



G A R I A

Workshop manual for TRIPL Urban Cargo Drive



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Original instruction

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Symbols used in this manual

The following symbols are used in this manual as well as the associated documentation supplied with the product.



WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

IMPORTANT

IMPORTANT indicates important information about handling and use of the product.

NOTICE

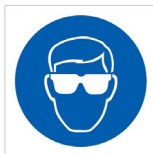
NOTICE is used to address practices not related to personal safety.



Pinching/crushing hazard.



Electricity or potentially dangerous voltage.



Use protective eyewear.



Use protective gloves.

General safety

WARNING

- Read and understand the manual completely before attempting any repair or maintenance.
- Comply with this manual to avoid accidents involving serious personal injury.
- Never handle this vehicle in other ways than are specified in this manual, as this can put your safety at risk and cause damage to the vehicle.
- Make sure that everyone who is to repair or maintain the vehicle and its systems has the necessary information and access to this manual.

CAUTION

Please comply with these instructions to avoid the vehicle becoming damaged or destroyed.

NOTICE

We reserve the right to amend this manual without prior notice.

Specifik safety



Never sit or lie under the vehicle when it is jacked up

If the jack fails the vehicle can fall down on you! Jacks, hoists, or other lifting devices shall not be used beyond the safe load capacity recommended by the manufacturer. Never sit in vehicles being lifted by hydraulic lifts or jacks. Never work under vehicles that are not properly supported with approved stands. Makeshift stands made of wood, cement blocks, or boxes shall not be used.

Sudden movement hazard

Switch off the car before beginning service. Follow lockout procedure to secure the car. Never allow anyone to stand in front of or behind the vehicle during service.

Hot surfaces

Some of the engine parts become very hot during operation and shortly after shutdown. Keep hands and other body parts away from hot engine surfaces.

Fire hazard

Keep fire extinguishers handy. Clearly indicate the location of the fire extinguishers with a safety sign. Ensure that the types of fire extinguishers are appropriate for materials that might catch fire. Have all fire extinguishers checked and recharged periodically.

Exposure hazard

Wear protective clothing during work to avoid injuries. Wear the following protection:

- Safety glasses or goggles when performing work like grinding, chiseling, spraying or any other activity that could result in an object or chemical striking the eye.
- Hearing protection when performing work making loud noises that could damage your hearing.
- Safety shoes when working with heavy objects that could be dropped.
- Respiratory protection when performing work involving dust, vapors or gases that could cause respiratory problems.

Eye protection

Eye protection is mandatory for all operations which produce sparks, chips, flying objects or involve use of corrosive chemicals. **ALWAYS** wear eye protection when servicing engine and batteries or when using compressed air or high-pressure water. Dust, compressed air, pressurized water or steam may injure your eyes.

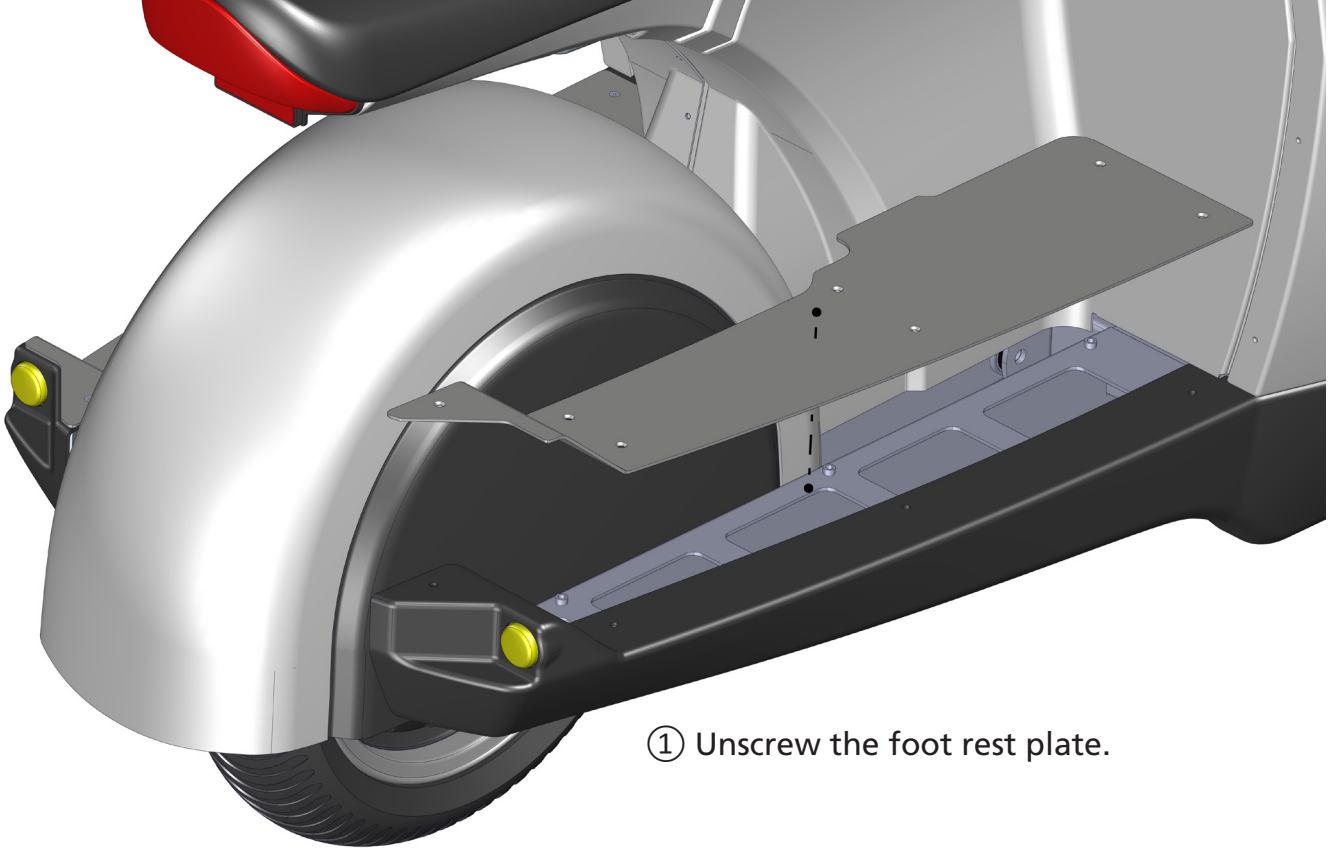
Product label



The manufacture's plate ① and the stamped chassis number ② is placed inside the vehicles boot.

Lights and indicators

Rear indicators



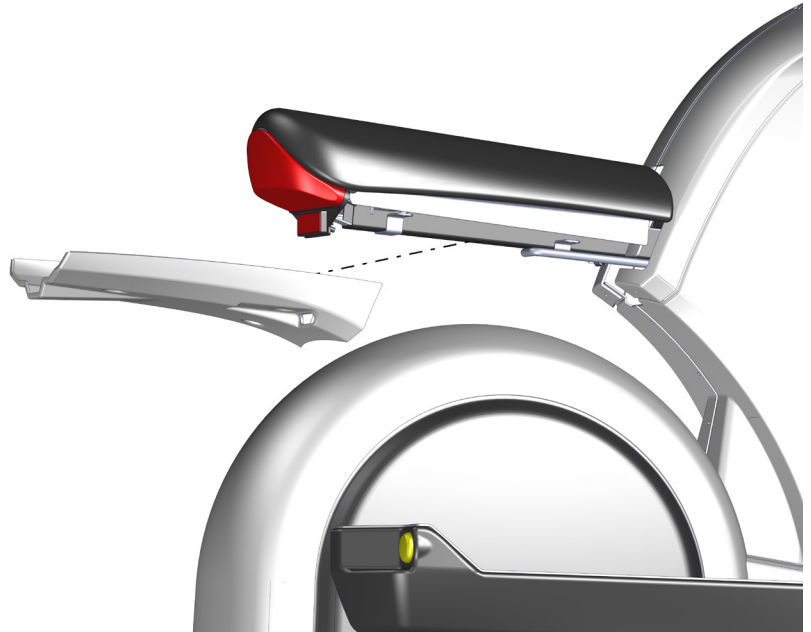
① Unscrew the foot rest plate.



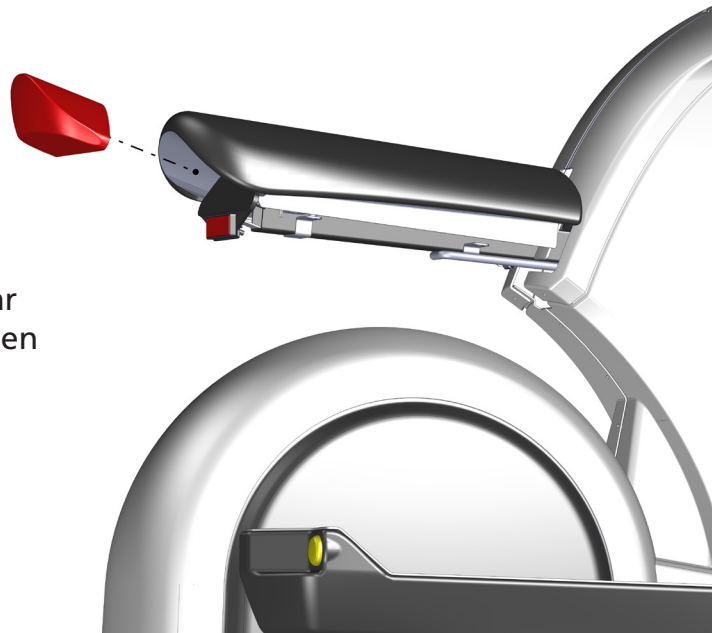
② Unplug the wires from the tail light. Unscrew it, pull it out and replace it. The indicator must be replaced as a unit.

Stop light and rear light

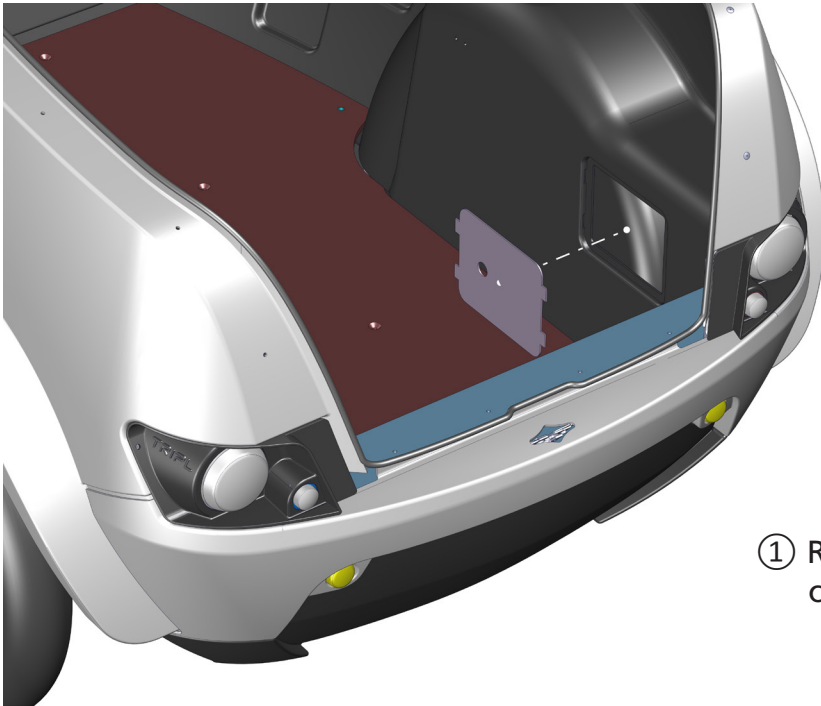
- ① Unscrew the lower seat cover.



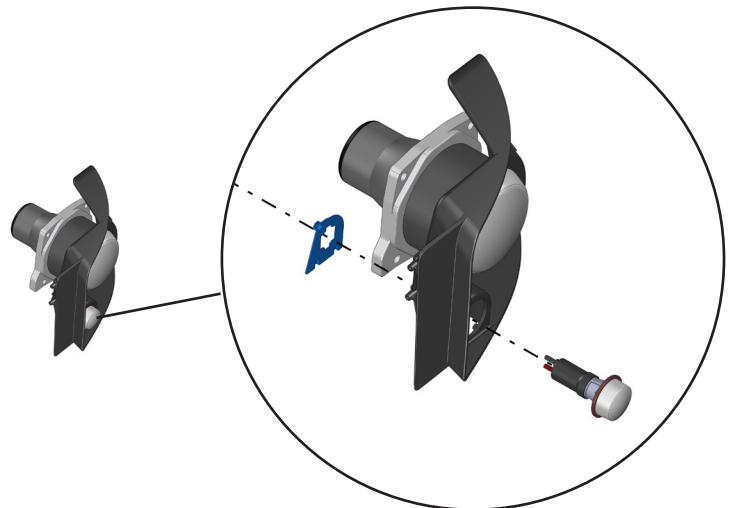
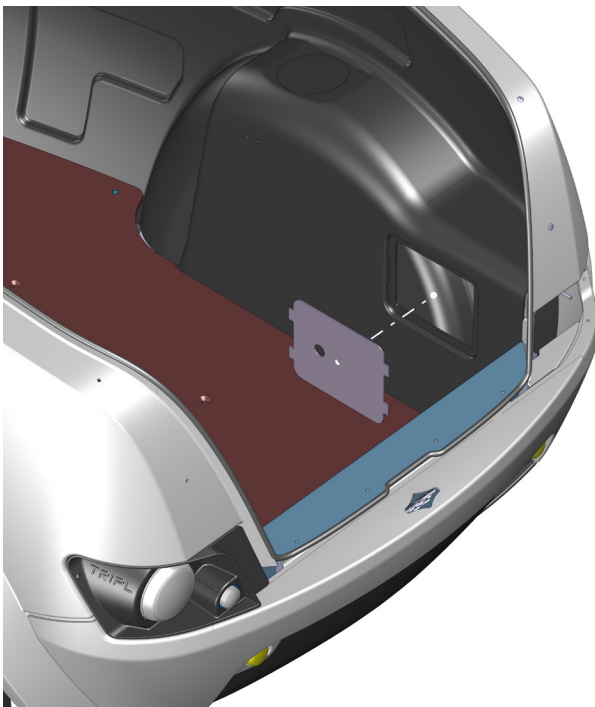
- ② Unplug the wires from the stop light/rear light unit. Unscrew it and pull it out. Open it and change the light bulbs.



Head lights

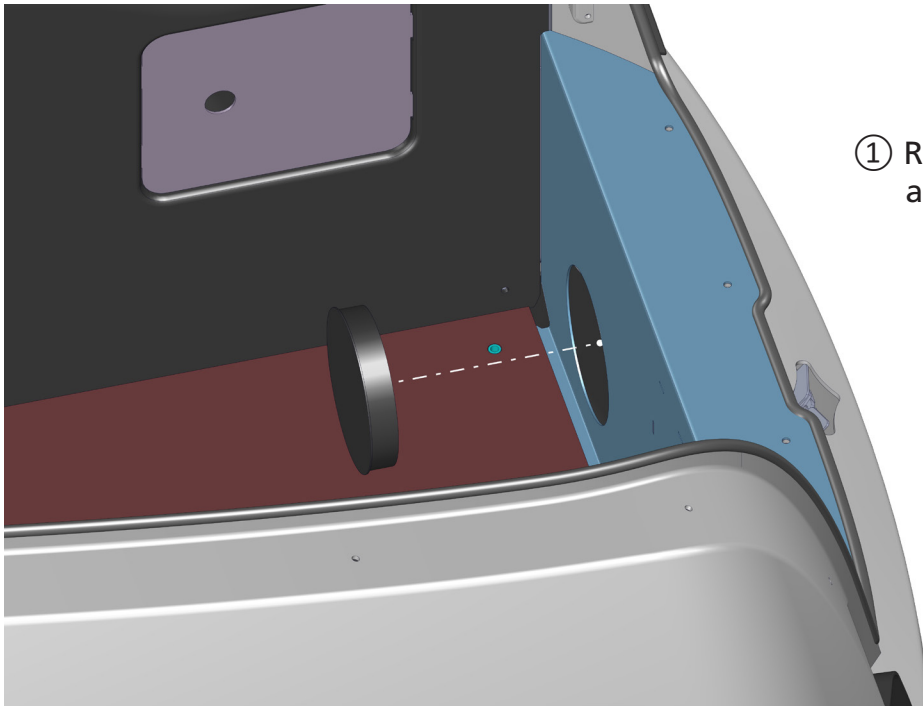


- ① Remove the cover for the light compartment.

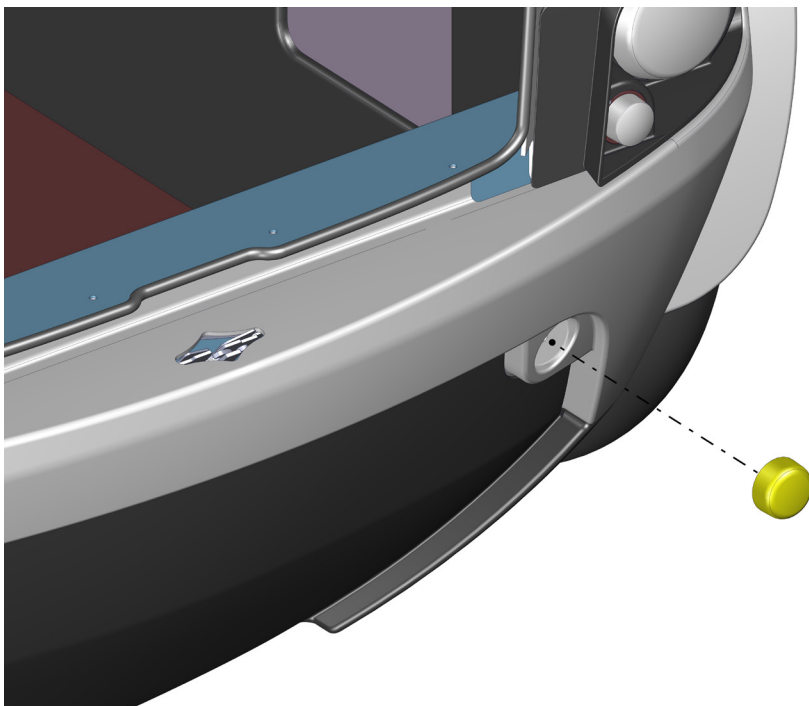


- ② Unplug the wires from the head light unit. Unscrew it and pull it out. The unit consists of the head light and the parking light which can be replaced independently. The light bulbs are fitted at the rear end of the units.

Front indicators

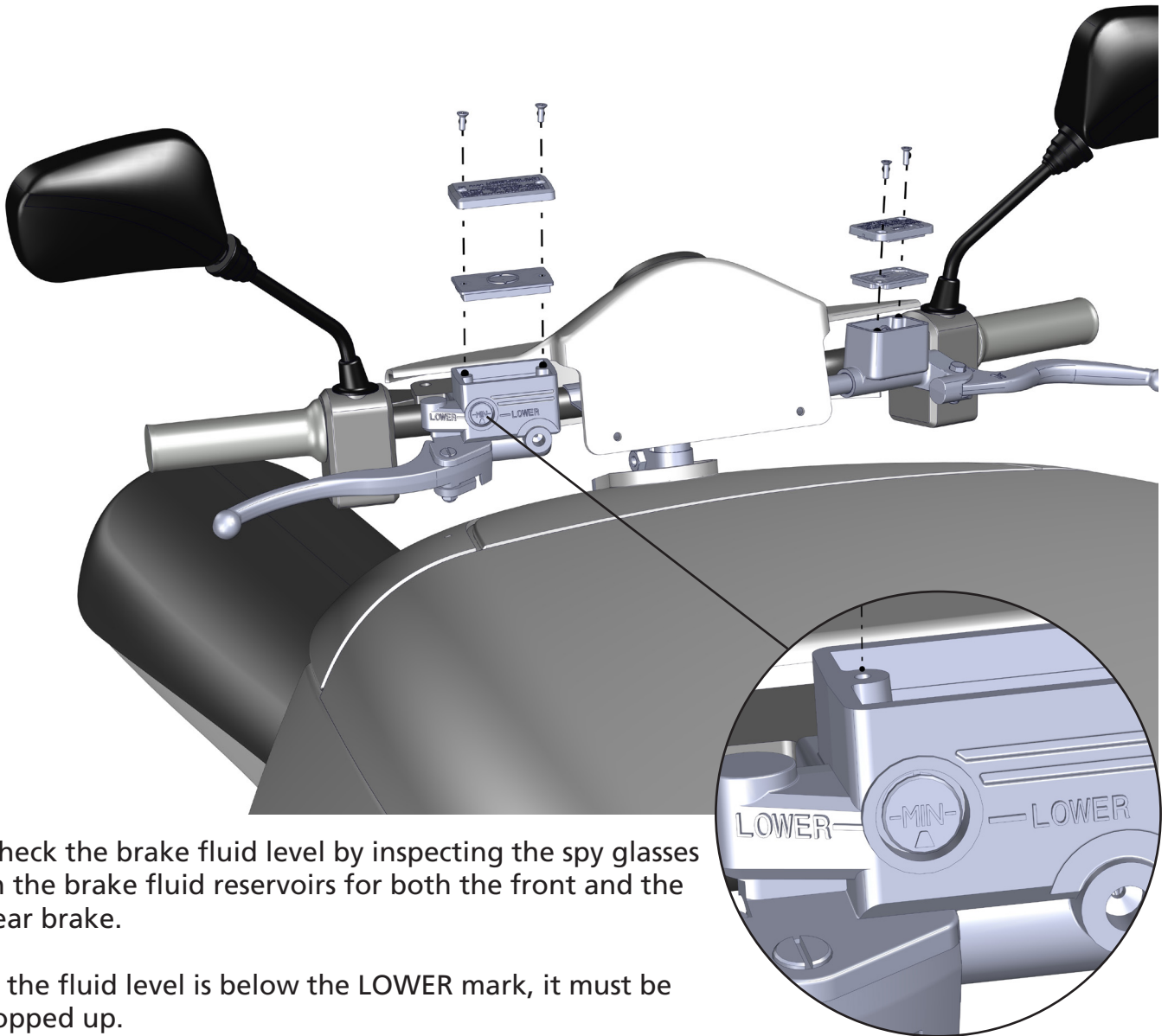


- ① Remove the cover to gain access to the front indicator.



- ② Unplug the wires from the indicator. Unscrew it, pull it out and replace it. The indicator must be replaced as a unit.

Brake fluid



Check the brake fluid level by inspecting the spy glasses in the brake fluid reservoirs for both the front and the rear brake.

If the fluid level is below the LOWER mark, it must be topped up.

Remove the brake fluid reservoir cap and fill the reservoir until the brake fluid fill all of the spy glass.

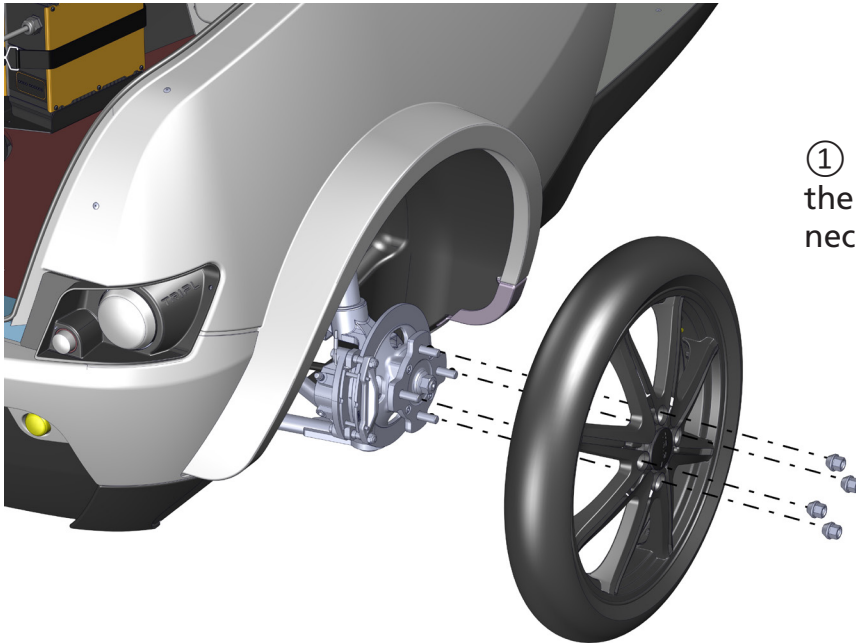


Use protective gloves and eye wear when working with hydraulic brakes. Brake fluid can burn skin and eyes.

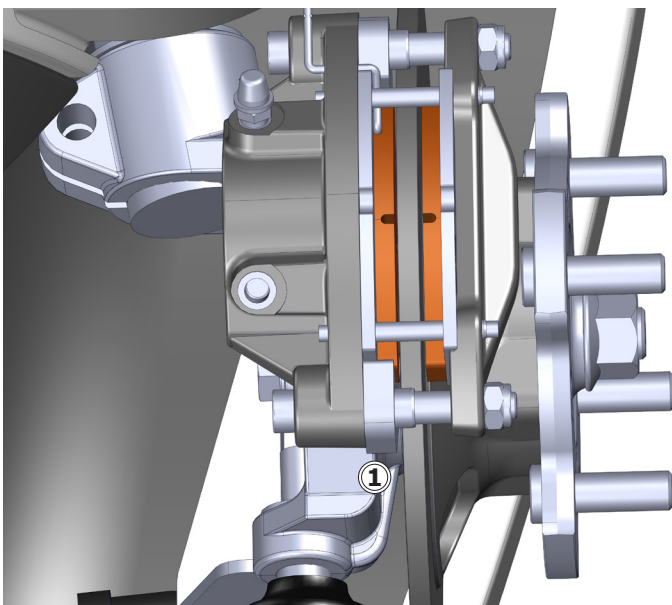
Brake pads

Engage the parking brake and jack up the vehicle before removing any wheels.

Front brakes

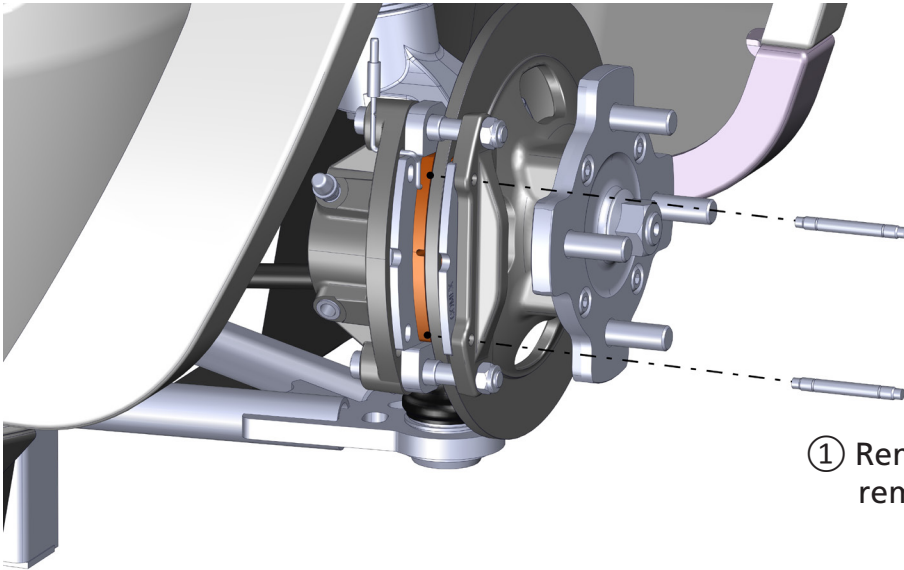


① Unscrew the wheel. Check the tyre for wear and replace it if necessary.

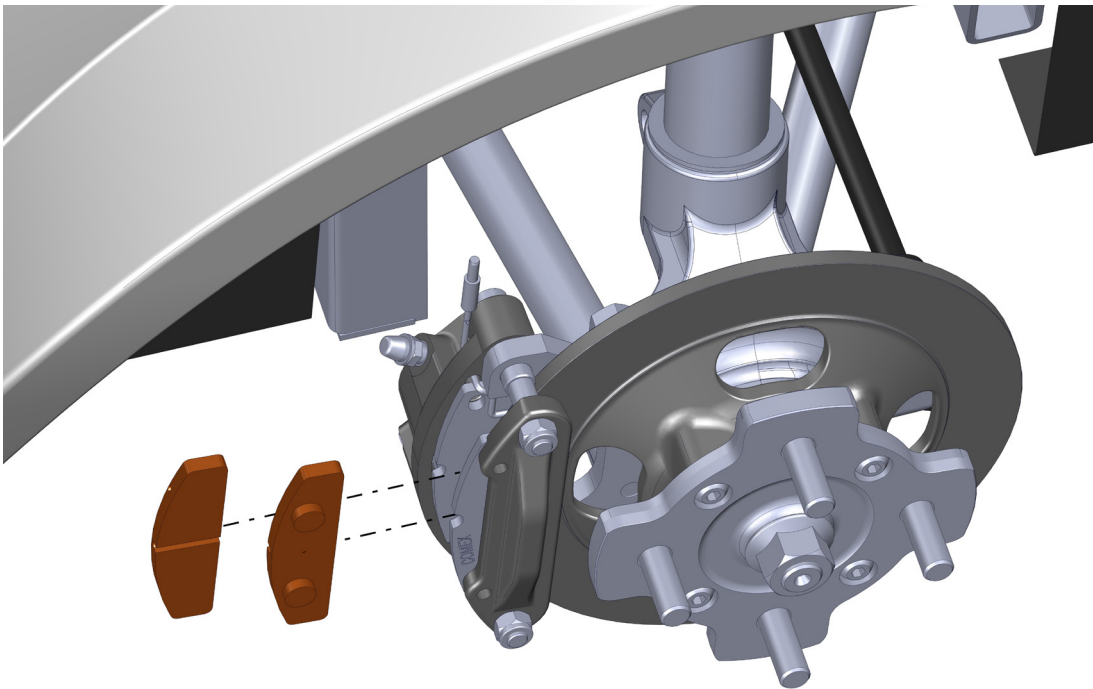


② Check the brake pads ① for wear. If the brake pads are under 2 mm they must be replaced.

Brake pad replacing

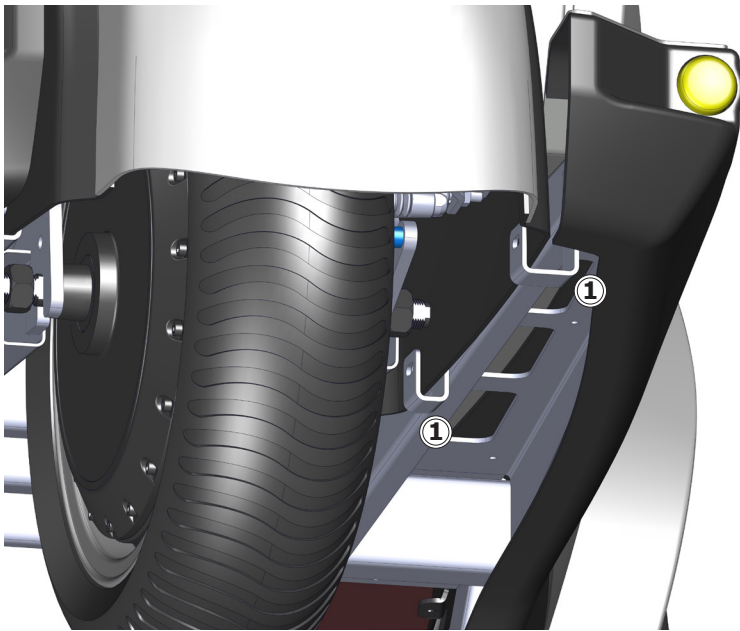


- ① Remove the pad clips () and remove the brake pad pins.

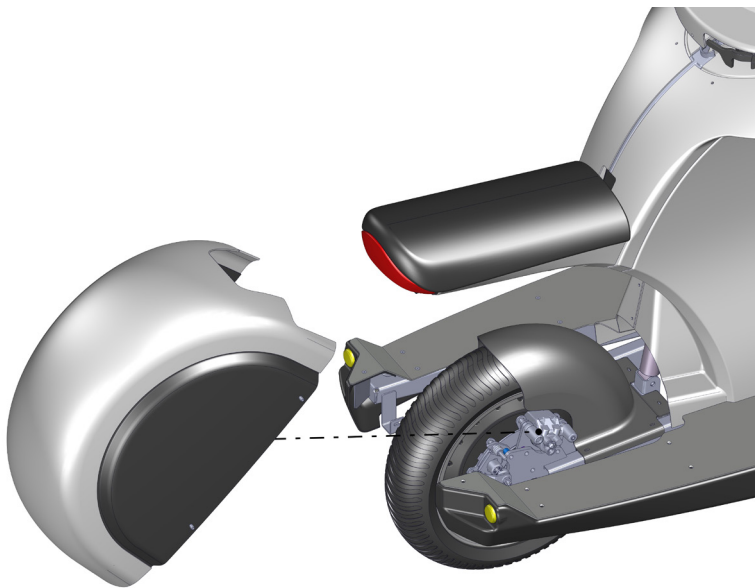


- ② Remove the brakepads and replace them.

Rear brake and parking brake

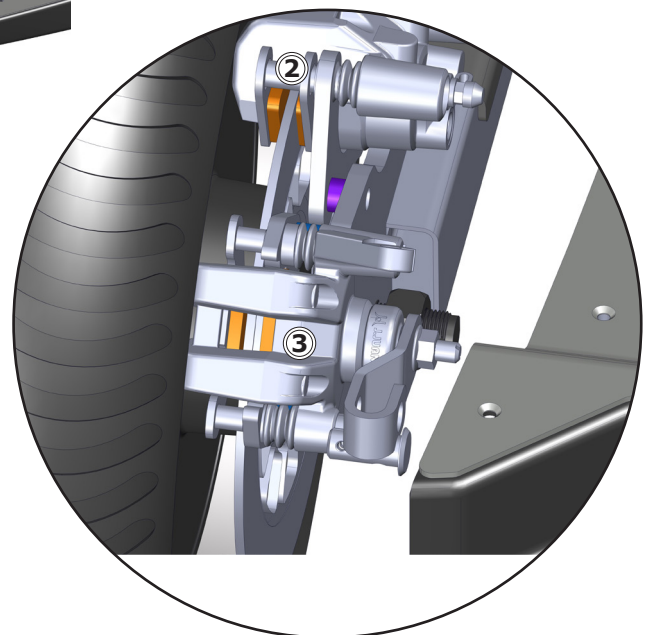


- ① Unscrew the rear wheel cover. It is secured with brackets ①.

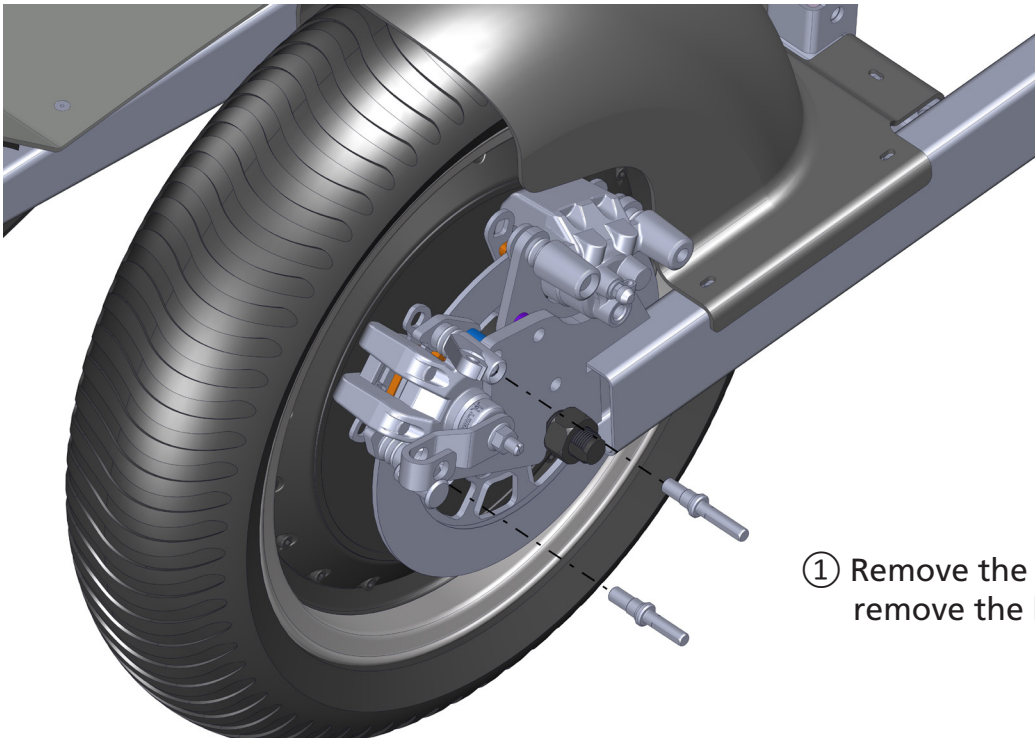


- ② Remove the rear wheel fender.

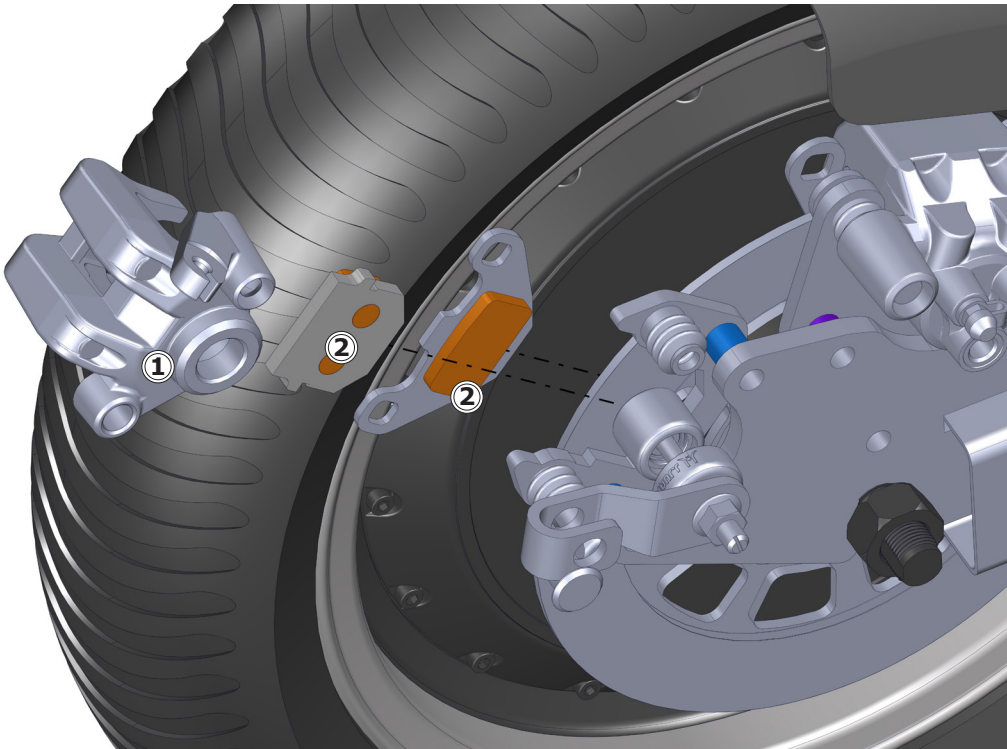
- ③ Check the brake pads for wear on both the the main brake ② and the parking brake ③. If the brake pads are under 2 mm they must be replaced.



Parking brake pad replacing

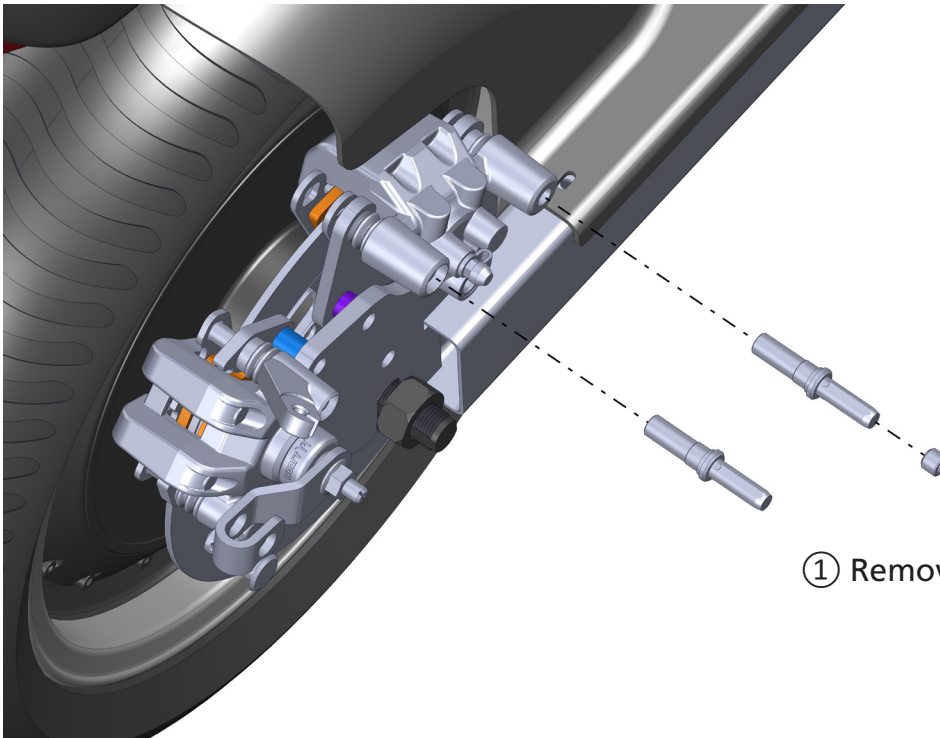


① Remove the pad clips () and remove the brake pad pins.

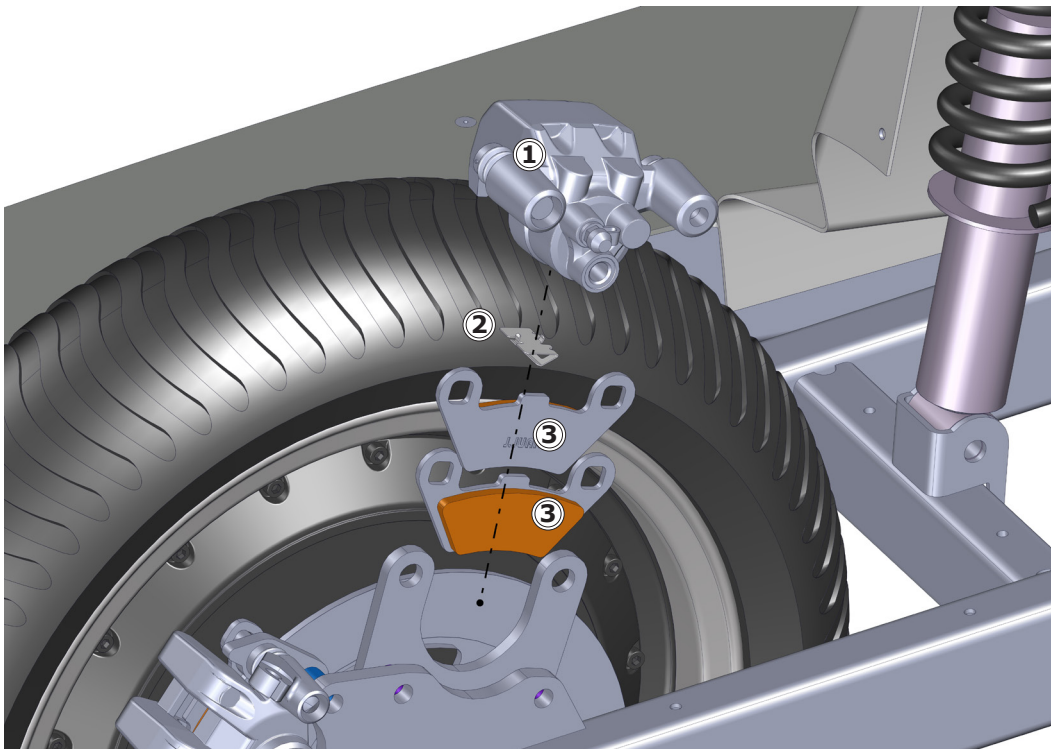


② Remove the caliper ① to gain access to the parking brake pads ②.

Main brake pad replacing

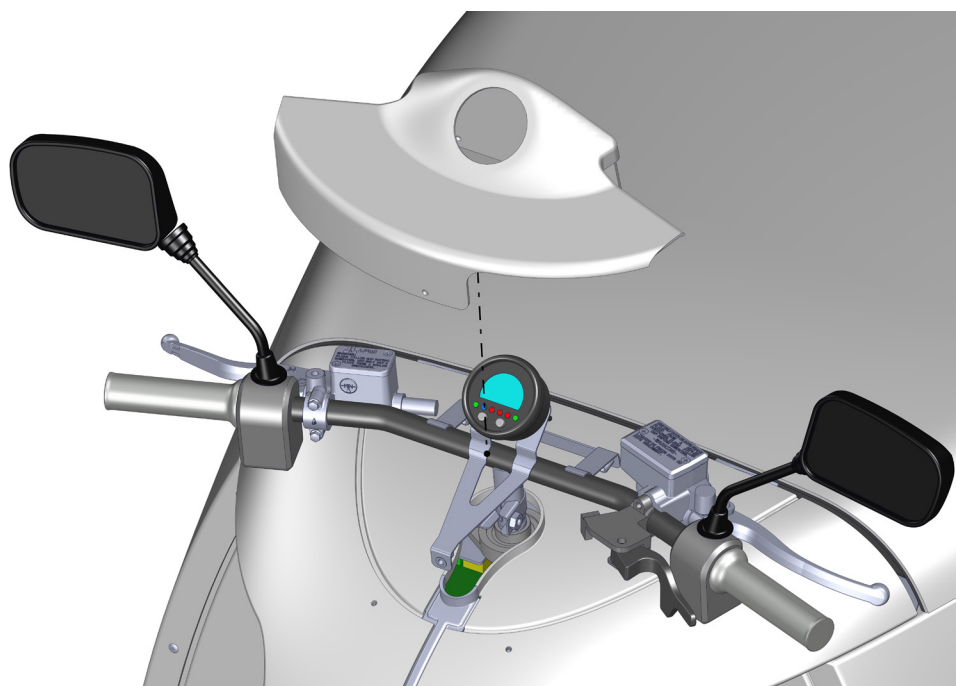


① Remove the brake pad pins.



② Remove the caliper ①. Remove the brake pad spring ② and the brake pads ③.

Steering



Remove the dashboard cover to gain access to the parking brake handle, the dashboard cluster and the handlebar assembly. Check everything for wear and cracks and replace it if necessary.



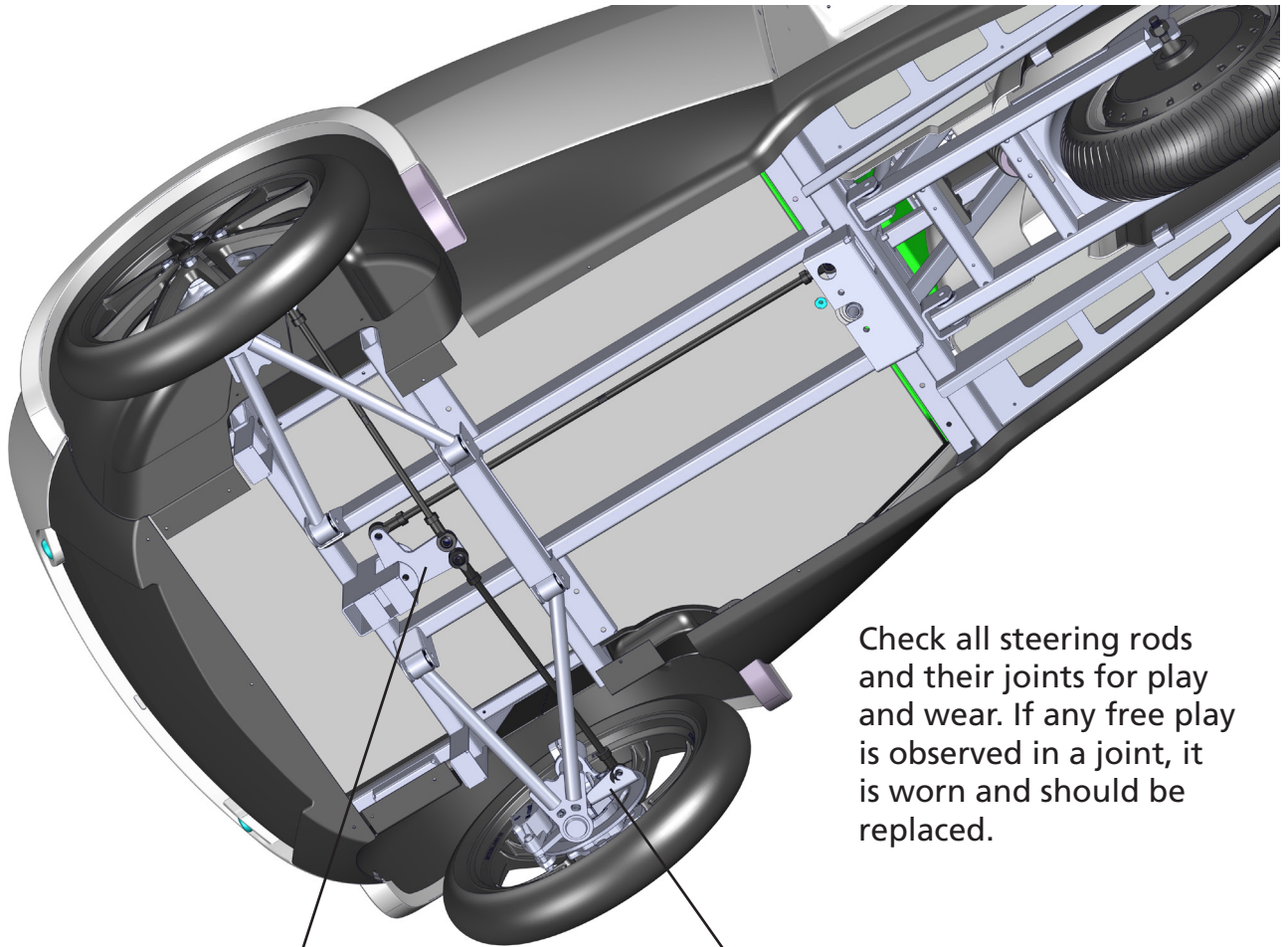
Jack up the vehicle to gain access to the steering rods.

WARNING

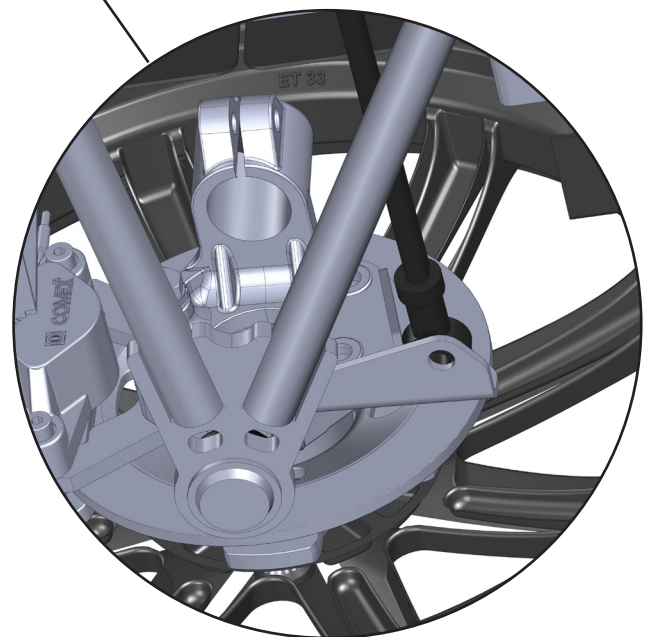
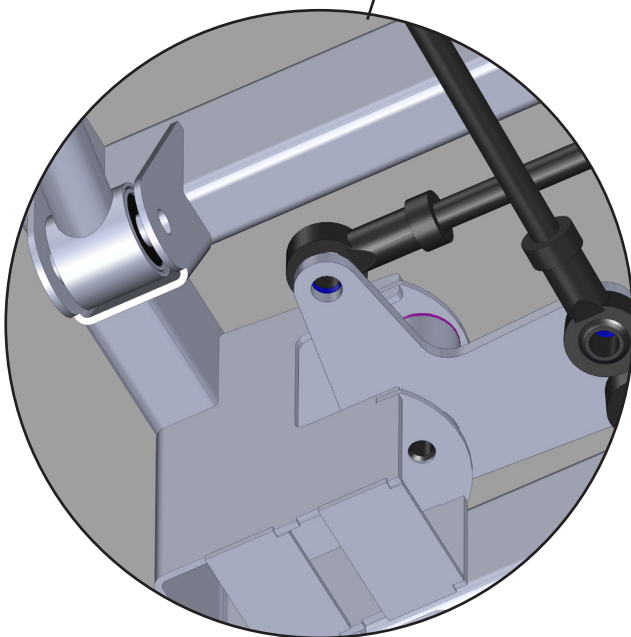


Never sit or lie under the vehicle when it is jacked up. If the jack fails the vehicle can fall down on you! Jacks, hoists, or other lifting devices shall not be used beyond the safe load capacity recommended by the manufacturer. Never sit in vehicles being lifted by hydraulic lifts or jacks. Never work under vehicles that are not properly supported with approved stands. Makeshift stands made of wood, cement blocks, or boxes shall not be used.

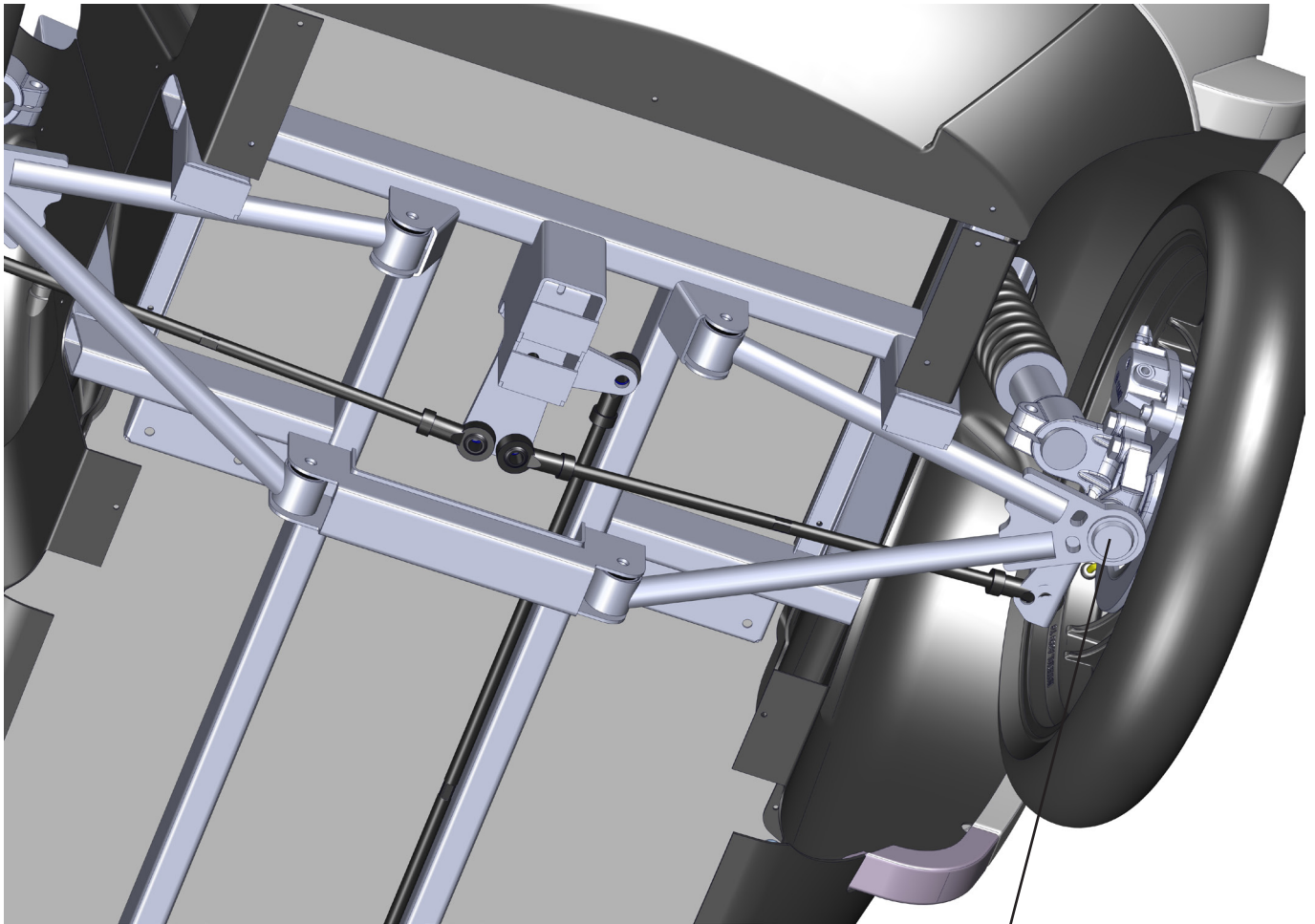
Steering rods



Check all steering rods and their joints for play and wear. If any free play is observed in a joint, it is worn and should be replaced.

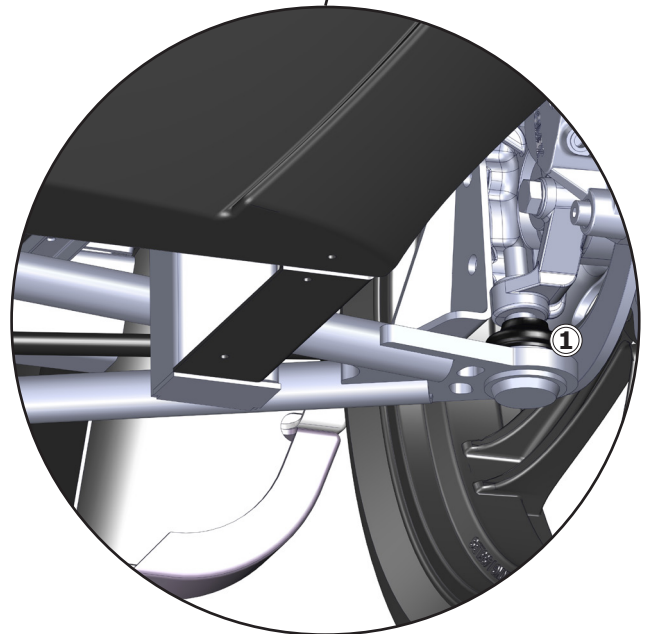


Front suspension

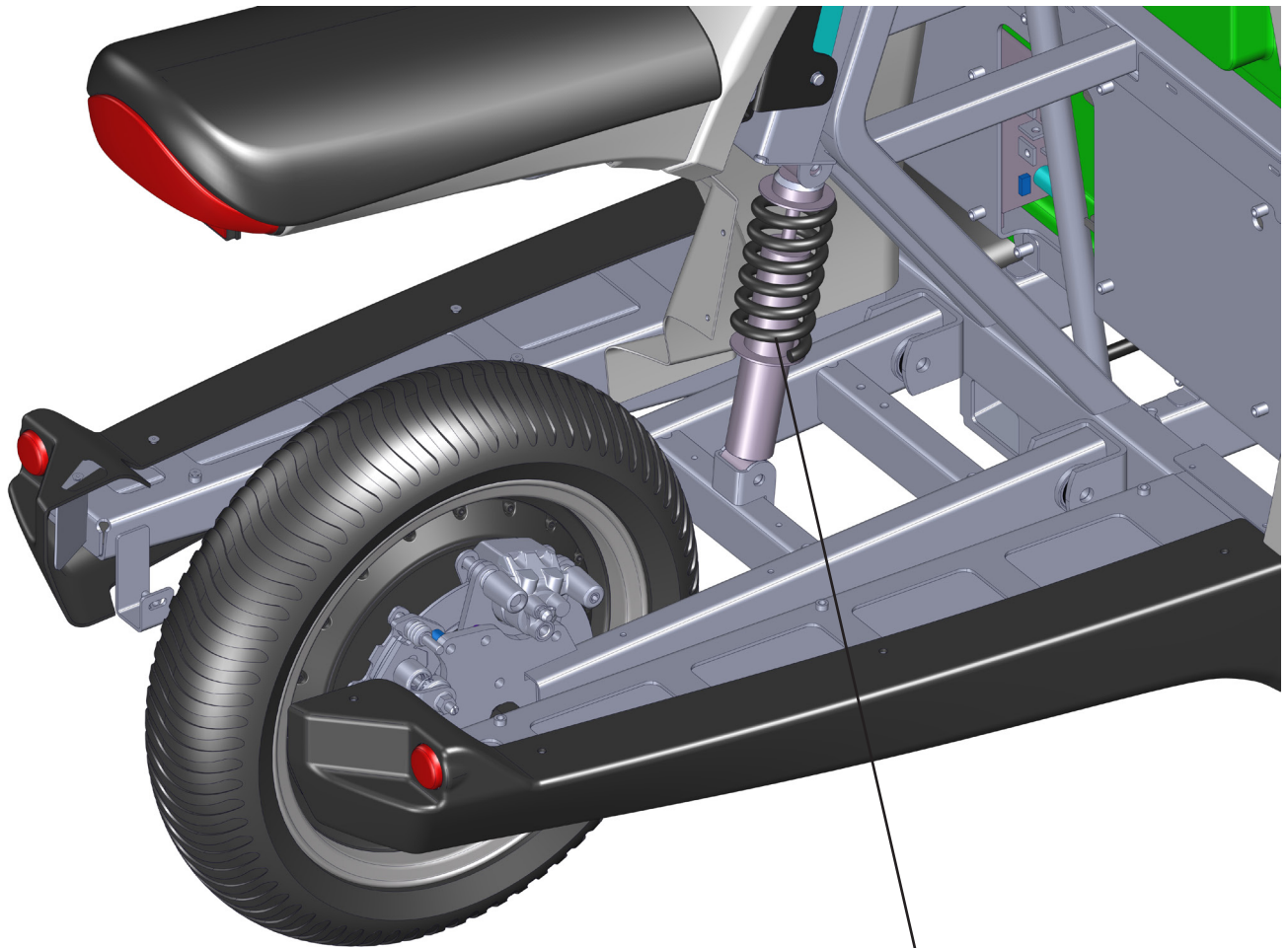


The front suspension can be inspected by jacking up the vehicle. Check all joints and bushings for cracks and wear and replace if necessary. The shock absorbers and spring must be replaced as a whole unit.

Check the suspension ball joint rubber bushings ① for crack and wear. Replace if necessary.

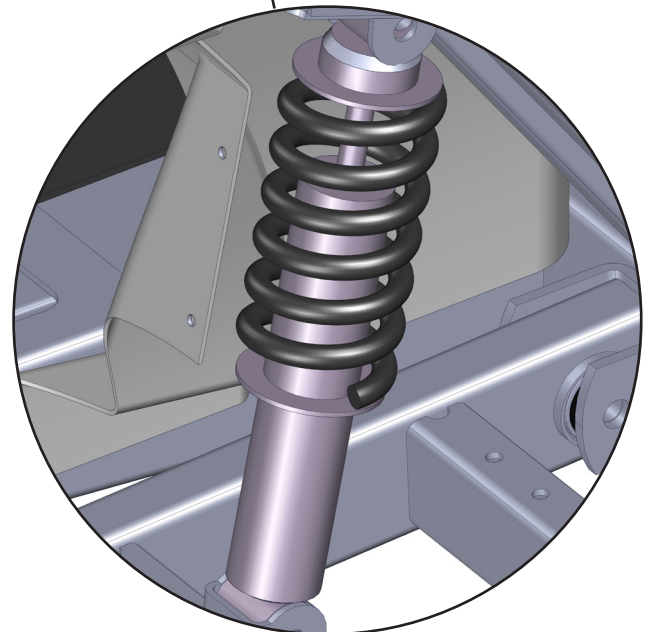


Rear suspension

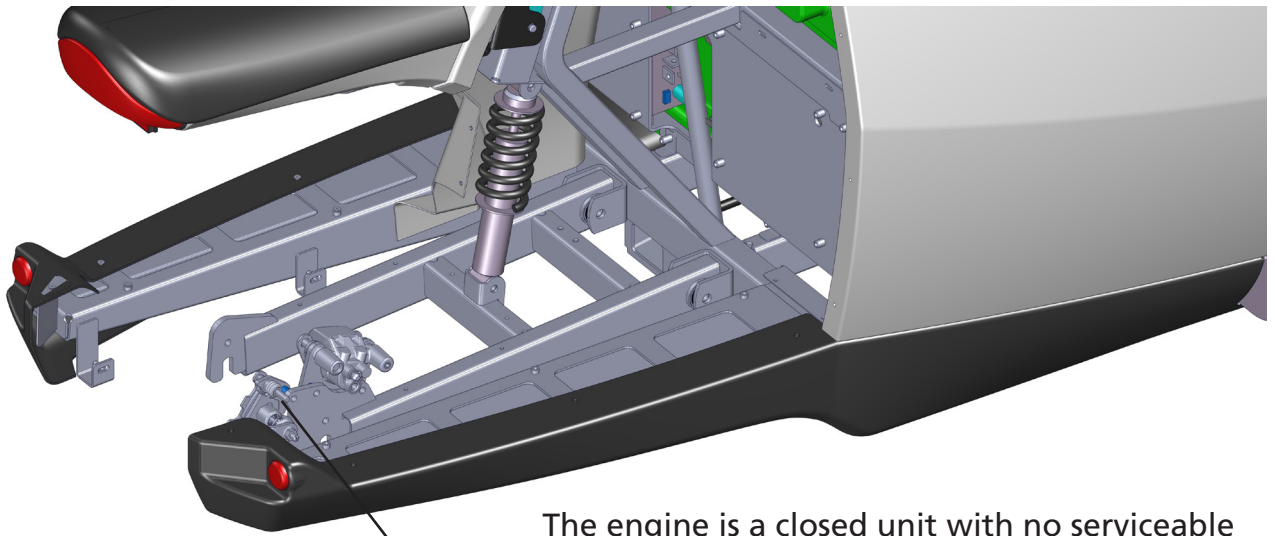


The rear suspension can be inspected after removing the side panels. Check all joints for cracks and wear and replace if necessary.

The shock absorber and spring must be replaced as a whole unit.



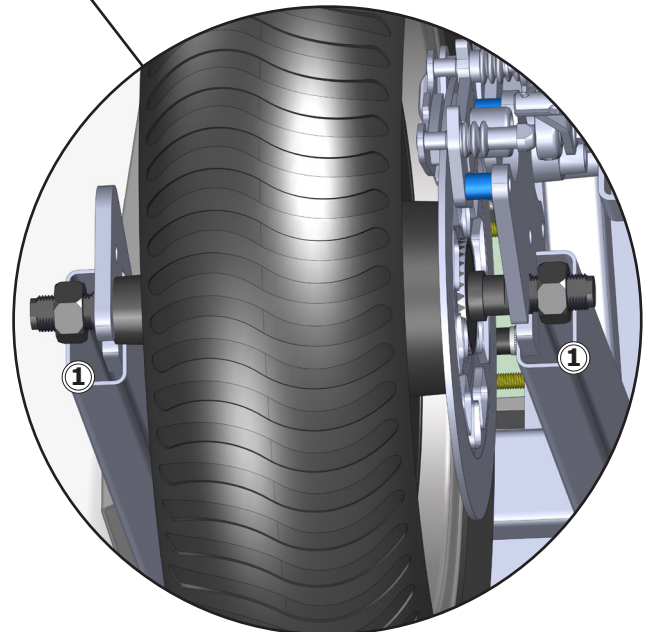
Engine



The engine is a closed unit with no serviceable parts inside. It must be replaced as a unit if it is defective.



To remove the engine, jack up the vehicle. Disconnect all wires to the engine and loosen the retaining bolts ①.

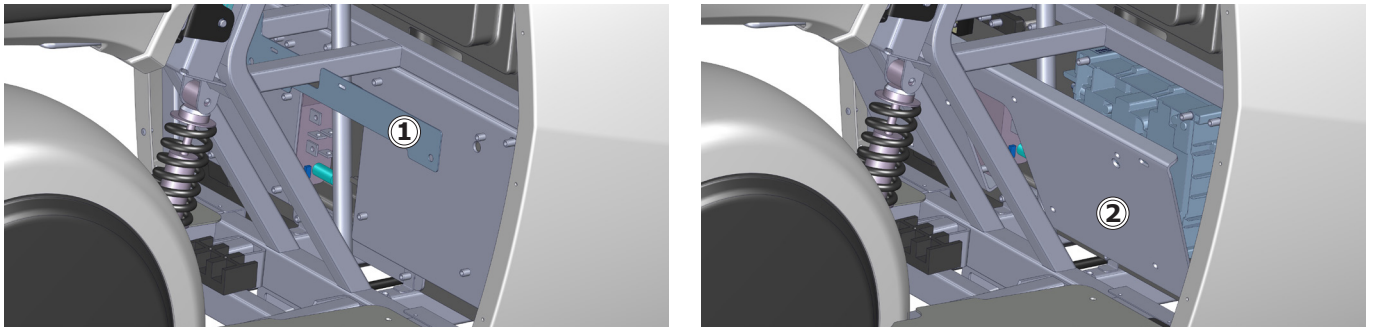


Charger

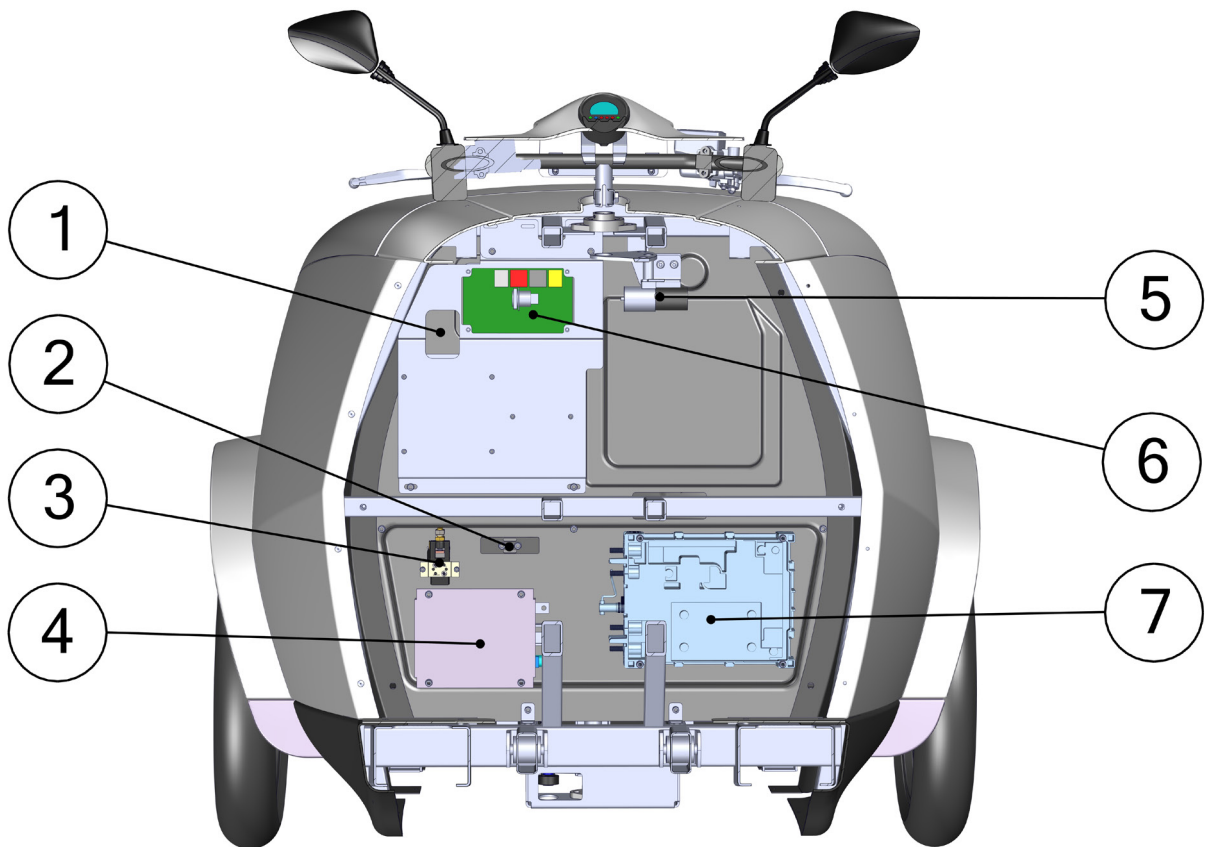
In case of error the LED light on the external charger will blink in different patterns.

LED code pattern	Cause	Action

Electronic system

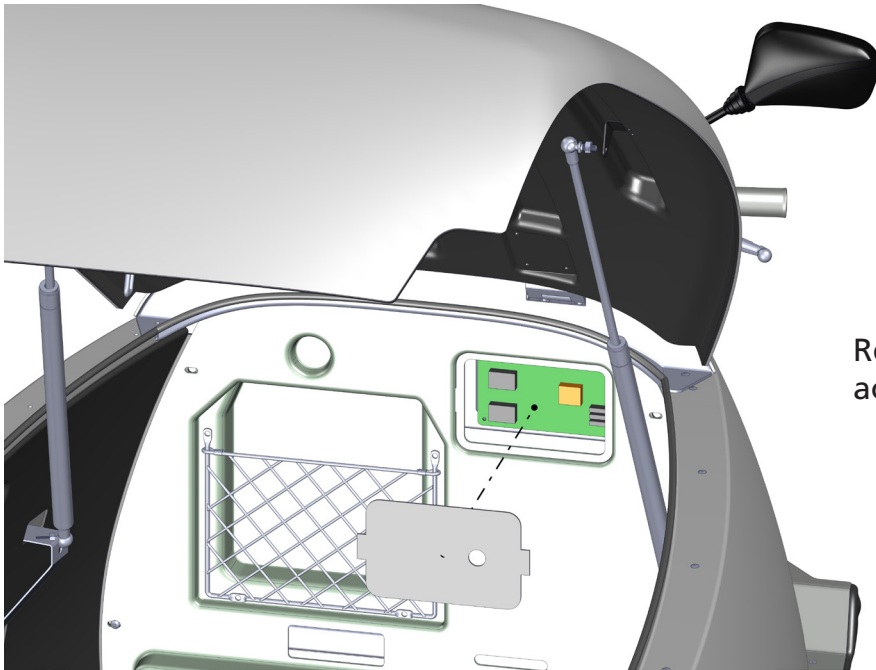


Remove the plates ① and ② to gain access to the electronics.



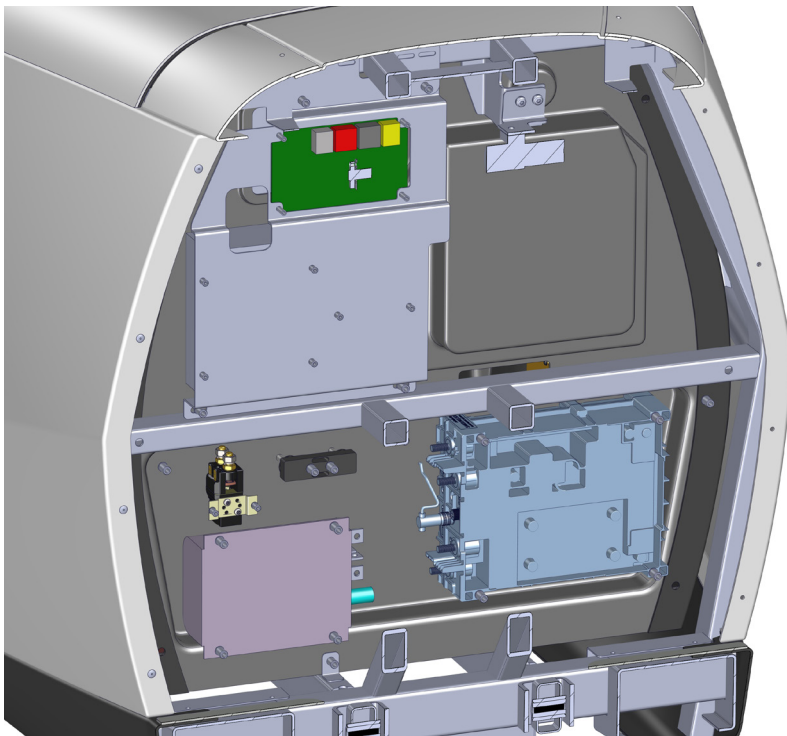
1	2	3	4	5	6	7

Fuses



Remove the service hatch to gain access to the fuse box.

LIST / IMAGE OF FUSES



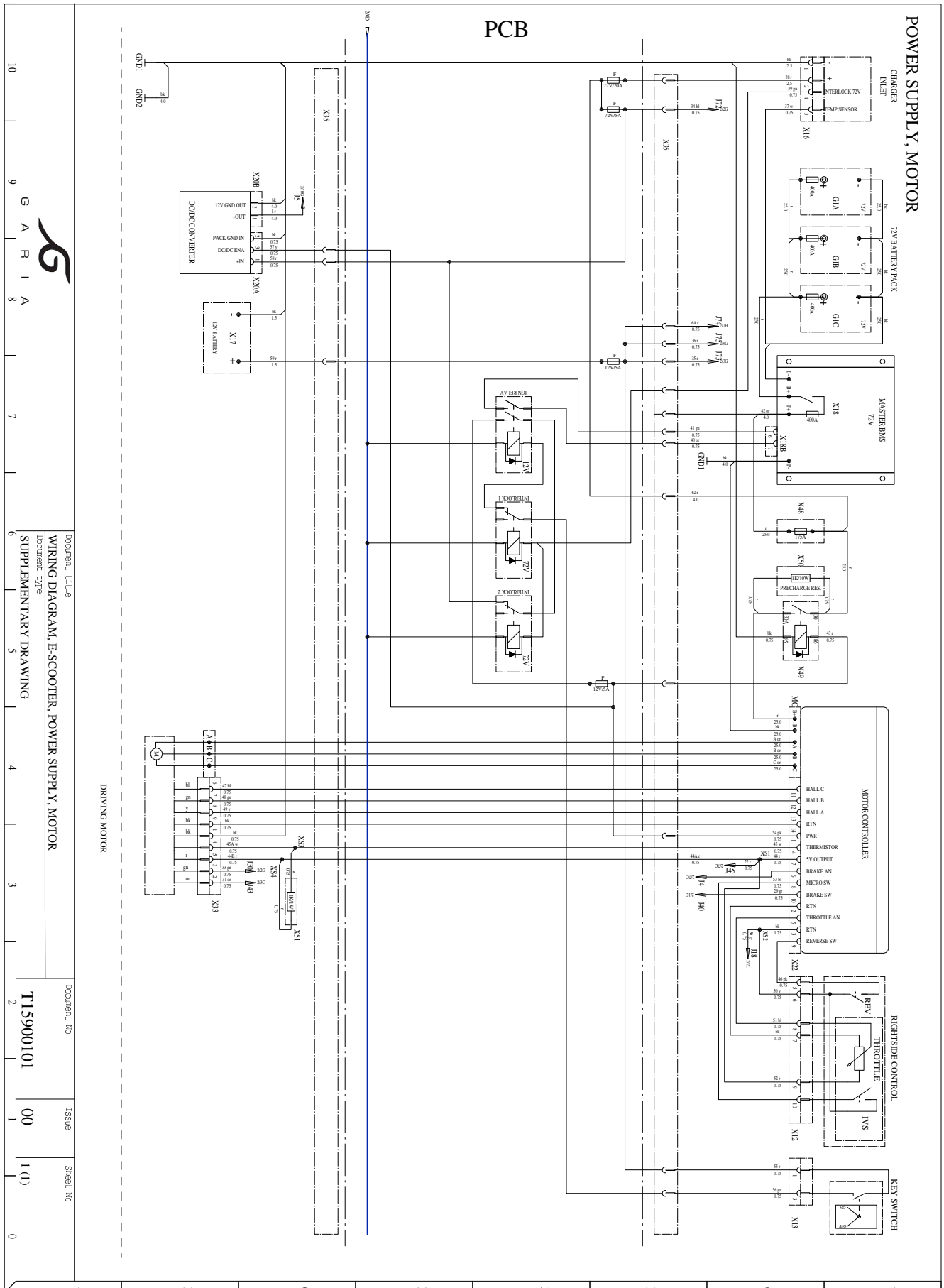
The main fuse sits in....

Service plan

Service intervals								
Months	6	12	18	24	30	36	42	48
Distance (km)	10,000	20,000	30,000	40,000	50,000	60,000	70,000	80,000
Description								
Tire pressure	CA	CA	CA	CA	CA	CA	CA	CA
Visual inspection of tires and rims	C	C	C	C	C	C	C	C
Brake fluid	C/S	C/S	R	C/S	R	C/S	R	C/S
Battery mounting and liquid levels	C	S	S	S	S	S	S	S
Wires, battery cables and various connectors	CL	CL	CL	CL	CL	CL	CL	CL
Steering for free play	C	S	S	S	S	S	S	S
Shocks, springs and cuffs	C	C	C	C	C	C	C	C
Lights (front, rear, turn)	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R
Wheel bearings, sound and free play	-	S	S	S	S	S	S	S
Toe in alignment	-	CA	CA	CA	CA	CA	CA	CA
Front brakes	C	S/CL	S/CL	S/CL	S/CL	S/CL	S/CL	S/CL
Rear brakes	C	S/CL	S/CL	S/CL	S/CL	S/CL	S/CL	S/CL
Discharge test	-	S	S	S	S	S	S	S
Front suspension wishbones	-	C	C	C	C	C	C	C
Rear suspension swing arm	-	C	C	C	C	C	C	C
Motor	-	C	C	C	C	C	C	C
Controller	-	C	C	C	C	C	C	C
Brake handles and throttle control	-	CA	C	CA	C	CA	C	CA
Seat adjustment	-	C	C	C	C	C	C	C
Side mirrors	-	C	C	C	C	C	C	C
Cluster (functionality / Service reset)	CA	CA	CA	CA	CA	CA	CA	CA
Dashboard buttons and switches	C	C	C	C	C	C	C	C

<p>C = Check CA = Check & Adjust R = Replace</p>	<p>S = Service CL = Clean & Lubricate L = Lubricate</p>
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Wiring diagrams



10	9	8	7	6	5	4	3	2	1	0
G A R I A										
Document title WIRING DIAGRAM, E-SCOOTER, POWER SUPPLY, MOTOR										
Document type SUPPLEMENTARY DRAWING										
Document no T15900101										
Issue 00										
Sheet no 1 (1)										

