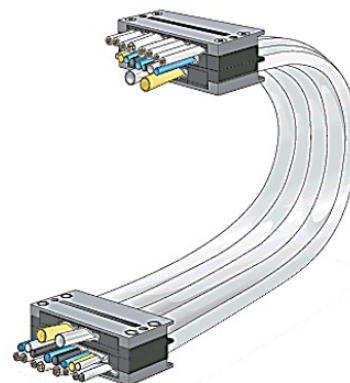
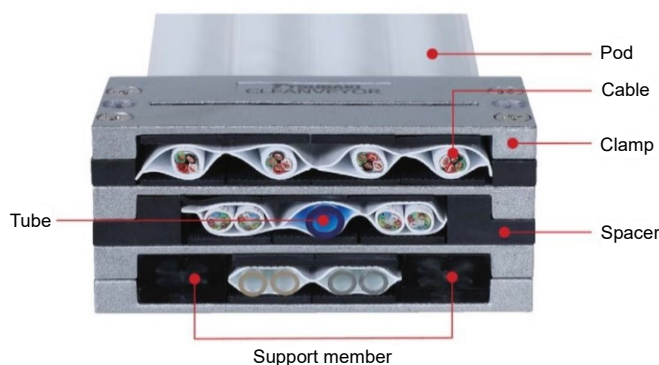


TSUBAKI CLEANVEYOR

Caution: Wear the appropriate protective gear (safety glasses, gloves, safety shoes, etc.) when working.

1 Structure/Part Name



2 Handling Precautions

1. Do not expose the product to organic solvents that will affect its function or quality.
2. Do not allow dirt, including oil, to stick to the pod because it cannot be removed.
3. When taking out the CLEANVEYOR from the packing box and installing it to the equipment, hold it horizontally (parallel) by the underside and avoid twisting it (Fig. 1-1).
4. If you hold it as shown in Fig. 1-2 and 1-3, the clamp and pod will be misaligned with each other, which may result in malfunctions.
5. When using a multi-layer CLEANVEYOR, be careful not to misalign the pods on each layer.
6. When handling a large CLEANVEYOR with a long travel length and many layers, work with multiple people.
7. Do not disassemble or modify the CLEANVEYOR.

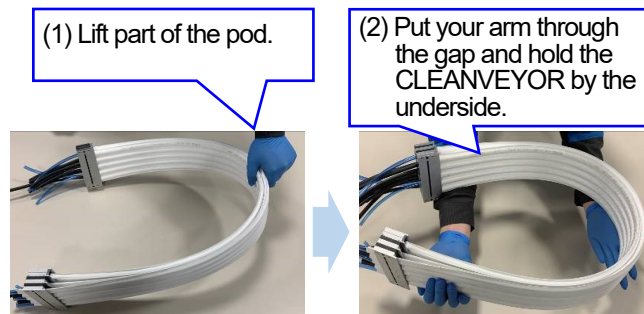


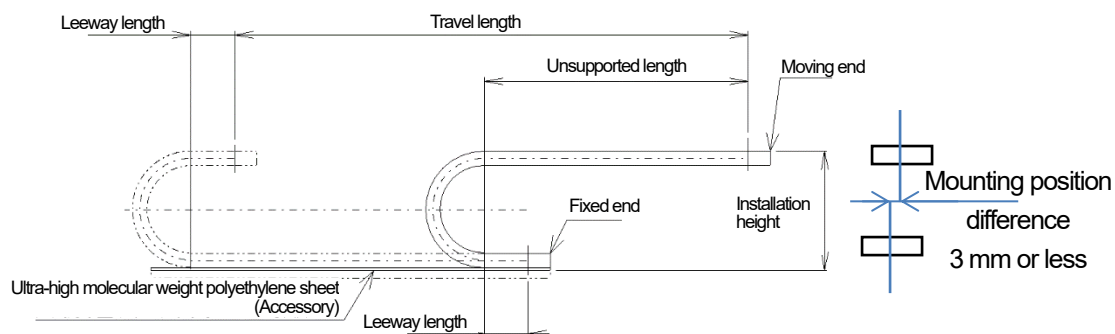
Fig. 1-1




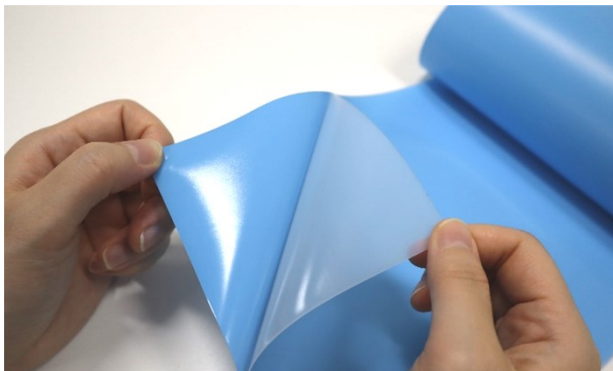
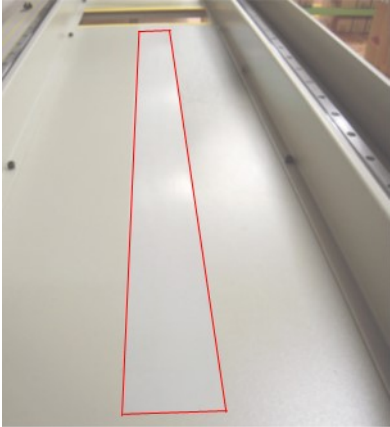
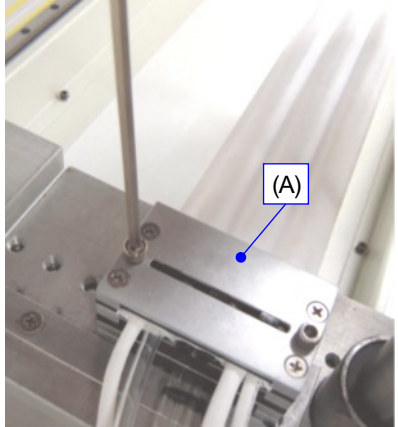
Fig. 1-2

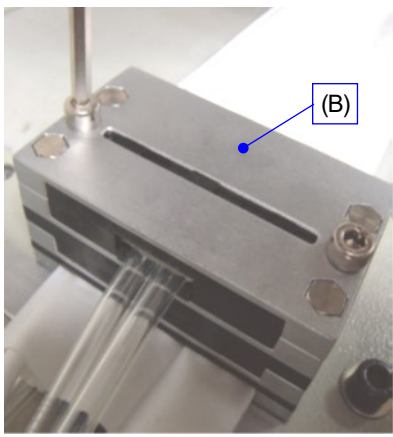
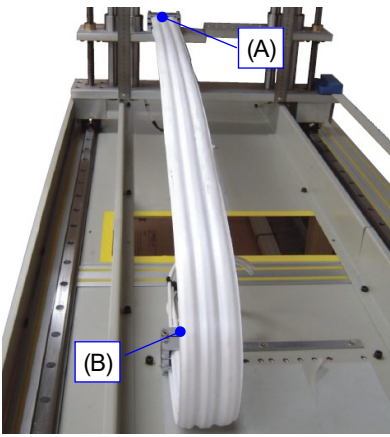
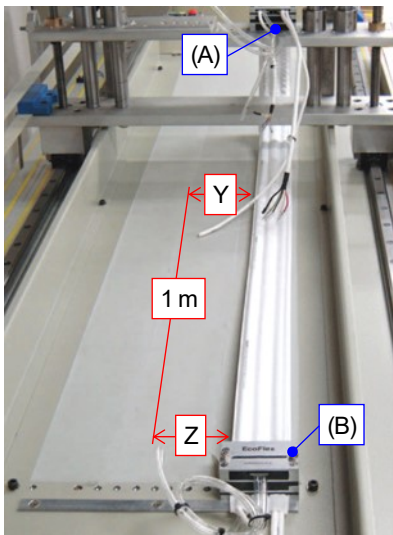
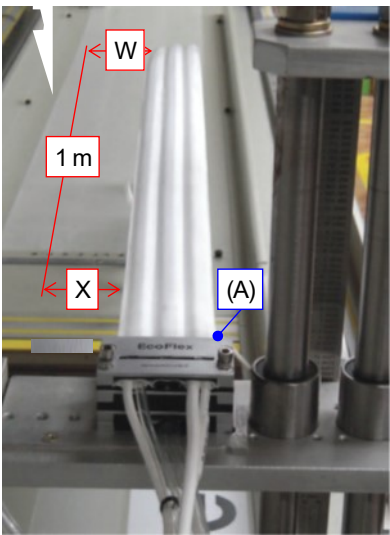
Fig. 1-3

3 Installation on Equipment



The installation height should be in accordance with the drawings provided by Tsubaki.

	
<p>(1) Spread an ultra-high molecular weight polyethylene sheet (blue sheet roll) supplied with the CLEANVEYOR.</p>	<p>(2) Peel off the ultra-high molecular weight polyethylene sheet from the blue backing sheet.</p>
	
<p>(3) Attach an ultra-high molecular weight polyethylene sheet to the floor where the CLEANVEYOR will be installed.</p>	<p>(4) Temporarily fix the moving end clamp (A).</p>

	
<p>(5) Temporarily fix the fixed end clamp (B).</p>	<p>(6) With the moving (A) and fixed (B) end clamps temporarily fixed, move the moving end back and forth to check for the following.</p> <ul style="list-style-type: none"> • No malfunction • No interference with the equipment • No deviation from the ultra-high molecular weight polyethylene sheet • On multi-layer CLEANVEYORs, no misalignment between the pods on respective layers
	
<p>(5)-1. Push the moving end clamp (A) to all the way to the rear end by hand.</p> <p>(5)-2. Check if the difference between the distance Z and the distance Y is within ± 10 mm per 1 m.</p> <p>(5)-3. If it is within ± 10 mm, securely fix the fixed end clamp (B).*</p> <p>* If the difference exceeds ± 10 mm, adjust the position of the fixed end clamp (B) so that the difference is within ± 10 mm and then fix it.</p>	<p>(6)-1. Move the moving end clamp (A) to the position where the unsupported length becomes longest.</p> <p>(6)-2. Check if the difference between the distance X and the distance W is within ± 10 mm per 1 m.</p> <p>(6)-3. If it is within ± 10 mm, securely fix the moving end clamp (A).*</p> <p>* If the difference exceeds ± 10 mm, adjust the position of the moving end clamp (A) so that the difference is within ± 10 mm and then fix it.</p>

< Precautions for installation on equipment >

1. Before installing the CLEANVEYOR on the equipment, make sure that the following damage has not occurred during transportation.
 - Tears on pods
 - Chips or cracks on clamps
2. The moving end of a cable or tube has a yellow label (Fig. 2).
3. Remove any dirt on the installation surface, and allow the CLEANVEYOR to slide on top of the supplied ultra-high molecular weight polyethylene sheet.
4. When installing the CLEANVEYOR onto the equipment, use M4 bolts and a tightening torque of 3.6 N·m.*
If the tightening torque is too high, the clamps and spacers may be damaged.
* Use this as a reference value, since the appropriate tightening torque changes depending on the specifications of the equipment and the type of bolt.
5. The bending radius of the support member may differ from that shown in the installation drawing.
6. Do not install anything that may interfere with the inner circumference surface of the CLEANVEYOR.
7. Do not install a guide or the like inside the bend of the moving end or fixed end clamp mounting part. It may interfere with pods, support members, cables, and tubes and cause damage (Fig. 3).

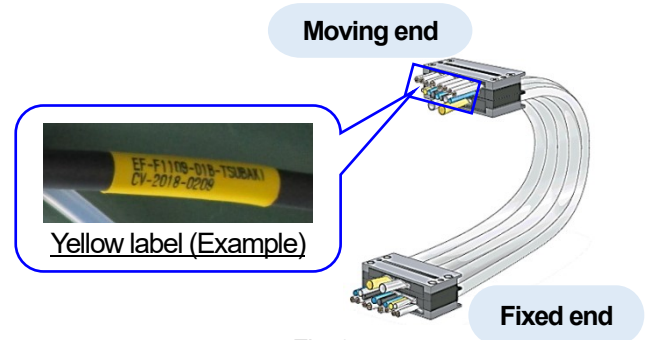


Fig. 2

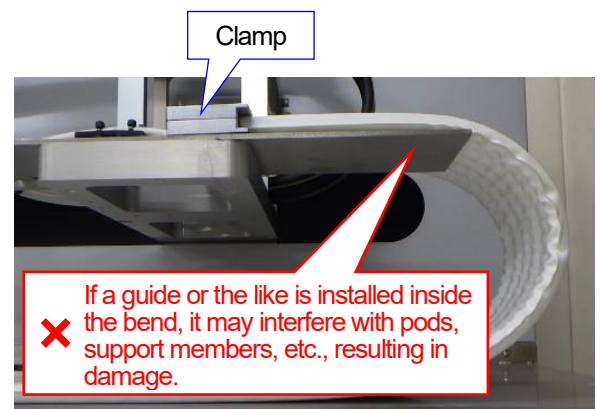


Fig. 3

4 Maintenance Check

Be sure to perform periodic maintenance checks of the CLEANVEYOR to ensure that there are no problems, such as those shown below.

- Tears on pods, chips or cracks on clamps
- Loosening of countersunk head screws or fixing bolts used for mounting the CLEANVEYOR to the equipment
- Unusual behavior such as contact with surrounding equipment
(If any screws and bolts have loosened, retighten them.)
- Tightening torque for countersunk head screws: 1.5 to 2 N·m
- Tightening torque for fixing bolts used for mounting the CLEANVEYOR to the equipment: 3.6 N·m
(Reference value)

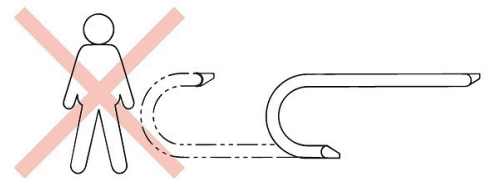
For Safe Use



WARNING

Observe the following points in order to prevent hazardous situations.

- Do not use the cable carrier and its accessories (including Cleanveyor and Flatveyor) for anything other than their original purpose.
- Do not stand or ride on the cable carrier. There is a risk of damage and falls.
- Never perform additional work on the cable carrier or the accessories (except fitting connectors on Cleanveyor or Flatveyor).
 - Do not clean the cable carrier or the accessories with acids or alkalis, as they may cause cracking.
 - Never electroplate the cable carrier or the accessories, as this may cause cracking due to hydrogen embrittlement.
 - Do not weld the cable carrier or the accessories, as the heat may cause cracking or a reduction in strength.
- Observe all appropriate labor safety codes and standards for your region or area.
- When there is a need to replace a damaged (fractured) portion of a cable carrier or an accessory, always replace the whole cable carrier or the accessory with a new product rather than replacing only the damaged or fractured portion.
- Immediately stop using the cable carrier or the accessories if they come into contact with a substance that can cause embrittlement cracking (acid, strong alkali, battery fluid, etc.) and replace with a new cable carrier or accessory.
- Observe the following when connecting, installing, removing, servicing, and inspecting the cable carrier or the accessories.
 - Perform the procedure as specified in the instruction manual, catalog, or documentation specially provided to the customer.
 - Secure the cable carrier and the accessories so they do not move freely. The cable carrier may move on its own or collapse under its own weight.
 - Be careful not to pinch, crush, or entangle hands in the bending section of the cable carrier.
 - Wear suitable clothing and protective equipment for the work (such as safety goggles, gloves and safety shoes).
 - Always turn off the source power supply beforehand, and take care not to accidentally operate switches.
 - Only experienced personnel should handle the cable carrier.



CAUTION

Observe the following points to prevent accidents

- Carefully understand the construction and specifications of the cable carrier or the accessories before handling.
- Inspect the cable carrier or the accessories for damage during transport before installation.
- The cable carrier or the accessories should be periodically serviced and inspected.
- Cable carrier capacity varies according to manufacturer. When selecting a chain based on a Tsubaki catalog always use the corresponding Tsubaki product.
- Always ensure that the final customer receives the instruction manual.
 - If you do not have the instruction manual, contact a Tsubaki representative with the product name, series name, and chain/model number to receive the appropriate manual.
- The product information given in this catalog is mainly for selection purposes. Thoroughly read the instruction manual before actually using the product, and use it properly.