

TC6-B type

TC6-S type

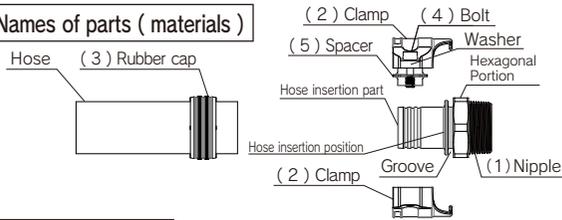
# TOYOCONNECTOR® Handling Manual

Be sure to read this manual before using the connector.

**Warning:** A potentially hazardous situation which could result in death or serious injury.

This is an instruction for the correct use of TOYOCONNECTOR. Like the hoses itself, there are also limitations for the use of TOYOCONNECTOR. Please observe the following safety precautions fully. Failure to observe these could result in injury or property damage.

## Names of parts ( materials )



## Materials

- ( 1 ) Nipple : TC6-B type ... Brass  
( Compliant with corrected RoHS2 regulations )  
TC6-S type ... SCS13 ( SUS304 equivalent )
- ( 2 ) Clamp : SCS14 ( SUS316 equivalent )
- ( 3 ) Rubber cap : NBR
- ( 4 ) Bolt : SUSXM7 ( SUS304 equivalent )
- ( 5 ) Spacer : Polyacetal
- Washer ( Only the TC6-B50,TC6-S50 ) : Polyacetal
- Lubricant of the bolt screw portion : NSF " H1 " registered grease

## Before fitting

- When cutting a hose, please make sure that the edge face of the hose will become square-on.
- Be sure to have a sufficient hose length so as not to apply a hose bending stress around a connector.
- Make sure that the hose is inserted completely into the root of the hose insertion part.
- Warning** When inserting hoses, never put grease on the hose insertion part. It would be a cause of hose being pulled out.
- Fasten the clamp after confirming the direction of each component.
- Be sure to use a " monkey ( motor ) wrench " when fastening the hexagonal portion. Refrain from using a " pipe wrench. " This will scratch the hexagonal portion. In addition, be careful of injuries caused by tools slipping during the fastening process.
- Be sure to use a " hex wrench " that is at least 180mm long to fasten the bolts ( at least 200mm long for TC6-B50,TC6-S50 ). Fasten the 2 bolts evenly while alternating and fasten these until there are no gaps. When used in a state where there are gaps, trouble due to leaked fluids and detached hoses will occur. When tightening a bolt, do not use an impact driver. Doing so may damage the screws of the clamp.  
**Note** Complete fastening cannot be achieved with uneven fastening.
- Note** A lubricant ( grease ) is applied to the screw portion of the clamp.
- Note** When fastening the unit, there rarely may be cases when resin or metal dust ( or stringy shavings ) is generated. Be sure to remove such prior to use.

## How to attach a hose

※ The same mounting instruction applies to all hoses.

- Loosen the ( 4 ) bolt, remove the ( 2 ) clamp from the ( 1 ) nipple, and attach the ( 1 ) nipple in advance to the machine.

TOYOCONNECTOR Code	Dimension of hexagonal part ( mm )	Size of hexagonal bolt hole ( mm )
TC6-B32,TC6-S32	46	6
TC6-B38,TC6-S38	55	6
TC6-B50,TC6-S50	70	8

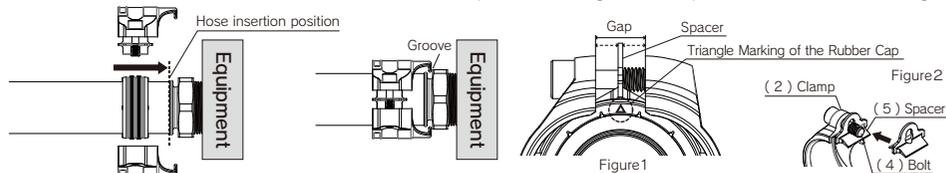
- Place the ( 3 ) rubber cap over the hose. By marking a line in advance on the hose according to the " Appropriate Rubber Cap Insertion Volume " table on the right, it will be possible to appropriately align the position of the rubber cap.

### Appropriate Rubber Cap Insertion Volume

TOYOCONNECTOR Code	mm
TC6-B32,TC6-S32	40
TC6-B38,TC6-S38	45
TC6-B50,TC6-S50	55

- Insert the hose passed through the ( 3 ) rubber cap up to hose insertion position of the ( 1 ) nipple.

- Provisionally assemble the ( 2 ) clamp in line with the grooves on the ( 1 ) nipple. Adjust the triangle marking of the rubber cap to be positioned in the center of the gap. ( Figure 1 )  
※ If the spacer has fallen off of the ( 4 ) bolt, provisionally assemble the ( 2 ) clamp after attaching the ( 5 ) spacer onto the ( 4 ) bolt. ( Figure 2 )

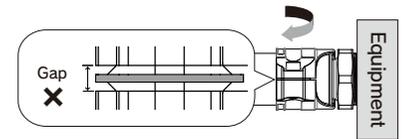


- Fasten the 2 ( 4 ) bolts evenly while alternating and fasten these until there are no gaps.

**Note** Complete fastening cannot be achieved with uneven fastening.

**Note** Be sure to use a " hex wrench " that is at least 180mm long to fasten the bolts ( at least 200mm long for TC6-B50,TC6-S50 ).

**Note** When fastening the unit, there rarely may be cases when resin or metal dust ( or stringy shavings ) is generated. Be sure to remove such prior to use.



## Notes for use

- This product is a hose connector dedicated for TOYOX hoses. TOYOX is not liable for any damages caused by using TOYOCONNECTOR 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.  
※ HOSE compatibility depends on the connector. Confirm through the catalog or the homepage.
- Use TOYOCONNECTOR within the operating temperature and pressure ranges of the applicable hose.
- Hoses usable under negative pressures may not be applicable depending on applications and conditions ( temperature, movement, etc. ).
- As there is a difference in level with the screw portion for the tube, refrain from using this product for sanitary piping ( foods, etc. ).
- Do not fully bend the hose near the connector. Do not bend the hose beyond the minimum bending radius.
- Warning** Do not assemble or disassemble the connector while fluid is in the hose because the hose may become loose and the liquid will leak.
- Do not use the hose where there is vibration or shock. It may cause the connector to break or the hose to become detached.
- Perform periodic inspections to make sure that the hose does not become detached and the fluid does not leak at the connection during use period of the hose.
- Warning** Never use connector for the below applications. Hoses may rupture or become loose.  
  - For piping such as electromagnetic valve piping, which would put impact pressure on the piping.
  - Where vibration or impact will be applied to the connector
  - Purposes that exceed the maximum temperature of use
  - Where constant tensile stress may be applied to the hoses
  - In a way that may cause static buildup ( There is a danger of electrical shocks. )
- Please store the hose at low temperature and humidity. Ensure the connector is sealed for protection against dust and foreign matter.
- Products should be disposed of in accordance with the requirements of the local region.
- 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.**

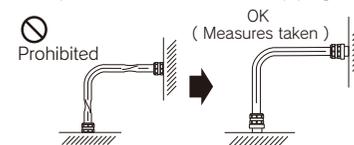
## Notes for Connector Reuse and Hose Replacement

- When reusing this product, make sure that each of its components is not damaged prior to use. Be sure to replace the rubber cap. Please be sure to fasten the bolts after applying a commercially available lubricant ( grease ) to the bolt screw portion of the clamp.
- When reusing this product, be sure to use a brand-new hose.
- Before replacing a hose, always make sure to remove the fluid and dirt on the connector surface. Fluid and dirt remaining on connector may possibly cause fluid leakage and hose loosening.
- Although this may differ depending on conditions of use, replace the unit with a new clamp set after it has been removed approximately 5 times.

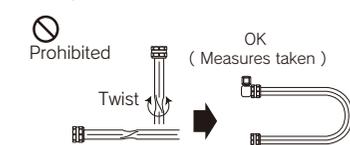
## Warning

- Be sure to check the material for the flow path ( inner layer or the connector ), Brass for TC6-B, SCS13 ( Equivalent to SUS304 ) for TC6-S.  
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 homepage ).  
Please also make similar checks for fluid contact with the outer surface of joints.
- Do not use hoses when they are twisted. Partially twisted hoses are also a danger as they may cause internal structural damage leading to a " Burst ". Follow the examples below to take preventative measures.

Example 1 ) Twisted hose while piping



Example 2 ) Twist when bent



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