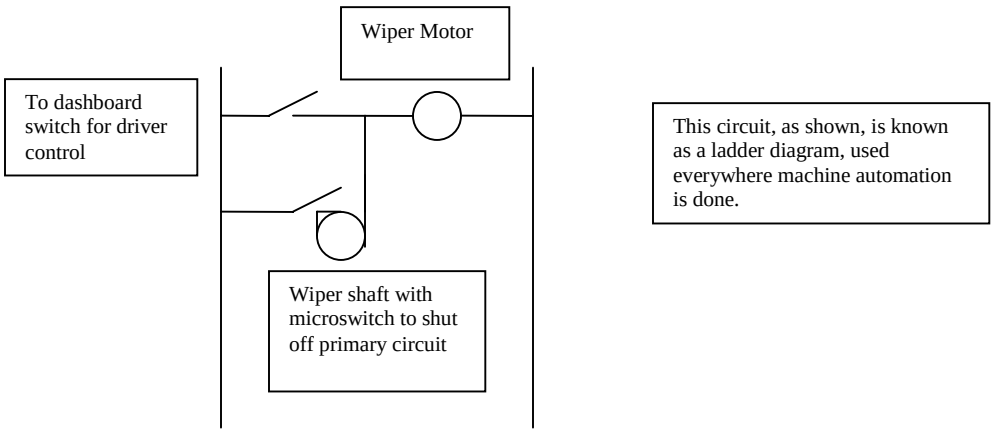
Think **‘microswitch’** as your first element in machine/robot control. It is the most commonly used ‘feedback’ sensors in the world. But it is also a logic device where your first automated decision-making could take place.

These photos show a shaft coupled to a 60 RPM motor. I want the motor to run only as long as it takes for the shaft to turn once. Then shut off until I send another signal for it to run again. I call this circuit a “One-shot”.

The simplest way to accomplish this is to put a bump somewhere on the shaft – in this case the natural bump is the screw locking the coupling to the shaft. When the bump clicks the microswitch to ‘off’ the flow of electrons to the motor stop. To start the machine again I have another power line going to the motor actuated by a simple button switch to give the motor just enough of a move for the microswitch to click closed and remain closed until the bump pushes the lever to disconnect the circuit.

Think of your windshield wipers on your car. How do they do it so that the wipers continue running until they hit the ‘home’ position?

Can you see it in the following circuit diagram?



For examples of this circuit in use on production machines download “Third Hand Concept…” from www.mydocsonline.com and typing Waynelund then password 2staput2 and for innovative manufacturing go to http://www.superfactory.com/Resources/experts.htm