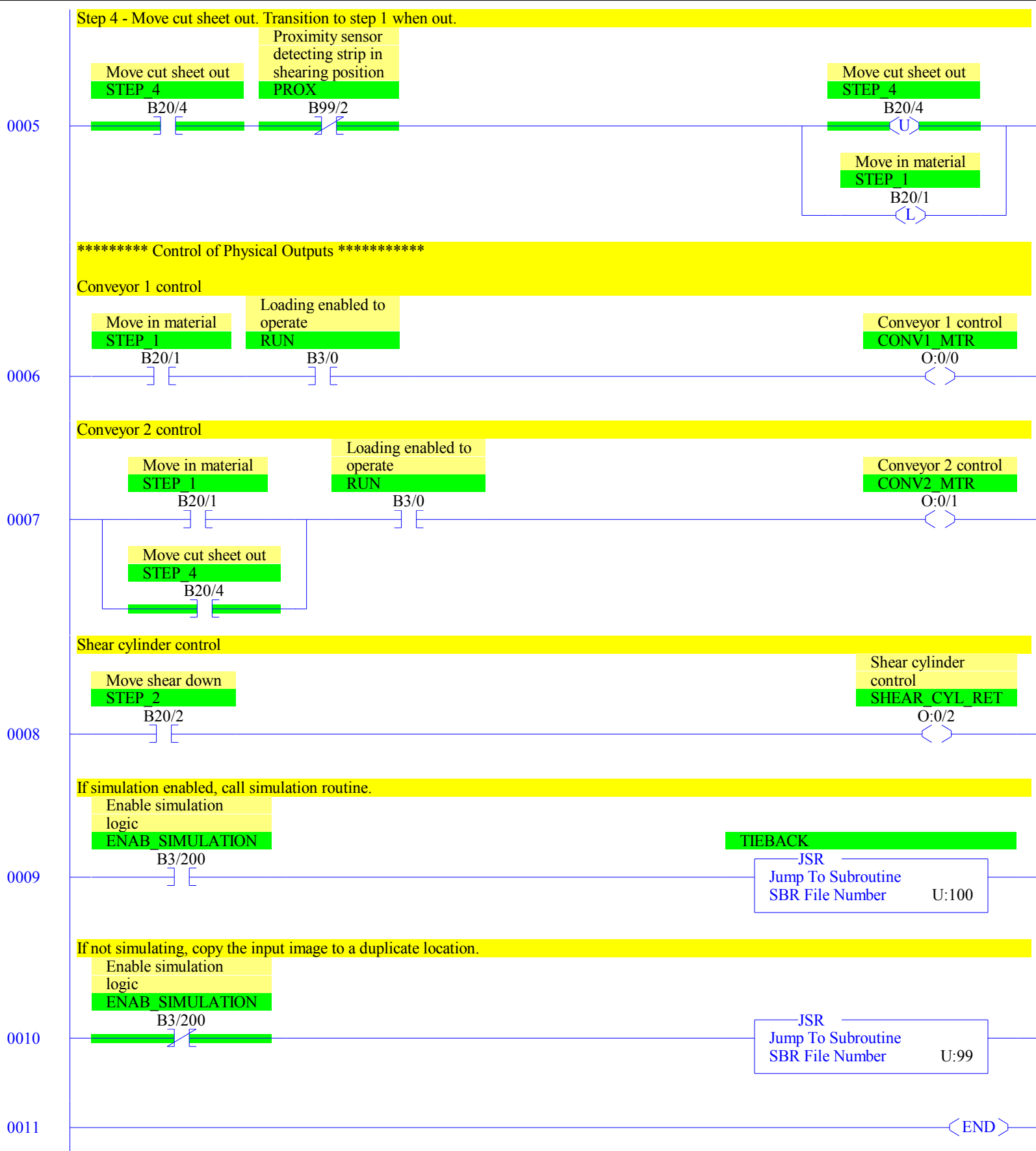


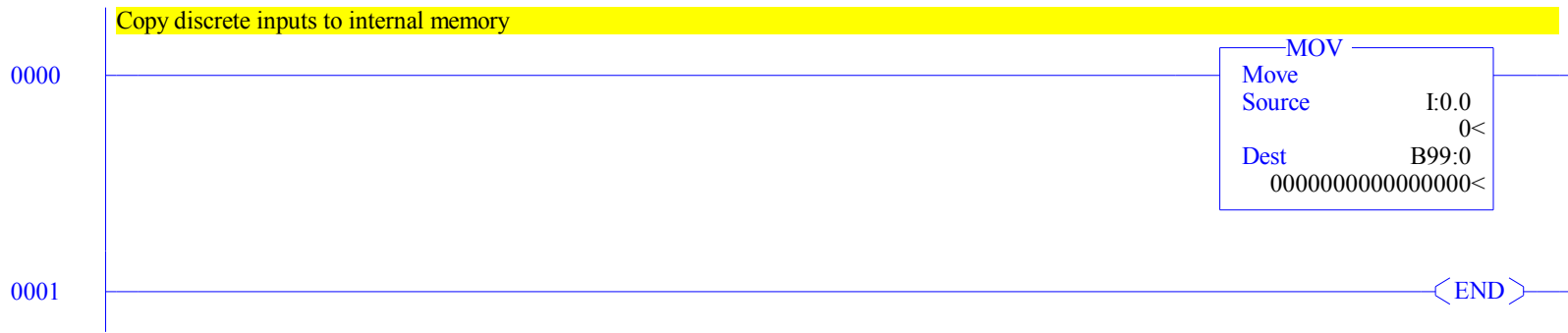
Example 6.2 Metal Shear Control With Simulation

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Start/stop/pause







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Tie-back logic for shear limit switches.

Shear cylinder
control

SHEAR_CYL_RET

O:0/2

TIETMR_SHEAR_ON

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

Limit switch
detecting blade down

DOWN_LS

TIETMR_SHEAR_ON/DN

T100:0/DN

B99/3

Shear cylinder
control

SHEAR_CYL_RET

O:0/2

TIETMR_SHEAR_OFF

TON
Timer On Delay
Timer T100:1
Time Base 0.01
Preset 300<
Accum 300<

Limit switch
detecting blade up

UP_LS

TIETMR_SHEAR_OFF/DN

T100:1/DN

B99/4

Tie-back logic for proximity sensor.

Conveyor 1 control

Conveyor 2 control

CONV1_MTR

CONV2_MTR

O:0/0

O:0/1

TIETMR_PROX_ON

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

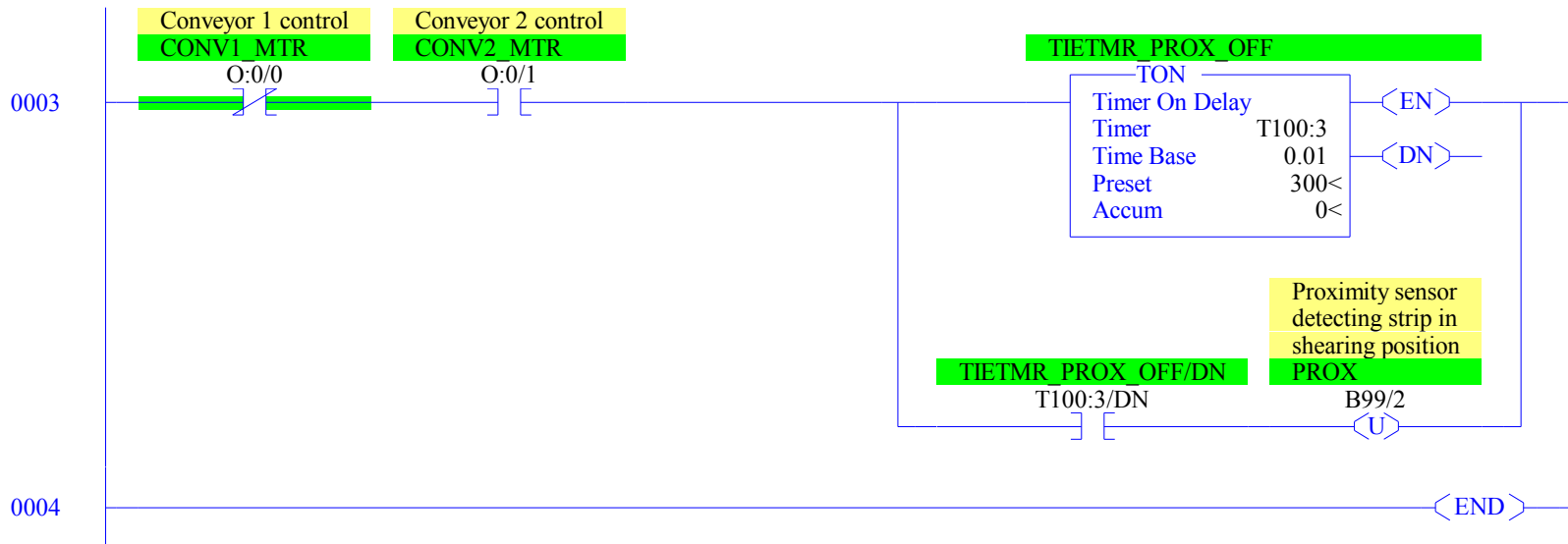
Proximity sensor
detecting strip in
shearing position

PROX

TIETMR_PROX_ON/DN

T100:2/DN

B99/2



RSLogix 500 Cross Reference Report - Sorted by Address

O:0/0	- {CONV1_MTR} Conveyor 1 control OTE - File #2 - 6 XIC - File #100 SIMULATION - 2 XIO - File #100 SIMULATION - 3
O:0/1	- {CONV2_MTR} Conveyor 2 control OTE - File #2 - 7 XIC - File #100 SIMULATION - 2, 3
O:0/2	- {SHEAR_CYL_RET} Shear cylinder control OTE - File #2 - 8 XIC - File #100 SIMULATION - 0 XIO - File #100 SIMULATION - 1
I:0.0	- MOV - File #99 DUPLIC INS - 0
B3/0	- {RUN} Loading enabled to operate OTE - File #2 - 0 XIC - File #2 - 0, 1, 6, 7
B3/200	- {ENAB_SIMULATION} Enable simulation logic XIC - File #2 - 9 XIO - File #2 - 10
B20/1	- {STEP_1} Move in material OTL - File #2 - 1, 5 OTU - File #2 - 2 XIC - File #2 - 2, 6, 7 XIO - File #2 - 1
B20/2	- {STEP_2} Move shear down OTL - File #2 - 2 OTU - File #2 - 3 XIC - File #2 - 3, 8 XIO - File #2 - 1
B20/3	- {STEP_3} Move shear up OTL - File #2 - 3 OTU - File #2 - 4 XIC - File #2 - 4 XIO - File #2 - 1
B20/4	- {STEP_4} Move cut sheet out OTL - File #2 - 4 OTU - File #2 - 5 XIC - File #2 - 5, 7 XIO - File #2 - 1
B99:0	- MOV - File #99 DUPLIC INS - 0
B99/0	- {START_PB} Start push button XIC - File #2 - 0
B99/1	- {STOP_PB} Stop push button XIC - File #2 - 0
B99/2	- {PROX} Proximity sensor detecting strip in shearing position OTL - File #100 SIMULATION - 2 OTU - File #100 SIMULATION - 3 XIC - File #2 - 2 XIO - File #2 - 5
B99/3	- {DOWN_LS} Limit switch detecting blade down OTE - File #100 SIMULATION - 0 XIC - File #2 - 3
B99/4	- {UP_LS} Limit switch detecting blade up OTE - File #100 SIMULATION - 1 XIC - File #2 - 4
T100:0	- {TIETMR_SHEAR_ON} TON - File #100 SIMULATION - 0
T100:0/DN	- XIC - File #100 SIMULATION - 0
T100:1	- {TIETMR_SHEAR_OFF} TON - File #100 SIMULATION - 1
T100:1/DN	- XIC - File #100 SIMULATION - 1
T100:2	- {TIETMR_PROX_ON} TON - File #100 SIMULATION - 2
T100:2/DN	- XIC - File #100 SIMULATION - 2
T100:3	- {TIETMR_PROX_OFF} TON - File #100 SIMULATION - 3
T100:3/DN	- XIC - File #100 SIMULATION - 3

RSLogix 500 Cross Reference Report - Sorted by Address

U:99	- JSR - File #2 - 10
U:100	- {TIEBACK}
	JSR - File #2 - 9