

3. Center Height Adjustment

a) No core remains / Core with Excessively Small Diameter

This happens when the Inner Insert is set above the Center Height.

In this case, adjustment is necessary since insert breakage will be probable at the center of the drill. (Fig.7)

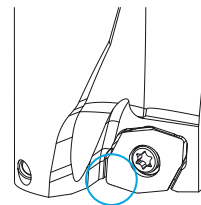


Fig.7 Insert breakage near the center of the drill

[How to Adjust]

① Install the drill rotated 180°.

Most problems will be solved by this method. (Fig.8)

② If the core diameter becomes too large after the above adjustment, install the drill by rotating 90° counter-clockwise as shown in Fig.9 (outer insert is positioned lower) and adjust the center height by moving the tool in the X-axis direction. (However, this makes it impossible to adjust the cutting diameter)

Caution: In case of installing the drill in the reverse direction (outer insert is positioned above), the cutting diameter will become smaller, which may cause the drill body to interfere with the drilled hole.

The best solution is to readjust the center position of the turret itself.

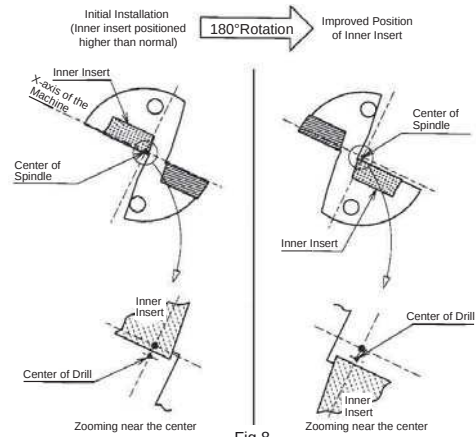


Fig.8

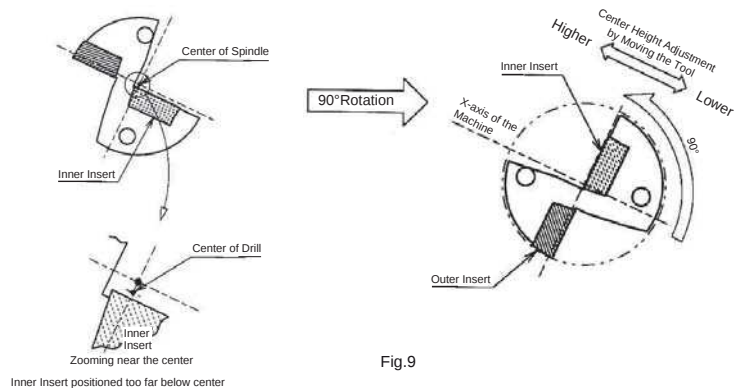


Fig.9

b) Core with excessively large diameter (More than 1mm)

This occurs when the inner insert is excessively below the center.

This condition causes poor chip evacuation and an adjustment is required.

[How to Adjust]

Install the drill rotating 90° as shown in Fig.10. (outer insert is positioned on the upper side) and adjust the center height by moving tool in the X-axis direction.

(However, this makes it impossible to adjust the cutting diameter)

Caution: When installing the drill in the opposite direction (outer insert is positioned lower), the cutting diameter will become smaller, which may cause the drill body to interfere with the drilled hole.

The best solution is to readjust the center position of the turret itself.

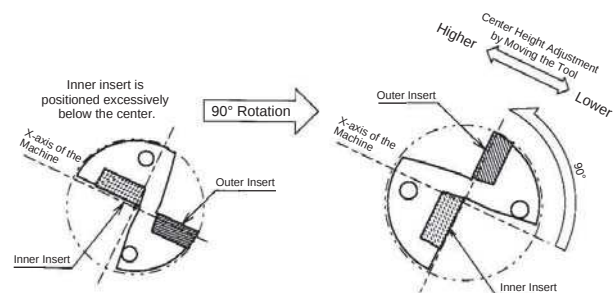


Fig.10