TOOL TURRET EXAMPLE

The following turret is a 16 pocket turret. The turret moves in clockwise and counter clockwise direction.

I2 = counts
I5 = home switch
O2 = clockwise direction
O3 = counter clockwise direction

TBCD - will store indicated tool instruction
ex. CPS TBCD NE -1 (-1 means if tool does not exist)

M88 will indicate direction.

B31 R49 is 0 for the positive direction > CCW
B31 R49 is 1 for the negative direction > CW
(bit 31 checks the sign of the number)

5 - 1 =4
9 - 10 = -1
15-1 = 14

If we are in position 16, we want to go back one turn not 15
To solve this problem, CPS R49 GT 8 = CPL M88 (change direction)

If we have 30 tools, then CPS R49 GT 16

R50 = has the actual tool
R51 = requested tool
R49 = (requested minus actual)

(M100 AND M500) OR (M100 AND M88) AND CPS R52 NE R50
AND NOT M500 = O2

M100 AND NOT M88 AND CPS R52 NE R50 AND NOT M500=O3

M100 goes low, everything stops

CPS C1 EQ 17 AND O2 = CPR 1 1
tool turret rotates past tool 16 so when it gets to 1, do not count
as 17 but preselect to 1