

Tool and Equipment First-Round Winner

Innovations Challenge

April 2018

Prepared by Transportation Planning
Missouri Department of Transportation

Chipper Truck Hitch



Description

Two buildings in the district had a need for an easier way to hitch the self-propelled chippers and smaller push chippers to older and newer fleet trucks. The Chipper Truck Hitch was designed to hook up both to the self-propelled chipper and the chipper push box. It slides into the 4" receiver at the rear of the 10-wheel dump truck and attaches with just one 1" pin. Installing the hitch just takes two minutes.

Benefit

The Chipper Truck Hitch uses just one pin and is universal between chipper machines. The hitches fit on new trucks and can be taken on and off by just pulling a pin. The hitch design can be shared to other buildings and districts with like model trucks. Using the new hitch saves time and makes the job easier because it is quick and simple to remove or add hitches as needed for different jobs.

Materials and Labor

\$85 in materials costs with 3 hours of staff time. See parts list on back.

For More Information Contact:

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Additional information, photos or videos can be seen by accessing the Innovations Challenge SharePoint page at:

<http://sharepoint/systemdelivery/TP/Documents/InnovationsChallenge.aspx>

Steel Parts List for the "Chipper Hitch"

Pieces Width Length Thick Stock Description

1- 15" x 10" 1/2" Steel Plate

2 - 2.5" x 2.5" 8.5" 3/16" Square Tube

2 - 2.5" x 2.5" 23" 3/16" Square Tube

2 - 3" x 3" 3/16" Triangles

2 - 2" x 20.5" 3/8" Steel Strap

1- 4" x 4" 12" 3/16" Square Tube

1- 15.5" 1 3/4" Round Stick

2 - 8.5" 1 1/4" Round Stick