

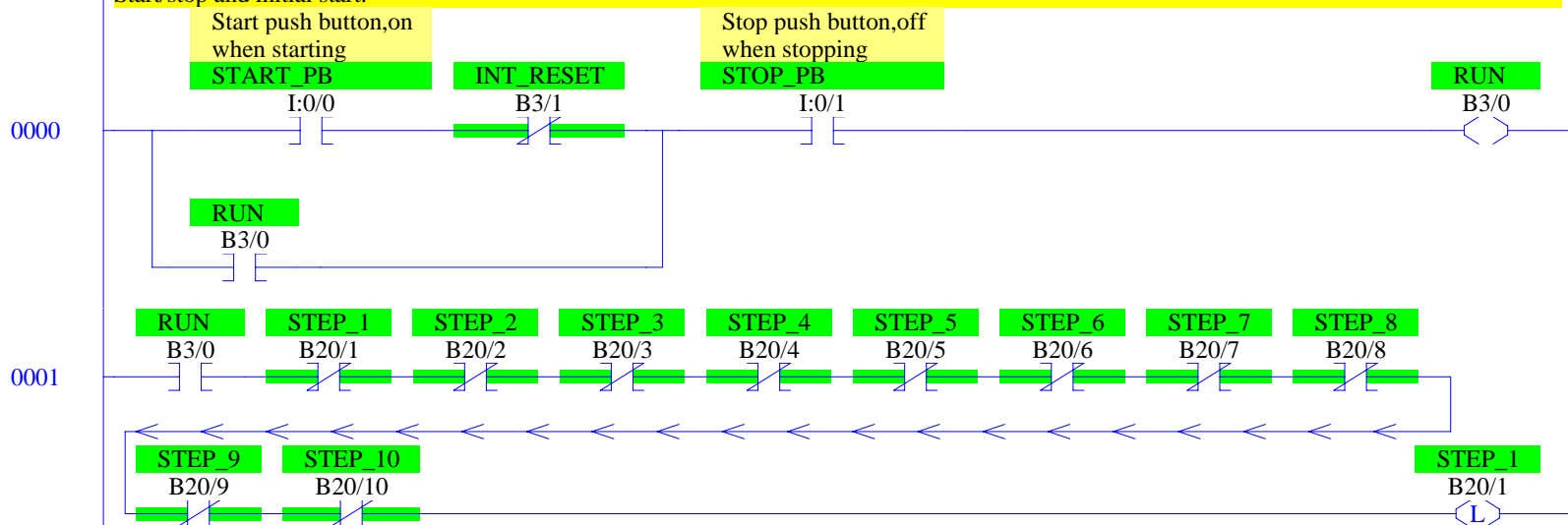
## Drilling Station Control

Copyright (c) 2013 Dogwood Valley Press, LLC

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
UNCLAMP_TMR	T4:2	Times unclamp of part carrier

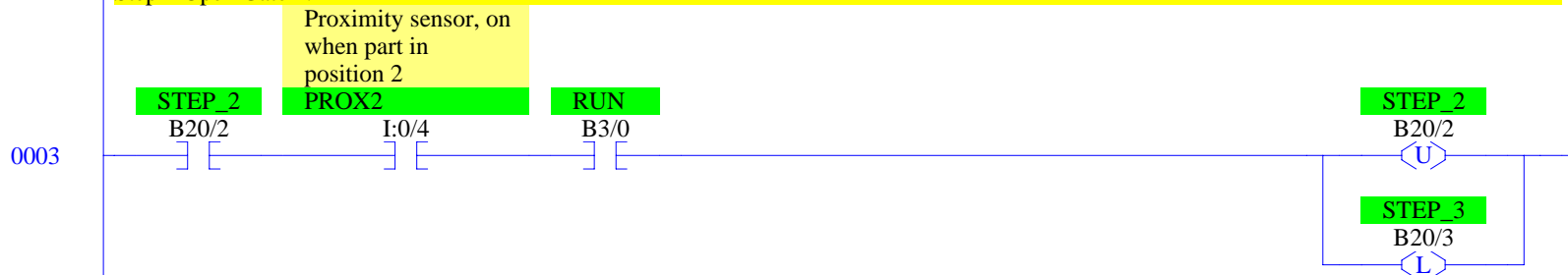
Start/stop and initial start.

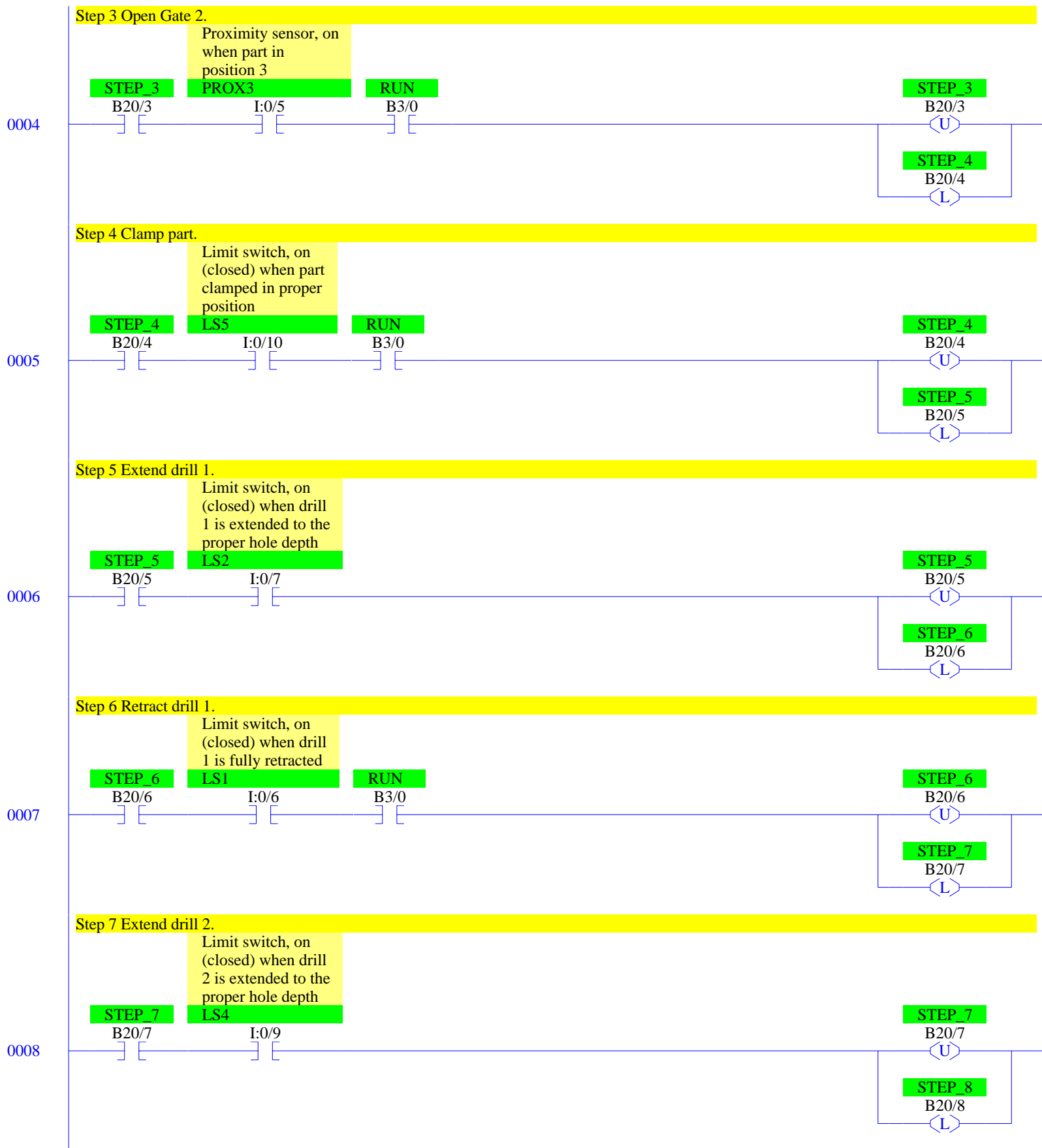


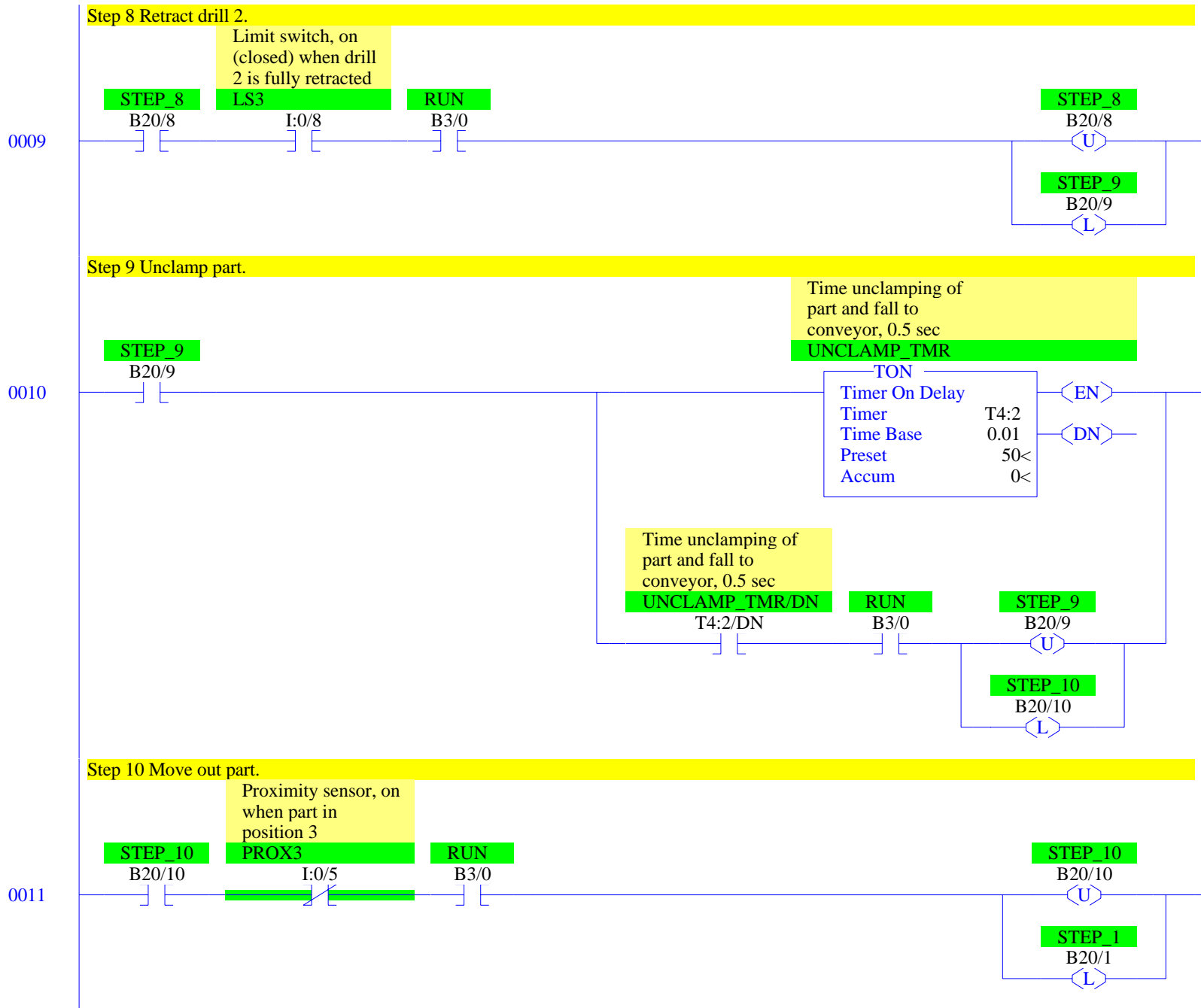
Step 1 Wait for part.



Step 2 Open Gate 1.







0012

**Reset - Retract drills. Maintain reset until both retracted.**Reset push button,  
on when restoring  
process to initial  
state**RESET\_PB**

I:0/2

**RUN**

B3/0

**INT RESET**

B3/1

**INT RESET**

B3/1

Limit switch, on  
(closed) when drill  
1 is fully retracted**LS1**

I:0/6

Limit switch, on  
(closed) when drill  
2 is fully retracted**LS3**

I:0/8

**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

**Physical Outputs****Gate Controls**Gate 1 control, on  
to open gate 1, off  
closes gate**GATE\_1**

O:0/0

Gate 2 control, on  
to open gate 2, off  
closes gate**GATE\_2**

O:0/1

0013

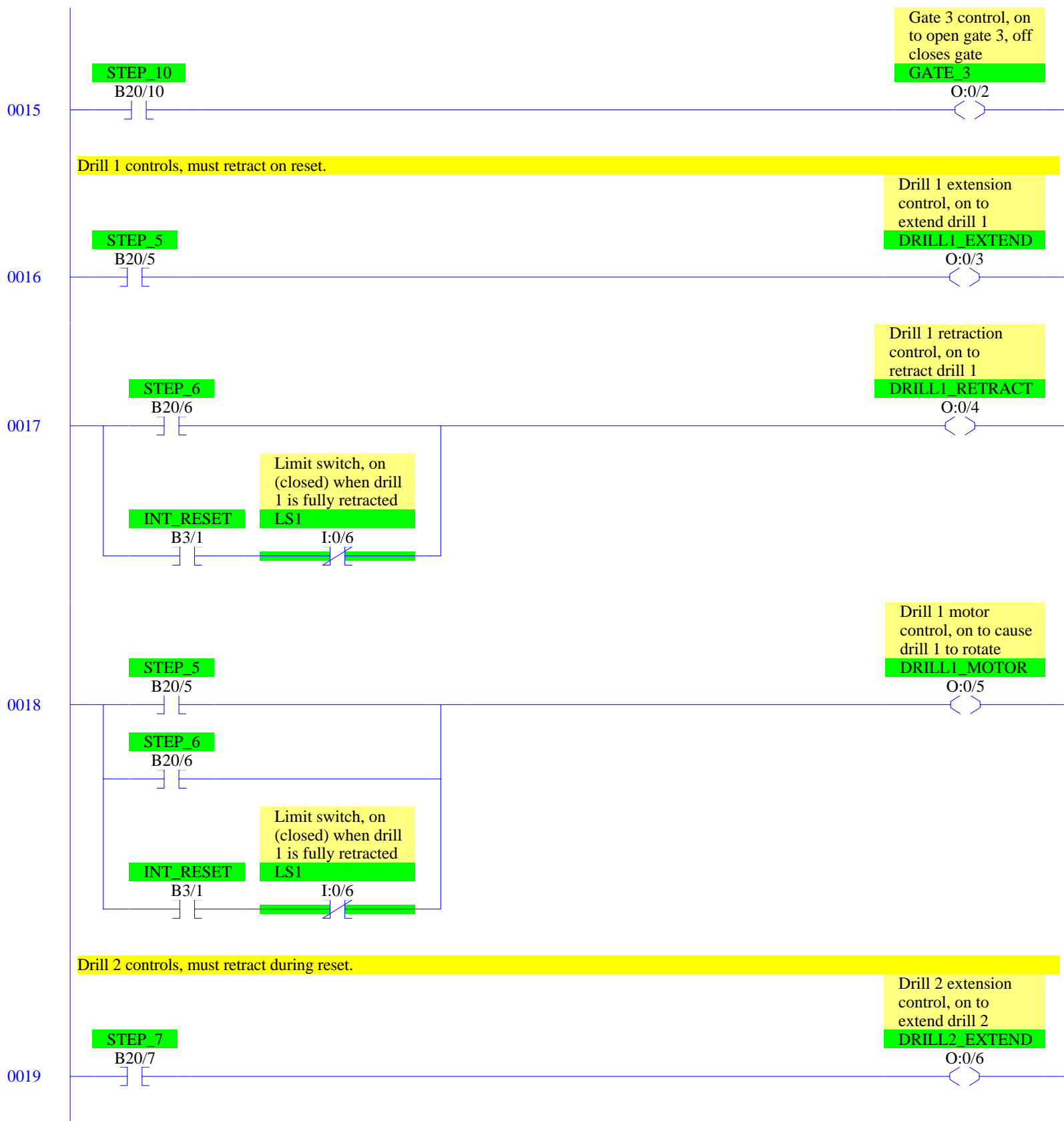
**STEP\_2**

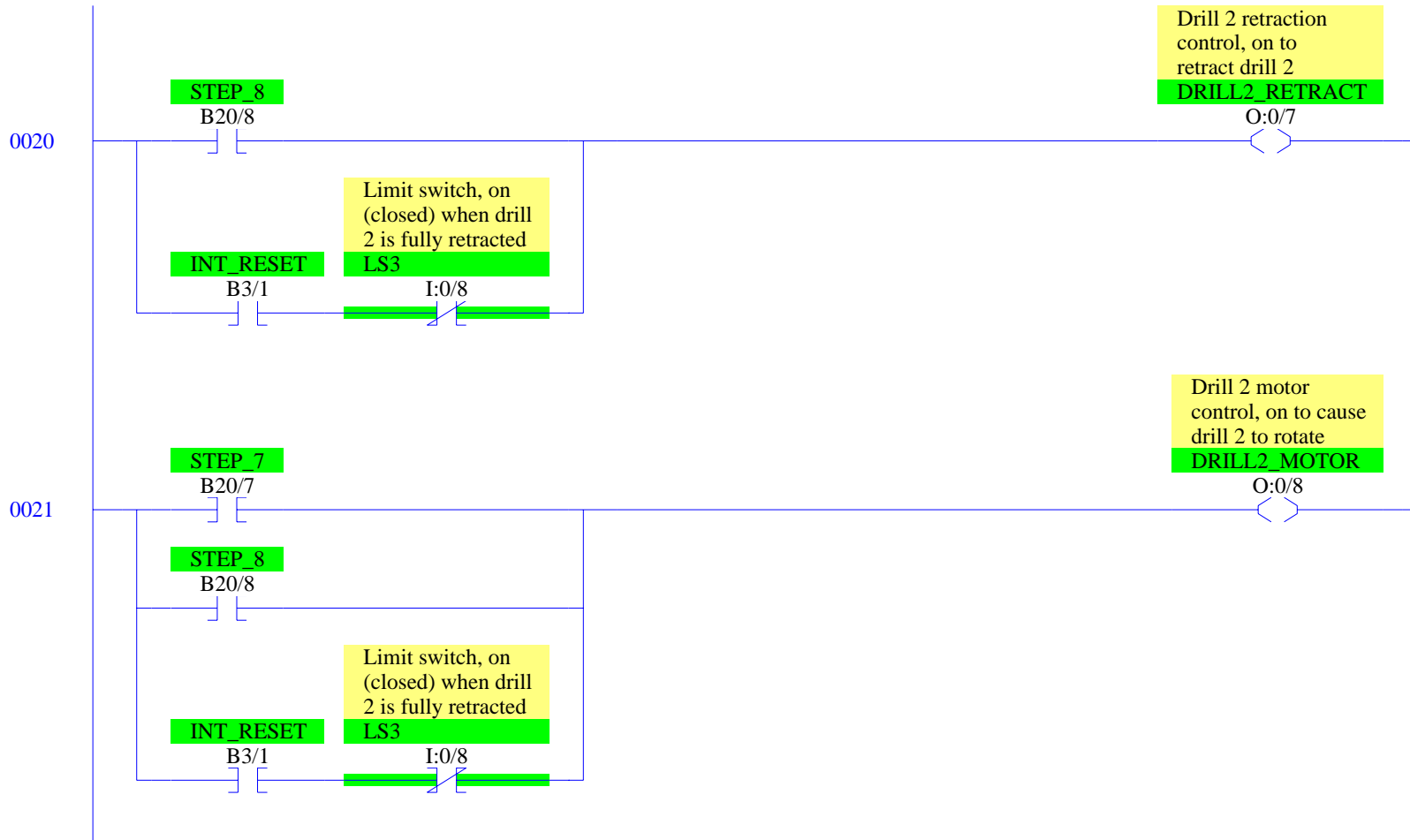
B20/2

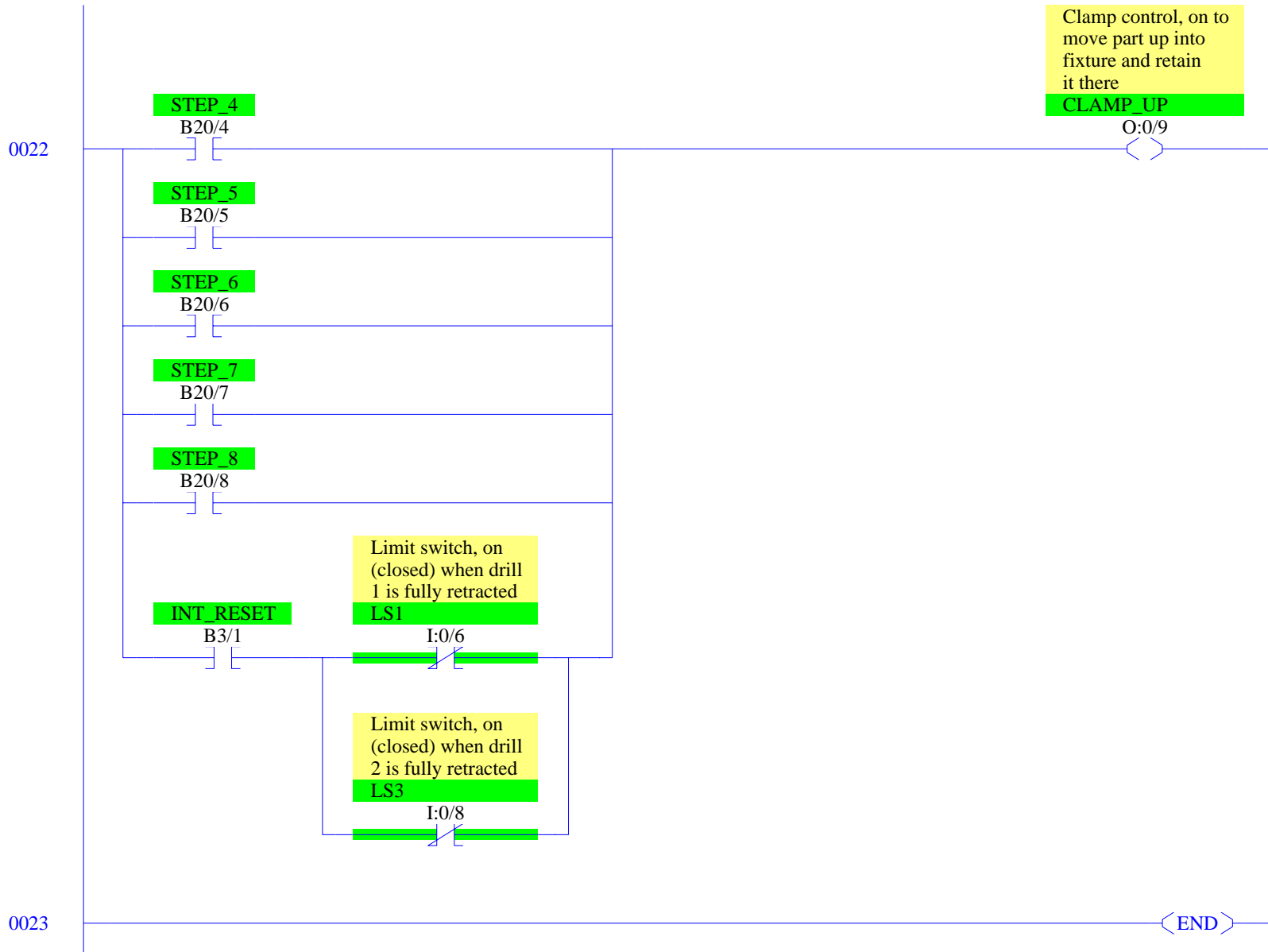
0014

**STEP\_3**

B20/3







## RSLogix 500 Cross Reference Report - Sorted by Address

O:0/0	- {GATE_1} Gate 1 control, on to open gate 1, off closes gate OTE - File #2 - 13
O:0/1	- {GATE_2} Gate 2 control, on to open gate 2, off closes gate OTE - File #2 - 14
O:0/2	- {GATE_3} Gate 3 control, on to open gate 3, off closes gate OTE - File #2 - 15
O:0/3	- {DRILL1_EXTEND} Drill 1 extension control, on to extend drill 1 OTE - File #2 - 16
O:0/4	- {DRILL1_RETRACT} Drill 1 retraction control, on to retract drill 1 OTE - File #2 - 17
O:0/5	- {DRILL1_MOTOR} Drill 1 motor control, on to cause drill 1 to rotate OTE - File #2 - 18
O:0/6	- {DRILL2_EXTEND} Drill 2 extension control, on to extend drill 2 OTE - File #2 - 19
O:0/7	- {DRILL2_RETRACT} Drill 2 retraction control, on to retract drill 2 OTE - File #2 - 20
O:0/8	- {DRILL2_MOTOR} Drill 2 motor control, on to cause drill 2 to rotate OTE - File #2 - 21
O:0/9	- {CLAMP_UP} Clamp control, on to move part up into fixture and retain it there OTE - File #2 - 22
I:0/0	- {START_PB} Start push button, on when starting XIC - File #2 - 0
I:0/1	- {STOP_PB} Stop push button, off when stopping XIC - File #2 - 0
I:0/2	- {RESET_PB} Reset push button, on when restoring process to initial state XIC - File #2 - 12
I:0/3	- {PROX1} Proximity sensor, on when part in position 1 XIC - File #2 - 2
I:0/4	- {PROX2} Proximity sensor, on when part in position 2 XIC - File #2 - 3
I:0/5	- {PROX3} Proximity sensor, on when part in position 3 XIC - File #2 - 4 XIO - File #2 - 11
I:0/6	- {LS1} Limit switch, on (closed) when drill 1 is fully retracted XIC - File #2 - 7 XIO - File #2 - 12, 17, 18, 22
I:0/7	- {LS2} Limit switch, on (closed) when drill 1 is extended to the proper hole depth XIC - File #2 - 6
I:0/8	- {LS3} Limit switch, on (closed) when drill 2 is fully retracted XIC - File #2 - 9 XIO - File #2 - 12, 20, 21, 22
I:0/9	- {LS4} Limit switch, on (closed) when drill 2 is extended to the proper hole depth XIC - File #2 - 8
I:0/10	- {LS5} Limit switch, on (closed) when part clamped in proper position XIC - File #2 - 5
B3/0	- {RUN} OTE - File #2 - 0 XIC - File #2 - 0, 1, 2, 3, 4, 5, 7, 9, 10, 11 XIO - File #2 - 12
B3/1	- {INT_RESET} OTE - File #2 - 12 XIC - File #2 - 12, 17, 18, 20, 21, 22 XIO - File #2 - 0
T4:2	- {UNCLAMP_TMR} Time unclamping of part and fall to conveyor, 0.5 sec TON - File #2 - 10
T4:2/DN	- XIC - File #2 - 10
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, 13 XIO - File #2 - 1



## RSLogix 500 Cross Reference Report - Sorted by Address

```

B20/3      - {STEP_3}
            OTL - File #2 - 3
            OTU - File #2 - 4, 12
            XIC - File #2 - 4, 14
            XIO - File #2 - 1

B20/4      - {STEP_4}
            OTL - File #2 - 4
            OTU - File #2 - 5, 12
            XIC - File #2 - 5, 22
            XIO - File #2 - 1

B20/5      - {STEP_5}
            OTL - File #2 - 5
            OTU - File #2 - 6, 12
            XIC - File #2 - 6, 16, 18, 22
            XIO - File #2 - 1

B20/6      - {STEP_6}
            OTL - File #2 - 6
            OTU - File #2 - 7, 12
            XIC - File #2 - 7, 17, 18, 22
            XIO - File #2 - 1

B20/7      - {STEP_7}
            OTL - File #2 - 7
            OTU - File #2 - 8, 12
            XIC - File #2 - 8, 19, 21, 22
            XIO - File #2 - 1

B20/8      - {STEP_8}
            OTL - File #2 - 8
            OTU - File #2 - 9, 12
            XIC - File #2 - 9, 20, 21, 22
            XIO - File #2 - 1

B20/9      - {STEP_9}
            OTL - File #2 - 9
            OTU - File #2 - 10, 12
            XIC - File #2 - 10
            XIO - File #2 - 1

B20/10     - {STEP_10}
            OTL - File #2 - 10
            OTU - File #2 - 11, 12
            XIC - File #2 - 11, 15
            XIO - File #2 - 1

```