

## Pick-and-Place Machine Control

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Additional internal memory:

Symbol	Address	
RUN	B3/0	On while station running
INT_RESET	B3/1	Internal reset
STEP_1 to STEP_10	B20/1 to B20/10	Step-in-progress bits
CLAMP_TMR	T4:1	Times stirring step
UNCLAMP_TMR	T4:2	Times unclamp
RESET_TMR	T4:3	Times unclamp during reset

Start/stop and initial start.

Start push button, on  
when starting

START\_PB

I:1/0

INT\_RESET

B3/1

Stop push button, off  
when stopping

STOP\_PB

I:1/1

RUN

B3/0

RUN

B3/0

RUN

B3/0

STEP\_1

B20/1

STEP\_2

B20/2

STEP\_3

B20/3

STEP\_4

B20/4

STEP\_5

B20/5

STEP\_6

B20/6

STEP\_7

B20/7

STEP\_8

B20/8

STEP\_9

B20/9

STEP\_10

B20/10

STEP\_1

B20/1

Step 1 Wait for part ready.

Part operation-in-  
progress switch, on  
(closed) when not  
ready to move part  
off of left table

PART\_OIP

STEP\_1

B20/1

RUN

B3/0

STEP\_1

B20/1

STEP\_2

B20/2

Step 2 Lower to left table.

Lower limit switch,  
on (closed) when  
mechanism is lowered

LOWER\_LS

STEP\_2

B20/2

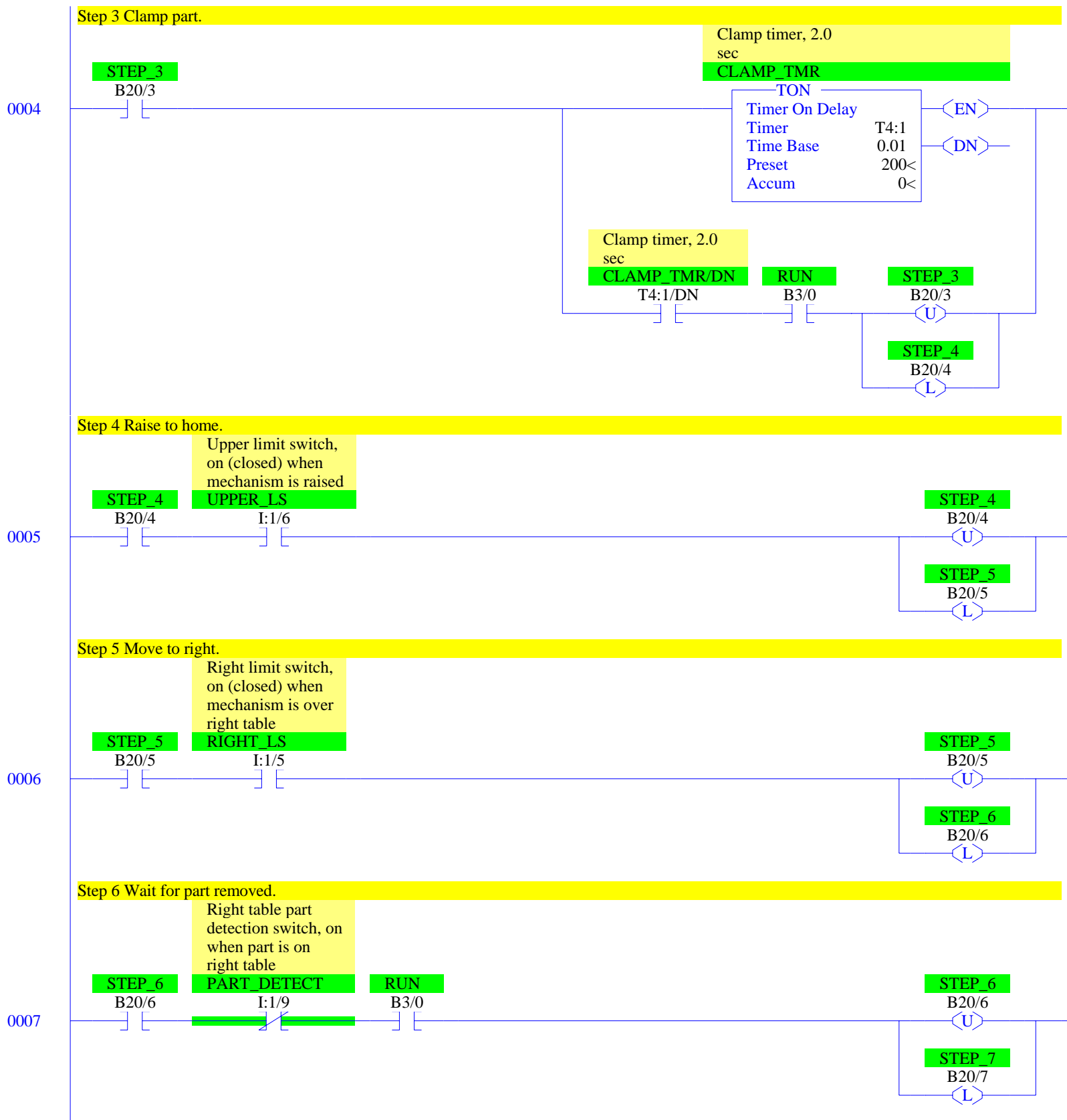
I:1/7

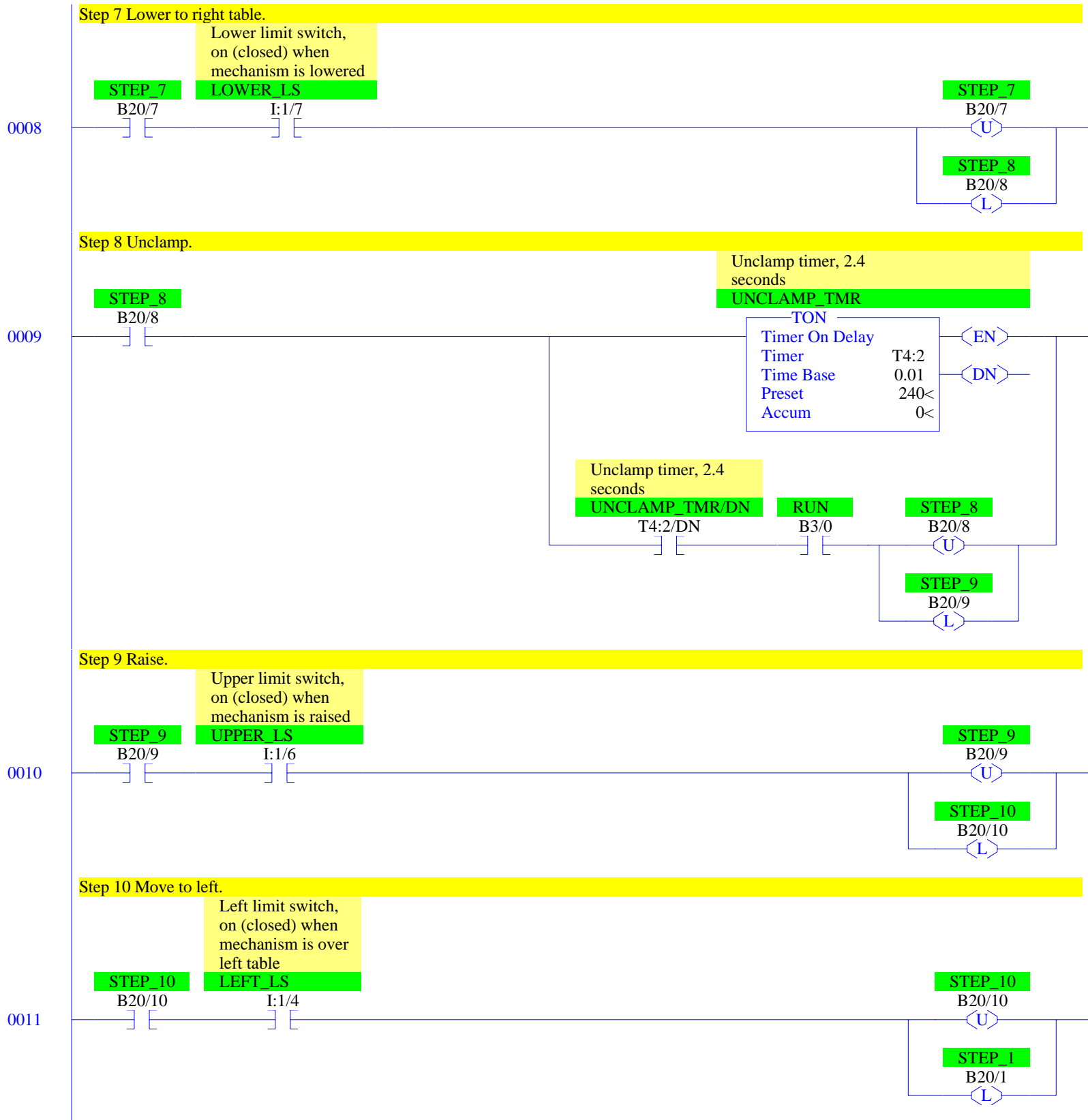
STEP\_2

B20/2

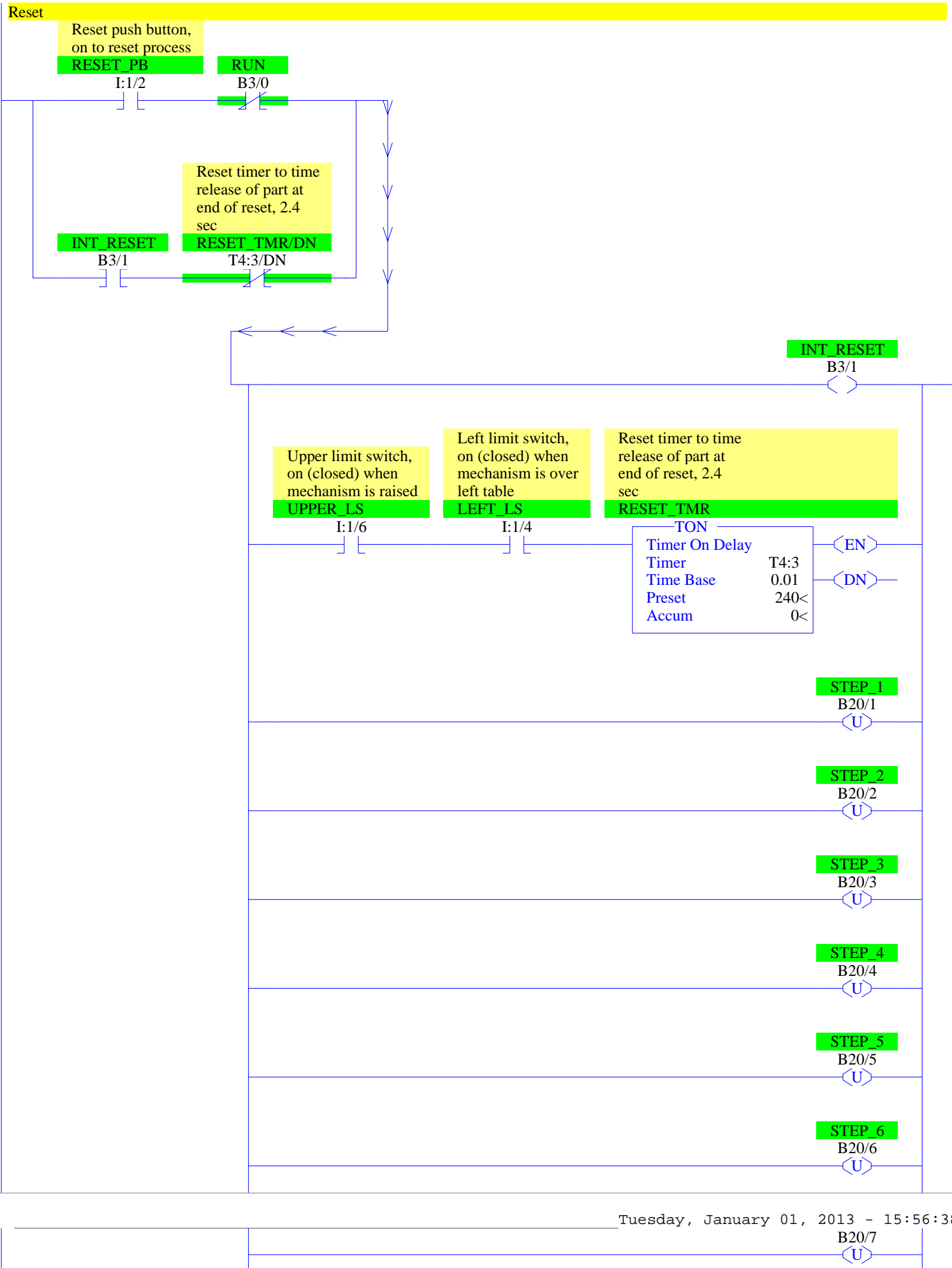
STEP\_3

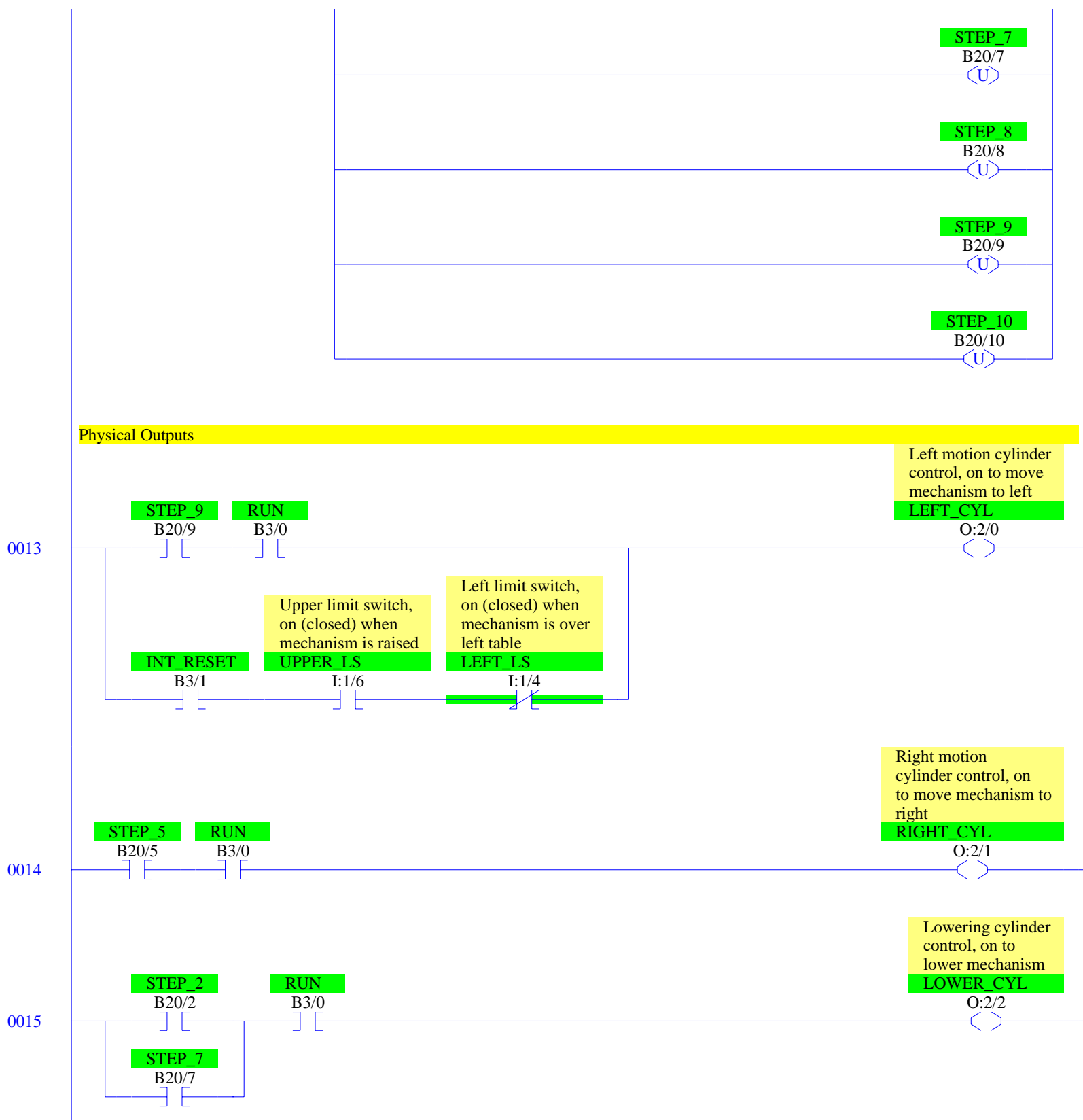
B20/3

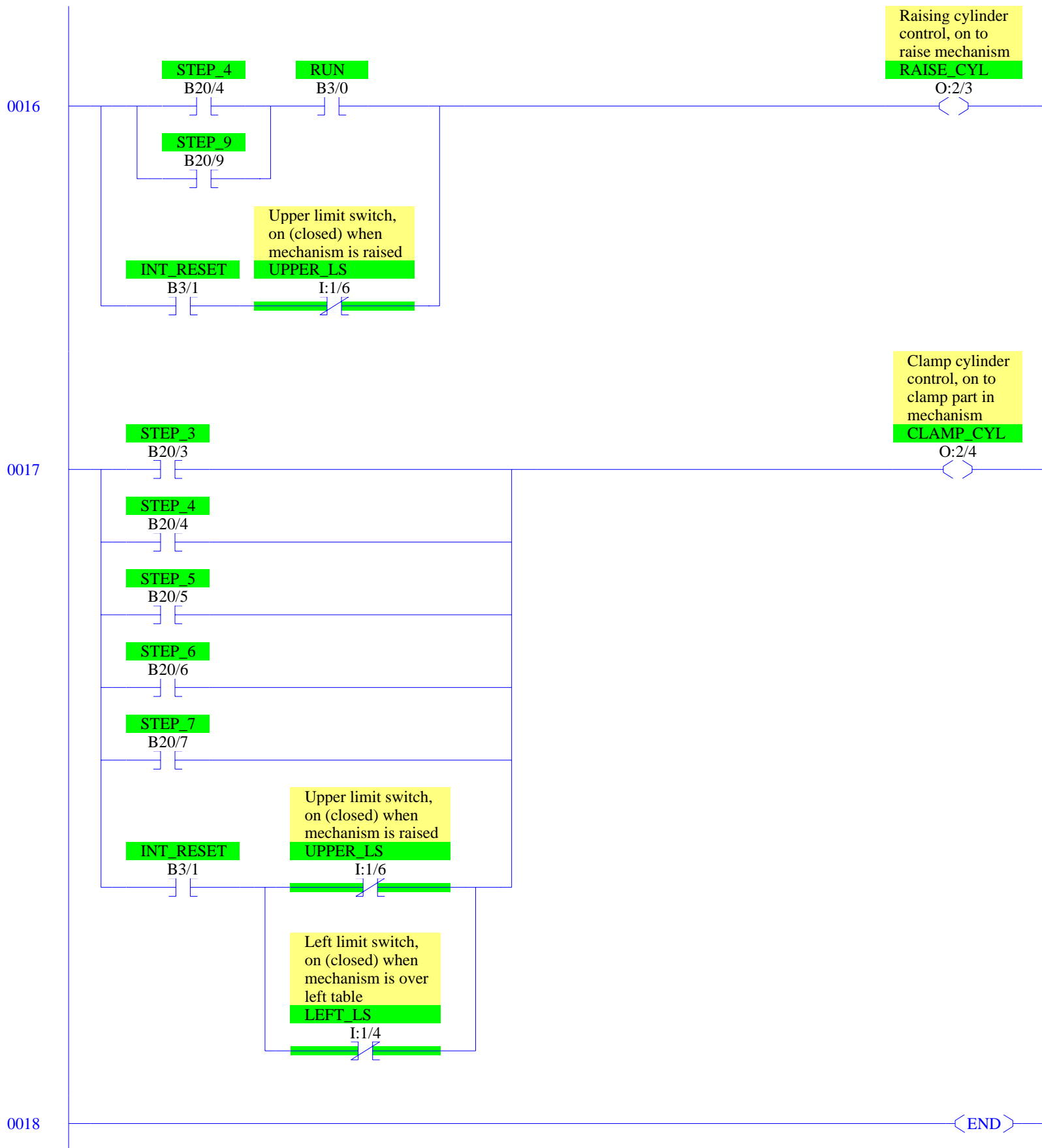




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## RSLogix 500 Cross Reference Report - Sorted by Address

O:2/0	- {LEFT_CYL} Left motion cylinder control, on to move mechanism to left OTE - File #2 - 13
O:2/1	- {RIGHT_CYL} Right motion cylinder control, on to move mechanism to right OTE - File #2 - 14
O:2/2	- {LOWER_CYL} Lowering cylinder control, on to lower mechanism OTE - File #2 - 15
O:2/3	- {RAISE_CYL} Raising cylinder control, on to raise mechanism OTE - File #2 - 16
O:2/4	- {CLAMP_CYL} Clamp cylinder control, on to clamp part in mechanism OTE - File #2 - 17
I:1/0	- {START_PB} Start push button, on when starting XIC - File #2 - 0
I:1/1	- {STOP_PB} Stop push button, off when stopping XIC - File #2 - 0
I:1/2	- {RESET_PB} Reset push button, on to reset process XIC - File #2 - 12
I:1/3	- {PART_OIP} Part operation-in- progress switch, on (closed) when not ready to move part XIO - File #2 - 2
I:1/4	- {LEFT_LS} Left limit switch, on (closed) when mechanism is over left table XIC - File #2 - 11, 12 XIO - File #2 - 13, 17
I:1/5	- {RIGHT_LS} Right limit switch, on (closed) when mechanism is over right table XIC - File #2 - 6
I:1/6	- {UPPER_LS} Upper limit switch, on (closed) when mechanism is raised XIC - File #2 - 5, 10, 12, 13 XIO - File #2 - 16, 17
I:1/7	- {LOWER_LS} Lower limit switch, on (closed) when mechanism is lowered XIC - File #2 - 3, 8
I:1/9	- {PART_DETECT} Right table part detection switch, on when part is on right table XIO - File #2 - 7
B3/0	- {RUN} OTE - File #2 - 0 XIC - File #2 - 0, 1, 2, 4, 7, 9, 13, 14, 15, 16 XIO - File #2 - 12
B3/1	- {INT_RESET} OTE - File #2 - 12 XIC - File #2 - 12, 13, 16, 17 XIO - File #2 - 0
T4:1	- {CLAMP_TMR} Clamp timer, 2.0 sec TON - File #2 - 4
T4:1/DN	- XIC - File #2 - 4
T4:2	- {UNCLAMP_TMR} Unclamp timer, 2.4 seconds TON - File #2 - 9
T4:2/DN	- XIC - File #2 - 9
T4:3	- {RESET_TMR} Reset timer to time release of part at end of reset, 2.4 sec TON - File #2 - 12
T4:3/DN	- XIO - File #2 - 12
B20/1	- {STEP_1} OTL - File #2 - 1, 11 OTU - File #2 - 2, 12 XIC - File #2 - 2 XIO - File #2 - 1
B20/2	- {STEP_2} OTL - File #2 - 2 OTU - File #2 - 3, 12 XIC - File #2 - 3, 15 XIO - File #2 - 1
B20/3	- {STEP_3} OTL - File #2 - 3 OTU - File #2 - 4, 12 XIC - File #2 - 4, 17 XIO - File #2 - 1
B20/4	- {STEP_4} OTL - File #2 - 4 OTU - File #2 - 5, 12 XIC - File #2 - 5, 16, 17

## RSLogix 500 Cross Reference Report - Sorted by Address

B20/5	XIO - File #2 - 1 - {STEP_5} OTL - File #2 - 5 OTU - File #2 - 6, 12 XIC - File #2 - 6, 14, 17 XIO - File #2 - 1
B20/6	- {STEP_6} OTL - File #2 - 6 OTU - File #2 - 7, 12 XIC - File #2 - 7, 17 XIO - File #2 - 1
B20/7	- {STEP_7} OTL - File #2 - 7 OTU - File #2 - 8, 12 XIC - File #2 - 8, 15, 17 XIO - File #2 - 1
B20/8	- {STEP_8} OTL - File #2 - 8 OTU - File #2 - 9, 12 XIC - File #2 - 9 XIO - File #2 - 1
B20/9	- {STEP_9} OTL - File #2 - 9 OTU - File #2 - 10, 12 XIC - File #2 - 10, 13, 16 XIO - File #2 - 1
B20/10	- {STEP_10} OTL - File #2 - 10 OTU - File #2 - 11, 12 XIC - File #2 - 11 XIO - File #2 - 1