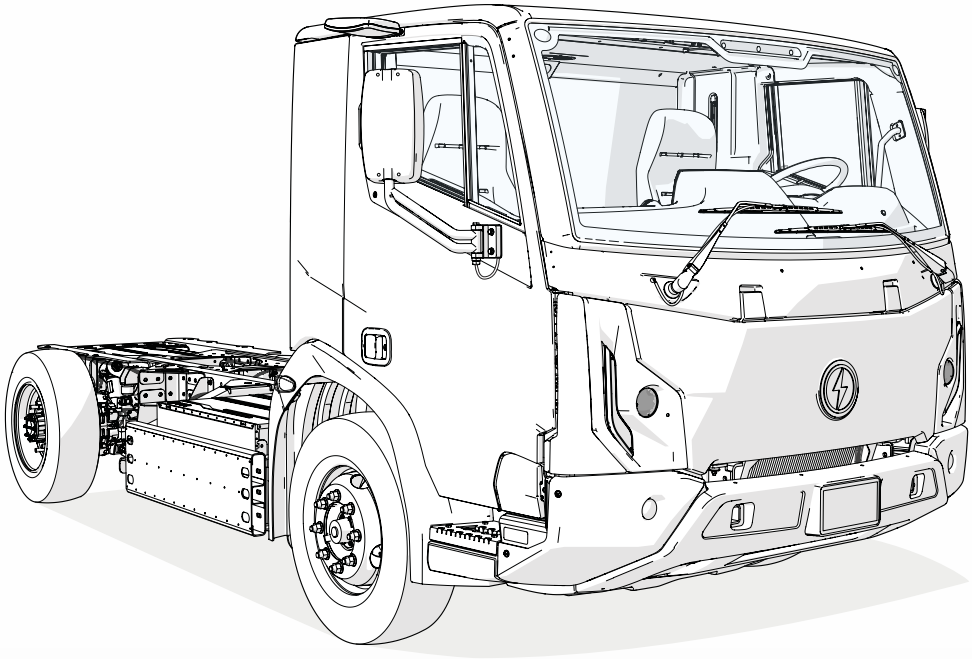
LION ELECTRIC

Towing procedure



This guide is intended for first responders and certified rescuers. high-voltage batteries are the only energy source for the propulsion of the Lion5.Always act as if the high-voltage system is activated. the high-voltage system might be active even when the vehicle emits no sound.

LION5

Legal Notice

Lion5 Towing procedure — 2024/10/28

General towing guidelines

- If the hydraulic suspension is non-functional and the distance between front tire and fender is less than 5 in (13 cm) **(Figure 1)**, a flatbed platform towing is required.
- If the hydraulic suspension is non-functional and the distance between front tire and fender is 5 in (13 cm) or more **(Figure 1)**, towing by the front axle is allowed .Confirm there is at least 6.75 in (17 cm) between battery bracket and ground **(Figure 2)**.
- If the low-voltage circuit (12 V / 24 V) is available and the hydraulic suspension system is functional, disable the Auto mode and select Normal or High mode **(see Hydraulic suspension section)**, and proceed to tow by the front axle **(follow the Towing the vehicle procedure)**.

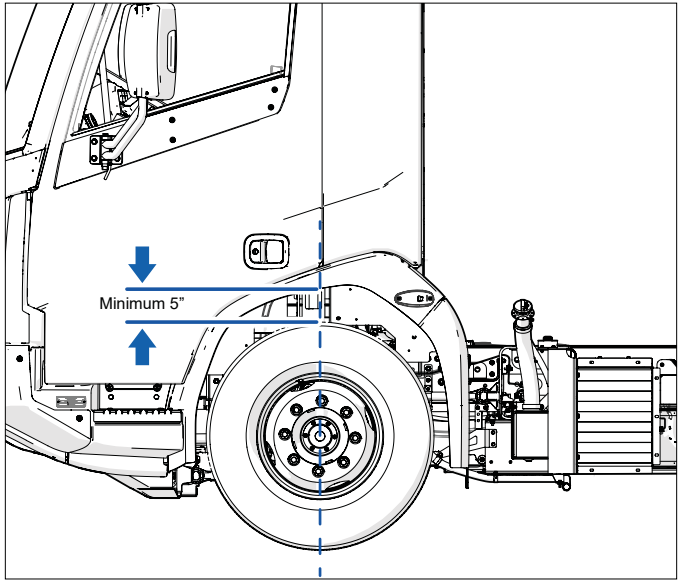


Figure 1 – *Minimum front ride height for towing*

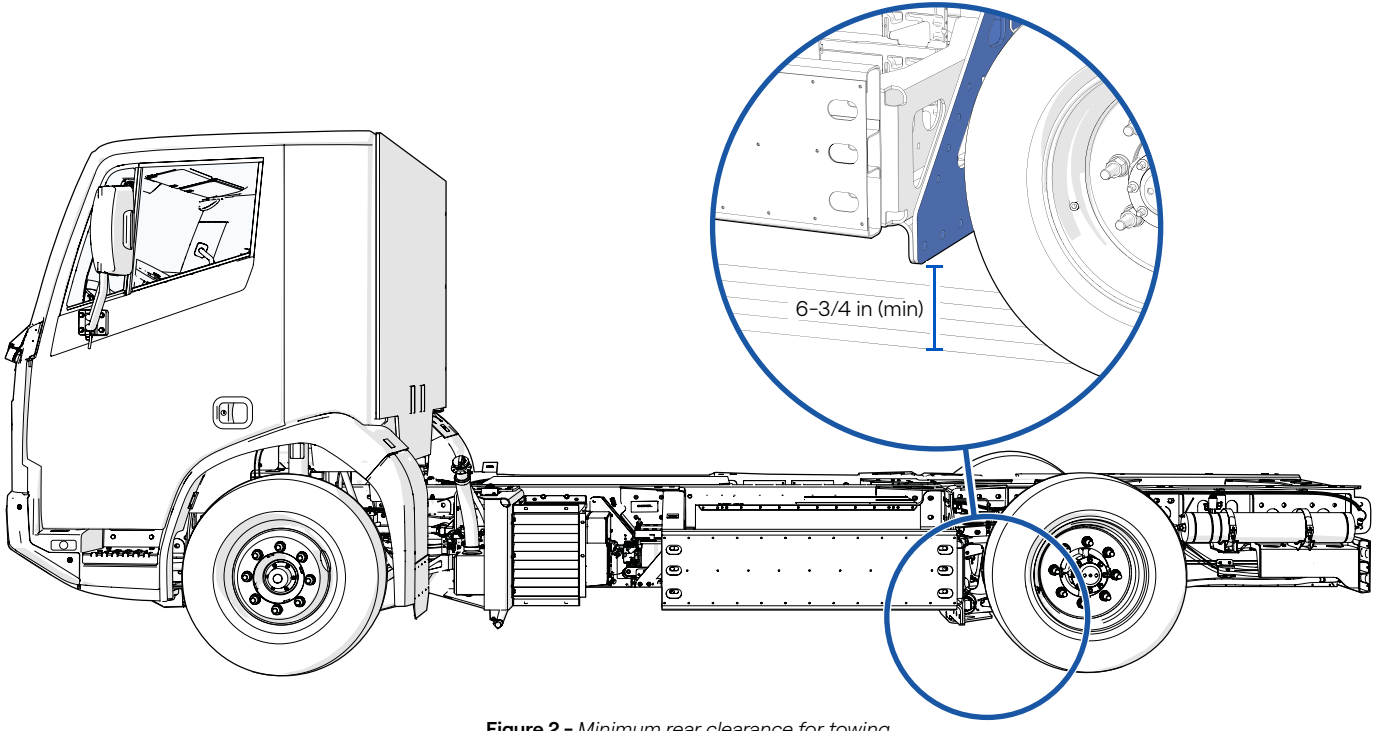


Figure 2 – *Minimum rear clearance for towing*

- If need be, an auxiliary 24 V supply can be applied to the two electrical terminals (optional equipment) located at the top of the accessory compartment **(Figure 3)** on the passenger side of the truck.

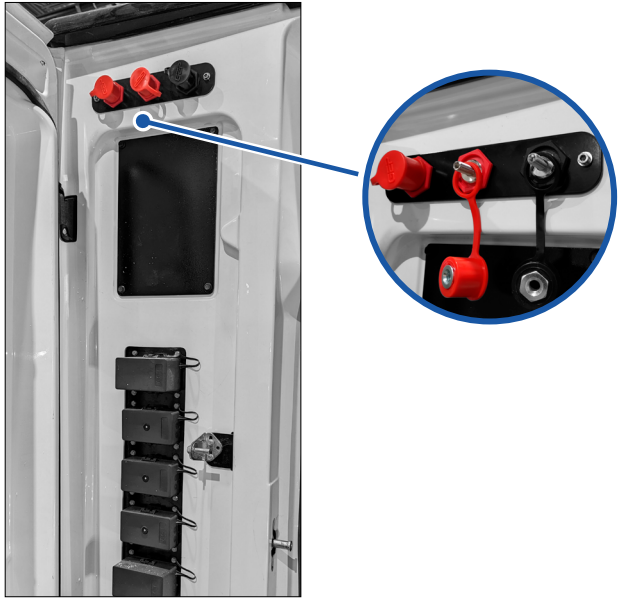


Figure 3 - *Accessory compartment low-voltage remote battery posts (if equipped)*

Towing the vehicle

⚠ WARNING ⚠

The Lion5 preferred method of towing is by placing the truck on a flatbed or platform trailer (Figure 4).

It can also be towed by lifting the front axle with the rear wheels on the ground if the rear half-shafts are removed.

The Lion5 can also be towed with the rear half-shafts in place, but speed shall not exceed 15 mph (20 km/h) and distance shall not exceed 6 miles (10 km). Failing to follow the limits stated above may result in high-voltage hazards such as electrocution or electrical fire.

⚠ WARNING ⚠

If the Lion5 is fitted with an Automatic Parking Brake and it is not possible to deactivate it by selecting "Towing" mode on the multifunction display, then the rear axle half-shafts must be removed and the vehicle towed by the front.

DO NOT TOW THE LION5 FROM THE REAR.

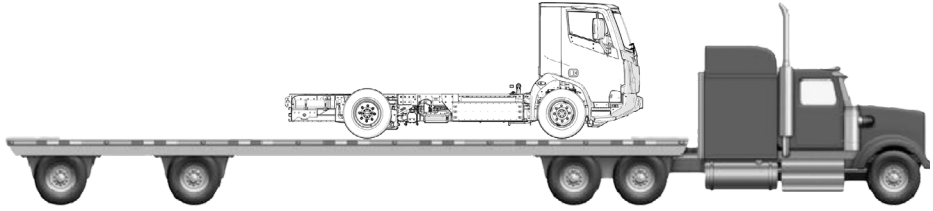


Figure 4 - *Flatbed towing*

Front tow hooks

Two Lion5 removable front tow hooks are stored in a compartment located above the step on the operator's side. Open this compartment to retrieve the tow hooks **(Figure 5).**

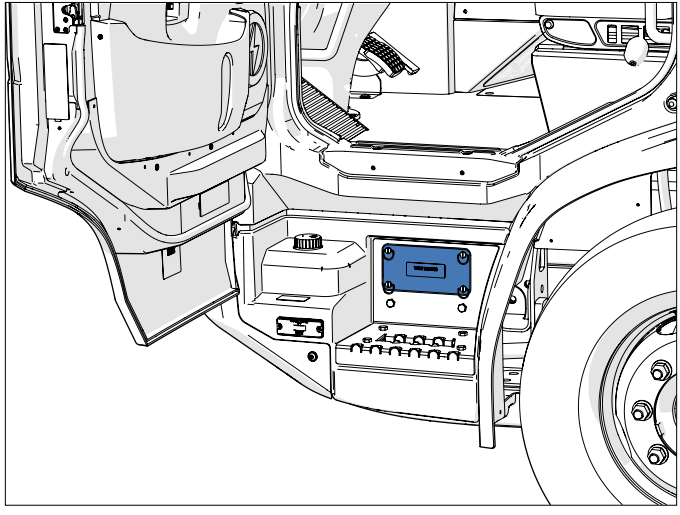


Figure 5 – *Tow hook compartment*

Installing front tow hooks:

1. Open the hood and remove the lock pins that hold the locking dowels in their receptacles **(Figure 6 no. 1)**.
2. Lift the locking dowels **(Figure 7 no. 2)**.

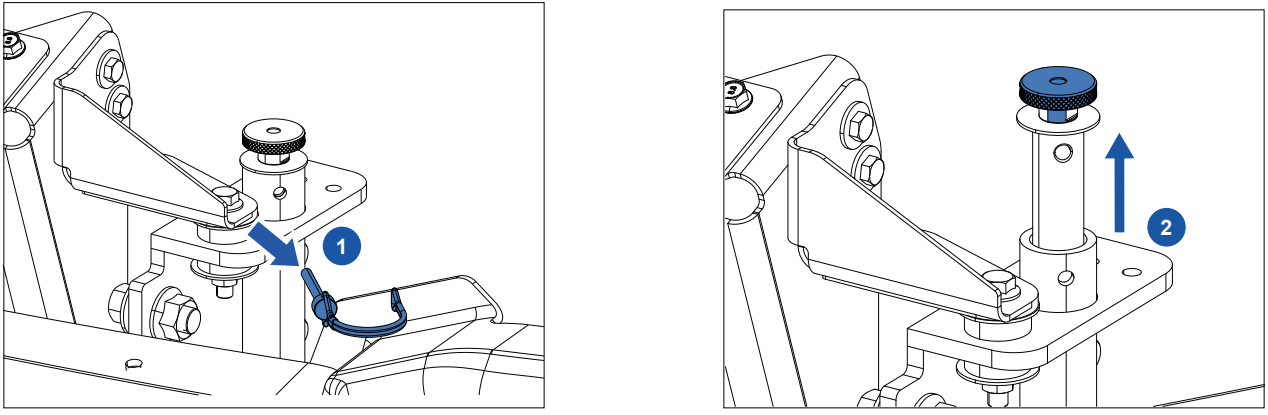


Figure 6 – *Tow hook locking dowel with lock pin*

3. Insert the tow hooks into the openings of the bumper cover **(Figure 7)**.

4. Lower the locking dowels in their receptacle **(Figure 8)**.

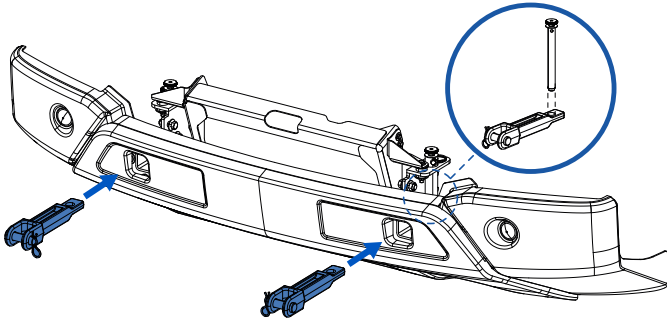


Figure 7 – *Tow hooks and locking dowel*

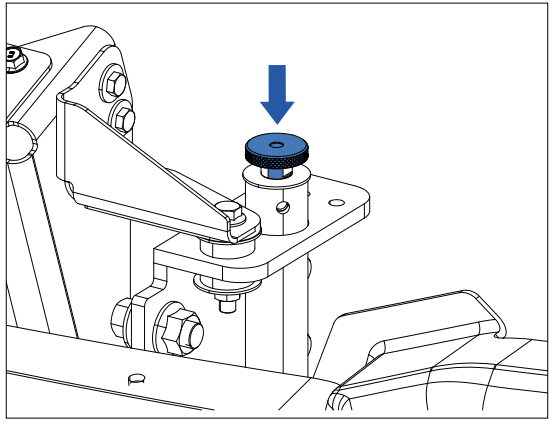


Figure 8 – *Tow hook locking dowel*

5. Replace the lock pins on the locking dowels **(Figure 9)**.

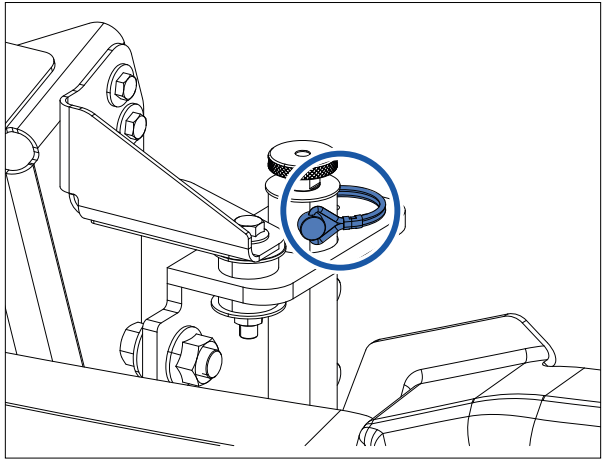


Figure 9 - *Locking pins*

Towing by lifting the front axle

1. Chock the rear wheels.
2. Release the parking brake.
3. Turn on the vehicle and set the vehicle ride height to **<< Normal >>** or **<< High >>** using the suspension height control switches (see section on **Hydraulic Suspension**). Provide an auxiliary 24 V supply if need be **(Figure 3)**.

4. Remove the hydraulic suspension system safety connector, which is located under an access panel behind the passenger seat **(Figure 10).**

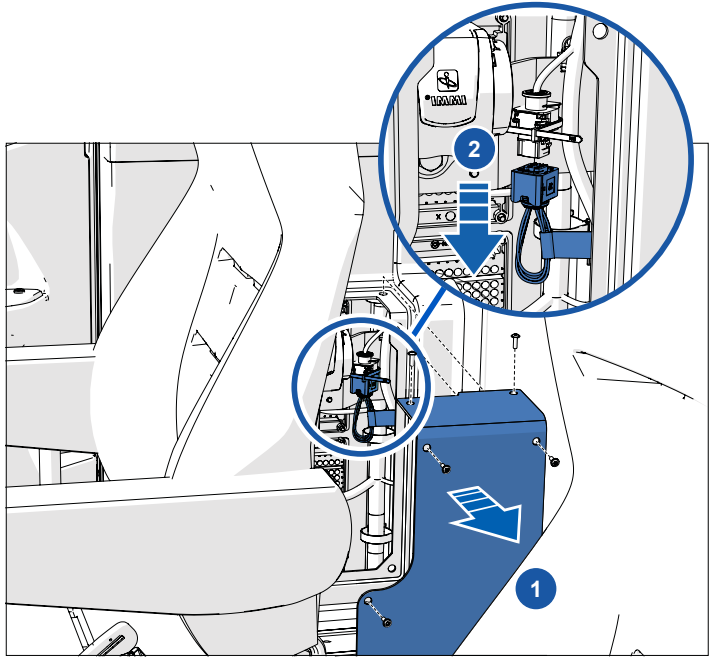


Figure 10 – *LiquidSpring suspension safety disable connector*

5. Raise the vehicle by the front two hooks until the front wheels are at least 5.5 in (14 cm) off the ground **(Figure 11)**.
6. Drop the front wheels on blocks (or place stands under the jacking points on the chassis). You can now insert the tow boom under the front bumper.
7. Raise the vehicle by lifting the front axle **(Figure 12)**.

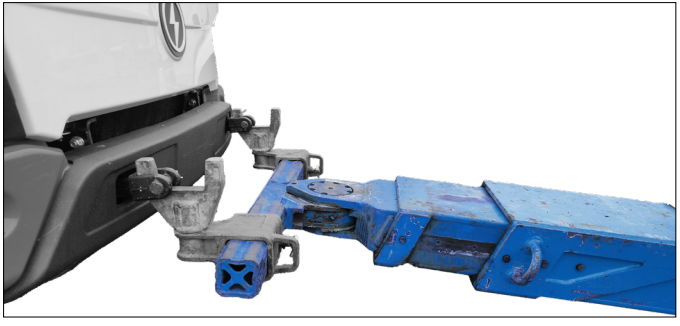


Figure 11 – *Lifting by the front hooks*

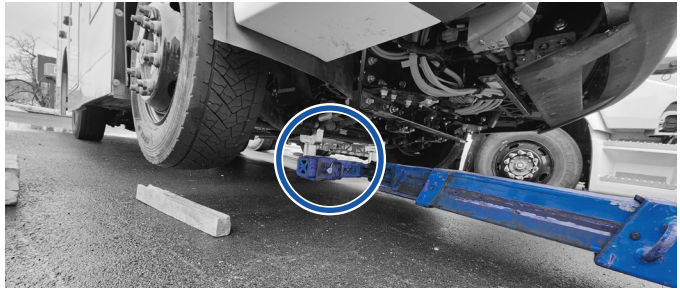


Figure 12 – *Raising the front axle*

8. Remove the rear wheel half-shafts **(Figure 13)**.

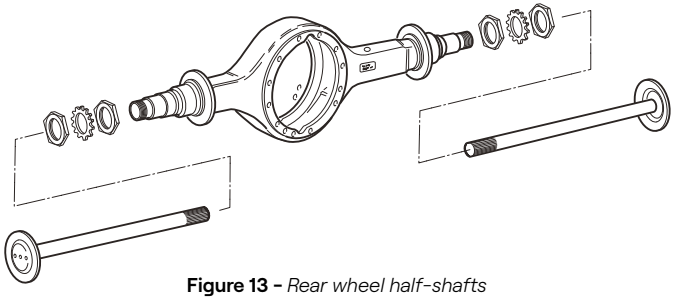


Figure 13 – *Rear wheel half-shafts*

9. Turn the battery disconnect switch to "**OFF**" **(Figure 14)**.

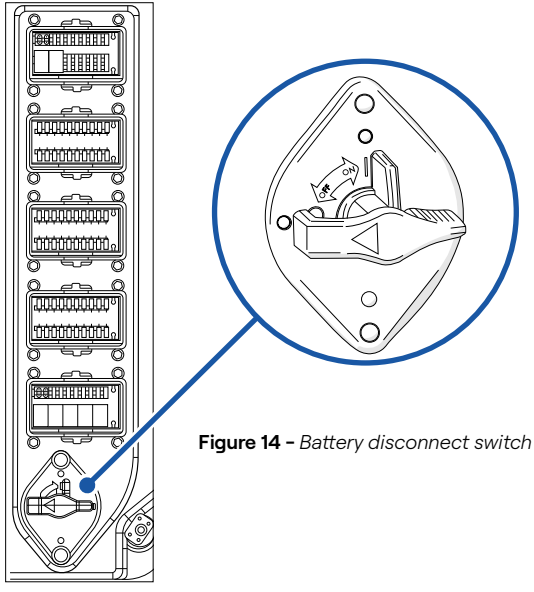


Figure 14 – *Battery disconnect switch*

Front anchoring equipment capacity

The maximum pulling capacity of the front tow hooks depends on the direction of the pulling force. See **Table 1** for the maximum calculated capacity allowed for two pulling points working simultaneously.

⚠ WARNING ⚠

The data in the table above assumes that the constraints are shared equally between the two towing points. Severe damage to the vehicle can occur if the assembly isn't properly secured.

If the vehicle gets stuck or goes off the road, use the towing equipment with extreme caution and respect capacity limits. Damage to axles, suspension, or chassis can occur even if the force at the pulling points is less than the maximum capacity.

Direction of the traction exerted	Maximum capacity	
	kg	lb
Straight towards the front or the rear	11 600	25,500
Up front in a V	not allowed	
Vertical straight (front only)	7 484	16,500
20 degrees towards the side (front or rear)	11 600	25,500
20 degrees upward or downward (front or rear)	11 600	25,500

Table 1 – *Tow hooks capacity by pull direction*

Safe recovery recommendations:

- Use double chains or cables to distribute the load evenly between both tow hooks.
- Never run a single chain or cable passing through both tow hooks.
- Use a spreader bar to distribute the load between the tow hooks **(Figure 15)**.
- Secure the recovered vehicle with two additional chains or cables.

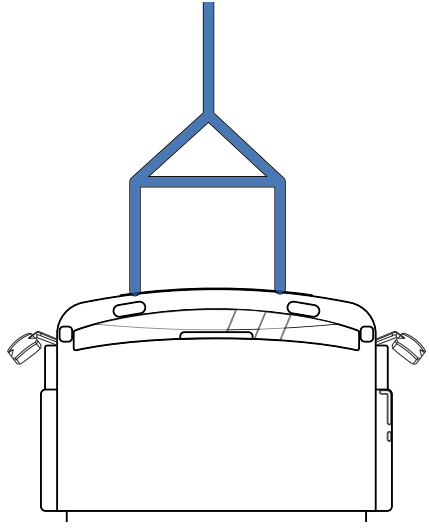


Figure 15 – *Spreader bar*

Rear anchoring points

The truck is equipped with two anchoring lugs at the rear end of the chassis **(Figure 16)**. These are to be used only to pull or recover the vehicle. They are not lifting points.

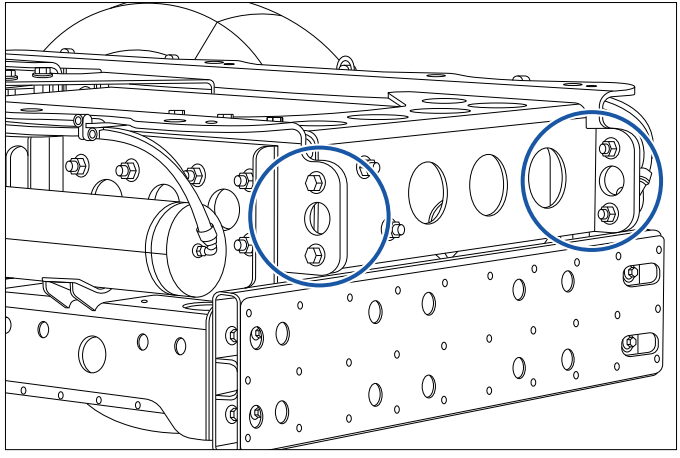


Figure 16 - *Rear anchoring lugs*

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THE LION ELECTRIC COMPANY

921 chemin de la Rivière-du-Nord
Saint-Jérôme, Quebec, CANADA J7Y 5G2
855-546-6706
Info@thelionelectric.com