Q&A

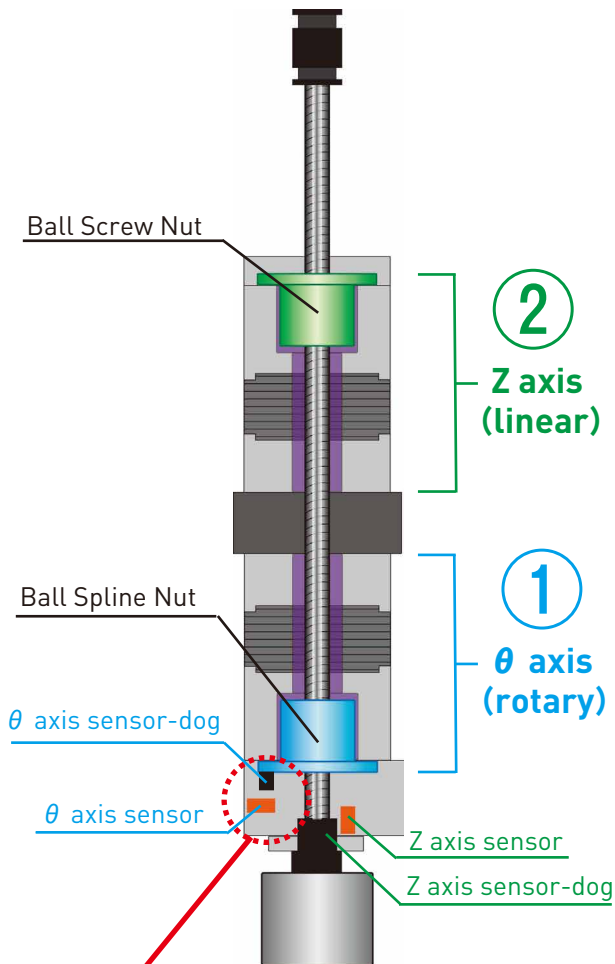**Question:**

Does V-Z-θ Actuator has any orders to return to home position?

In order to apply home positioning, we recommend that θ-axis should be the first, then followed by Z-axis. If Z-axis home positioning is first, then zero position may move after θ-axis home positioning. The reason is shown below diagram.
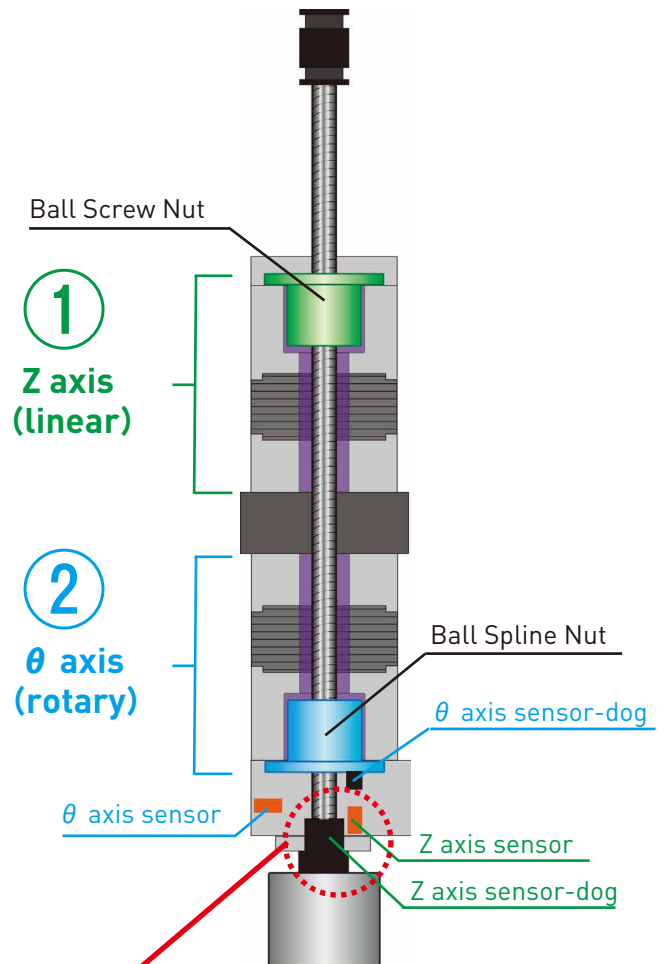
【Recommended procedure of home positioning】
$\theta \Rightarrow Z$ axis

【In case of home positioning】
$Z \Rightarrow \theta$ axis

Ball Screw Nut

② Z axis (linear)

Ball Spline Nut

① θ axis (rotary)

θ axis sensor-dog

θ axis sensor

Z axis sensor

Z axis sensor-dog

Ball Screw Nut

① Z axis (linear)

② θ axis (rotary)

Ball Spline Nut

θ axis sensor-dog

θ axis sensor

Z axis sensor

Z axis sensor-dog

θ-axis home positioning has been done in zero position. In this situation, Z-axis home positioning should be applied. θ-axis will never move because Ball Spline Nut only plays a role of guide for linear motion.

Z-axis home positioning has been done in zero position. In this situation, if θ-axis home positioning is applied, BSSP Shaft (Ball Screw with Ball Spline) will move up or down with rotary movement at the same time of CW/CCW home positioning.

There is the appropriate order to apply home positioning…!