

Allen Bradley CompactLogix Training Timer Instructions Lab

Objectives:

Upon completion of this lab exercise the trainee should be able to:

1. Explain the operation of a TON instruction and the associated status bits.
2. Explain a program operation after viewing it and running it on a training unit .
3. Modify a program to result in a specified operation.

Procedure:

1. Key in the Alias Tags for the Base I/O Tag addresses.

Key in the following program with RSLogix5000 and save to the hard drive.

Start up RSLinx and create a driver (path) to the ControlLogix processor.

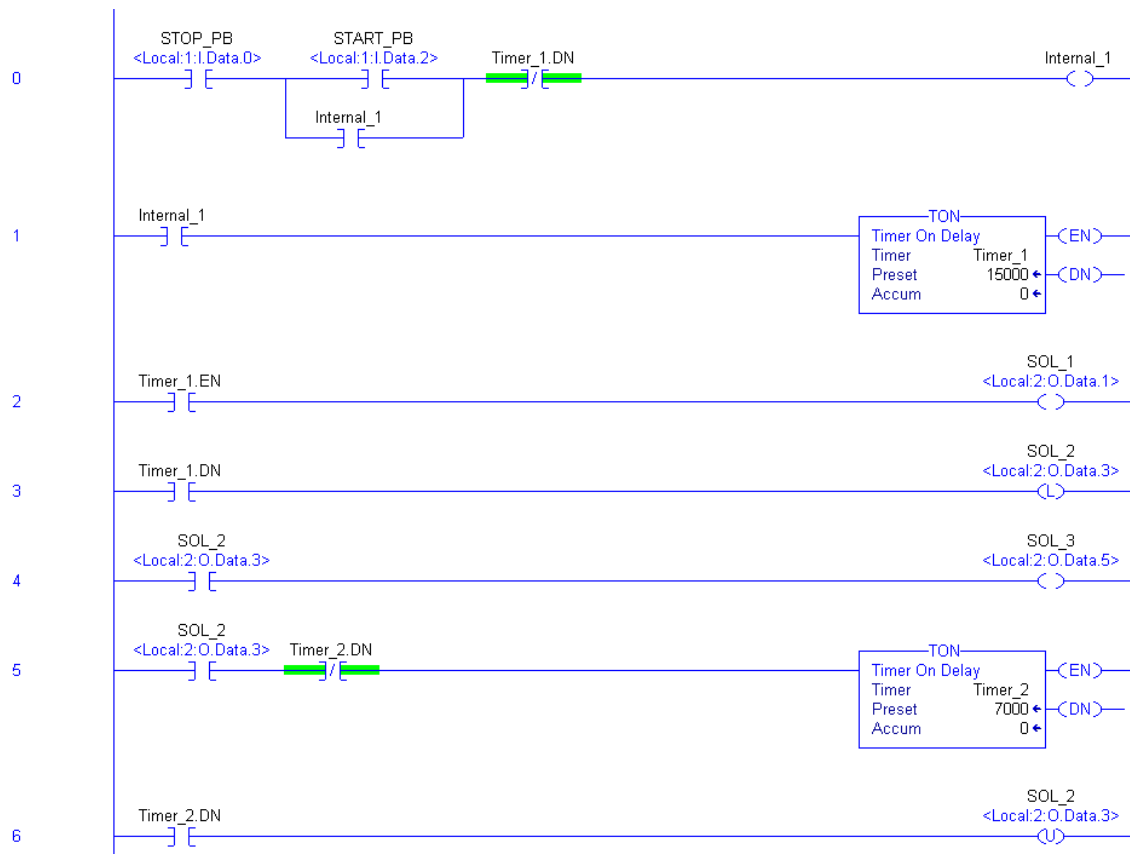


Figure 1. A PLC program with two TON instructions.

2. Download the program from the hard disk to the ControlLogix processor.
3. Go Online to the ControlLogix and you should see the following program.
Put the processor into the RUN (or Remote Run Mode).
4. Make sure the STOP_PB pushbutton is pulled out, so the XIC instruction in rung "0" has highlight.

Push the START_PB input to initiate the program.

Explain how the 3 outputs operate once the START_PB is pushed.

5. What timer controls the amount of time SOL_1 is on?

What timer controls the amount of time SOL_2 is on?

6. When does the Internal_1 tag (bit) shut off?
7. Why is an OTL instruction used in rung 3 for SOL_2?
8. Show how the program would need to be modified so that if Selector Switch #7 (Local:1:I.Data.7) were turned on, it would reset everything in the program.

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