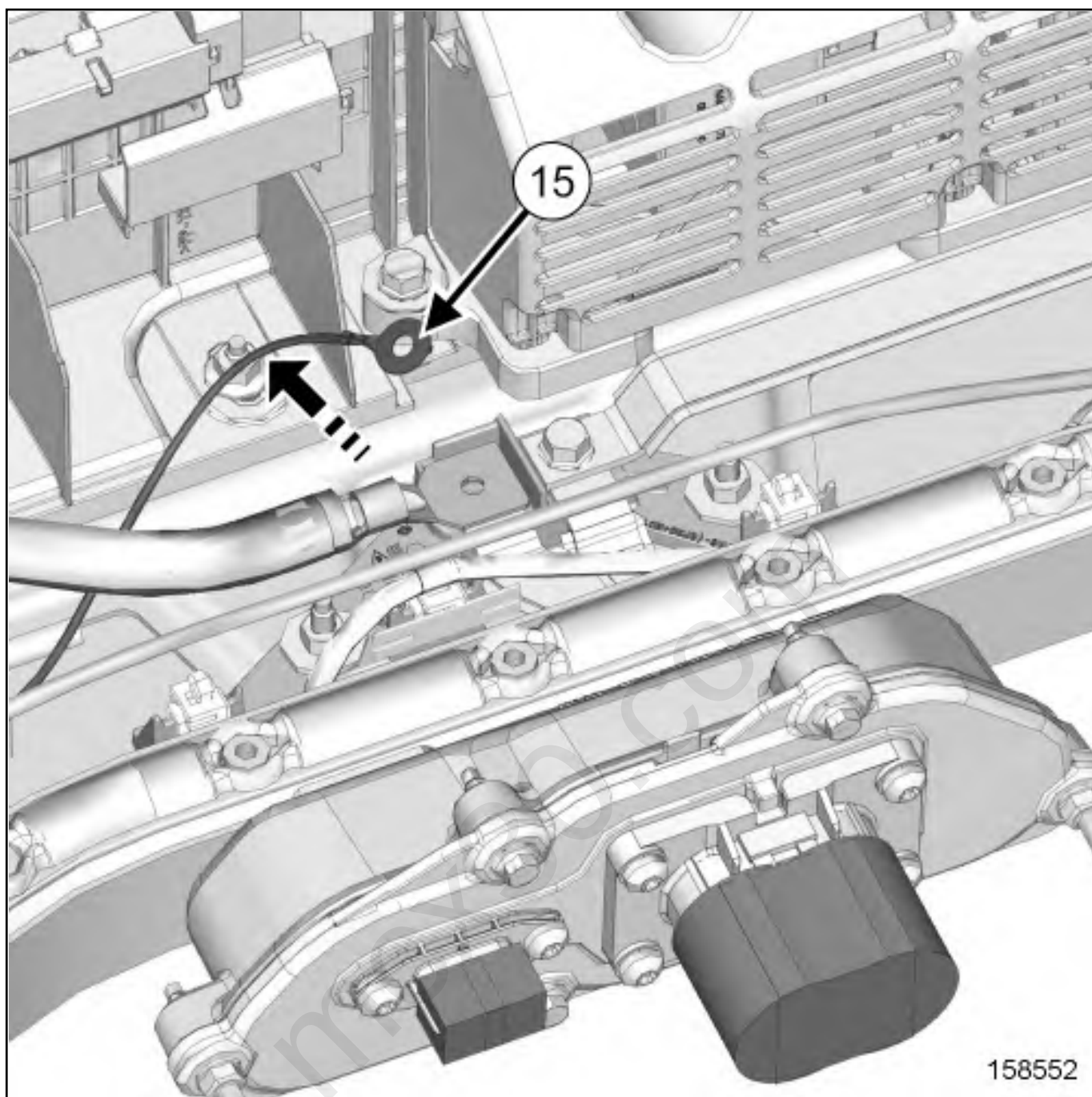
Cut the clamp on the power wire number 3(13) using the insulated cutting pliers.



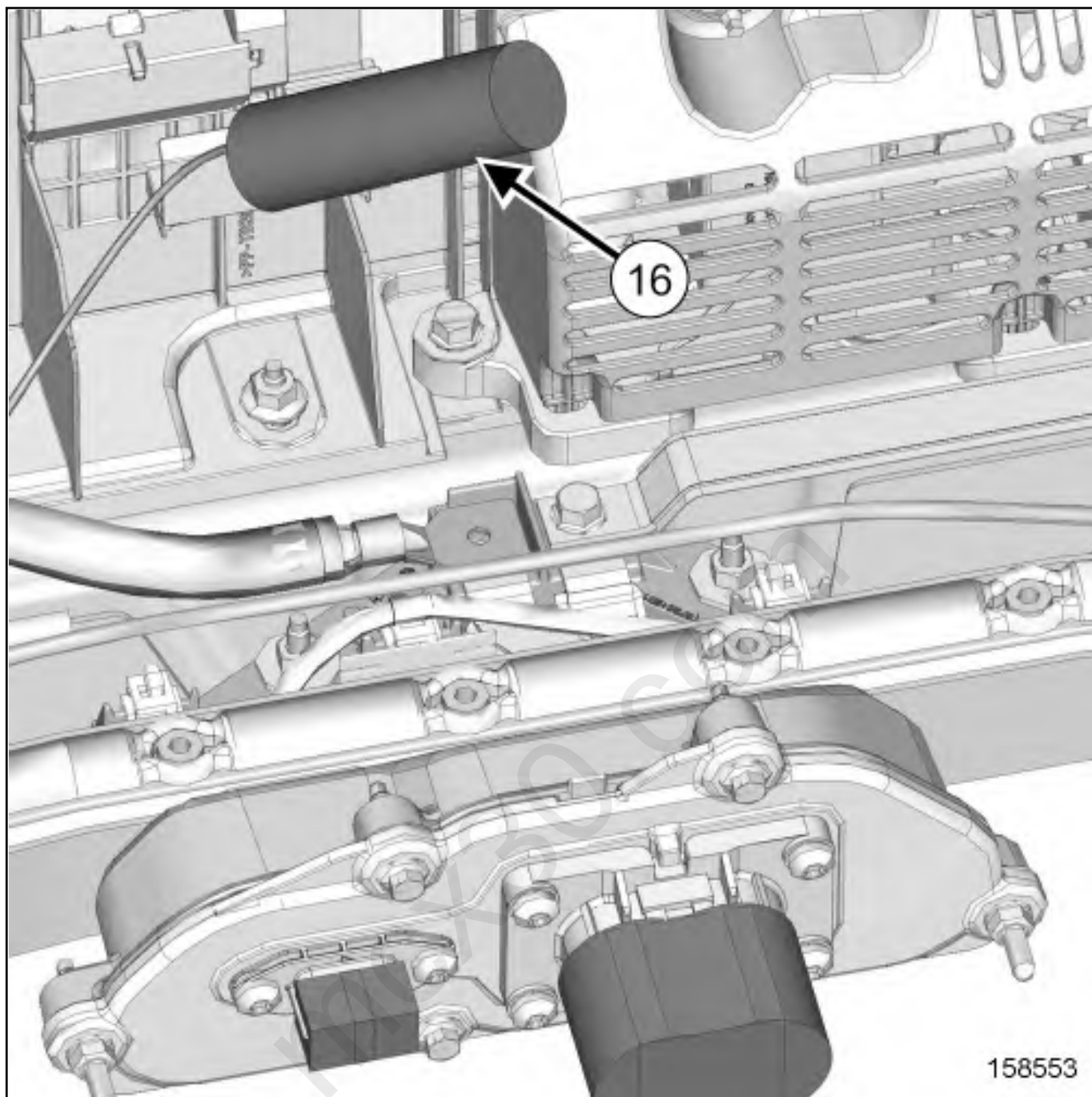
Move the power wire number 3.



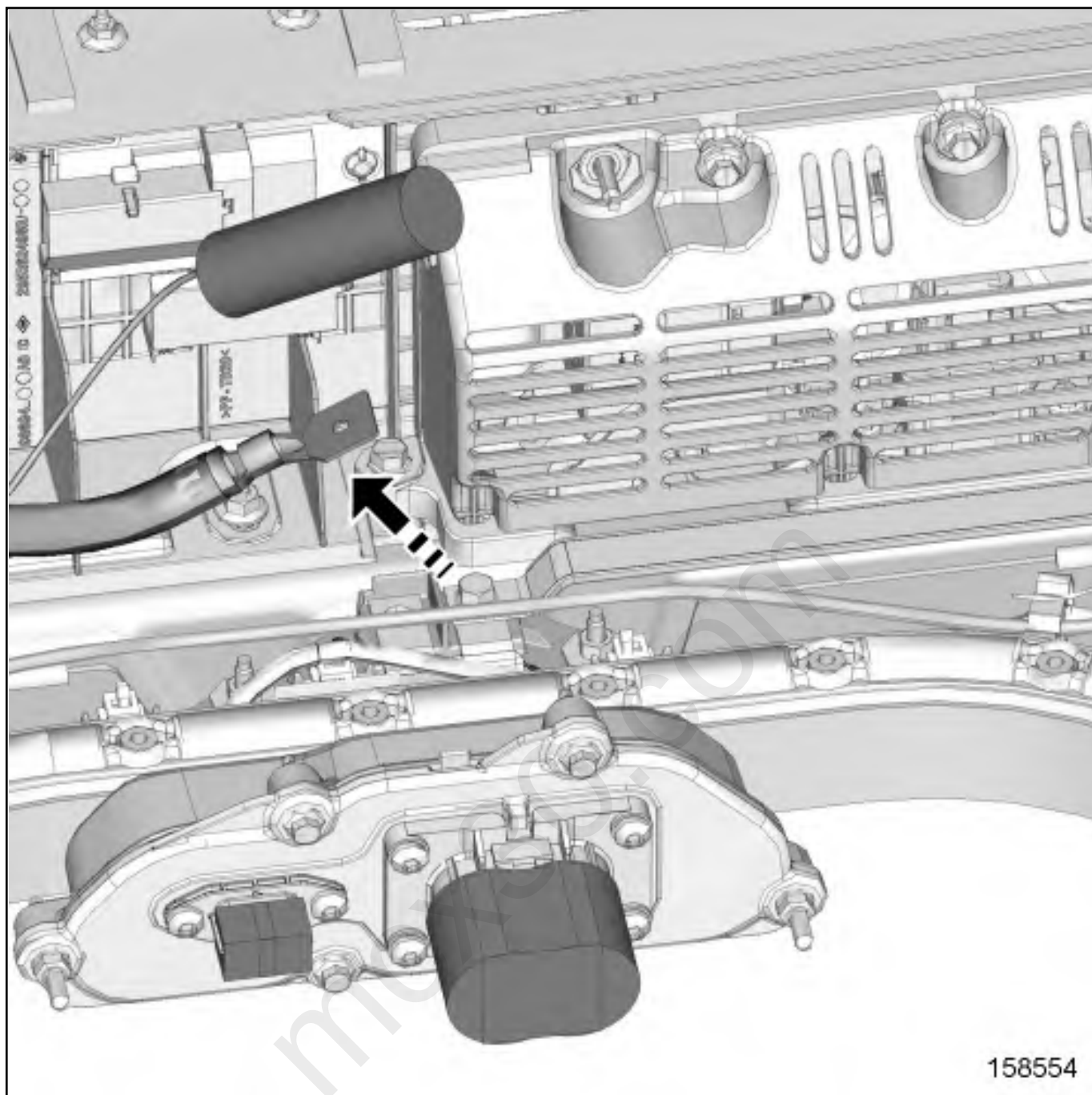
Remove the electronic filter wiring and power wire number 4 connection screw(14) from the insulated support using an insulated magnetic socket([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



Move the electronic filter wiring(15) .

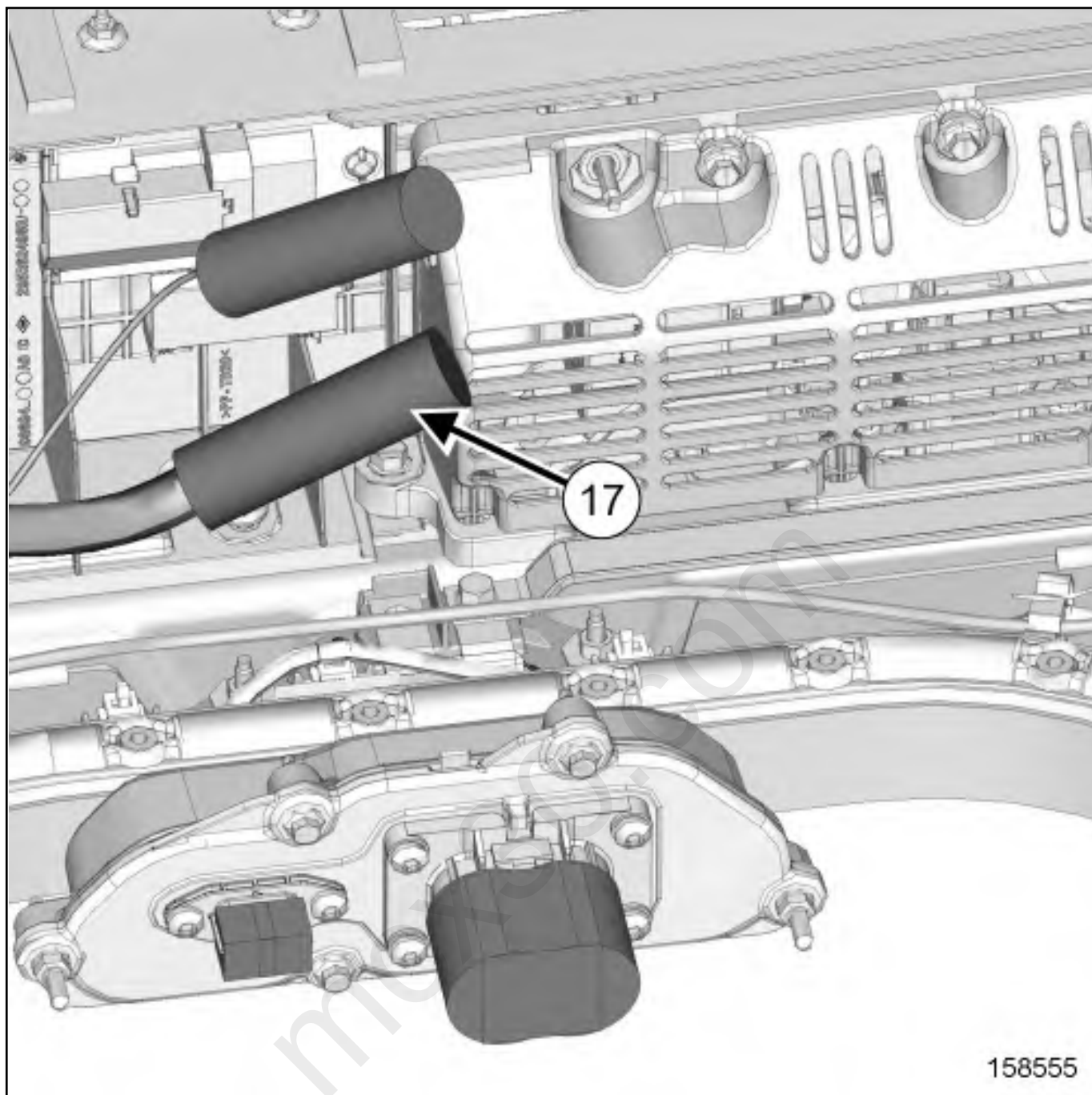


Insulate the electronic filter wiring lug with an insulated cover(16) .

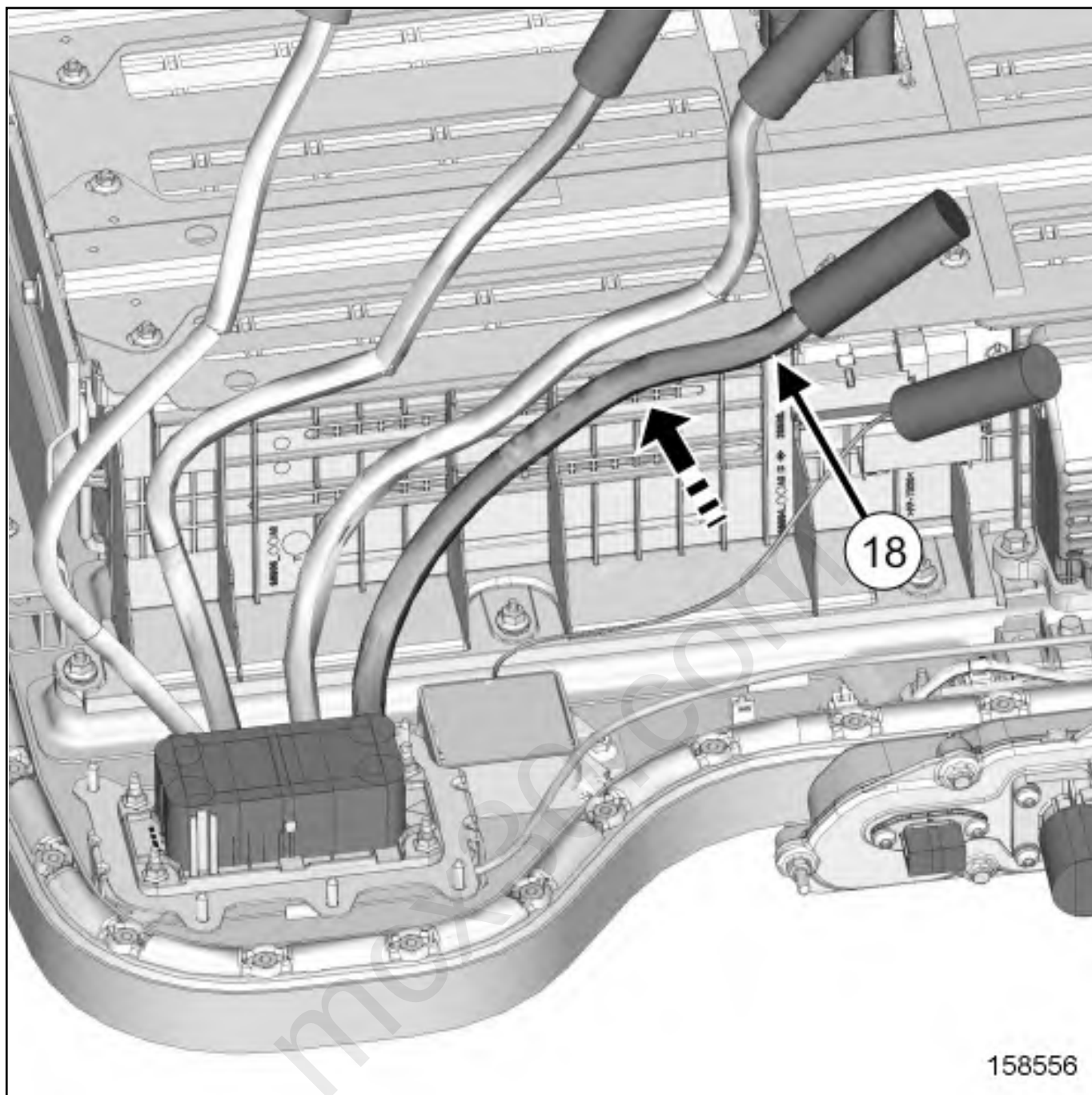


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Move the power wire number 4.



Insulate the power wire number 4 lug with an insulated cover(17) .



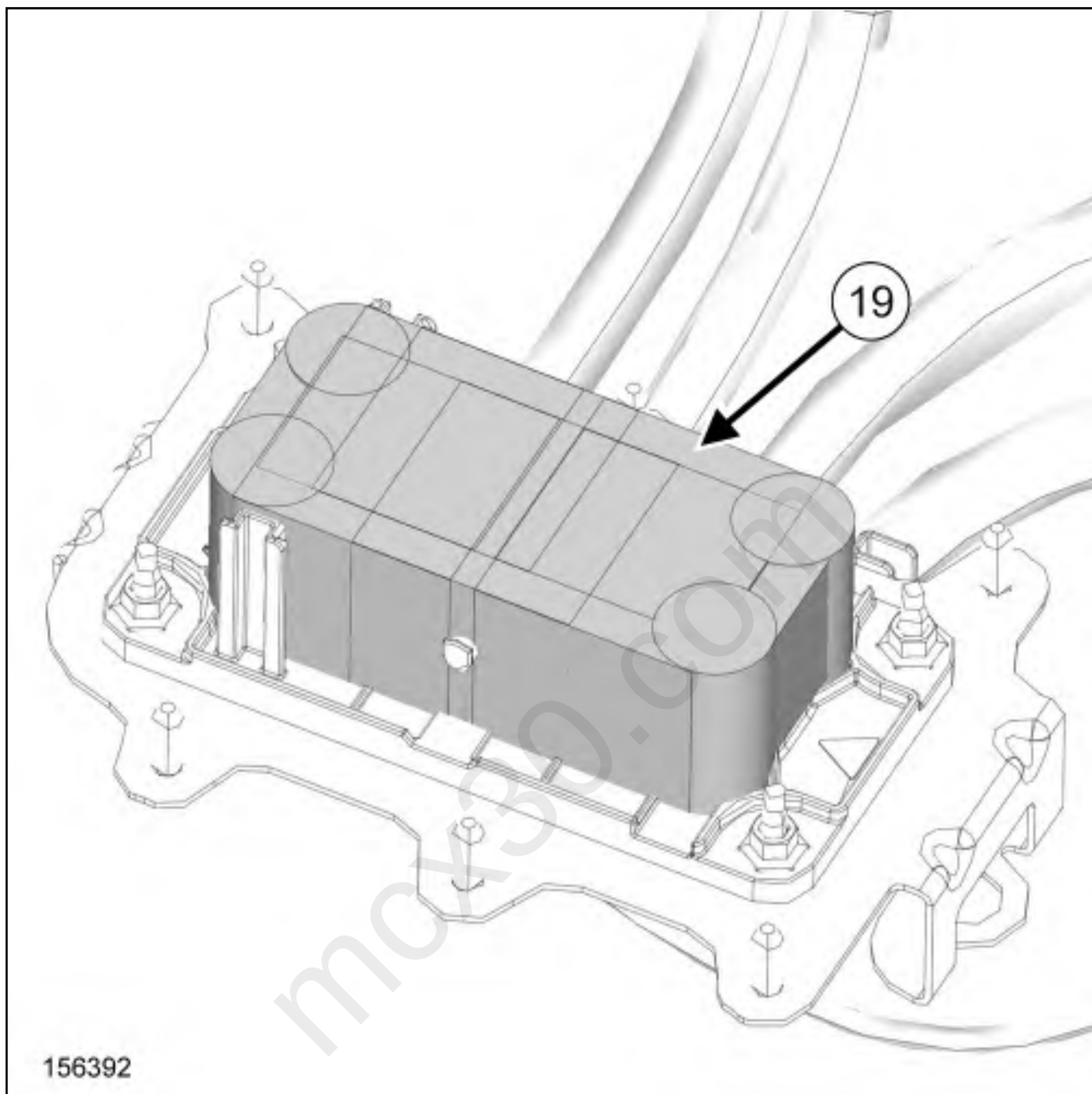
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Mark the location of the clamp on the power wire number 4 using a paint marker.

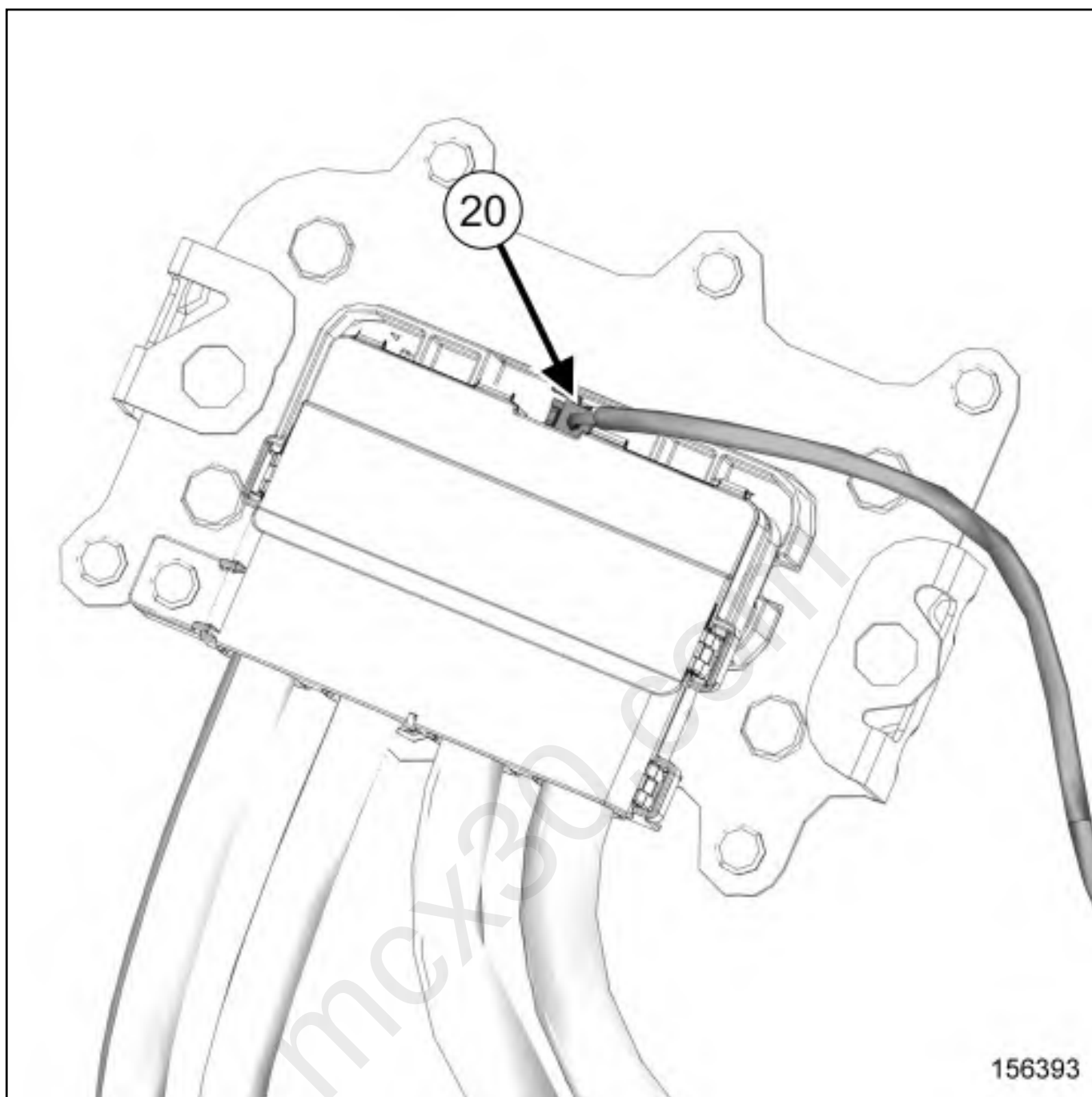
Cut the clamp on the power wire number 4 using the insulated cutting pliers.

Move the power wire number 4(18) .

Remove the safety device switch socket assembly on a clean area.



Remove the protection cover from the safety device switch socket(19) .



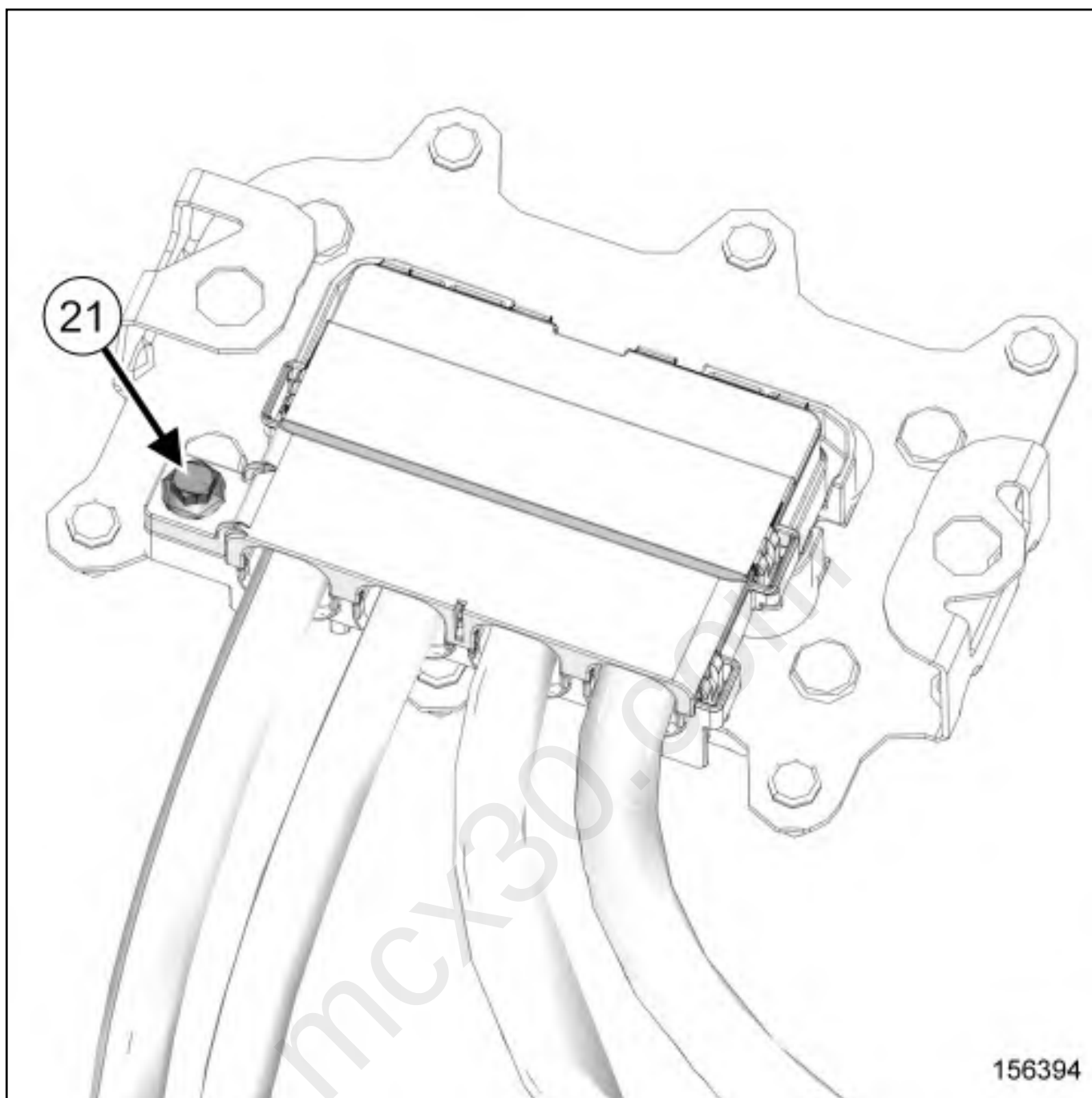
156393



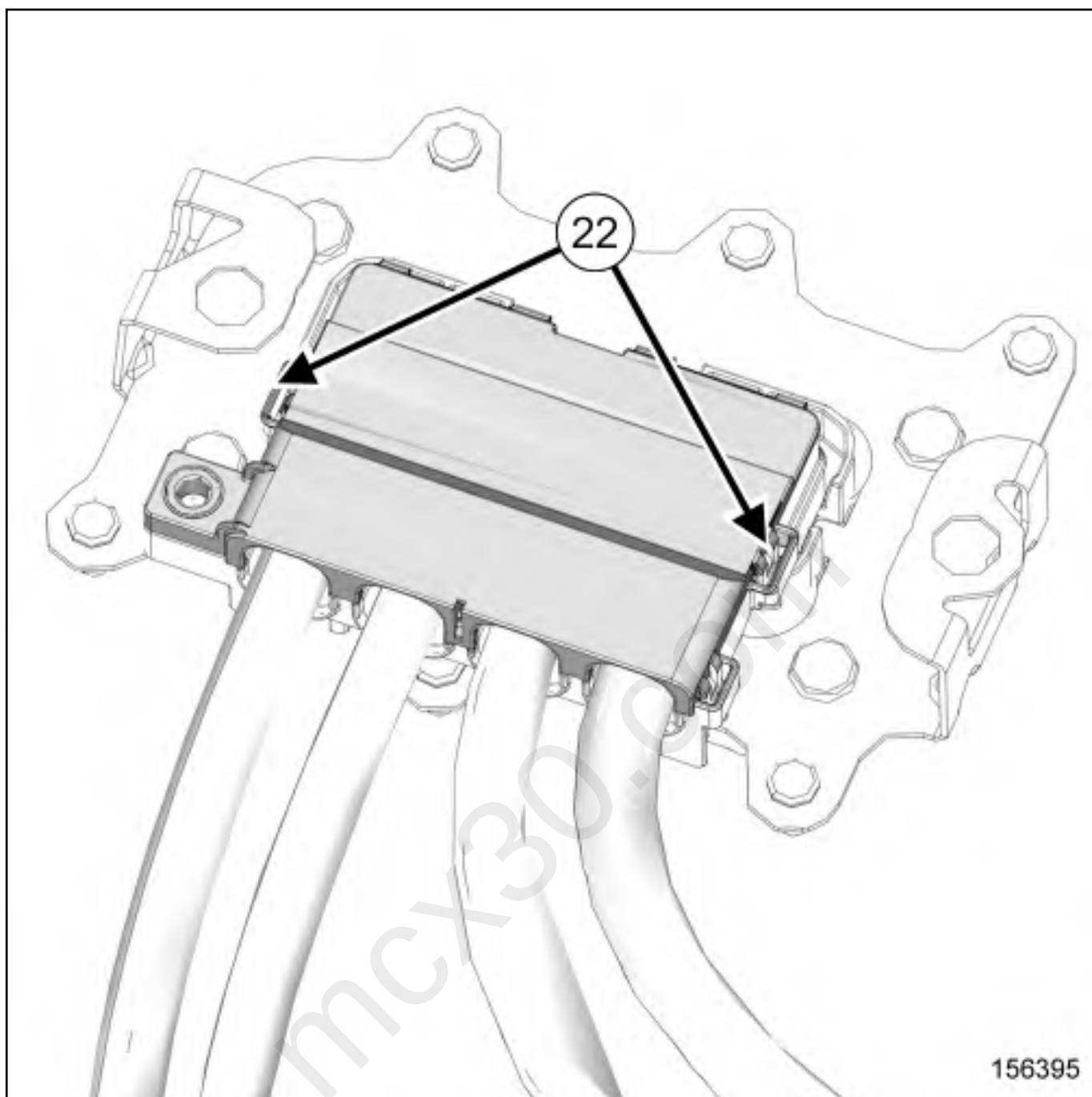
Disconnect the safety device switch socket interlock wire plug(20) using the toolSet of trim removal levers.(Car. 1363) .



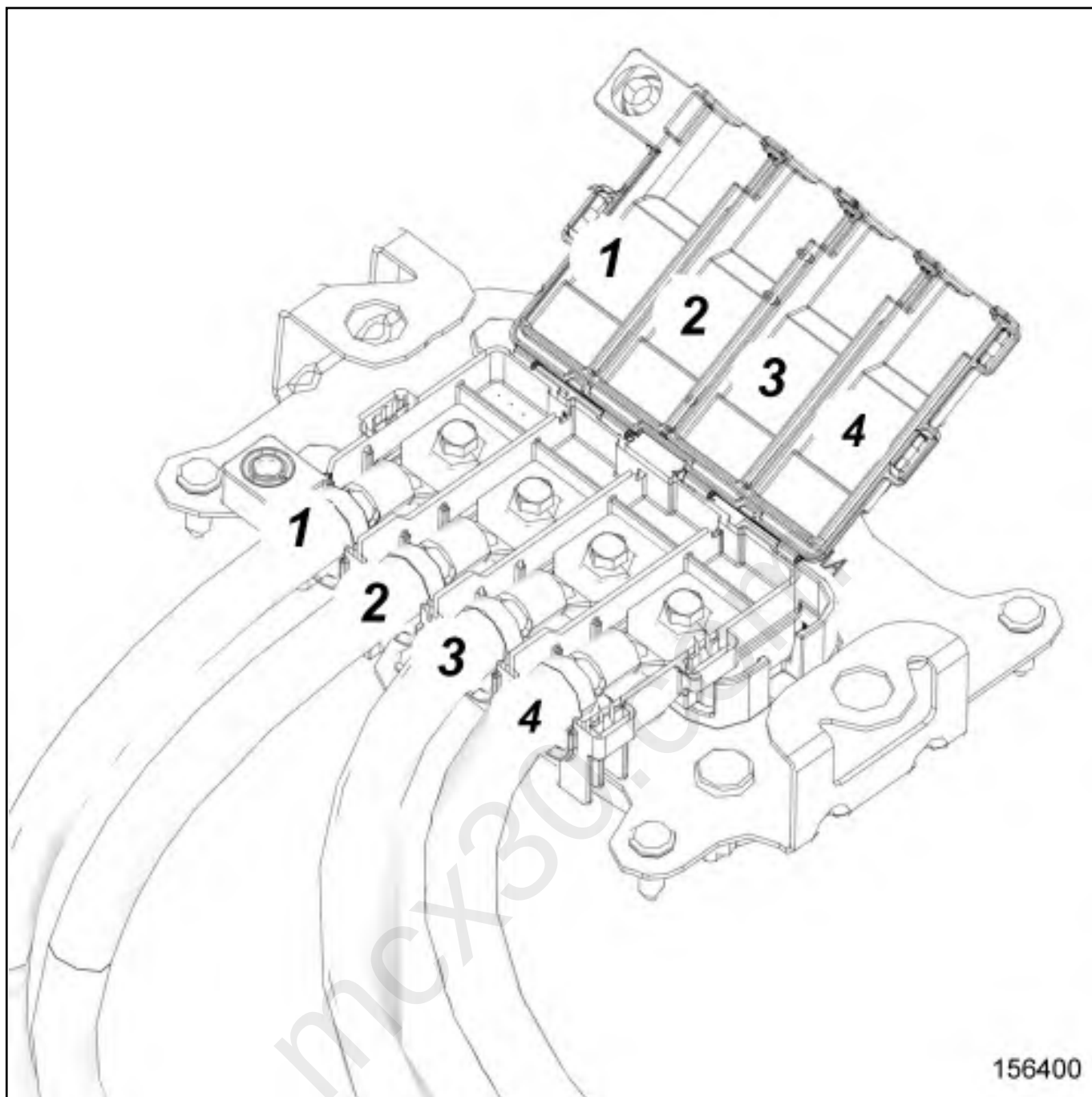
Move the safety device switch socket interlock wire.



Remove the screw(21) from the safety device switch socket rear cover using an insulated magnetic socket ([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



Unclip the safety device switch socket rear cover clips(22) using the toolSet of trim removal levers. (Car. 1363) .

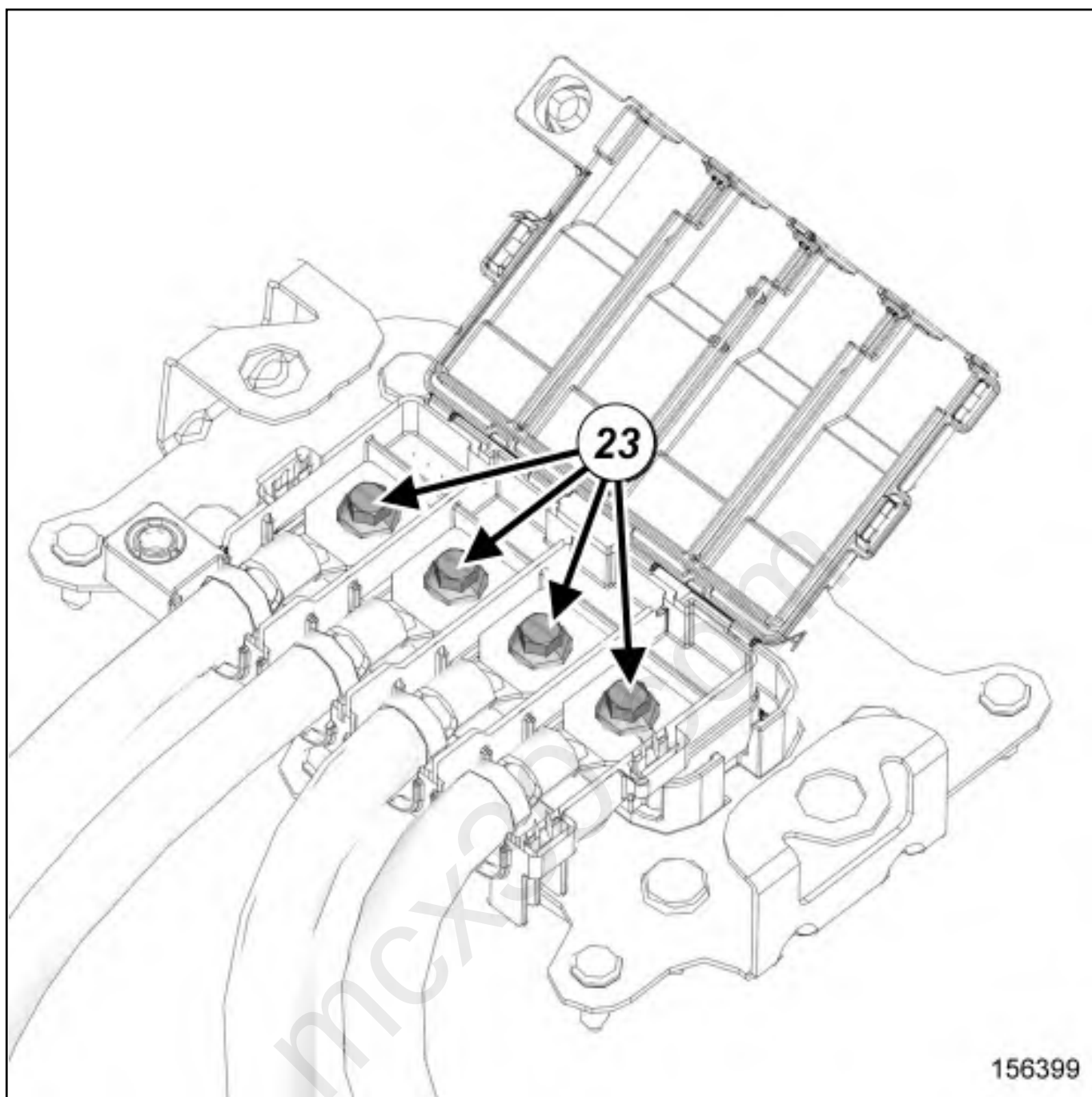


Mark the number of each of the 4 power wires using a paint marker.



Note:

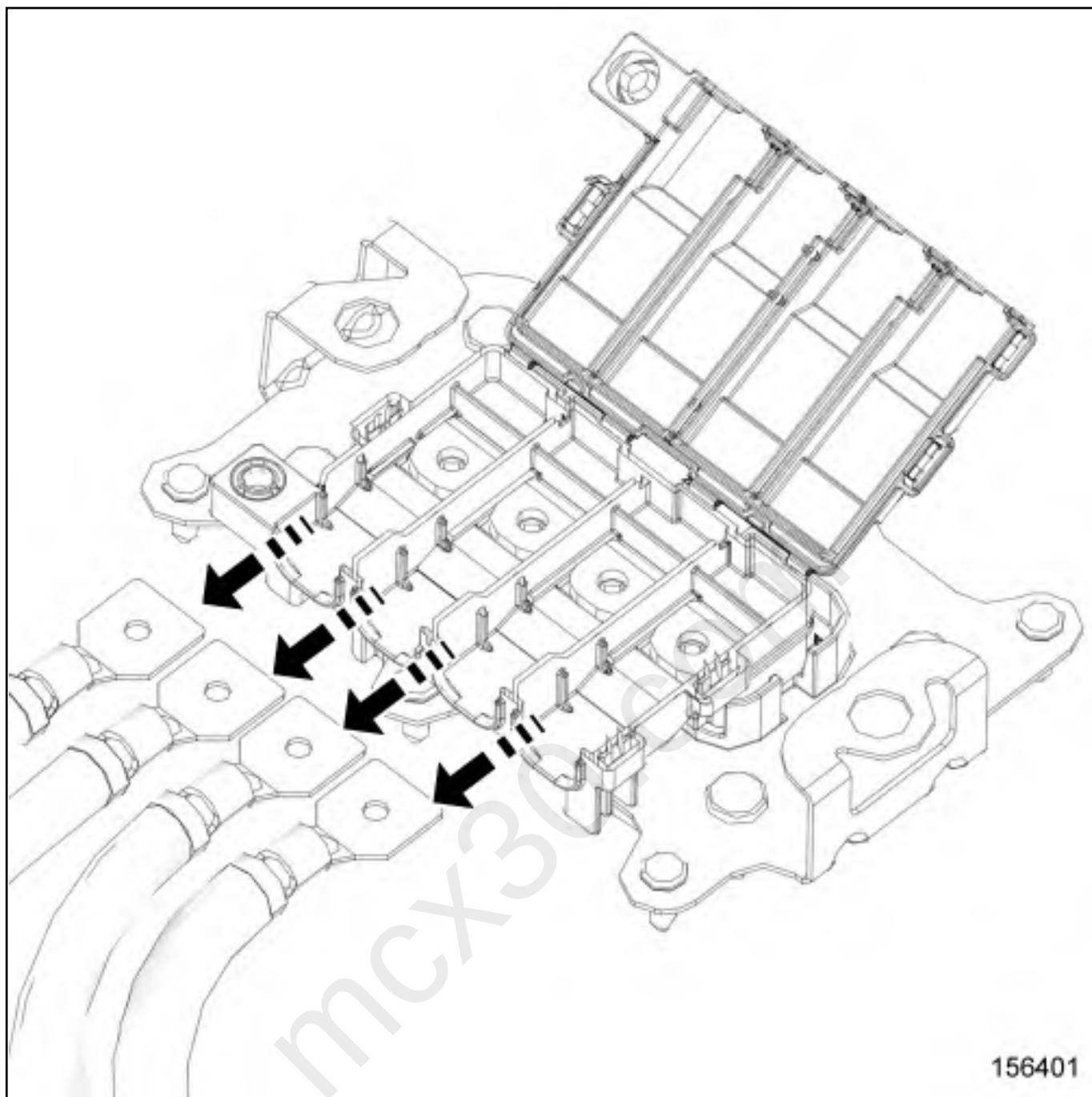
the power wire number 1 is the longest one.



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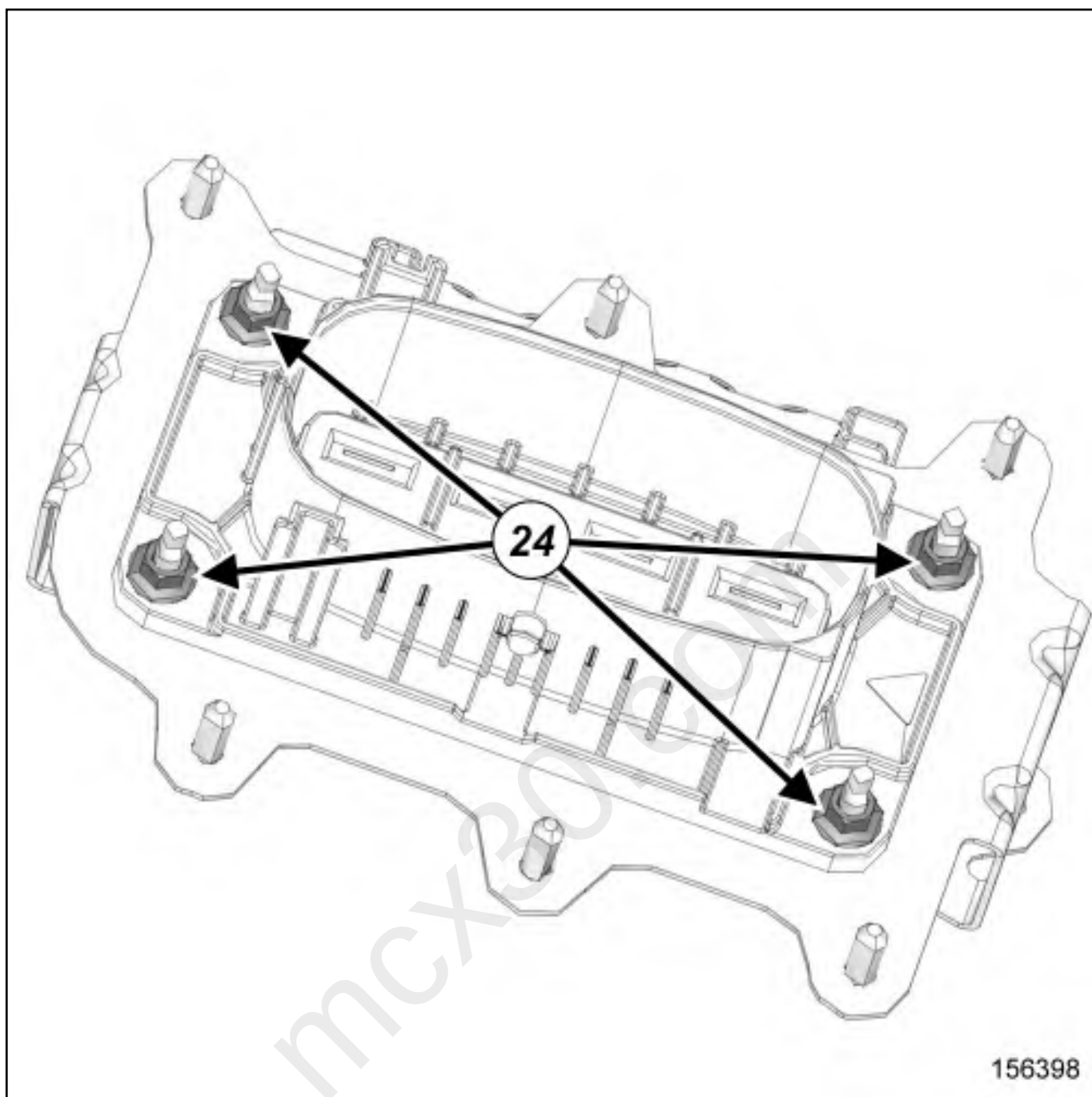


Remove the screws(23) from the 4 power wires using an insulated magnetic socket([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



Move the 4 power wires.

Remove the safety device switch socket rear cover using the toolSet of trim removal levers.(Car. 1363) .



Remove the safety device switch socket nuts(24) using an insulated magnetic socket([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



Move the safety device switch socket mount.

1. REFITTING PREPARATION OPERATION



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



the internal junction box cover screws.

Note:



Check the state of the bus bar, power wire lugs (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 all the sealing surface of the safety device switch socket mount using a LINT-FREE CLOTH (see **Vehicle: Parts and consumables for the repair**) .

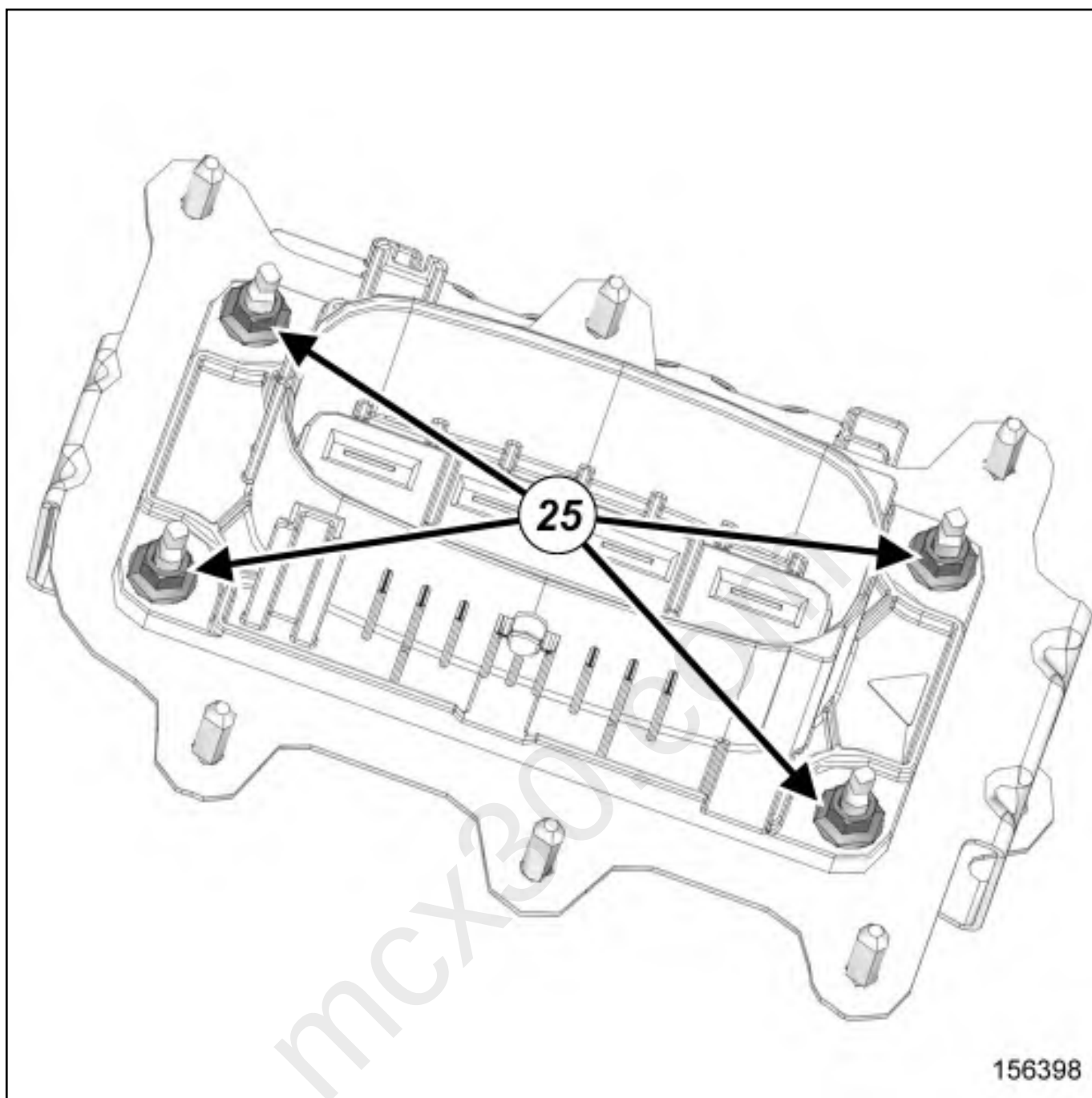


Fit the safety device switch socket on its mount.

Note:



Pay attention to the mechanical coding.



Refit the safety device switch socket nuts(25) using an insulated magnetic socket([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



Torque tighten the safety device switch socket nuts using an insulated magnetic socket([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



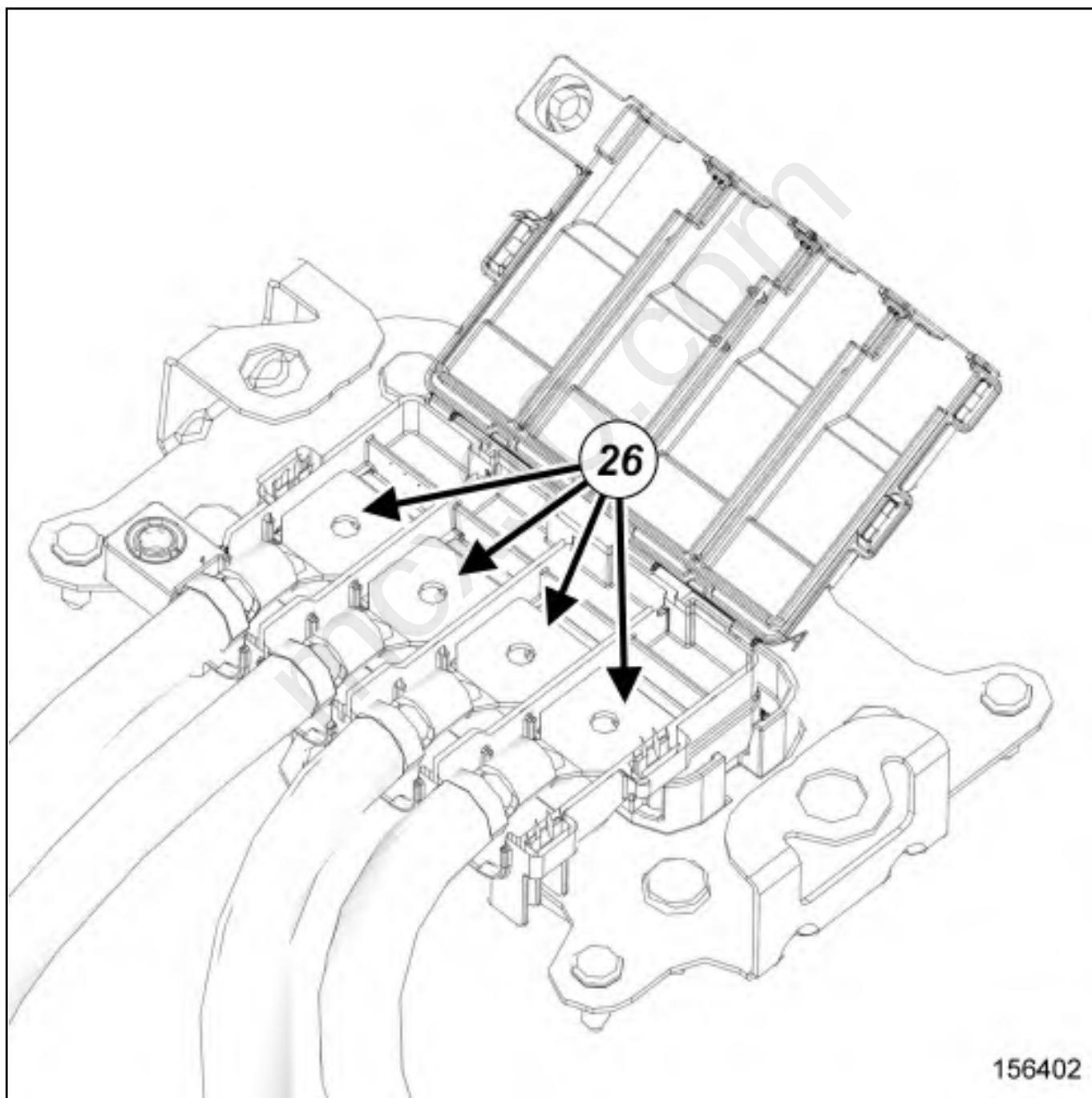
Mark always the nuts with a PAINT MARKER of a color different from the original.

Clip the safety device switch socket rear cover on it socket.



Note:

Pay attention to the mechanical coding.



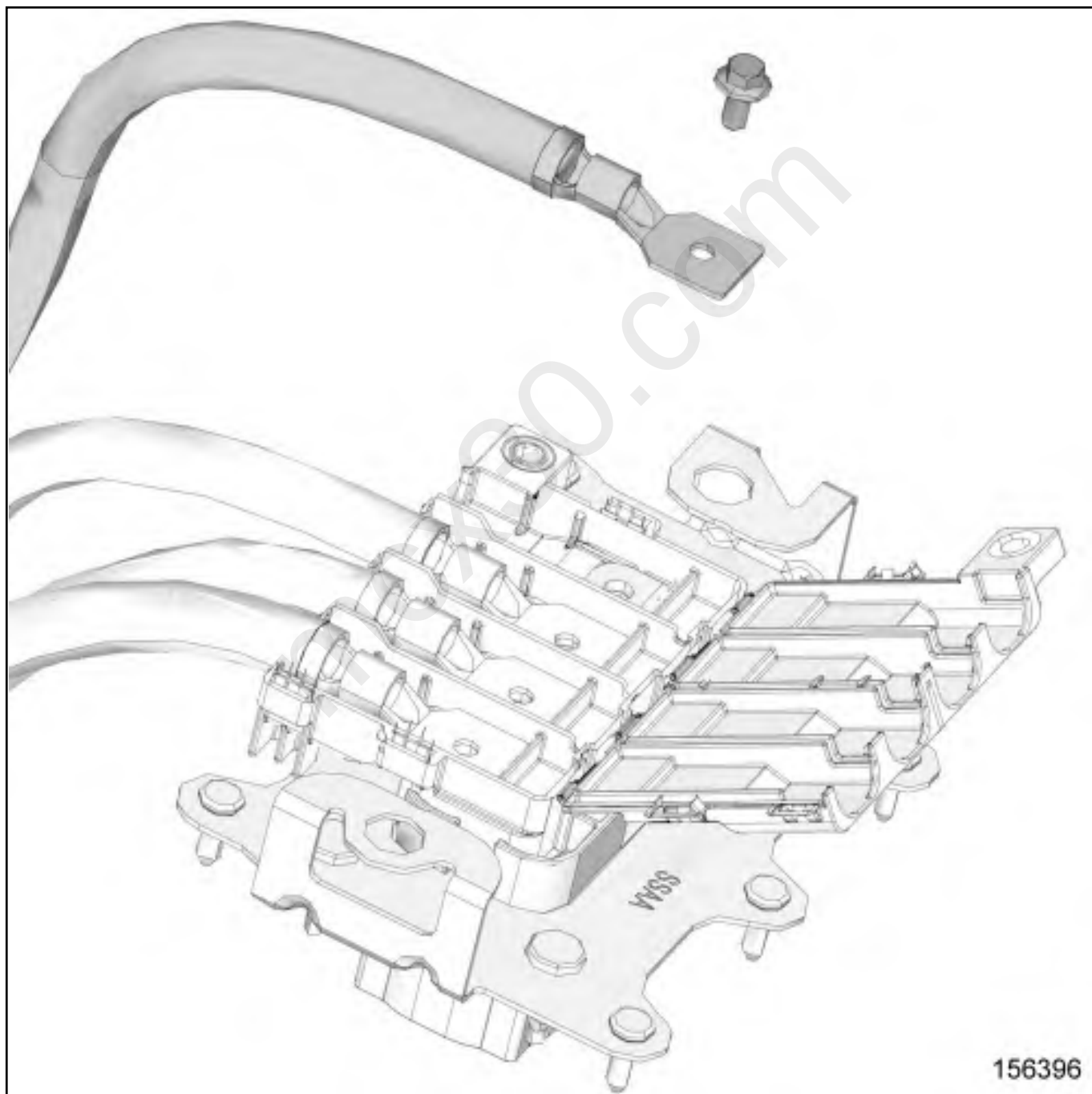
Refit the 4 power wires(26) on the safety device switch socket.

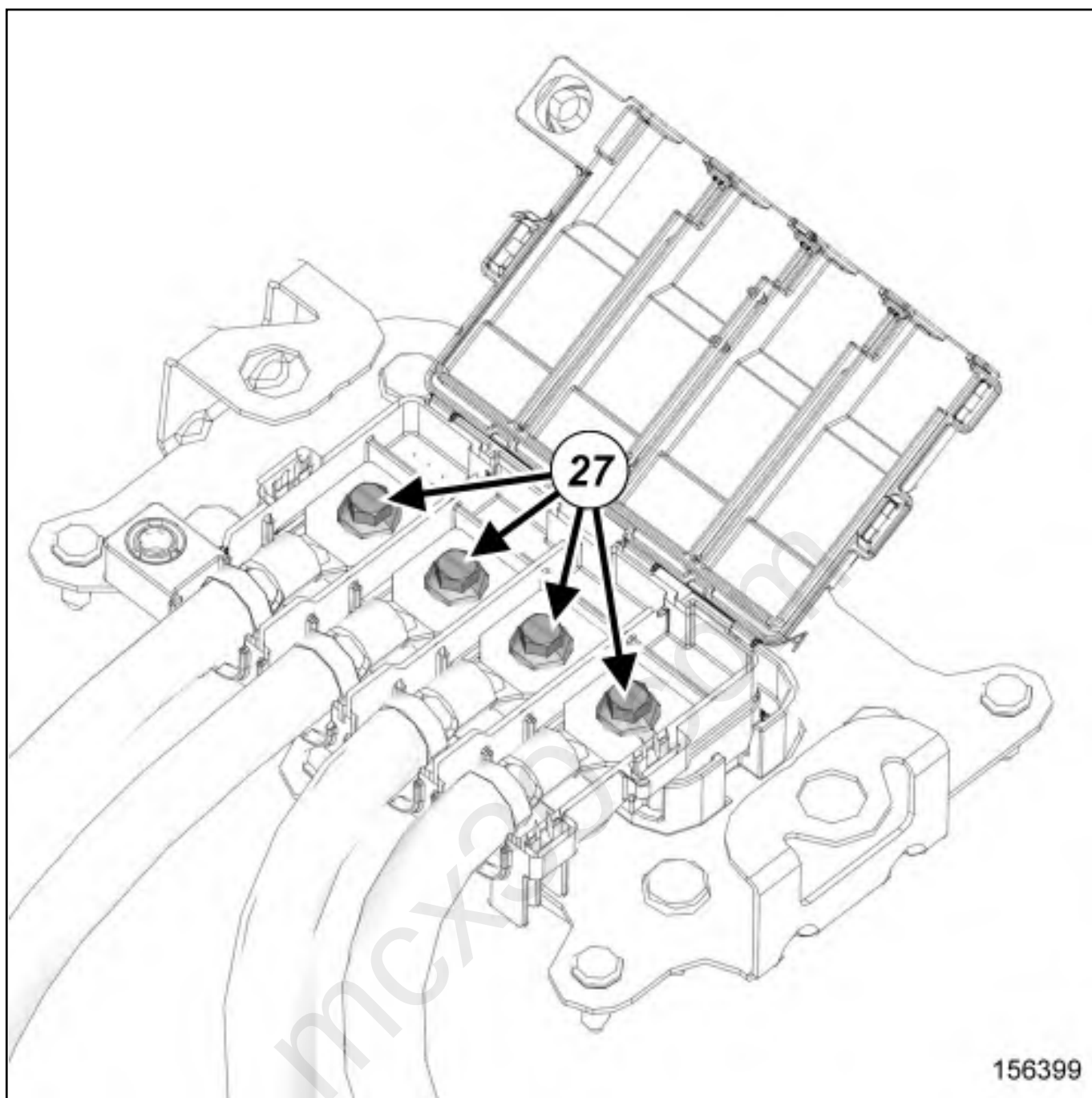
Note:



Place the streaks of the lugs in the up position.

Pay attention to the numeral coding of the 4 power wires.





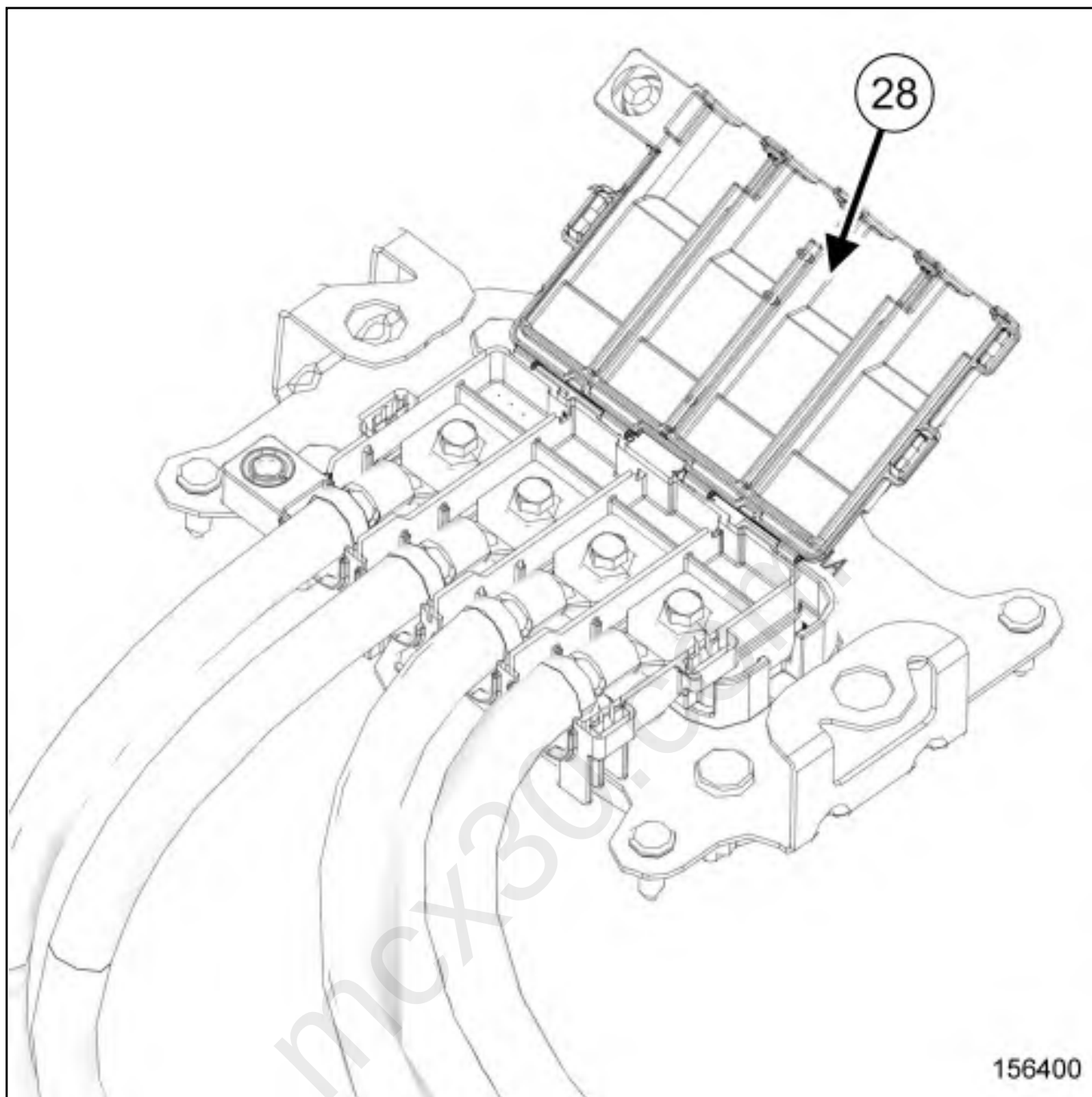
Refit the screws(27) on the 4 power wires using an insulated magnetic socket([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



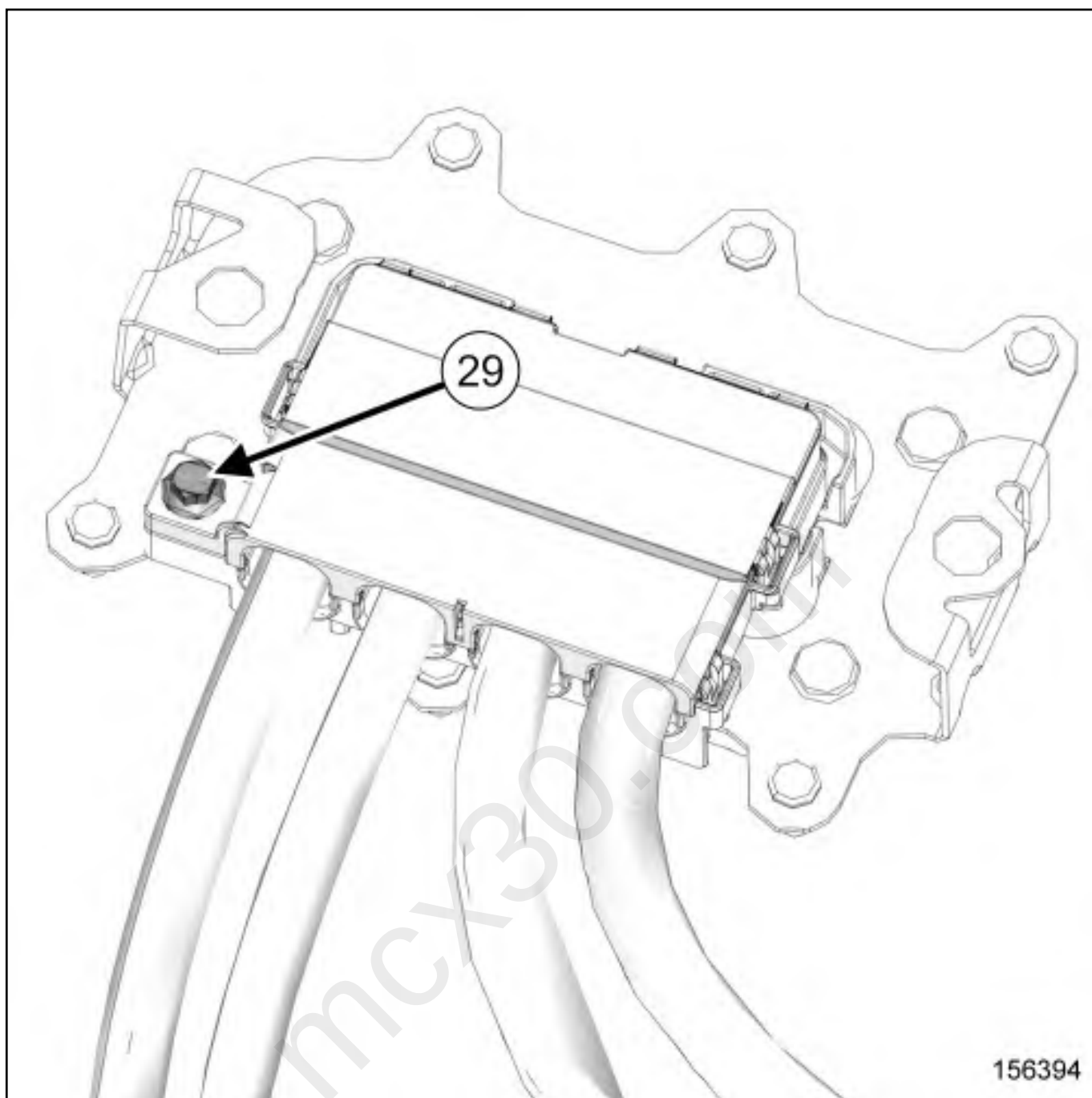
Torque tighten the screws on the 4 power wires using an insulated magnetic socket([see 19E, Traction battery, Traction battery module stack assembly : Exploded view](#)) .



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



Close the safety device switch socket rear cover(28) .



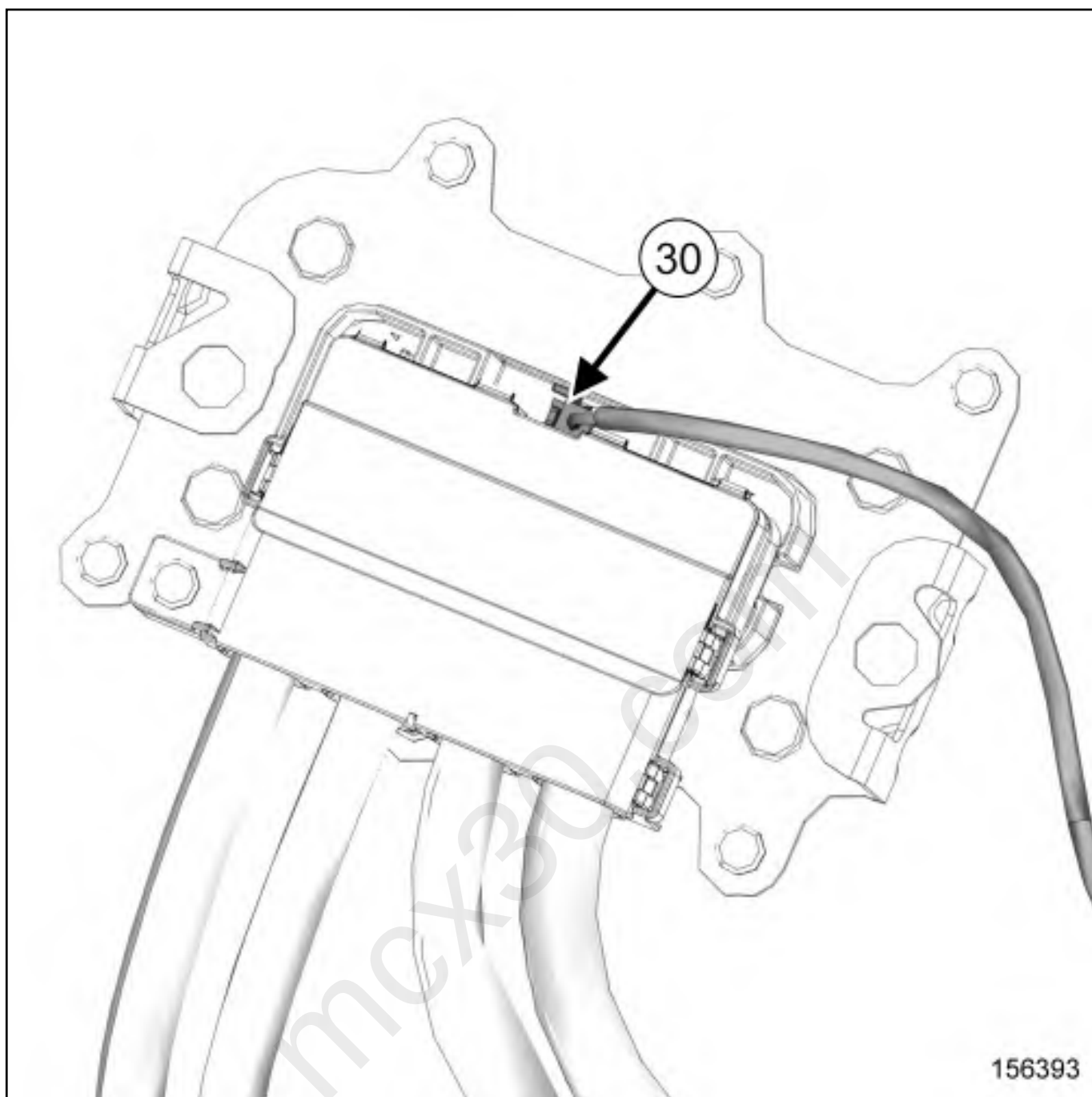
Refit the screw(29) on the safety device switch socket rear cover using an insulated magnetic socket (see **Traction battery module stack assembly : Removal - Refitting**) .



Torque tighten the screw on the safety device switch socket rear cover using an insulated magnetic socket (see **Traction battery module stack assembly : Removal - Refitting**) .



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



Connect the safety device switch socket interlock wire plug(30) using the toolSet of trim removal levers. (Car. 1363) .

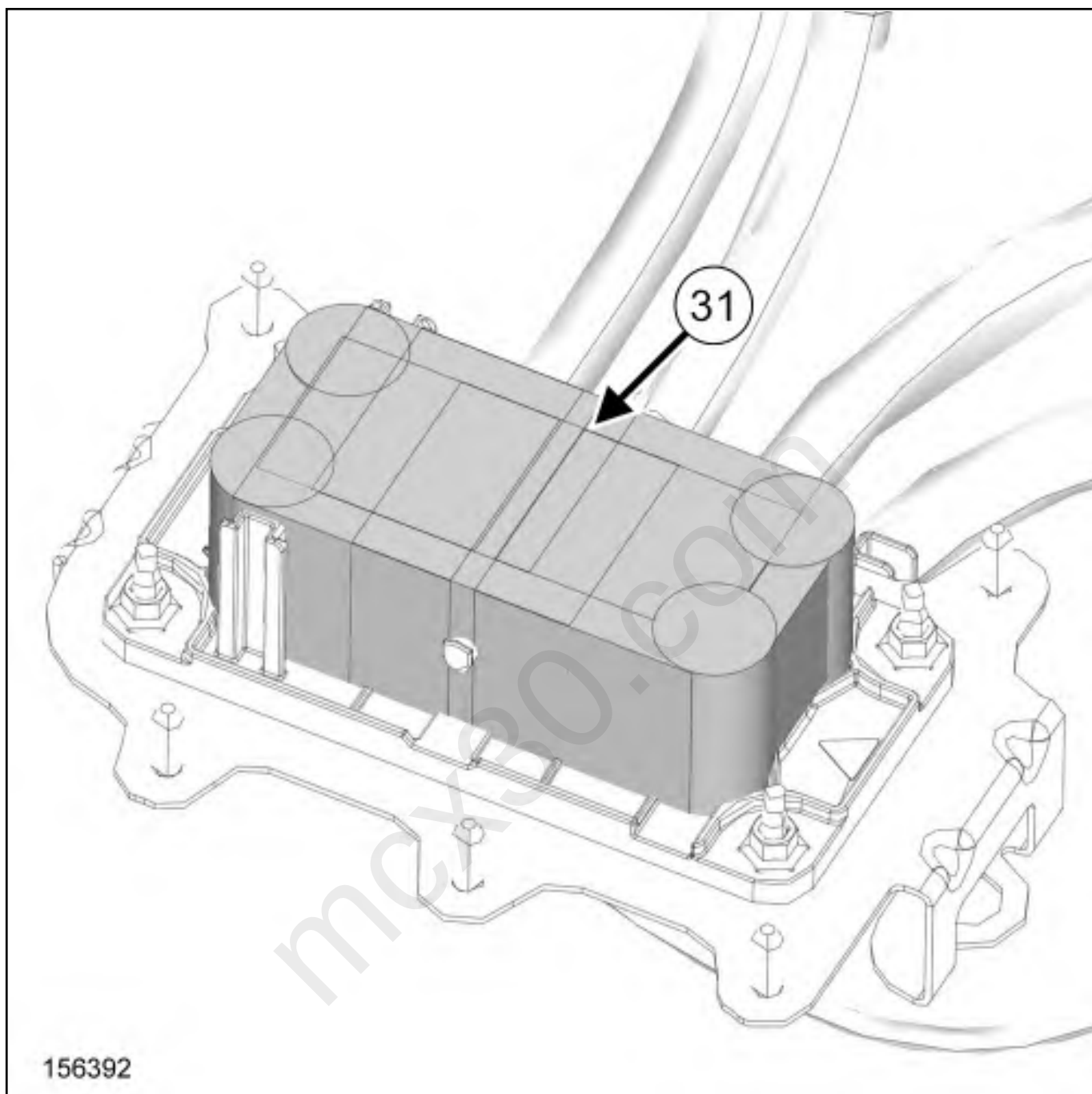


Note:

Pay attention to the mechanical coding.



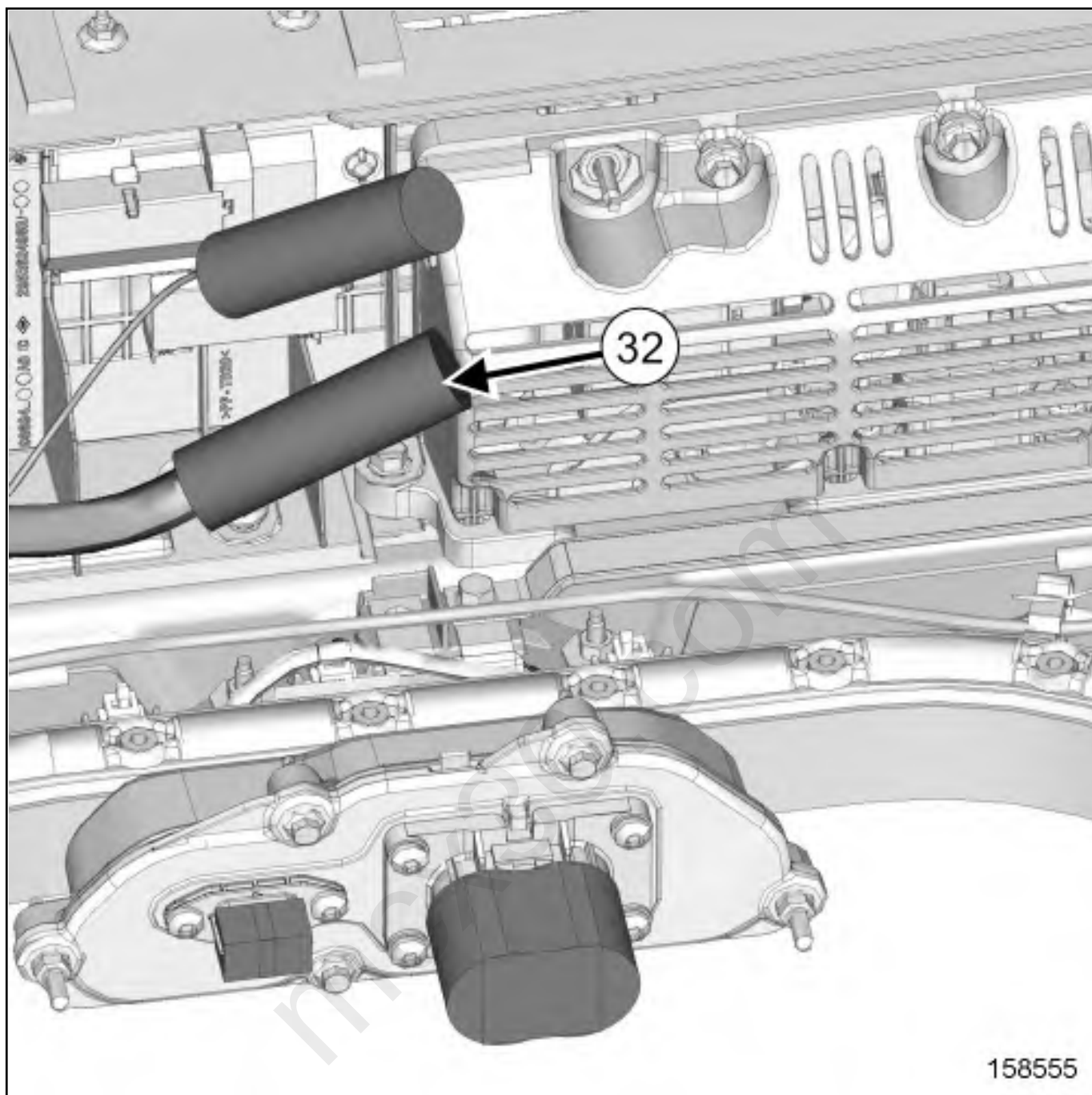
Make a push-pull test on the connector.



Refit the protection cover(31) on the the safety device switch socket.

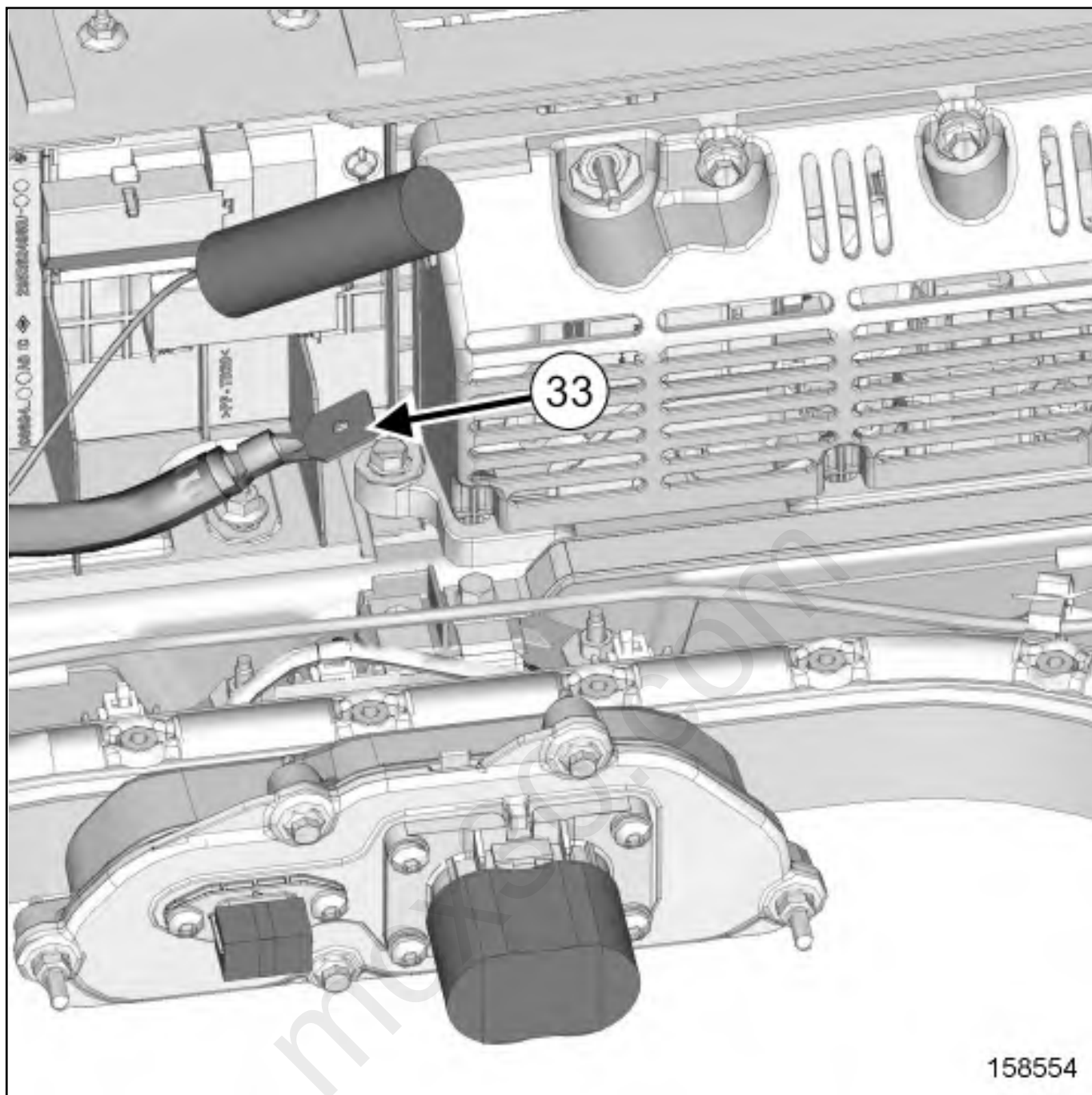
2. REFITTING OPERATION

Refit the safety device switch socket assembly on the lower cover.



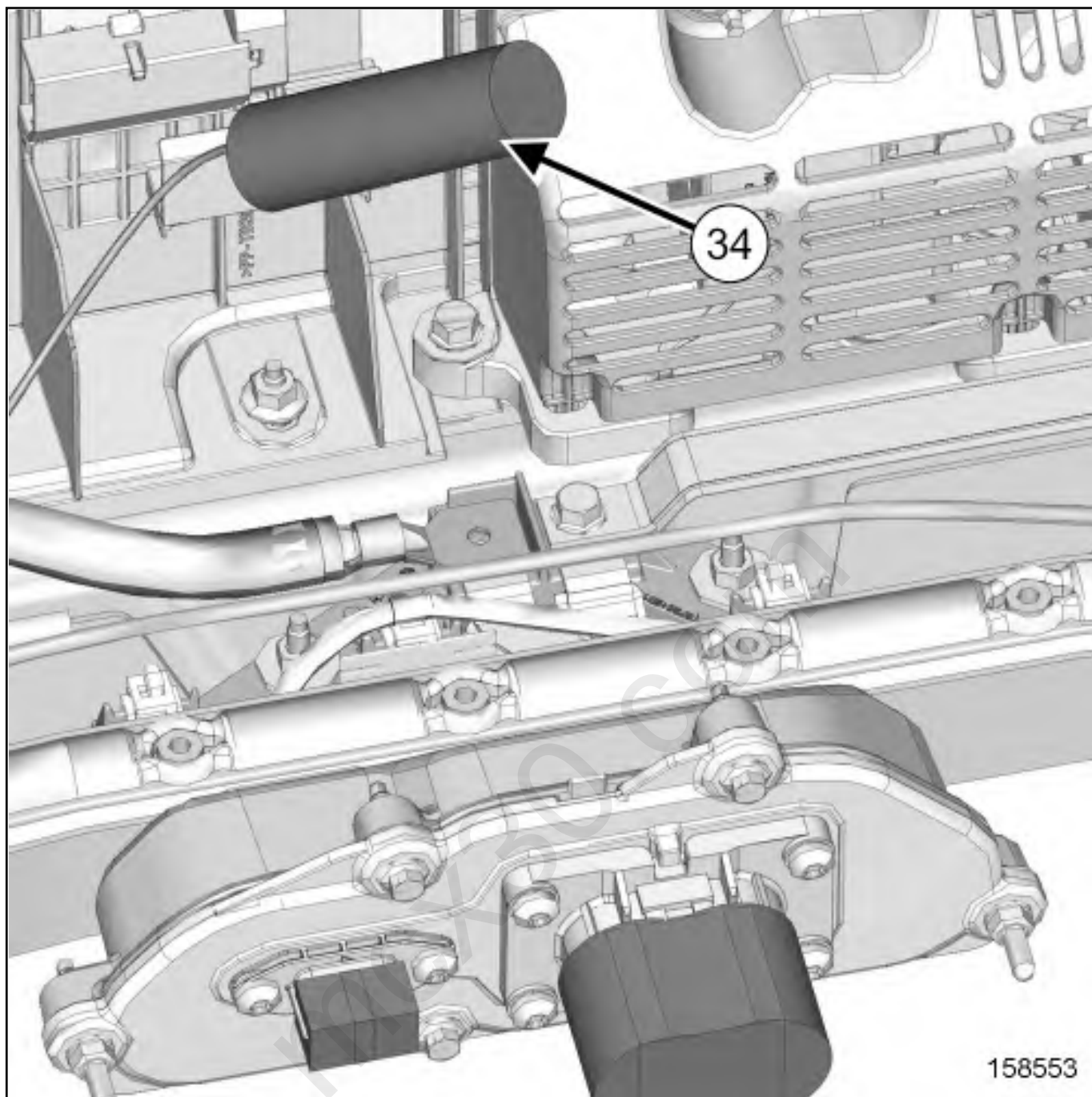
158555

Remove the insulated cover(32) from the power wire number 4 lug.

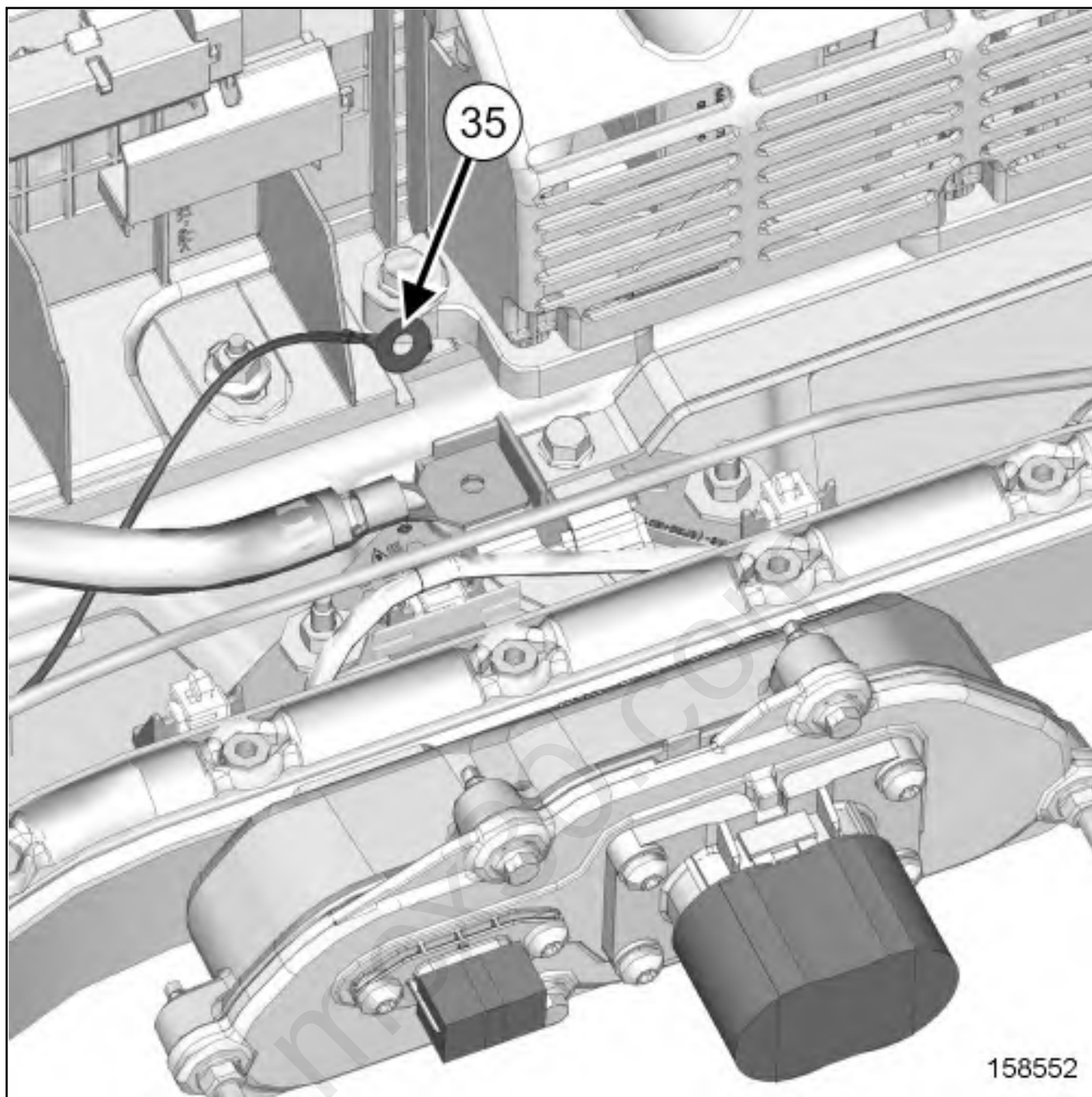


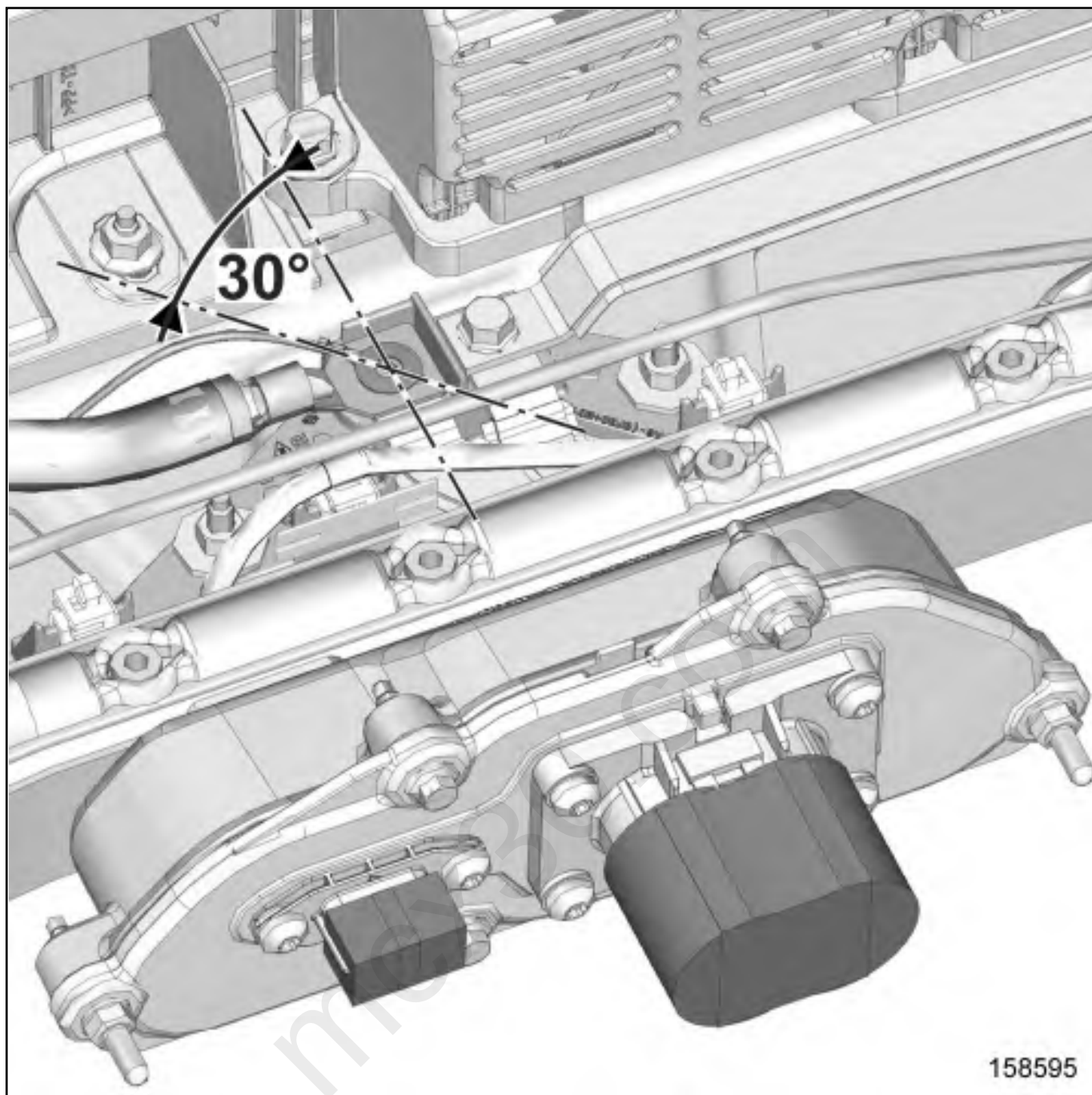
158554

Refit the power wire 4 lug(33) .

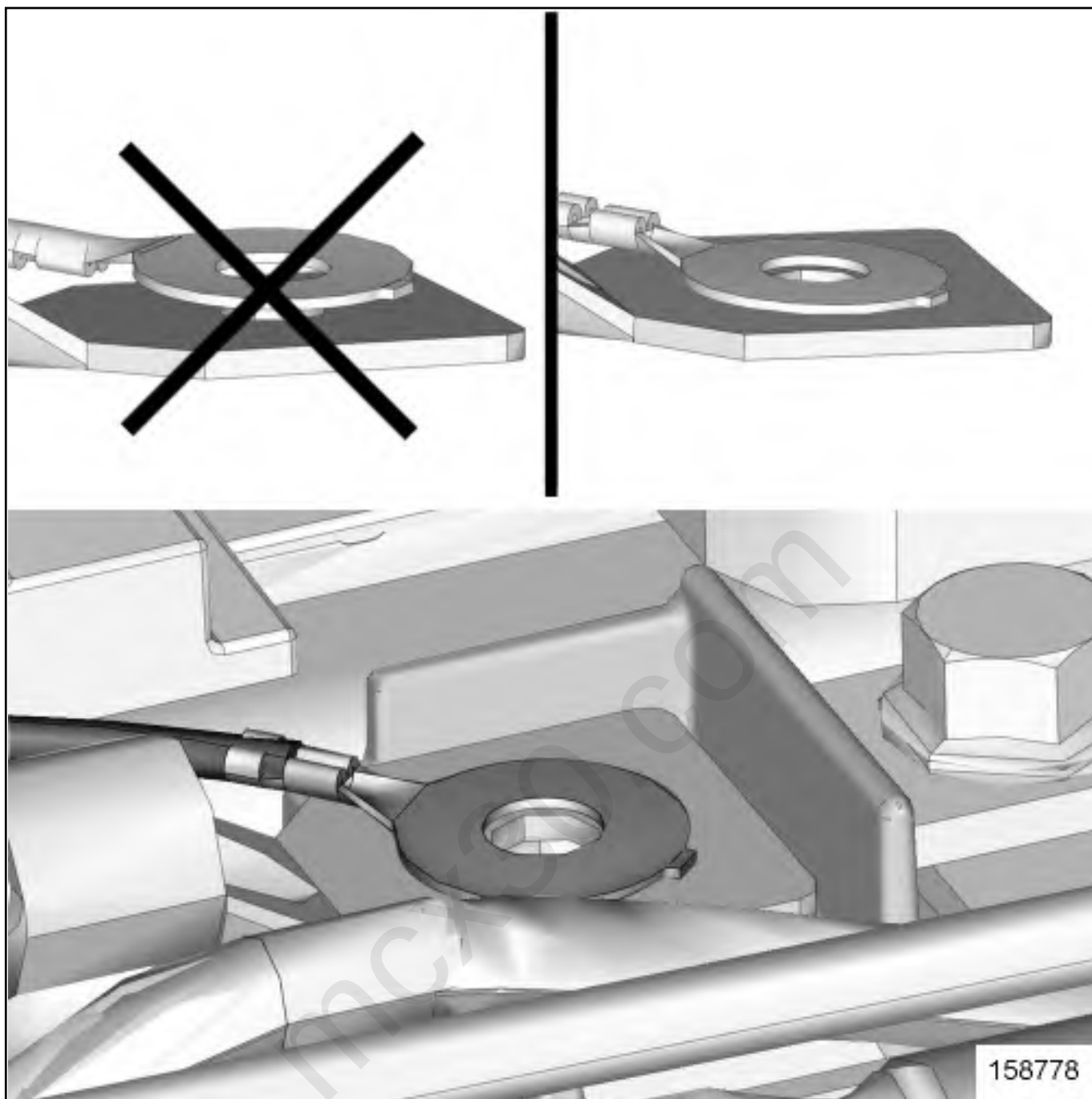


Remove the insulated cover(34) from the electronic filter wiring lug.





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Refit the electronic filter wiring lug(35) above the power number 4



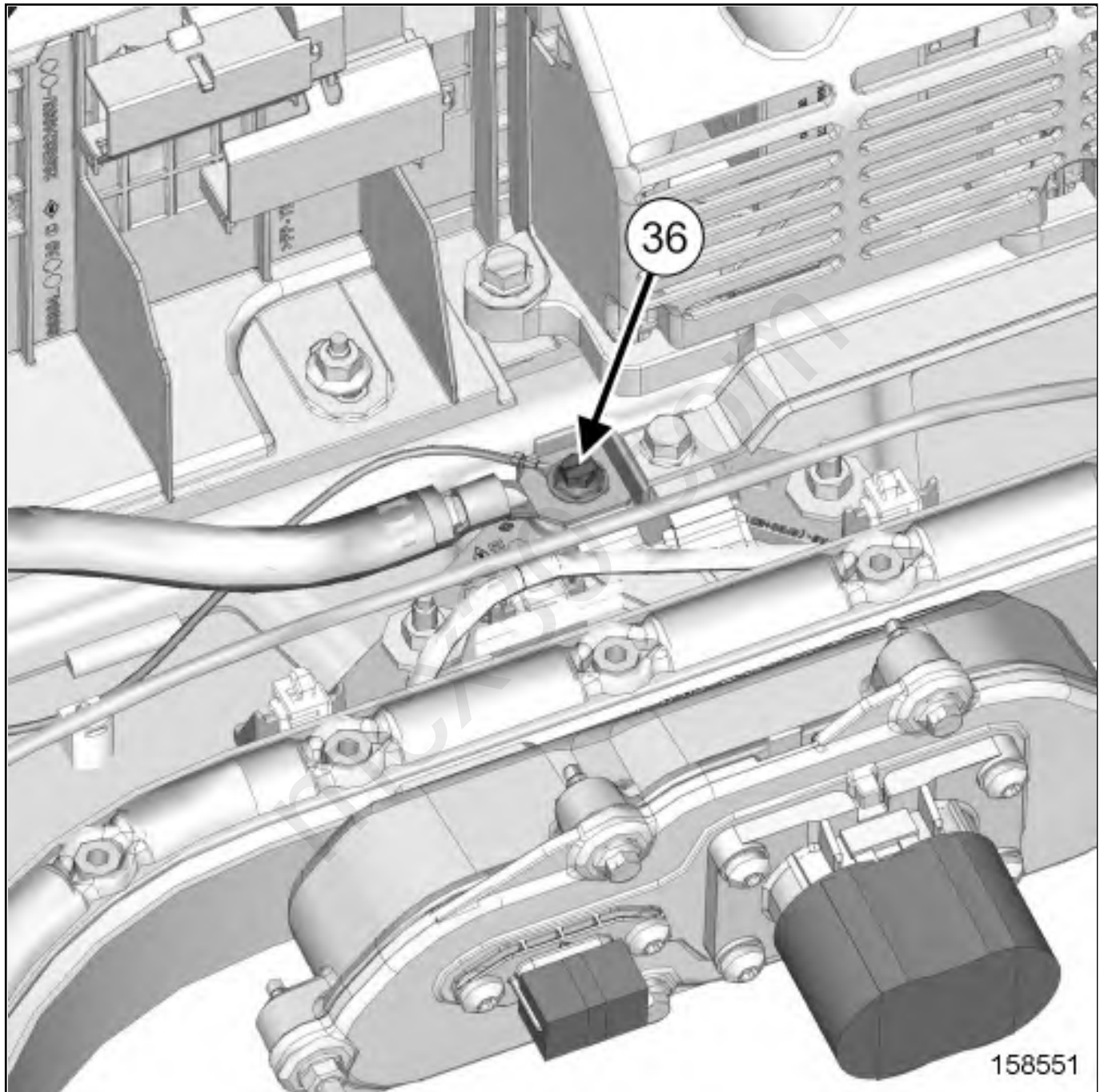
Note:

Position the filter electronic lug to 30 degrees.



Note:

The flat of the filter electronic lug downwardly.



Refit the electronic filter wiring and power wire number 4 connection screw(36) on the insulated support using an insulated magnetic socket(see **Traction battery module stack assembly : Removal - Refitting**) .

Torque tighten the electronic filter wiring and power wire number 4 connection screw on the insulated support using an insulated magnetic socket(see **Traction battery module stack assembly : Removal - Refitting**) .



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



Fit the clamp at the place indicated on the power wire number 4.

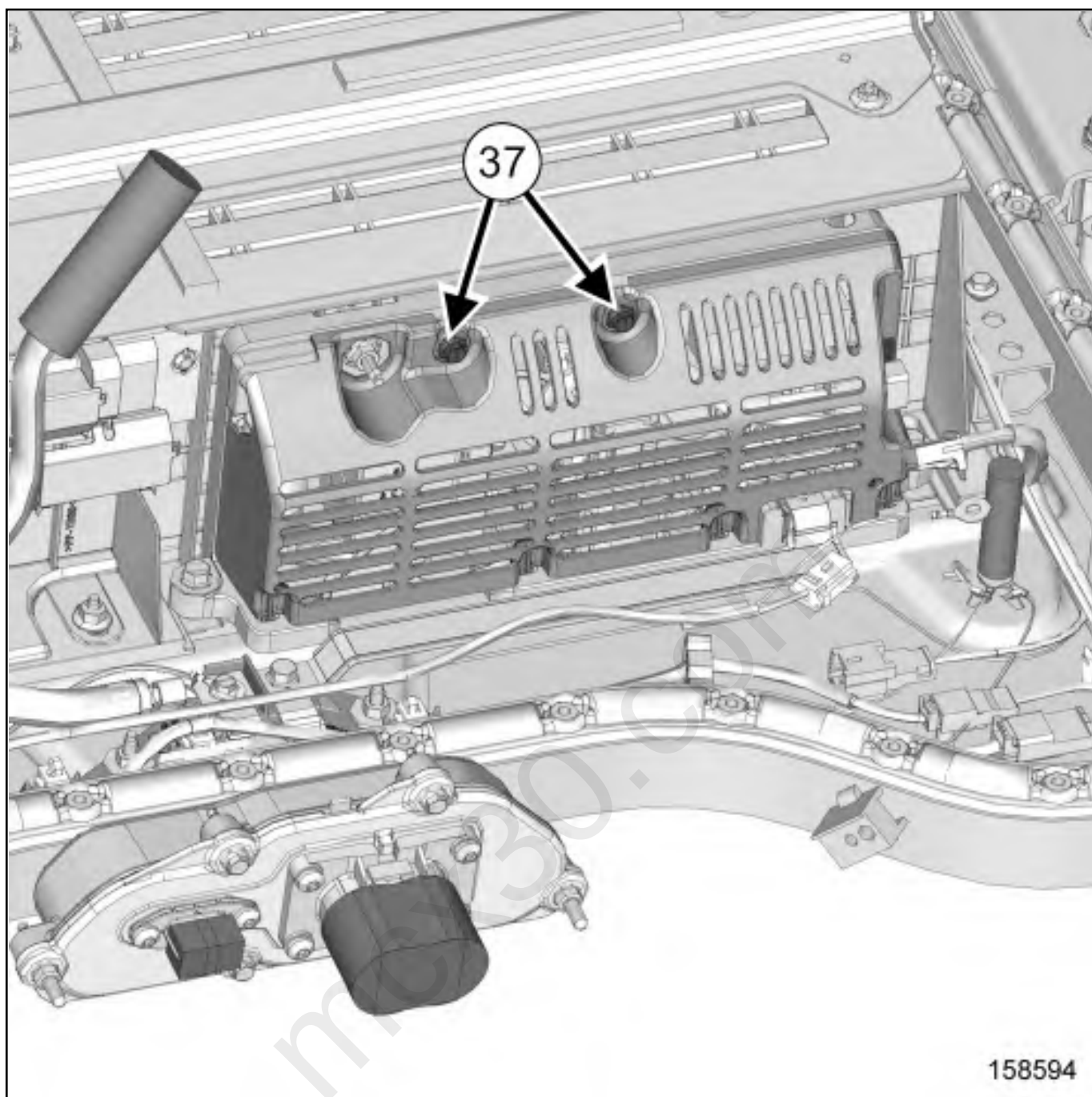


Clip the clamp clip.

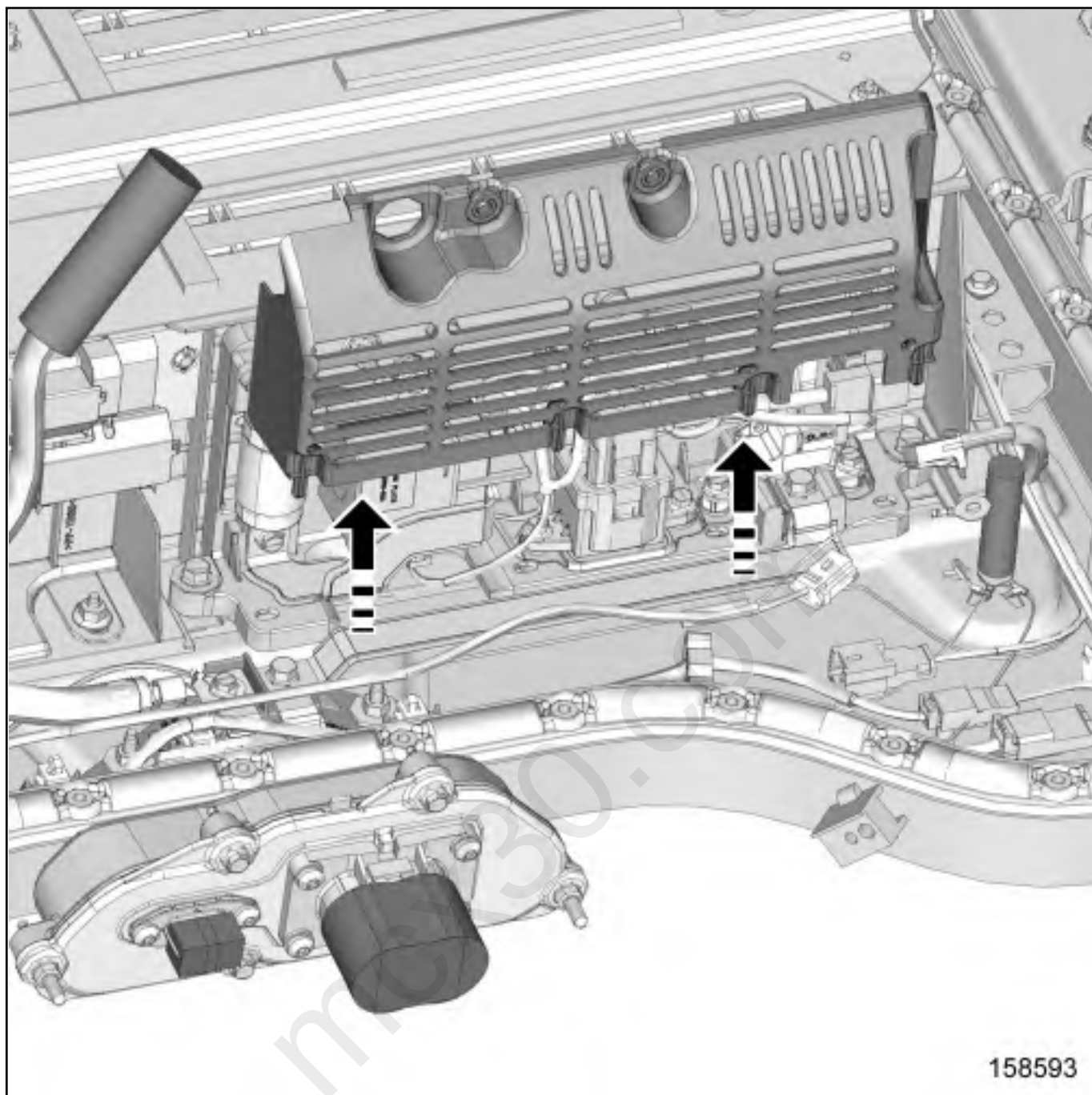


Cut the clip clamp using an insulated cutting pliers.

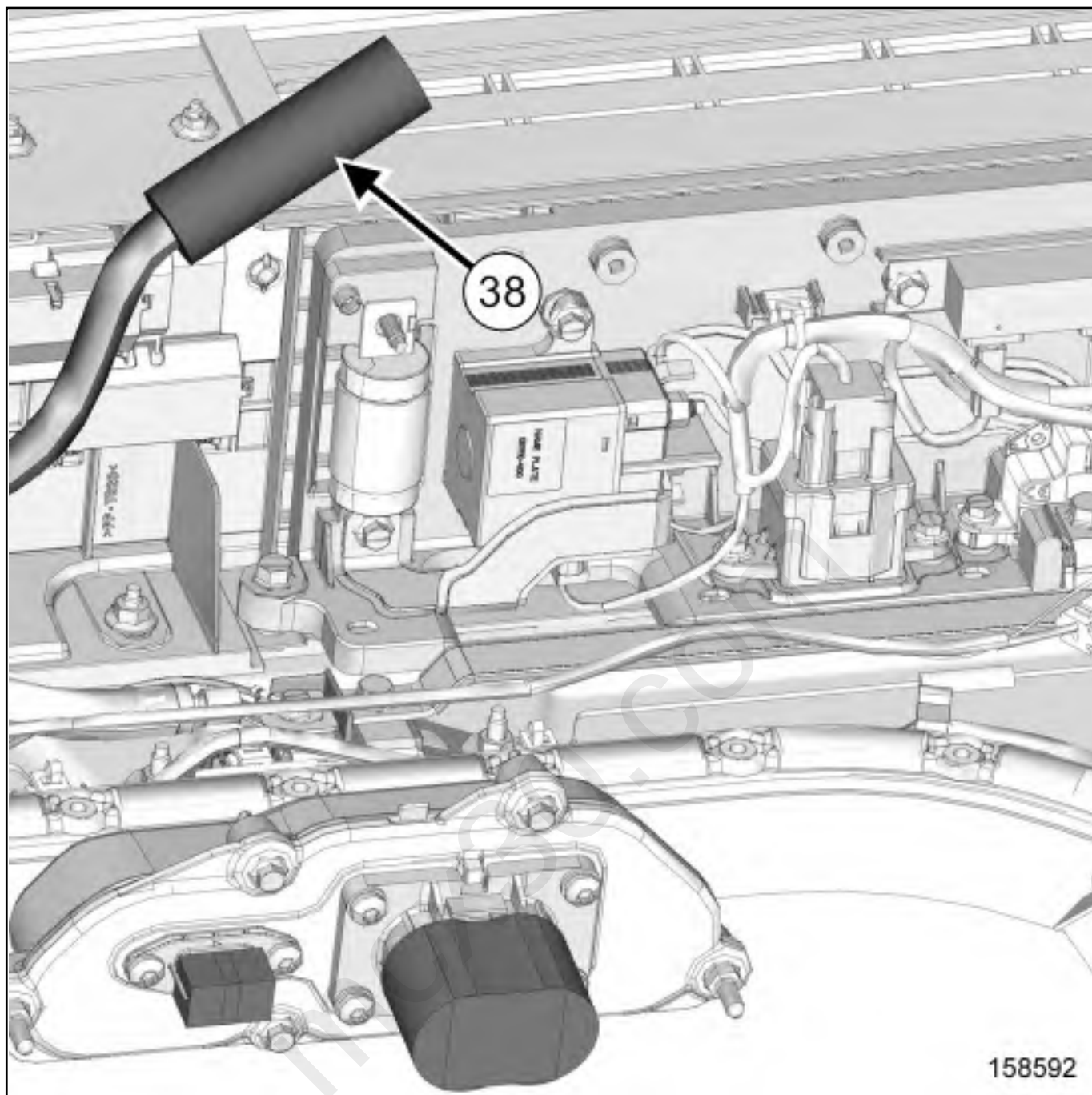
mcx30.com



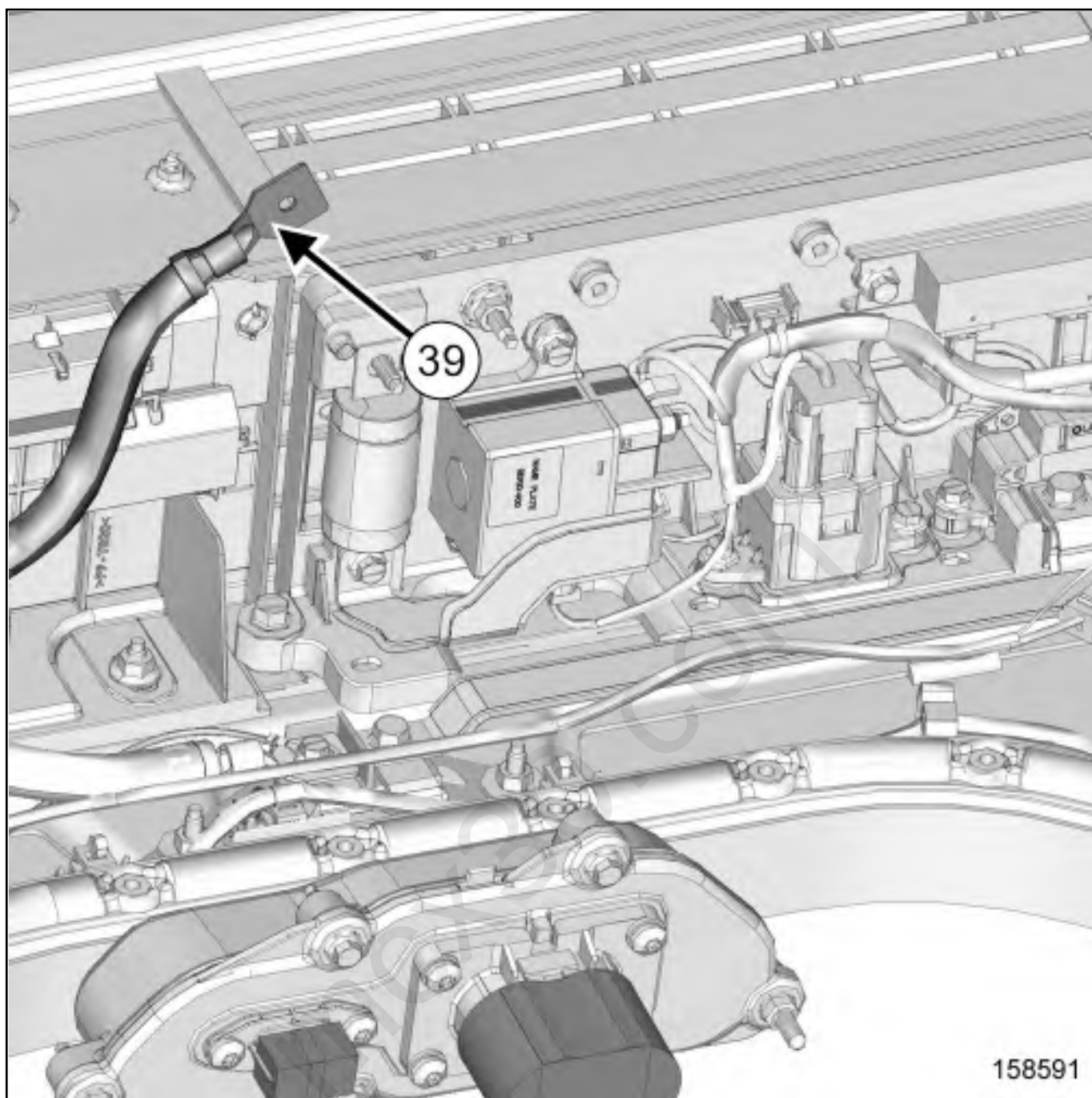
Remove the internal junction box cover screws(37) using an insulated magnetic socket(see **Traction battery module stack assembly : Removal - Refitting**) .



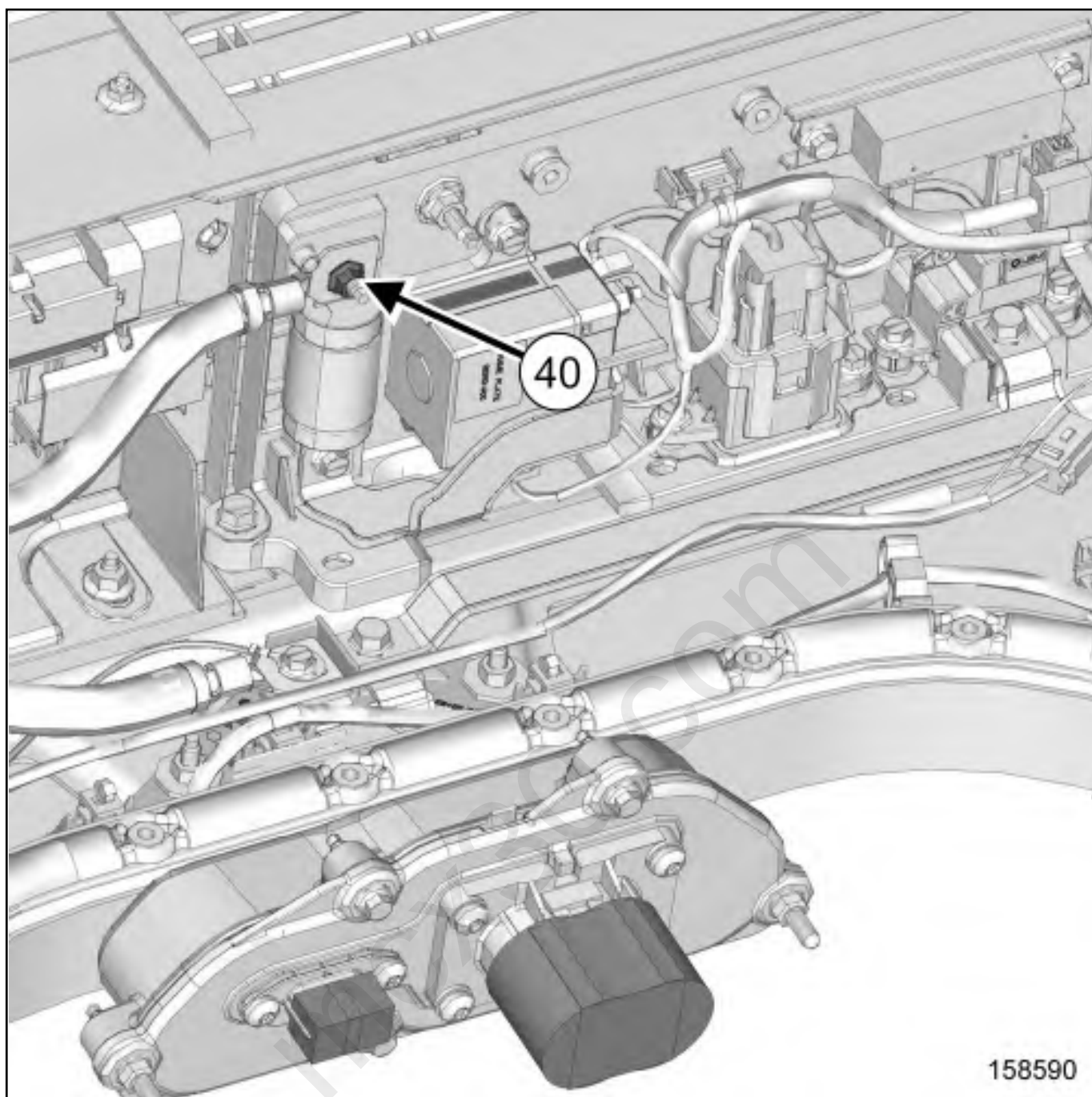
Remove the internal junction box cover.



Remove the insulation from the power wire number 3 lug(38) .



Refit the power wire number 3 lug(39) .



Refit the power wire number 3 connection nut(40) using an insulated magnetic socket(see Traction battery module stack assembly : Removal - Refitting) .

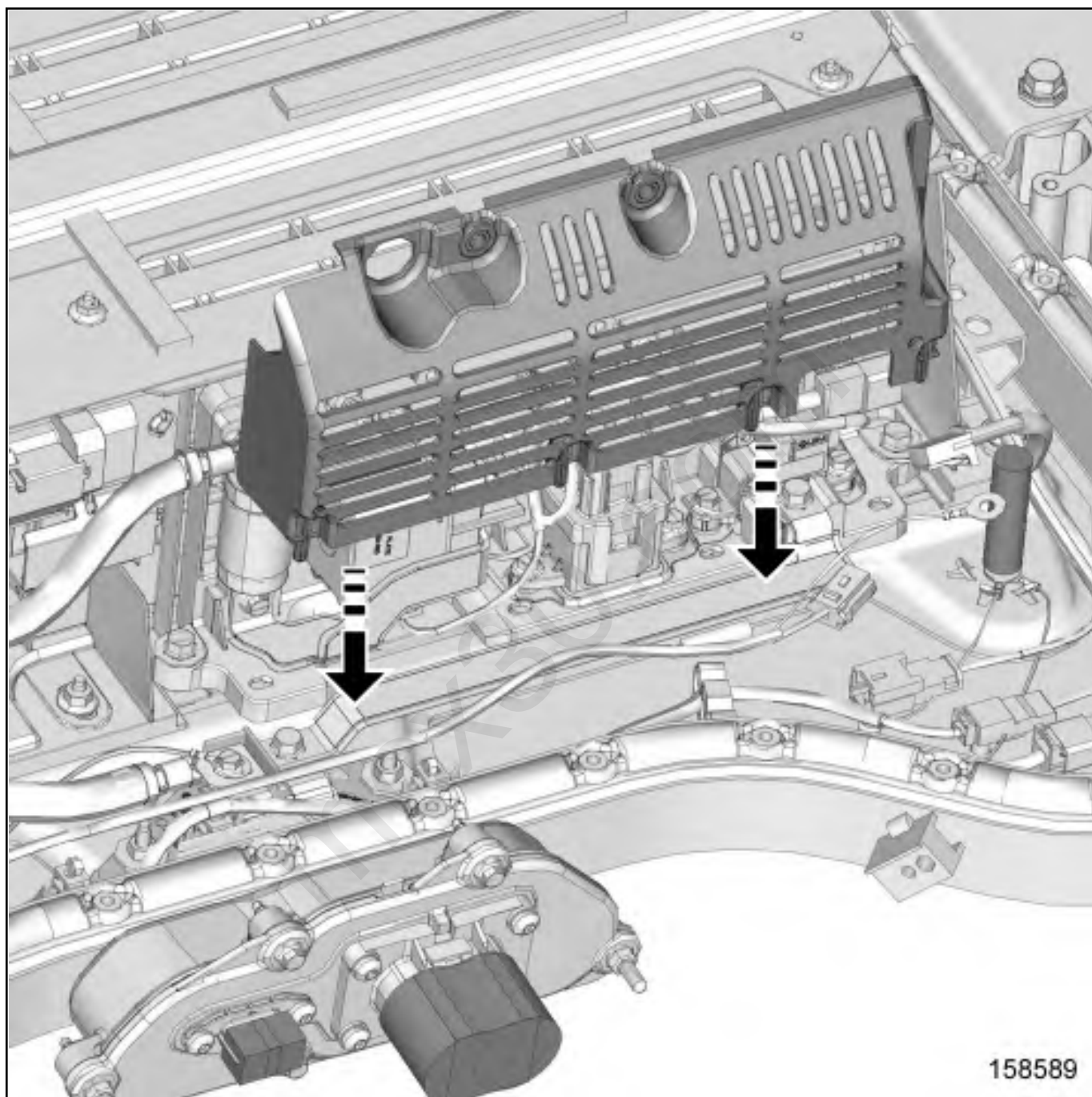


Torque tighten the power wire number 3 connection nut using an insulated magnetic socket(see Traction battery module stack assembly : Removal - Refitting) .



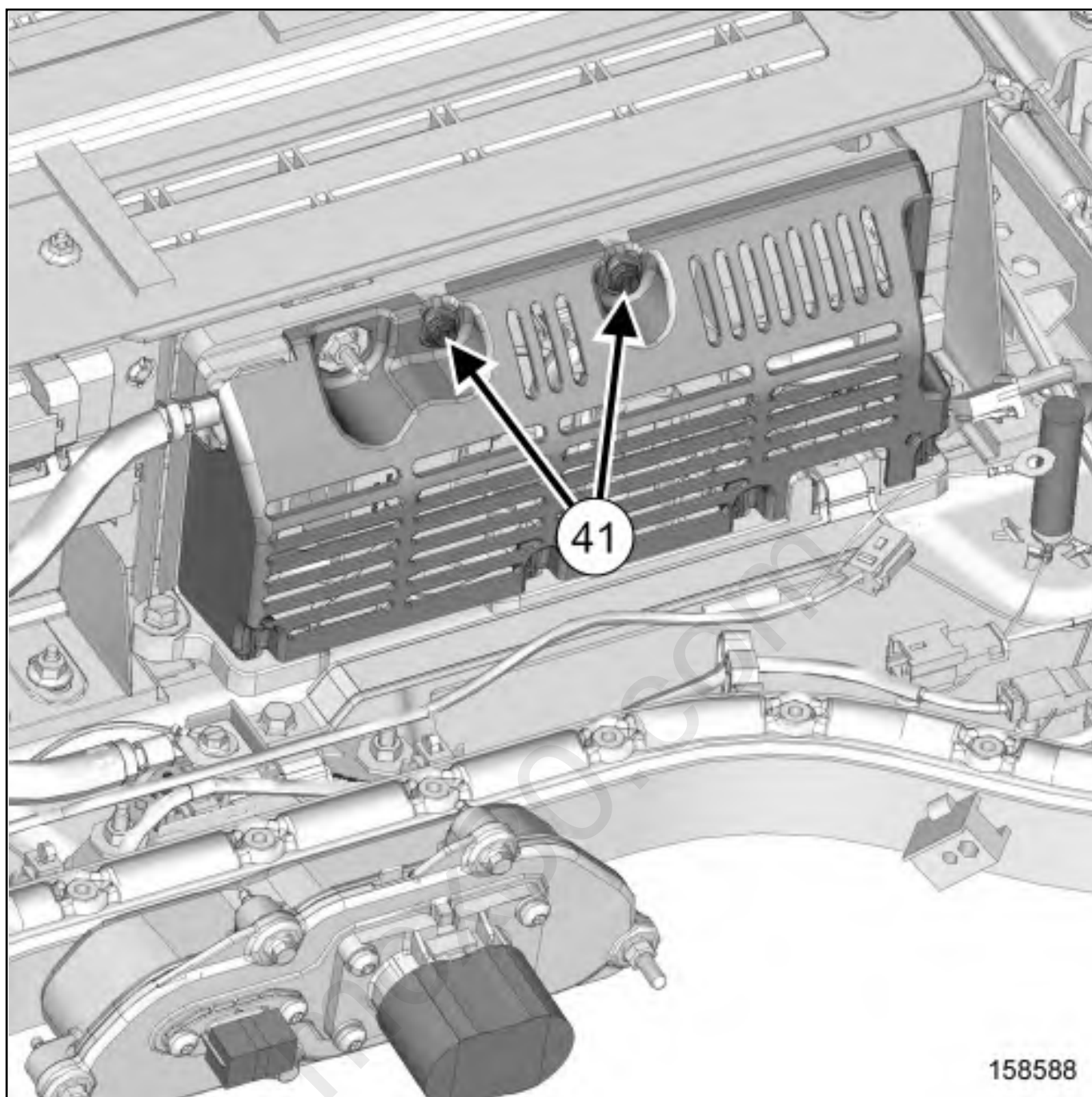
Mark always the nut with a PAINT MARKER of a color different from the original.

Clean the threads of the internal junction box cover screws using a vacuum equipped with a plastic nozzle.



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Refit the internal junction box cover.



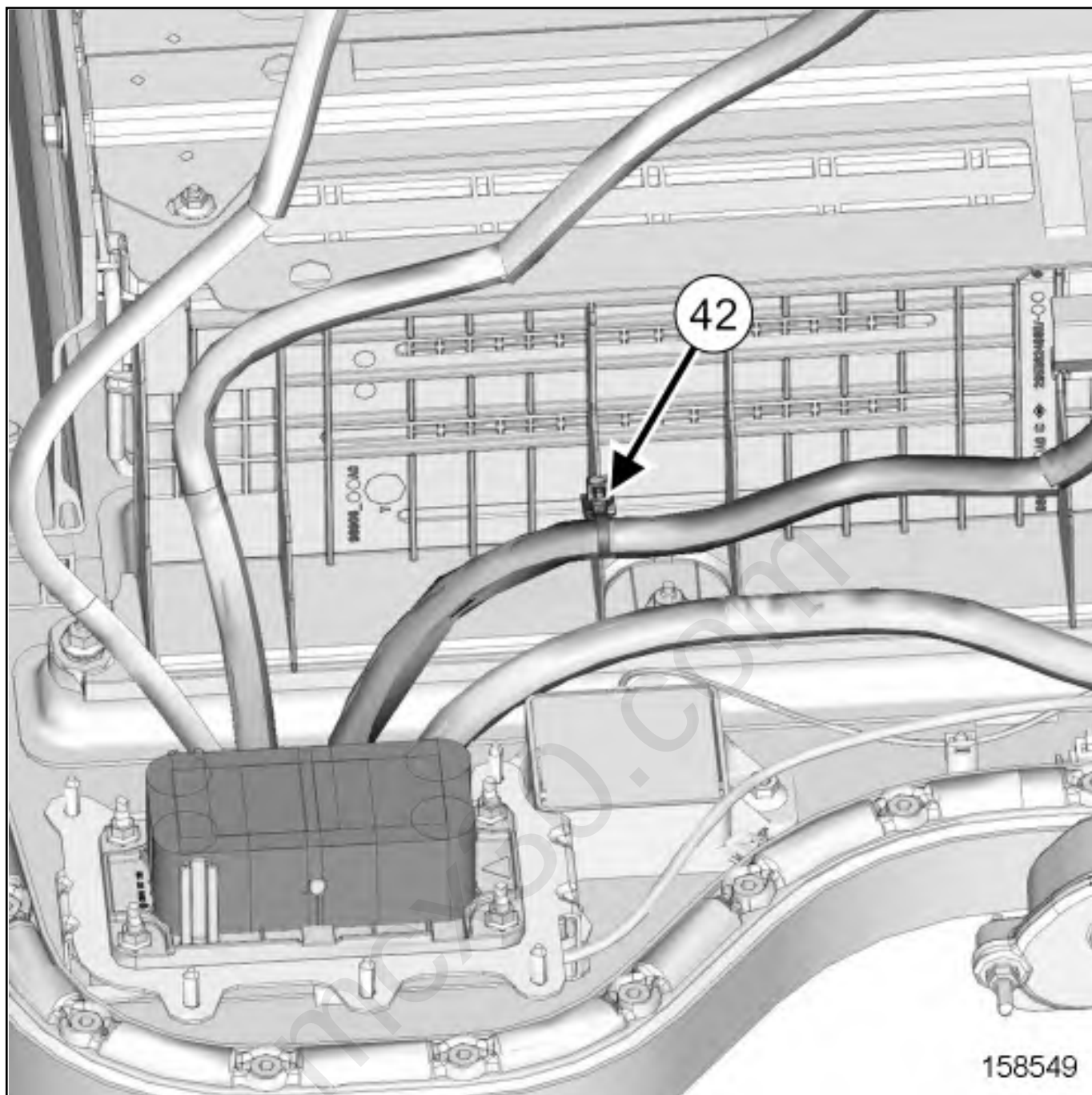
Refit the internal junction box cover screws(41) using an insulated magnetic socket(see **Traction battery module stack assembly : Removal - Refitting**) .



Torque tighten the internal junction box cover screws using an insulated magnetic socket(see **Traction battery module stack assembly : Removal - Refitting**) .



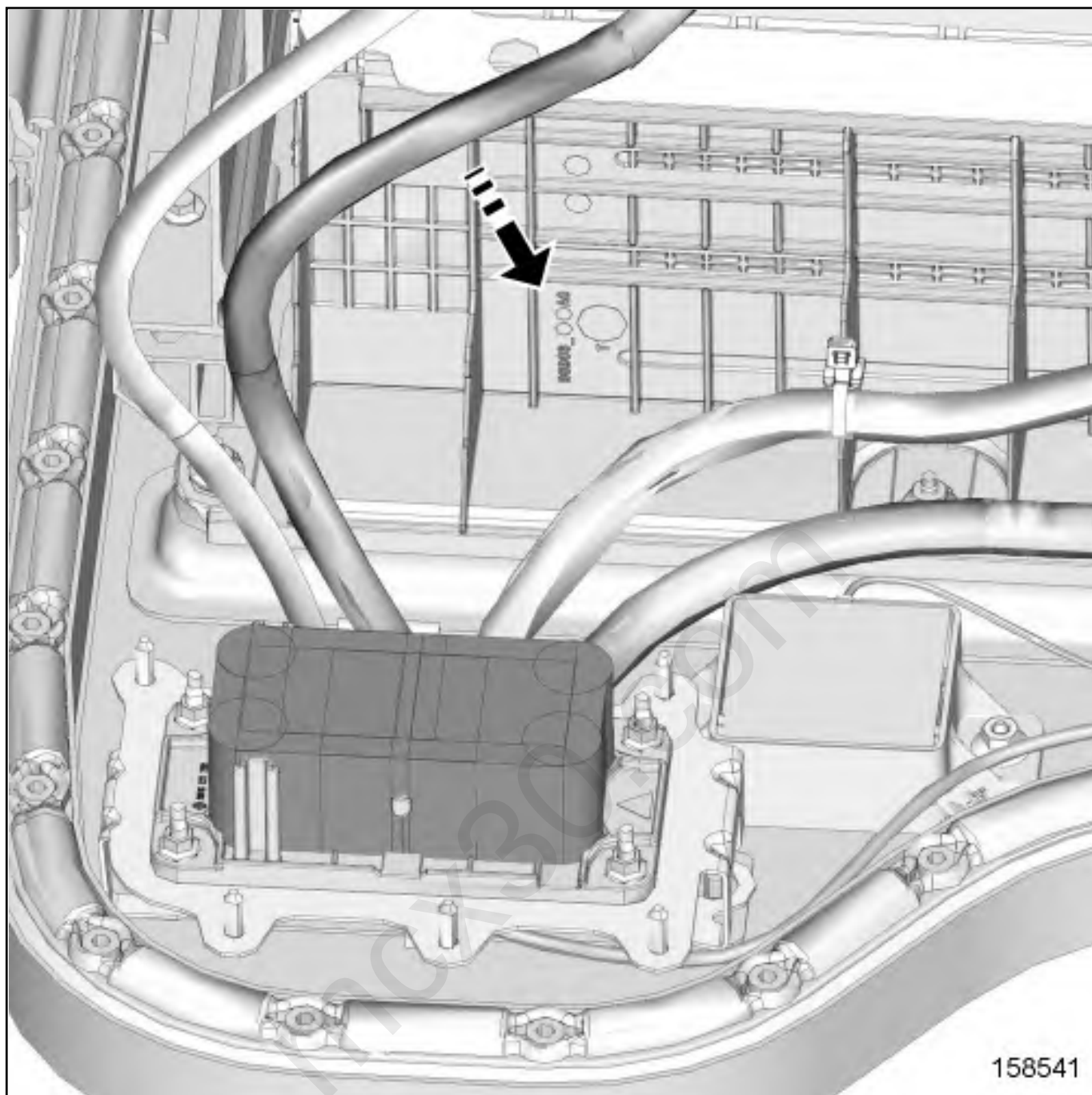
Mark always the screws with a PAINT MARKER of a color different from the original.



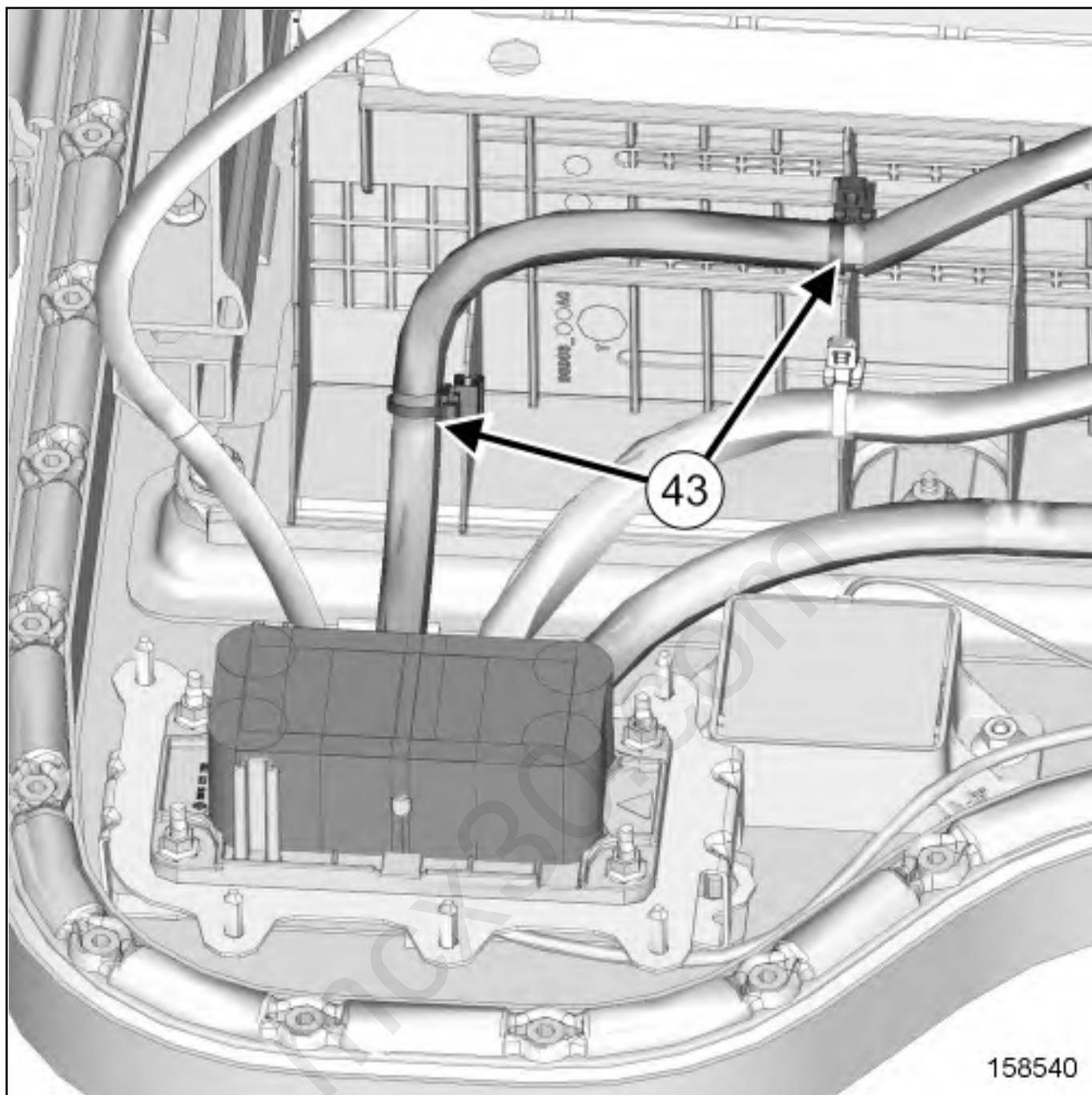
Fit the clamp(42) at the place indicated on the power wire number 3.

Clip the clamp clip.

Cut the clip clamp using an insulated cutting pliers.



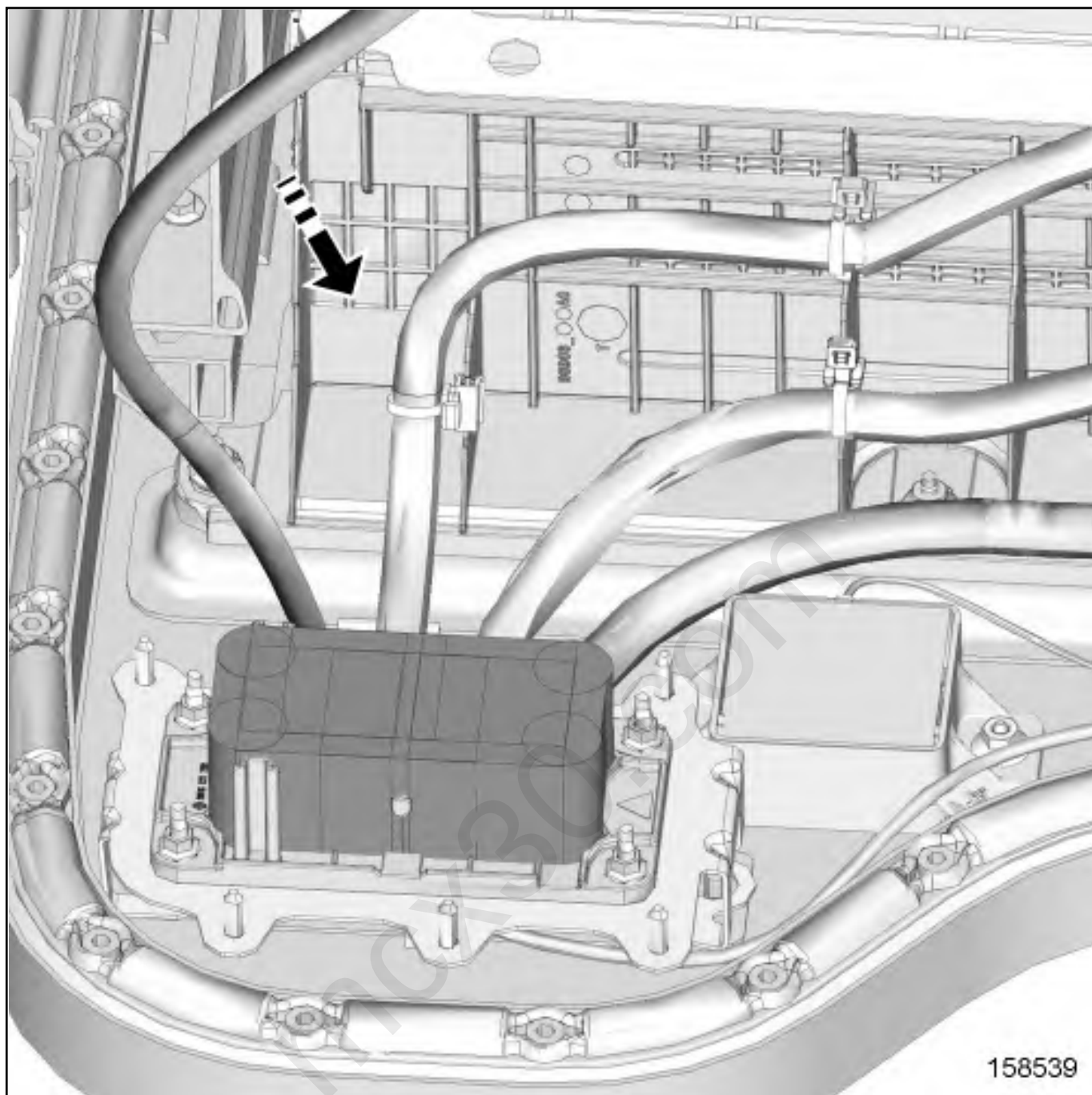
158541

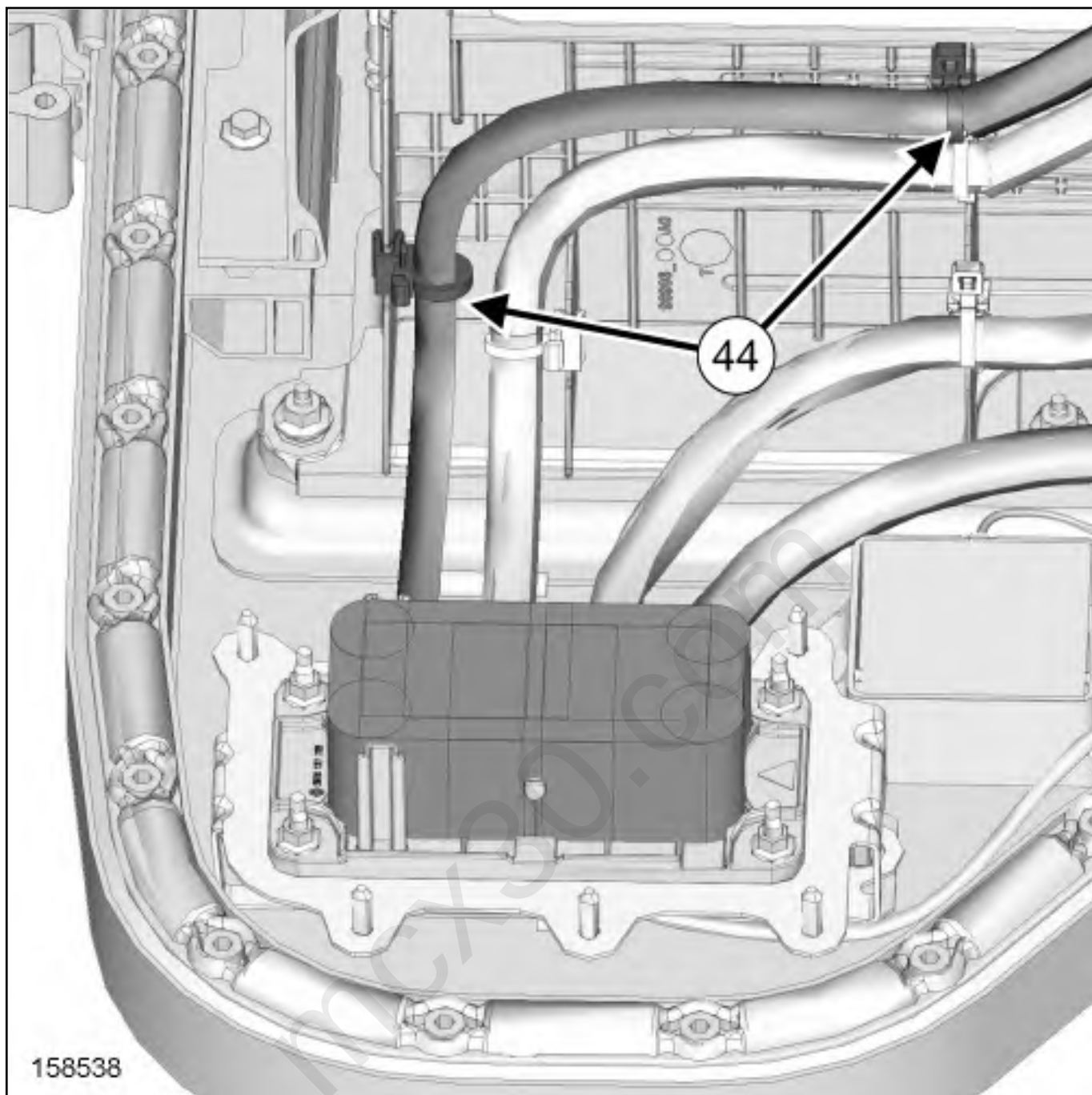


Fit the clamps(43) at the place indicated on the power wire number 2.

Clip the clamps clips.

Cut the clip clamps using an insulated cutting pliers.

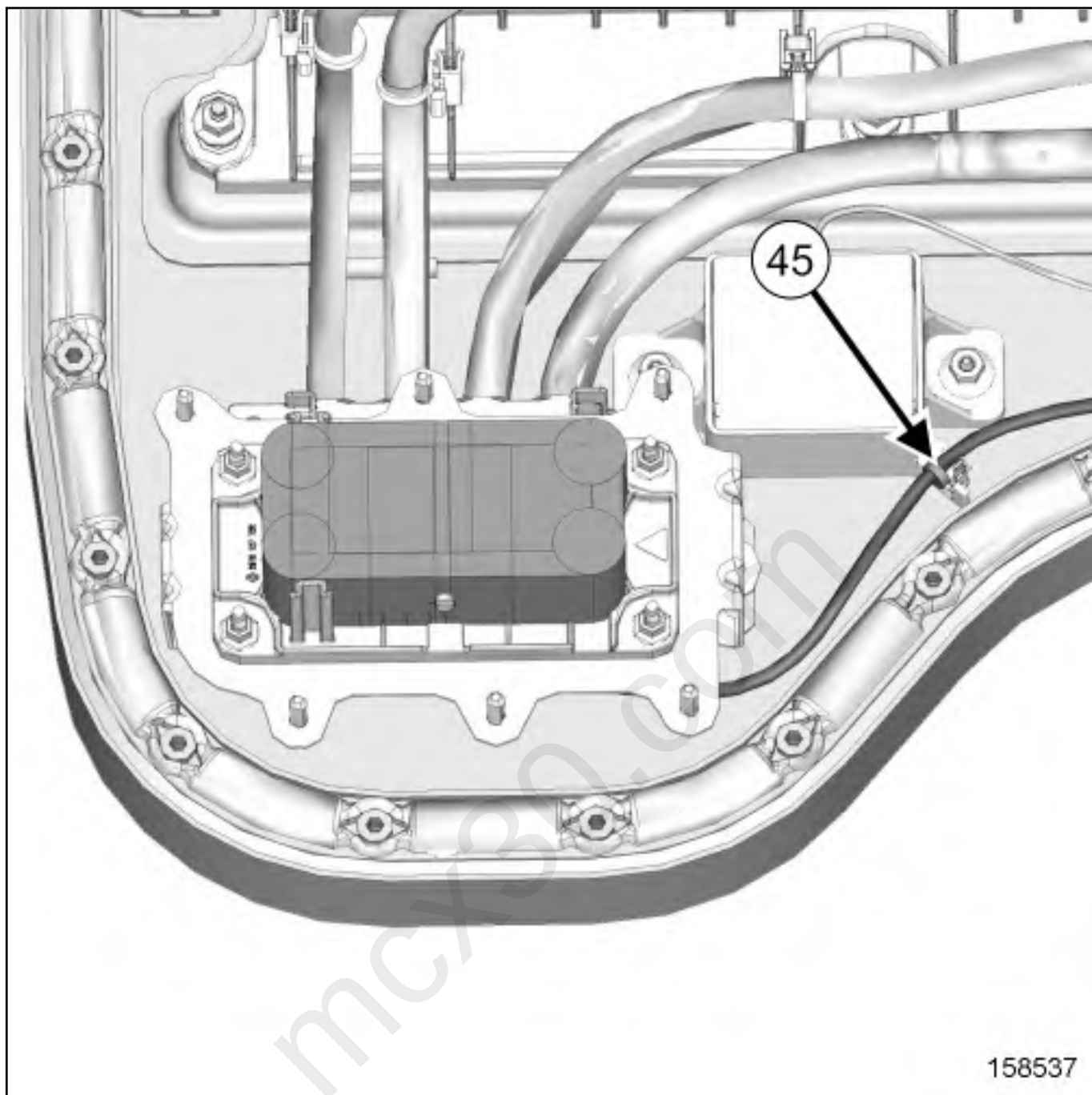




Fit the clamps(44) at the place indicated on the power wire number 1.

Clip the clamp clips.

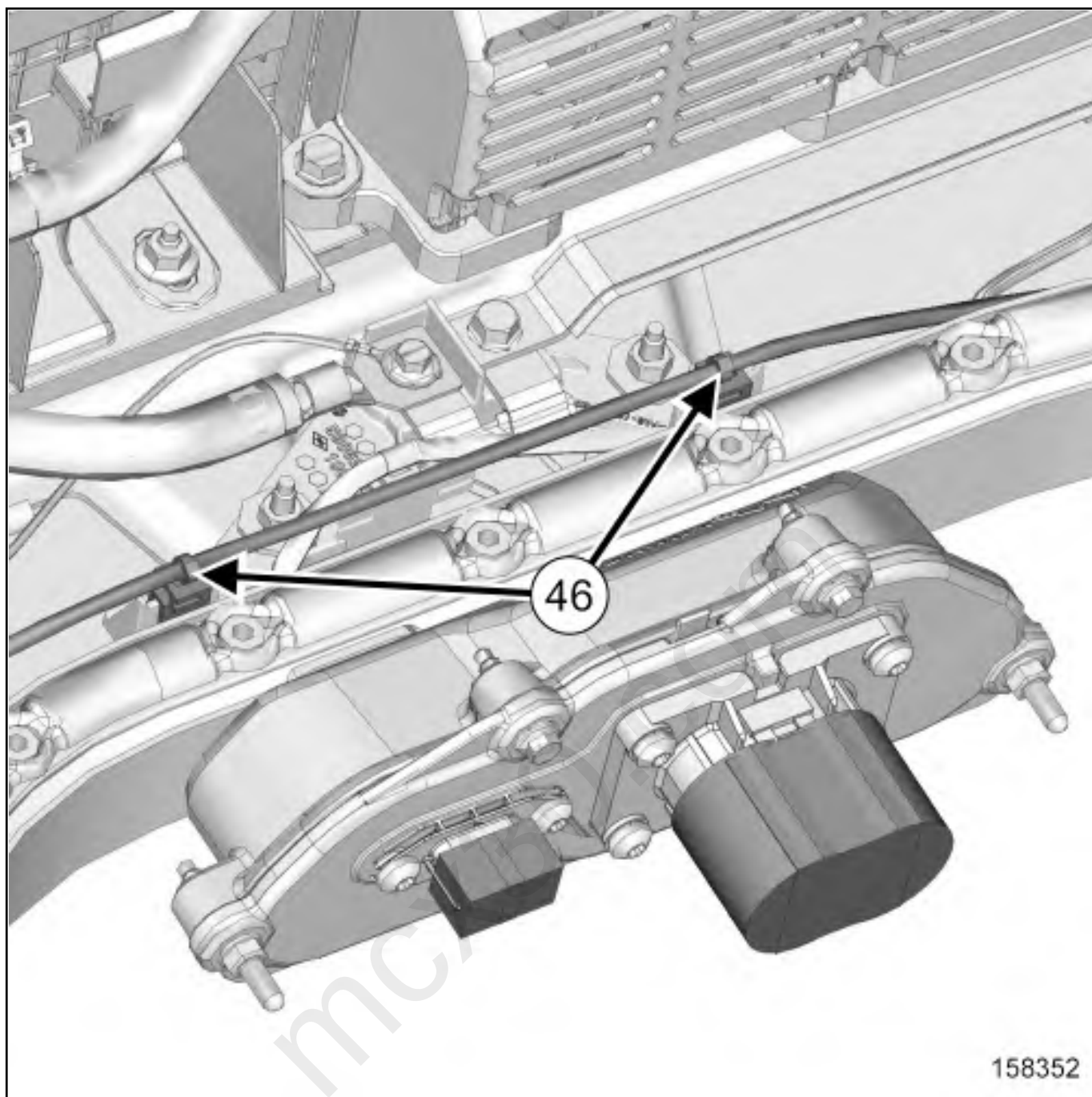
Cut the clip clamps using an insulated cutting pliers.



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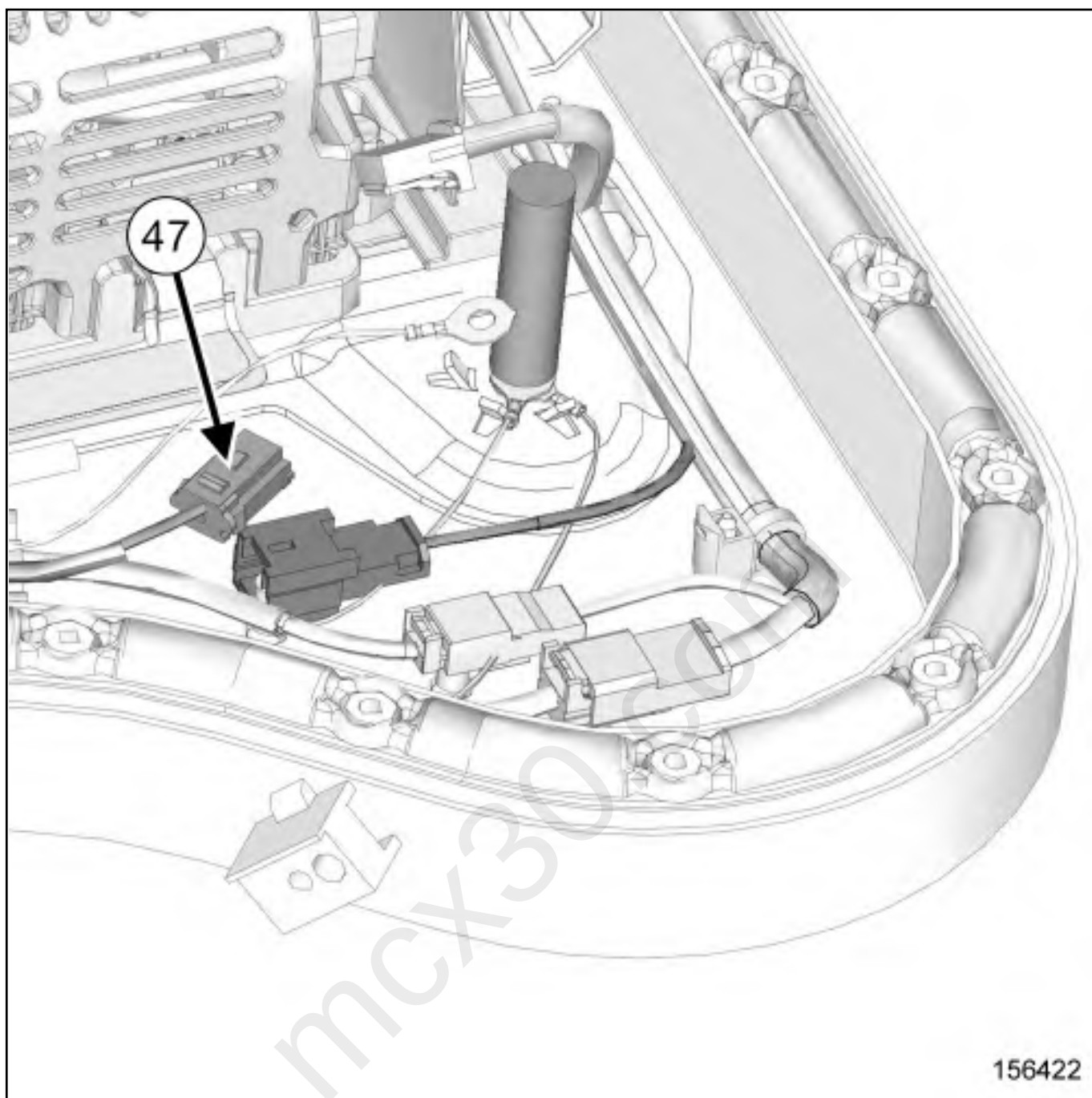
Clip the clip(45) of the safety device switch socket interlock wire on the traction battery electronic filter.



Fit the clamps(46) at the place indicated on safety device switch socket interlock wire.

Clip the clamp clips.

Cut the clip clamps using an insulated cutting pliers.

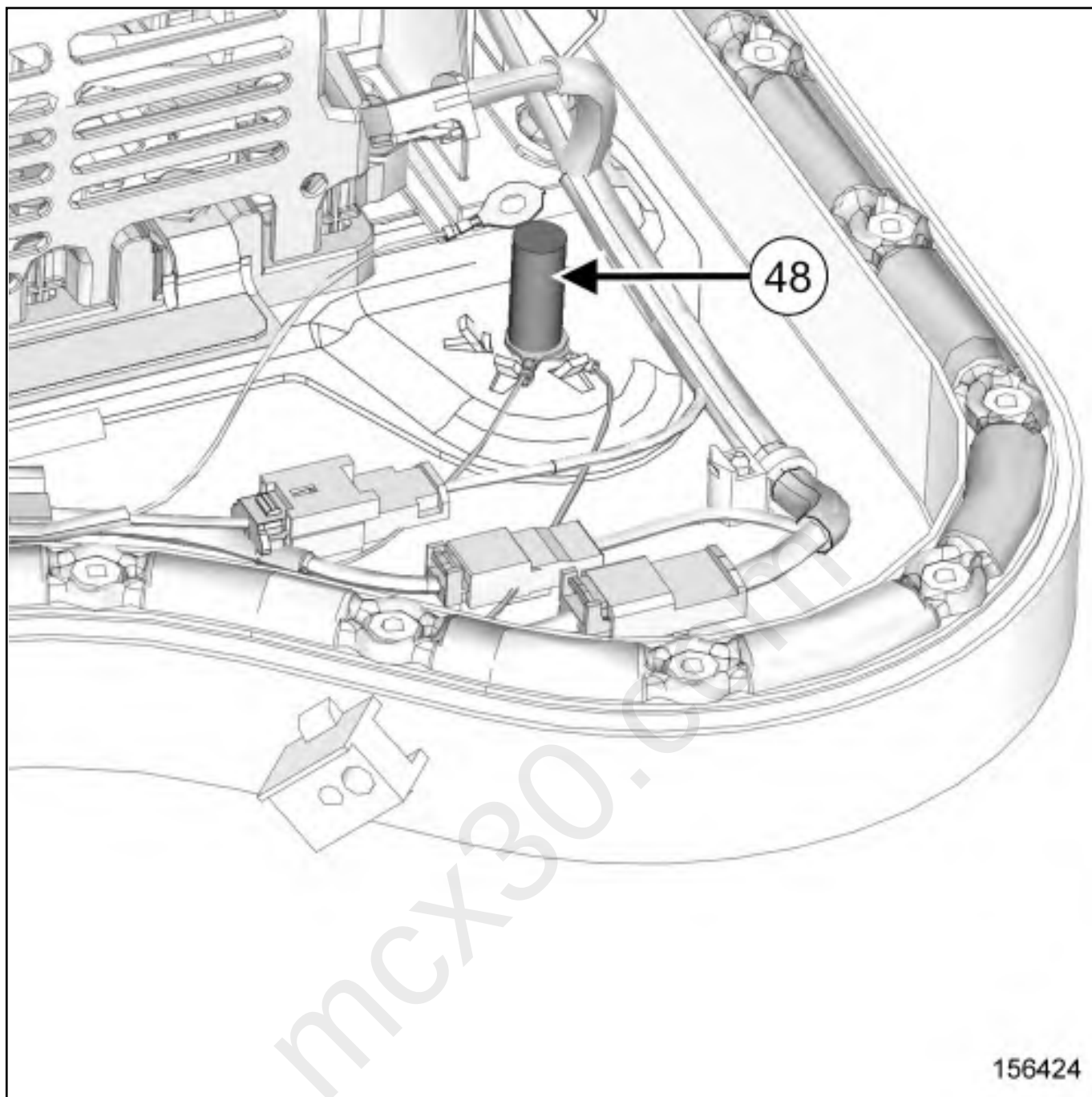


Connect the safety device switch socket interlock wire plug(47) .

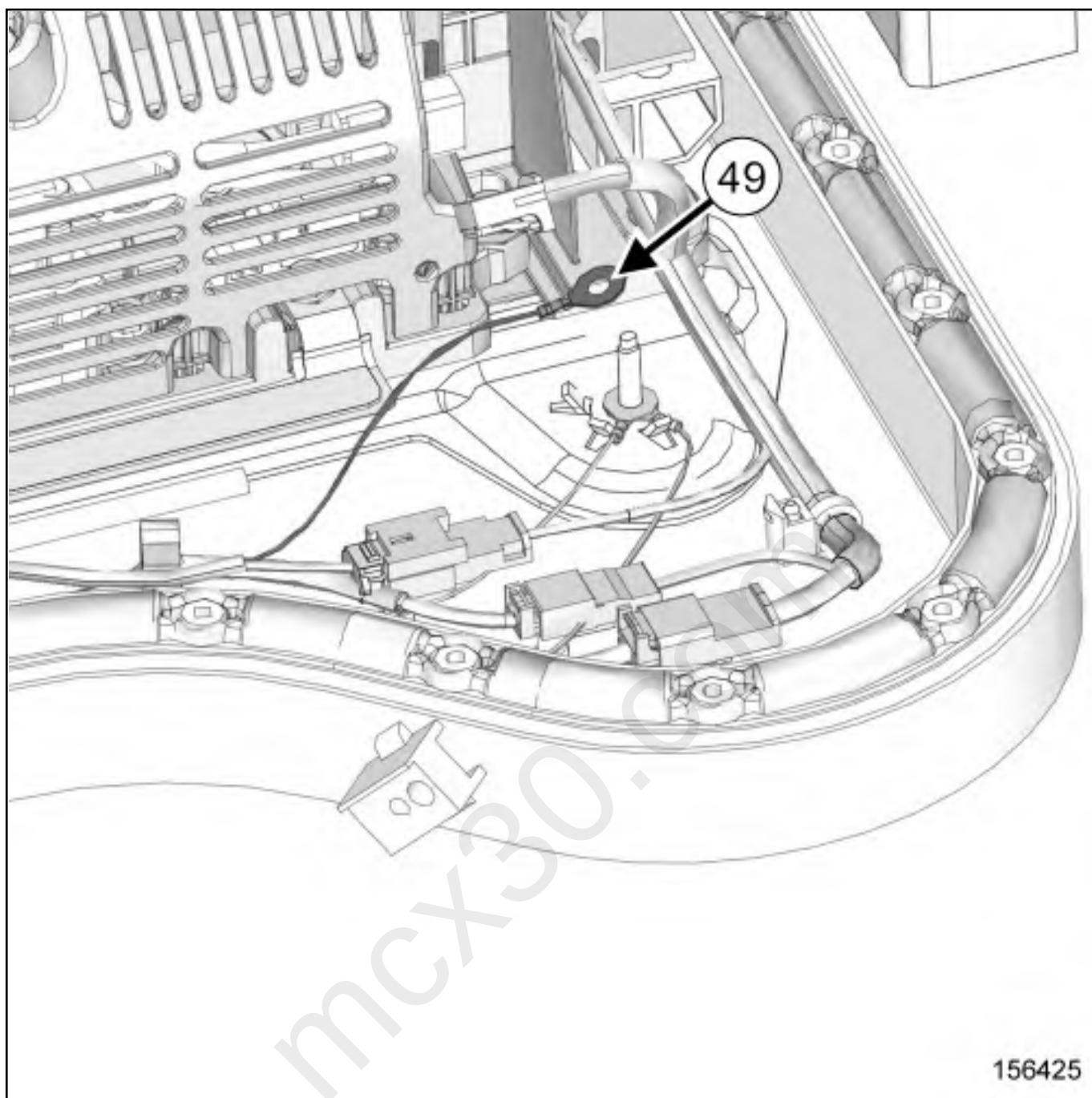


Note:

Make a push-pull test on the connector.



Remove the insulation(48) from the electric earth stud .

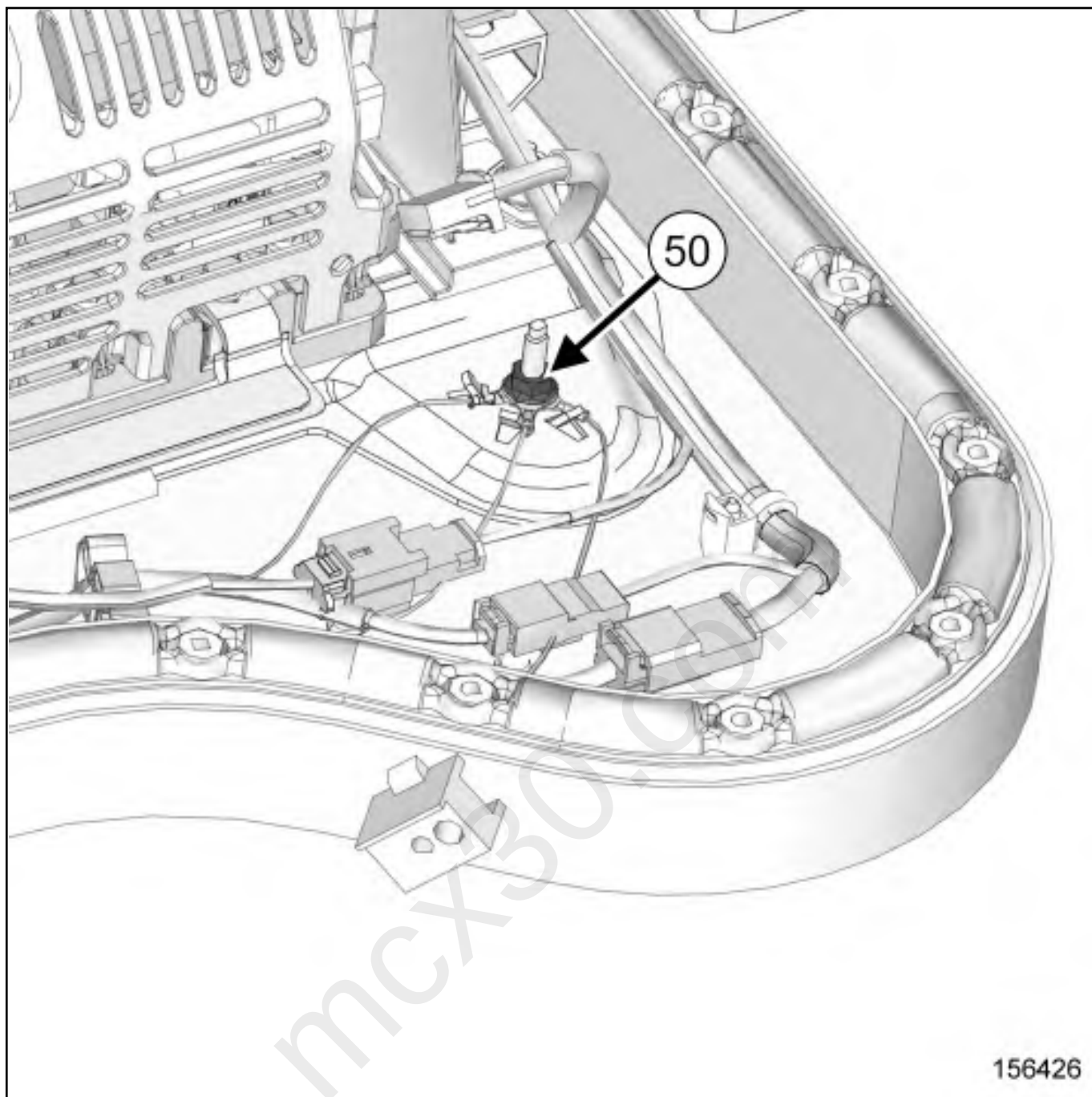


Refit the electric earth lug of the safety device switch socket interlock wire(49) using the toolSet of trim removal levers.(Car. 1363) .

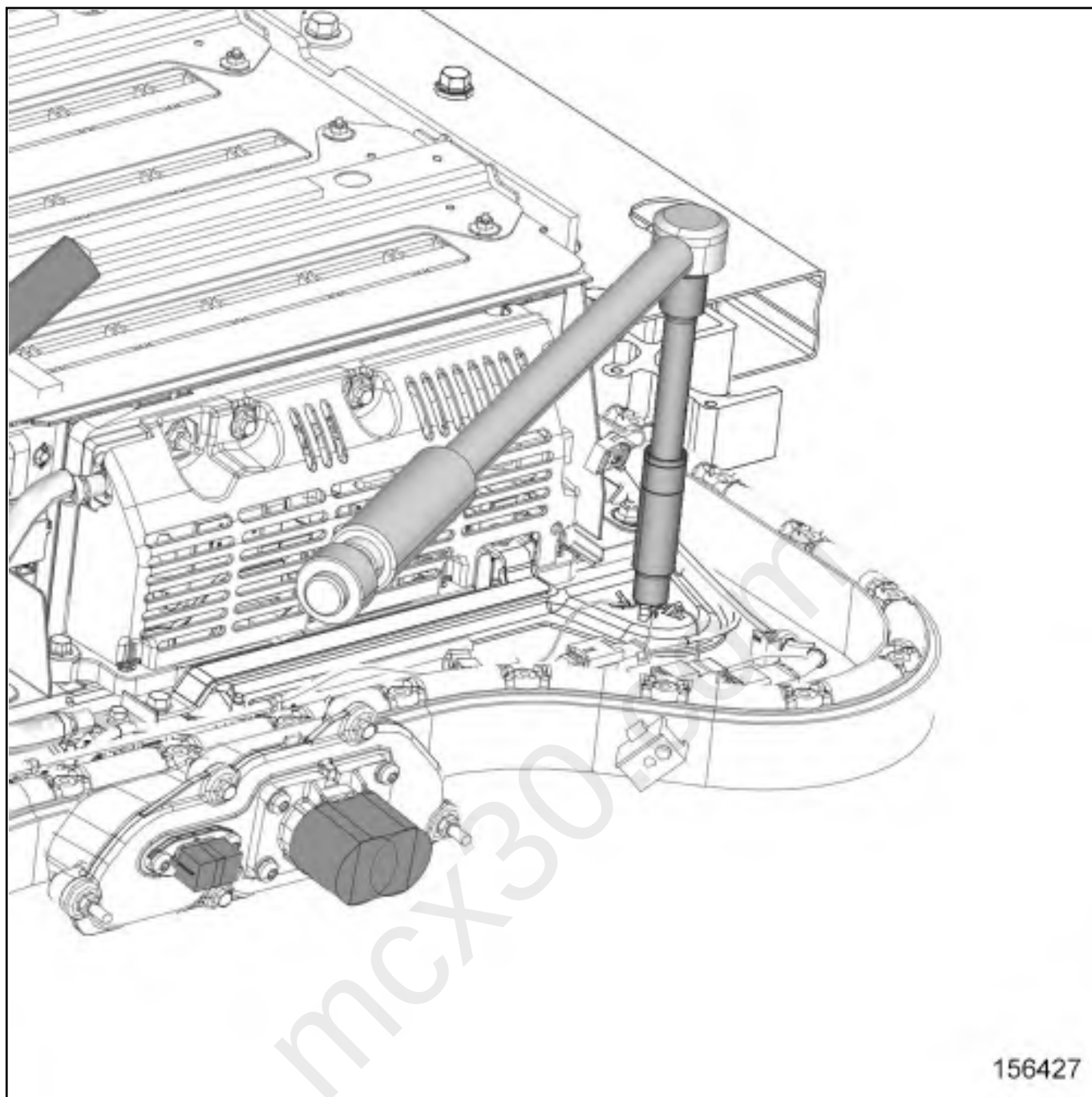


Note:

Get the electric earth wire on the bottom of the lower cover.



Refit the earth electric connection nut(50) from the lower cover using an insulated magnetic socket (see **Traction battery module stack assembly : Removal - Refitting**) .



Torque tighten the earth electric connection nut from the lower cover using an insulated magnetic socket (see **Traction battery module stack assembly : Removal - Refitting**) .



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

3. FINAL OPERATION



Proceed in the reverse order to removal.



Repair-14x02x01x98-01x37-1-3-1.xml



XSL version : 3.02 du 22/07/11

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