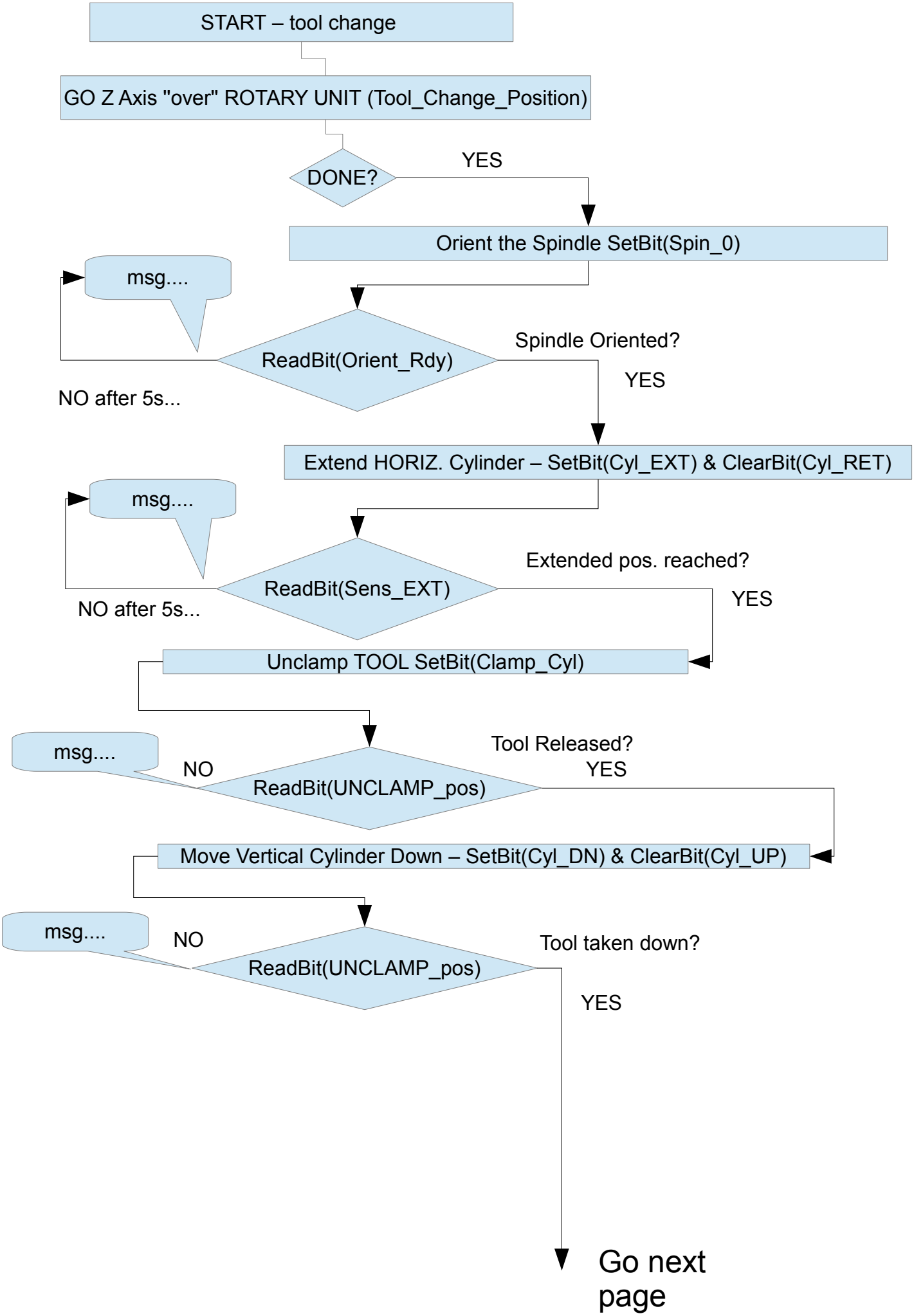
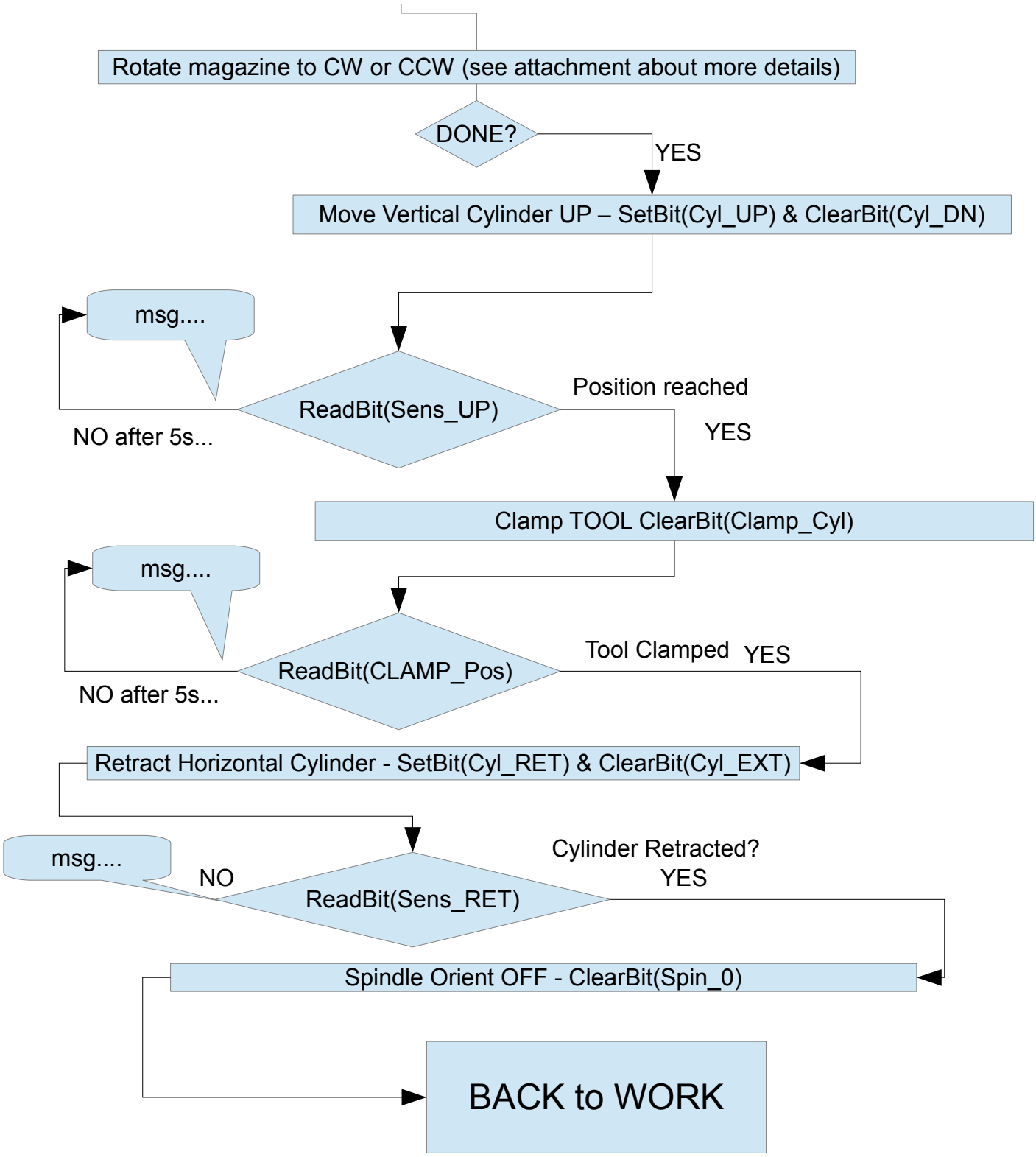

START – tool change
GO Z Axis "over" ROTARY UNIT (Tool_Change_Position)
DONE?
YES
Orient the Spindle SetBit(Spin_0)
msg....
ReadBit(Orient_Rdy)
Spindle Oriented?
YES
NO after 5s...
Extend HORIZ. Cylinder – SetBit(Cyl_EXT) & ClearBit(Cyl_RET)
msg....
ReadBit(Sens_EXT)
Extended pos. reached?
YES
NO after 5s...
Unclamp TOOL SetBit(Clamp_Cyl)
msg....
NO
ReadBit(UNCLAMP_pos)
Tool Released?
YES
Move Vertical Cylinder Down – SetBit(Cyl_DN) & ClearBit(Cyl_UP)
msg....
NO
ReadBit(UNCLAMP_pos)
Tool taken down?
YES
Go next page


Rotate magazine to CW or CCW (see attachment about more details)
DONE?
YES
Move Vertical Cylinder UP – SetBit(Cyl_UP) & ClearBit(Cyl_DN)
msg....
ReadBit(Sens_UP)
Position reached
NO after 5s...
YES
Clamp TOOL ClearBit(Clamp_Cyl)
msg....
ReadBit(CLAMP_Pos)
Tool Clamped
YES
NO after 5s...
Retract Horizontal Cylinder - SetBit(Cyl_RET) & ClearBit(Cyl_EXT)
msg....
NO
ReadBit(Sens_RET)
Cylinder Retracted?
YES
Spindle Orient OFF - ClearBit(Spin_0)
BACK to WORK