



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.

 Warning	A potentially hazardous situation which could result in death or serious injury.
 Caution	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 TCSB Stainless Steel (TOYOX Hose Dedicated Coupling)

① Notes for installation

1. When cutting a hose, make sure that the edge face of the hose is cut perpendicularly.
2.  **Warning** When inserting hoses, never apply oil, etc., to the surface of the nipples.
It may cause the hose to become disconnected.
3. Make sure that the hose is inserted completely into the root of the nozzle.
4. After the orientation of the sleeve with the TCSB gasket is checked, tighten the cap nut.
5. If the ring has come out of the cap nut during hose insertion etc., put the ring into the nut one more time (with attention to its direction) for use.
6.  **Warning** Fasten the cap nut until there are no gaps.
When used in a state where there are gaps, trouble due to fluid leakage or hose disconnection will occur.
As well, be careful to avoid injury due to wrench slips when fastening nuts.
7. Do not use a blade to cut the hose nozzle or sleeve with TCSB gasket.
8. After installation, confirm that before use that there is no fluid leakage or hose disconnection from the coupling area.
9. Be sure to set a gasket with the sleeve.
10. Use a monkey wrench for tightening. Do not use a pipe wrench. It will damage the cap nut.
11. During installation, take care to avoid injury from the sharp edges of the coupling.

② Notes for safe usage

1. TOYOCONNECTOR is a coupling dedicated for the TOYOX Hoses below. 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. 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.
4. Do not use in locations subject to vibration or impact. This may cause coupling damage or hose disconnection.
5. As there is a bump in the screw portion for the tube, refrain from using this product for sanitary piping (food, etc.).
※ There is a risk of problems with food sanitation.
6.  **Warning** Do not attempt assembly or disassembly of couplings while fluid is running through the hose.
This may cause fluid leakage or hose disconnection.
7. Perform periodic inspections during use to make sure that hose disconnection from the coupling and fluid leakage do not take place.
8. Do not allow anything other than the inner surface of the couplings or hose to come in contact with fluids, because the fluids may permeate the hose reinforcement layer or remain inside the couplings, and bacteria may propagate (attach to the parts) or the hose may deteriorate. Also, dust, hose fragments (reinforcement material) and ink adhering to the outer surface may be mixed in.
9.  **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 put impact pressure on the piping
 - Where vibration or impact will be applied to the coupling
 - Where constant tensile stress may be applied to the hoses
 - In a way that may cause static buildup (electric shock hazard)

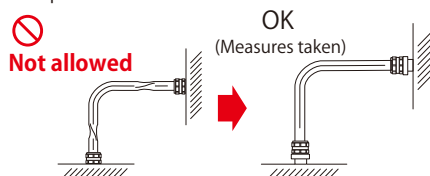
③ Notes for the reuse of couplings and replacement of hoses

1. When reusing a TOYOCONNECTOR product, make sure that each of its components is not damaged prior to use. Be sure to replace the sleeve with TCSB gasket.
2. Please make sure to use a brand-new hose.
3. 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.

④ Warning

1. The fluid path (interior) of TOYOCONNECTOR uses SCS 13 (SUS 304 equivalent) material. 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

