

# Precautions to ensure safe usage

The precautions given below are intended to ensure safe and correct use of the products.  
Note that certain restrictions apply to use of these products. Failure to observe these could result in injury or property damage.

 <b>Warning</b>	A potentially hazardous situation which could result in death or serious injury.
 <b>Caution</b>	A dangerous situation which could result in minor or medium injury and/or in which only property damage is foreseen.

Note: See the terminology glosses on our website for words marked with a ※.

## TOYOCONNECTOR TC6-FS Stainless Steel (TOYOX Hose Dedicated Coupling)

### ① Notes for installation

 **Caution** This coupling is not for routine disassembly cleaning.

 **Warning** Hose replacement and coupling disassembly must be performed after the coupling is cooled to room temperature.  
There is a risk of burns or damage to the couplings.

1. When cutting a hose, make sure that the edge face of the hose is cut perpendicularly.
2. When any lint or hard wire is left at the end of the hose, remove it with pliers or similar tool.  
Make sure that no hose fragments, lint, or hard wire is stuck in the hose.
3. Secure an adequate hose length to avoid bending stress on the hose near the coupling.
4. Make sure that the hose is inserted completely into the root of the insertion part.
5.  **Warning** When inserting hoses, never put grease on the hose insertion part. It may cause the hose to become disconnected.
6. After the orientation of each part is checked, tighten the clamp.
7. Be careful to avoid injury due to tool slips when fastening.
8. To fasten the bolts, use a hex wrench of length 180 mm or more (200 mm or more for TC6-FS 50).  
Tighten the two bolts evenly, and fasten until there are no gaps. If a gap remains, preventing complete fastening, then wait a while and make sure to re-tighten until there is no gap with the clamp. When used in a state where there are gaps, trouble due to fluid leakage or hose disconnection will occur. When tightening bolts, do not use an impact screwdriver. This may cause damage to the clamp screws.  
 **Caution** Unbalanced tightening cannot be fully completed.
9.  **Caution** NSF "H1" lubricant (extreme-pressure grease), registered as "permitted for use in locations where there is a possibility of incidental contact with food," is applied to the clamp screw parts.
10.  **Caution** Very occasionally, resin or metal chip dust (or threads) may transpire when fastening. Remove completely before use.

### ② Notes for safe usage

1. TOYOCONNECTOR is a coupling dedicated for TOYOX HOSE. TOYOX is not liable for any damages caused by use with any other hose including those produced by TOYOX as well as those by other manufacturers, as full performance may not be achieved or maintained.
2. Use within the operating temperature and pressure ranges of the applicable hose.
3. In the case of use under negative pressure, negative-pressure usable hoses may not be applicable depending on applications or conditions (temperature, movements, etc.).
4. Do not use a hose that is extremely bent near a coupling. The bending radius of a hose should be larger than its ※3 minimum bending radius.
5.  **Warning** Do not attempt assembly or disassembly of couplings while fluid is running through the hose. This may cause fluid leakage or hose disconnection.  
Do not use in locations subject to vibration or impact. This may cause coupling damage or hose disconnection.
6. Perform periodic inspections during and before use to make sure that hose disconnection from the coupling, fluid leakage, and bolt loosening do not take place.
7. When using for drinking water or food, place the hoses and the couplings so that they will not submerge in drinking water or food fluids in the tanks, because the fluids may stay inside the couplings and bacteria may propagate (attach to the parts).
8.  **Warning** Do not use for piping in the applications below. This may cause coupling damage, hose rupture, or hose disconnection.
  - For piping such as solenoid valve piping, which would apply impact to the piping
  - Where vibration or impact will be applied to the coupling
  - Where the maximum operating temperature is exceeded
  - Where constant tensile stress may be applied to the hoses
  - In a way that may cause static buildup (electric shock hazard)
9. Before using, make certain to sterilize and disinfect inside the hoses (Sterilization is not carried out before shipping).
10. Do not rub the hose surface with a hard brush, etc., when washing it. This may damage the surface, causing germs to accumulate.
11. Store in a cool, dry place not subject to direct sunlight. Store keeping the inside of the coupling free from foreign matter and dust.
12. The hose should be disposed of in accordance with the requirements of the local region.

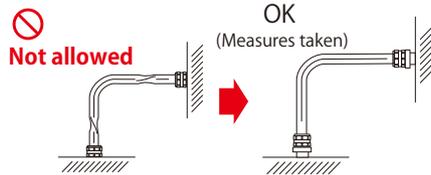
### ③ Notes for the reuse of couplings and replacement of hoses

1. When reusing a TOYOCONNECTOR product, make sure that each of its components is not damaged prior to use. Be sure to replace the rubber cap. Be sure to apply commercially available lubricant (extreme-pressure grease) to the bolt screw parts and the clamp before fastening. We recommend the use of NSF "H1" lubricant (extreme-pressure grease), registered as "permitted for use in locations where there is a possibility of incidental contact with food."
2. Before replacing a hose, always make sure to remove the fluid and dirt on the coupling surface. This may cause fluid leakage or hose disconnection.
3. When reusing TOYOCONNECTOR, be sure to use a new hose.
4. While it may vary according to conditions of use, consider five disassemblies a rough guideline for replacing parts or using a new clamp set.
5. Do not hit the coupling with a hammer or similar tool.

## ④ Warning

1. The material of fluid path (interior) of this product uses SCS 16 (SUS 316L equivalent) .  
Phenomena such as corrosion or fluid leaks may occur depending on the type of fluid.  
Before use, be sure to check data (refer to data on chemical resistance in the catalog or on the website) or make inquiries to the toll-free number.  
As well, make similar checks for fluid contact with the outer surface of couplings.
2. Do not install or use twisted hoses. Twisted hoses are dangerous because they deform their interior structures and cause hose ruptures.  
Fix twisted hoses appropriately as shown in the following examples.

Example 1: Hose twisted when it is installed



Example 2: Hose twisted when it is bent

