

# 3. Engine removal

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### 3.1. General instructions

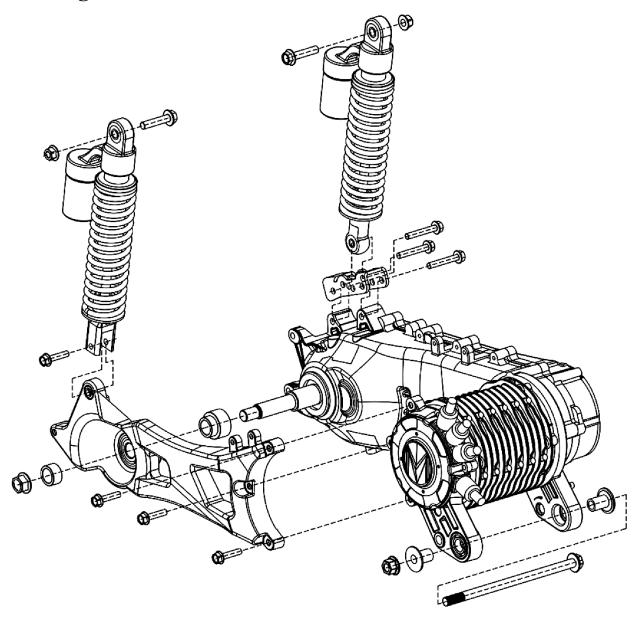
- A suitable support or stand is required to support the full weight of the batteries and frame when the engine is removed.
- It is recommended that the seat, helmet boot and the entire rear bodywork of the scooter be removed. If you leave any components mounted, protect them with rags to avoid damaging them during removal.
- When disassembling the engine, be careful not to trap your hands or fingers under the weight of the engine.
- It is recommended that this operation be carried out with another person to help, especially considering the weight of the engine. Exercise extreme caution when working in teams.

## 3.2. Tightening torques

Component	Thread	Tightening
		torque
Lower left shock absorber fixing screws	M8x50	25±5 Nm
Lower right shock absorber fixing screws	M8x30	20±4 Nm
Upper shock absorber fixing nut	M10	40±3 Nm
Engine support axle	M12	75±8 Nm
Rear caliper screws	M8x30	25±5 Nm



# 3.3. Diagram



### 3.4. Engine removal

#### Required prior operations:

- Disconnection of electrical system components 76.8V:
  - → 5.5. Disconnection of the BDU
  - → 5.6. Disconnection of the engine cables from the Controller
- Disassembly of rear axle components:
  - → 8.6. Removal of the left shock absorber
  - → 8.7. Removal of the right shock absorber
  - → 8.9. Rear brake caliper removal



#### **Necessary tools**









Nylon hammer

Easel or kickstands

Use a suitable kickstand or other sturdy stand to support the bottom cradle of the frame. If you have not removed the underbody, insert a piece of wood between the kickstand or cradle and the cradle to avoid scratching the underside of the scooter.

Raise the cradle so that the centre kickstand is slightly in the air.

On the right-hand side of the vehicle, locate the engine data connector.





Disconnect the connector by pressing the end of the tab.

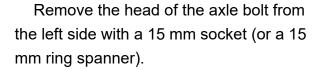




On the right-hand side, use a 17 mm socket to secure the axle nut.

#### **Tightening torque:**

Engine axle nut 75±8 Nm





Use a nylon hammer to tap the axle on the right-hand side.



Pull out the axle from the left-hand side. Do not forget to grease the axle during assembly.





With the help of another person, release the engine from the frame by moving it backwards.

The assembly sequence is the reverse of the disassembly sequence.

