

moviroll

pneumatic roll pusher



OPERATING INSTRUCTIONS



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introduction

Dear customer,
Thank you for purchasing Renova's **Moviroll**.

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.

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 this 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.

The warranty does not apply in cases which occur as a result of the Customer's 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.

foreword

Moviroll is a roll pusher that allows the operator to effortlessly handle cylindrical loads on a flat surface. The machine is driven by a pneumatic gear motor that is activated by pressurized and lubricated air at 6 bar.

The activation of this gear motor allows the transmission of the circular motion to a pyramidal system composed of three rubber rollers.

Thanks to the chain drive, the motion is transferred from the pinion fit to the gear motor to the pinion fit to the drive roller. When the drive roller is touching the roll, it has been compressed by the roll weight against the driving rollers. In this way the continuous and effortless handling of the roll is guaranteed but only when the load is applied.

In the case that the device is activated without the load, the drive roller will run free, since the springs that hold it detached from the drive rollers would not be compressed.

advices

- The manufacturer's instructions must be read and completely understood before the installation and use of the product and, in the case of breakdown, before any check intervention or recourse at the Renova's technical assistance.
- The operator must understand the manufacturer's instructions and be aware of the dangers.
- A hearing protection must always be used.
- A safety valve must always be installed in the case of broken pipe or air connector.
- **Moviroll** is exclusively designed to move cylindrical loads as paper and corrugated rolls, wood and steel rolls, and vehicles.
- **Moviroll** must not be used to brake heavy loads which run toward the machine.
- 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.
- **Moviroll** is fitted with a chain and sprocket transmission. This transmission is covered by a carter that is affixed with two screws so that nothing can come into contact with the chain. It is obligatory to keep the carter mounted for safety reasons.

mounting and installation

Initial content of the box:

standard kit

- | | |
|-------------|----|
| ✓ moviroll* | x1 |
| ✓ handle | x1 |
| ✓ air valve | x1 |

*MR100/MR100S – MR200/MR200S

air supply kit * *optional*

- | | |
|-------------------------|----|
| ✓ spiral pipe 15m 12x15 | x1 |
| ✓ lubricator filter ½ " | x1 |
| ✓ pipe fitting | x1 |

*code MVRK001

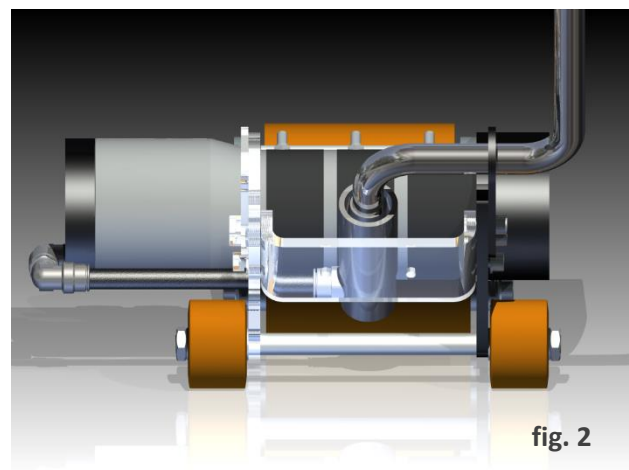
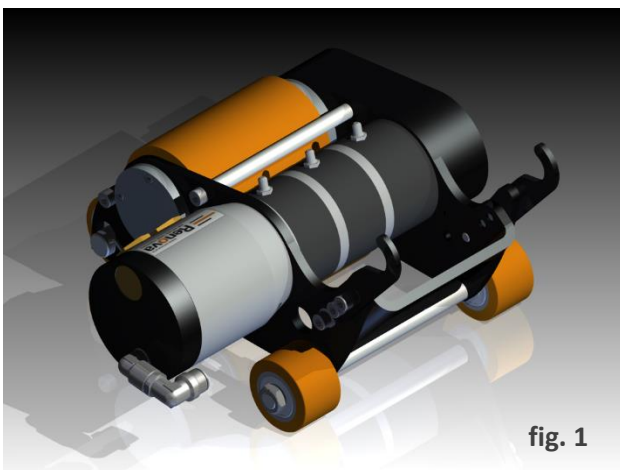
Air supply kit (optional) already set
in conjunction with the motor

Assembly

The assembly is made through rapid and simple operations.

1. Initial situation after the removal from the box (fig.1)
2. Insert the supply pipe into the pipe fitting of the motor (fig.2)
3. Place the fastener in its fixing position paying attention to the correct alignment of the handle in relation to the mechanical lock for the rotation (fig.3)
4. Lock the two screws of the fastener using a medium threadlocker (Loctite Blue) in order to ensure a perfect tightening of the handle (fig.4)
5. Screw the air valve at the end of the handle (fig.5)
6. Screw the male connector of the pipe fitting of $\frac{1}{2}$ " at the air valve
7. Install the filter-lubricator on your pneumatic line paying attention to adjust the output pressure at 6 bar and setting a lubrication as recommended at page 9
8. Connect the filter-lubricator and the **Moviroll** with the spiral pipe 12X15

Connect your pneumatic line to the device trying to eliminate bottlenecks and air loss. The machine works at 6 bar air pressure. Please find the air consumption schedule at page 9. It is important to verify that along the length of the air supply there is no reduction of the air pipe or air loss. This could create a power loss of the machine with poor performance.



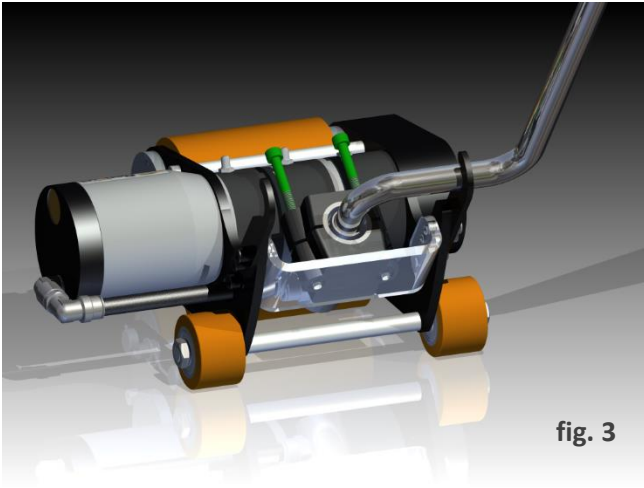


fig. 3

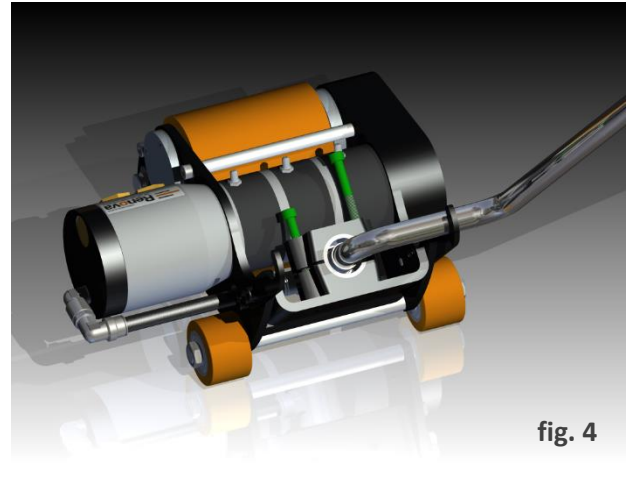


fig. 4

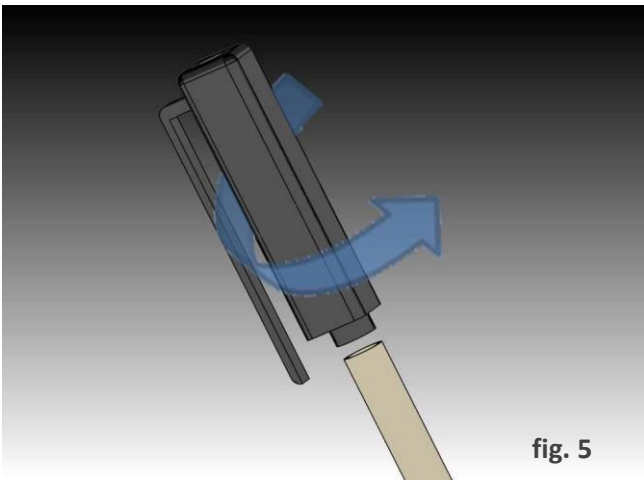
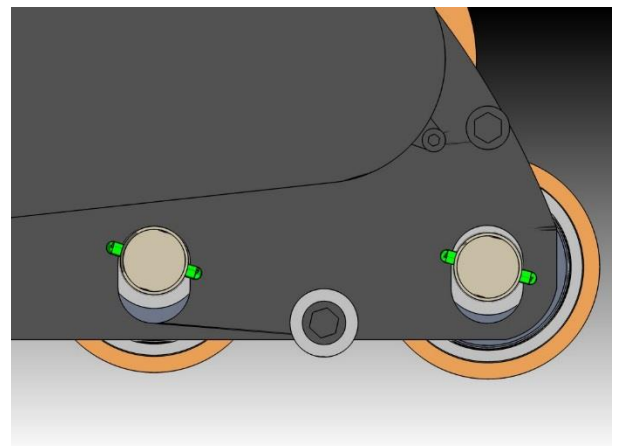
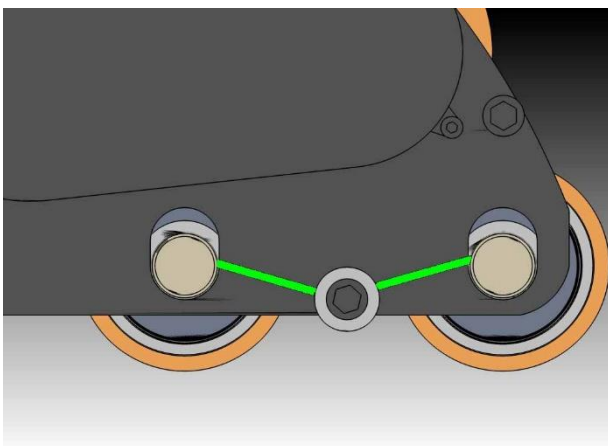


fig. 5

Use without counter springs

Counter springs are mounted on the device. They allow the rollers to get into contact between them. The springs are designed and calibrated to guarantee the contact between the 3 rollers only when compressed by the roll weight. In the case you prefer an use without counter springs, it is possible to remove them and insert some split pins into the holes drilled at the ends of the pins. In this way a continuous contact is guaranteed between the drive roller and the transport rollers.



Installation

Below please find some simple steps and devices to better use this quality product. The pneumatic motor air supply is essential for the correct functioning of the **Moviroll**. You need to follow small but essential measures in order to achieve maximum performance without loss of power or machine malfunctions

The pneumatic motor on **Moviroll** needs treated compressed, filtered and lubricated air at **6-7 bar**. In the case the air flow that supplies the **Moviroll** is lower, or the air pressure is under 6 bar, or even, the air is not treated and lubricated, it is not possible to guarantee optimal performance of the device.

Pneumatic line dimensioning

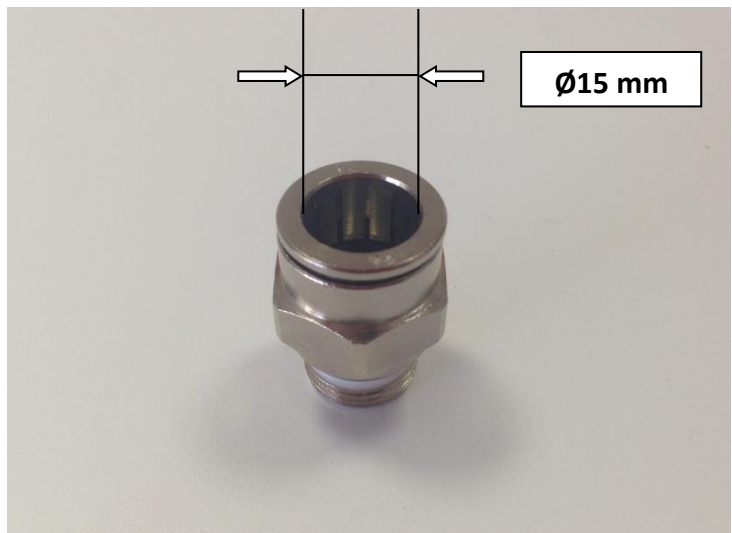
A pipe with an internal diameter not less than to 12mm must be used to provide the right air flow that supplies the motor. A great attention must to be paid to pipes-fitting and pipes along the pneumatic line that supplies **Moviroll**.

Example of a correct Moviroll supply

This is a simple example of how dimensioning the pneumatic supply. A direct connection from the pneumatic line to the air valve of the **Moviroll** it is also possible. This allows to avoid pipes-fitting, but it is important to have no reduction in any section (less than 12 mm) along the air path.

1.

The first step is connecting to the lubricator or directly to the pneumatic line (not recommended), with a super pipe-fitting or a pipe-fitting by safe lockring with an internal flow **above or equal** to 12 mm.



Pipe-fitting tube 12X15 with thread of ½" and air flow internal diameter **15 mm**.



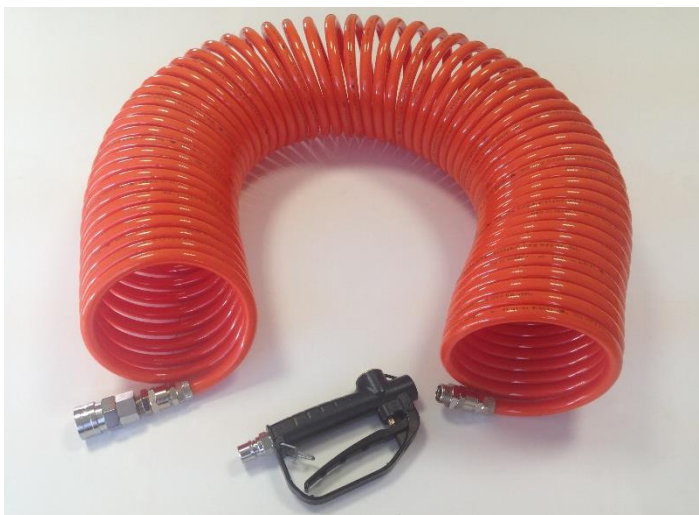
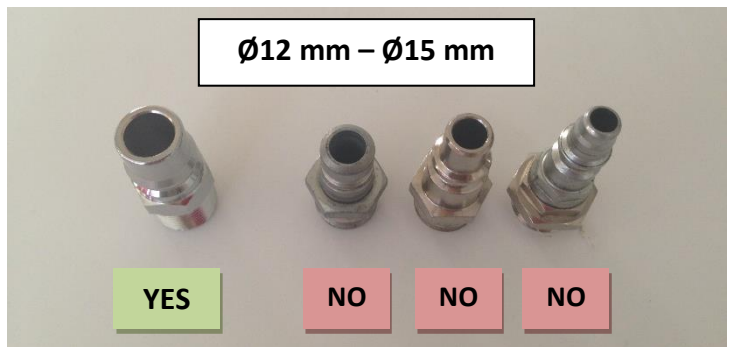
Spiral pipe 15 mt. **12X15** mm pressure rating up to 10 bar.

2.
Connect a pipe with an internal diameter of at least 12 mm and a length depending on the distances you need to cover.

3.
Connect the end of the tube to a pipe-fitting as shown in the picture. The male pipe-fitting must have an **internal diameter greater than 12 mm.**



Correct pipe-fitting selection.



4.
Connect the output of the pipe-fitting to the air valve of the **Moviroll**.

Operating pressure



Moviroll correctly works in a pressure range that goes from 6 to 7 bar.

It is important to verify that the input pressure does not drop under 6 bar when running motor.

In the case the pressure drops under this value, increase the pressure that supplies the **Moviroll** to obtain a work pressure of about 6 bar continuously.

Lubrication and air filtering Reduction gear greasing



For a proper pneumatic motor functioning and for long life of the vanes, moviroll is provided with a lubricator with a filter for the lubrication and filtering of the air that supplies the **Moviroll** following the parameters below:

Filtering → 64 μ or better

Recommended air lubricants:

BP	STATOIL	Q8	MOBIL	OK	SHELL	TEXACO
EnergolRD-E 46	AroxEP 68	Chopin46	Almo oil525	PneutoolOil K68	Torcula68	RD Lube32

Use grease as **GULBELLS RASK HS** multipurpose grease for high loads.

model	pressure [bar]	Consumption [NI/min]	Oil quantity [mm3/min]	greasing
MR100 / MR100S	> 6-7	1400	60-70	fill every 70 h
MR200 / MR200S	> 6-7	2800	120-140	fill every 70 h

The non-compliance with the above parameters may cause damage to the internal components of the motor. In this case Renova srl disassociates itself from any responsibility. Any foreign matter that gets into the motor such as dirt, metallic powder or other, may cause a permanent damage and the subsequent seizure of it. The greatest attention must be paid to the methods of air filtering.

Air pressure

The recommended air pressure is about 6 bar constant (85 psi).

A lower air pressure leads to a performance reduction.

A higher air pressure may damage the motor.

use and maintenance

After the mounting and the installation according to the correct parameters it is possible starting to use the **Moviroll**.

Place **Moviroll** in front of the roll and in contact with it. After checking there are not obstacles along the way, press the valve lever of the handle and drive the roll effortlessly to the desired destination.

To perform the lift up of the roll on sliders, place the roll in contact with the slider and afterward place **Moviroll** at the center of the roll length. Then gradually press the air lever until the complete lift up of the roll.

Never exceed the weight limit allowed and guaranteed by the **Moviroll**. The excessive effort required for a not permitted load may cause irreversible damage to the motor and other components.

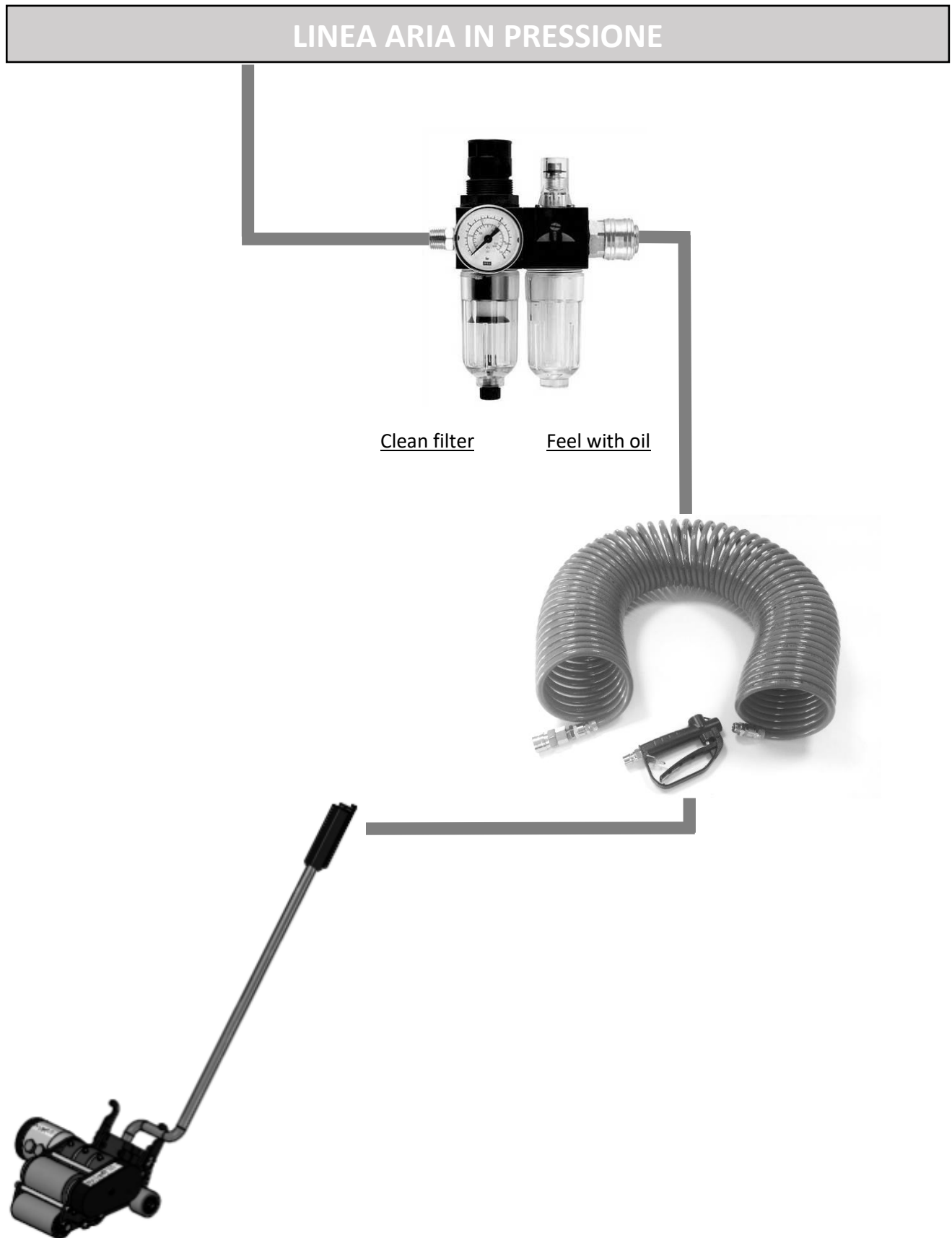
The drive roller and the transport rollers must be kept clean from dust, oil and grease.

If the device loses power please check:

- air pressure
- lubrication
- check and clean the air filter of motor entry.
-

The correct tightening of the threaded elements must be checked every 4 months. The weak or medium thread lockers (Loctite Blue) must be used in the case the screws are disassembled and then assembled again.

Connection scheme



Instructions for a proper use

① **Moviroll** versions MR100S and MR200S with curved handle must be used with the handle in their appropriate locations (see the drawings at page 11). Any other position or use of the handle doesn't guarantee the integrity of the handle itself.

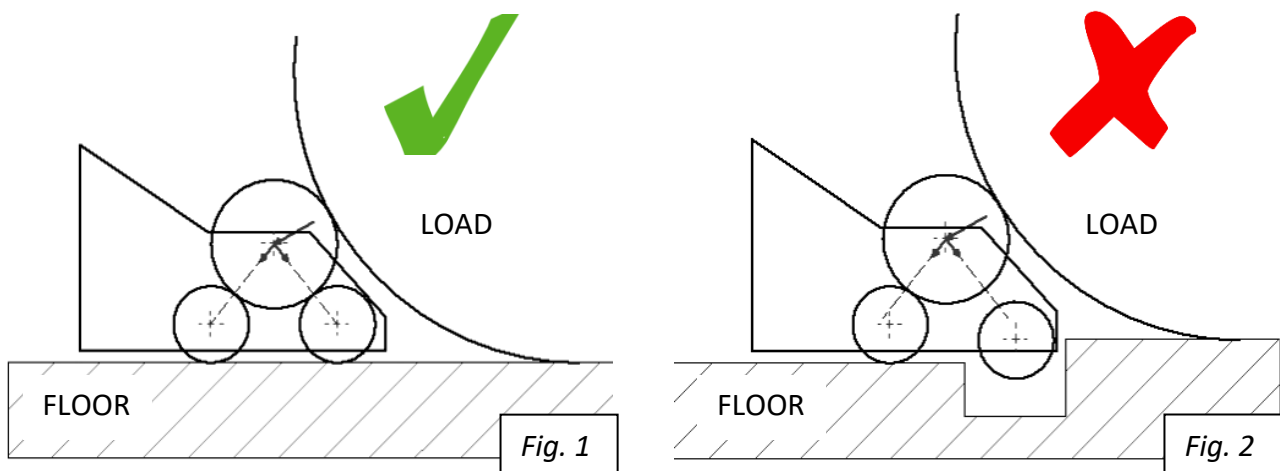


① Never use the **Moviroll's** handle as lever to lift loads especially during the phase of roll pushing.

① It's strongly advised to not touch the roll with the **Moviroll** when the **Moviroll** motor is at maximum power and when the roll is rolling towards the **Moviroll** itself (improper use of the **Moviroll** as brake).

① Renova's moviroll is provided with its original air supply kit (code MVRK001) in order to ensure the maximum performance and durability of **Moviroll**. If supplying **Moviroll** with untreated air, a power reduction of up to 70% is possible and the premature wear of its internal parts may occur. The warranty on Moviroll will be void in the case of not use of the Renova's air supply kit.

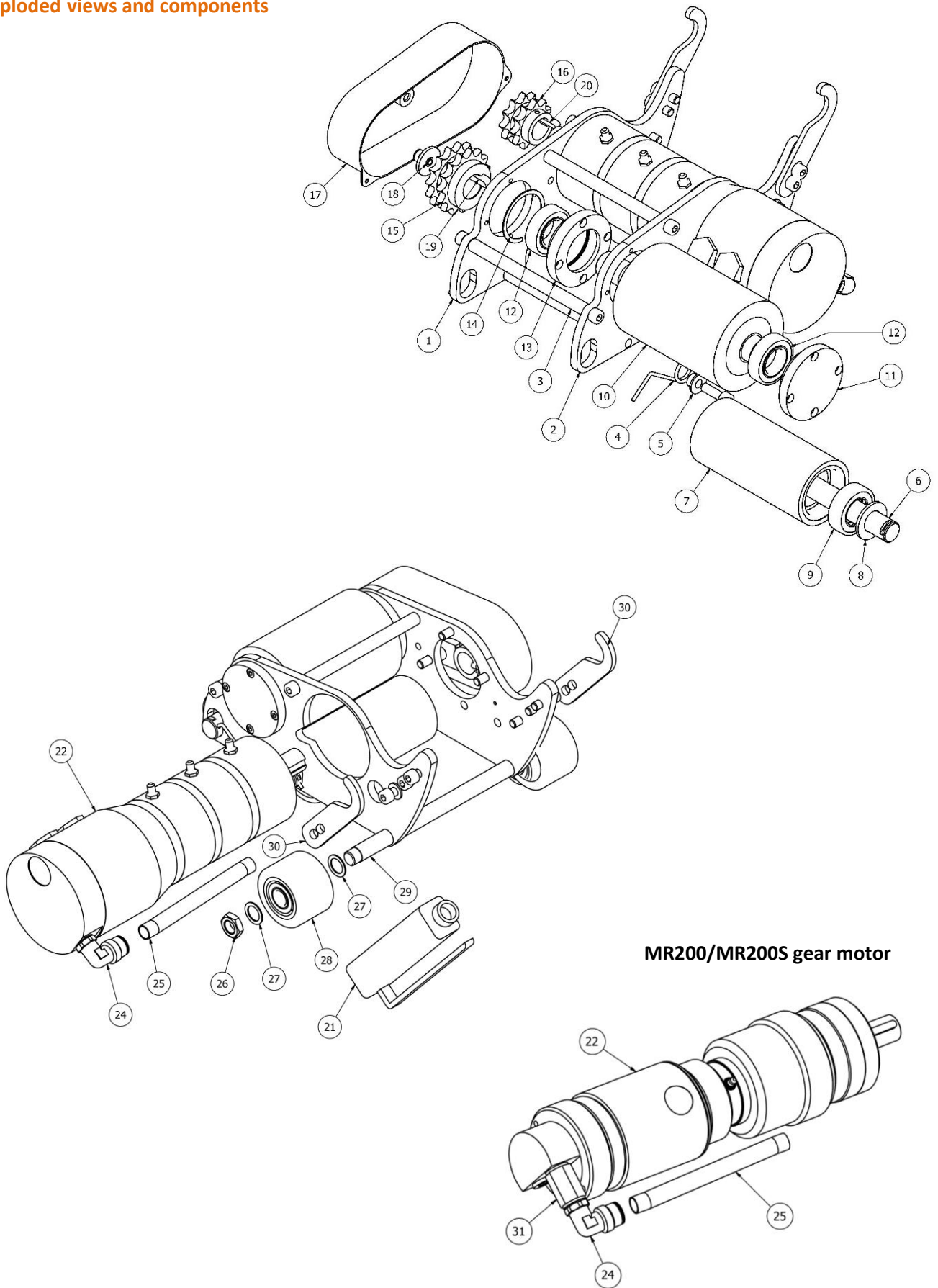
① Do not use **Moviroll** on surfaces with obstacles and holes of big dimensions that may cause the detachment of one of the rollers from the roller drive. Figure 1 shows how the weight of the roll/load should be unloaded on the rollers. Figure 2 shows an example of how moviroll should not work in order to avoid the premature breakdown of the bearing of the roller drive due to an improper unloading of the roll/load weight on them.



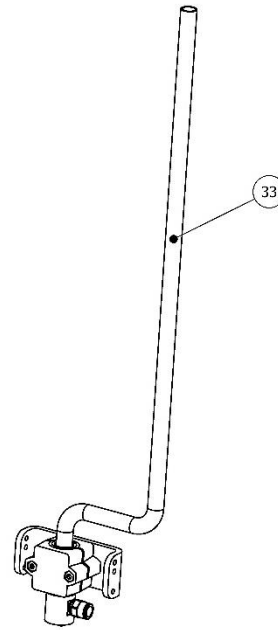
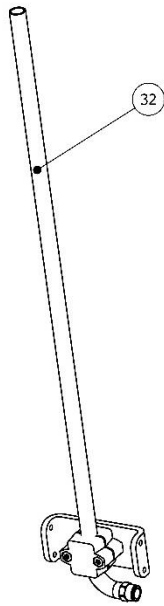
Change of the vanes of the pneumatic motor

A correct lubrication and a proper air filtering as recommended, ensure excellent performance of the motor over time. However vanes subject to wear are present into the motor. The useful life of the vanes varies from 5,000 to 15,000 hours. This depends mainly on the air filtering and lubrication, the pressure, the speed of the motor and on the proper preventive maintenance. For replacement, revision and maintenance of your **Moviroll** we recommend you to consult Renova srl.

Exploded views and components



Position	Description	Code		Quantity
		MR100 MR100S	MR200 MR200S	
1	<i>chassis right side cover</i>	MVRP0002	MVRP0033	1
2	<i>chassis left side cover</i>	MVRP0001	MVRP0032	1
3	<i>chassis pull-rod</i>	MVRP0021	MVRP0021	3
4	<i>spring</i>	MVRP0019	MVRP0019	2
5	<i>spring support</i>	MVRP0020	MVRP0020	2
6	<i>rubber roller axis</i>	MVRP0015	MVRP0015	2
7	<i>assembled rubber roller</i>	MVRP0018	MVRP0018	2
8	<i>galvanized washer</i>	R60-0005	R60-0005	4
9	<i>ball bearing for pos. 7</i>	C30-0008	C30-0008	4
10	<i>rubber shaft</i>	MVRP0031	MVRP0031	1
11	<i>closed flange for pos. 10</i>	MVRP0024	MVRP0024	1
12	<i>ball bearing for pos. 10</i>	C30-0004	C30-0004	2
13	<i>open flange for pos. 10</i>	MVRP0025	MVRP0025	1
14	<i>seeger ring for internal hole</i>	A70-0003	A70-0003	1
15	<i>gear box double roller drive for pos. 10</i>	I30-0001	I30-0001	1
16	<i>gear box double gear chain pos. 22</i>	I30-0002	I30-0002	1
17	<i>chain gear box – roller drive cover</i>	MVRP0026	MVRP0026	1
18	<i>oversized plain washer</i>	R60-0004	R60-0004	1
19	<i>rounded key for pos. 10</i>	L51-0004	L51-0004	1
20	<i>rounded key for pos. 22</i>	L51-0005	L51-0005	1
21	<i>air valve</i>	P50-0001	P50-0001	1
22	<i>gear motor</i>	M70-0001	M70-0002	1
23	<i>pipe fitting 90°</i>	R10-0002	R10-0002	1
24	<i>rapid fitting 90°</i>	I40-0005	I40-0005	1
25	<i>air supply pipe-motor</i>	T80-0001	T80-0001	1
26	<i>hexagon nut</i>	D14-0001	D14-0001	2
27	<i>wheels washer</i>	R60-0001	R60-0001	4
28	<i>rear wheels</i>	MVRP0013	MVRP0013	2
29	<i>rear wheels axis</i>	MVRP0010	MVRP0010	1
30	<i>mechanical stop for curved handle 'S'</i>	MVRP0009	MVPR0009	2
31	<i>extention fitting M/F 3/8"G</i>	/	MVPR0035	1



Position	Description	Code	
		MR100 MR100S	MR200 MR200S
	<i>air supply kit</i>	MVRK001	MVRK001
32	<i>straight handle kit</i>	MVRK002	MVRK002
33	<i>curved handle kit</i>	MVRK003	MVRK003

ISOENCertifications s.r.l.



DICHIARAZIONE DI CONFORMITA' DECLARATION OF CONFORMITY

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 with the following requirements
to which the undersigned is subject transposing

RENOVA S.r.l.
Viale Rimembranze 93
I - 20099 Sesto S. G. (MI)

DICHIARA CHE
/ DECLARE THAT

il prodotto/
the product

SPINGIBOBINA

Modello / Model

MOVIROLL

Anno di fabbricazione /
Production year

2012

E' CONFORME
/ FULFILS

alle seguenti Direttive Europee:
/ the requirements of the Directive:

Direttiva 2006/42/CE relativa alle Macchine

directive 2006/42/EC "Machinery directive"

Milano,
Data di Emissione del Certificato: 25/09/2012



L'amministratore unico
ing. Sergio Müller

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DICHIARAZIONE DI CONFORMITÀ
DECLARATION OF CONFORMITY
EN 17050:2005

MILANO / /

RENOVA s.r.l.

Viale Rimembranze 93 – 20099 – Sesto S.G. - MILANO

DICHIARA CHE
/ DECLARE THAT

il prodotto/
the product

Descrizione / description	Spingibobina
Modello / Model	MOVIROLL
N° serie / serial number	
Anno di fabbricazione/ Production year	

E' CONFORME
/ FULFILS

alle seguenti Direttive Europee:
/ the requirements of the Directive:

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

Ugo Re

Amministratore /
General manager



Nome / name

Funzione / function

Firma / signature

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