



Battery vehicle mover

MVE 100 C

MVE 200 C



operating instructions



renova srl a socio unico – viale Rimembranze 93 – 20099 Sesto San Giovanni - Italy – tel: +39.02.2700.7394 – fax:
+39.02.2570.8635

www.renova-srl.com – email: support@renova-srl.com

This product complies with the Directive 2006/42/CE

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MANMVEENA4V0423

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introduction

Dear customer,

Thank you for purchasing Renova's **movitruck MVE - battery vehicle mover**.

We also thank you for the preference you have reserved for this innovative product. We are certain it will satisfy you with its technologically advanced solutions, its in-line and elegant design and its professional quality.

In this manual you will find our instructions for a proper use of this product and the necessary technical information, as well as our advices, to ensure excellent performance over time.

All information contained in this manual have been collected respecting the rules in force, the current state of knowledge of design and construction, our knowledge and our many years of experience.

The instruction manual was translated with all due care and attention. However, we do not accept liability for any translation errors. The Italian version of this instruction manual is definitive.

The warranty does not apply in cases which occur as a result of the Customer's violation of advice concerning operation, incorrect use, improper application, negligence (including but not limited to improper maintenance and storage), accidents, improper installation, modifications (included but not limited to the use of non-original parts or accessories not authorized by Renova), improper adjustment or repair. All parts subject to normal wear are excluded from the guarantee.

warning

CAREFULLY READ THE INSTRUCTIONS AND WARNINGS IN THIS MANUAL AND KEEP THEM FOR FURTHER REFERENCE FOR ENTIRE PRODUCT LIFE. THEY SUPPLY IMPORTANT INSTRUCTIONS REGARDING OPERATIONS AND SAFETY FOR INSTALLING, USING AND MAINTAINING THE PRODUCT.

PLEASE TAKE THE TIME TO READ AND UNDERSTAND THE INSTRUCTIONS COMPLETELY BEFORE THE INSTALLATION AND USE OF THIS PRODUCT.

IN THE EVENT OF A POSSIBLE BREAKDOWN OF THE PRODUCT, THE OPERATOR SHOULD UNDERSTAND THE MANUFACTURER'S INSTRUCTIONS AND BE AWARE OF THE DANGERS, BEFORE ANY CHECK INTERVENTION OR RECOURSE OF RENOVA'S TECHNICAL ASSISTANCE.

general warnings

- **movitruck** is exclusively designed to move vehicles.
 - **movitruck** must not be used to brake heavy loads which run toward the appliance.
 - The work place must be kept proper of whatever object should be between the machine and the object to move. Any object in between that could create a somersault, a sliding or a fall must be kept away.
 - The operator must always be aware that nothing or no one is in the way of the object to be displaced and that no one could be endangered by the moving object.
 - Certain fundamental rules must be respected when using any kind of electrical appliance. More specifically:
 - do not leave the appliance exposed to the weather (rain, sun, etc.)
 - do not use the appliance next to flammable material
 - do not let children or incapable persons use the appliance without supervision
- A hearing protection must always be used.

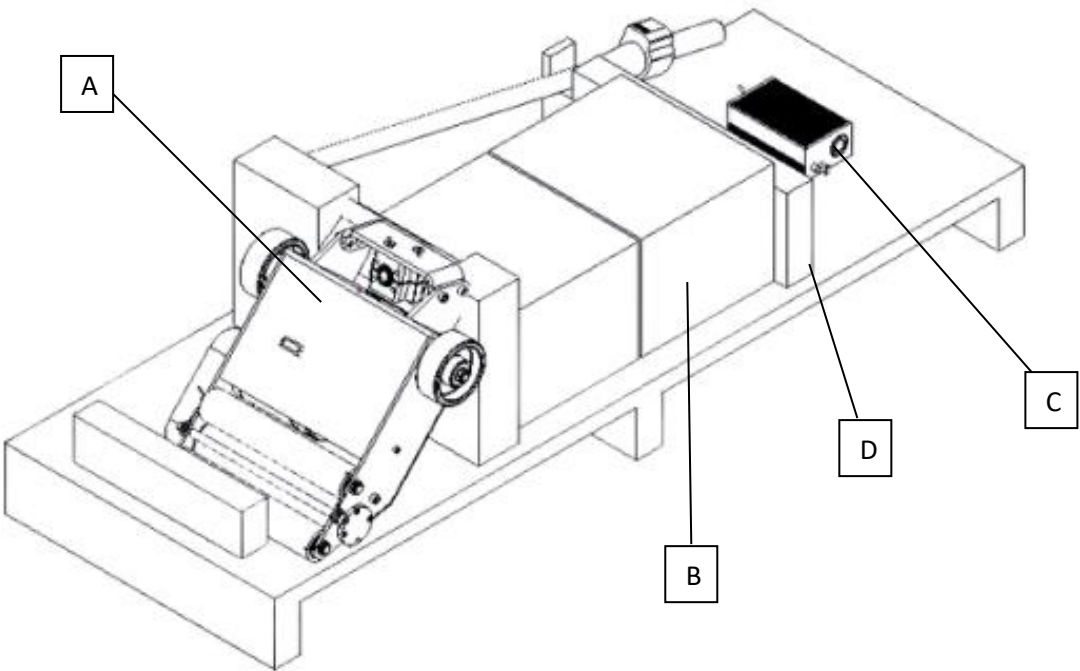
assistance

renova is worldwide present with Agents and Distributors.

Contact renova support
support@renova-srl.com

general instructions

INITIAL CONTENT OF THE BOX



A	movtruck	x1
B	batteries	x2 (optional)
C	battery charger	x1
D	shipment kit	x1

CONTENT DESCRIPTION

MOVITRUCK: in the box you can find the **movitruck** model as previously ordered: MVE 100 C /MVE 200 C with curved handle 'S'.

BATTERIES: **movitruck** (tutti i modelli) viene fornito con seconda batteria (optional). One of the two batteries is already inserted in the machine; the second (optional) is placed in a cardboard box. They are supplied with a state of charge at 30% or less; therefore, they require a full charging cycle before the use.

BATTERY CHARGER: **movitruck** is provided with the original battery charger.

SHIPMENT KIT: with spare throttle, plug battery and fuse for the electronic board.

PACKAGING

Please do not throw away the wood packaging of your **movitruck** as it might be useful for storage purposes, when moving or, in case of damages, when the device must be sent back to renova srl.

SERIAL NUMBER

Each **movitruck** is provided with its serial number.

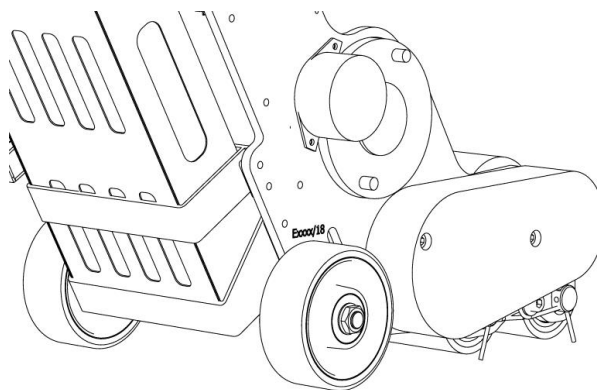
Please find the serial number of your **movitruck** stamped on the **movitruck** frame, above the right rear wheel.

Example in the picture on the right.



Please find the serial number also on the warranty sheet provided with the **movitruck**.

IMPORTANT:

Always communicate the serial number when requiring assistance or spare parts for your **movitruck**.



instructions for use

- Unpack the appliance and store the packaging material
- After unpacking, make sure that the appliance is intact with no visible signs of damage caused by transport. If in doubt, do not use the appliance and contact renova srl
- Place the **movitruck** on a safe and flat surface that can support its weight
- After three months of non-use, the battery needs a full discharge and charge cycle.
- Push the switch into the ON position
- 'Ready to go' on the **moviroll** display indicates that the appliance is ready to be used
- Now select the forward gear -  - or the backward gear -  (emergency)
- To start using the **movitruck** to handle loads just spin the accelerator handle.
- Push the switch into OFF position when the **movitruck** is not running to preserve the battery charge

NOTA:

The **movitruck** battery roll pusher is equipped with reverse gear. Please use the reverse gear to release the **movitruck** from the load, when the **movitruck** remains locked beneath the load because of an obstacle or a wrong maneuver

BATTERY STATUS

On the display (see the picture at page 8) the battery charge percentage is visible next to a bar indicator of variable length and color depending on the state of charge:

GREEN BAR	YELLOW BAR	RED BAR
		



ATTENTION!

Use the **movitruck** only when GREEN and YELLOW charge indicator. Do not use the **movitruck** with RED bar to avoid any irreparably damage to the electronic unit and the battery. When the battery status indicator is red, with the **"RECHARGE"** writing, you need to recharge the battery immediately, otherwise movitruck will stop working. By recharging the battery, the movitruck will work again.

*Please note: after 5 seconds of inactivity, the display turns off.

BATTERY RECHARGE

- Push the switch into the OFF position
- Open the orange door
- Disconnect the two red plugs of the battery and of the Movitruck.
- Connect the charger to the red battery plug
- Connect the battery charger to the mains supply.
A red LED on the battery charger will light up
- The estimated time of charging is about 4 hours (maximum time needed for a full recharge of the battery). The battery is full recharged when the LED on the battery charger turns green
- Please leave the battery under charge for about 30 minutes to stabilize the tension of the cells.
- After recharging the battery, disconnect the red plug of the battery charger from that of the battery
- Connect the red plug of the battery to the red plug of the Movitruck.
- Reposition the plugs inside the Movitruck and close the orange door.





ATTENTION!

For the full recharge of the battery, please use the battery charger supplied with the **movitruck** battery roll pusher. To not damage the battery please do not use different battery chargers.

BATTERY HANDLING PRECAUTIONS

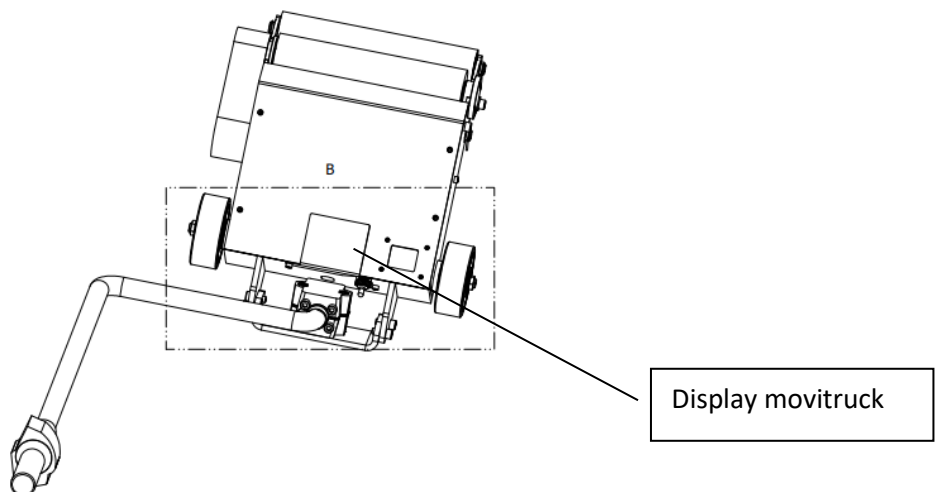
- Do not disassemble, crush or puncture a battery
- Do not dispose of a battery in fire
- Do not immerse the unit in any liquid
- Do not expose a battery to temperatures above 40°C (104°F) and below 5°C (41°F)
- Do not use a damaged battery
- Do not leave batteries unused for extended periods of time, either in the product or in storage

BATTERY STORAGE AND DISPOSAL

- Store the batteries separately from the product
- Store the batteries at temperatures between 15°C and 20°C (59°F and 68°F)
- Always check and follow your applicable regulations before disposing of a battery

malfunctions diagnosis

In case of anomaly or not functioning of the **moviroll** system, please count the number of flashes of the diagnosis LED to identify the problem and solve it using the schedule below.

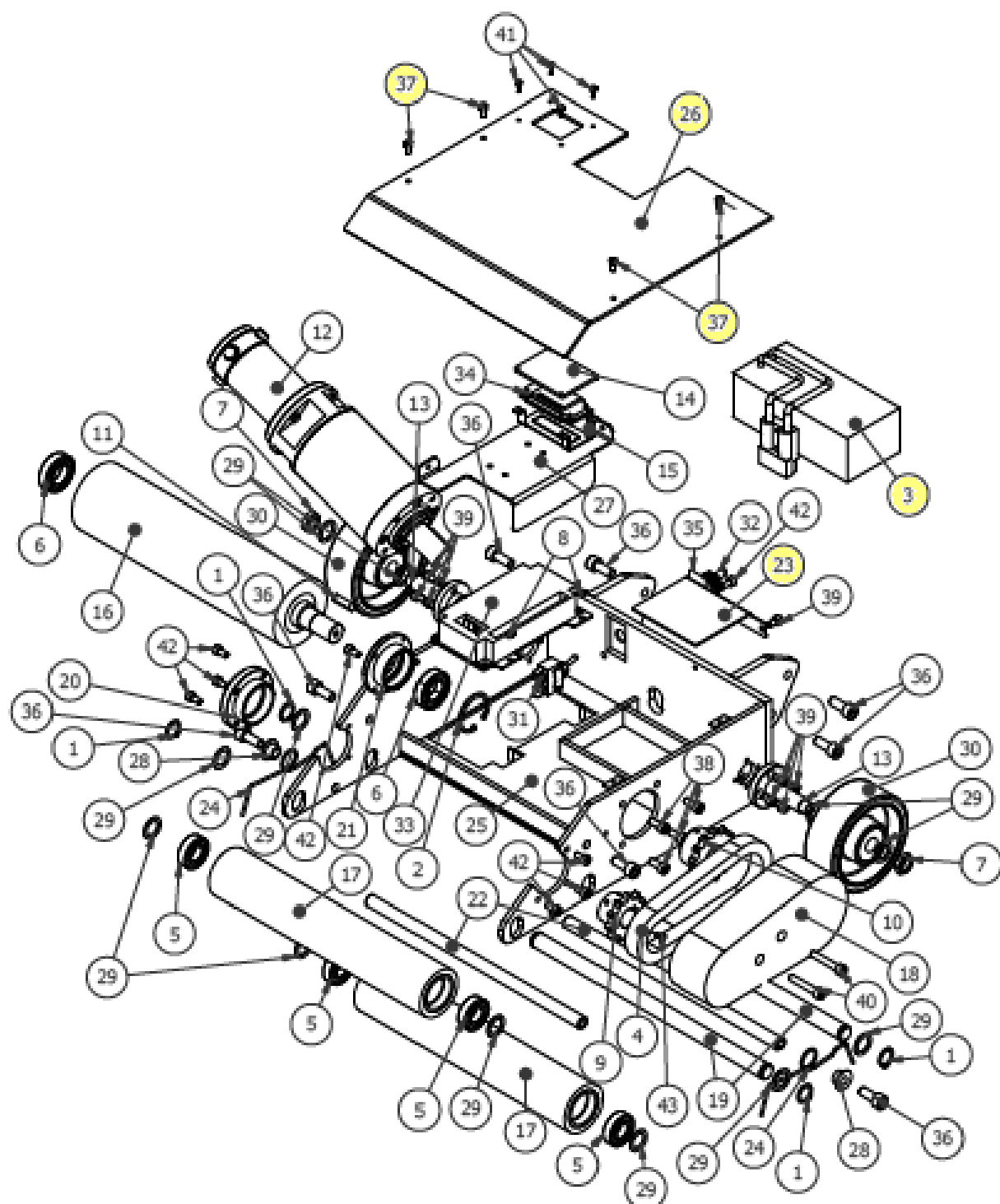


	POSSIBILI MESSAGGI DI ERRORE	SOLUZIONI/RIMEDI
E01	Motor already powered at start (forward gear)	Turn off/on with throttle in zero position
E02	Motor already powered at start (backward gear)	Turn off/on with throttle in zero position
E03	Battery tension too low	Charge the battery
E04	Battery tension too high	Use another battery and contact renova
E05	Throttle not at position zero at start	Turn off/on with throttle in zero position
E06	Broken throttle (potentiometer)	Replace the throttle
E07	Overheating	Cool the electronic board
E08	Programming error eprom	Turn off/on. If the problem persists, contact renova
E09	Error on control's power	Turn off/on. If the problem persists, contact renova
E10	Resolver not connected	Turn off/on. If the problem persists, contact renova

PLEASE NOTE:

Please see warranty conditions on the warranty sheet.

components descriptions and codes



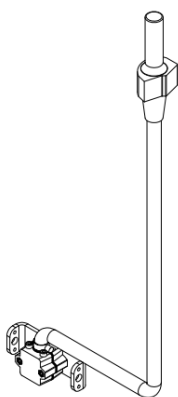
battery replacement

- Push the switch into the OFF position
- Open the orange door (23)
- Remove the four screws (37)
- Remove the cover in the front direction (26)
- Disconnect the red plug of the battery (3) from the movitruck
- Extract the battery (3)
- Insert the new battery
- Reconnect the two red connectors
- Reposition the cover (26)
- Refit the four screws (37)
- Close the orange door (23)

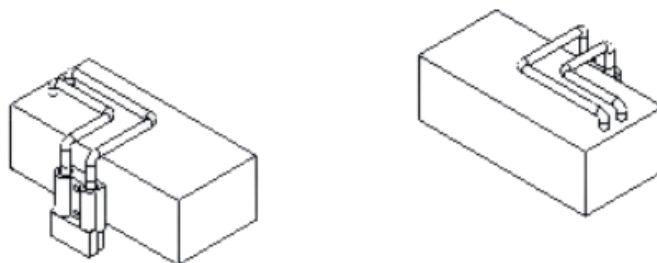
Note: the numbers refer to those highlighted in the image above.

POSIZIONE	CODICE PER MODELLO		DESCRIZIONE	Q.tà
	MVE 100 C	MVE 200 C		
1	A70-0029		Segeer ring	4
2	A70-0031		Roller axis	1
3	B10 - 0020		Battery 24v 5Ah	1
4	C10-0025		Simple chain	1
5	C30-0033		Radial ball bearing	4
6	C30-0042		Radial ball bearing	2
7	D14-0002		Nut	2
8	D14-0004		Nut	2
9	I30-0004		Gear box	1
10	I30-0031		Gear box	1
11	L51-0006		Rounded tab	1
12	M65-0034	M65-0035	Gear motor	1
13	MREP0301		Rear wheel axis	2
14	MREP0374		Color viewer cover	1
15	MREP0375		Display support with electronic board	1
16	MREP0436		Rubber shaft	1
17	MREP0439		Rubber roller	2
18	MREP0447		Chain cover	1
19	MREP0449		Rubber roller axis	2
20	MREP0451		Closed flange for bearing	1
21	MREP0452		Closed flange for bearing	1
22	MREP0456		Rod	2
23	MREP0469		Chain cover	1
24	MREP0470		Spring	2

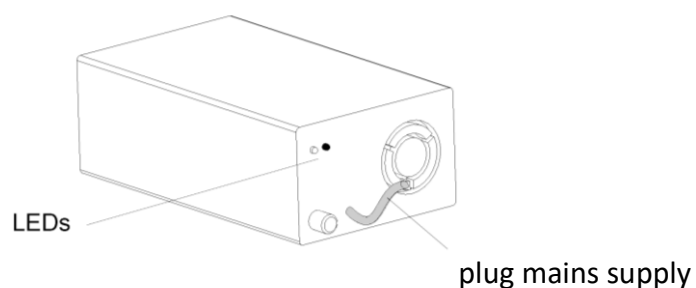
25	MREP0508		Frame	1
26	MREP0509		Upper cover	1
27	MREP0510		Electronic board cover	1
28	MVRP0020		Spring housing	2
29	R60-0001		Washer	12
30	R95-0001		Rubber wheel	2
31	S15-0020		ON/OFF Switch	1
32	S15-0021		Rubber cover for ON/OFF Switch	1
33	S15-0046		Electronic board	1
34	S20-0023		Color display	1
35	T10-0010		Switch adhesive label	1
36	V50-0005		Galvanized screw	8
37	V50-0008		Brunished screw	4
38	V50-0023		Brunished screw	4
39	V50-0027		Galvanized screw	9
40	V50-0037		Brunished screw	2
41	V50-0060		Galvanized screw	4
42	V50-0062		Galvanized screw	8
43	V53-0003		Galvanized screw	1



40	MREK0060	Curved handle 'S'
41	A20-0009	Throttle for curved handles



	B10-0020	24 V battery
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	B10-0021	Charger 220V 50Hz
	B10-0022	Charger 110V 60 Hz

SPARE PARTS REQUEST

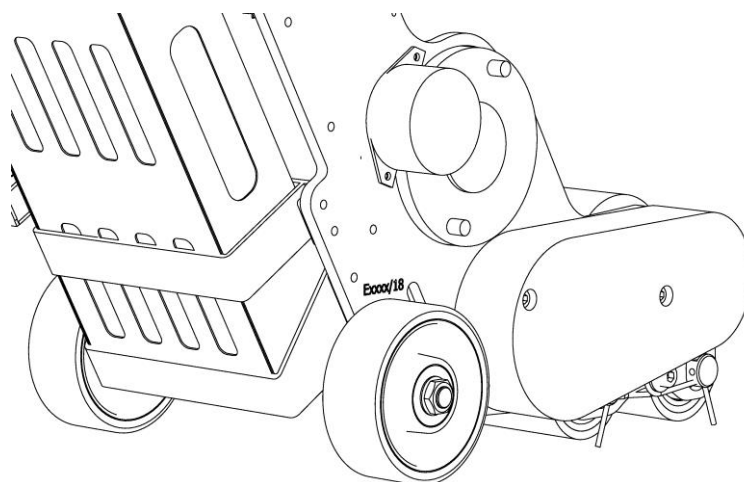
Please always communicate the serial number of your **movitruck** when requiring spare parts together with the code of the spare parts needed.

Each **movitruck** is provided with its serial number.

Please find the serial number of your **movitruck** stamped on the **movitruck** frame, above the rear wheel.

Example in the picture on the right.

Please find the serial number also on the warranty sheet provided with the **movitruck** and on the Declaration of Conformity in this manual.



instructions for a proper use

movitruck uses the power of a gear motor, which generates the capability of moving small or big loads through a pyramidal transmission with rollers.

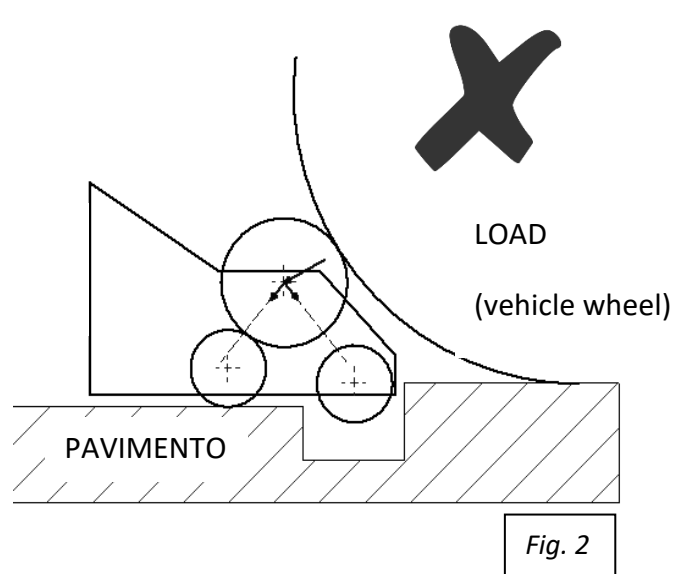
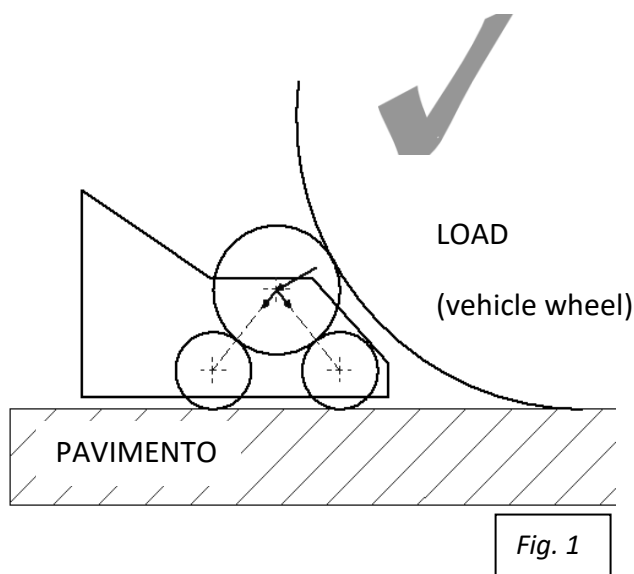
The power transmission from the motor to the rollers begins when **movitruck** is touching the load. The rollers on the ground allow the movement of the load in a continuous and regular way and the overcoming of small obstacles.

⚠ Do not use **movitruck** on surfaces with obstacles and holes of big dimensions that may cause the detachment of one of the rollers from the roller drive. In this situation, the contact between the movitruck and the ground no longer takes place via rollers and wheels but directly on the chassis, preventing its movement



Figure 1 shows how the weight of the roll/load should be unloaded on the rollers.

Figure 2 shows an example of how **moviroll** should not work in order to avoid the premature breakdown of the bearing of the roller drive due to an improper unloading of the roll/load weight on them.



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ATTESTAZIONE DI CONFORMITÀ /CONFORMITY STATEMENT

dichiariamo che l'esame è stato effettuato secondo i sotto citati requisiti che il sottoscritto soggetto recepisce.
/we declare that the examination has been carried out according to the below-mentioned requirements, that are acknowledged by the holder of the present Statement.

Secondo quanto descritto nel Fascicolo Tecnico costituito nell'anno 2015

(According to the content of the Technical File issued in 2015)

renova s.r.l. a socio unico

Via Pompeo Mariani, 16

I-20128 - Milano (MI)

dichiara che il/i prodotto/i

(declares that the product/s)

Descrizione : Description:

Nome /Name:

Modello : Model:

Spingi veicolo
MOVITRUCK

MME



E' CONFORME alle seguenti direttive:

(It fulfills the requirements of the following directive(s))

alla Direttiva 2006/42/CE relativa alle macchine (procedura di valutazione in accordo all'allegato VIII)

(in accordance with the procedure of evaluation in accordance with Annex VIII)

Norme applicate

(Applied standards)

EN ISO 12100:2010



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ISOENCertifications s.r.l.

Sede Legale: via Suardi, 21 - 24124 BERGAMO

Sede Operativa: via P. Lodi 1 - 24040 Madone (BG)

tel. 035 4943471 fax 035 4943471

P.IVA & C.F. 03940380169

e-mail: info@isoencertifications.it

website: www.isoencertifications.it

L'Amministratore Unico

ISOENCertifications S.r.l.

Niki Muller

prima emissione /first issue: 12/06/2015

data di revisione /revision date: Rev. A 12/06/2015

DICHIARAZIONE DI CONFORMITÀ
alla Direttiva 2006/42/CE relativa alle macchine in accordo all'allegato IIA
DECLARATION OF CONFORMITY
according to 2006/42/EC machinery directive annex IIA

RENOVA s.r.l.

a socio unico

Viale rimembranze 93, Sesto S.Giovanni (MI) 20099 Italy

info@renova-srl.com

DICHIARA CHE
/ DECLARE THAT

il prodotto/
the product

Descrizione / description

Spingi veicolo

Nome / Name

MOVITRUCK

Modello / Model

MVE

Anno di fabbricazione e ultimo agg.
fascicolo tecnico/ Production year and
technical file last revision

2023

N° matricola

E' CONFORME
/ FULFILLS

alle seguenti Direttive Europee:

/ the requirements of the Directive:

alla Direttiva 2006/42/CE relativa alle macchine
(procedura di valutazione in accordo all'allegato VIII)
directive 2006/42/EC "Machinery directive"
(conformity assessment according to annex VIII)

Norme applicate/applied standards
EN ISO 12100:2010

Nome e indirizzo della persona stabilita nella Comunità europea autorizzata a costituire il fascicolo tecnico /
Name and address of the person established in the EU Community authorized to compile the technical file

Ugo Re

Amministratore /
General manager



Nome / name

Funzione / function

Firma / signature

Firma della persona autorizzata a redigere la dichiarazione a nome del fabbricante o del suo mandatario
Signature of the person empowered to draw up the declaration on behalf of the manufacturer or his authorized representative

Ugo Re

Amministratore /
General manager



Nome / name

Funzione / function

Firma / signature

La macchina è progettata rispettando tutti i requisiti di sicurezza previsti per la destinazione d'uso che devono essere previsti anche agli elementi o quasi macchine associate per estenderne la destinazione d'uso con particolare riferimento a rischi interferenziali (posizionamento operatore, solidità di elementi mobile, giunzioni e saldature)
The machine is designed in compliance with all the safety requirements envisaged for the intended use which must also be provided for the associated elements or other Partly Completed Machinery to extend their intended use with particular reference to interference risks (operator positioning, solidity of moving elements and joints and welds)

Si declina ogni responsabilità legata all'eventuale non-conformità degli elementi associati o quasi macchine per estenderne la destinazione d'uso
We decline all responsibility related to any non-conformity of the associated elements or Partly Completed Machinery to extend their intended use

La presente dichiarazione di conformità è emessa sotto la responsabilità esclusiva del fabbricante

This declaration of conformity is issued under the sole responsibility of the manufacturer



	<p align="center">DICHIARAZIONE DI CONFORMITÀ UE EU DECLARATION OF CONFORMITY</p> <p>In accordo alla direttiva 2014/34/UE del Parlamento europeo e del Consiglio, del 26 febbraio 2014, concernente l'armonizzazione delle legislazioni degli Stati membri relative agli apparecchi e sistemi di protezione destinati a essere utilizzati in atmosfera potenzialmente esplosiva</p> <p><i>According to 2014/34/EU directive on the harmonisation of the laws of the Member States relating to equipment and protective systems intended for use in potentially explosive atmospheres</i></p>
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Ragione sociale / manufacturer	<p align="center">Renova s.r.l. a socio unico Sede legale/legal site: Via Palmanova 24 20132 Milano Sede operativa/operative site: Viale Rimembranze 93 20099 Sesto San Giovanni(MI)-Italy</p>
---------------------------------------	--

dichiara che / declare that

Prodotto/Product Name	Spingi bobine ed attrezzature e per la movimentazione di carrelli Reel pushers and equipment and for cart handling
Tipologie/Types	Movitruck
Categoria ATEX ATEX category	3
Matricola/serial number	

E' CONFORME
FULFILLS

alla Direttiva Europea 2014/34/UE
the European Directive 2014/34/EU

Prodotto di categoria 3 per zone ATEX 2-22/ ATEX category 3 product for 1-22 ATEX classified zone



Sono stati applicati i seguenti standard tecnici
The following technical standards have been applied:

EN 1127-1:2019
EN ISO 80079-36:2016 (ex EN 13463 – 1)
EN ISO 80079-37:2016 (ex EN 13463 – 5)
Controllo interno della fabbricazione in accordo alla EN ISO/IEC 80079-34:2020
Internal Fabrication Control according to EN ISO/IEC 80079-34:2020

RENOVA applicando il marchio CE garantisce che il progetto, la costruzione delle attrezzature sopra menzionate rispondono ai requisiti della Direttiva 2014/34/UE
La presente dichiarazione di conformità è rilasciata sotto la responsabilità esclusiva del fabbricante.

RENOVA by using the CE marking guarantee that design, construction of equipment mentioned above fulfil the requirements of the Directive 2014/34/EU
This declaration of conformity is issued under the sole responsibility of the manufacturer.



renova srl a socio unico – viale Rimembranze 93 – 20099 Sesto San Giovanni - Italy – tel: +39.02.2700.7394 – fax:
+39.02.2570.8635

www.renova-srl.com – email: support@renova-srl.com