

6 - START-UP

It is absolutely necessary that the machine opens the telescopic cover after assembly at a low speed. When the telescopic cover is completely opened, lubricate it well and close it back up, again at low speed. During these operations check that the steel telescopic guard does not collide with machine components and that all of the boxes open out freely and evenly without jerking and swivelling. Then gradually increase the speed until the maximum speed is reached. The so-called stick-slip effect may also happen at low speeds. It is caused by the friction between the scraping seal of the wiper and the sheet of the box underneath. This phenomenon can also occur in the telescopic covers equipped with synchronised opening systems without jeopardising operation.

7 - MAINTENANCE AND CONSUMABLES

Preventive maintenance performed on a regular basis is essential for guaranteeing good operation of your telescopic cover. This is why we recommend that you clean it regularly every week, at its maximum extension, and then lubricate it with oil to prevent rust. When cleaning, do not use compressed air which could cause harmful infiltrations of grime and chips inside the machine. In some heavy-duty applications it is recommended cleaning the telescopic cover more frequently and checking there are no chips trapped inside. If there are, it must be disassembled and cleaned thoroughly.

7.1 - Replacing components subject to wear

For particularly high speed telescopic covers it is necessary to evaluate whether noise production, increasing as time goes by, is caused by breakage or problems on the shock absorbers or synchronisation systems. All components found to be worn, regardless of their service guarantee, must be replaced in order to prevent additional damage to your telescopic cover. If abnormal component wear is detected, it is necessary to analyse these problems and determine the causes in order to resolve the problem and prevent other possible damage to the telescopic cover. The wipers, scraping seals, sliding gliders, sliding rollers of various material, side guide brass profiles and shock absorbers are not covered by the service guarantee as they are components subject to wear.

• Scraping wipers and seals

These components must be replaced if they have sustained serious deformations or when the scraping action is jeopardised.

• Sliding gliders and rollers

These must be replaced if they have deformed sliding surfaces. The sliding rollers are to be replaced if they have uneven rotation and tend to jam.

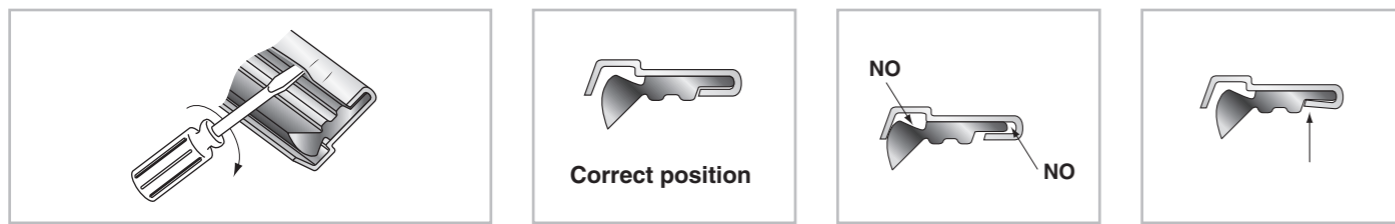
• Brass guide profiles

These must be replaced if they show deformations.

• Shock absorbers

These components are subject to heavy cushioning stress and contact with the various coolants. They must be replaced if their damping effect has lessened and if you notice increased noise generated by the telescopic cover.

7.2 - Replacing scraper ring type PR2 and PR3



8 - SPARE PARTS

The name plate of your P.E.I. telescopic cover shows information on the serial number, drawing and month of manufacture. It is placed on the outside of the outermost box of the cover and is highly visible.



9 - SERVICE

P.E.I. is at your complete disposal for any requirement and need you may have. By giving us the data shown on the name plate of your cover, we will be able to submit our best cost estimate to you for either repair or manufacture a new product in a short period of time. Our technical staff will be pleased to pay you a visit should you need advice concerning this issue.



**Protezioni
Elaborazioni
Industriali** srl

Via Torretta 32-32/2 • 40012 Calderara di Reno (BO)
Tel. ++39 - 051/6464811 (r.a.) • Fax ++39 - 051/6464840
E-mail: info@pei.it • Website: www.pei.it

ASSEMBLY AND MAINTENANCE INSTRUCTIONS FOR TELESCOPIC COVERS

Dear Customer,

Thank you for choosing a P.E.I. telescopic cover.
Thank you for the trust you have placed in us and our products.

You have been supplied with a reliable telescopic steel cover built and designed using the most advanced technologies. Please find all the necessary instructions for correct assembly and maintenance enclosed in this manual to ensure the product has a long and problem free working life. It is essential that the instructions are strictly adhered to and in case of any doubts please contact our customer sales team who is at your disposal.

1 - SAFETY WARNING SIGNS

The NON-walkable telescopic covers display the shown red warning sign.



Horizontal telescopic covers that do NOT display the red warning sign can be walked on by one person at a time and only when the **MACHINERY** is **NOT IN USE**.

2 - HANDLING

It is recommended that attention is paid during unloading and transportation of the product to prevent opening and the potential risk of damage to single components. The telescopic cover should be moved only when closed/not extended and can only be extended when placed on the machine guideways. Products exceeding 50 kg usually come equipped with devices to assist in lifting and vary according to the different types of telescopic covers and working position required.

3 - STORAGE

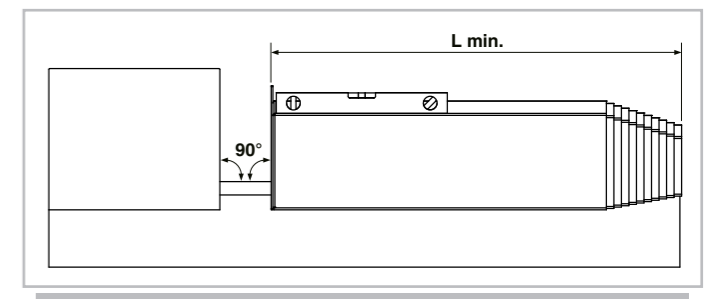
The P.E.I. telescopic cover is cleaned and lubricated with anti-corrosive protection oil after operational and quality testing and before shipping. The aforementioned necessitates that the product is kept in its original packaging until installation keeping it free from dust and humidity during storage.

4 - ASSEMBLY ONTO THE MACHINE

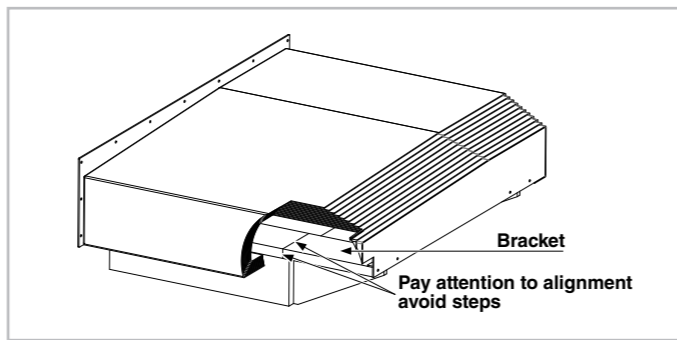
4.1 - Horizontal telescopic covers

- The telescopic covers must be mounted in their closed/non extended state firstly by fixing the smaller box unit onto the machine. Next adjust the telescopic cover size if necessary by pulling out three or four biggest steel boxes together to reach closed length required.
- Next place the telescopic cover onto the carriage or table of the machine and fasten the larger box unit.
- Make sure fastened surfaces are at right-angles with the guideways and not slanting.
- To prevent inefficient working of the telescopic cover, the fastening must not be "forced" in any way, to line up with the holes between the machine and cover or to make the cover attachment flange adhere to the machine's surface. Once secured, the larger box must not cause undue force or pressure to the components underneath.

The fastening holes may have to be adapted. Any possible fissures between the two surfaces must be filled with sealants.

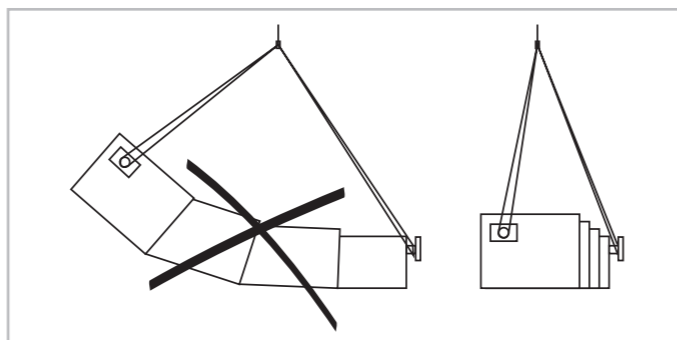


- If the telescopic covers are guided by rails of the guide track, or if they run on fixed brackets of the machine base, make sure they are well aligned and do not form any "steps" near the joints of the surfaces, thereby ensuring the smooth sliding of the rollers and sliding gliders.

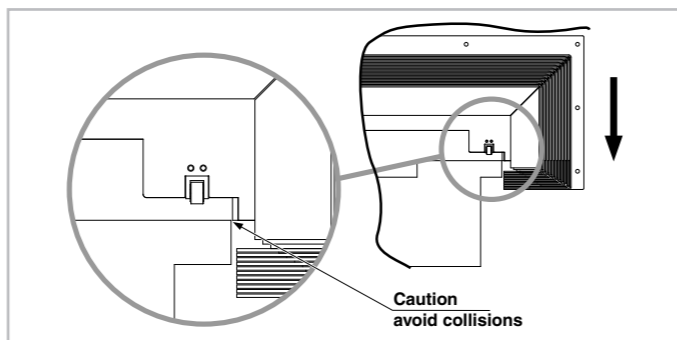


- The sliding tracks of the sliding gliders and rollers must be smooth. The steel bearings require tempered tracks with a hardness ≥ 55 HRC.
- it is recommended extending the cover only on the guideways so as to not deform the single components making up the cover.
- use only the lifting devices supplied for handling heavy covers.

- the covers must be put inside the machine only when they are at their maximum closed length.



- during assembly, the covers should be lowered from above; pay attention that the steel bearings and side sliding gliders do not bang against the machine guideways.



- pay attention that the lifting equipment does not damage the covers.

4.2 - Crossrail and vertical covers

These covers are generally built with connecting sliding gliders in order to bind every single element of the cover to the guideways. The crossrail covers can be inserted on the side, whereas the vertical ones can be inserted from below or above, depending on whether it is a lower or upper cover.

Sometimes the crossrail covers can be also assembled on the front if they are slightly turned when being installed on the machine. Whereas the vertical covers requiring front assembly can be built in three different executions depending on their configuration and type:

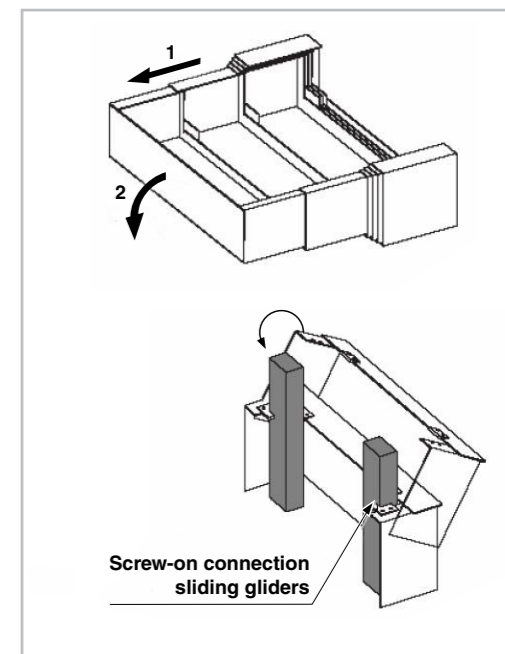
- with sliding gliders that bind to the guide screwed on one part only
- with sliding gliders that bind to the guide screwed on both parts
- with snap-on sliding gliders that bind to the guide.

There is also another possibility that covers can be mounted on the front: by making a vertical section of the upright guideways screwable.

4.3 - Assembly and disassembly diagram for vertical telescopic covers with screw-on sliding gliders

1. Starting with the small box, extract one pair of boxes (1) at a time and turn the single boxes (2) downwards, starting with the smallest one
2. Unscrew the sliding gliders
3. Put the small box at the end of the guideways
4. Secure the flange
5. Clean the screws with thinner
6. Screw on the sliding gliders using Loctite threadlocker on the screws
7. Put in the next box
8. Screw on the sliding gliders as described in points 5 and 6
9. Push the box until it's at its closed length
10. Repeat the operation starting from point 5 for all the other boxes
11. Secure the large box to the machine with pack closed.

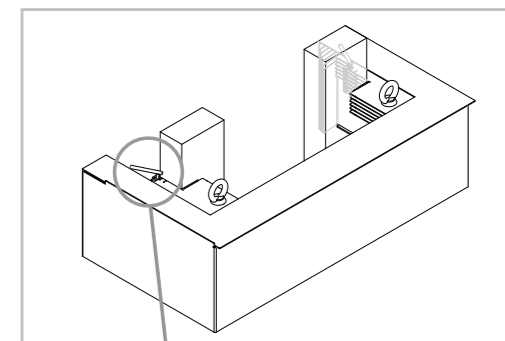
Perform the operations in reverse order to release the telescopic cover from the machine.



4.4 - Assembly and disassembly diagram for vertical telescopic covers with snap-on sliding gliders

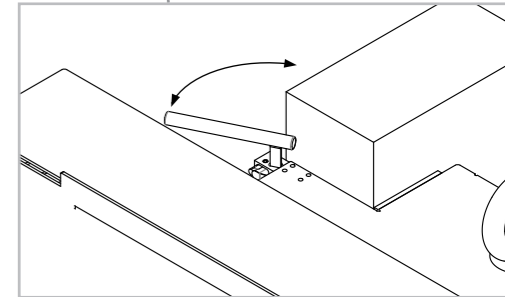
1. Place the telescopic cover next to the upright guideways
2. Turn the stop teeth of the snap-on sliding gliders all the way using the provided levers
3. Move the telescopic cover forward so that the stop teeth go over the thickness of the guideways
4. Release the levers so that the stop teeth become "locked" onto the undercut of the upright guideways.

Perform the operations in reverse order to release the telescopic cover from the machine.



4.5 - Assembly and disassembly for Sheet-Pocket covers

The Sheet-Pocket cover must be lifted using only the eyebolts provided. It must be carefully pushed against the vertical carriage so that a part of the carriage or work unit passes through the opening provided in the middle panel. After having been "inserted" into the opening provided, check the height alignment and that it has been fastened to the frame of the machine. It can be secured to the work unit or to the vertical carriage.



5 - DISASSEMBLY AND ASSEMBLY OF THE TELESCOPIC COVERS

5.1 - Standard telescopic covers

It is advisable to uninstall the telescopic cover in an upside-down position for small and medium-small covers.

- 1A - Pull out the last two small elements. Only the last one must be extracted completely until the box is all the way out.
- 2A - Turn the smallest element to face downwards, prizing on the side of the largest box with your hand.

It is advisable to uninstall large and medium-large telescopic covers in an upright position.

- 1B - Pull the box all the way out
- 2B - Slowly pull the box from one side only, grasping it from the bottom
- 3B - Turn over the box and completely pull it out.

