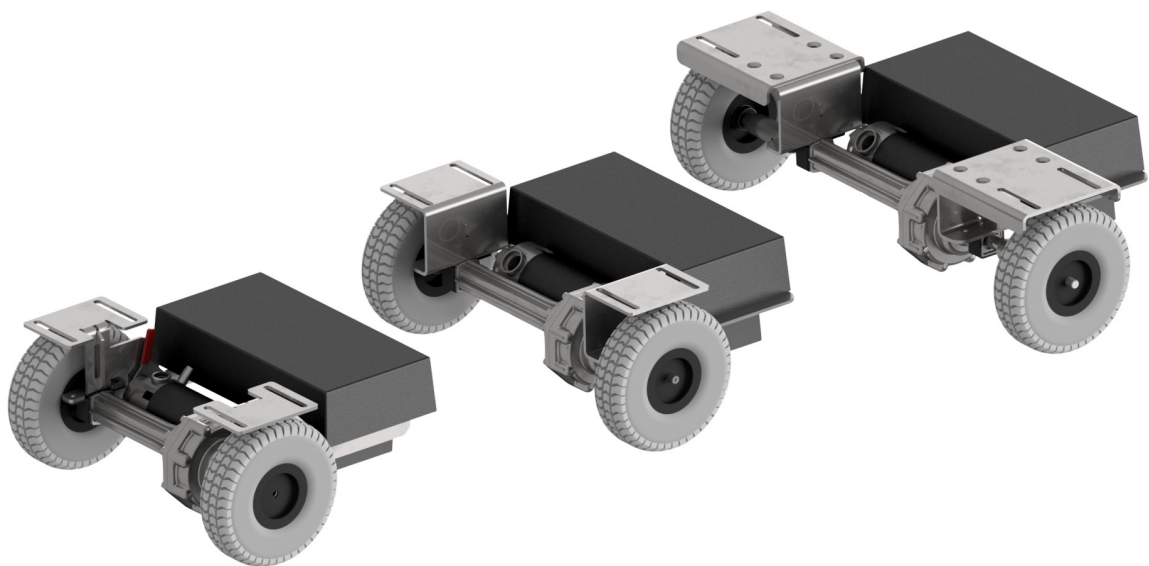




# USER MANUAL

## EASYGO PREMIUM

EasyGo Premium is a compact, safe and reliable series comprising three sizes of auxiliary engines, which can be installed onto a wide range of different standard trolleys. The auxiliary engine easily handles the heavy lifting, thereby reducing the risk of physical deterioration and work injuries for employees.



# TABLE OF CONTENTS

<b>1. ABOUT THIS USER MANUAL</b>	<b>4</b>
1.1 PURPOSE AND COVERAGE	4
1.2 INSTRUCTIONS FOR THE READER	4
1.3 VERSION	4
1.4 MANUFACTURER	4
1.5 MACHINERY DESIGNATION	5
1.6 CONNECTION BETWEEN THIS DOCUMENT AND THE MACHINE	5
1.7 EXPLANATION OF THE SYMBOLS	5
<b>2. SAFETY</b>	<b>6</b>
2.1 GENERAL WARNINGS AND PRECAUTIONS	6
2.2 USE OF PERSONAL PROTECTIVE EQUIPMENT (PPE)	6
2.3 SAFETY FEATURES	6
2.4 NON-AUTHORISED USE	6
2.5 CE MARKING	6
<b>3. OVERVIEW OF EASYGO PREMIUM</b>	<b>8</b>
3.1. DESCRIPTION OF EASYGO PREMIUM	8
3.2 PRODUCT OVERVIEW	8
3.3 LAYOUT DRAWINGS	12
<b>4. INSTALLATION</b>	<b>13</b>
4.1 MOUNTING OPTIONS	13
4.1.1 INSTALLATION CRITERIA FOR THE TROLLEY	13
4.2 INSTALLING EASYGO PREMIUM	13
4.2.1 INSTALLING EASYGO PREMIUM'S MOTOR UNIT	14
4.2.2 INSTALLING EASYGO PREMIUM'S SPEEDER BOX	15
<b>5. OPERATION</b>	<b>17</b>
5.1 TRAINING IN OPERATING THE TROLLEY WITH EASYGO PREMIUM	17
5.2 OPERATING A TROLLEY USING EASYGO PREMIUM	17
5.3 CHARGING	18
5.3.1 BATTERIES AND CHARGING TIME:	20
<b>6. ERROR CODES</b>	<b>21</b>
6.1 OVERVIEW OF ERROR CODES	21
<b>7. MAINTENANCE</b>	<b>23</b>
7.1 CLEANING	23
7.2 BATTERIES AND WIRING	23
7.2.1 REPLACING THE MAIN FUSE	23
7.3 STORAGE	23
7.4 DISPOSAL	23
<b>8. SERVICE</b>	<b>24</b>
<b>9. DECLARATION OF INCORPORATION FOR PARTLY COMPLETED MACHINERY</b>	<b>25</b>
<b>10. TECHNICAL SPECIFICATIONS</b>	<b>26</b>

# 1. ABOUT THIS USER MANUAL

## 1.1 PURPOSE AND COVERAGE

The purpose of this user manual is to ensure the correct installation, use, handling and maintenance of EasyGo Premium. EasyGo Premium is a series consisting of three models (see the list below). Together, the series enables installation on standard trolleys with a mounting width of 29.5-77.5 cm.

This user manual covers all three models, in that functionality, maintenance and installation are generally the same. In cases where there are differences between the three models, this will be evident in the text. There may be small deviations in the images from your model, in which case the text applies. In the section of the user manual concerning installation, EasyGo Premium is depicted on a platform trolley. There will naturally be variations depending on which trolley the EasyGo Premium is mounted on. The pictures should be seen as a supplement to the text, where the text is general and applicable. In case of doubt, you are always welcome to contact the dealer or manufacturer for clarification.

A six-digit Item No. is specified on the nameplate, which refers to which of the three models you have to hand.

- 100350 EasyGo Premium Small
- 100955 EasyGo Premium Medium
- 100956 EasyGo Premium X-large

## 1.2 INSTRUCTIONS FOR THE READER

It is the responsibility of the employer (the owner of the machinery) to ensure that everyone who operates, services, maintains or repairs EasyGo Premium has read and understood the user manual; at the very least, those parts of it which are relevant to their work.

Furthermore, everyone who must operate, service, maintain or repair the machine is obliged to look up the information themselves in the user manual.

### Accessibility

The user manual must be kept in a place known to staff where it is easily accessible for operators and maintenance personnel.

## 1.3 VERSION

This user manual is the manufacturer's original user manual. The user manual is version number 01, which is shown on the document's footer.

## 1.4 MANUFACTURER

IMMO A/S  
Friis Hansens Vej 9, DK-7100 Vejle  
+45 7585 8022  
hello@immodenmark.dk  
www.immodenmark.dk

## 1.5 MACHINERY DESIGNATION

As EasyGo Premium is added to an existing product, this makes EasyGo Premium a piece of partly completed machinery. It is the owner of the machinery's responsibility to mount EasyGo Premium onto a CE-marked trolley.

EasyGo Premium consists primarily of:

- Speeder box
- Motor unit
- Electrical system

## 1.6 CONNECTION BETWEEN THIS DOCUMENT AND THE MACHINE

This user manual covers the use and maintenance of EasyGo Premium. The list below contains information identical to that specified on EasyGo Premium's nameplate:

- The manufacturer's contact information
- Machine No.
- Battery
- Motor Effect
- Max. Charge Curr.
- Main Fuse
- Max. Axle Load
- Item No

## 1.7 EXPLANATION OF THE SYMBOLS

EasyGo Premium is labelled with the following symbols, the meanings of which are described below.



The user manual must be read and understood prior to taking EasyGo Premium into use.



When disposing of EasyGo Premium, the individual parts must be disposed of according to locally applicable legislation.

# 2. SAFETY

## 2.1 GENERAL WARNINGS AND PRECAUTIONS

- The user manual must be read and understood prior to taking EasyGo Premium into use.
- It is the installer's responsibility to ensure that EasyGo premium is installed correctly.
- It is the owner of the machinery's responsibility to mount the EasyGo Premium onto a CE-marked trolley.
- It is the owner of the machinery's responsibility to ensure that EasyGo Premium is maintained and inspected by a technically qualified person every 6 months at minimum.
- Everyone who operates, services, maintains or repairs the machine is obliged to look up the information themselves in the user manual.
- Never attempt to rebuild or adapt EasyGo Premium to another use than the one described in this user manual. Any rebuilding or adaptation of use shall render any manufacturer's warranties and liability void.
- Servicing of the electrical system may only be performed by personnel trained in such. There is a risk of serious injury or death for unskilled persons in working with the electrical installations.
- Before carrying out any work on the electrical parts, the battery supply must be disconnected.
- Only use original spare parts supplied by the manufacturer or a supplier approved by the manufacturer.

## 2.2 USE OF PERSONAL PROTECTIVE EQUIPMENT (PPE)

No personal protective equipment is required to operate and use EasyGo Premium. Follow any requirements and orders defined for the context and the trolley.

## 2.3 SAFETY FEATURES

In order to make EasyGo Premium as safe as possible, a number of precautions have been programmed into the electrical system that prevent driving if the accelerator arm remains switched on, for example, or if the charger is not disconnected. A main fuse has also been installed that will switch off automatically if an error occurs in the electrical system. See more on this in section 5. *Operation* and 6. *Error codes*.

In addition to the safety measures in the electrical system, there is also a safety release button on the control box to protect the user against being crushed or pinned when backing. The safety release button should be oriented towards the user who is manoeuvring the trolley. If the safety release button is activated, EasyGo Premium brakes suddenly and drives slightly forward. The safety release button reduces crushing and pinning risks for the user, but must not replace the user's awareness of their surroundings and any obstacles.

## 2.4 NON-AUTHORISED USE

It is not permitted to use EasyGo Premium on trolleys that are used for transporting people or animals. Nor is it permitted to use EasyGo Premium on trolleys where the driver remains seated during transport.

## 2.5 CE MARKING

EasyGo Premium is supplied as a piece of partly completed machinery, which is why it does not have its own CE mark. It is the owner of the machinery's responsibility to ensure that CE marking is present after it is fitted onto the trolley. As this is the first time that there is complete documentation, risk assessment and a declaration of conformity can now be drawn up.

EasyGo Premium itself complies with the requirements for functionality and safety in the Machinery Directive (2006/42/EC). See section 9. *Declaration of Incorporation*. Some of these requirements are greatly influenced however by the trolley's design and assembly with EasyGo Premium. In the event of doubts regarding the CE marking it is recommended that you seek professional help and advice to determine whether the safety requirements for the machinery (the trolley fitted with EasyGo Premium) have been followed.

**IMMO A/S**

Friis Hansens Vej 9 - DK-7100 Vejle  
+45 7585 8022  
hello@immodenmark.dk  
**immodenmark.dk**



# 3. OVERVIEW OF EASYGO PREMIUM

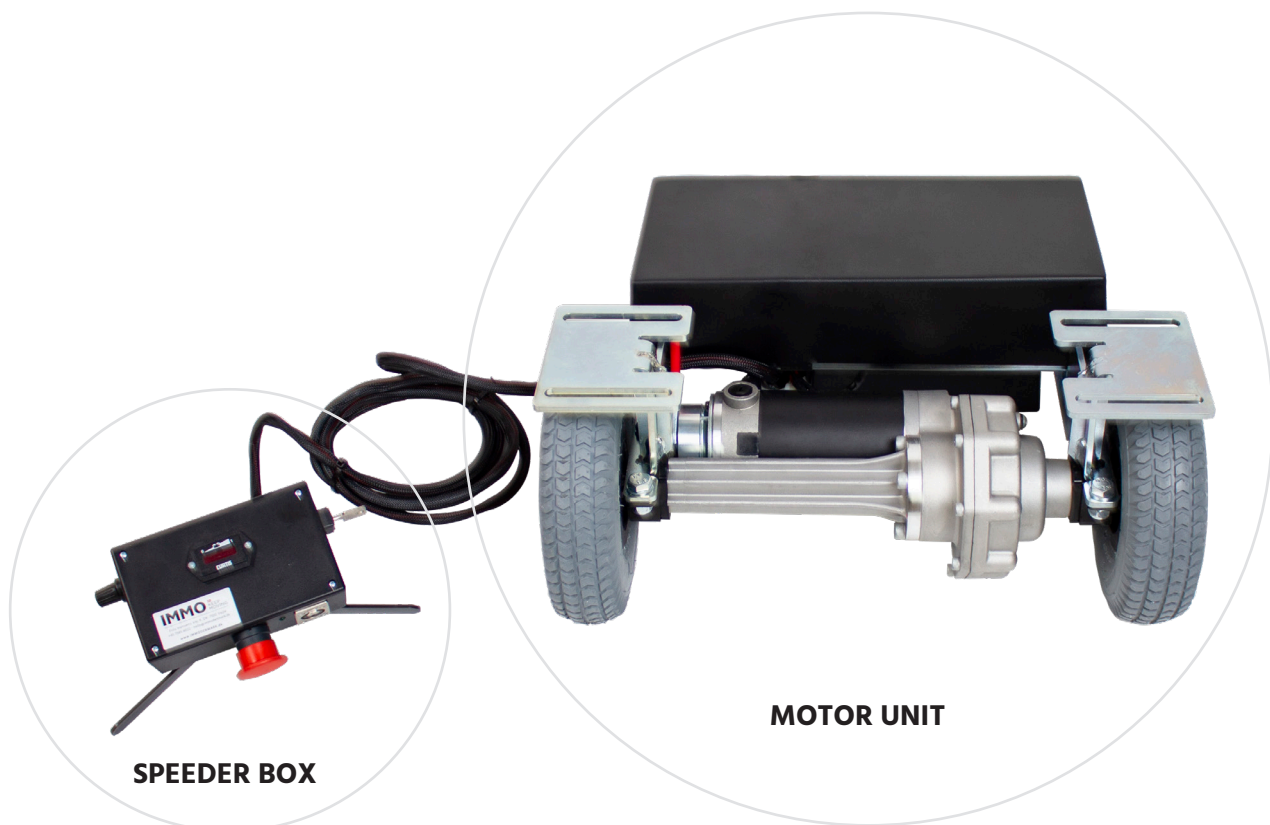
## 3.1. DESCRIPTION OF EASYGO PREMIUM

EasyGo Premium is an auxiliary engine that is fitted onto existing standard trolleys to ease the work of employees. EasyGo Premium handles the heavy lifting from A to B. It is the user's responsibility at all times to ensure the condition of the trolley and that goods are loaded correctly and properly secured.

## 3.2 PRODUCT OVERVIEW

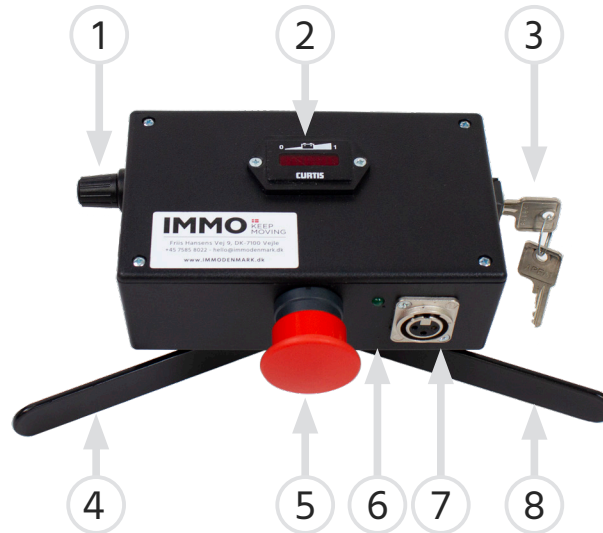
EasyGo Premium consists overall of a speeder box and a motor unit, which are connected to each other via a power cable. The functions of the speeder box and the motor unit are described in sections 3.2.1 *Speeder box* and 3.2.2 *Motor unit* respectively.

The motor unit is mounted under the trolley so that the wheels are in contact with the underside. The speeder box is mounted on the trolley's controls, so that the user has easy access to its features as well as a good grip on the controls in order to be able to manoeuvre the trolley correctly. For a more detailed description of how to install EasyGo Premium, see section 4. *Installation*. For a more detailed description of how to operate EasyGo Premium, see section 5. *Operation*.





## 3.2.1 SPEEDER BOX



### Setting the speed (1)

The maximum operating speed can be set at full activation of the accelerator arm using the rotary switch. The precise operating speed is determined steplessly using the accelerator arm.

By positioning the switch to the lowest or highest speed setting, the maximum operating speed will be either 1 km/h or 6 km/h respectively at full activation of the accelerator arm. The speeds indicated are for driving with an empty trolley; for heavy loads, the maximum operating speed is reduced.

It is recommended that the speed setting is used during operation to set the maximum operating speed adjusted for your current walking pace. This makes it possible to keep the accelerator arm fully activated during operation. This gives increased operating comfort to the user and also reduces the risk of 'jerks' during operation.

### Battery meter (2)

The battery meter indicates the batteries' current power level via a lit-up line in the display. The batteries are fully charged when the indicator lights furthest to the right. The indicator light far to the left means that the batteries are completely drained. The line moves towards the left as the power level drops. If the battery meter is flashing, this means that the batteries are almost flat. The trolley should be driven immediately back for recharging.

It is recommended that you stop using EasyGo Premium and take it for recharging when the batteries' remaining power levels are down to about 30%.

**N.B.:** you should keep an eye on the batteries' power levels yourself, as the battery meter does not warn of low power levels, only the amount it has charged.

### Key switch (3)

Used to turn EasyGo Premium off and on. To turn on, insert the key a quarter of a turn in a clockwise direction. To turn off, turn the key a quarter of a turn in a counter clockwise direction, after which the key can be removed.

### Accelerator arm (4 and 8)

The accelerator arm is stepless and determines the actual operating speed within the selected speed setting. The more the arm is tilted, the faster EasyGo Premium will run.

By pressing down on the arm to the left of the speeder box (4), EasyGo Premium will run in reverse. By pressing down on the arm to the right of the speeder box (8), EasyGo Premium will move forwards.

The accelerator arm returns automatically to its starting position when it is not activated, which brings EasyGo Premium to a stop.

### Safety release button (5)

By activating the safety release button, EasyGo Premium stops and runs slightly forward (away from the user). This is a safety measure to prevent any risk of the user being pinned or crushed when the trolley is running in reverse.

### Status lamp (6)

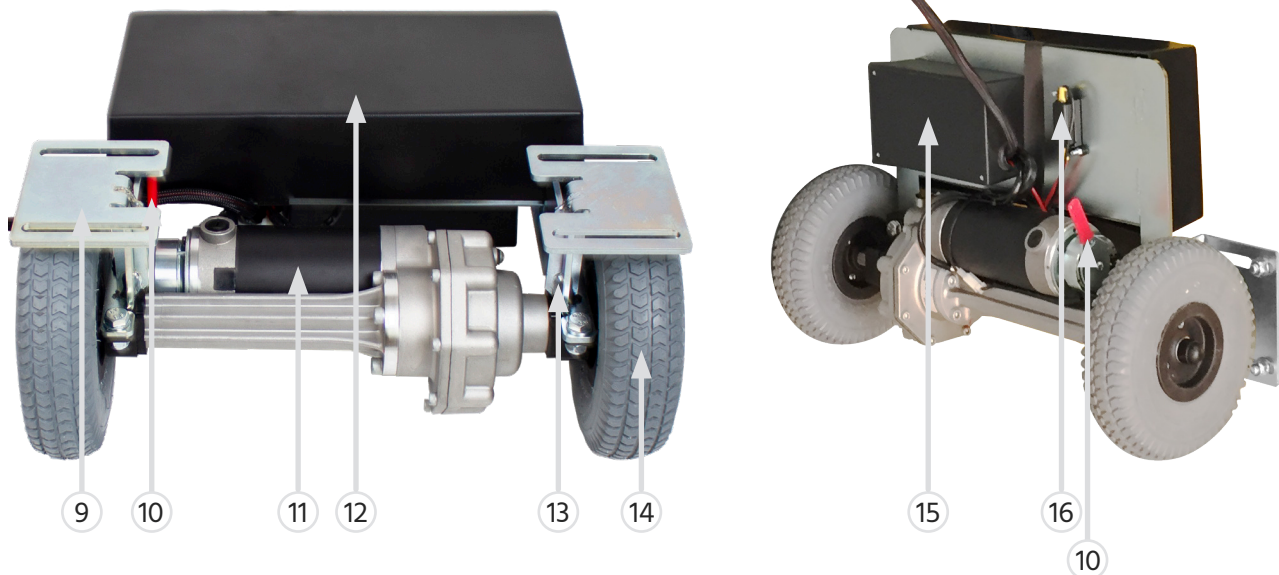
The status lamp indicates whether EasyGo Premium is turned on or off as well as any error codes. When the status lamp is lit, EasyGo Premium is

turned on. If the status lamp is off, this indicates that EasyGo Premium is either turned off or has run out of power. If the status lamp flashes, this will refer to a specific error code. See section 6. *Error codes.*

### Connector (7)

The connector is used to charge EasyGo Premium's battery pack. See section 5.3 *Charging* for instructions on how to charge the motor.

## 3.2.2 MOTOR UNIT



### Mounting bracket (9)

The mounting bracket is used to bolt EasyGo Premium securely under the trolley. The brackets are designed with slots that make fitting them flexible in relation to the trolley's mounting holes. The appearance and mounting width of the brackets can vary from model to model. See a more detailed description in section 3.3 *Layout drawings* and 4. *Installation.*

### Release (10)

Should there be a need to push the trolley manually, the motor can be disconnected using the red release handle. The position of the handle may vary between the three EasyGo Premium models. The release handle is positioned either to the left, as pictured, or to the right above.

To release the motor, rotate the handle upwards.

EasyGo Premium must be switched off before connecting or disconnecting the motor. This is done using the key switch (3). Once the motor has been disconnected, the motor brake will also be disconnected. You must therefore be careful that the trolley does not roll away from you when you release it.

The release must be deactivated before it is possible to operate the trolley using the motor. This is done by rotating the release handle downwards until you hear a 'click'.

**REMEMBER:** always deactivate the release handle after use if it has been activated.

If you attempt to switch EasyGo Premium on with the motor disconnected, the status lamp will flash (F) and EasyGo Premium cannot drive. In order to reset this error, turn off EasyGo Premium via the key switch, deactivate the release handle and switch it on again. EasyGo Premium can now be used.

### **Motor (11)**

The motor operates the wheels when the accelerator arm is activated. The motor's maximum axle load/carrying capacity varies between the three models, see section 10. *Technical specifications.*

### **Battery pack (12)**

The battery pack is fixed in place and houses two 20 Ah batteries.

### **Nameplate (13)**

The nameplate is affixed to EasyGo Premium's right mounting bracket. The nameplate shows the manufacturer's details, the machine number, technical specifications and item number. Should you need to contact the manufacturer regarding questions about the product, please provide the machine number.

### **Sprockets (14)**

EasyGo Premium's wheelset is directional and acts as the trolley's sprockets.

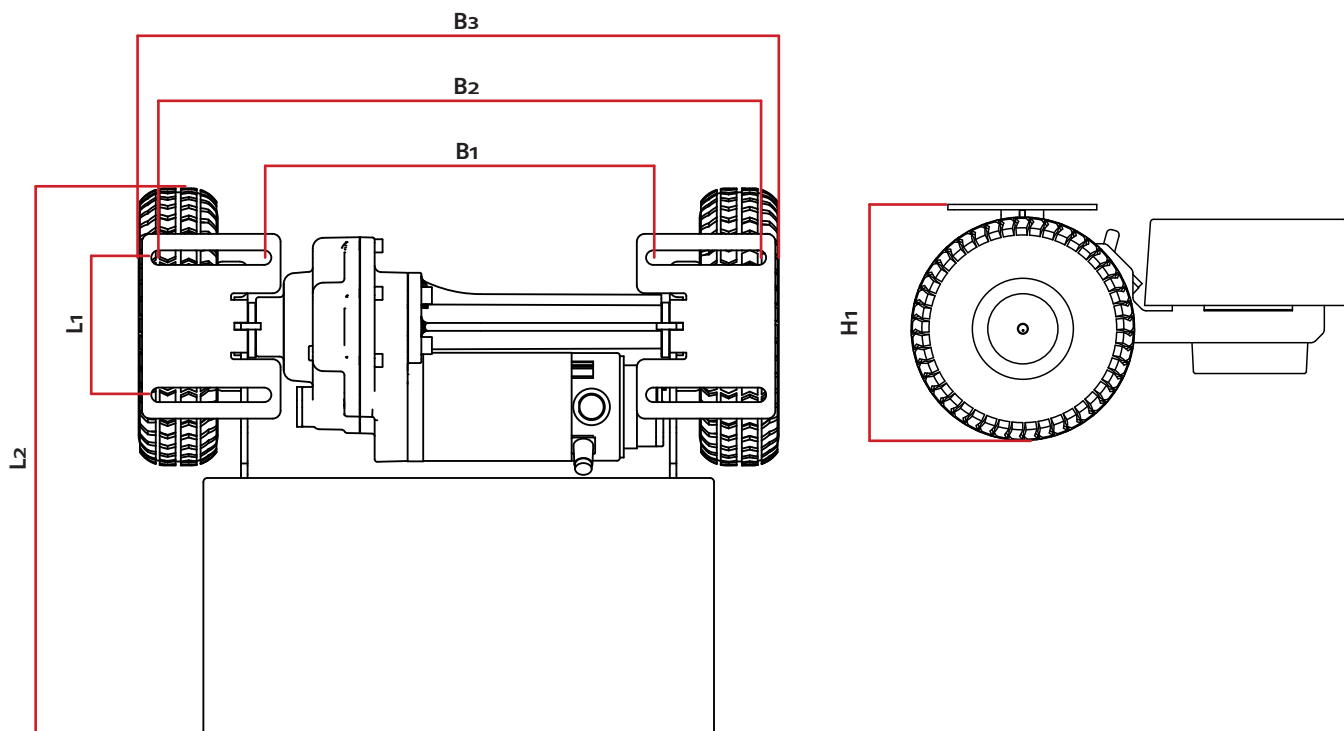
### **Control box (15)**

The control box contains the controls and electrical components.

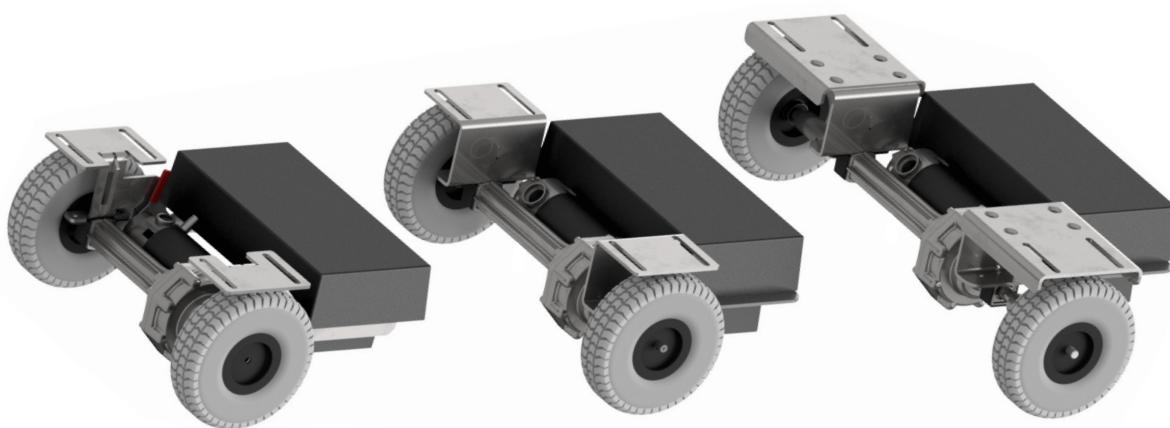
### **Main fuse (16)**

A main fuse is installed in the electrical system to protect it against overloading. If the main fuse blows it must be replaced. See section 7.2.1 *Replacing the main fuse.*

### 3.3 LAYOUT DRAWINGS



Dimensions	B1	B2	B3	L1	L2	H1
EasyGo Premium Small	295 mm	455 mm	485 mm	104 mm	415 mm	225 mm
EasyGo Premium Medium	375 mm	535 mm	575 mm	104 mm	380 mm	225 mm
EasyGo Premium X-large	375 mm	775 mm	775 mm	104 mm	380 mm	230 mm



EasyGo Premium Small

EasyGo Premium Medium

EasyGo Premium X-large

# 4. INSTALLATION

## 4.1 MOUNTING OPTIONS

EasyGo Premium is intended for mounting under different standard trolleys. The trolley's own wheelset is replaced by the motor unit. Wherever possible, you should use the existing mounting points from the trolley's original wheelset to mount the motor unit. If this is not possible, an additional, specially adapted bracket should be used or new mounting points made. It is the installer's responsibility to ensure that the motor unit is attached to the frame of the trolley in the place approved for mounting. If there are deviations in the trolley and EasyGo Premium's ground clearance, chocking can be used to offset the height difference.

**IMPORTANT:** EasyGo Premium is not intended for trolleys that are used to transport people and must not be mounted onto such machinery. Nor is it permitted to use the auxiliary engine on trolleys where the driver remains seated while driving.

### 4.1.1 INSTALLATION CRITERIA FOR THE TROLLEY

EasyGo Premium may only be installed on trolleys that meet the following criteria:

- That the trolley's individual wheelset can be replaced with the motor unit correctly oriented in relation to the direction of operation.
- That none of the parts on EasyGo Premium's motor unit protrude outside of the trolley's frame.
- That after installation, the trolley has at least one set of moveable wheels.
- That the trolley's controls allow installation of the speeder box, so that the user can easily manoeuvre the trolley while also using the speeder box's functions.
- That the trolley's mounting points match overall with EasyGo Premium's installation measurements.

## 4.2 INSTALLING EASYGO PREMIUM

The installation consists basically of two steps: installing the motor unit and installing the speeder box. EasyGo Premium is supplied as an assembled piece of partly completed machinery, and the installer must not make any interventions to the electrical system. A step-by-step description of the installation is provided in the following sub-sections. Pictures are included as a supplement to the text. The pictures show the installation of a platform trolley, which is why it may look different to the type of trolley you have in front of you. It is the text that applies, while the images should only be used as a supplement to aid understanding.

After installation, it is the installer's responsibility to perform a test run before the trolley is taken into use. The first time EasyGo Premium is installed on a specific trolley type, it is the owner of the machinery's responsibility to ensure that it is CE-marked before the trolley is taken into use.

### BEFORE STARTING INSTALLATION

Always check that you have the correct size of EasyGo Premium for the relevant trolley before starting installation. See section 3.3 *Layout drawings* for mounting options for the three models. It is also recommended that there is plenty of room for the mount, with the opportunity to turn the trolley upside down or tilt it over onto its side. Installation should always be performed on an empty trolley.

## 4.2.1 INSTALLING EASYGO PREMIUM'S MOTOR UNIT

Remove the wheelset, which must be replaced with EasyGo Premium's motor unit. It is recommended that the motor unit is mounted at the front and replaces the trolley's directional wheelset. In order to be able to manoeuvre the trolley satisfactorily after installing the motor unit, the trolley must have at least one set of moveable wheels.

1. Turn off EasyGo Premium using the key switch and remove the key before starting installation.
2. If possible, use the trolley's existing mounting points from the wheelset you removed to mount the motor unit.
3. The motor unit's mounting bracket is designed with slots so that it can be adapted to the trolley's existing mounting points. Place the motor unit correctly in relation to the trolley's direction of movement and centred in the trolley's widthways direction. If the motor is not centrally placed, the trolley will pull to one of the sides during operation.
  - If it is not possible to use the existing mounting points to centre the motor unit under the trolley, then special mounting brackets must be used or new mounting points made.
  - If the installation height of the trolley and the motor unit do not match, the lowest wheelset must be chocked up to offset the height difference.
4. Insert a minimum of one M10 bolt in each of the slots in EasyGo Premium's two mounting brackets. Remember to use a washer between the bolt and mounting bracket as well as between the trolley's frame and the nut. If the trolley's mounting holes are threaded, nuts can be left out.
5. Tighten the bolts lightly. Perform a check measurement to ensure that the motor unit is centred under the trolley. Tighten all four bolts using either a ratchet wrench or a spanner.

The wiring for the speeder box will still be hanging loose, and is secured after the speeder box is installed.



The motor unit is bolted firmly to the trolley's frame with min. four bolts. N.B.: remember to use washers and nuts.



## 4.2 INSTALLING EASYGO PREMIUM'S SPEEDER BOX

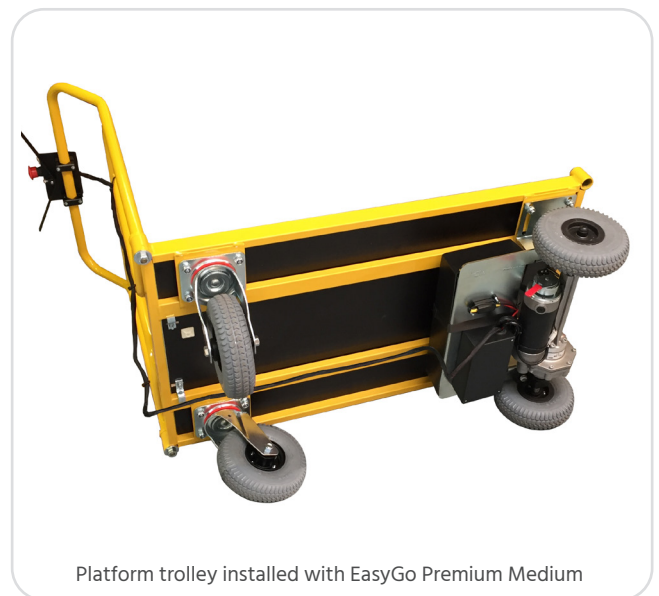
There is a flexible mounting bracket located on the underside of the speeder box. The mounting bracket enables mounting of the speeder box on pipe thicknesses from Ø19-32 mm. The speeder box must be mounted onto the trolley's controls so that the user can easily use the speeder box's functions while also manoeuvring the trolley. When determining the placement of the speeder box it is important to keep in mind that activation of the accelerator arm must not occur unintentionally.

1. Turn off EasyGo Premium using the key switch and remove the key before starting installation of the speeder box.
2. Loosen the 2 x 2 bolts in the speeder box's mounting bracket using an Allen key. Pull the bolts and the bottom part of the mounting bracket partly out.
3. Place the speeder box on the top side of the controls so that the user can use the functions at the same time as manoeuvring the trolley. The speeder box must be oriented so that the accelerator arm turns in towards the user with the battery meter facing upwards. Ensure that the wiring between the speeder box and the motor unit runs as smoothly as possible in relation to the design of the trolley and is not twisted.
4. Screw each of the mounting bracket's bottom parts lightly together with the top parts so that these clip firmly onto the controller from each of their sides. Screw in the bolts lightly so everything is assembled.
5. Finely adjust the position of the speeder box. Tighten all four bolts with an Allen key, so that the speeder box is securely attached. Check that the accelerator arm can move freely without any risk of it getting stuck in one of the outer positions.
6. Secure the cable to the trolley's structure so that it is well protected. Never attempt to extend or shorten the wiring between the motor unit and the speeder box. In most cases the wiring will be too long, and should be rolled up and secured to the trolley.

After installation of the motor unit and the speeder box, a test run must be performed before the trolley is ready for use; see section 4.2.3 *Test run*.



Place the top and bottom sections of the speeder box on each side of the controller and tighten the four bolts.



Platform trolley installed with EasyGo Premium Medium

### 4.2.3 TEST RUN

After installation, the following must be tested as a minimum:

- That EasyGo Premium turns on when the key is inserted and turned one quarter's rotation in a clockwise direction. When turned on, that the status lamp lights constantly and a line can be seen on the battery meter.
- That EasyGo Premium turns off when the key is turned one quarter's rotation in a counter clockwise direction and can then be removed.
- That the trolley moves forward by pressing on the accelerator arm's right side.
- That the trolley reverses by pressing on the accelerator arm's left side.
- That the maximum speed can be regulated using the speed setting button.
- That the trolley does not pull to either side when moving straight forward.
- That the wiring is not placed anywhere where it is exposed to impact or could get stuck in anything while in operation.
- That the trolley stops and moves forward slightly when the safety release button is activated.

There is normally enough power in the batteries upon delivery to carry out a test run. After the test run, you should always charge the batteries fully before taking EasyGo Premium into use.





# 5. OPERATION

## 5.1 TRAINING IN OPERATING THE TROLLEY WITH EASYGO PREMIUM

The first time a user attempts to manoeuvre a trolley installed with EasyGo Premium, they should try out the different functions in an area with plenty of space and no obstacles. Initially, operation should take place with an empty trolley. Once the user feels comfortable operating a trolley using EasyGo Premium, they can then try operating it with goods properly secured to the trolley. The functions that should be tested out are the same as those described in section 5.2 *Operating a trolley using EasyGo Premium*. Read through all the operating instructions before you start operating with EasyGo Premium. A description of EasyGo Premium's functions can be found in section 3. *Overview of EasyGo Premium*.

The training must ensure that the users are aware of the risks and sources of danger that can arise during operation, as well as how to react appropriately should any unexpected obstacles arise.

## 5.2 OPERATING A TROLLEY USING EASYGO PREMIUM

It is the user's responsibility to check that the trolley incl. EasyGo Premium is not damaged before start of operation. Should the trolley's user manual stipulate additional checks before use, then it is the user's responsibility to check these points. It is also the user's responsibility to ensure that the trolley is properly loaded if it is operated with goods, and that these are correctly secured.

It is the user's responsibility to ensure that operation does not take place in areas that exceed permitted operating performance for EasyGo Premium and the trolley. The specifications for EasyGo Premium can be found in section 10. *Technical specifications*.

If the user becomes concerned for any reason during operation, they should bring the trolley to a stop by releasing or guiding the accelerator arm back to its starting position.

- Prior to any possible operation of the trolley, the charger must be disconnected. This is done by switching off the power outlet where the charger is connected and removing the charger's jack plug from EasyGo Premium's charging port. Before disconnecting the charger it should be checked whether the charger's diode is lighting green, which means that EasyGo Premium's batteries are fully charged.
- Insert the key in the key switch and turn a quarter of a rotation in a clockwise direction. Once it is turned on the status lamp will light constantly and a line on the battery meter will show the batteries' current power level. If the status lamp flashes, this will refer to a specific error code. See the most common causes for error codes below and check whether one of these is the reason for the error. If not, see section 6. *Error codes*.
  - Attempting to turn on with the motor disengaged. Before resetting, turn off EasyGo Premium, deactivate the unlocking mechanism and then turn on again.
  - The accelerator arm remains activated as EasyGo Premium turns on. To reset this error, release the accelerator arm, turn off EasyGo Premium, wait 5 seconds and then turn on again.
  - EasyGo Premium turned on with the charger connected. To reset, turn off EasyGo Premium and disconnect the charger. EasyGo Premium can now be turned on again.
- Setting the maximum operation speed using the rotary switch for the speed setting. It is always recommended that you start at the lowest speed setting at the start of operations and adjust upwards as needed.
- During operation, set the maximum speed that matches your walking tempo. This helps give a more even drive where the accelerator arm can remain fully activated.
- Before operation, activate the accelerator arm's right or left side for driving forward or in reverse respectively. The harder the accelerator arm is pushed down, the faster EasyGo Premium will run. The machine will decelerate to stop when the accelerator arm is released or returned to its start position. For a controlled stop, guide the accelerator arm gradually back to the start position.
- If you switch quickly between the two driving directions, braking will be harder than normal. Take particular care with high and/or heavy loads.

- If the safety release button is activated during driving in reverse, EasyGo Premium will brake suddenly and drive slightly forward. This is a safety precaution to prevent the user from becoming pinned between the trolley and a wall, for example. To allow the machinery to run afterwards, release the accelerator arm and reactivate it.
- To turn while in motion, turn the trolley's controls as you would if EasyGo Premium was not installed.
- When EasyGo Premium is brought to a stop, the motor's parking brake will engage automatically after about 3 seconds. You will hear a small click when the brake is engaged. The parking brake disengages automatically when the accelerator arm is activated for operation.
- After use, turn off EasyGo Premium by turning the key a quarter of a rotation in a counter clockwise direction. It is always recommended that you remove the key and take it with you when leaving the trolley to safeguard against unauthorised use.
- Always connect the charger after use. For a more detailed description of the charging process, see section 5.3 *Charging*.
- If you wish to operate the trolley manually without using the motor, this can be disengaged by using the release handle. This might be necessary for example if you run out of power. Always remember to deactivate the release handle after using it as the brake will also be disengaged together with the motor. When disengagement has been activated, the user should be aware of the underside and take care that the trolley is not at risk of rolling away.

## 5.3 CHARGING

The following charging instructions apply for the standard charger supplied, Mascot Type 2440. Charging should be done in dry, frost-free surroundings with good ventilation. If charging is done at temperatures under 10°C, a reduced driving distance must be expected.

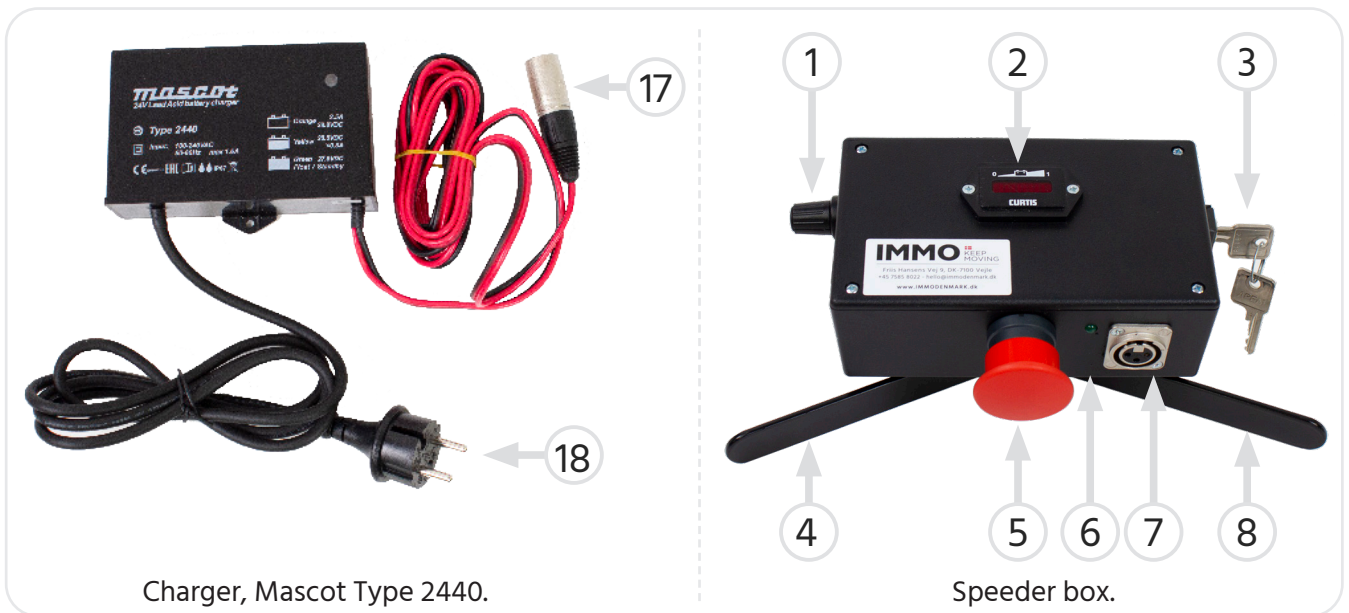
**WARNING!** During charging, explosive gas may form under certain conditions. Never charge in the vicinity of any ignition sources and always ensure there is good ventilation.

Only use the charger supplied, Mascot Type 2440, or another charger approved by the manufacturer. When using another charger than the standard charger, the indications and charging times described below may be different. Always read the user manual for the charger in question. Use of other chargers not approved by the manufacturer may result in destruction of the electrical systems and the risk of explosion and/or fire.

### CONNECTION/DISCONNECTION OF THE CHARGER:

- Turn off EasyGo Premium using the key switch (3) before starting charging.
- Connect the charger's jack (17) into the charging port (7) on EasyGo Premium's speeder box.
- Insert the charger plug (18) into a power socket with the power turned on.  
**N.B.:** For safety reasons, EasyGo Premium is manufactured so that it will not run when the charger is connected.
- When the charger is connected the lamp on the charger will first light **ORANGE**, which indicates that there is under 80% power in the batteries. When the batteries is charged +80%, the lamp will light **YELLOW**. Once charging is complete and the batteries are fully charged, the lamp will light **GREEN** and EasyGo Premium is ready for use.
- The charger must be disconnected in order to be able to use EasyGo Premium. To disconnect the charger, first turn it off at the power socket and then remove the charger's jack (17) from the charging port (7) in the speeder box. See section 5. *Operation*, for use of EasyGo Premium.

Once the batteries have fully charged, the charger will ensure charging is maintained with a very small electrical current. This ensures that the batteries remain fully charged and helps to extend the batteries' lifetime. Always remember therefore to turn off EasyGo Premium and disconnect the charger after use. This also applies if you do not plan to use EasyGo Premium for a longer period.



### 5.3.1 BATTERIES AND CHARGING TIME:

The batteries are maintenance-free. That is to say that they are sealed and do not need to be checked for acid levels. Always make sure you disconnect the charger when EasyGo Premium is not in use. This helps to extend the batteries' lifetime.

It normally takes 6 hours for the batteries to charge completely. If the batteries are completely flat, charging may take longer. Avoid completely flattening the batteries, as this shortens the batteries' lifetime significantly.

The batteries will slowly lose power if EasyGo Premium is left unused. The loss is about 10-20% per month depending on environmental conditions and the condition of the batteries.

If you notice that EasyGo Premium cannot run as far as it could previously or lacks traction, this could be because the batteries are run down and need to be replaced. Batteries are wearing parts and you should expect to have to replace them approx. every three years. Before replacing batteries, contact your EasyGo Premium dealer.

Handle batteries with care. Take care not to knock the corners or allow the packaging to come into contact with sharp or pointed objects,

The batteries contain large amounts of energy. Short circuiting or damaging the batteries can result in explosion and endanger lives. The batteries may only be replaced by trained personnel. Never attempt to charge damaged batteries!

If you detect a hole in the batteries or you come into contact with the gel-like acid in the batteries, you must remove any contaminated clothing immediately and wash the skin thoroughly with soap and water. In case of any subsequent rash or eczema, contact a physician. If acid gets in the eyes they must be rinsed immediately with water before contacting a physician.

Worn-out or defective batteries should be collected and recycled according to locally prescribed environmental guidelines. Any waste from defective batteries should be collected and handled according to locally prescribed environmental guidelines.



# 6. ERROR CODES

EasyGo Premium's electrical system comprises various interconnected components, all of which are important for ensuring its daily operation takes place safely and smoothly. Even the best systems are not 100% free from error however, so naturally, malfunctions can occur. Due to the high level of safety in the system, most errors will prevent EasyGo Premium from running. A simple diagnosis system is therefore built into the motor's control unit itself.

In its normal state, whereby EasyGo Premium is turned on and ready to run or is running, the status lamp will light constantly. In an error state, the status lamp will flash in a sequential pattern consisting of a number of flashes, a short pause, another set number of flashes and a long pause. The first number of flashes indicates the first digit in the sequence. The short pause indicates that the next digit is starting. The second number of flashes indicates the second digit in the sequence. The long pause means that the code has finished, and that it will be shown again shortly. The sequence is repeated until the error is remedied or EasyGo Premium is turned off using the key switch.

For example, the sequence might flash '1 flash - short break - 4 flashes - short break', which is then repeated until EasyGo Premium is turned off. This should be read as • •••• which gives the error code 1.4.

When contacting the dealer or manufacturer, you will be asked to provide the machine number, which is specified on the nameplate. It will also be very helpful if you can provide the error code that is displayed. Should you have any further questions, the dealer and the manufacturer are happy to help.

## 6.1 OVERVIEW OF ERROR CODES

Error code	Section	Explanation	Possible source of error
0.0	LED off	No power or a defective control circuit	1: Key switch 2: The battery is not connected or is flat 3: The charger is disconnected 4: Main fuse has blown
1.1	Thermal fault	Too high or too low temperature	1: Temperature <-10°C or >80°C 2: Too great a load 3: Operation in extreme temperatures 4: Automatic engine brake not releasing
1.2	Throttle fault	Error in the electrical system for the accelerator arm	1: Defective wiring connection between the speeder box and the controller box 2: Defective accelerator arm
1.3	Speed pot fault	Error on potentiometer	1: Defective wiring connection between the speeder box and the controller box 2: Defective potentiometer
1.4	Undervoltage fault	Battery voltage is too low	1: Battery voltage under 17V 2: Poor connection between battery and motor controls
1.5	Overvoltage fault	Battery voltage is too high	1: Battery voltage over 31V 2: Attempting to operate the motor with the charger connected (3: Poor connection to battery)
2.1	Main Off Fault	Controls for main relay defective	1: Main relay in motor controls not reacting as expected
2.2	Motor stalled	Motor is blocked	1: Motor is blocked

Error code	Section	Explanation	Possible source of error
2.3	Main fault	Main relay defective	1: Main relay in motor controls not reacting as expected
2.4	Main On Fault	Controls for main relay defective	1: Main relay in motor controls not reacting as expected
3.1	Wiring fault	HPD error > 10 sec.	1: The accelerator arm is constantly activated 2: Wiring error 3: Error on potentiometer
3.2	Brake On fault	Error in the brake system	1: Brake has been disconnected 2: Brake output is constantly active 3: Interruption in brake's magnetic coil
3.3	Pre-charge fault	Error in the brake system	1: Brake output short-circuited 2: Brake output defective
3.4	Brake Off fault	Error in the brake system	1: Brake output disconnected 2: Short circuit in brake's magnetic coil
3.5	HPD fault	Accelerator arm is active at start-up	1: Accelerator arm is not in neutral position 2: Error on potentiometer
4.1	Current sense fault	Current measurement outside of safe range	1: Short circuit in motor or wiring 2: Error in motor controls
4.2	Hardware failsafe	Unexpected behaviour from motor controls	1: Motor controls are defective 2: Charcoal canister worn out 3: Defective motor
4.3	EEPROM Check-sum fault	Error in motor controls' memory	1: Motor controls are defective or have been incorrectly programmed
4.4	Motor open	Motor disconnected	1: Motor or motor's wiring disconnected 2: Charcoal in motor worn out
4.5	Battery disconnect fault	Battery interrupted	1: Battery disconnected 2: Poor connection in battery or plug connections to the battery

# 7. MAINTENANCE

Disassembly and repair of EasyGo Premium is only permitted by a technically qualified person trained for this purpose.

In general, EasyGo Premium is maintenance-free. For a long and problem-free operational life it is recommended that the following be carried out at minimum every 6 months:

- Tighten wheels and bolt joints.
- Check the tyres for wear and tear.
- Check the cables and speeder box for wear and tear.

## Replace parts as needed.

The gearbox has been prefilled with grease at the factory and is made to last for the motor's entire lifetime.

The batteries are sealed and maintenance-free. The batteries' lifetime depends greatly on usage patterns and the environment the machine is used in. Replace the batteries when a satisfactory driving distance per charge can no longer be achieved. The batteries' lifetime can be considerably extended by ensuring they are fully charged as often as practically possible and by keeping the charger connected when EasyGo Premium is not in use.

## 7.1 CLEANING

Cleaning EasyGo Premium should ideally be done with water mixed with a mild soap and a well-wrung cloth. Take care not to get water into the electrical parts. Do not use solvents or cleaning agents that contain abrasive particles, as these can damage the surfaces on EasyGo Premium.

## 7.2 BATTERIES AND WIRING

It is very important to charge and maintain the batteries in regard to prolonging their lifetime. See section 5.3 *Charging*. You should check regularly for damage to the wires.

### 7.2.1 REPLACING THE MAIN FUSE

There is one fuse that will switch off in the main fuse if an error occurs in the vehicle's electrical system. If the fuse blows, contact your dealer or manufacturer.

Replace the defective fuse only with a new one of the same type and rated current [A/AMP]. Installing a more powerful fuse is bypassing of a safety function and can result in fire or explosion. Only replace one fuse at a time. Should the fuse blow again immediately after replacement, then there is an error in the electric system and EasyGo Premium must be sent for repair.

## 7.3 STORAGE

If you do not plan to use EasyGo Premium for a longer period, then it should be placed on charge. If this is not possible, the batteries should be charged up completely and then connected to the charger approx. every 3-4 weeks.

EasyGo Premium should be stored in a dry place at temperatures of 5-25°C.

## 7.4 DISPOSAL

The batteries are the only parts in EasyGo Premium that can be considered as having an environmental impact and must be handled according to current regulations stipulated by local environmental authorities. Any waste from defective batteries should be collected and handled according to locally prescribed environmental guidelines. All other parts may be disposed of as metal and electronics.

**IMMO A/S**  
Friis Hansens Vej 9 - DK-7100 Vejle  
+45 7585 8022  
hello@immodenmark.dk  
immodenmark.dk

**IMMO**  **KEEP MOVING**



## 8. SERVICE

Service of EasyGo Premium is only permitted by a technically qualified person trained for this purpose. The batteries must be disconnected prior to any work on the motor or other electrical parts. Only original spare parts supplied by IMMO A/S or one of IMMO A/S' approved suppliers may be used for repairs.

**WARNING!** There is a risk of serious injury or death for unskilled persons in working with the electrical installations in EasyGo Premium. Short circuiting the batteries can result in explosion and endanger lives.

Service agreements for EasyGo Premium are available; contact your dealer or manufacturer for further information about this.



# 9. DECLARATION OF INCORPORATION FOR PARTLY COMPLETED MACHINERY

Machine Directive 2006/42/EC Annex II B

The undersigned manufacturer is authorised to draw up the technical documentation for the partly completed machinery and, upon duly motivated request, to supply the technical dossier:

IMMO A/S  
Friis Hansens Vej 9  
DK-7100 Vejle

The undersigned hereby declares that the partly completed machinery of type:

100350 EasyGo Premium Small  
100955 EasyGo Premium Medium  
100956 EasyGo Premium X-large

Is manufactured in accordance with the following substantial health and safety requirements in the Machine Directive 2006/42/EC Annex I:

Relevant requirements in sections 1, 3

Is manufactured in accordance with the following EC directives:

Machine Directive 2006/42/EC  
Low Voltage Directive 2006/95/EC  
EMC Directive 2004/108/EC

The following harmonised standards are used:

EN 60204-1, EN 55022, EN 61000-4

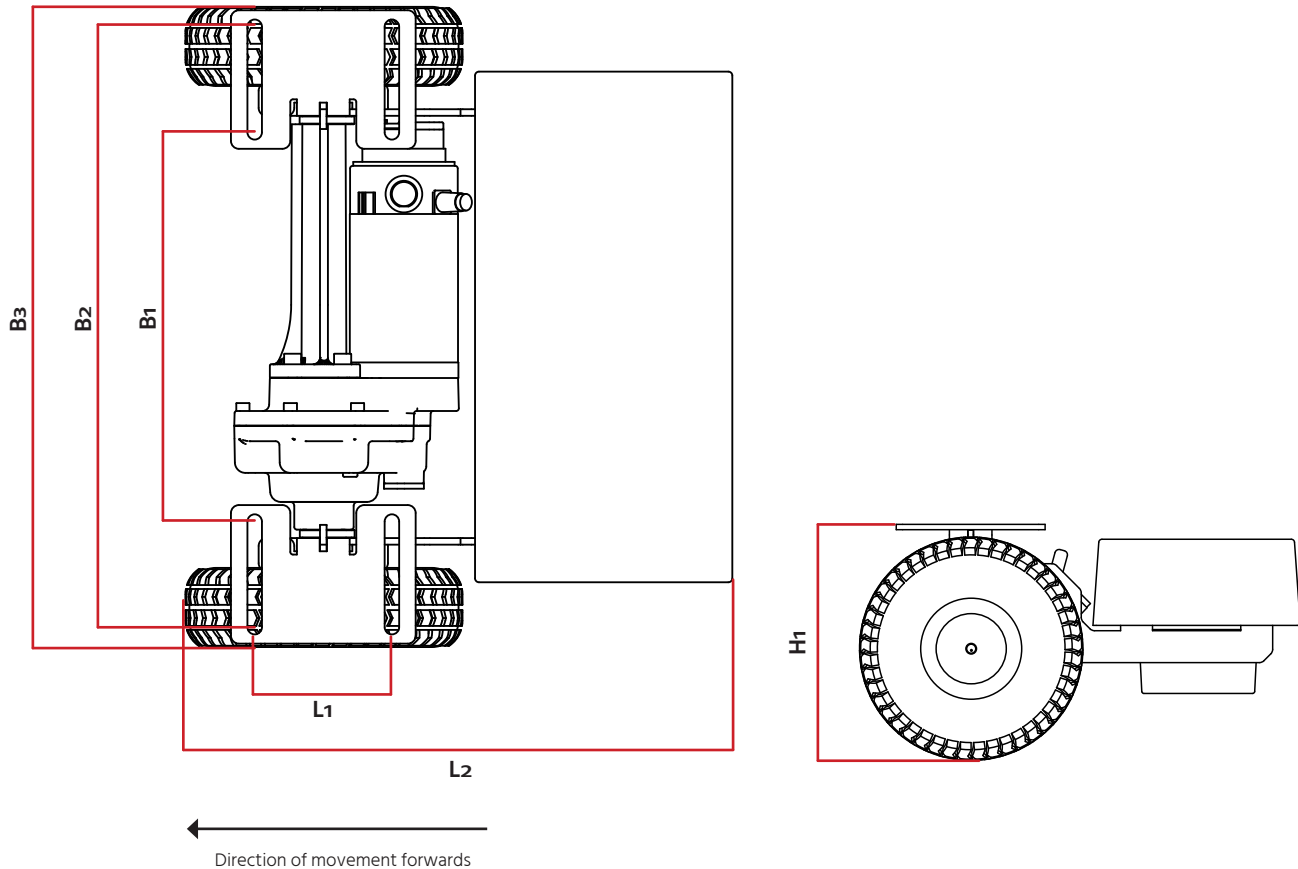
The partly completed machinery may not be taken into use before the finished machine, which it shall be incorporated into, has been conformity assessed and found to conform to all relevant health and safety requirements in 2006/42/EC and other relevant directives.

Vejle, 8 December 2015

Thomas Svendsen  
Approver

# 10. TECHNICAL SPECIFICATIONS

100350 EasyGo Premium Small / 100955 EasyGo Premium Medium / 100956 EasyGo Premium X-large			
Total load capacity distributed across the trolley	400 kg / 500 kg / 400 kg	Driving distance per charge	Up to 10 km
Load capacity for the motor	200 kg / 250 kg / 200 kg	Increase capacity	Up to 10°
Batteries	20 Ah	Engine power	250 W / 350 W / 350 W
Charger - charging time	2.5 A - 6 hours	Weight incl. batteries	30 kg / 32 kg / 36 kg



Model	Dimensions					
	B1	B2	B3	L1	L2	H1
EasyGo Premium Small	295 mm	455 mm	485 mm	104 mm	415 mm	225 mm
EasyGo Premium Medium	375 mm	535 mm	575 mm	104 mm	380 mm	225 mm
EasyGo Premium X-large	375 mm	775 mm	775 mm	104 mm	380 mm	230 mm