



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 ※.



TOYOBIO-JOINT TBJ (TOYORING-F Hose dedicated coupling)

TOYOBIO-JOINT is a TOYORING-F hose dedicated coupling specially developed for filter press machines.


① Notes for installation


1. When cutting a hose, make sure that the edge face of the hose is cut perpendicularly.
2. Make sure that the hose is inserted completely into the flange of the nozzle.
3.  **Warning** Catch the clip band hook on the flange of the nipple for use.
Also, be sure to use a dedicated clip band.
The hose may disconnect or leak.
4.  **Warning** Install the clip band using pliers or a special tool that can grasp the knob.
Be careful to avoid injury due to scattering caused by falling off the knob.
5. Do not scratch the surface of nipples with blades or other items.
6. After installation, confirm that before use that there is no fluid leakage or hose disconnection from the coupling area.
7. Use a monkey wrench for mounting on equipment or machines. Do not use a pipe wrench. It will damage the nipple.
8. During installation, take care to avoid injury from the sharp edges of the coupling.

② Notes for safe usage

1. TOYOBIO-JOINT is a dedicated coupling for TOYORING-F Hose (part number: TGF-19). 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. Perform periodic inspections during and before use to make sure that hose disconnection from the coupling and fluid leakage do not take place.
6. Do not allow anything other than the inner surface of the couplings or hose to come in contact with fluids (food, etc.), 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.
7.  **Warning** Do not use for piping in the applications below. This may cause hose rupture, or hose disconnection.
 - For piping such as solenoid valve piping, which would put impact pressure on the piping
 - Where the maximum operating temperature is exceeded
 - Where constant tensile stress may be applied to the hoses
8. Before use, be sure to disinfect and sterilize the interior of the hose. (Sterilization is not carried out at shipping)
9. Do not rub the surface with a hard brush, etc., when washing it. The surface could be damaged, causing germs to accumulate.
10.  **Warning** The metal sections should be disposed of in accordance with the requirements of the local region.

③ Notes for the reuse of couplings and replacement of hoses

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

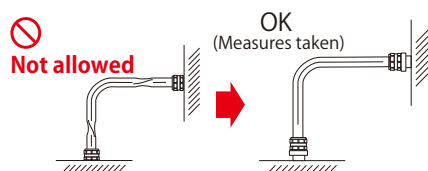
 **Warning** Hose replacement and coupling disassembly must be performed after the coupling is cooled to room temperature.
There is a risk of burns or damage to the couplings.

1. When reusing TOYOBIO-JOINT, replace the dedicated clip band with a new one.
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.
The hose may leak, disconnect or twist and cause the clip band to be dislocated.

④ Warning

1. The fluid path (interior) of TOYOBIO-JOINT uses SCS13 (SUS304 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

