

2018 YOU SHOW US CONTEST

Sign Rack in Sign Truck

COUNTY: Richland County in North Dakota

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PROBLEM STATEMENT:

The storage compartment in the sign truck for signs was unorganized. This make it difficult to find the required sign when needed. Signs were stacked on top of each other and would get scratched from bouncing around in the compartment. There was not enough room to carry all the signs needed for the day. It was hard to keep a good inventory on the number of each type of sign needed when being called out to repair or replace a particular sign. It was taking a considerable amount of time to determine if we had the signs needed when leaving the shop to do sign work.

DISCUSSION OF SOLUTION:

Organize the sign storage compartment on our sign truck to store the signs in a vertical position and separate them in slots. Using 1-½ inch telespar and 3/8-inch steel rod we created slots with 1-inch on center spacing. The 3/8-inch hose (tubing) is slipped over each steel rod. There is enough space so each slot can accommodate at least two of each regulatory signs and the most commonly used signs needed for the day. There are 24 slots. Signs no longer show damage from riding on top of each other and it is easy to keep an inventory of signs used. At the end of each day, we restock the compartment with signs is so they are available when needed.

LABOR, EQUIPMENT, AND MATERIALS:

Equipment used: Metal band, saw, welder, drill

Salvage Material: 3 – 1 ½ inch telespar pieces each 24 inches long

New Material:

3/8-inch steel rod

3/8-inch ID plastic tubing (hose)

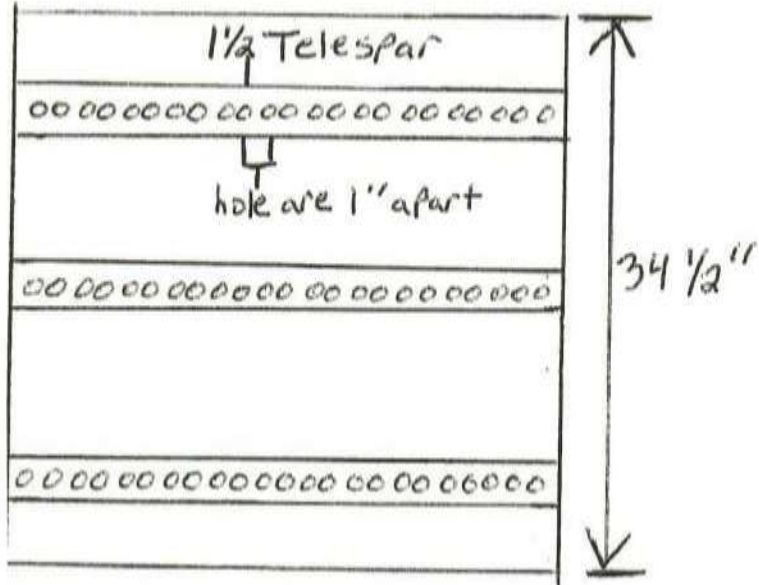
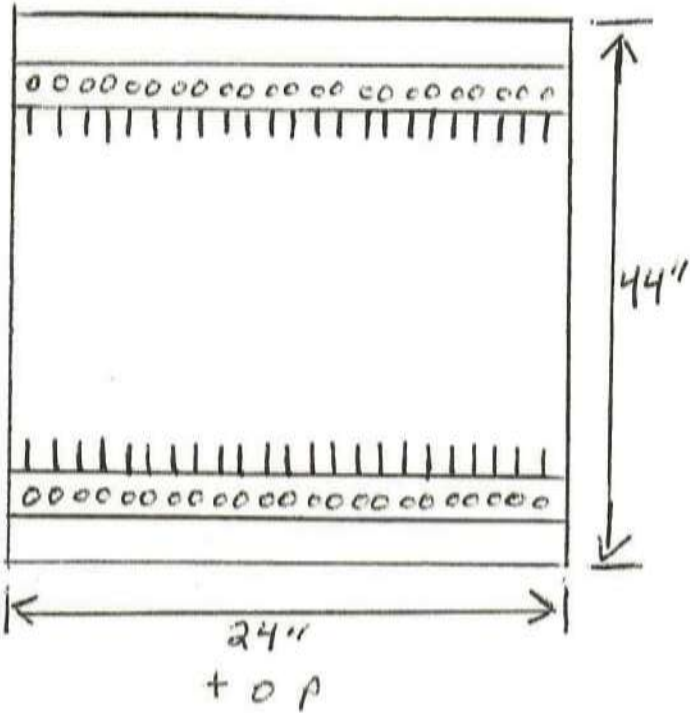
Total Labor Hours:

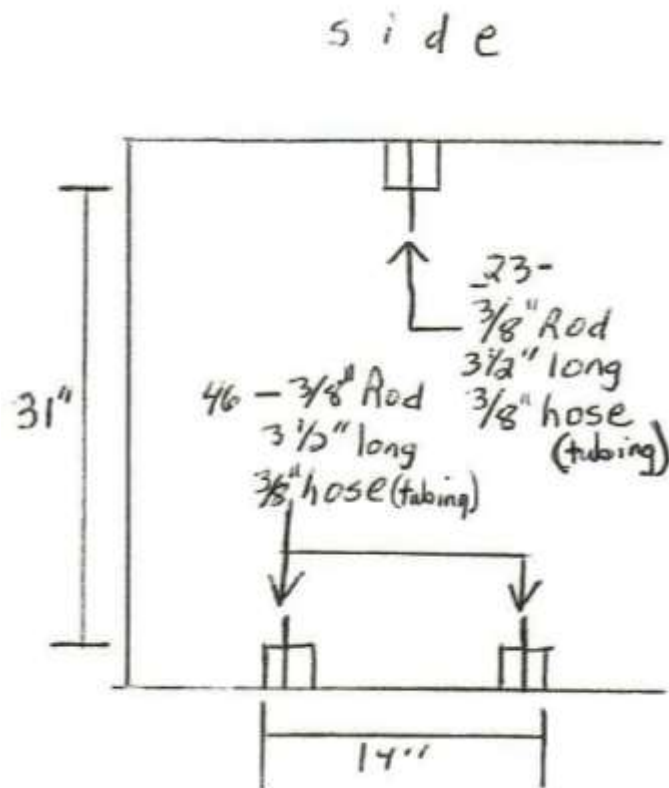
Total number of persons: 2

Total hours: 8

DRAWING (SCHEMATIC) WITH DETAILS:

Front





COST SUMMARY:

Total cost: \$12 plus labor

SAVINGS AND BENEFITS:

The sign rack has saved costs to the County in fuel, time, and manpower. The rack protects the signs from scratches and damage when transported to the job. The well-organized inventory of the most commonly used signs on the truck enables employees to do their job more effective and efficiently. With this being a larger county, there is a significant savings with fewer trips back to the shop.

OPERATING COSTS:

Prior to using the innovation – Difficult to assess.

After using the innovation – Savings up to \$200 - \$300 per month

Storage compartment in truck retrofitted with sign rack

RICHLAND COUNTY



HIGHWAY DEPARTMENT

Each slot designed to hold more than one sign



Sign compartment in sign rack

