

TECHNICAL DOCUMENTATION

SP14_01

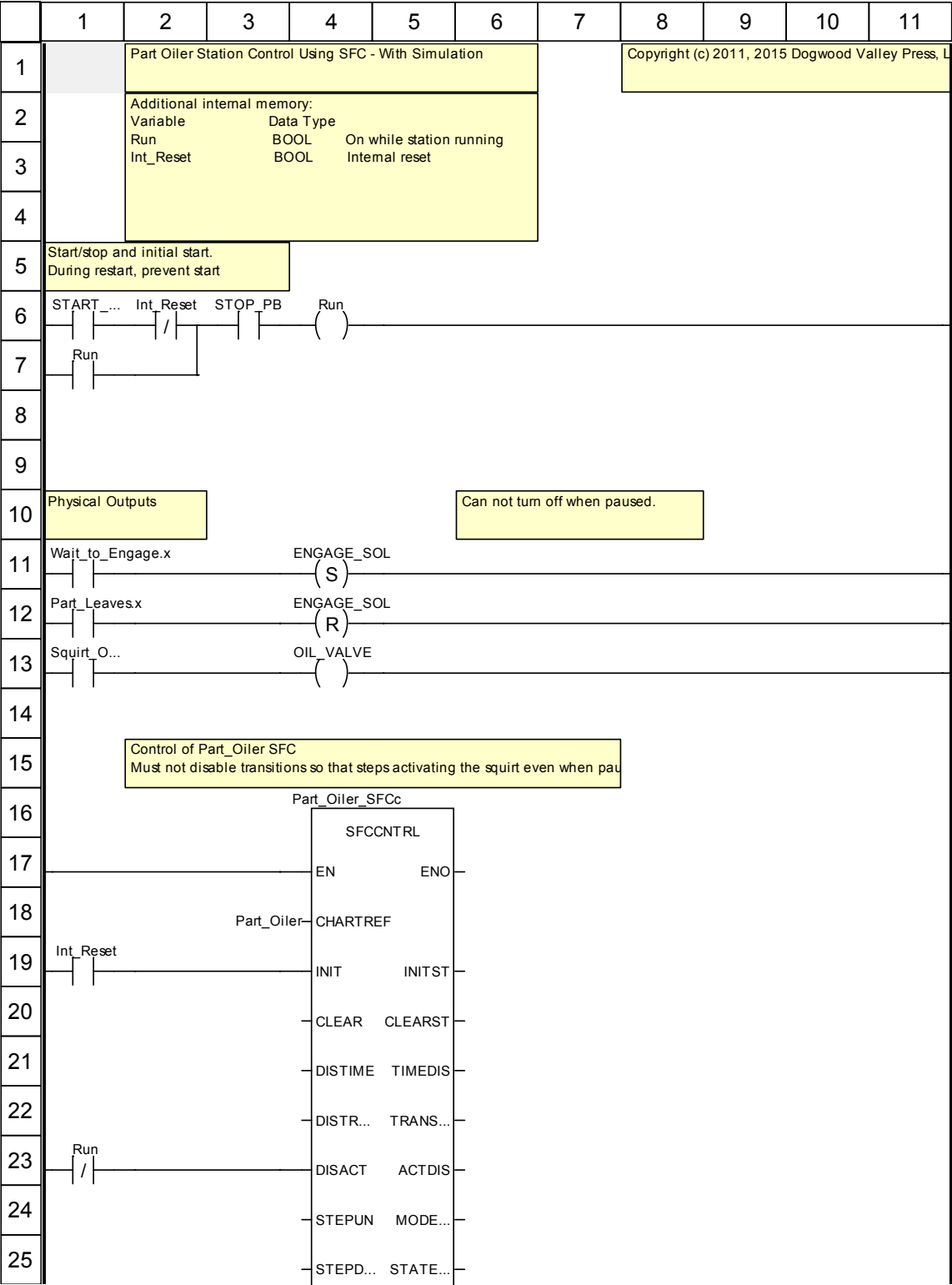
Project	SP14_01
Designer	
Application	sp14_01.stu
Software Version	Unity Pro L V10.0
Creation Date	4/12/2011 8:52:23 PM
Last Modification Date	12/24/2015 6:27:29 AM
Target PLC	BMX P34 1000 02.00CPU 340-10 Modbus

MAST

Specific properties

Configuration	Cyclic
Task period configuration	0
Watchdog time configuration	250

main : [MAST]

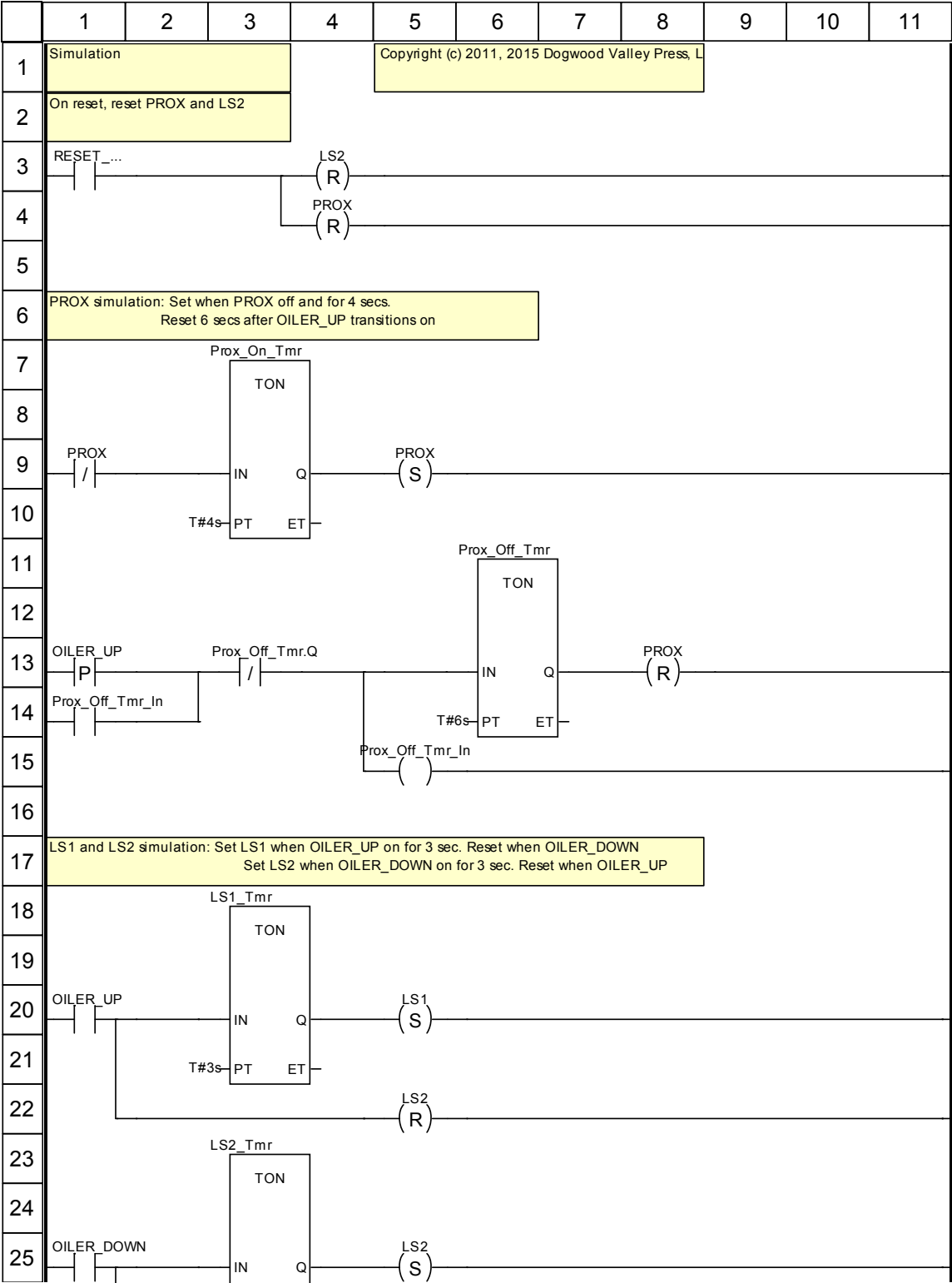


	1	2	3	4	5	6	7	8	9	10	11
26				RESET... TIMEERR							
27				DISRM... TERRA...							
28				ALLTRANS							
29				RESSTEPT							

Truncated labels:

Label	Position(s)
START_PB	(1, 6)
Squirt_Oil.x	(1, 13)

Simulation : [MAST]



	1	2	3	4	5	6	7	8	9	10	11
26			T#3s	PT	ET						
27						LS1					
					(R)						

Truncated labels:

Label	Position(s)
RESET_PB	(1, 3)

Part_Oiler : [MAST]

Comment

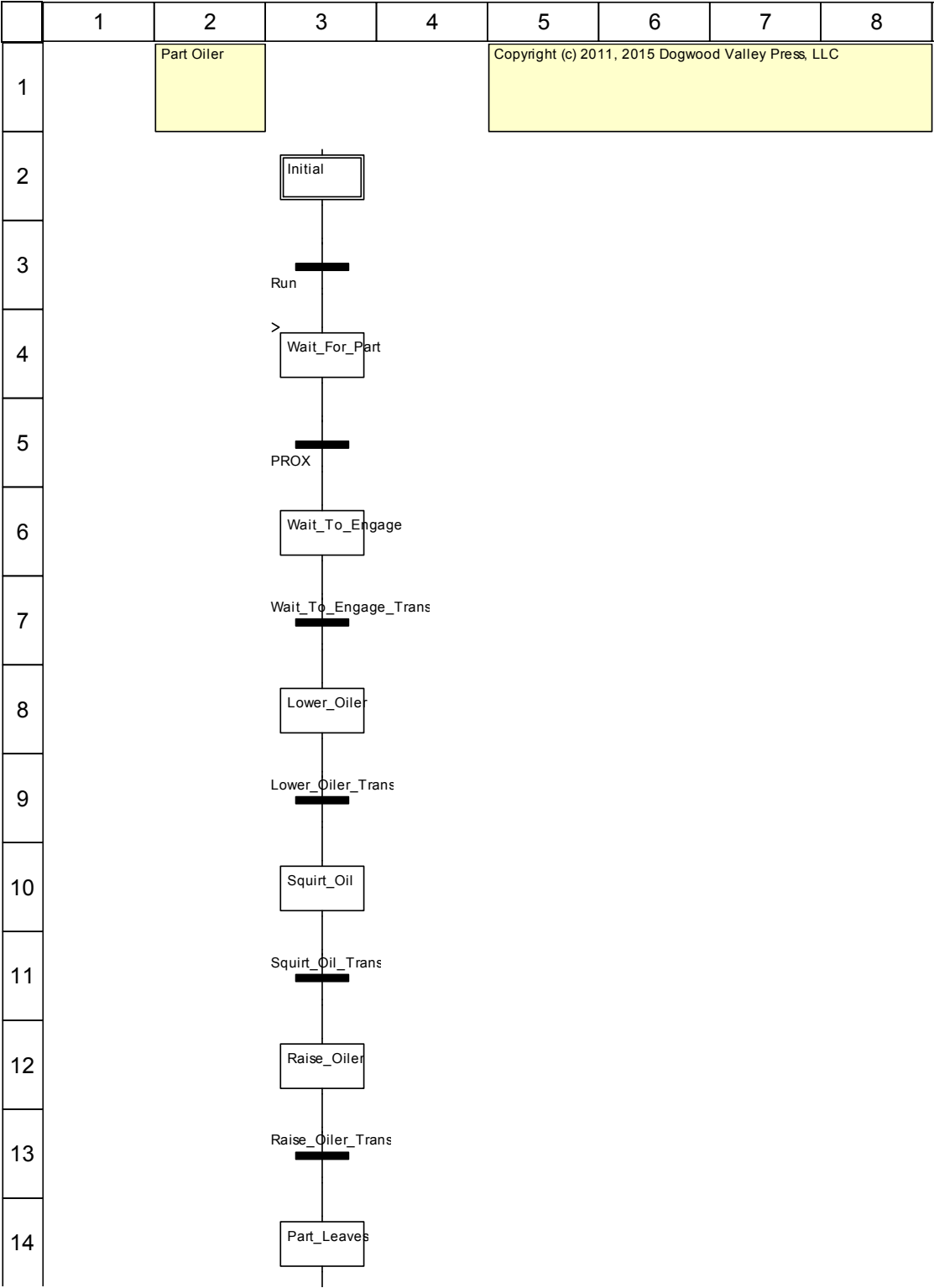
Common properties

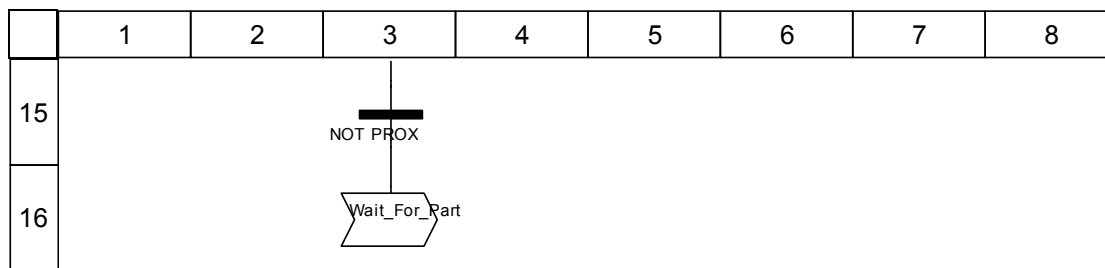
Functional module	
Condition name	

Specific properties

Operator control	No
Area number	0

Chart : [MAST - Part_Oiler]





Object description

Steps:

Initial (Initial Step)	(3, 2)
Min./Max. supervision time:	Step delay time:
Comment:	
Lower Oiler	(3, 8)
Min./Max. supervision time:	Step delay time:
Comment:	
Actions:	
Qualifier: N	Time: Variable: OILER_DOWN
Part Leaves	(3, 14)
Min./Max. supervision time:	Step delay time:
Comment:	
Raise Oiler	(3, 12)
Min./Max. supervision time:	Step delay time:
Comment:	
Actions:	
Qualifier: N	Time: Variable: OILER_UP
Squirt Oil	(3, 10)
Min./Max. supervision time:	Step delay time:
Comment:	
Wait For Part	(3, 4)
Min./Max. supervision time:	Step delay time:
Comment:	
Wait To Engage	(3, 6)
Min./Max. supervision time:	Step delay time:
Comment:	

Transitions:

Name	Type of Condition	Position	Comment
ST :: Lower Oiler Trans	Section	(3, 9)	
NOT PROX	Variable	(3, 15)	
PROX	Variable	(3, 5)	

ST :: Raise Oiler Trans	Section	(3, 13)	
Run	Variable	(3, 3)	
ST :: Squirt Oil Trans	Section	(3, 11)	
ST :: Wait To Engage Trans	Section	(3, 7)	

Jumps:

Name	Position	Comment
Wait For Part	(3, 16)	

Wait_To_Engage_Trans <Transition> : [MAST - Part_Oiler]

1| 10| 20| 30| 40| 50| 60| 70| 80| 90| 100| 110|
120| 134|
1 (Wait_To_Engage.t >= T#4s) AND Run

Lower_Oiler_Trans <Transition> : [MAST - Part_Oiler]

1| 10| 20| 30| 40| 50| 60| 70| 80| 90| 100| 110|
120| 134|
1 LS2 AND Run

Squirt_Oil_Trans <Transition> : [MAST - Part_Oiler]

1| 10| 20| 30| 40| 50| 60| 70| 80| 90| 100| 110|
120| 134|
1 Squirt_Oil.t >= T#500ms

Raise_Oiler_Trans <Transition> : [MAST - Part_Oiler]

1| 10| 20| 30| 40| 50| 60| 70| 80| 90| 100| 110|
120| 134|
1 LS1 AND Run

Part_Oiler_Reset : [MAST]

Comment

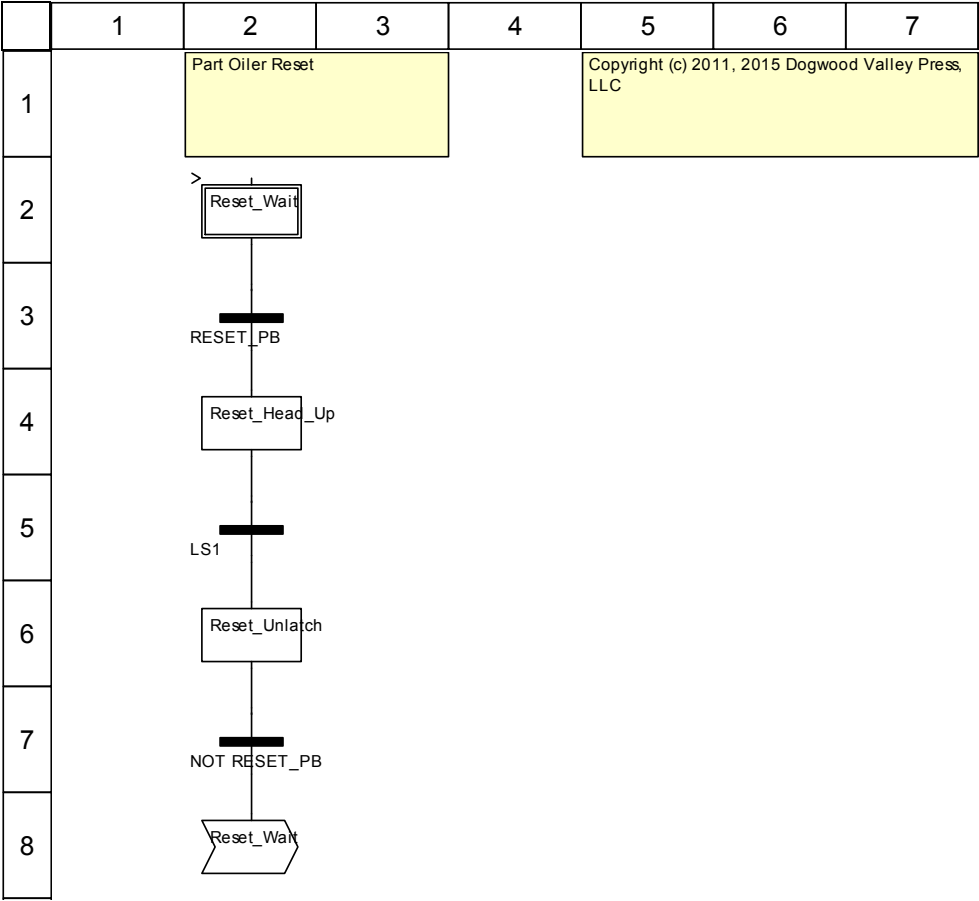
Common properties

Functional module	
Condition name	

Specific properties

Operator control	No
Area number	0

Chart : [MAST - Part_Oiler_Reset]



Object description

Steps:

Reset Head Up			(2, 4)
Min./Max. supervision time:			Step delay time:
Comment:			
Actions:			
Qualifier: N	Time:	Variable: OILER UP	
Qualifier: S	Time:	Variable: Int Reset	

Reset Unlatch			(2, 6)
Min./Max. supervision time:			Step delay time:
Comment:			
Actions:			
Qualifier: R	Time:	Variable: Int Reset	

Reset_Wait (Initial Step)			(2, 2)
Min./Max. supervision time:		Step delay time:	

Comment:

Transitions:

Name	Type of Condition	Position	Comment
LS1	Variable	(2, 5)	
NOT RESET_PB	Variable	(2, 7)	
RESET_PB	Variable	(2, 3)	

Jumps:

Name	Position	Comment
Reset_Wait	(2, 8)	

Cross References

Application:

Addresses

Object	Referred into	Location	Usage
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Variables or FB instances

Object	Referred into	Location	Usage
ENGAGE_SOL	main : [MAST]	(l 11, c: 4)	W
		(l 12, c: 4)	W
Initial	Chart : [MAST - Part_Oiler]	(l 2, c: 3)	W
Int_Reset	main : [MAST]	(l 6, c: 2)	R
		(l 19, c: 1)	R
	Chart : [MAST - Part_Oiler_Reset]	(l 4, c: 2)	W
		(l 6, c: 2)	W
LS1	Simulation : [MAST]	(l 20, c: 5)	W
		(l 27, c: 5)	W
	Chart : [MAST - Part_Oiler_Reset]	(l 5, c: 2)	R
	Raise_Oiler_Trans <Transition> : [MAST - Part_Oiler]	(l 1, c: 1)	R
LS1_Tmr	Simulation : [MAST]	(l 18, c: 3)	FC
		(l 18, c: 3)	R
		(l 18, c: 3)	R
LS2	Simulation : [MAST]	(l 3, c: 4)	W
		(l 22, c: 5)	W
		(l 25, c: 5)	W
	Lower_Oiler_Trans <Transition> : [MAST - Part_Oiler]	(l 1, c: 1)	R
LS2_Tmr	Simulation : [MAST]	(l 23, c: 3)	FC
		(l 23, c: 3)	R
		(l 23, c: 3)	R
Lower_Oiler	Chart : [MAST - Part_Oiler]	(l 8, c: 3)	W
Lower_Oiler_Trans	Lower_Oiler_Trans <Transition> : [MAST - Part_Oiler]	(l 1, c: 1)	W
	Chart : [MAST - Part_Oiler]	(l 9, c: 3)	R
OILER_DOWN	Simulation : [MAST]	(l 25, c: 1)	R
	Chart : [MAST - Part_Oiler]	(l 8, c: 3)	W
OILER_UP	Simulation : [MAST]	(l 13, c: 1)	R
		(l 20, c: 1)	R
	Chart : [MAST - Part_Oiler_Reset]	(l 4, c: 2)	W
	Chart : [MAST - Part_Oiler]	(l 12, c: 3)	W
OIL_VALVE	main : [MAST]	(l 13, c: 4)	W
PROX	Simulation : [MAST]	(l 4, c: 4)	W
		(l 9, c: 1)	R
		(l 9, c: 5)	W
		(l 13, c: 8)	W
	Chart : [MAST - Part_Oiler]	(l 5, c: 3)	R
		(l 15, c: 3)	R
Part_Leaves	main : [MAST]	(l 12, c: 1)	R
	Chart : [MAST - Part_Oiler]	(l 14, c: 3)	W
Part_Oiler	main : [MAST]	(l 16, c: 4)	R
Part_Oiler_SFCC	main : [MAST]	(l 16, c: 4)	FC
		(l 16, c: 4)	R
		(l 16, c: 4)	R

Cross References

Object	Referred into	Location	Usage
		(l 16, c: 4)	R
Prox_Off_Tmr	Simulation : [MAST]	(l 13, c: 3)	R
		(l 11, c: 6)	FC
		(l 11, c: 6)	R
		(l 11, c: 6)	R
Prox_Off_Tmr_In	Simulation : [MAST]	(l 14, c: 1)	R
		(l 15, c: 5)	W
Prox_On_Tmr	Simulation : [MAST]	(l 7, c: 3)	FC
		(l 7, c: 3)	R
		(l 7, c: 3)	R
RESET_PB	Simulation : [MAST]	(l 3, c: 1)	R
	Chart : [MAST - Part_Oiler_Reset]	(l 3, c: 2)	R
		(l 7, c: 2)	R
Raise_Oiler	Chart : [MAST - Part_Oiler]	(l 12, c: 3)	W
Raise_Oiler_Trans	Raise_Oiler_Trans <Transition> : [MAST - Part_Oiler]	(l 1, c: 1)	W
	Chart : [MAST - Part_Oiler]	(l 13, c: 3)	R
Reset_Head_Up	Chart : [MAST - Part_Oiler_Reset]	(l 4, c: 2)	W
Reset_Unlatch	Chart : [MAST - Part_Oiler_Reset]	(l 6, c: 2)	W
Reset_Wait	Chart : [MAST - Part_Oiler_Reset]	(l 2, c: 2)	W
		(l 8, c: 2)	L REF
Run	main : [MAST]	(l 6, c: 4)	W
		(l 7, c: 1)	R
		(l 23, c: 1)	R
	Lower_Oiler_Trans <Transition> : [MAST - Part_Oiler]	(l 1, c: 9)	R
	Wait_To_Engage_Trans <Transition> : [MAST - Part_Oiler]	(l 1, c: 32)	R
	Chart : [MAST - Part_Oiler]	(l 3, c: 3)	R
	Raise_Oiler_Trans <Transition> : [MAST - Part_Oiler]	(l 1, c: 9)	R
START_PB	main : [MAST]	(l 6, c: 1)	R
STOP_PB	main : [MAST]	(l 6, c: 3)	R
Squirt_Oil	main : [MAST]	(l 13, c: 1)	R
	Squirt_Oil_Trans <Transition> : [MAST - Part_Oiler]	(l 1, c: 1)	R
	Chart : [MAST - Part_Oiler]	(l 10, c: 3)	W
Squirt_Oil_Trans	Squirt_Oil_Trans <Transition> : [MAST - Part_Oiler]	(l 1, c: 1)	W
	Chart : [MAST - Part_Oiler]	(l 11, c: 3)	R
Wait_For_Part	Chart : [MAST - Part_Oiler]	(l 4, c: 3)	W
		(l 16, c: 3)	L REF
Wait_To_Engage	main : [MAST]	(l 11, c: 1)	R
	Wait_To_Engage_Trans <Transition> : [MAST - Part_Oiler]	(l 1, c: 2)	R
	Chart : [MAST - Part_Oiler]	(l 6, c: 3)	W
Wait_To_Engage_Trans	Wait_To_Engage_Trans <Transition> : [MAST - Part_Oiler]	(l 1, c: 1)	W
	Chart : [MAST - Part_Oiler]	(l 7, c: 3)	R

Subroutines

Object	Referred into	Location	Usage
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