

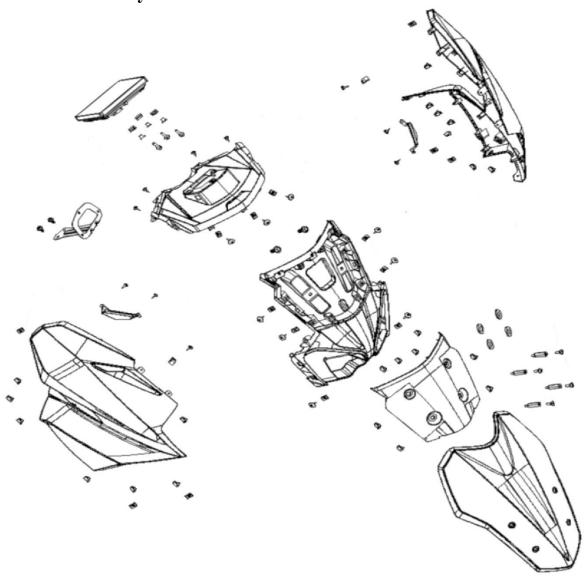
# 1. Bodywork

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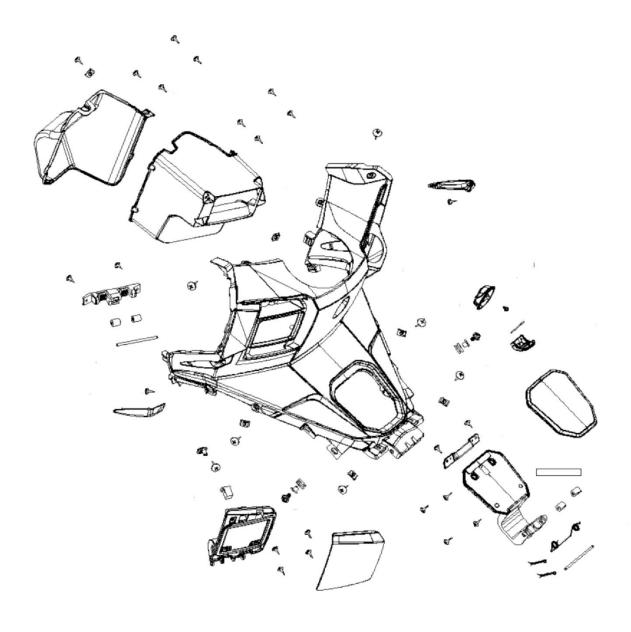
# 1.1. DIAGRAMS

# 1.1.1. Front bodywork



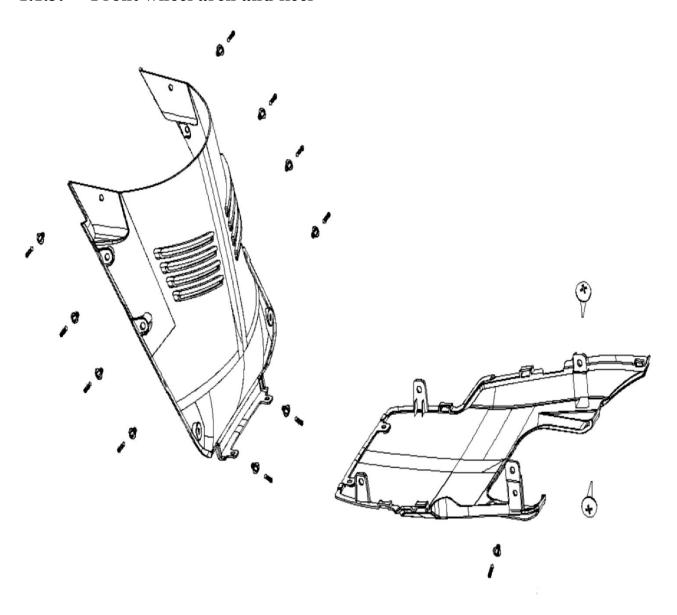


# 1.1.2. Counter shield



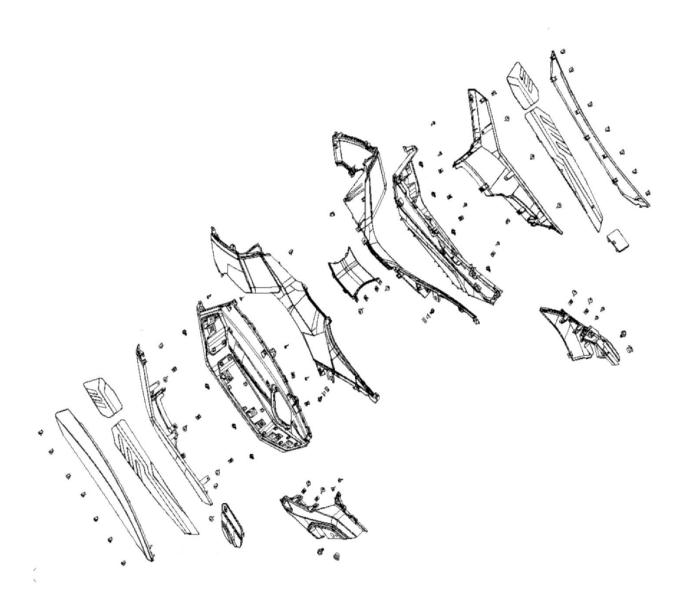


# 1.1.3. Front wheel arch and keel



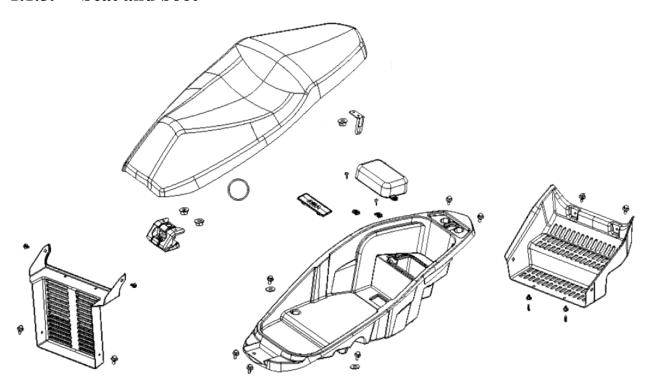


# 1.1.4. Central bodywork



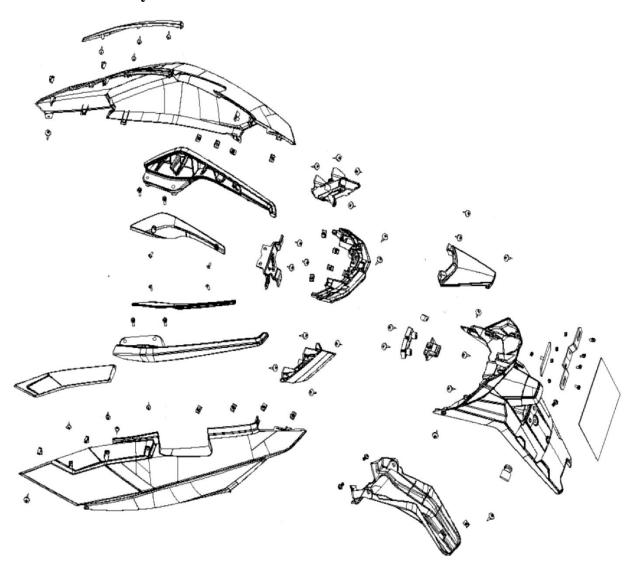


# 1.1.5. Seat and boot



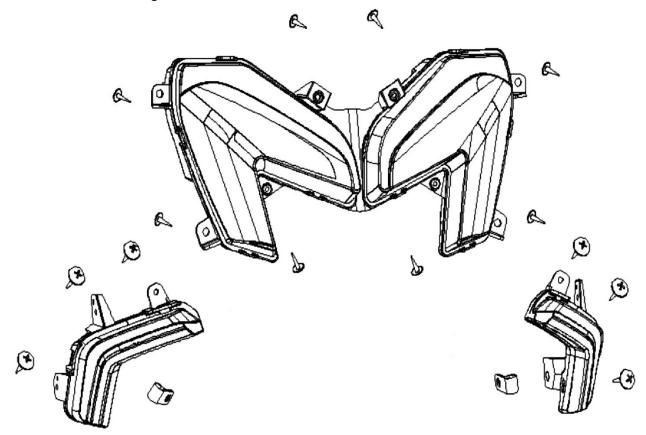


# 1.1.6. Rear bodywork





# 1.1.7. Headlamp and front indicators





# 1.2. Introduction to bodywork connections

For a more aesthetically pleasing look without visible screws, the Nerva Exe uses multiple solutions to connect the various parts that make up the bodywork. Avoid forcing these connections, as this risks damaging them.

#### 1.2.1. Locating pegs

The locating pegs are flexible plastic parts with a pointed tip that makes it easier to insert them into the square hole of the mating piece; once inserted, a small ridge just behind the tip prevents them from coming back out.

In the pictures in this manual, they are located in green circles.

Parts joined by locating pegs should be separated using the appropriate plastic remover tool, as this will minimise scratches on the bodywork surface.

However, the locating pegs can usually be separated by hand.

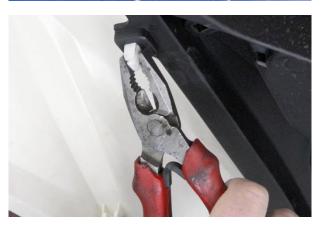
Do not force separation under any circumstances.

If you feel resistance, it is recommended that you do not force the separation of the locating peg with the eyelet.

Use a pair of pliers on the inside of the bodywork to squeeze the pointed profile of the locating peg; this will make it easier to remove.









#### 1.2.2. Plastic rivets

Plastic rivets are small-sized parts which join two bodywork components through a shared hole. The rivet consists of an outer part with eaves and the central pin. When the central pin is flush with the outer surface of the rivet, it widens the underside of the rivet making it larger than the hole and preventing the underbody component from separating.

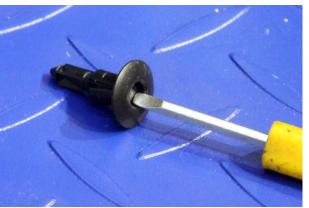
To release the rivet, press the central pin with a small screwdriver or punch of suitable width.

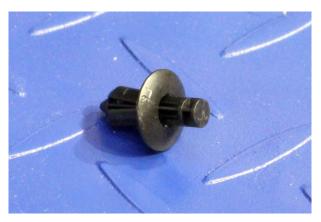
This frees up the flange by reducing its cross-section and makes it easier to dismantle. Once the central pin has sunk, remove the rivet from its housing by pulling the eaves outwards.

On assembly, re-insert the rivet through the two holes in the two bodywork parts, but with the central pin protruding from the outer surface of the rivet.

Once the rivet has passed through the two bodywork parts, push the central pin in with your finger until it is flush with the outer surface of the rivet.











### 1.2.3. Clamps/Threaded screws

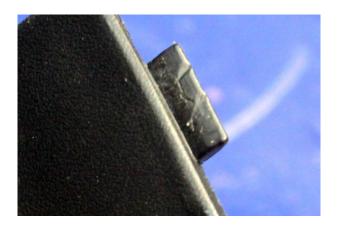
The clamp is a sheet folded on itself, with a hole through both sides and a single-threaded thread on one side. The clamp is placed on the underbody with the thread side outside the connection. From the outer part, the appropriate threaded screw is inserted and screwed into the clamp, connecting the two bodywork parts.



### 1.2.4. Flanges

The flange is the complement to another connection, as it fixes the parts in such a way that they do not separate perpendicular to the flange surfaces.

Once the other connection is separated, the flange is released by simply pulling the part outwards.





# 1.3. Disassembly of the rear bodywork

### 1.3.1. Removal of seat, auxiliary battery and charging compartment

#### **Necessary tools**





Phillips screwdriver no. 2

10 mm socket

Use a 10 mm socket spanner to remove the two screws securing the seat hinge.



Remove the seat.



Remove the two screws securing the auxiliary battery cover with a #2 Phillips head screwdriver.





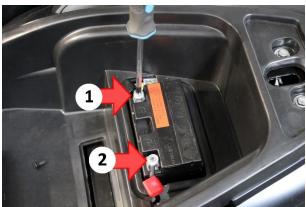
Remove the auxiliary battery cover.



Disconnect the battery connections, using a #2 Phillips screwdriver or 8 mm socket spanner to remove their securing screws. First remove the red positive (+) connection and then the black negative (-) connection.

When mounting, first connect the black negative (-) connection and then the red positive (+) connection.

Remove the auxiliary battery from its housing by hand.





Remove the two screws on both sides of the seat lock with a 10 mm socket spanner.





Remove the two front screws of the charging compartment with a 10 mm socket spanner.



Remove the charging compartment with your hands by pulling it upwards.



### 1.3.2. Disassembly of the rear bodywork shell

#### Required prior operations:

 Remove the seat, auxiliary battery and charging compartment (→ See 1.3.1. Seat, auxiliary battery and charging compartment removal)

#### **Necessary tools**



Phillips screwdriver no. 2



Long Phillips screwdriver no. 2



10 mm socket spanner

NOTE: The procedure is described for the right-hand side of the rear bodywork. Repeat the procedure for the left-hand side of the bodywork at each step.



Use a 10 mm socket spanner to remove the two screws securing the side handle.



Remove the side handle.



To remove the centre moulding, pull apart the seven locating pegs marked with the green circles.



Carefully pull the centre moulding away from the centre bodywork.





Remove the centre moulding.



Using a Phillips screwdriver with a #2 point, remove the screw that secures the rear bodywork side to the frame.



Using a #2 Phillips screwdriver, remove the screw securing the lower part of the rear side of the bodywork.

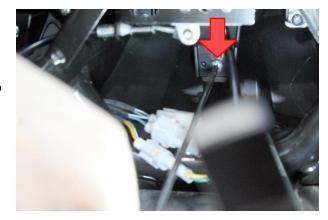


Using a long Phillips screwdriver with a #2 tip, remove the screw that secures the inner rear portion of the rear bodywork side to the frame.





Using a long Phillips screwdriver with a #2 tip, remove the screw located a little further down on the inside that secures the rear part of the rear side of the bodywork to the frame.



Disconnect the 3-pin connector from the rear lamp.



Disconnect the other three connectors from the rear lamp and rear indicator.



To remove the rear side panel from the frame, the four green circled locating pegs must be removed.





Pull these four points to separate the rear side locating pegs.



Open the left and right rear sides with your hands.



Separate the rear bodywork from the bodywork (left and right rear side panels, rear lamp, indicators and rear mudguards) by hand.



# 1.3.3. Disassembly of the rear mudguard and rear wheel arch

#### **Necessary tools**



10 mm socket spanner



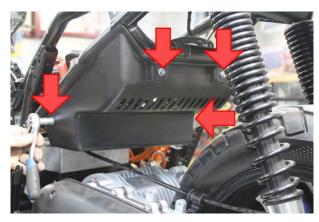
Remove the two screws securing the rear mudguard with a 10 mm socket spanner.



Remove the rear mudguard.



Remove the four screws securing the rear wheel arch with a 10 mm socket spanner.



Remove the rear wheel arch.





# 1.4. Disassembly of the central bodywork

### 1.4.1. Disassembly of the front wheel arch

#### **Necessary tools**



screwdriver or punch

NOTE: The procedure is described for the right-hand side of the rear bodywork. Repeat the procedure for the left-hand side of the bodywork at each step.

Remove the front plastic rivet from the lower keel of the scooter.



Remove the lower plastic rivet from the front wheel arch.



Remove the intermediate plastic rivet from the front wheel arch.





Remove the upper outer plastic rivet from the front wheel arch.



Remove the upper centre plastic rivet from the front wheel arch.



Remove the front wheel arch.





### 1.4.2. Disassembly of the lower centre sides

#### Required prior operations:

Disassemble the front wheel arch (→ See 1.4.1. Removal of front wheel arch)

#### **Necessary tools**







Small screwdriver or punch



10 mm socket spanner



5 mm Allen key

NOTE: The procedure is described for the right-hand side of the rear bodywork. Repeat the procedure for the left-hand side of the bodywork at each step.

Remove the rear plastic rivet that joins the keel to the side of the bodywork.



To remove the lower centre side panel, locate this locating peg and pull it apart without removing the moulding completely.





To remove the lower centre side panel, locate this locating peg and pull it apart without removing the moulding completely.



To remove the lower centre side panel, locate this locating peg and pull it apart without removing the moulding completely.



Using a 5 mm Allen key, remove the screw that covers the passenger footrest when it is retracted.



Separate the lower side.





### 1.4.3. Dismantling of the central sides

#### Required prior operations:

- Disassemble the front wheel arch (→ See 1.4.1. Removal of front wheel arch)
- Remove the lower centre sides (→ See 1.4.2. Disassembly of the lower centre sides)

#### **Necessary tools**







Phillips screwdriver #2

10 mm socket spanner

5 mm Allen key

NOTE: The procedure is described for the right-hand side of the rear bodywork. Repeat the procedure for the left-hand side of the bodywork at each step.

Remove the rubber mat from the horizontal platform by pulling it out by hand.



Remove the rubber mat from the inclined platform by pulling it out by hand.

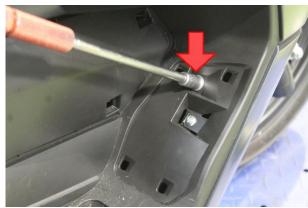




Use a #2 Phillips screwdriver to remove the indicated screw.



Use a 10 mm socket spanner to remove the indicated screw.



Use a #2 Phillips screwdriver to remove the four indicated screws.



Use the 10 mm socket spanner to remove the three indicated screws.

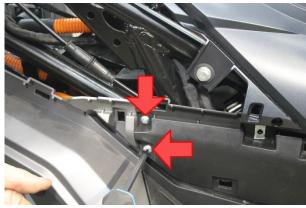




Use a 10 mm socket spanner to remove the indicated screw.



Use a #2 Phillips screwdriver to remove the two indicated screws.



Use a #2 Phillips screwdriver to remove the indicated screw.



Remove the upper cover of the centre tunnel.





Use a #2 Phillips screwdriver to remove the indicated screw.



To remove the central side, locate these locating pegs.



Separate the upper-front part by removing the two indicated locating pegs without separating it completely.



To remove the central side, locate this locating peg.





Separate the front centre side by separating the locating peg indicated in the previous step.



Separate the entire central side.



### 1.4.4. Disassembly of the lower keel

#### Required prior operations:

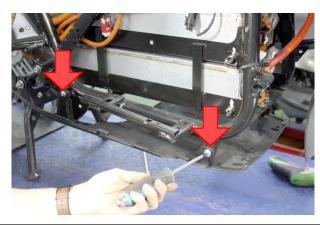
- Disassemble the front wheel arch (→ See 1.4.1. Removal of front wheel arch)
- Remove the lower centre sides (→ See 1.4.2. Disassembly of the lower centre sides)

#### **Necessary tools**



Phillips screwdriver #2

Remove the four screws securing the keel (two more on the left-hand side) to the frame with a #2 Phillips screwdriver.





Remove the keel.





# 1.5. Disassembly of the front bodywork

## 1.5.1. Disassembly of the windscreen

#### **Necessary tools**



Torx Plus 25 spanner

Using a Torx Plus 25 spanner, remove the four screws securing the windscreen to the front shield.



Remove the windscreen.





### 1.5.2. Disassembly of the headlamp

### Required prior operations:

• Remove the windscreen (→ See 1.5.1. Disassembly of the windscreen)

#### **Necessary tools**

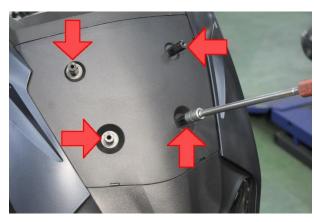




Phillips screwdriver #2

10 mm socket spanner

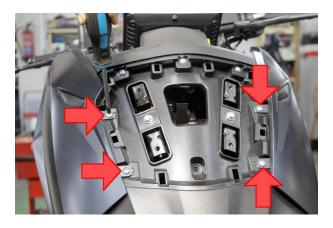
Use a 10 mm socket spanner to remove the four spacers shown in the picture.



Remove the front shield cover by hand.



Using a #2 Phillips screwdriver, remove the four screws securing the headlight support to the frame.





Working on the counter shield, remove the screw at the upper right with a #2 Phillips screwdriver.

Do the same with the symmetrical screw of the counter shield (upper left).



The picture shows the positions of the seven locating pegs that hold the upper right front side panel.



Separate the seven locating pegs on the upper-front right-hand side one-by-one.

Do the same for the upper-front left-hand side.



Apart from the upper-front right-hand side.

Do the same for the upper-front lefthand side.





Disconnect the right front indicator connector.

Disconnect the left front indicator connector.

Remove the front right and left upper side panels.



Remove the three screws that attach the headlight support to the instrument cluster support using a #2 Phillips screwdriver.



Use a 10 mm socket spanner to remove the two centre screws from the headlamp support.



Remove the headlamp support assembly with the headlamp to gain access to the connector.





Disconnect the connector from the headlamp.

Remove the headlamp support assembly with the headlamp.



### 1.5.3. Disassembly of the instrument cluster assembly

#### Required prior operations:

- Remove the windscreen (→ See 1.5.1. Disassembly of the windscreen)
- Remove the headlamp (→ See 1.5.2. Disassembly of the headlamp)

#### **Necessary tools**





Phillips screwdriver #2

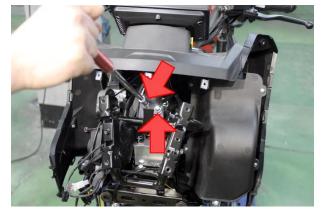
10 mm socket spanner

Using a #2 Phillips screwdriver, remove the two screws on the right-hand side that connect the base of the instrument cluster to the countershield.

Do the same with the two screws on the left-hand side.



Using a 10 mm socket spanner, remove the two screws that attach the instrument cluster assembly to the frame.





Separate the instrument cluster assembly to access the connectors.



Disconnect the connector from the instrument cluster display.



Disconnect the USB connector.



### 1.5.4. Disassembly of the counter-shield

#### Required prior operations:

- Disassembly of the windscreen (→ See 1.5.1. Disassembly of the windscreen)
- Remove the headlamp (→ See 1.5.2. Disassembly of the headlamp)
- Disassemble the instrument cluster assembly (→ See 1.5.3. Disassembly of the instrument cluster assembly

#### **Necessary tools**







Fine-tipped screwdriver or punch

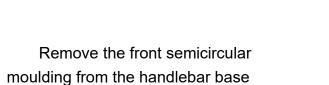


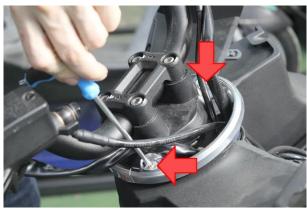
Torx Plus 25 spanner



10 mm socket spanner

Remove the two screws securing the front semi-circular moulding to the handlebar base with a Torx Plus 25 spanner.









Use a #2 Phillips screwdriver to remove the screw on the lower right-hand side of the counter shield.

Do the same with the screw on the lower left-hand side of the counter shield.



Using a 10 mm socket, remove the screw holding the hook and remove the hook.



Using a #2 Phillips head screwdriver, remove the screw from the plate on the contact knob assembly where it supports the Type 2 charging connector cover release cable.



Using a fine-tipped screwdriver or punch, manipulate the opening cable head of the Type 2 charging connector cover to release it from the contact knob assembly.





Remove the counter-shield with your hands.



### 1.5.5. Disassembly of the front mudguard

#### Required prior operations:

• Remove the front wheel (→ See 7.8. Front wheel removal)

#### **Necessary tools**







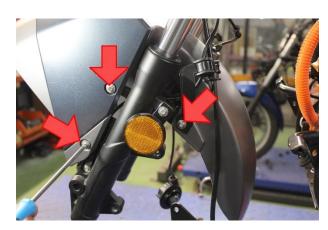
Phillips screwdriver #2

Torx Plus 25 spanner

10 mm socket

Use a Torx Plus 25 spanner to remove the three screws that secure the front mudguard to the left fork leg.

Use a Torx Plus 25 spanner to remove the three screws that secure the front mudguard to the right fork leg.



Remove the front mudguard by hand.

