Innovation in Motion TSUBAKI

Tsubaki

User Manual

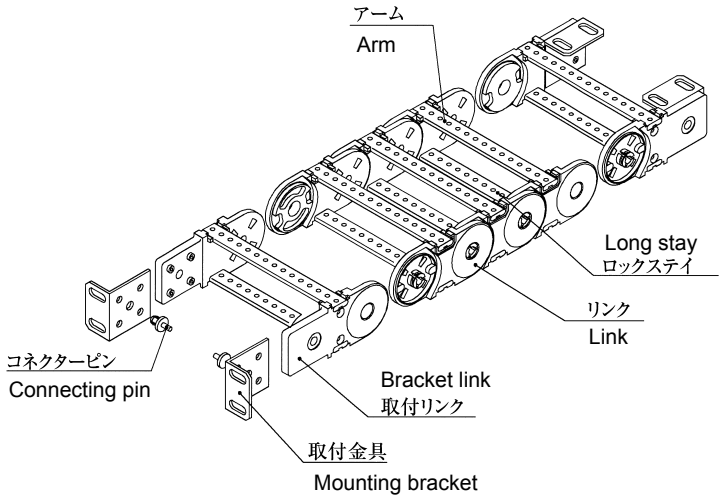
Cableveyor®

TKMKSeries
(formely TKM Series open type)

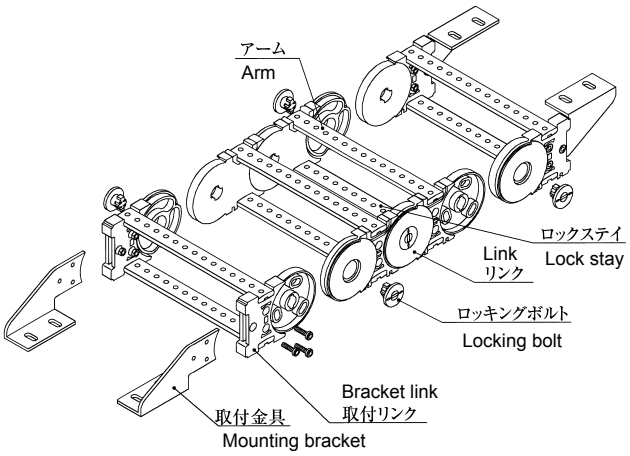
Thank you for your purchase of a Tsubaki Cableveyor.
These instructions cover everything from delivery to installation.
Please read them thoroughly before starting.

1 Construction/Part Name

1.1 TKMK47H28
(formerly TKMO475)



1.2 TKMK65H42, TKMK95H58, TKMK125H72
(formerly TKMO650, TKMO950, TKM1250)



2 Delivery

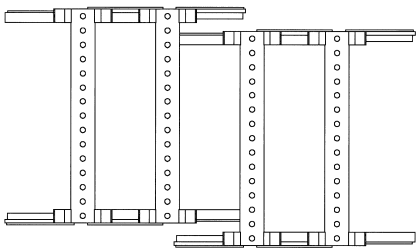
Your Cableveyor will be delivered disassembled if the number of links exceeds the following:

TKMK47H28: 84 links	TKMK125H72, R260 or less	32 links
TKMK65H42: 64 links	R340 or R380	16 links
TKMK95H58: 40 links	R500	8 links

3 Cableveyor Connection

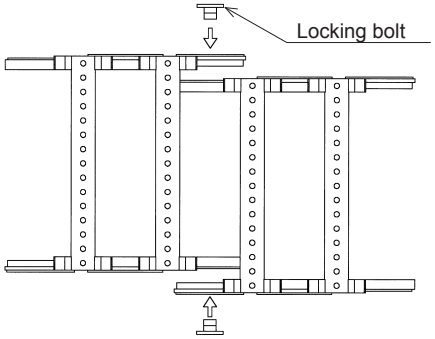
(1) TKMK47H28

Overlap the points to be connected and firmly press them together with your hands or tap them together with a plastic hammer until you hear a click. Bend the connected area several times to ensure that the points were connected properly.

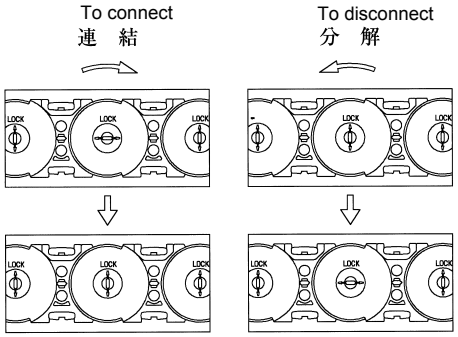


(2) TKMK65H42, TKMK95H58, TKMK125H72

Ensure the points to be connected are facing the same direction. Overlap these points and insert locking bolts into the center holes. Use a tool that matches the grooves in the locking bolts.



Use an Allen wrench to turn the locking bolt clockwise 90° until the arrow aligns with the LOCK mark. Bend the connected area several times to ensure that the points were connected properly.

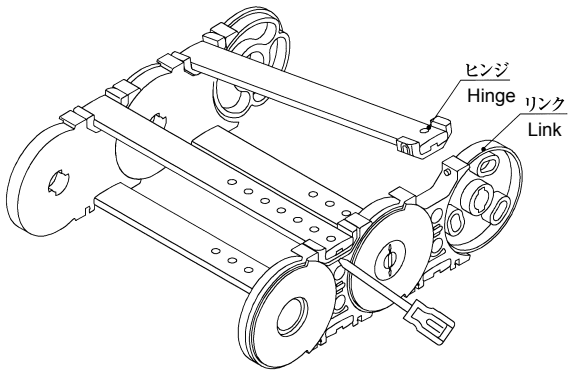


Allen wrench sizes

TKMK65H42:	Nominal 5, for M6 bolts
TKMK95H58:	Nominal 6, for M8 bolts
TKMK125H72:	Nominal 8, for M12 bolts

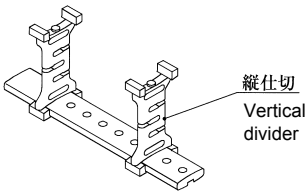
4 Opening the Arms

The arms feature a hinge on both ends of the lock stay. Insert a flat-head screwdriver between the link and hinge to open the arm.

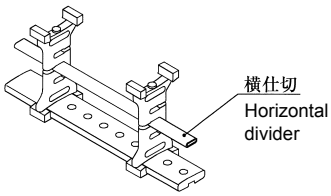


5 Attaching Dividers

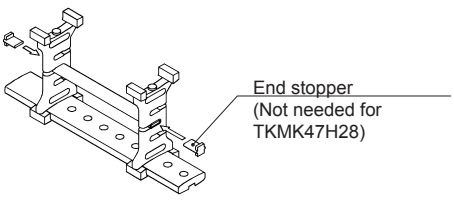
Vertical dividers are designed to attach to the lock stay, but not to the arm side (forming a loose fit). Attach the vertical dividers so that the product name on the side of the divider is on the arm side.



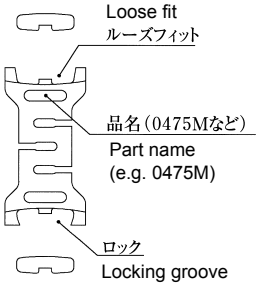
Vertical dividers



Full vertical and horizontal height separation



Partial vertical and horizontal height separation



6 Closing Arms

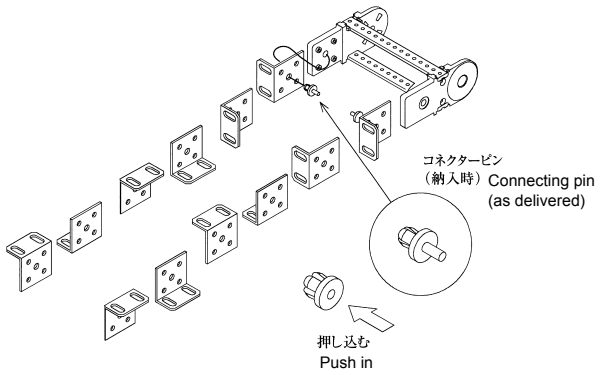
Tap the arms with a plastic hammer to close.

7 Attaching Brackets

Attach brackets to links designed for bracket attachment.

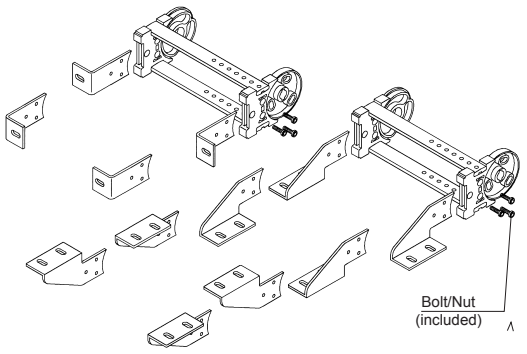
(1) TKMK47H28

The brackets and bracket links are connected using the accompanying connector pins. Pass the connector pin through the hole and push in the center pin to fix.



(2) TKMK65H42, TKMK95H58, TKMK125H72

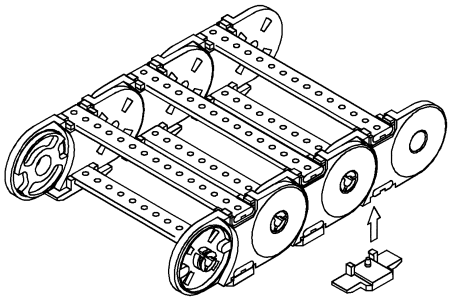
The brackets and bracket links are attached using the accompanying hexagonal bolts. When installing the Cableveyor into the equipment, it is best to temporarily affix the bracket to the equipment itself, then insert the cables/ hoses and connect the Cableveyor and brackets.



8 Attaching Glide Shoes (for long span applications)

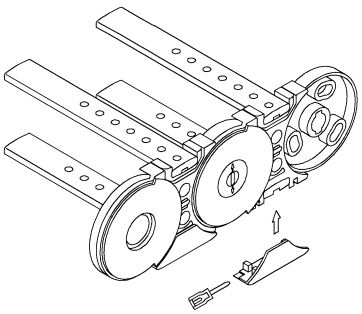
Lightly tap the glide shoes with a plastic hammer to insert the glide shoes into the links on inner radius of the Cableveyor. (*To remove, insert a flat-head screwdriver between the link and glide shoe and twist.

(1) TKMK47H28



Inner circumference

(2) TKMK65H42, TKMK95H58, TKMK125H72

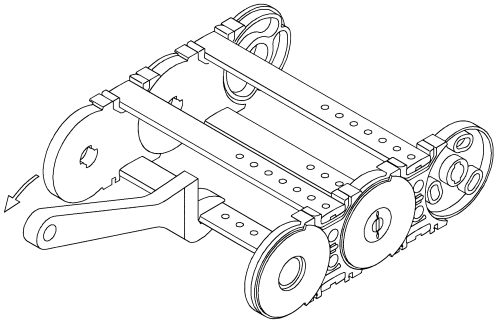


Inner radius

9 Attaching and Removing Lock Stays

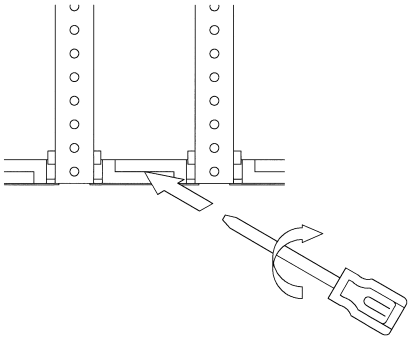
Use a plastic hammer to attach lock stays to the links. Grip the lock stays with a monkey wrench and twist to remove.

(On long span applications, remove the glide shoes first before beginning.)



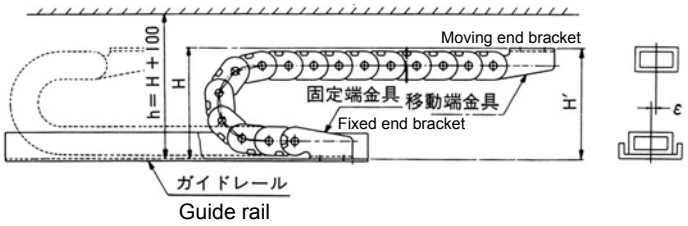
10 Disassembling Cableveyors

To disassemble, perform the opposite of the assembly steps. For TKMK47H28, remove the arms and lock stays around the area to disassmble, then insert a flat-head screwdriver between the links and twist.



11 Cautions When Handling

Pretension and sag may appear in the free span depending on the application. However, if selected within Tsubaki's performance graph then there will be no problems with use.



1. Machine travel end installation height (H') should be Cableveyor height H + (10-30).
2. Cableveyor installation space (h) should be H + 100.
3. Install a guide rail.
4. The difference in attachment face heights (ε) between fixed and moving end brackets should be less than 6mm.
5. Use travel cables/hoses with excellent bending and wear properties.
6. Avoid using wire plate jackets as they are easily damaged.
7. Cables/hoses wear easily when used stacked onto of one another. Lay horizontally or use horizontal dividers.
8. Set cables and hoses in the Cableveyor so that they have some play, and clamp both ends.
9. Remove foreign matter from guide rails, as it may cause damage.
10. The following are shipped unassembled and will require assembly when installing the Cableveyor.
    ・Bracket set (attaching links + brackets and necessary parts)
    ・Dividers