

## 2-4-9: Installation on a PVC pipe using SUS grounding ring material

The installation methods described in this section are for installation on a PVC pipe using SUS grounding ring material. For the installation method corresponding to any other combination of materials, refer to Table 2-5 on page 2-12.

PTFE gaskets are provided for this type of installation. If you supply the gaskets, Yamatake recommends non-rubber gaskets such as joint sheet or PTFE. Although rubber gaskets can be used, they are not recommended. See page 2-23 for installation using rubber gaskets.

### ⚠ CAUTION

The use of rubber gaskets and a lower fastening torque is not recommended and can cause insufficient surface pressure between the lining and the grounding ring, resulting in leakage.

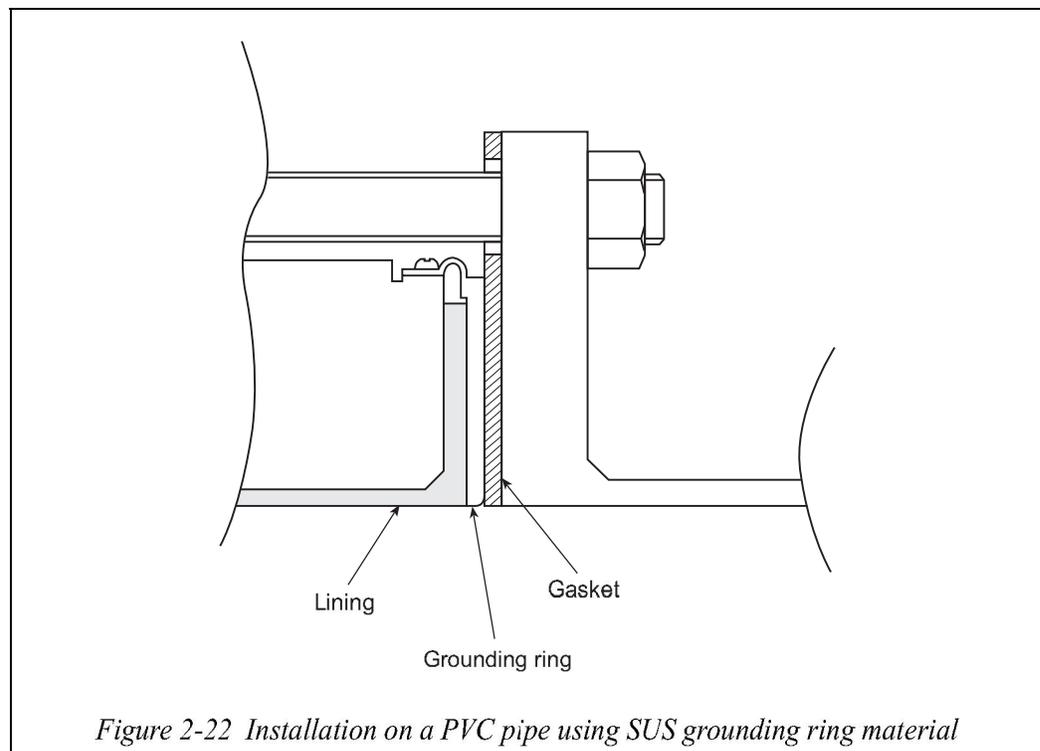
If tightening the bolts at the specified torque threatens to warp or damage the PVC pipes, you will need to use a protective plate. See page 2-22 for installation of the protective plate.

### To install a wafer detector on a PVC pipe using SUS grounding ring material with a specified fastening torque:

- Install the detector as shown in the following illustration. The torque level for tightening the bolts is not related to the gasket material.

See Table 2-1 on page 2-7 for the appropriate torque.

See Table 2-2 on page 2-10 for the inner diameter of the gasket.



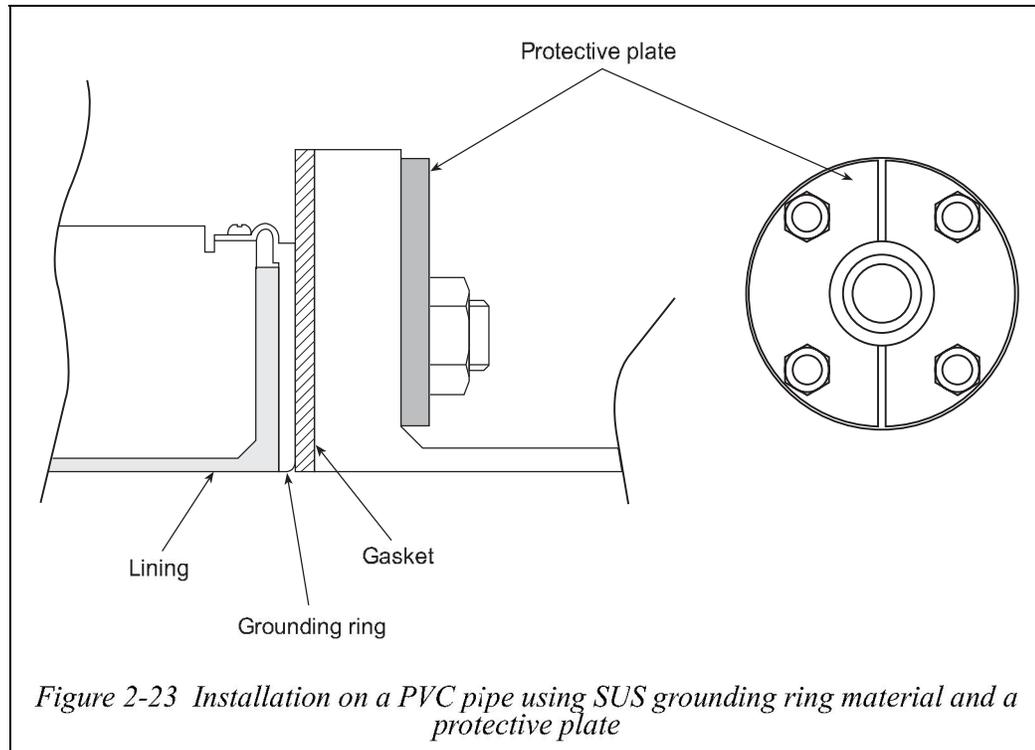
**To install a wafer detector on a PVC pipe using SUS grounding ring material and a protective plate:**

Use this method to install the detector using a protective plate to prevent the PVC pipe from being deformed or damaged when the bolts are tightened with the specified torque.

- Install the protective plate between the outer side of the PVC flange and the detector, as shown in the figure below. The protective plate protects the PVC pipe. The torque level for tightening the bolts is not related to the gasket material.

See Table 2-1 on page 2-7 for the appropriate torque.

See Table 2-2 on page 2-10 for the inner diameter of the gasket.

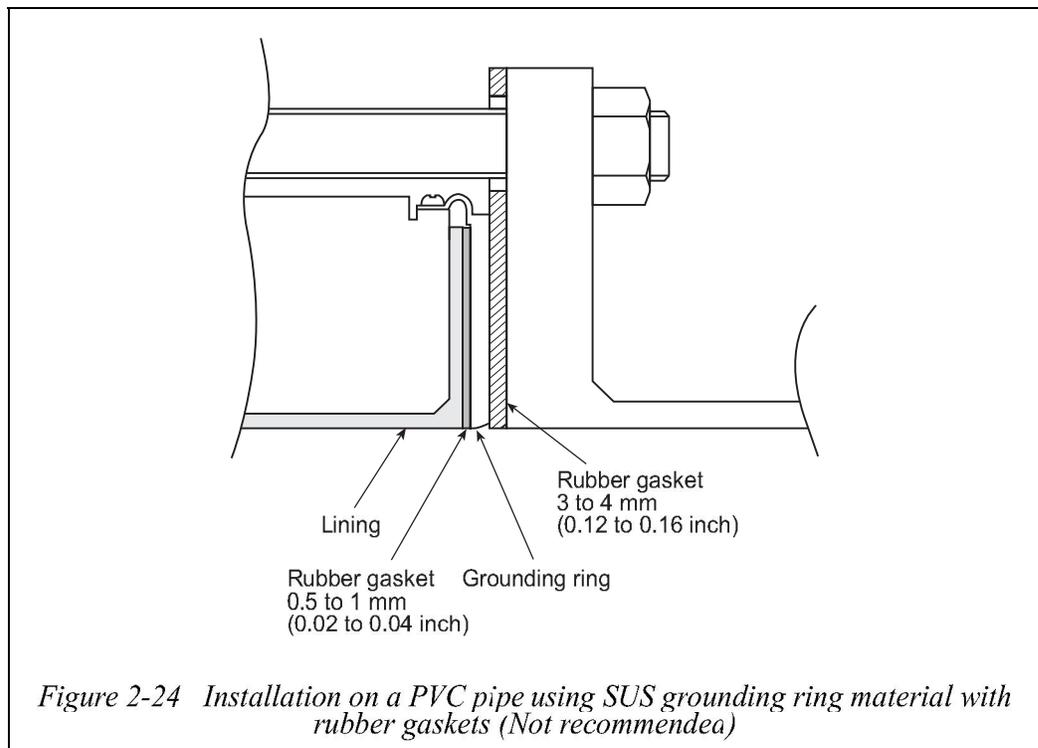


To install a wafer detector on a PVC pipe using SUS grounding ring material with rubber gaskets and a low fastening torque:

**⚠ CAUTION**

The use of rubber gaskets and a lower fastening torque is not recommended and can cause insufficient surface pressure between the lining and the grounding ring, resulting in leakage.

- (1) Remove the grounding ring from the detector and insert a rubber gasket 0.5 to 1.0 mm (0.02 to 0.04 inch) thick between the lining and the grounding ring.
- (2) Reinsert the grounding ring on top of the rubber gasket.
- (3) With the rubber gasket in the position shown in the following figure, attach the detector to the pipe. In the example shown, both rubber gaskets are made of the same material.



- (4) Fasten the bolts with a torque that provides a leakproof joint.

## 2-4-10: Installation on a PVC pipe using non-SUS grounding ring material

The installation methods described in this section are for installation on a PVC pipe using non-SUS grounding ring material. For the installation method corresponding to any other combination of materials, refer to Table 2-5 on page 2-12.

PTFE gaskets are provided for this type of installation. If you supply the gaskets, Yamatake recommends non-rubber gaskets such as joint sheet or PTFE. Although rubber gaskets can be used, they are not recommended. See page 2-26 for installation using rubber gaskets.

### ⚠ CAUTION

The use of rubber gaskets and a lower fastening torque is not recommended and can cause insufficient surface pressure between the lining and the grounding ring, resulting in leakage.

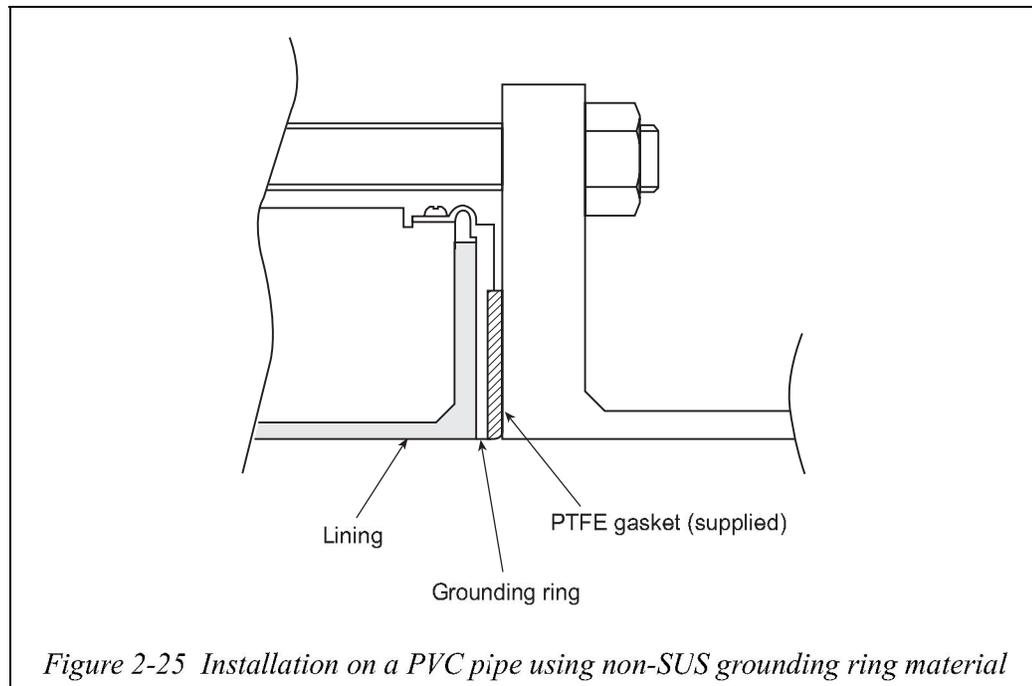
If tightening the bolts at the specified torque threatens to warp or damage the PVC pipes, you will need to use a protective plate. See page 2-25 for installation of the protective plate.

### To install a wafer detector on a PVC pipe using non-SUS grounding ring material with a specified fastening torque:

- Install the detector as shown in the following illustration. The torque level for tightening the bolts is not related to the gasket material.

See Table 2-1 on page 2-7 for the appropriate torque.

See Table 2-2 on page 2-10 for the inner diameter of the gasket.



**To install a wafer detector on a PVC pipe using non-SUS grounding ring material and a protective plate:**

Use this method to install the detector using a protective plate to prevent the PVC pipe from being deformed or damaged when the bolts are tightened with the specified torque.

- Install the protective plate between the outer side of the PVC flange and the detector, as shown in the figure below. The protective plate protects the PVC pipe. The torque level for tightening the bolts is not related to the gasket material.

See Table 2-1 on page 2-7 for the appropriate torque.

See Table 2-2 on page 2-10 for the inner diameter of the gasket.

