



Innovation Showcase

2024 “Outstanding Innovation” Winner

Backhoe Door Travel Lock

Submitted By:

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Description:

Throughout the state/district there were several instances of backhoe doors/windows coming open and shattering while being transported. We were tasked with coming up with a solution to lock the doors and windows while in transport. Rather than secure the doors and windows with a chain or ratchet strap, this design only modifies the door hinge itself. It locks the rear window, door glass and entire door in the closed position by using scrap metal, 3/8” hex nuts, and a chainsaw tool (the pin). In this example, a chainsaw tool was used as the pin. In most cases, most crew or foreman trucks will have a chainsaw tool to utilize. When not in use, the pin is stored in the cab hanging on the hardhat hook.



How does this Innovation benefit SCDOT?:

This design is beneficial in several ways. It secures backhoe doors and glass while being transported, saving time and money on costly glass replacement. It also gets the task completed in a safer manner, since using a chain or a ratchet strap requires someone to climb on the machine that is loaded higher up on a trailer to secure and bind it down. The pin can be removed from the cab when exiting the machine and installed from the deck of the trailer. The replacement glass ranges from \$200-\$500 for each section/piece.

