

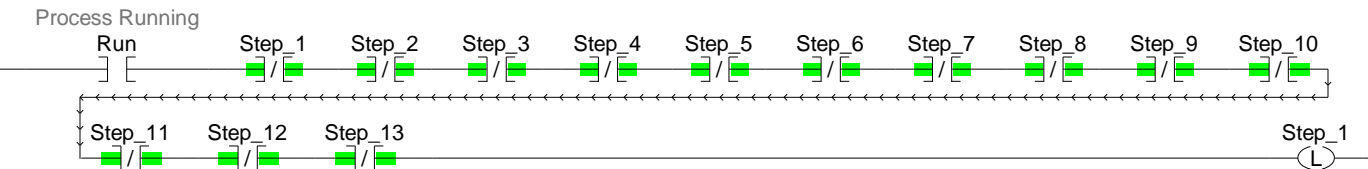
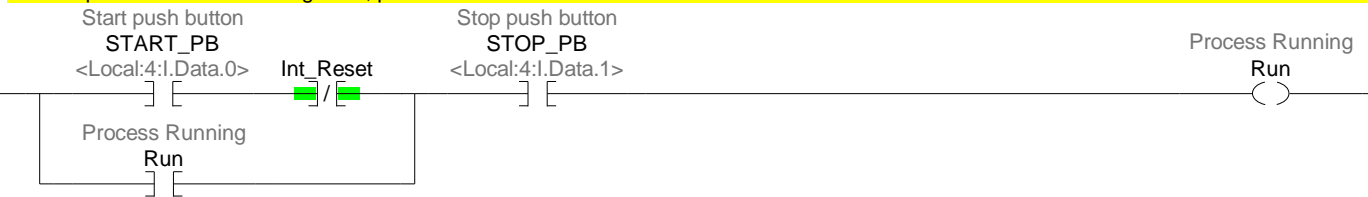
Copyright (c) 2011-2023 Dogwood Valley Press, LLC

Revised Bolt Driving Station Control

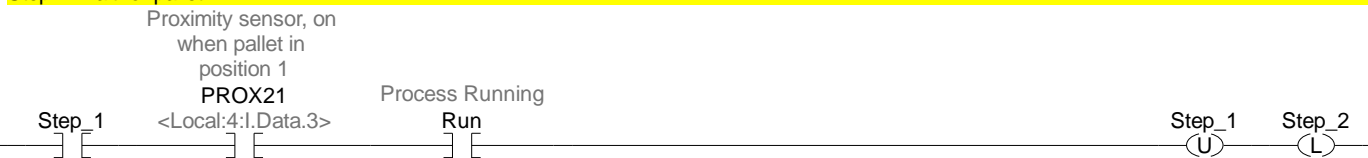
Additional internal memory:

Tag	Data Type	
Run	BOOL	On while station running
Int_Reset	BOOL	Internal reset
Step_1 to Step_13	BOOL	Step-in-progress bits
In_Tmr	TIMER	Times engage cyl for bringing in pallet
Raise_Tmr	TIMER	Times raise of pallet
Push_Tmr	TIMER	Times push of bolts
Motor_Tmr	TIMER	Times air motor rotation
Lower_Tmr	TIMER	Times lower of pallet
Out_Tmr	TIMER	Times engage cyl for allowing out pallet

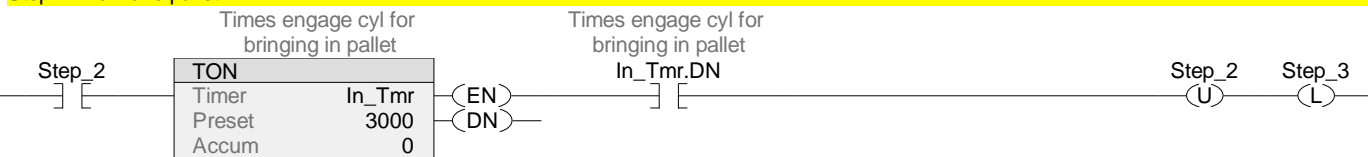
Start/stop and initial start. During reset, prevent start



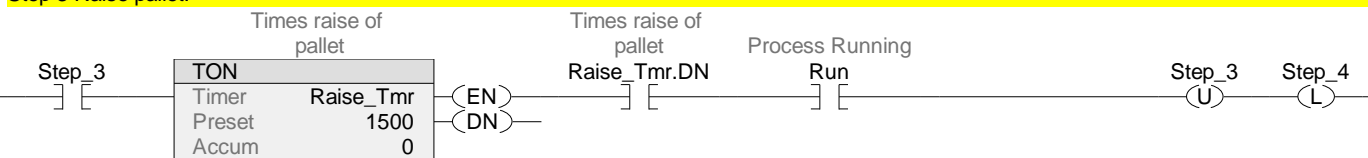
Step 1 Wait for pallet.



Step 2 Allow one pallet in.



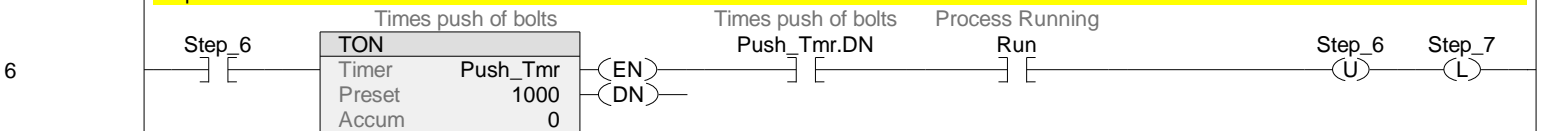
Step 3 Raise pallet.



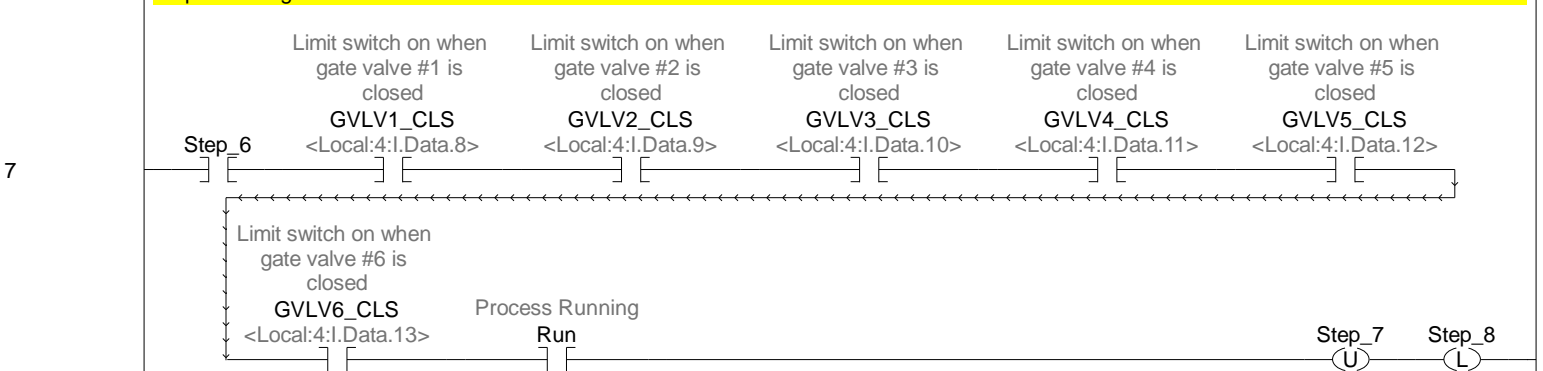
Step 4 Lower mehanism.



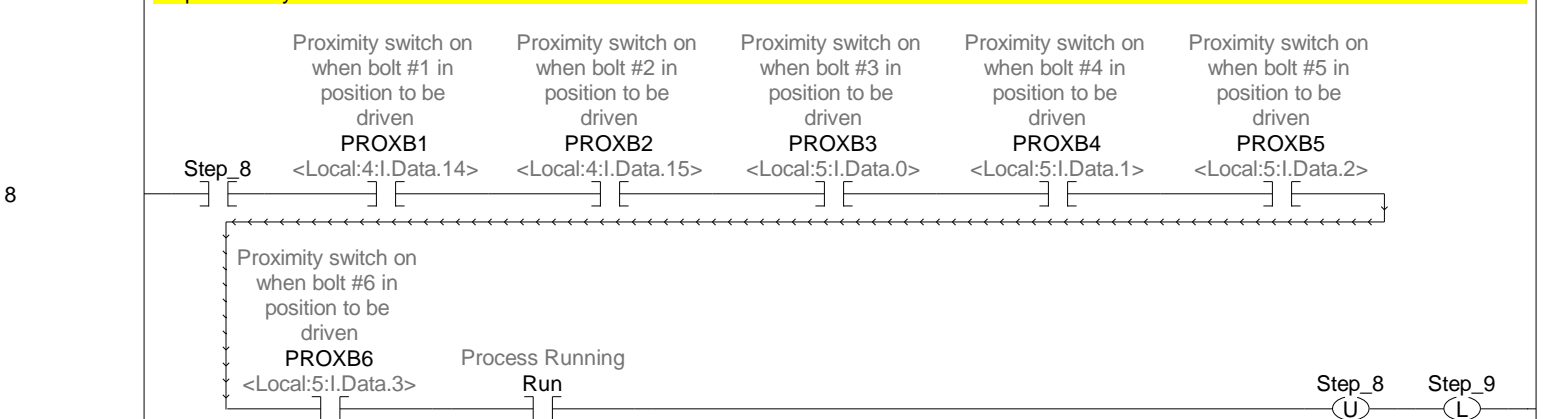
Step 6 Push bolts.



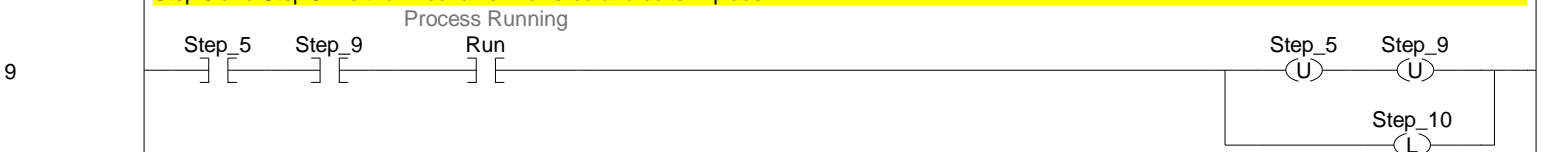
Step 7 Close gate valves.

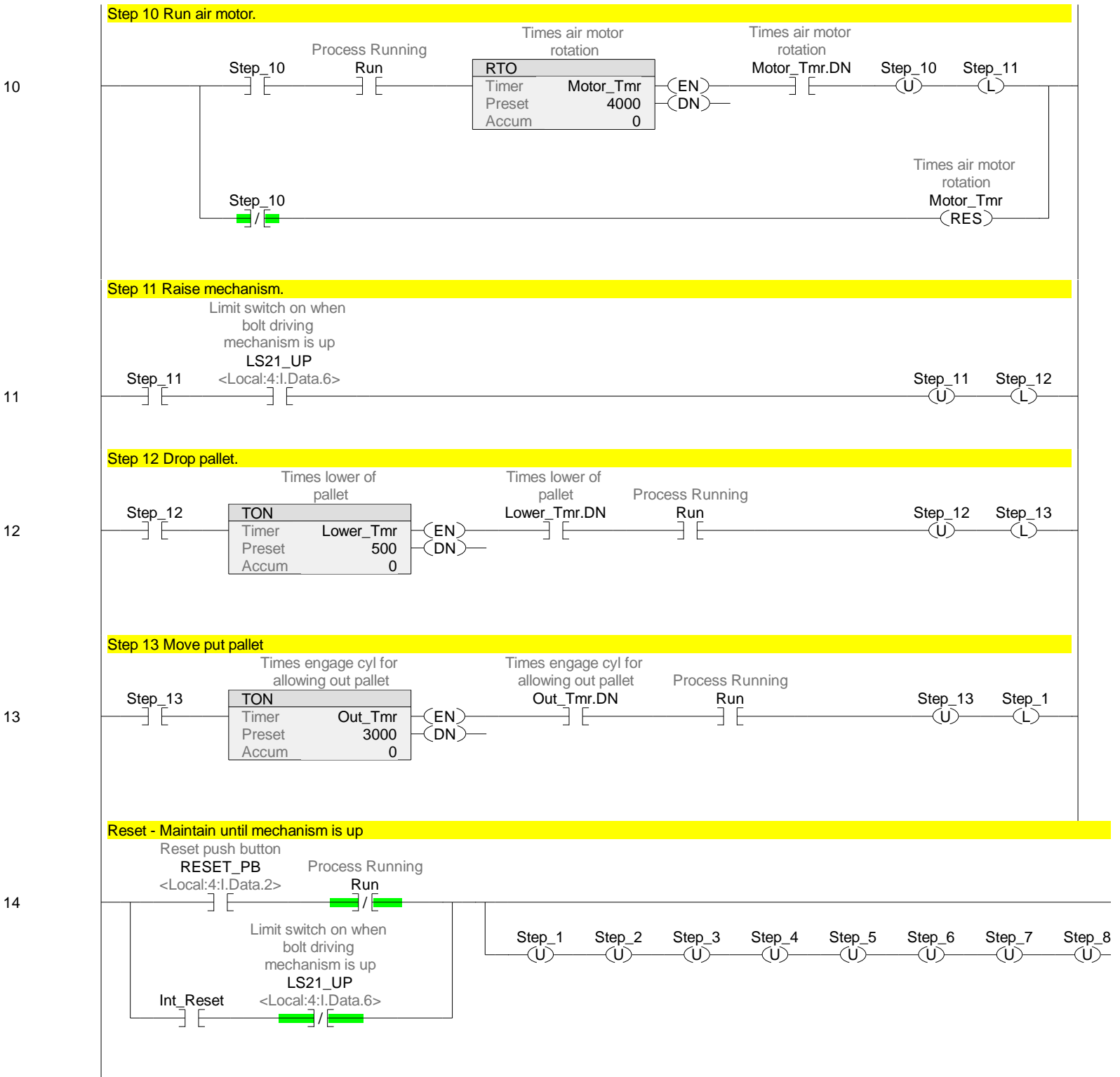


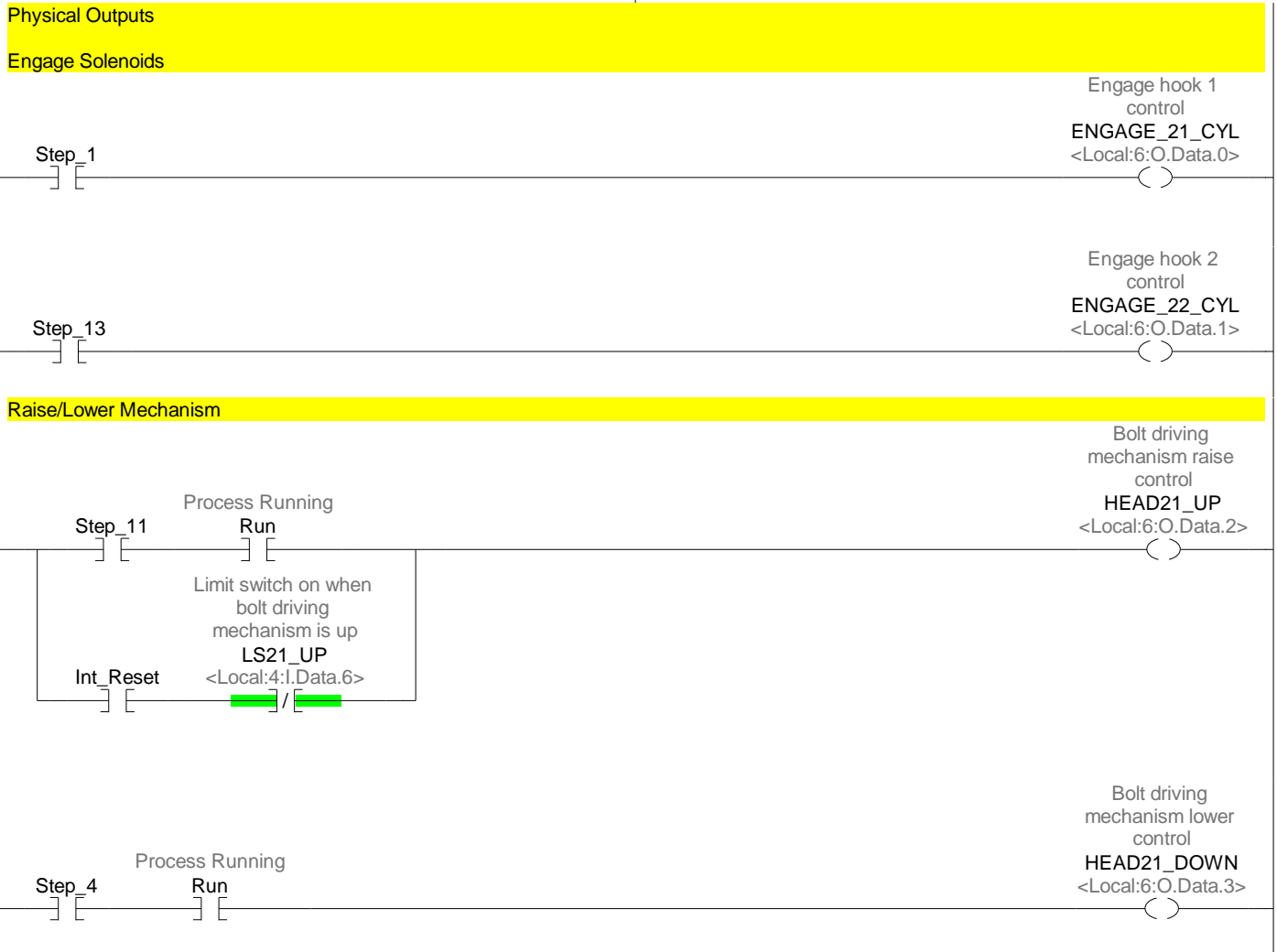
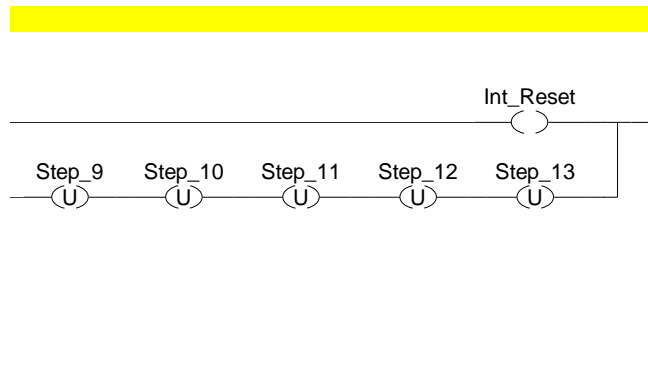
Step 8 Convey bolts.



Step 5 and Step 9 Wait for mechanism lowered and bolts in place.







Push Bolt Solenoids

19

Step_6



Push bolt #1 into
pneumatic tube
PBOLT1_CYL
<Local:6:O.Data.4>



Push bolt #2 into
pneumatic tube
PBOLT2_CYL
<Local:6:O.Data.5>



Push bolt #3 into
pneumatic tube
PBOLT3_CYL
<Local:6:O.Data.6>



Push bolt #4 into
pneumatic tube
PBOLT4_CYL
<Local:6:O.Data.7>



Push bolt #5 into
pneumatic tube
PBOLT5_CYL
<Local:6:O.Data.8>

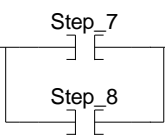


Push bolt #6 into
pneumatic tube
PBOLT6_CYL
<Local:6:O.Data.9>



Gate Valves

20



Close gate valve #1
to seal pneumatic
tube
GVLV1
<Local:6:O.Data.10>



Close gate valve #2
to seal pneumatic
tube
GVLV2
<Local:6:O.Data.11>



Close gate valve #3
to seal pneumatic
tube
GVLV3
<Local:6:O.Data.12>



Close gate valve #4
to seal pneumatic
tube
GVLV4
<Local:6:O.Data.13>



Close gate valve #5
to seal pneumatic
tube
GVLV5
<Local:6:O.Data.14>



Close gate valve #6
to seal pneumatic
tube
GVLV6
<Local:6:O.Data.15>



Convey Valves

21

Step_8



Open convey valve #1
to convey bolt #1 to
driver
CVLV1
<Local:7:O.Data.0>
()

Open convey valve #2
to convey bolt #2 to
driver
CVLV2
<Local:7:O.Data.1>
()

Open convey valve #3
to convey bolt #3 to
driver
CVLV3
<Local:7:O.Data.2>
()

Open convey valve #4
to convey bolt #4 to
driver
CVLV4
<Local:7:O.Data.3>
()

Open convey valve #5
to convey bolt #5 to
driver
CVLV5
<Local:7:O.Data.4>
()

Open convey valve #6
to convey bolt #6 to
driver
CVLV6
<Local:7:O.Data.5>
()

