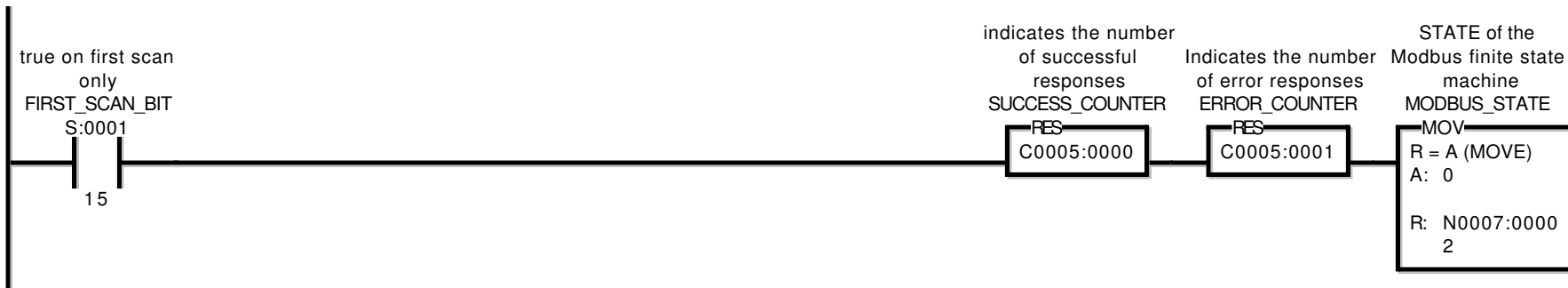


Ladder Diagram

P2/0

Start the state machine in state zero (0) at the transition to RUN mode.
 Bit S1/15 is set only on the first scan after entering RUN mode by the runtime system.



P2/1

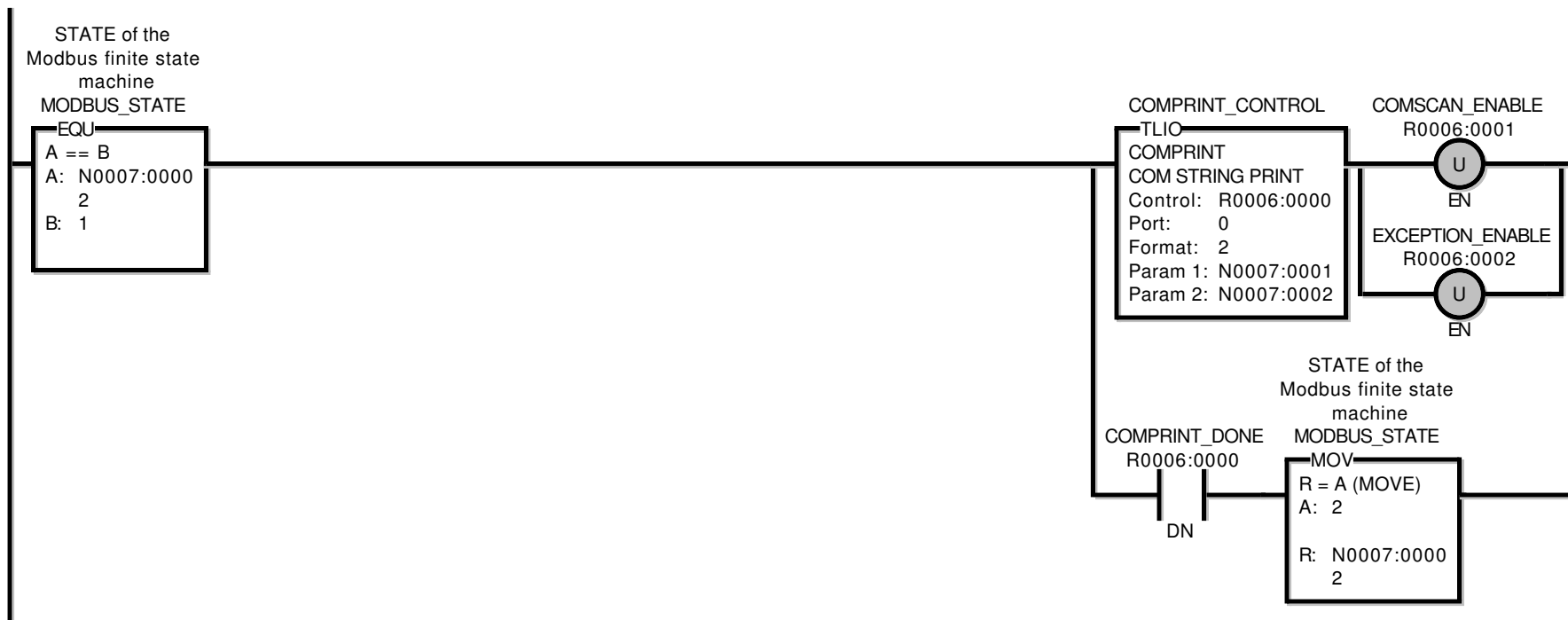
If state 0, then clear transmit and receive buffers, and reset the COMPRINT enable bit so the COMPRINT instruction sees a low to high transition. Go to state 1.



Ladder Diagram

P2/2

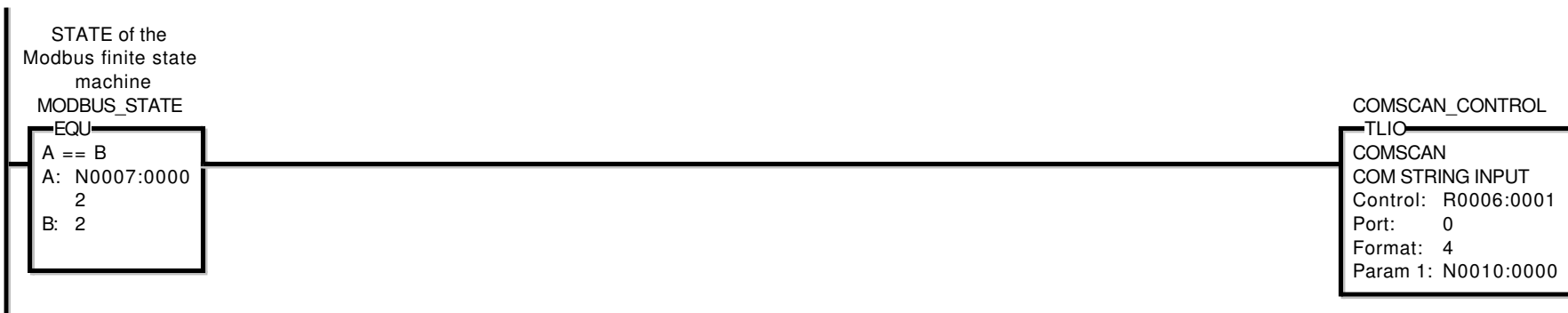
If state 1, send the Modbus Query out.
 When COMPRINT is done, unlatch the COMSCAN enable bit so the 2 COMSCAN instructions see a low to high transition, then go to state 2.



Ladder Diagram

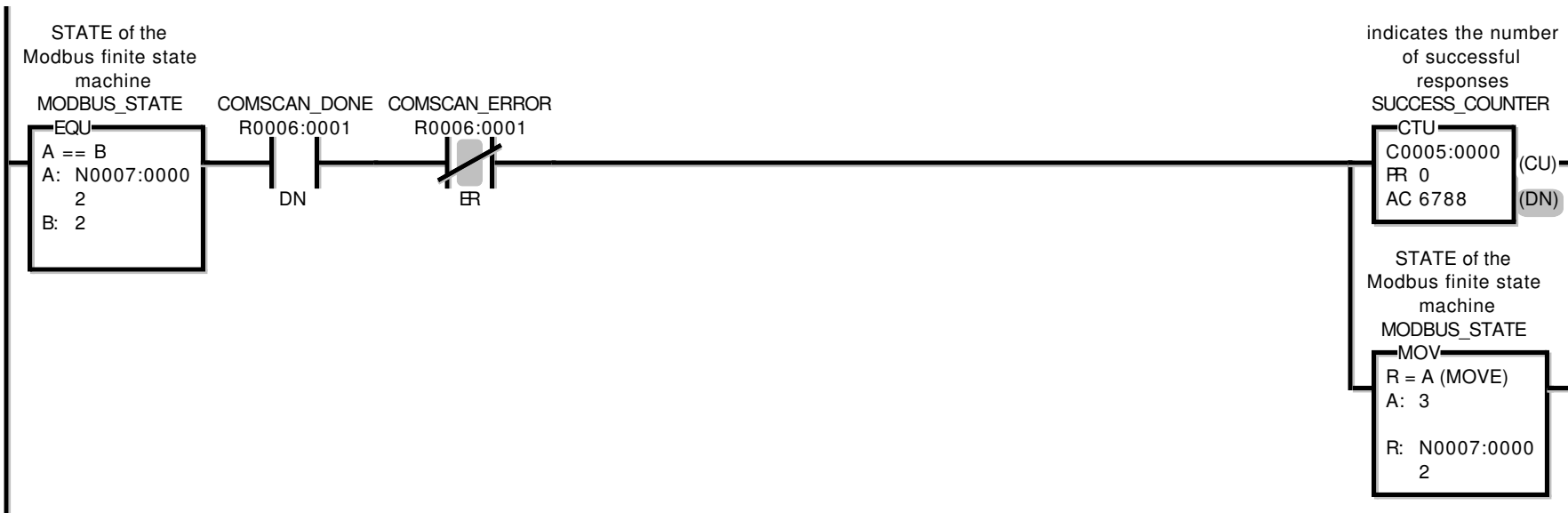
P2/3

If state 2, do COMSCAN for response



P2/4

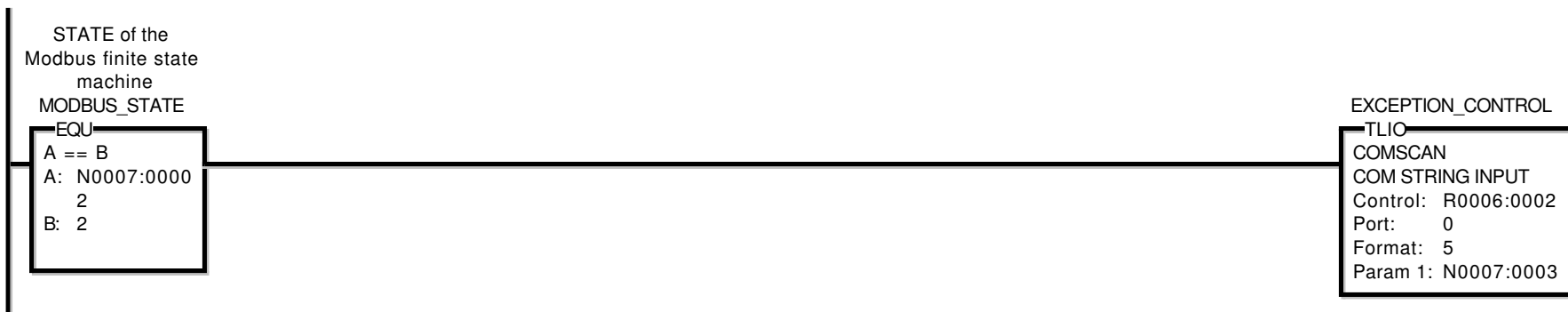
If COMSCAN is done and no error, increment a success counter and go to state 3



Ladder Diagram

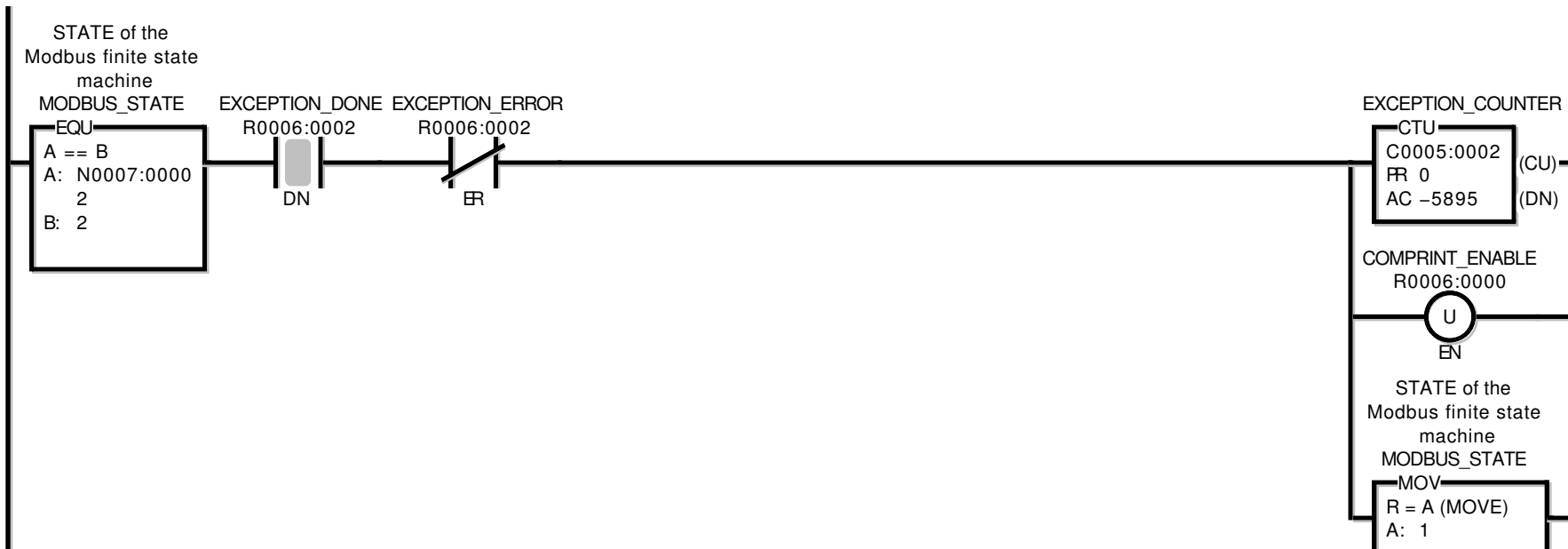
P2/5

If still in state 2, the slave may have sent an exception response.
 If it matches format string 5, then it is an exception and the
 exception code is saved in Param 1.



P2/6

If COMSCAN is done without error, the exception response was matched.
 Increment exception counter and goto state 1. See COMSCAN Param for exception code.

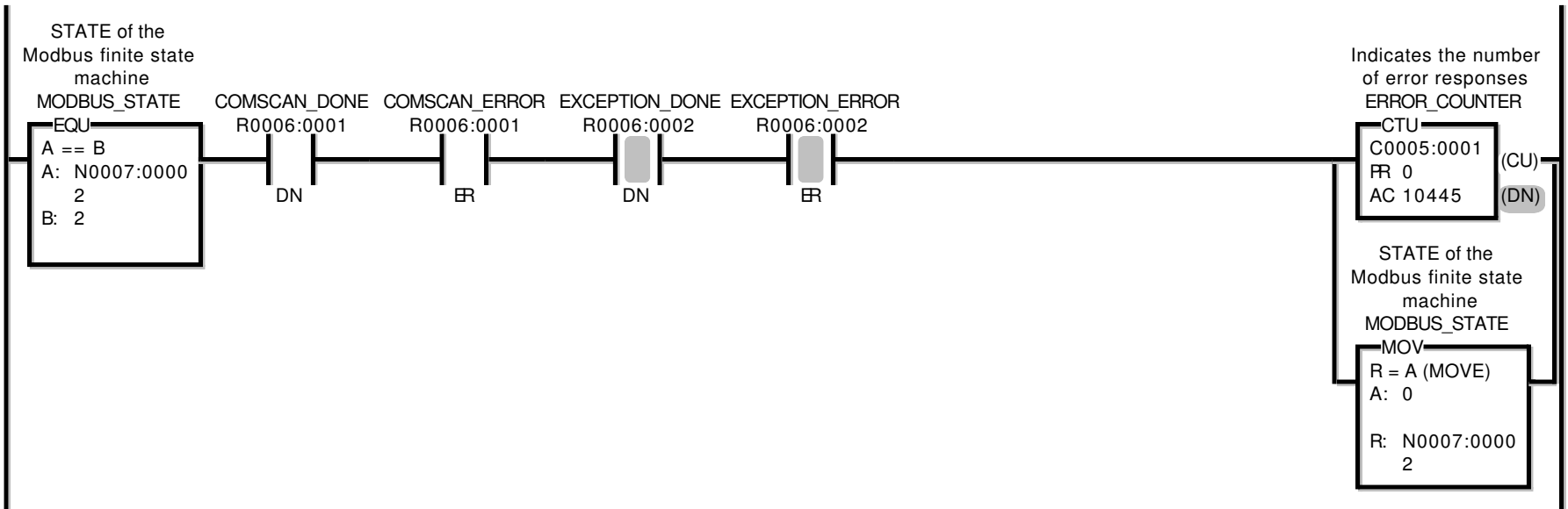


Ladder Diagram

R: N0007:0000
2

P2/7

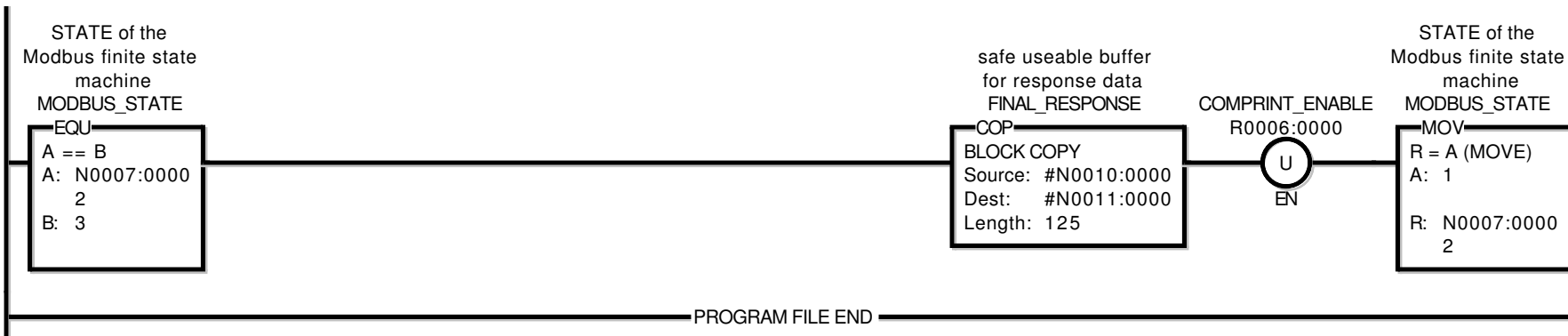
If still in state 2 and both COMSCANS are done and failed, then this is an error.
Increment the error counter and go to state 0 which is an error recovery state.



Ladder Diagram

P2/8

If state 3, the Modbus response is valid. Now copy the data to a safe, useable place, then go to state 1.



P2/9