

## Erbia Can Tipper/Rotator Control

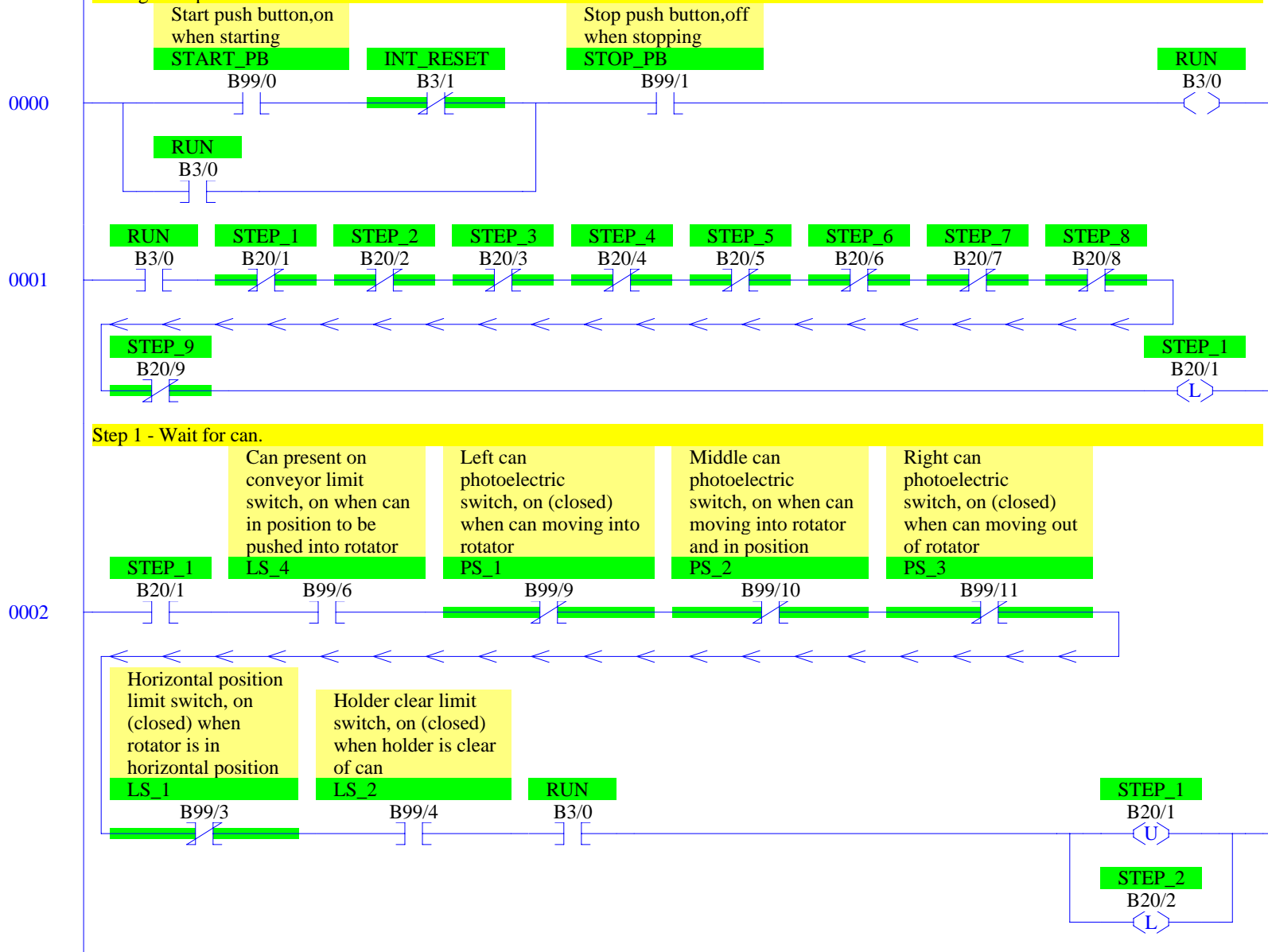
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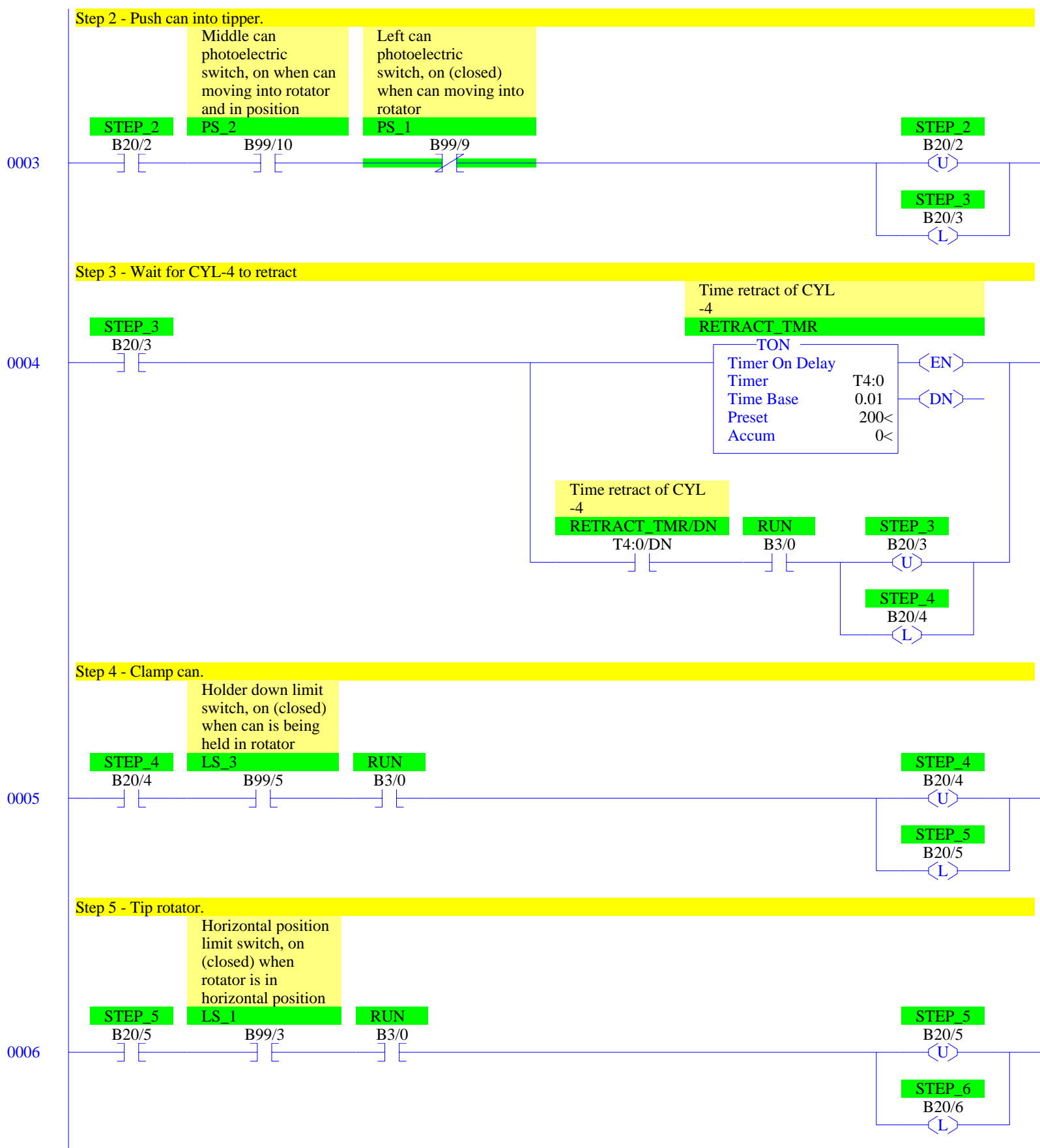
Additional internal memory:

Symbol	Address	
RUN	B3/0	On while station running
INT_RESET	B3/1	Internal reset
STEP_1 to STEP_9	B20/1 to B20/9	Step-in-progress bits
RETRACT_TMR	T4:0	Times retract of CYL-4
BLEND_TMR	T4:1	Times rotation for blend

Start/stop and initial start.

During reset prevent start.





0007

## Step 6 - Blend.

Blend timer, 60  
secSTEP\_6  
B20/6RUN  
B3/0

BLEND\_TMR

RTO  
Retentive Timer On  
Timer T4:1  
Time Base 1.0  
Preset 60<  
Accum 0<

Blend timer, 60  
secBLEND\_TMR/DN  
T4:1/DNSTEP\_6  
B20/6STEP\_7  
B20/7Blend timer, 60  
secBLEND\_TMR  
T4:1

RES

0008

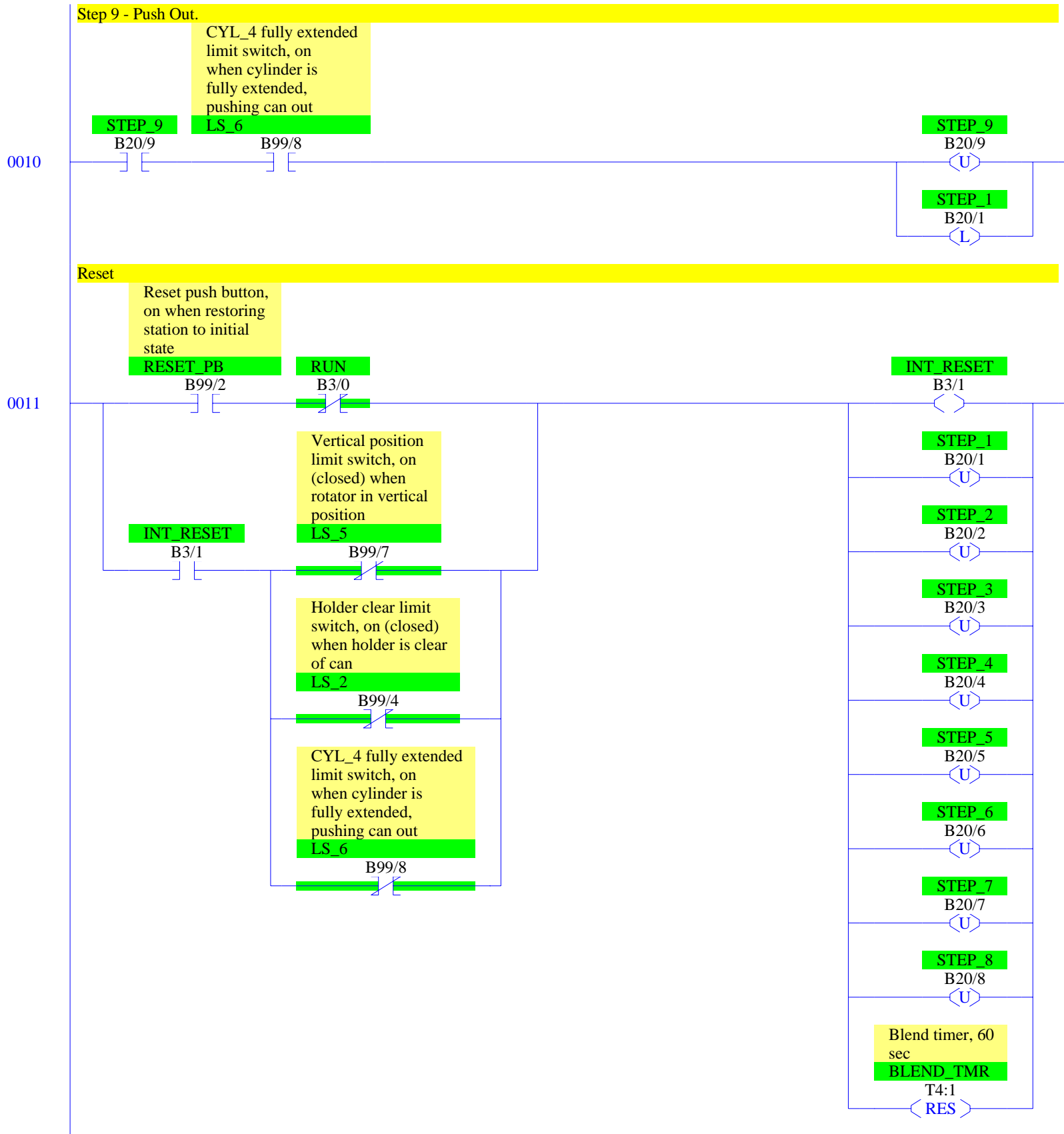
## Step 7 - Untip.

Vertical position  
limit switch, on  
(closed) when  
rotator in vertical  
positionSTEP\_7  
B20/7LS\_5  
B99/7RUN  
B3/0STEP\_7  
B20/7STEP\_8  
B20/8

0009

## Step 8 - Unclamp.

Holder clear limit  
switch, on (closed)  
when holder is clear  
of canSTEP\_8  
B20/8LS\_2  
B99/4RUN  
B3/0STEP\_8  
B20/8STEP\_9  
B20/9



## Physical Outputs

Can not turn off CYL\_1, CYL\_2, or CYL\_3 when paused.

On reset, do not unclamp until in vertical position.

Can holder cylinder  
control, on to clamp  
can into rotator

CYL\_1

O:0/0

STEP\_4

B20/4

STEP\_5

B20/5

STEP\_6

B20/6

STEP\_7

B20/7

INT\_RESET

B3/1

Vertical position  
limit switch, on  
(closed) when  
rotator in vertical  
position

LS\_5

B99/7

Tipper cylinder  
control, on to tip  
rotator

CYL\_2

O:0/1

STEP\_5

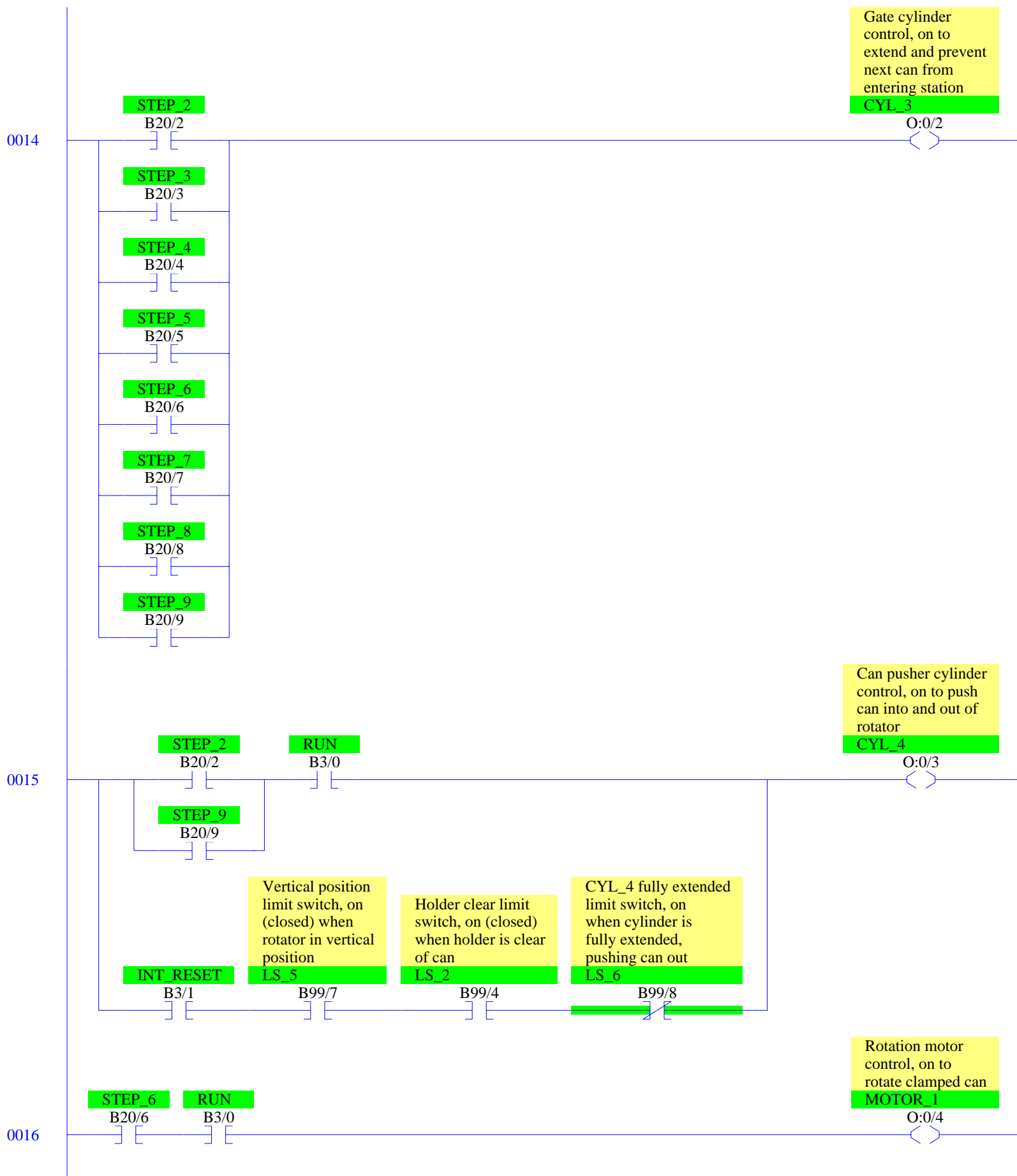
B20/5

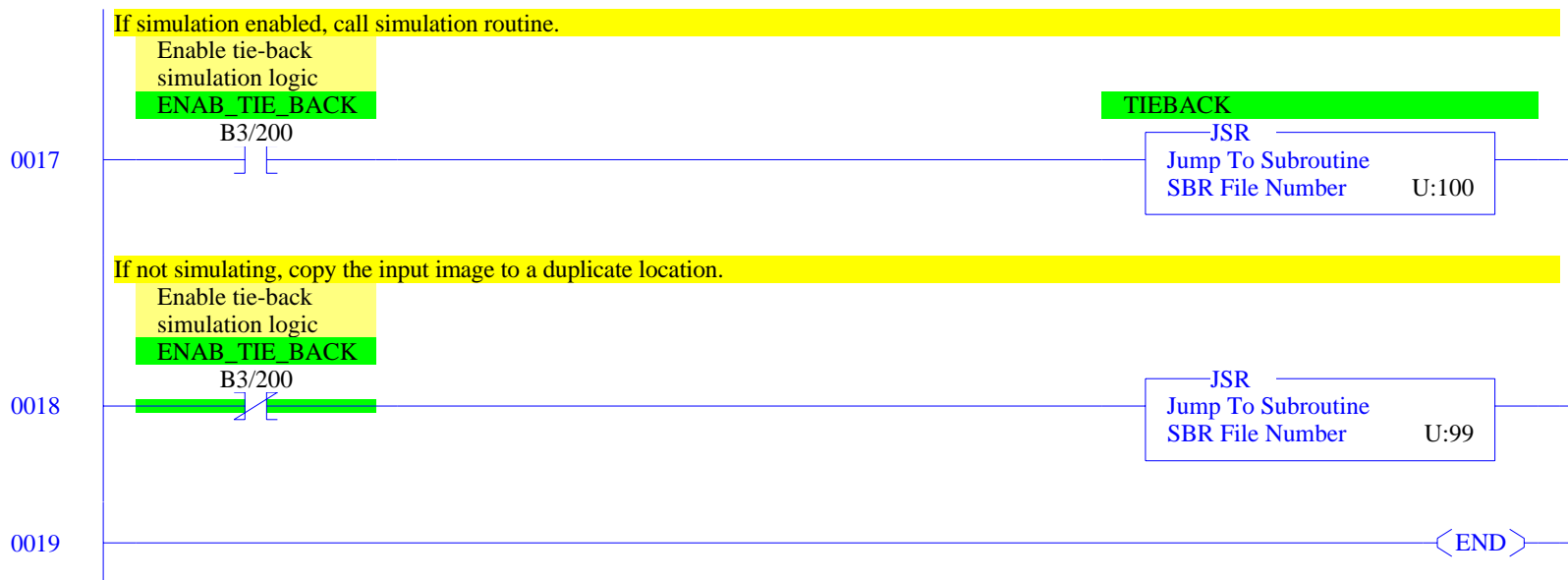
STEP\_6

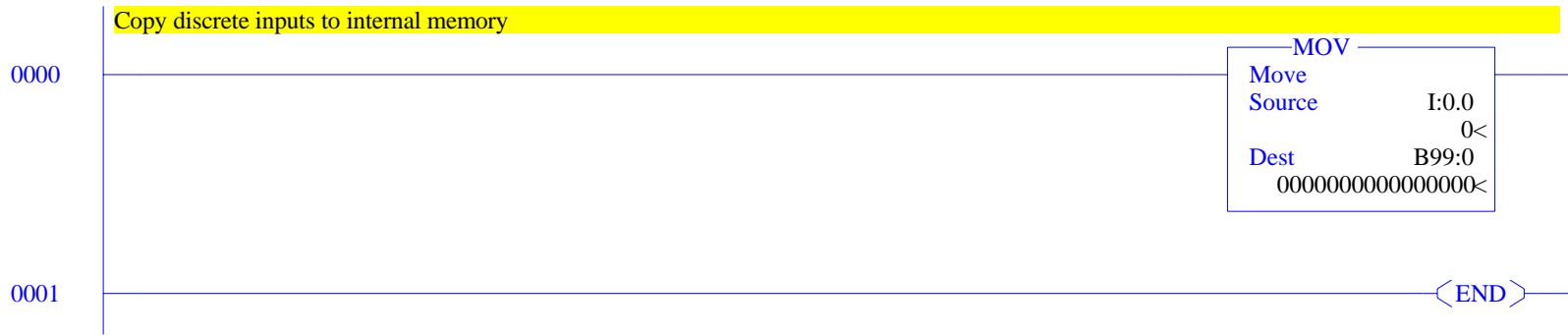
B20/6

0012

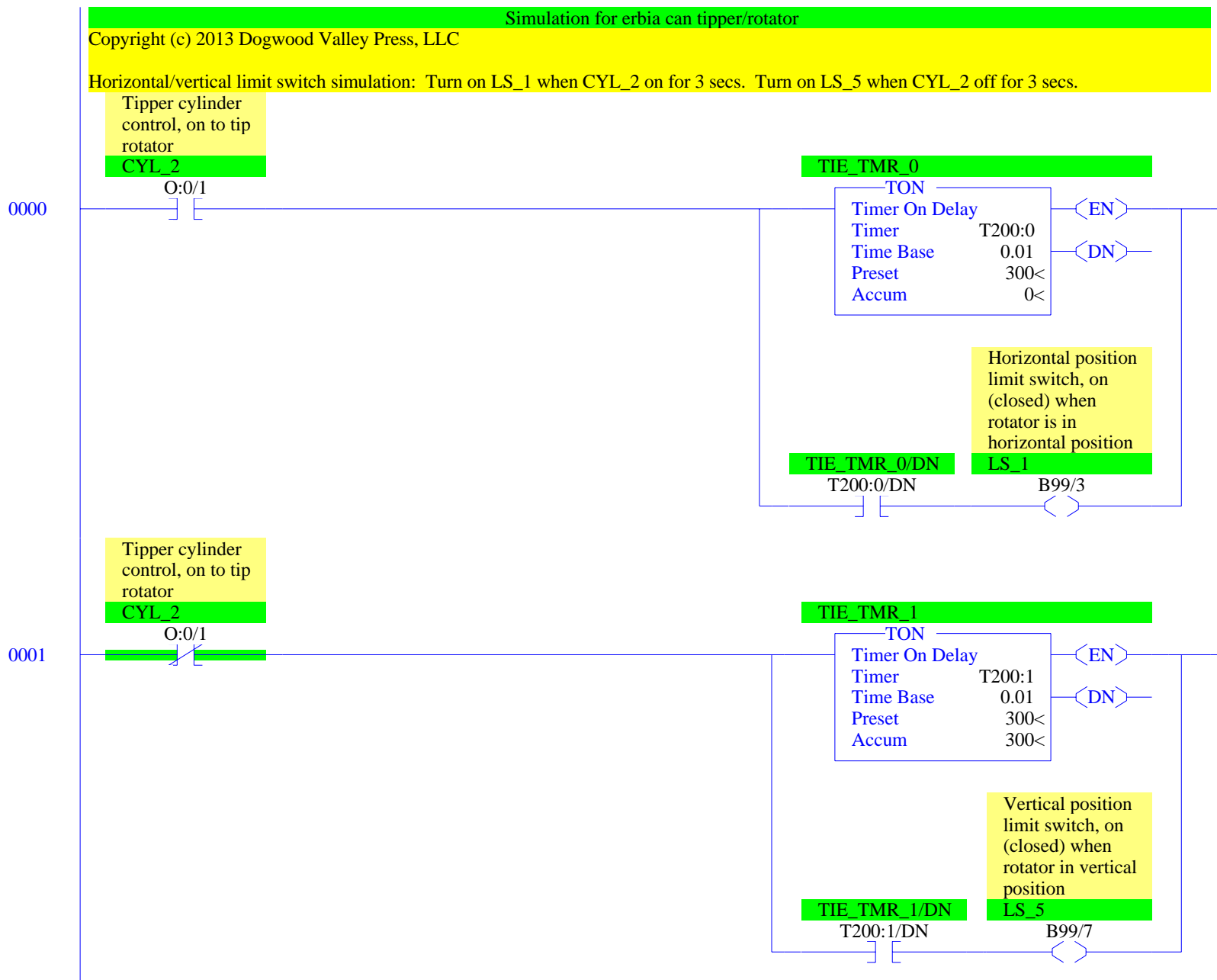
0013











## Tieback for clamped can limit switches

Clamped can limit switch simulation: Turn on LS\_3 when CYL\_1 on for 3 secs. Turn on LS\_2 when CYL\_1 off for 3 secs.

Can holder cylinder  
control, on to clamp  
can into rotator

CYL\_1

O:0/0

TIE\_TMR\_2

TON

Timer On Delay

Timer

T200:2

Time Base

0.01

Preset

300&lt;

Accum

0&lt;

&lt;EN&gt;

&lt;DN&gt;

Holder down limit  
switch, on (closed)  
when can is being  
held in rotator

TIE\_TMR\_2/DN

T200:2/DN

LS\_3

B99/5

Can holder cylinder  
control, on to clamp  
can into rotator

CYL\_1

O:0/0

TIE\_TMR\_3

TON

Timer On Delay

Timer

T200:3

Time Base

0.01

Preset

300&lt;

Accum

300&lt;

&lt;EN&gt;

&lt;DN&gt;

Holder clear limit  
switch, on (closed)  
when holder is clear  
of can

TIE\_TMR\_3/DN

T200:3/DN

LS\_2

B99/4

Switches that change because of CYL\_4 extension are driven based on time that CYL\_4 control is on.

Can pusher cylinder  
control, on to push  
can into and out of  
rotator

CYL\_4

O:0/3

TIE\_TMR\_4

TON

Timer On Delay

Timer

T200:4

Time Base

0.01

Preset

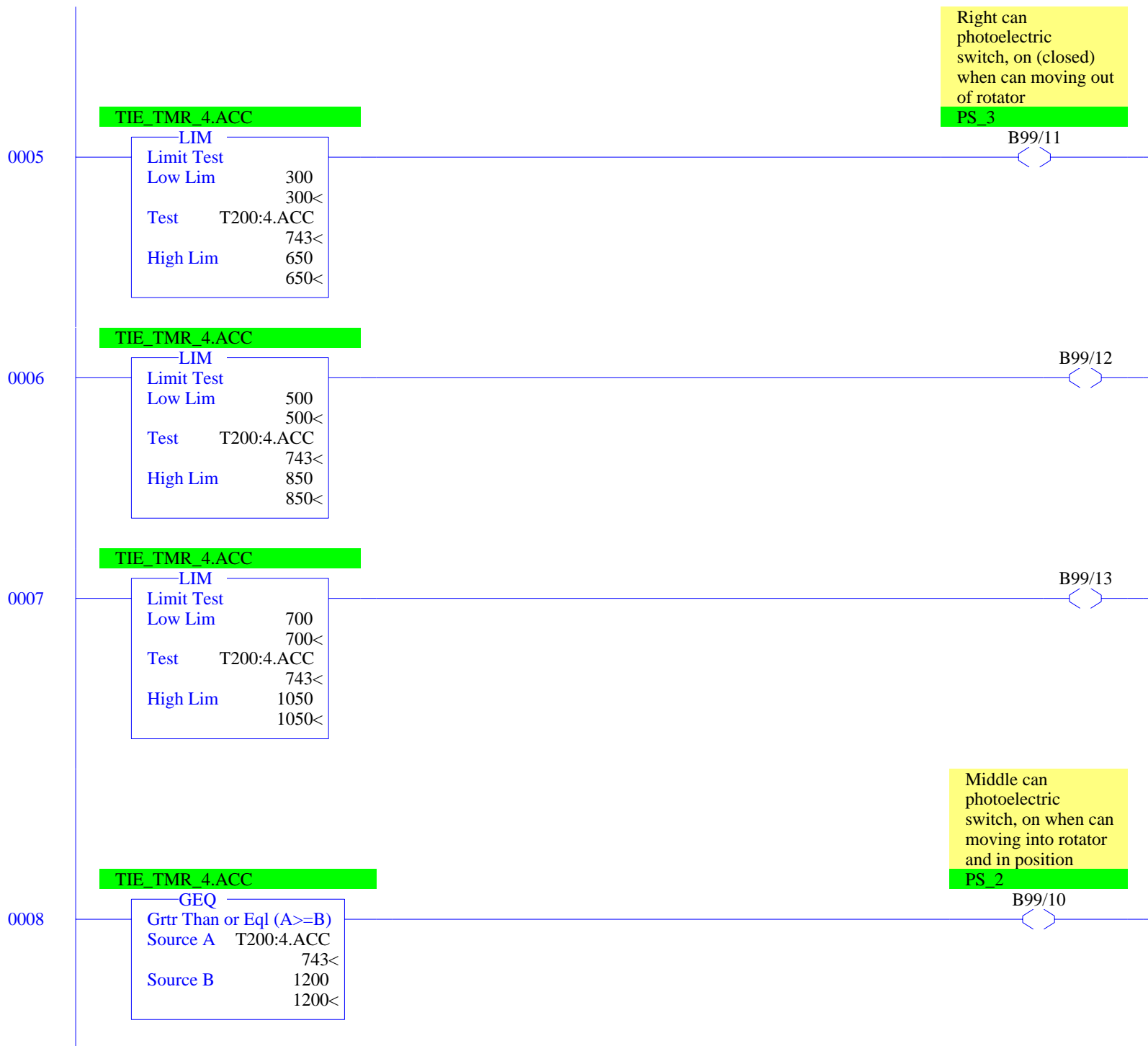
20000&lt;

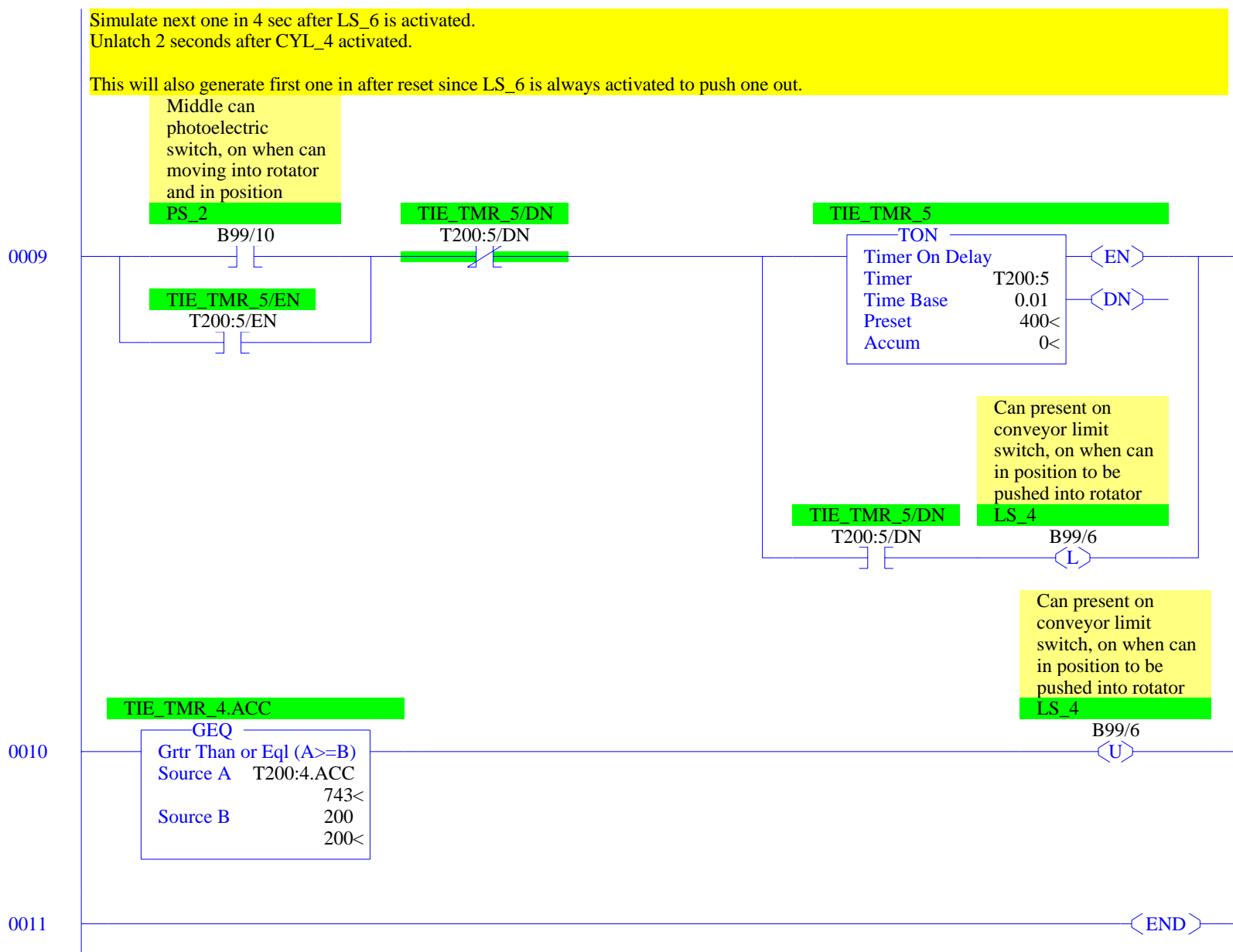
Accum

743&lt;

&lt;EN&gt;

&lt;DN&gt;





## RSLogix 500 Cross Reference Report - Sorted by Address

O:0/0	- {CYL_1} Can holder cylinder control, on to clamp can into rotator OTE - File #2 - 12 XIC - File #100 TIEBACK - 2 XIO - File #100 TIEBACK - 3
O:0/1	- {CYL_2} Tipper cylinder control, on to tip rotator OTE - File #2 - 13 XIC - File #100 TIEBACK - 0 XIO - File #100 TIEBACK - 1
O:0/2	- {CYL_3} Gate cylinder control, on to extend and prevent next can from entering station OTE - File #2 - 14
O:0/3	- {CYL_4} Can pusher cylinder control, on to push can into and out of rotator OTE - File #2 - 15 XIC - File #100 TIEBACK - 4
O:0/4	- {MOTOR_1} Rotation motor control, on to rotate clamped can OTE - File #2 - 16
I:0.0	- MOV - File #99 DUPLIC_INS - 0
B3/0	- {RUN} OTE - File #2 - 0 XIC - File #2 - 0, 1, 2, 4, 5, 6, 7, 8, 9, 15, 16 XIO - File #2 - 11
B3/1	- {INT_RESET} OTE - File #2 - 11 XIC - File #2 - 11, 12, 15 XIO - File #2 - 0
B3/200	- {ENAB_TIE_BACK} Enable tie-back simulation logic XIC - File #2 - 17 XIO - File #2 - 18
T4:0	- {RETRACT_TMR} Time retract of CYL -4 TON - File #2 - 4
T4:0/DN	- XIC - File #2 - 4
T4:1	- {BLEND_TMR} Blend timer, 60 sec RTO - File #2 - 7 RES - File #2 - 7, 11
T4:1/DN	- XIC - File #2 - 7
B20/1	- {STEP_1} OTL - File #2 - 1, 10 OTU - File #2 - 2, 11 XIC - File #2 - 2 XIO - File #2 - 1
B20/2	- {STEP_2} OTL - File #2 - 2 OTU - File #2 - 3, 11 XIC - File #2 - 3, 14, 15 XIO - File #2 - 1
B20/3	- {STEP_3} OTL - File #2 - 3 OTU - File #2 - 4, 11 XIC - File #2 - 4, 14 XIO - File #2 - 1
B20/4	- {STEP_4} OTL - File #2 - 4 OTU - File #2 - 5, 11 XIC - File #2 - 5, 12, 14 XIO - File #2 - 1
B20/5	- {STEP_5} OTL - File #2 - 5 OTU - File #2 - 6, 11 XIC - File #2 - 6, 12, 13, 14 XIO - File #2 - 1
B20/6	- {STEP_6} OTL - File #2 - 6 OTU - File #2 - 7, 11 XIC - File #2 - 7, 12, 13, 14, 16 XIO - File #2 - 1
B20/7	- {STEP_7} OTL - File #2 - 7

## RSLogix 500 Cross Reference Report - Sorted by Address

	OTU - File #2 - 8, 11
	XIC - File #2 - 8, 12, 14
	XIO - File #2 - 1
B20/8	- {STEP_8}
	OTL - File #2 - 8
	OTU - File #2 - 9, 11
	XIC - File #2 - 9, 14
	XIO - File #2 - 1
B20/9	- {STEP_9}
	OTL - File #2 - 9
	OTU - File #2 - 10
	XIC - File #2 - 10, 14, 15
	XIO - File #2 - 1
B99:0	- MOV - File #99 DUPLIC_INS - 0
B99/0	- {START_PB} Start push button, on when starting
	XIC - File #2 - 0
B99/1	- {STOP_PB} Stop push button, off when stopping
	XIC - File #2 - 0
B99/2	- {RESET_PB} Reset push button, on when restoring station to initial state
	XIC - File #2 - 11
B99/3	- {LS_1} Horizontal position limit switch, on (closed) when rotator is in horizontal position
	OTE - File #100 TIEBACK - 0
	XIC - File #2 - 6
	XIO - File #2 - 2
B99/4	- {LS_2} Holder clear limit switch, on (closed) when holder is clear of can
	OTE - File #100 TIEBACK - 3
	XIC - File #2 - 2, 9, 15
	XIO - File #2 - 11
B99/5	- {LS_3} Holder down limit switch, on (closed) when can is being held in rotator
	OTE - File #100 TIEBACK - 2
	XIC - File #2 - 5
B99/6	- {LS_4} Can present on conveyor limit switch, on when can in position to be pushed into rotator
	OTL - File #100 TIEBACK - 9
	OTU - File #100 TIEBACK - 10
	XIC - File #2 - 2
B99/7	- {LS_5} Vertical position limit switch, on (closed) when rotator in vertical position
	OTE - File #100 TIEBACK - 1
	XIC - File #2 - 8, 15
	XIO - File #2 - 11, 12
B99/8	- {LS_6} CYL_4 fully extended limit switch, on when cylinder is fully extended, pushing in
	XIC - File #2 - 10
	XIO - File #2 - 11, 15
B99/9	- {PS_1} Left can photoelectric switch, on (closed) when can moving into rotator
	XIO - File #2 - 2, 3
B99/10	- {PS_2} Middle can photoelectric switch, on when can moving into rotator and in position
	OTE - File #100 TIEBACK - 8
	XIC - File #2 - 3
	File #100 TIEBACK - 9
	XIO - File #2 - 2
B99/11	- {PS_3} Right can photoelectric switch, on (closed) when can moving out of rotator
	OTE - File #100 TIEBACK - 5
	XIO - File #2 - 2
B99/12	- OTE - File #100 TIEBACK - 6
B99/13	- OTE - File #100 TIEBACK - 7
T200:0	- {TIE_TMR_0}
	TON - File #100 TIEBACK - 0
T200:0/DN	- XIC - File #100 TIEBACK - 0
T200:1	- {TIE_TMR_1}
	TON - File #100 TIEBACK - 1
T200:1/DN	- XIC - File #100 TIEBACK - 1
T200:2	- {TIE_TMR_2}
	TON - File #100 TIEBACK - 2
T200:2/DN	- XIC - File #100 TIEBACK - 2
T200:3	- {TIE_TMR_3}
	TON - File #100 TIEBACK - 3
T200:3/DN	- XIC - File #100 TIEBACK - 3

## RSLogix 500 Cross Reference Report - Sorted by Address

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T200:4	- {TIE_TMR_4}
	TON - File #100 TIEBACK - 4
T200:4.ACC	- GEQ - File #100 TIEBACK - 8, 10
	LIM - File #100 TIEBACK - 5, 6, 7
T200:5	- {TIE_TMR_5}
	TON - File #100 TIEBACK - 9
T200:5/DN	- XIC - File #100 TIEBACK - 9
	XIO - File #100 TIEBACK - 9
T200:5/EN	- XIC - File #100 TIEBACK - 9
U:99	- JSR - File #2 - 18
U:100	- {TIEBACK}
	JSR - File #2 - 17