

Tool and Equipment First-Round Winner

Innovations Challenge

April 2019

Prepared by Transportation Planning
Missouri Department of Transportation

Board Position Indicator



Description

The board position indicator provides a clear visual indication using a Yellow or Green LED to the position of the board. Currently, you have to open your window and listen for the cavitation of the actuator or try to look behind you to ensure that the board is either in the “Up” or “Down” position. Using a combination of N/O Reed switches, 12V LED’s and Yellow and Green LED’s provides a clear visual indication to the position of the Message Board. (See design plans on the back of this page)

Benefit

This innovation removes the distraction of having to remove your eyes from the road trying to visually check for proper position and removes the distraction of opening the window trying to actively listen for the cavitation of the Board Actuator. Extended and repetitive cavitation of the Board Actuator has also caused the inline fuse to fail which in turn requires the operation to cease until it can be replaced.

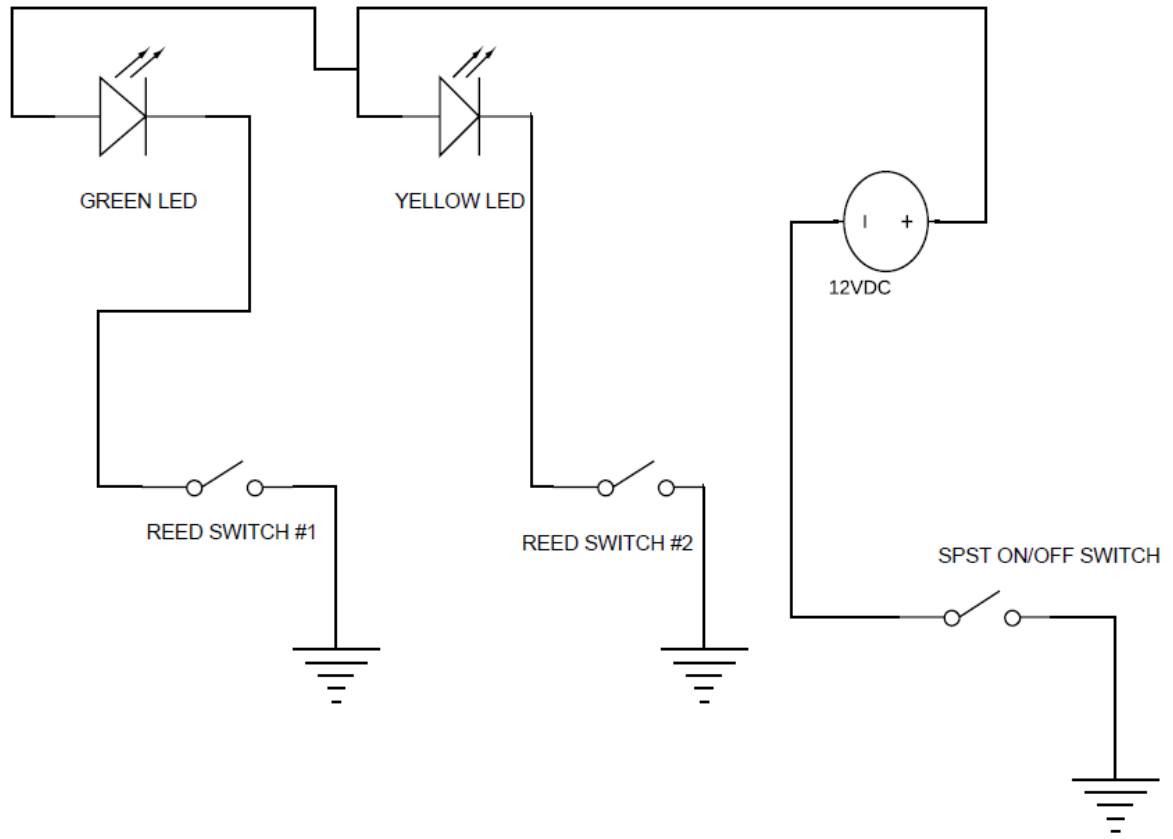
Materials and Labor

The cost of materials is \$29.18 and about 4 hours of labor. (See the back of this page for the list of materials)

For More Information Contact:

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Additional information, photos or videos can be seen by accessing Innovations Challenge SharePoint page at: <http://sharepoint/systemdelivery/TP/Documents/InnovationsChallenge.aspx>



2- Normally Open Reed Switch	\$7.22
2- 12VDC LED Indicator	\$11.52
½" PVC Conduit box	\$2.45
50ft CAT 3 Cable	<u>\$7.99</u>
Total	\$29.18