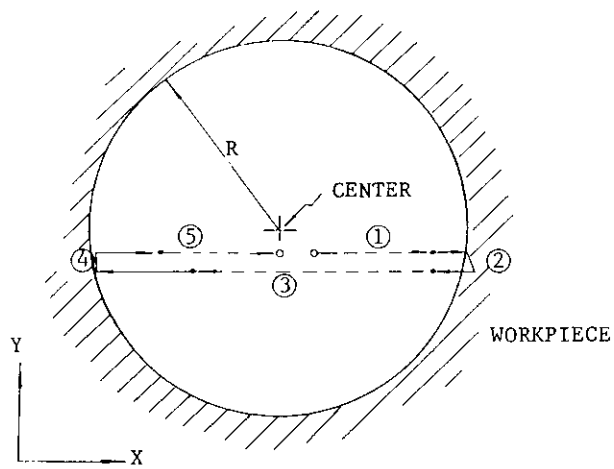
2.9.19 AUTOMATIC CENTERING FUNCTION (G36, G37)† (CONT'D)

EXAMPLE A: Automatic bore centering

M06 T10 ; ———	Selection of touch sensor
G00 X··· Y··· ; —	Positioning in X and Y axes to virtual center
Z··· ; ———	Motion in Z direction to measurable position
① G91 Xr ; ———	Motion through virtual radius r in X direction
② G36 Ii F··· ; —	Automatic centering (1) in X direction
③ X-2r ; ———	Motion through virtual diameter-2r in X direction
④ G37 I-i ; ———	Automatic centering (2) in X direction
⑤ Xr ; ———	Completion of centering in X direction
Yr ; G36 Jj ; Y-2r ; G37 J-j; Yr ;	Similar automatic centering in Y direction
G92 X0 Z0 ; ·····	Setting the automatically obtained center point as the coordinate (0,0) point

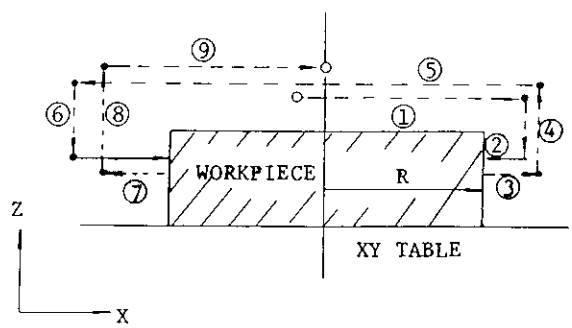


Note: r < R is assumed in the program.

Fig. 2.34

EXAMPLE B: Automatic outer diameter

M06 T10 ; ·····	Selection of touch sensor
G00 X··· Y··· ;···	Positioning in X and Y axes to virtual center
① G01 Xr ; ·····	Motion through virtual radius r in X direction
② Z-z ; ·····	Motion in Z direction to measurable position
③ G36 I-i F··· ; ····	Automatic centering (1) in X direction
④ Zz ; ·····	Retraction in Z direction
⑤ X-2r ; ·····	Motion through virtual diameter-2r in X direction
⑥ Z-z ; ·····	Motion in Z direction to measurable position
⑦ G37 Ii ; ·····	Automatic centering (2) in X direction
⑧ Zz ; ·····	Retraction in Z direction
⑨ Xr ; ·····	Completion of centering in X direction
Yr ; · · · Yr ;	Similar automatic centering in Y direction
G92 X0 Y0 ; ·····	Setting the automatically obtained center point as the coordinate (0,0) point



Note: r > R is assumed in the program.

Fig. 2.35