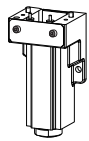

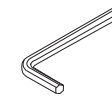
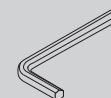


Attention of Replacing Consumables

This manual is the same as the replacement procedure for the spindle motor (SM-20). If replacing the spindle unit and the spindle motor at the same time, refer to this document.

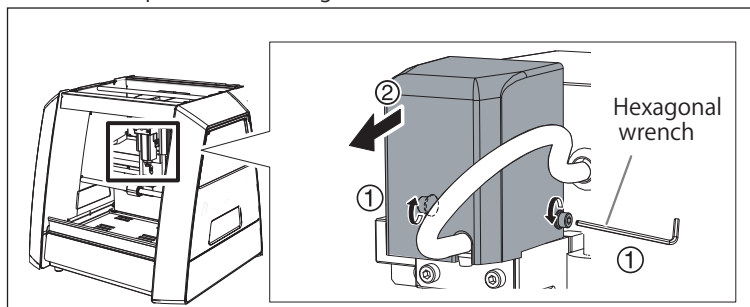
- ⚠ WARNING** Be sure to follow the replacement procedure provided in this manual. You must not touch any parts except for those specified in the instructions.
- ⚠ WARNING** An unexpected operation of the machine may cause injury and burn.
- ⚠ WARNING** Before starting the replacement work, turn off the machine's power switch and unplug the power cord from the machine. Attempting such operations while the machine is connected to a power source may result in injury or electrical shock.
- ⚠ CAUTION** Never touch the spindle unit immediately after cutting. Doing so may cause burns.
- ⚠ CAUTION** When performing replacement, be sure to keep the cutting tool detached. Contact with the blade may cause injury.

Items Used in This Procedure

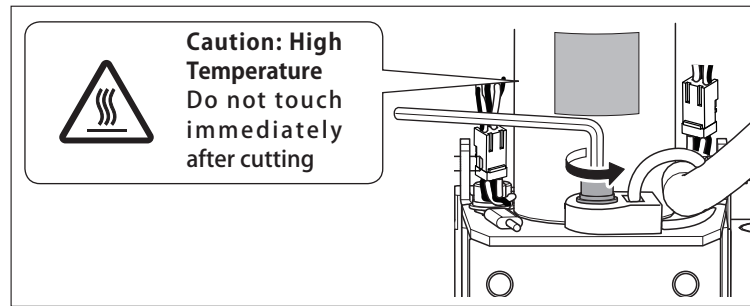
	Included items	Accessories of machine
	 Screw (For spare, L 2 · S 5)	 Hexagonal wrench (AF 2.5mm)
		 Hexagonal wrench (AF 3mm)

STEP 1 : Remove the Spindle Unit

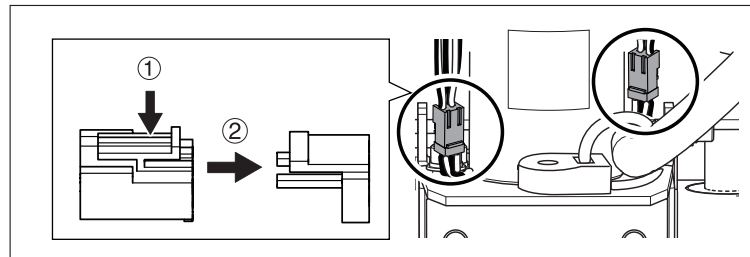
- 1** If there is cutting waste inside the front cover, remove it.
 - ⚠ If cutting waste gets inside the spindle unit, it may cause malfunction.
- 2** If a material, collet, or cutting tool is mounted on the machine, remove it.
- 3**
 - 1 In VPanel, click the [View] button.
 - 2 Move the Z axis to the lowest position.
- 4** Switch off the power and unplug the AC adapter from the power outlet.
- 5** Remove the spindle cover.
 - 1 Loosen the screws in the locations shown in the figure using a hexagonal wrench (2.5 mm). (2 places)
 - 2 Pull the spindle cover straight out and remove it.



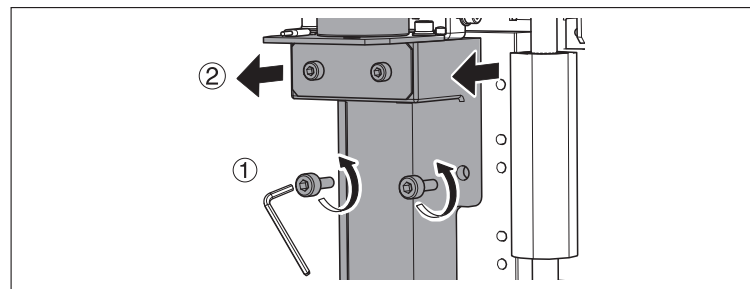
- 6** Remove the screws using a hexagonal wrench (2.5 mm).



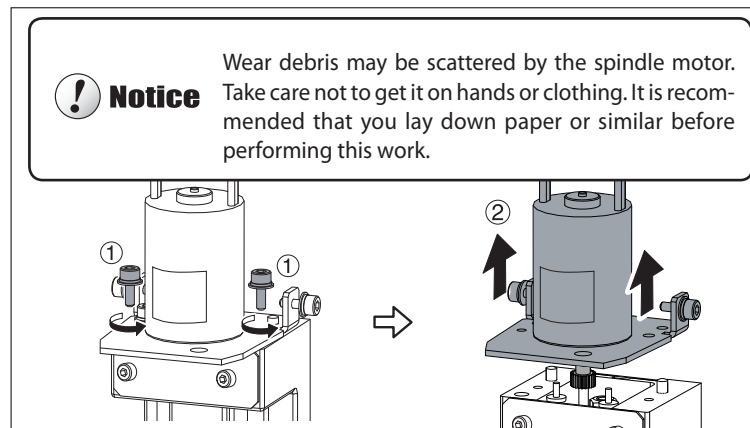
- 7** Remove the motor connector and the rotation sensor connector. Press part ① and pull in the direction of ②.



- 8** Remove the spindle unit.
 - 1 Remove the screws in the locations shown in the figure using a hexagonal wrench (3 mm). (2 places)
 - 2 Pull the spindle unit straight out and remove it.



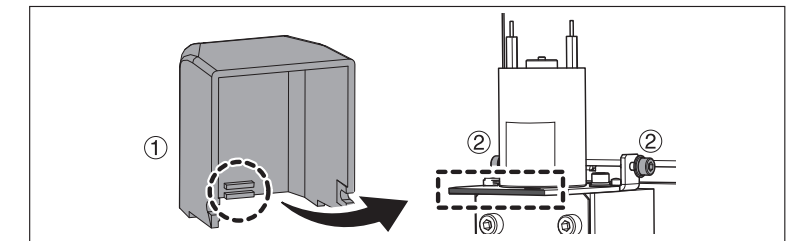
- 9** Remove the spindle motor from the spindle unit.
 - 1 Remove the screws in the locations shown in the figure using a hexagonal wrench (2.5 mm). (2 places)
 - 2 Remove the spindle motor by pulling it straight up.



STEP 2 : Attach the New Spindle Unit

! Notice If cutting waste builds up in the spindle unit or on the installation surface, the unit may be secured in place on an angle, resulting in problems. Thoroughly remove cutting waste.

- 1** Attach the spindle motor to the spindle unit. Refer to STEP 1, procedure 9 and attach the screws using a hexagonal wrench. (2 places)
- 2** Attach the spindle unit to the machine and attach the cables. Perform STEP 1, procedures 6 to 8 in reverse order.
- 3** Attach the spindle cover to the machine.
 - 1 Securely fit the tabs on the spindle cover onto the spindle base plate.
 - 2 Tighten the screws that you loosened in STEP 1, procedure 5. (2 places)



STEP 3 : Run in the Spindle

Start VPanel and run in the spindle following procedures 1 to 5. Failure to run in the spindle may result in unstable spindle rotation.

- 1** Move the slider to "Low."
- 2** Click **ON**.
- 3** Move the slider to the center.
 - Guide: Approx. 5 minutes
- 4** Move the slider to "High."
 - Guide: Approx. 10 minutes
- 5** Once the guide time is reached, click **OFF**.

