Tool and Equipment First-Round Winner

Innovations Challenge

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Prepared by Transportation Planning Missouri Department of Transportation

Foldable Tailgate Chute



Description

The Folding Tailgate Chute attaches to the truck and never has to be removed. To operate the chute, remove two bolts and fold the spread lip down out of the way then the sides of the chute can be removed and placed in the truck toolbox. To install, simply place a side back in place and place the bolt. It takes about one minute to reinstall, and the only tool needed is a wrench.

Benefit

The chute is safer for all employees, because it doesn't require lifting the heavy chutes to remove or install and there's no chance of getting hurt with equipment trying to remove or install. This chute benefits MoDOT because you can show up on a job and be ready to blade patch with a grader (Chute down), or pull pave (Chute up). No more having to run back and forth taking chutes off and putting them on, now just show up on the job and adjust the chute and you're ready to go. Compared to the factory chute ours is half the price and is built stronger to carry the pull paver without bending in the corners.

Materials and Labor

\$152 in materials costs with 8 hours of staff time.

Material List:

1/4"x4"x10' flat strap - \$24.00

1/4"x6"x10' sheet metal - \$35.00

1 ¹/₄" heavy square tubing - \$15.00

1/4"x12"x3' sheet metal - \$10.00

1"x2" Key Stock- \$7.00

4 heavy hinges (greasable) - \$50.00

3/16"x2"x10' flat strap - \$11.00

2 bolts 15/16" (wrench size) - in stock

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

