

# 6

## TRANSPORT, INACTIVITY AND COMMISSIONING OF THE VEHICLE

### CONTENTS

<b>6.1.</b>	<b>VEHICLE LIFTING, HANDLING AND TRANSPORT .....</b>	<b>6 - 2</b>
<b>6.2.</b>	<b>INACTIVITY OF VEHICLE FOR ONE OR MORE DAYS .....</b>	<b>6 - 4</b>
6.2.1	Inactivity for one day .....	6 - 4
6.2.2	Prolonged inactivity .....	6 - 5
<b>6.3.</b>	<b>PACKAGING .....</b>	<b>6 - 6</b>
<b>6.4.</b>	<b>STARTING THE VEHICLE .....</b>	<b>6 - 7</b>

## 6.1. VEHICLE LIFTING, HANDLING AND TRANSPORT

### Safety rules



**WARNING**

The loading, unloading, start-up and transport operations of the vehicle must only be carried out by qualified staff..



**COUPLING POINT FOR LIFTING THE VEHICLE**



**WARNING**

Carry out the operations below with the vehicle completely unloaded.

### Operating instructions

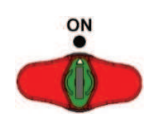
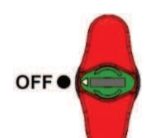
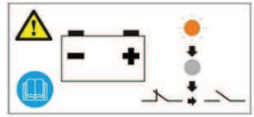

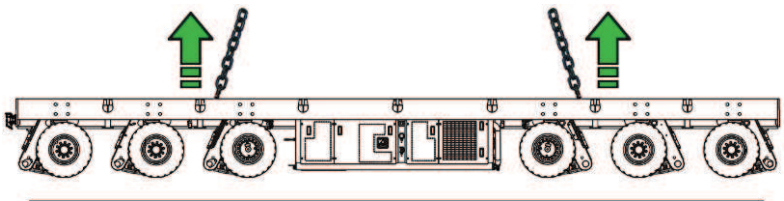
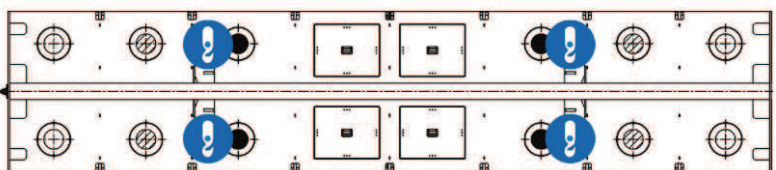
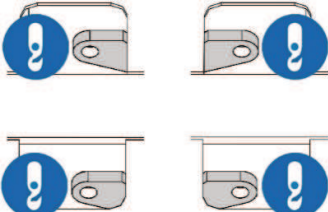
1	<p>Before lifting or moving the vehicle, make sure that its suspensions are completely closed and locked. Set the vehicle to full low position (see chapter 10).</p>	
2	<p>Switch off the engine (see chapter 8) and the control board: general key in position "0".</p>	
3	<p>Lock the suspensions with the corresponding lock pins and close all the taps [9] (one per suspension).</p> <p><b>NOTE</b> For each suspension of any vehicle ECO1000 there is a tap [9], always in the same position in respect to the suspension itself, as shown in the figure above (ECO1000 6/4). For more information, refer to paragraph 3.2.</p>	
4	<p>Check nobody is in the vehicle lifting and handling area.</p>	

INDICATIVE FIGURE

Continued →

Continued →

**Operating instructions**

5	<p>Disconnect the vehicle batteries → [+24V] Switch lever in the [OFF] position.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>ON</p> </div> <div style="text-align: center;">  <p>OFF</p> </div> <div style="text-align: center;"> <p><b>+24V</b> ...</p> </div> <div style="text-align: center;">  </div> </div> <p><b>! ATTENTION</b> The Diesel engine batteries can be disconnected only if the yellow light located over the switch handle is off.</p> <ul style="list-style-type: none"> <li>• <b>Indicator light ON: the batteries cannot be disconnected yet.</b></li> <li>• <b>Indicator light OFF: the batteries can be disconnected.</b></li> </ul> 
6	<p>Lift the vehicle keeping it level. Use one or two cranes and four chains of adequate capacity. Attach the chains to the four lifting hooks available on the frame of the vehicle.</p> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> <p><b>! WARNING</b> The characteristics of the lifting equipment must exceed those of the connection points (WLL minimum 16000 kg per chain).</p>

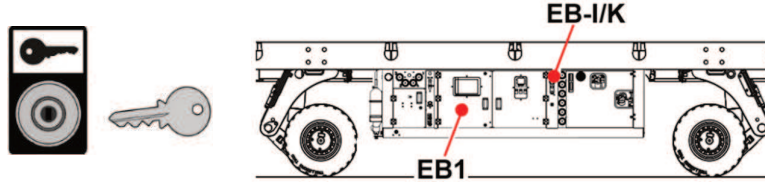
INDICATIVE FIGURE

## 6.2. INACTIVITY OF VEHICLE FOR ONE OR MORE DAYS

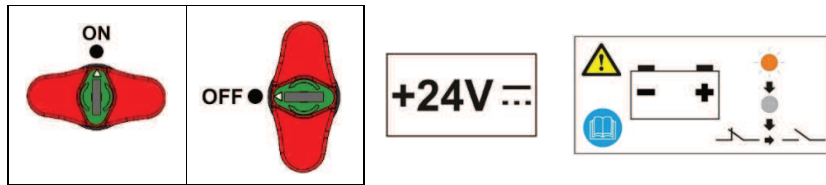
### 6.2.1 Inactivity for one day

#### Operating procedure

- 1) Remove the general key  from the [EB-I/K] panel.



- 2) Make sure that all electric panels are closed.
- 3) Disconnect the vehicle batteries → [+24V] Switch lever in the [OFF] position.



#### **ATTENTION**

*The Diesel engine batteries can be disconnected only if the yellow light located over the switch handle is off.*

- **Indicator light ON: the batteries cannot be disconnected yet.**
- **Indicator light OFF: the batteries can be disconnected.**



## 6.2.2 Prolonged inactivity

### Preliminary information



**ATTENTION**

*For periods of inactivity for ~ 10-15 days, park the vehicle, completely unloaded, in a closed premises and carry out the operations outlined below, to prevent possible damage.*

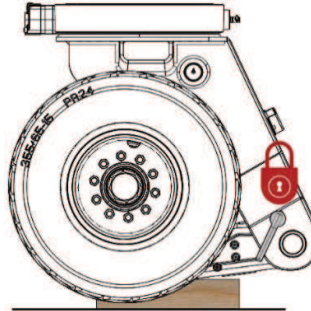
### Inactivity up to 15 days

- Park the vehicle, resting it on the structure of the suspensions.



**ATTENTION**

*Avoid parking the vehicle by resting it on the tyres.*



- Close:
  - all the cover panels;
  - all the electric panels;
  - the fuel tank cap;
  - the AdBlue® tank cap (if any). <sup>(1)</sup>
- Cover:
  - the Diesel engine exhaust (muffler);
  - the diesel engine radiators: air/intercooler and coolant liquid;
  - the hydraulic oil radiator.
- Ensure that the vehicle batteries are disconnected → Switch handle in the [OFF] position.
- Ensure all the commands are in the normal parking position.

### Inactivity over 15 days



**ATTENTION**

*You are advised not to prolong for more than 15 days the period of inactivity of the vehicle. Otherwise, carry out the following operations:*

- Check the level of liquids/lubricants.
- Start the diesel engine.
- When the hydraulic oil has reached the temperature of approx. 60°C, carry out the following manoeuvres:
  - movement forward/reverse of the vehicle (for 10 minutes);
  - lifting and lowering the vehicle (5 complete manoeuvres);
  - steering (during operation);
  - service braking and emergency stop (5 manoeuvres).



**WARNING**

**During the above operations, check all the signalling and alarm lights are working, simulating all the manoeuvres planned during vehicle use.**

<sup>(1)</sup> = the SCR system (see paragraph 1.13.6) is available only on some of the Diesel engine equipped vehicles.



### 6.3. PACKAGING

#### Instructions for packaging

For transport in saline environments, the Power Pack and all the motorized modules must be provided with a protective wax coating.  
 Also grease and/or protect the hydraulic cylinder rods and all the other parts not varnished with specific wax.  
 The muffler exhaust should be plugged.

#### Types of wax protection

Products **RECOMMENDED** by Cometto S.p.A.:

Protective wax for all the parts of the vehicle:

**DINITROL 3650** - Cometto S.p.A Code: 172.0497.

Protective wax for rods of hydraulic cylinders and all parts not painted:

**DINITROL 25B** - Cometto S.p.A Code: 172.0498.



For all parts not painted, threaded, holes and machined surfaces, the following types of grease can be used instead of protective wax:

**MOLYKOTE DX** - Cometto S.p.A Code: 275.0026.



**NOTE**

*For optimal removal of the protective wax, you are advised to use the following product: **DINITROL AUTOCLEANER**.*

#### Precautions of use and safety



**WARNING**

**Before using protective wax or grease, consult the relevant safety data sheets in compliance with the specifications given and using the specific P.P.E.**

## 6.4. STARTING THE VEHICLE

### Safety rules



**WARNING**

The loading, unloading, start-up and transport operations of the vehicle must only be carried out by qualified staff.




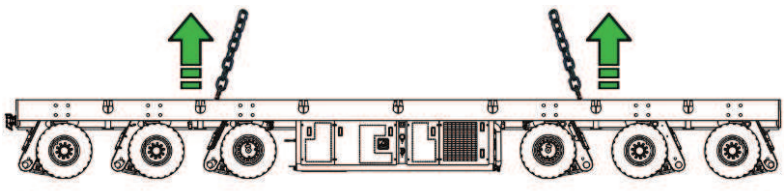
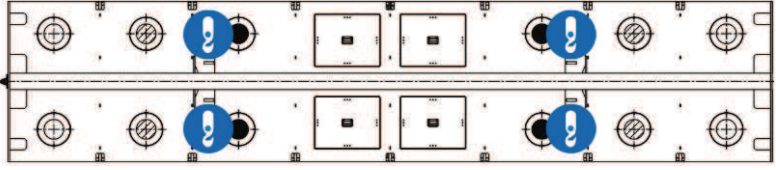



**COUPLING POINT FOR LIFTING THE VEHICLE**



**WARNING**

Carry out the operations below with the vehicle completely unloaded.

### Operating instructions

1	<p>Check nobody is in the vehicle lifting and handling area. </p>
2	<p>Unload the vehicle from the transport vehicle. During movement phases, the vehicle must be kept level. Use one or two cranes and four chains of adequate capacity. Attach the chains to the four lifting hooks available on the frame of the vehicle.</p>     <p> <b>WARNING</b> The characteristics of the lifting equipment must exceed those of the connection points (WLL minimum 16000 kg per chain).</p>

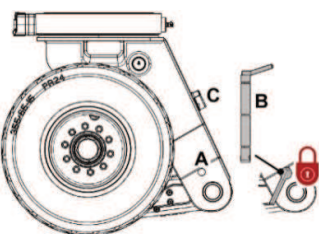
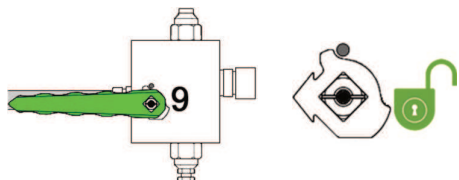
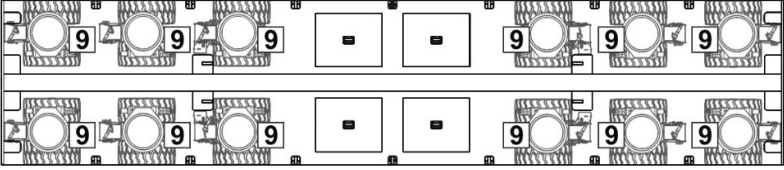
INDICATIVE FIGURE

Continued →

Continued "Starting the vehicle" →

**Operating instructions**

INDICATIVE FIGURE

3	<p>Remove the lock pins (B) and place them in their "housing" (C).</p> 
4	<p>Open all the suspension taps [9].</p>   <p><b>NOTE</b> For each suspension of any vehicle ECO1000 there is a tap [9], always in the same position in respect to the suspension itself, as shown in the figure above (ECO1000 6/4). For more information, refer to paragraph 3.3.</p> <p><b>ATTENTION</b> Keeping even a single tap [9] closed during operation of the vehicle can cause serious damage to the suspensions.</p>
5	<p>Start the Diesel engine (see chapter 8).</p>
6	<p>Lift the vehicle to the operating height (see chapter 10).</p> 