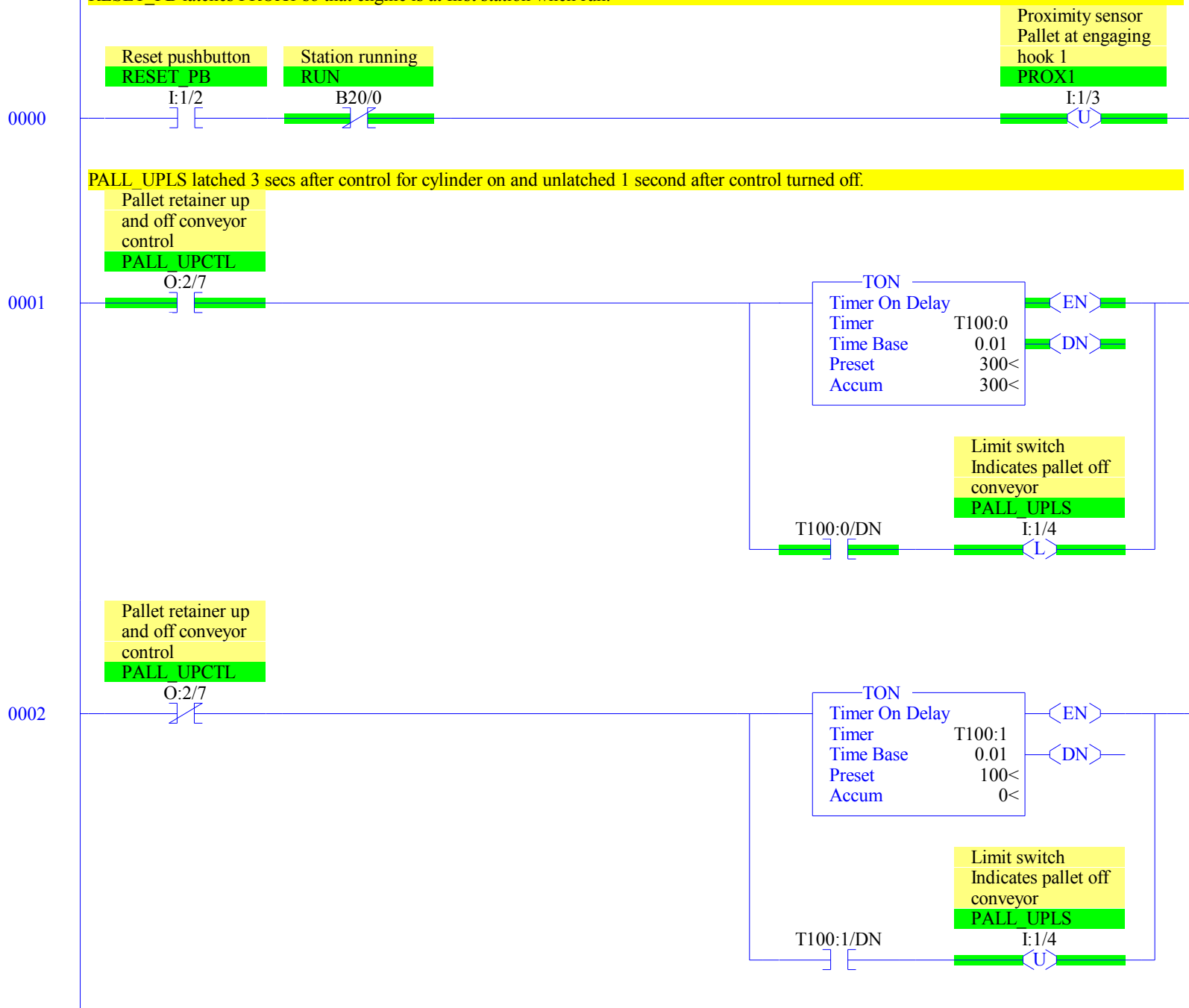


Simulation of engine inverter

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This version uses RESET_PB to generate first engine. Each subsequent engine appears 5 seconds after second engage hook goes back up.

RESET_PB latches PROX1 so that engine is at first station when run.



Up/Down limit switches.

Down LS latched 3 secs after down control active and unlatched immediately when up control active.

Up LS latched 3 secs after up control active and unlatched immediately when down control active.

Rotating mechanism

lower control

ROTR_DOWN

O:2/3

TON
Timer On Delay
Timer T100:2
Time Base 0.01
Preset 300<
Accum 0<

<EN>

<DN>

Rotator down limit
switch

ROTR_DNLS

T100:2/DN

I:1/6

<L>

Rotator up limit
switch

ROTR_UPLS

I:1/5

<U>

Rotating mechanism

raise control

ROTR_UP

O:2/2

TON
Timer On Delay
Timer T100:3
Time Base 0.01
Preset 300<
Accum 0<

<EN>

<DN>

Rotator up limit
switch

ROTR_UPLS

T100:3/DN

I:1/5

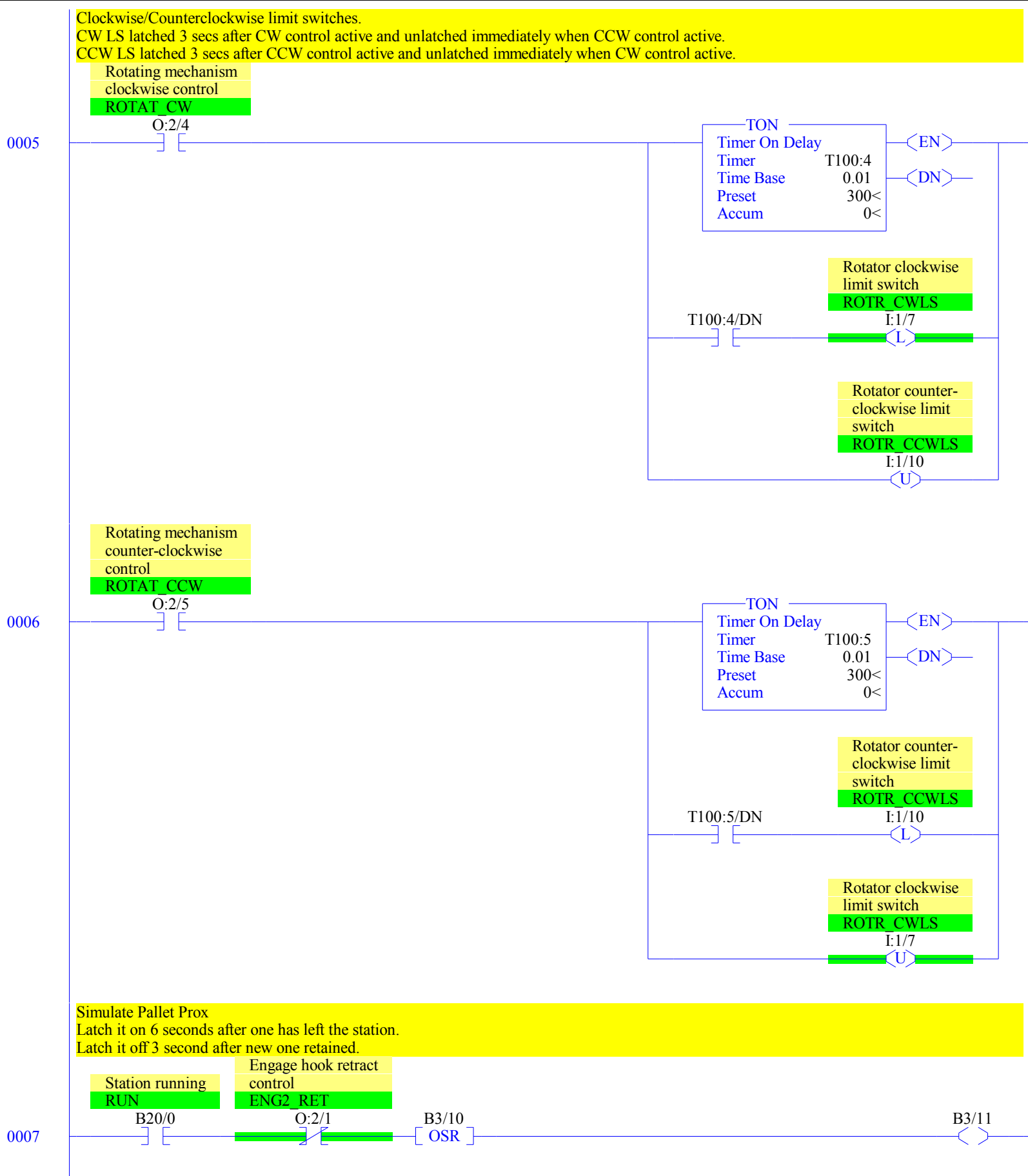
<L>

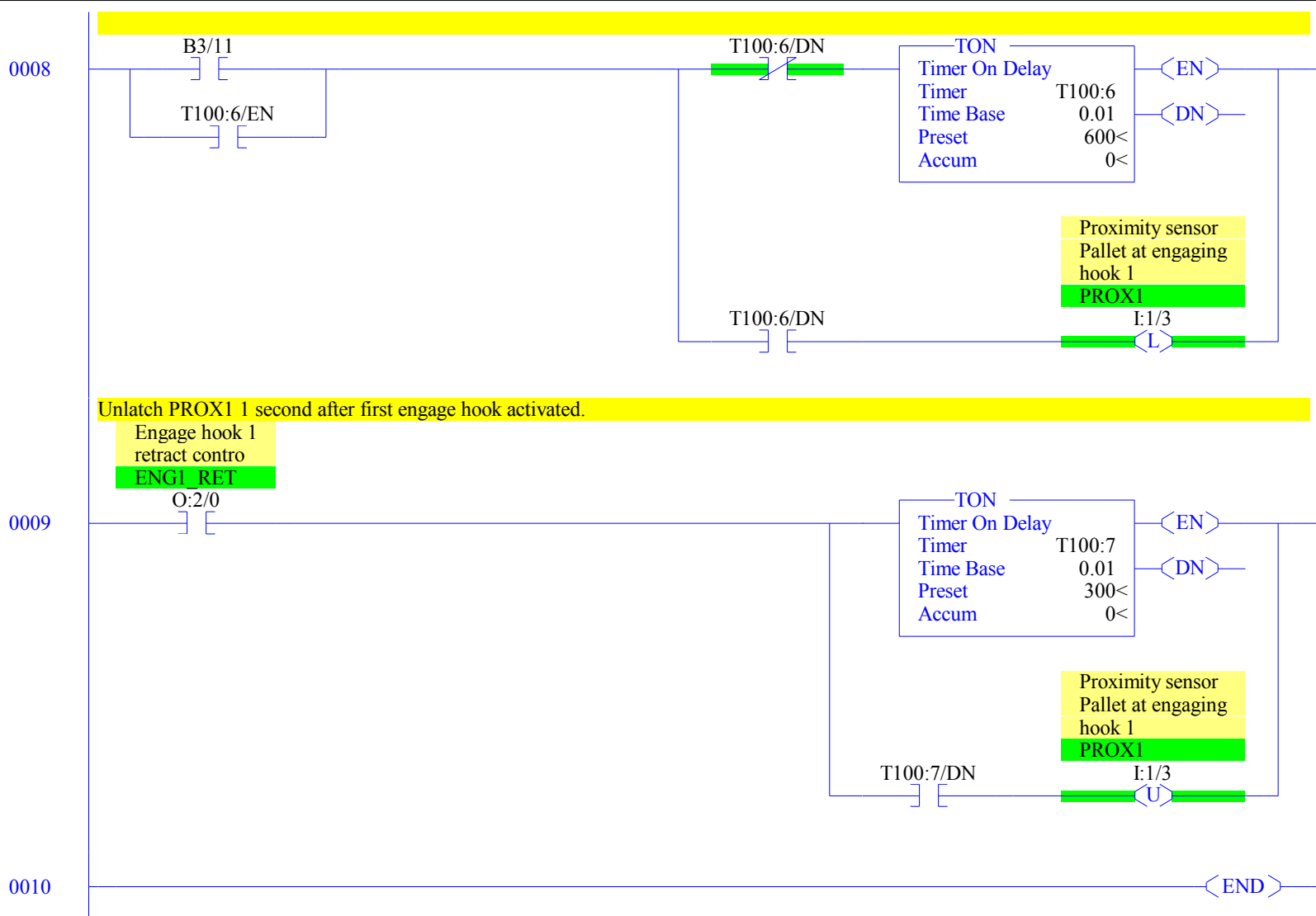
Rotator down limit
switch

ROTR_DNLS

I:1/6

<U>





RSLogix 500 Cross Reference Report - Sorted by Address

O:2/0	- {ENG1_RET} Engage hook 1 retract contro OTE - File #2 - 2 XIC - File #100 SIMULATION - 9
O:2/1	- {ENG2_RET} Engage hook retract control OTE - File #2 - 5 XIC - File #2 - 5 XIO - File #100 SIMULATION - 7
O:2/2	- {ROTR_UP} Rotating mechanism raise control OTE - File #2 - 15 XIC - File #100 SIMULATION - 4
O:2/3	- {ROTR_DOWN} Rotating mechanism lower control OTE - File #2 - 12 XIC - File #100 SIMULATION - 3
O:2/4	- {ROTAT_CW} Rotating mechanism clockwise control OTE - File #2 - 23 XIC - File #100 SIMULATION - 5 XIO - File #2 - 24
O:2/5	- {ROTAT_CCW} Rotating mechanism counter-clockwise control OTE - File #2 - 26 XIC - File #100 SIMULATION - 6 XIO - File #2 - 22
O:2/6	- {GRIP_CLOS} Gripper close control OTL - File #2 - 16 OTU - File #2 - 18 XIC - File #2 - 19 XIO - File #2 - 20
O:2/7	- {PALL_UPCTL} Pallet retainer up and off conveyor control OTL - File #2 - 6 OTU - File #2 - 8 XIC - File #100 SIMULATION - 1 XIO - File #100 SIMULATION - 2
I:1/0	- {START_PB} Start pushbutton XIC - File #2 - 0
I:1/1	- {STOP_PB} Stop pushbutton XIC - File #2 - 0
I:1/2	- {RESET_PB} Reset pushbutton XIC - File #2 - 27 File #100 SIMULATION - 0
I:1/3	- {PROX1} Proximity sensor Pallet at engaging hook 1 OTL - File #100 SIMULATION - 8 OTU - File #100 SIMULATION - 0, 9 XIC - File #2 - 1
I:1/4	- {PALL_UPLS} Limit switch Indicates pallet off conveyor OTL - File #100 SIMULATION - 1 OTU - File #100 SIMULATION - 2 XIC - File #2 - 9 XIO - File #2 - 3, 4
I:1/5	- {ROTR_UPLS} Rotator up limit switch OTL - File #100 SIMULATION - 4 OTU - File #100 SIMULATION - 3 XIC - File #2 - 21, 26 XIO - File #2 - 14, 15, 27
I:1/6	- {ROTR_DNLS} Rotator down limit switch OTL - File #100 SIMULATION - 3 OTU - File #100 SIMULATION - 4 XIC - File #2 - 16, 17 XIO - File #2 - 12
I:1/7	- {ROTR_CWLS} Rotator clockwise limit switch OTL - File #100 SIMULATION - 5 OTU - File #100 SIMULATION - 6 XIC - File #2 - 10, 17, 24 XIO - File #2 - 23
I:1/10	- {ROTR_CCWLS} Rotator counter- clockwise limit switch OTL - File #100 SIMULATION - 6 OTU - File #100 SIMULATION - 5 XIC - File #2 - 3, 5, 7, 11, 16, 22

RSLogix 500 Cross Reference Report - Sorted by Address

	XIO - File #2 - 25, 26, 27
B3/4	- OTL - File #2 - 6
B3/10	- OSR - File #100 SIMULATION - 7
B3/11	- OTE - File #100 SIMULATION - 7
	XIC - File #100 SIMULATION - 8
B3/16	- {PALLU_NBIT}
	OSR - File #2 - 4
B3/17	- {PALL_UPLS_NTRANS}
	OTE - File #2 - 4
	XIC - File #2 - 5
B3/18	- {ENG1T_PBIT}
	OSR - File #2 - 6
B3/19	- {DROPE_PBIT}
	OSR - File #2 - 7
B3/20	- {PALL_UPCTL_TRANS}
	OTE - File #2 - 7
	XIC - File #2 - 8
B3/21	- {PALLU_PBIT}
	OSR - File #2 - 9
B3/22	- {PALL_UPLS_TRANS}
	OTE - File #2 - 9
	XIC - File #2 - 11
B3/23	- {ROTRC_PBIT}
	OSR - File #2 - 10
B3/24	- {ROTR_CWLS_TRANS}
	OTE - File #2 - 10
	XIC - File #2 - 11
B3/25	- {MOVE_DN_TRANS}
	OTE - File #2 - 11
	XIC - File #2 - 12
B3/26	- {INT_ROT_R DOWN}
	OTE - File #2 - 12
	XIC - File #2 - 12
B3/27	- {MOVUP_PBIT}
	OSR - File #2 - 13
B3/28	- {MOVE_UP_TRANS}
	OTE - File #2 - 13
	XIC - File #2 - 14
B3/29	- {INT_ROT_R UP}
	OTE - File #2 - 14
	XIC - File #2 - 14, 15
B3/30	- {GRIPC_PBIT}
	OSR - File #2 - 16
B3/31	- {GRIPO_PBIT}
	OSR - File #2 - 17
B3/32	- {OPEN_GRIP_TRANS}
	OTE - File #2 - 17
	XIC - File #2 - 18
B3/33	- {ROTU_PBIT}
	OSR - File #2 - 21
B3/34	- {ROTR_UPLS_TRANS}
	OTE - File #2 - 21
	XIC - File #2 - 22, 24
B3/35	- {ROT_CW_TRANS}
	OTE - File #2 - 22
	XIC - File #2 - 23
B3/36	- {INT_ROT_CW}
	OTE - File #2 - 23
	XIC - File #2 - 23
B3/37	- {ROT_CCW_TRANS}
	OTE - File #2 - 24
	XIC - File #2 - 25
B3/38	- {INT_ROT_CCW}
	OTE - File #2 - 25
	XIC - File #2 - 25, 26
T4:1	- {ENG1_TMR} Hook 1 engage timer

RSLogix 500 Cross Reference Report - Sorted by Address

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T4:1/DN      TON - File #2 - 1
              - XIC - File #2 - 6
              XIO - File #2 - 2
T4:1/EN      - XIC - File #2 - 2
T4:2         - {ENG2_TMR} Hook 2 disengage timer
              TON - File #2 - 3
T4:2/DN      - XIC - File #2 - 1
              XIO - File #2 - 5
T4:2/EN      - XIC - File #2 - 3
T4:3         - {CLMP_TMR} Clamp timer
              TON - File #2 - 19
T4:3/DN      - XIC - File #2 - 13
T4:4         - {UNCLMP TMR} Unclamp timer
              TON - File #2 - 20
T4:4/DN      - XIC - File #2 - 13
T4:5         - {RUNCLMP_TMR} Reset unclamp timer
              TON - File #2 - 28
T4:5/DN      - XIC - File #2 - 15
              XIO - File #2 - 27
B20/0        - {RUN} Station running
              OTE - File #2 - 0
              XIC - File #2 - 0, 1, 3, 5, 7, 11, 12, 13, 15, 16, 17, 22, 23
                  24, 26
                  File #100 SIMULATION - 7
              XIO - File #2 - 27
                  File #100 SIMULATION - 0
B20/40      - {INT_RESET} Reset in progress
              OTE - File #2 - 27
              XIC - File #2 - 8, 15, 18, 26, 27, 28
              XIO - File #2 - 0, 3, 5
T100:0       - TON - File #100 SIMULATION - 1
T100:0/DN    - XIC - File #100 SIMULATION - 1
T100:1       - TON - File #100 SIMULATION - 2
T100:1/DN    - XIC - File #100 SIMULATION - 2
T100:2       - TON - File #100 SIMULATION - 3
T100:2/DN    - XIC - File #100 SIMULATION - 3
T100:3       - TON - File #100 SIMULATION - 4
T100:3/DN    - XIC - File #100 SIMULATION - 4
T100:4       - TON - File #100 SIMULATION - 5
T100:4/DN    - XIC - File #100 SIMULATION - 5
T100:5       - TON - File #100 SIMULATION - 6
T100:5/DN    - XIC - File #100 SIMULATION - 6
T100:6       - TON - File #100 SIMULATION - 8
T100:6/DN    - XIC - File #100 SIMULATION - 8
              XIO - File #100 SIMULATION - 8
T100:6/EN    - XIC - File #100 SIMULATION - 8
T100:7       - TON - File #100 SIMULATION - 9
T100:7/DN    - XIC - File #100 SIMULATION - 9
U:100        - JSR - File #2 - 29

```