

Second Place- Under Body and Frame Pressure Washer: Kentucky

Problem Statement: I wanted to design something that would wash off salt from underneath truck frames and dump beds after a snow event to help slow down the rusting process and help preserve the brake parts from early failure. I also wanted it to be something we could make economically.

Solution: I finally settled on a frame size small enough to be easily maneuverable and also big enough to accommodate enough nozzles. Caster size had to be big enough to roll easily and small enough to fit under brake chambers. Water supply needed to be high volume and the spray nozzles needed to fan out and overlap each other.

Labor/Materials/Cost: Frame is 1" box tubing, 3" swivel casters, 1 1/3" galvanized pipe for handles, all other piping is pvc sch. 40 (3 sizes) 1 1/3-1" and various fittings, nozzles are screw in type with 45" fan installed to overlap 1 1/3" fire hose from the handle to a 2" 195 GP gas water pump.

\$300 and a firehose.

Savings/Benefits to the Community: Our trucks and dump bed will last longer and look better, thus saving money and showing our department takes pride in our equipment. Keeping the brake parts from building up with rust means safer trucks and less liability plus longer brake life.



