

Productivity First-Round Winner
Innovations Challenge

April 2016
Prepared by Transportation Planning
Missouri Department of Transportation

Western Star Two-Way Valve



Description

District staff installed a two-way valve on its Western Star extra heavy-duty truck, which is equipped with a front-mounted righthand wing. The valve is used to redirect hydraulic fluid from the front snowplow turn cylinders to the mast-tilt cylinder. This valve eliminates the need to unhook one of the hoses from the turn cylinders on the front snowplow so that the hood of the truck could be raised. Without this valve, the hoses would have to be unhooked every time a driver checked the oil, added washer fluid or performed any other "under-hood" operation. With the two-way valve installed, the operator can simply move the handle on the valve and redirect the flow between the cylinder on the mast or to the cylinder on the snowplow turn cylinders.

Benefit

This innovation saves time, simplifies work and improves worker safety. Installing the two-way valve also allows the quick-attach plow coupler to be installed. It also eliminates the chance of oil spills from frequent hose disconnects.

Materials and Labor

Materials: \$300

Labor: 3 hours

For More Information Contact:

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