

## Guard Column for High Performance Packed Column

**Shim-pack**

# GIST/GISS/GIS/GWS (G) Series

## INSTRUCTION MANUAL

### ■ Introduction

This product is manufactured for the purpose of protecting analytical columns from contaminants in samples and eluents. This cartridge type provides easy installation and replacement. Please read the following instructions before use.

### ■ Operating Precautions

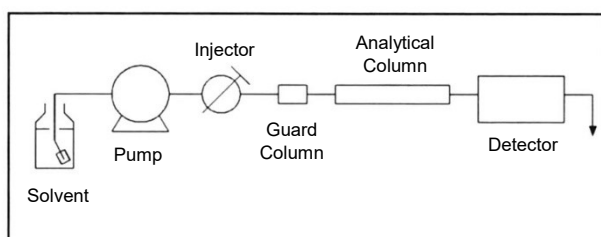
Check if anything is missing or damaged. If there are any signs of damage, notify your local Shimadzu representative at once.

### ■ Column Installation

Confirm the flow direction of the Cartridge Guard Column. Insert the Cartridge Guard Column into the holder and strongly tighten the holder using your hand. When the holder is not fastened firmly, slightly tighten the holder with a spanner.

**NOTE** Additionally tighten from the angle 90 to 180 degrees after hand tightening.

As shown below, the guard column should be connected between the injector and the analytical column.



Besides the male nuts for the analytical column, another set of male nuts are necessary to connect the Cartridge Guard Column. Ensure that the fittings are connected properly to avoid creating dead volume between the tubing and the guard column interface. Male nuts can be ordered by referring to the part number below.

Item name	P/N	Remarks
Male nut, PEEK	228-18565-84	5 pcs

Please use a tubing size below 0.25 mm I.D., 5 cm length between the Cartridges Guard Column and the analytical column.

Before connecting the Cartridge Guard Column to the analytical column, remove the air in the Cartridge Guard Column. Set the flow rate of the eluent at 1-2 mL/min and introduce approximately 5 mL of the eluent into the Cartridge Guard Column.

Then connect the analytical column and operate an analysis.

### ■ Technical Support

This product is manufactured, inspected, packaged and shipped under strict standards of quality control. Should you find any defect in performance, please contact your local Shimadzu representative, who will ensure your complete satisfaction.

We regret that we cannot guarantee the lifetime of columns, also that we cannot accept any claim when performance has deteriorated due to noncompliance with the operation procedures elucidated above, or as a result of normal aging.