Projects First-Round Winner

Innovations Challenge

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Prepared by Transportation Planning Missouri Department of Transportation

Automatic Backing Light and Sound



Description

Two facilities have worked on Automatic Backing Light and Sound systems. The innovation was combined since it was the same principal but required a different method based on the age of the truck. In older model trucks, a wire is attached from the reverse signal to the activation input of the warning lights and includes two diodes in the wiring. This hardwiring activates the LED warning lights and the horn signal which sounds every four seconds. The newer model trucks have a diamond logic builder system that can be programmed to activate strobes and the horn signal when in reverse. In addition, the newer trucks have an air horn that is activated when the backing speed exceeds 10 mph.

Benefit

Both warning systems greatly improve safety by providing audio and visual warnings to workers in the area. These warning signals increase awareness of vehicles in reverse, which makes individuals look up to see what truck is moving. In addition, the newer truck models improve safety even more with the air horn component.

Materials and Labor

20 minutes of staff time on newer model trucks with no material costs. 2 hours labor on older model trucks with \$25 in materials. Hardwired photo on back of page.

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



Hardwired system for older model trucks.

