

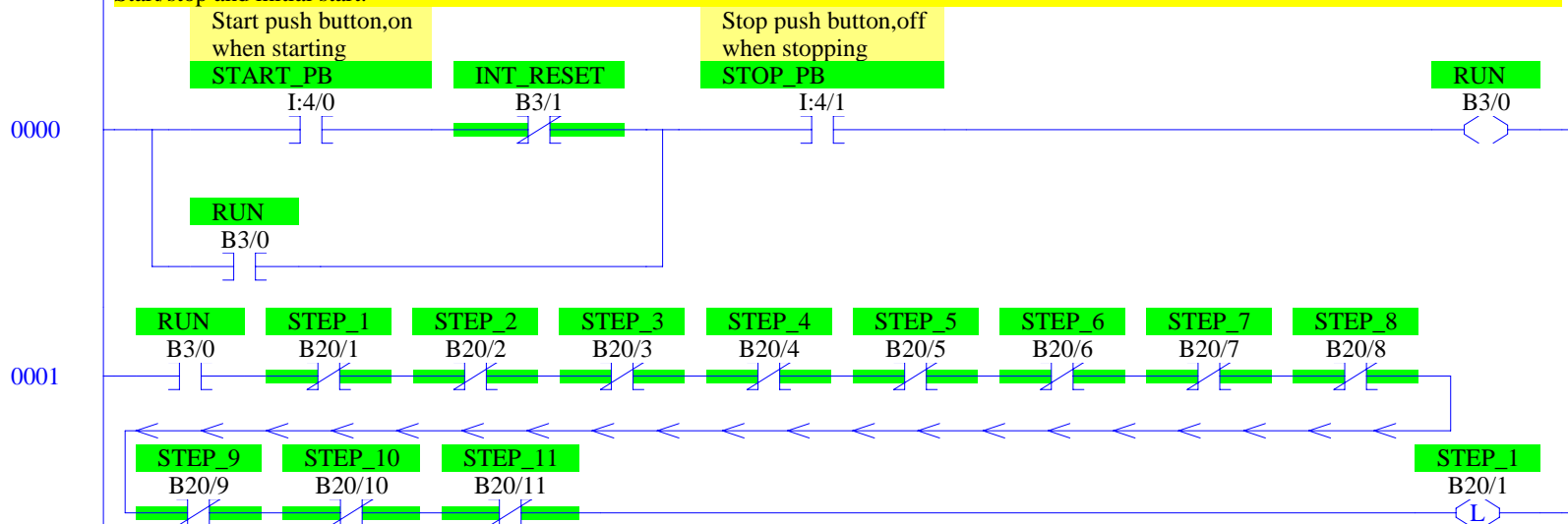
## Bolt Driving Station Control

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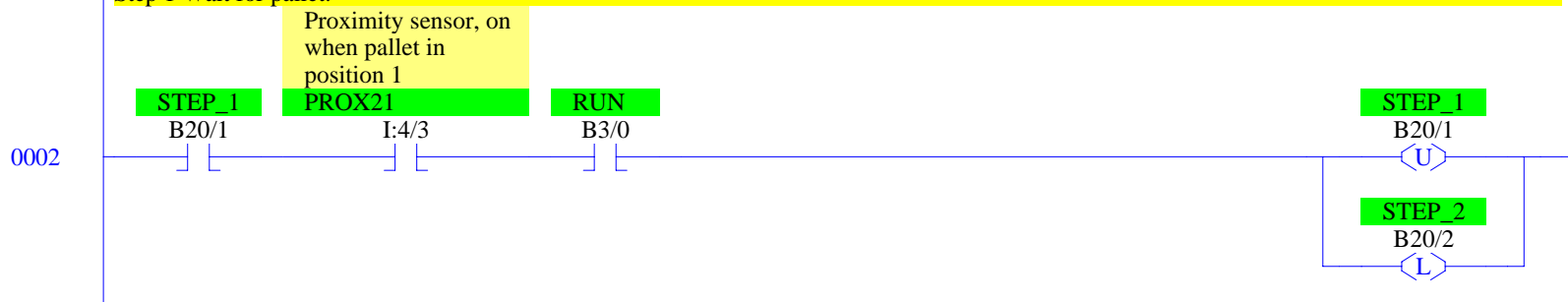
Additional internal memory:

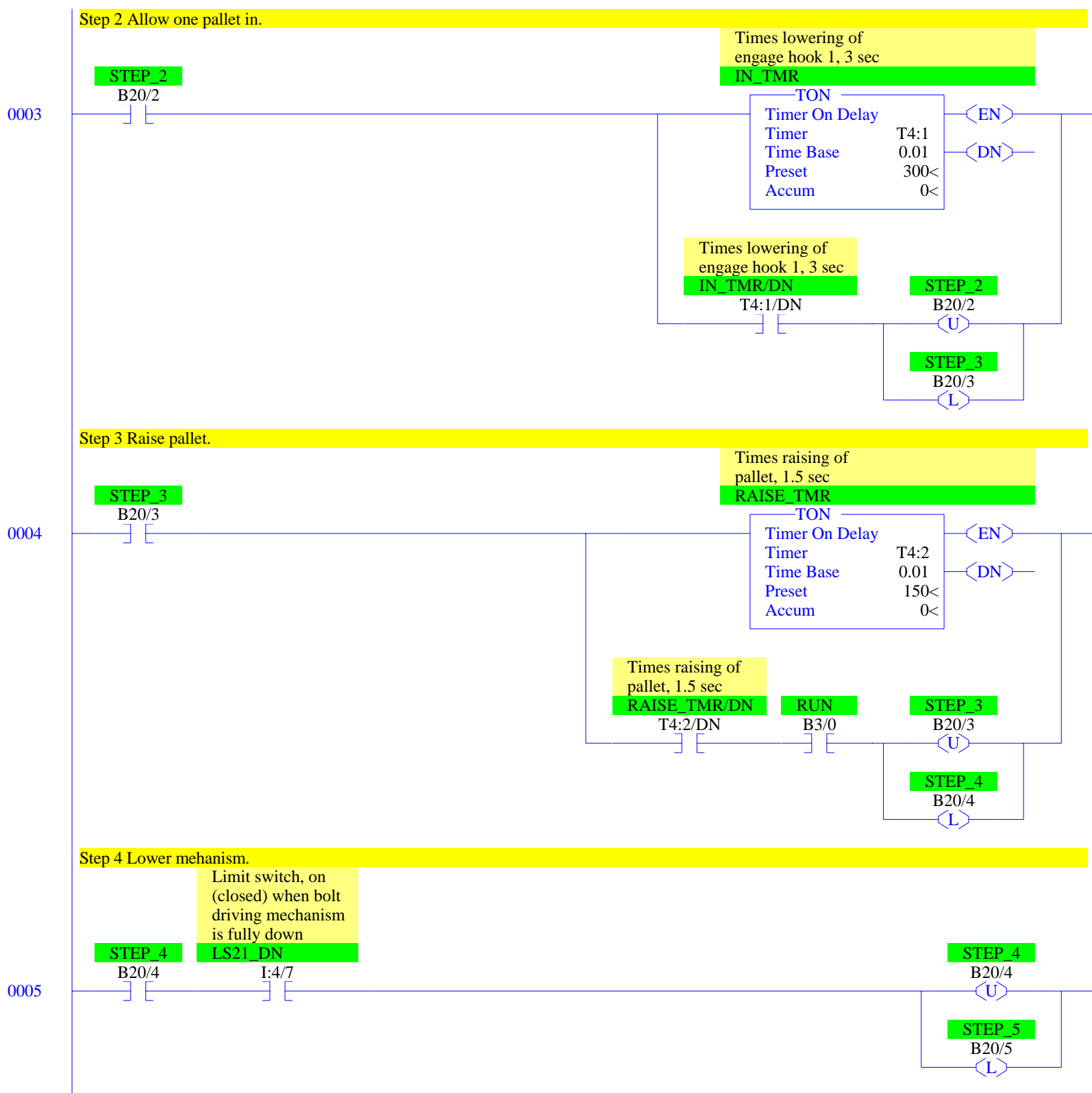
Symbol	Address	
RUN	B3/0	On while station running
INT_RESET	B3/1	Internal reset
STEP_1 to STEP_11	B20/1 to B20/11	Step-in-progress bits
IN_TMR	T4:1	Times engage cyl for bringing in pallet
RAISE_TMR	T4:2	Times raise of pallet
PUSH_TMR	T4:3	Times push of bolts
MOTOR_TMR	T4:4	Times air motor rotation
LOWER_TMR	T4:5	Times lower of pallet
OUT_TMR	T4:6	Times engage cyl for allowing out pallet

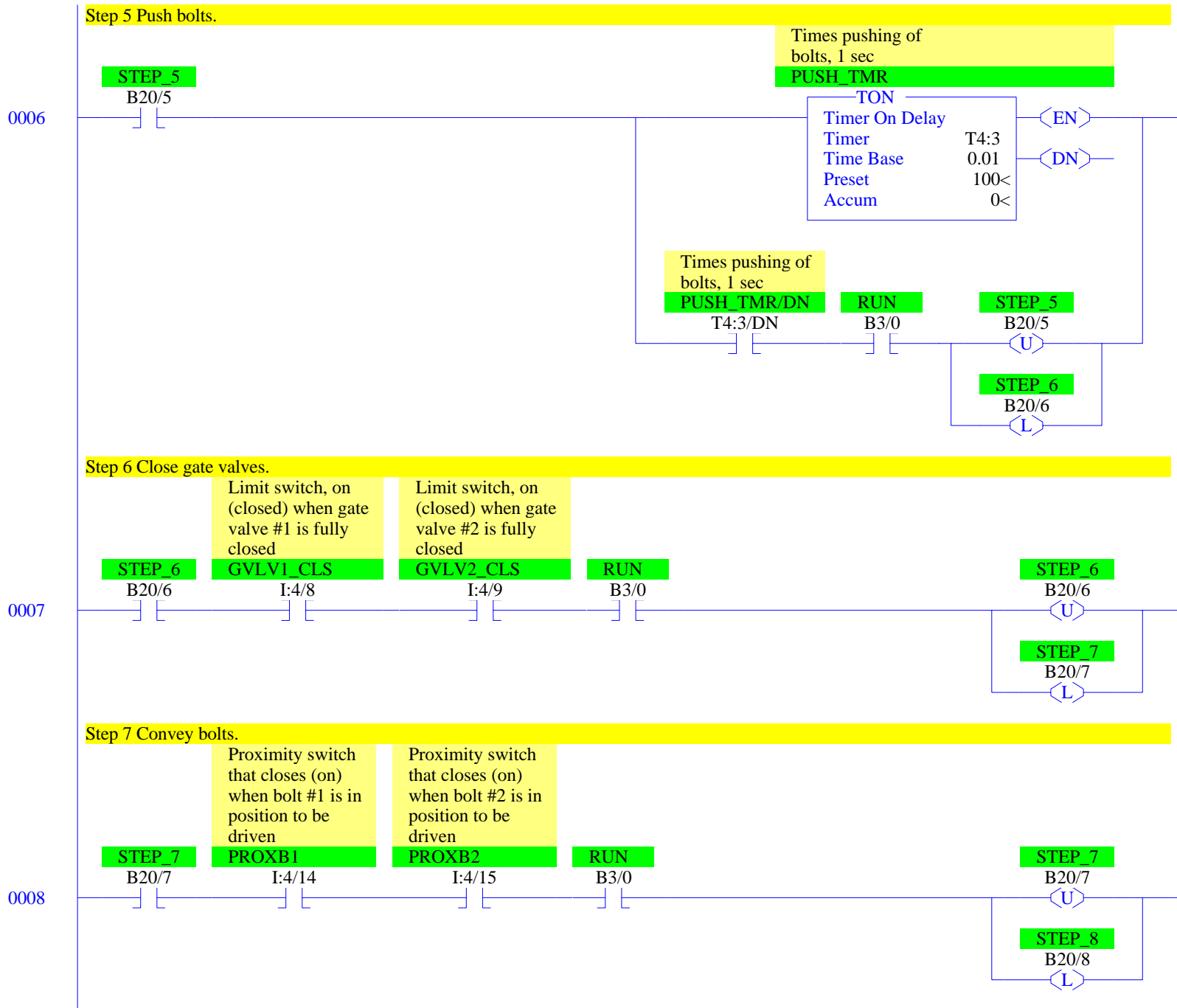
Start/stop and initial start.

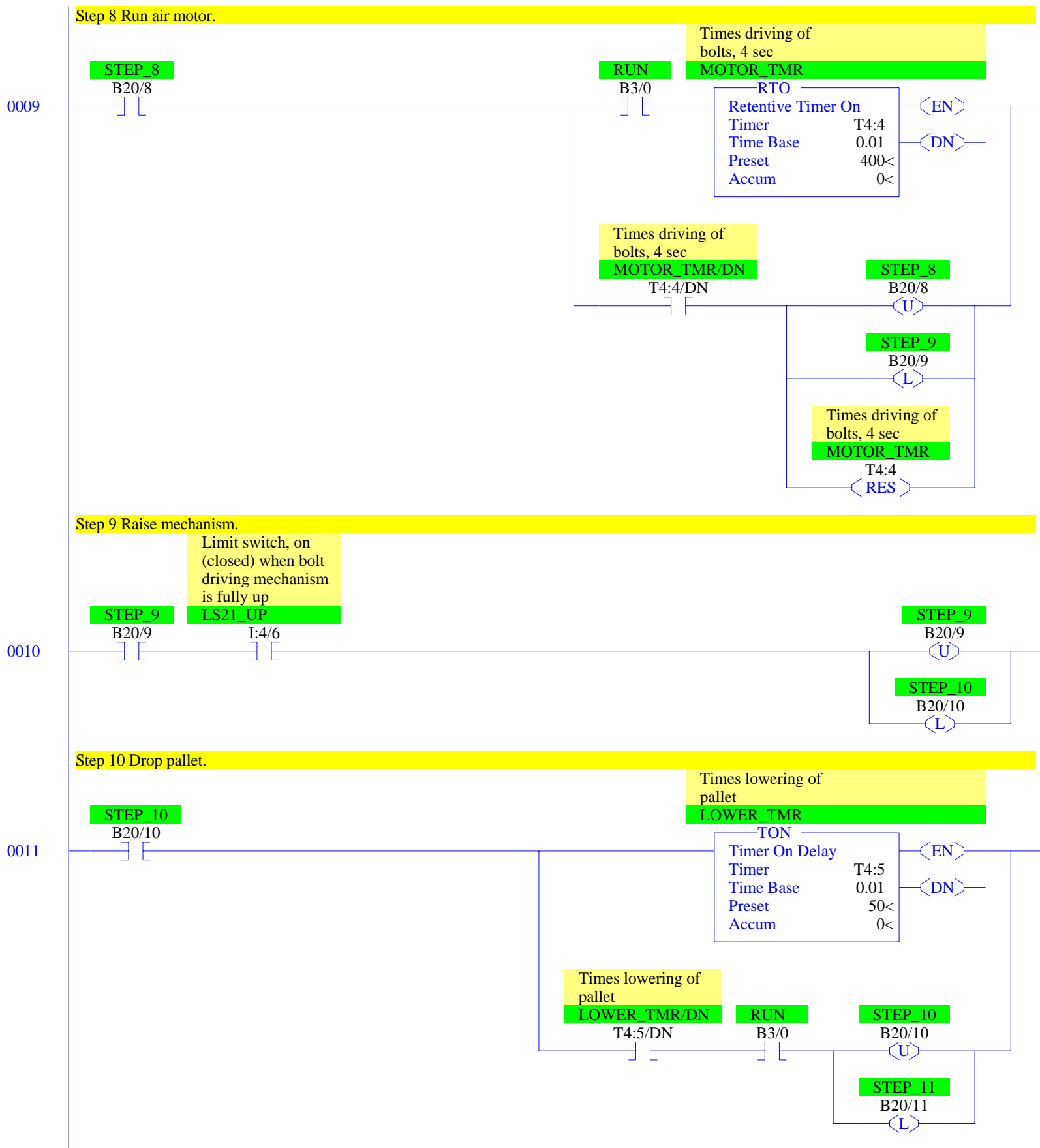


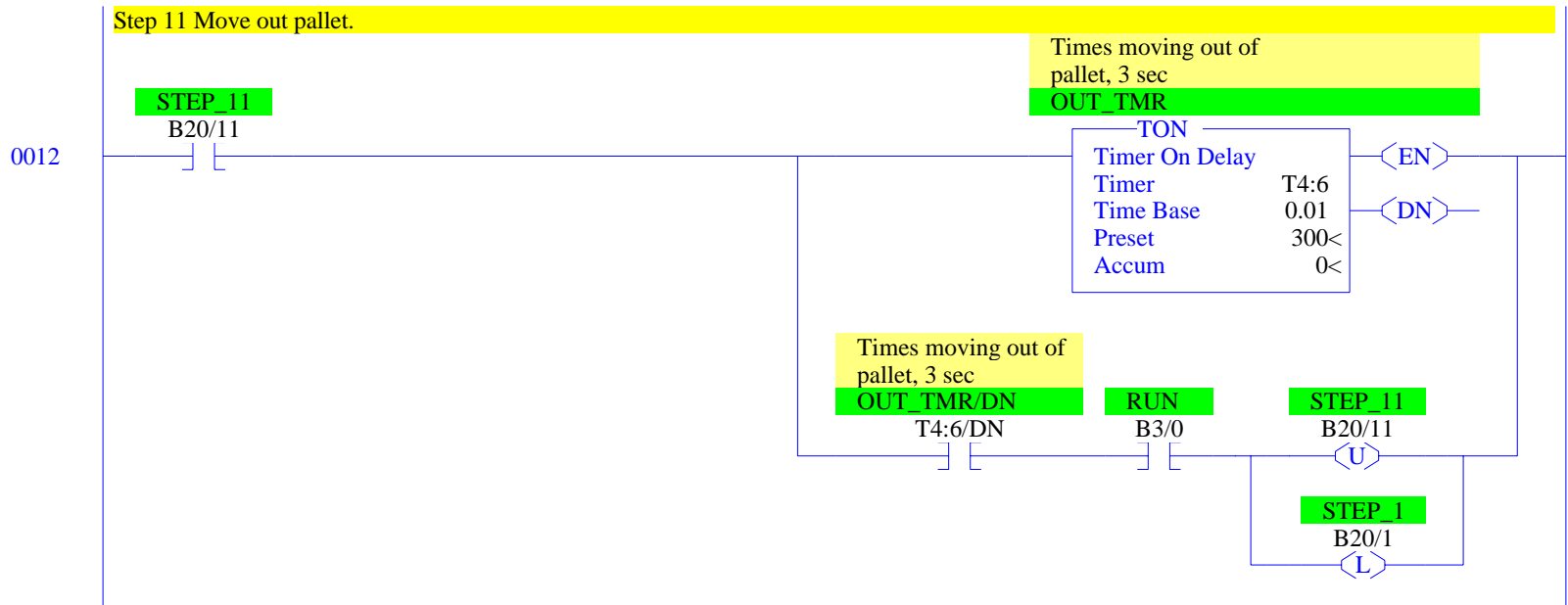
Step 1 Wait for pallet.



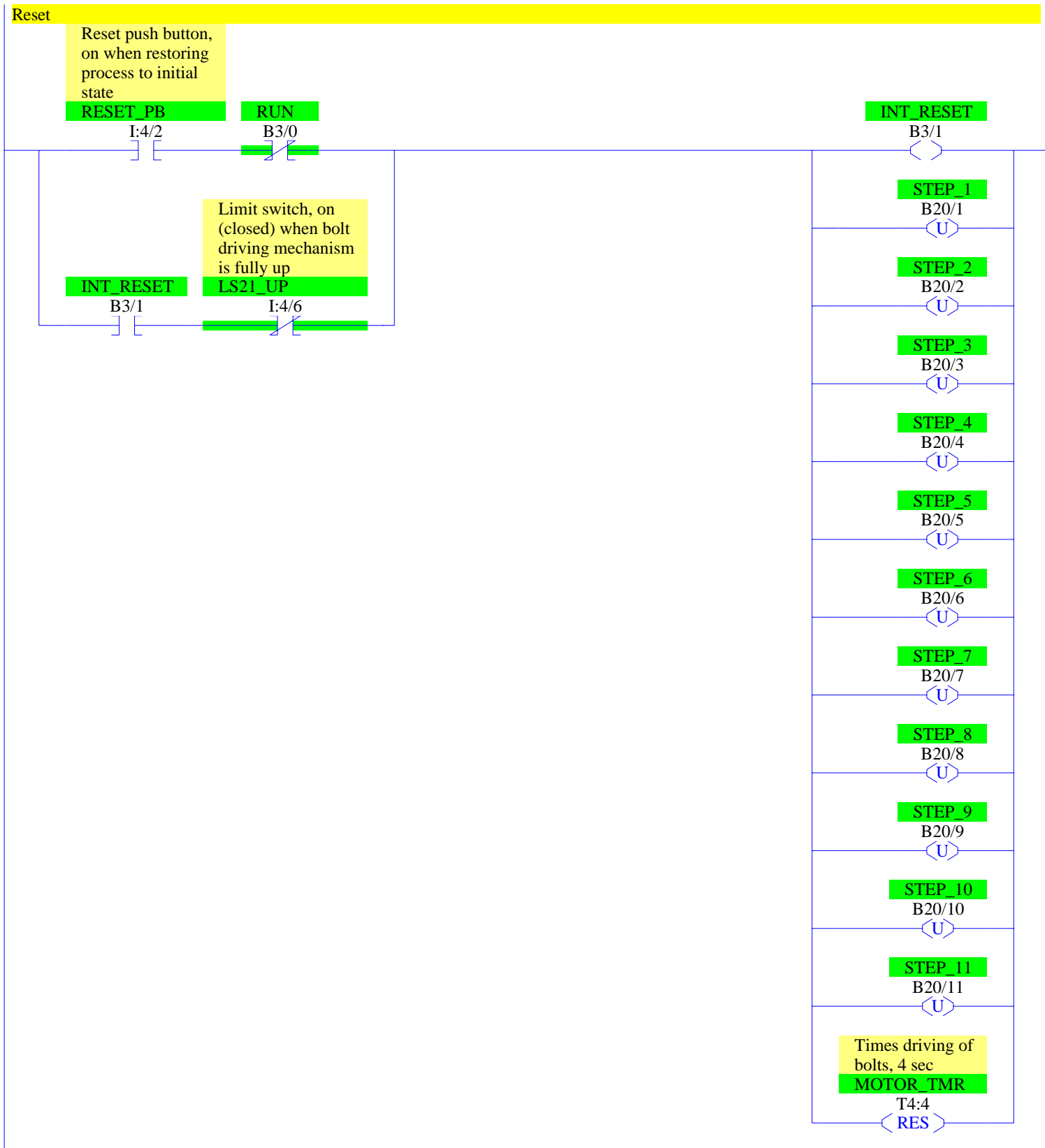








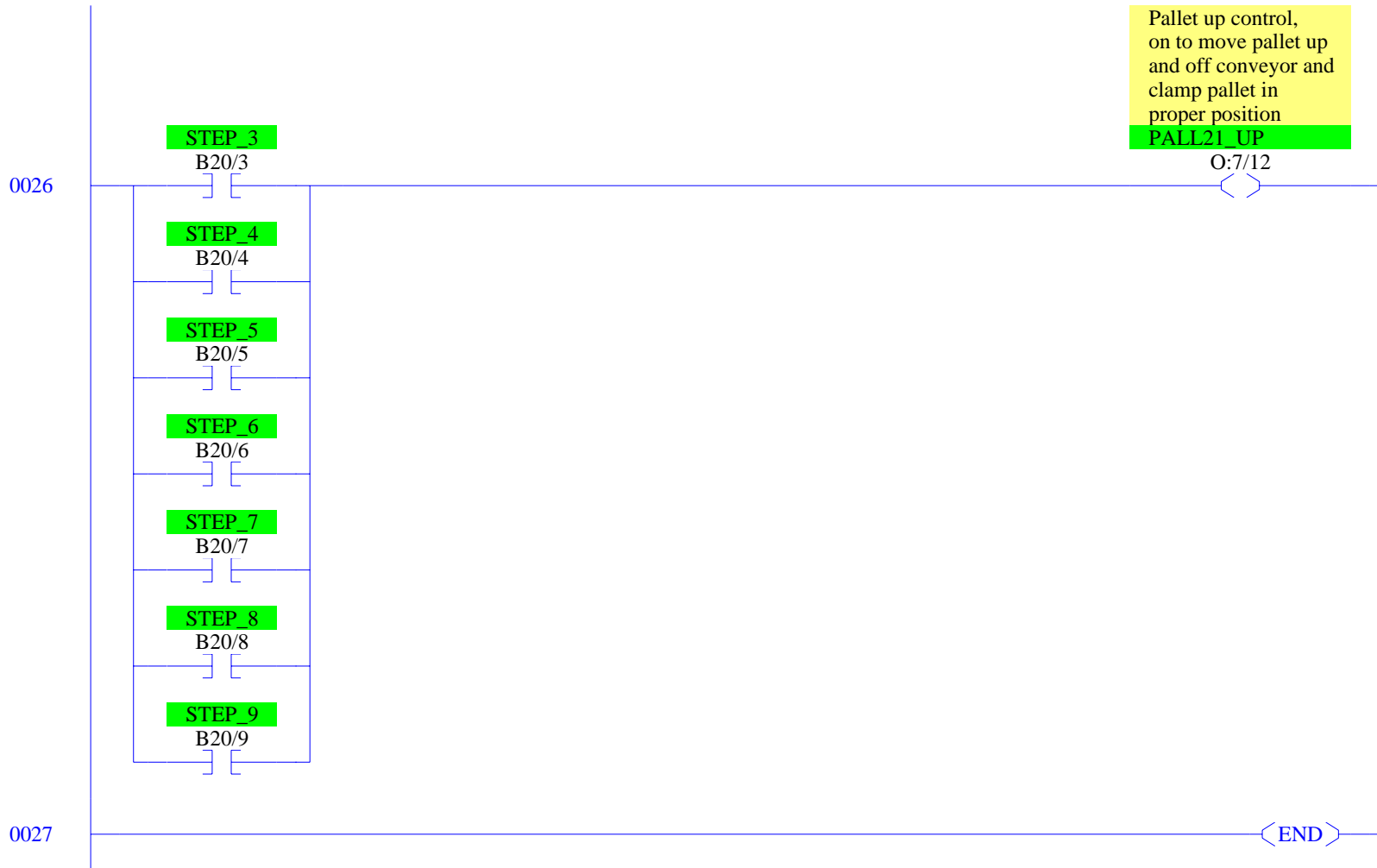
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## RSLogix 500 Cross Reference Report - Sorted by Address

O:6/0	- {ENGAGE_21_CYL} Engage hook 1 control, on to lower hook, off raises hook OTE - File #2 - 14
O:6/1	- {ENGAGE_22_CYL} Engage hook 2 control, on to lower hook, off raises hook OTE - File #2 - 15
O:6/2	- {HEAD21_UP} Bolt driving mechanism raise control, on to raise OTE - File #2 - 16
O:6/3	- {HEAD21_DOWN} Bolt driving mechanism lower control, on to lower OTE - File #2 - 17
O:6/4	- {PBOLT1_CYL} Pushes bolt #1 into pneumatic tube, on extends, off retracts OTE - File #2 - 18
O:6/5	- {PBOLT2_CYL} Pushes bolt #2 into pneumatic tube, on extends, off retracts OTE - File #2 - 19
O:6/10	- {GVLV1} Closes gate valve #1 to seal pneumatic tube, on to close, off to open OTE - File #2 - 20
O:6/11	- {GVLV2} Closes gate valve #2 to seal pneumatic tube, on to close, off to open OTE - File #2 - 21
O:7/0	- {CVLV1} Opens convey valve #1 to convey bolt #1 to driver, on to open valve, off to c OTE - File #2 - 22
O:7/1	- {CVLV2} Opens convey valve #2 to convey bolt #2 to driver, on to open valve, off to c OTE - File #2 - 23
O:7/6	- {AMOTOR1} Opens valve to air motor #1 to drive bolt #1, on to roatate bolt, off to s OTE - File #2 - 24
O:7/7	- {AMOTOR2} Opens valve to air motor #2 to drive bolt #2, on to roatate bolt, off to s OTE - File #2 - 25
O:7/12	- {PALL21_UP} Pallet up control, on to move pallet up and off conveyor and clamp pallet OTE - File #2 - 26
I:4/0	- {START_PB} Start push button,on when starting XIC - File #2 - 0
I:4/1	- {STOP_PB} Stop push button,off when stopping XIC - File #2 - 0
I:4/2	- {RESET_PB} Reset push button, on when restoring process to initial state XIC - File #2 - 13
I:4/3	- {PROX21} Proximity sensor, on when pallet in position 1 XIC - File #2 - 2
I:4/6	- {LS21_UP} Limit switch, on (closed) when bolt driving mechanism is fully up XIC - File #2 - 10 XIO - File #2 - 13, 16
I:4/7	- {LS21_DN} Limit switch, on (closed) when bolt driving mechanism is fully down XIC - File #2 - 5
I:4/8	- {GVLV1_CLS} Limit switch, on (closed) when gate valve #1 is fully closed XIC - File #2 - 7
I:4/9	- {GVLV2_CLS} Limit switch, on (closed) when gate valve #2 is fully closed XIC - File #2 - 7
I:4/14	- {PROXB1} Proximity switch that closes (on) when bolt #1 is in position to be driven XIC - File #2 - 8
I:4/15	- {PROXB2} Proximity switch that closes (on) when bolt #2 is in position to be driven XIC - File #2 - 8
B3/0	- {RUN} OTE - File #2 - 0 XIC - File #2 - 0, 1, 2, 4, 6, 7, 8, 9, 11, 12, 16, 17, 24, 25 XIO - File #2 - 13
B3/1	- {INT_RESET} OTE - File #2 - 13 XIC - File #2 - 13, 16 XIO - File #2 - 0
T4:1	- {IN_TMR} Times lowering of engage hook 1, 3 sec TON - File #2 - 3
T4:1/DN	- XIC - File #2 - 3
T4:2	- {RAISE_TMR} Times raising of pallet, 1.5 sec TON - File #2 - 4
T4:2/DN	- XIC - File #2 - 4
T4:3	- {PUSH_TMR} Times pushing of bolts, 1 sec TON - File #2 - 6
T4:3/DN	- XIC - File #2 - 6
T4:4	- {MOTOR_TMR} Times driving of bolts, 4 sec RTO - File #2 - 9

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	RES - File #2 - 9, 13
T4:4/DN	- XIC - File #2 - 9
T4:5	- {LOWER_TMR} Times lowering of pallet
	TON - File #2 - 11
T4:5/DN	- XIC - File #2 - 11
T4:6	- {OUT_TMR} Times moving out of pallet, 3 sec
	TON - File #2 - 12
T4:6/DN	- XIC - File #2 - 12
B20/1	- {STEP_1}
	OTL - File #2 - 1, 12
	OTU - File #2 - 2, 13
	XIC - File #2 - 2, 14
	XIO - File #2 - 1
B20/2	- {STEP_2}
	OTL - File #2 - 2
	OTU - File #2 - 3, 13
	XIC - File #2 - 3
	XIO - File #2 - 1
B20/3	- {STEP_3}
	OTL - File #2 - 3
	OTU - File #2 - 4, 13
	XIC - File #2 - 4, 26
	XIO - File #2 - 1
B20/4	- {STEP_4}
	OTL - File #2 - 4
	OTU - File #2 - 5, 13
	XIC - File #2 - 5, 17, 26
	XIO - File #2 - 1
B20/5	- {STEP_5}
	OTL - File #2 - 5
	OTU - File #2 - 6, 13
	XIC - File #2 - 6, 18, 19, 26
	XIO - File #2 - 1
B20/6	- {STEP_6}
	OTL - File #2 - 6
	OTU - File #2 - 7, 13
	XIC - File #2 - 7, 20, 21, 26
	XIO - File #2 - 1
B20/7	- {STEP_7}
	OTL - File #2 - 7
	OTU - File #2 - 8, 13
	XIC - File #2 - 8, 20, 21, 22, 23, 26
	XIO - File #2 - 1
B20/8	- {STEP_8}
	OTL - File #2 - 8
	OTU - File #2 - 9, 13
	XIC - File #2 - 9, 24, 25, 26
	XIO - File #2 - 1
B20/9	- {STEP_9}
	OTL - File #2 - 9
	OTU - File #2 - 10, 13
	XIC - File #2 - 10, 16, 26
	XIO - File #2 - 1
B20/10	- {STEP_10}
	OTL - File #2 - 10
	OTU - File #2 - 11, 13
	XIC - File #2 - 11
	XIO - File #2 - 1
B20/11	- {STEP_11}
	OTL - File #2 - 11
	OTU - File #2 - 12, 13
	XIC - File #2 - 12, 15
	XIO - File #2 - 1