

### **Battery rollpusher**

MRE 100 | MRE 100 S MRE 200 | MRE 200 S MRE 300 | MRE 300 S

# CE

# operating instructions





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This product complies with the Directive 2006/42/CE

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# introduction

Dear customer,

Thank you for purchasing Renova's **moviroll MRE - battery roll pusher**.

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 concerting 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

- moviroll is exclusively designed to move cylindrical loads as paper and corrugated rolls, wood and steel rolls, vehicles as well as vehicles and carts on rails by interposing plates installing the moviroll directly on board the cart.
- moviroll 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.



### assistenza

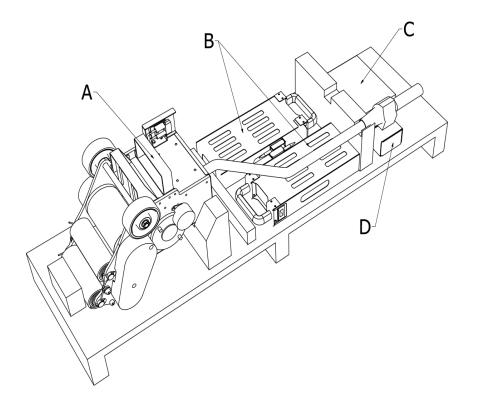
Renova is worldwide present with Agents and Distributors.

#### Contatta il Support Renova

support@renova-srl.com

# general instructions

#### INITIAL CONTENT OF THE BOX



Α	moviroll	x1
В	batteries	x2 (optional)
С	battery charger	x1
D	shipment kit	x1

#### **CONTENT DESCRIPTION**

**MOVIROLL:** In the box you can find the **moviroll** model as previously ordered: MRE100 / MRE200 / MRE300 with straight handle or with curved handle 'S'.

**BATTERIES:** moviroll (all models) is provided with a second battery (optional). The two Plug&Play batteries are housed in the box near the moviroll system. They are supplied with a state of charge at 30% or less; therefore, they require a full charging cycle before the use.

**BATTERY CHARGER: moviroll** 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 **moviroll** 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 moviroll is provided with its serial number

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

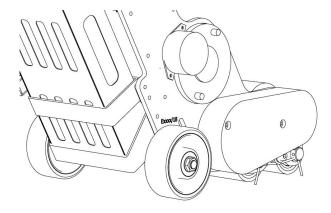
Example in the picture on the right.

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

#### **IMPORTANT:**

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

# 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 moviroll on a safe and flat surface that can support its weight
- Insert the battery into the special chassis. After three months of non-use, the battery needs a full discharge and charge cycle.
- Push the switch into the ON position
- A lit red LED indicates that the appliance is ready to be used
- Now select the forward gear 1 or the backward gear (emergency)
- To start using the **moviroll** to handle loads just spin the accelerator handle.
- Push the switch into OFF position when the **moviroll** is not running in order to preserve the battery charge

#### **PLEASE NOTE:**

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

#### **BATTERY STATUS**

The status LEDs (see the picture at page 8):

GREEN LED	charged battery
YELLOW LED	50% battery charge (when active)
RED LED	discharged battery

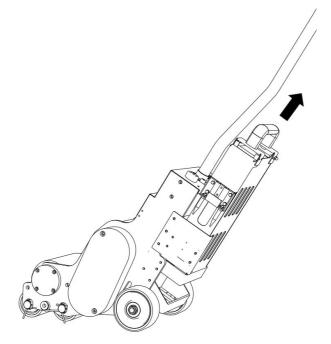


#### ATTENTION!

Use the **moviroll** only when GREEN and YELLOW LEDs. Do not use the **moviroll** with RED battery status LED to avoid any irreparably damage to the electronic unit and the battery. With RED battery status LED recharging the battery is mandatory before using the **moviroll** again

#### **BATTERY RECHARGE**

- Push the switch into the OFF position
- Remove the battery from the chassis (as in the picture)
- Insert the battery into the charger.
- Connect the battery charger to the mains supply.
  A red LED on the battery charger now turns on.
- 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 will turn green.
- Please leave the battery under charge for about 30 minutes to stabilize the tension of the cells.
- After recharging the battery remove the battery from the charger, then unplug the charger from the mains supply. The red LED of the charger will remain lit for a bit of time even if cable unplugged.





#### ATTENTION!

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

#### **BATTERY HANDLING PRECAUTIONS**

- Do not dissemble, 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

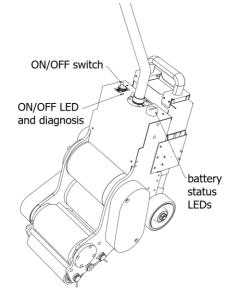
#### **BATTERY STORAGE AND DISPOSAL**

- 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:

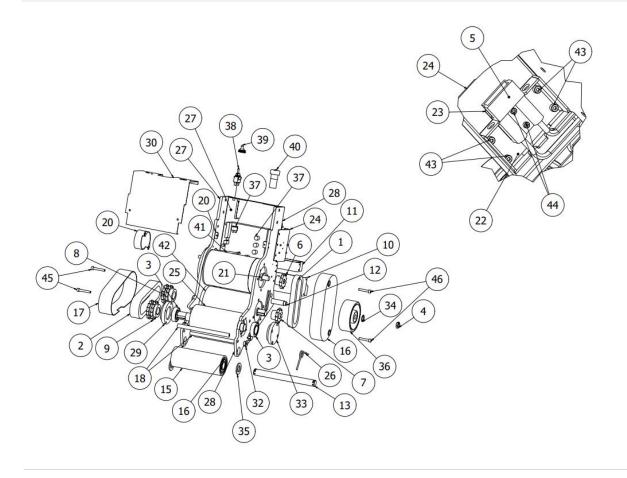


NUMERO DI LAMPEGGI	DIAGNOSI	SOLUZIONI/RIMEDI
1	Motor already powered at start	Turn off/on with throttle in zero position
	(forward gear)	
2	Motor already powered at start	Turn off/on with throttle in zero position
	(backward gear)	
3	Battery tension too low	Charge the battery
4	Battery tension too high	Use another battery and contact Renova
5	Throttle not at position zero at	Turn off/on with throttle in zero position
	start	
6	Broken throttle (potentiometer)	Replace the throttle
7	Overheating	Cool the electronic board
8	Programming error eprom	Turn off/on.
		If the problem persists, contact Renova
9	Error on control's power	Turn off/on.
		If the problem persists, contact Renova

#### **PLEASE NOTE:**

Please see warranty conditions on the warranty sheet.

# components descriptions and codes



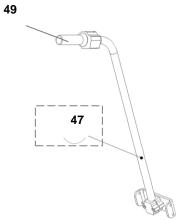
POSIZIONE	CODICE PER MODELLO		LO	DESCRIZIONE
	MRE100 MRE100S	MRE200 MRE200S	MRE300 MRE300S	
1	C10-0005	C10-0005	C10-0005	simple chain
2	C10-0013	C10-0013	C10-0015	double chain
3	C30-0004	C30-0004	C30-0004	ball bearing for roller drive
4	D14-0002	D14-0002	D14-0002	bolt for wheels
5	E50-0001	E50-0001	E50-0001	battery plug
6	130-0003	130-0003	130-0003	sprocket for motor
7	130-0004	130-0004	130-0004	Gear box simple gear chain
8	130-0013	130-0013	130-0017	Double gear**
9	130-0014	130-0014	130-0016	Double gear**
10	MREP0014	MREP0014	MREP0014	Battery lower support
11	MREP0015	MREP0015	MREP0015	Battery upper support

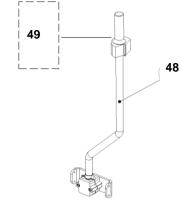


12	MREP0016	MREP0016	MREP0016	Rear axial
13	MREP0017	MREP0017	MREP0017	Axle for lower roller
14	MREP0018	MREP0018	MREP0018	Rubber roller
15	C30-0008	C30-0008	C30-0008	Shaft supports for ball bearing rubber
16	MREP0021	MREP0021	MREP0021	Chain motor – gear box cover
17	MREP0022	MREP0022	MREP0050	Chain gear box – roller drive cover
18	MREP0023	MREP0023	MREP0023	Tie rod
19	MREP0028	MREP0028	MREP0028	Motor wires cover
20	MREP0031	MREP0031	MREP0031	Front carter support
21	MREP0032	MREP0032	MREP0032	Engine pinion thickness
22	MREP0035	MREP0035	MREP0035	Battery fixed centering
23	MREP0038	MREP0038	MREP0038	Anderson connector thickness fixed
24	MREP0039	MREP0039	MREP0039	Fixed connector holder MRE
25	MREP0043	MREP0043	MREP0043	Roller drive
26	MREP0140	MREP0140	MREP0140	Reinforced spring MRE
27	MREP0143	MREP0143	MREP0143	Right frame
28	MREP0144	MREP0144	MREP0144	Left frame
29	MREP0145	MREP0145	MREP0145	Opened roller drive flange
30	MREP0165	MREP0165	MREP0165	Frontal cover
31	MREP0105	MREP0105	MREP0105	Support for control board
32	MVRP0020	MVRP0020	MVRP0020	Spring support
33	MVRP0024	MVRP0024	MVRP0024	Closed flange roller drive
34	R60-0001	R60-0001	R60-0001	Wheels washer
35	R60-0005	R60-0005	R60-0005	Galvanized washer
36	R95-0001	R95-0001	R95-0001	Rubber wheel
37	S15-0071	S15-0071	S15-0071	Control board
38	S15-0020	S15-0020	S15-0020	Switch ON/OFF
39	S15-0021	S15-0021	S15-0021	On/off switch rubber cover
40	S20-0002	S20-0002	S20-0002	Battery status LED
41	M65-0001	M65-0001	M65-0001	MRE Motor 100/200/300
42	R50-0001	R50-0003	R50-0004	Gear box MRE
43	V50-0008	V50-0008	V50-0008	TCCE Screw
44	V50-0011	V50-0011	V50-0011	TCCE Screw
45	V50-0016	V50-0016	V50-0016	TCCE Screw
46	V50-0037	V50-0037	V50-0037	TCCE Screw

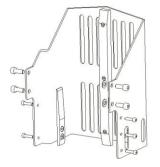
\*triple chain only for MRE300/MRE300S

\*\* triple pinion only for MRE300/MRE300S

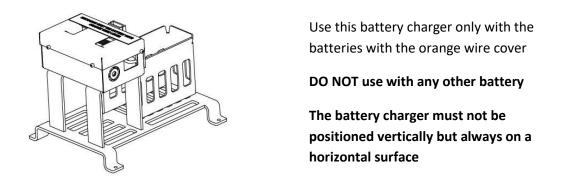




47	MREK0013	Straight handle kit
48	MREK0009	'S' handle kit
49	A20-0005	Throttle 2 buttons for straight / curved



	MREK0042	Extended battery guide	
p b v	onnettore er carica atteria ecchio nodello	connettore batteria MRE	Carter cavi arancione
	KITBATT	24 V battery	



KITCHRS220	Charger 220V 50-60 Hz
KITCHRS110	Charger USA 110V 50-60 Hz



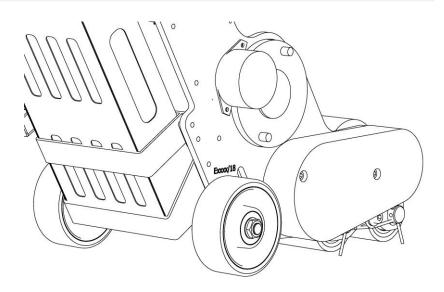
#### **SPARE PARTS REQUEST**

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

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

Please find the serial number of your **moviroll** stamped on the **moviroll** 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 **moviroll** and on the Declaration of Conformity in this manual.



# **INSTRUCTIONS FOR A PROPER USE**

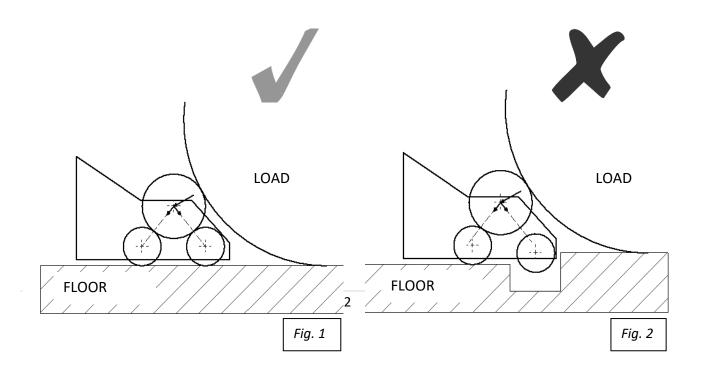
**moviroll** uses the power of a gear motor, which generates the capability of moving small or big loads through a pyramidal transmission with rollers.

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

① Do not use **moviroll** on surfaces with obstacles and holes of big dimensions that may cause the detachment of one of the rollers from the roller drive.

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.





#### **ISOENCErtifications S.r.l.**



# ATTESTAZIONE DI CONFORMITÀ **/CONFORMITY STATEMENT**

dichiariamo che l'esame e stato effettuato secondo i sotto citati requisiti che ii sottoscritto soggetto recepisce. /we declare that the examillation has been carried out according to the below melliold requirements, that are acklowledged by the holder of the presellt Statement.

> Secondo quanto descritto nel Fascicolo Tecnico costituito nell'anno 2015 According to the content of the Tecnical File issued n2015

#### **RENOVA S.r.1.** Viale Rimembranze, 93 I-20099 - Sesto San Giovanni (MI)

.dichiara che il/i prodotto/i I declares that the product/s)

Descrizione ; Description: Nome /Name:

Modello ; Model:





E CONFORME alle seguenti direttive: I FULFIL I the, eqwrements of the follm\1119 direct, vt(s)

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

Norme applicate I applied standards EN ISO 12100:2010





ISOENCe, tifications s.r.l. Sede Legale: via Suardi, 24 - 24124 BERGAMO Sede Operat1va: via PL1cc1ni. 1 - 24040 Macione (BG} tel. 035 | 997726 fax. 035 4943471 P.IVA & C.F. 03940380169 tel. Of ISOENCErtifications

L'Amministratore Unico ISOENCErtifications S.r.l. Niki Muller

1/JI

prima emissione !first issue: 12/06/2015

data di revisione /revism11 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.

Viale Rimembranze, 93 – 20099 – Sesto San Giovanni (Milano)



il prodotto/ the product

Descrizione / description

Spingi bobina

Nome / Name

Modello / Model

Anno di fabbricazione e costituzione fascicolo tecnico/ Production year N° matricola

MOVIROLL MRE / MRE S

2015



#### E' CONFORME /FULFILS

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 parson establishad in the EU Community autoprized to compile the technical file

Ugo Re	Amministratore / General manager	Mayle	
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	090	Re
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Amministratore / General manager

Funzione / function

Nome / name Luogo / Place MILANO Data / date Firma / signature





#### DICHIARAZIONE DI CONFORMITÀ UE

EU DECLARATION OF CONFORMITY

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 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

Ragione sociale /	RENOVA SRL
manufacturer	Sede legale/legal site: Via Palmanova 24 20132 Milano
manufacturer	Sede operativa/operative site: Viale Rimembranze 93 20099 Sesto San Giovanni(MI)-Italy

## 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/ <i>Types</i>	Movicart Moviroll
Categoria ATEX ATEX category	3
Matricola/serial number	

# E' CONFORME FULFILS

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

Prodotto di categoria 3 per zone ATEX 2-22/ ATEX category 3product 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 Interna 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.



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