#### T & E First-Round Winner

**Innovations Challenge** http://wwwi/intranet/cr/SolutionsAtWork/Innovations.htm

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Prepared by Transportation Planning Missouri Department of Transportation

# Tie Rod Savers



## Description

Tie Rod Savers are a split rubber hose used to cover the boot on the tractor tie rod. Rubber engine coolant hoses big enough to cover the joint along with two hose clamps were used to cover and protect the boot and joint. Using rubber hoses allows the joint area to stay flexible and provides an air tight seal to keep out moisture and dirt. This innovation was used on one mowing tractor through one full season of mowing with no apparent issues. Two other tractors without the tie rod saver had damaged boots after one mowing season.

## **Benefit**

Tie rod savers help save tie rod boots from being damaged by weeds and debris. It is important to protect the grease boot because allowing brush to rake over a torn grease boot will cause premature joint failure as grease escapes and dirt/moisture will go in the boot.

## **Materials and Labor**

Sizes of the hoses used were 1-1/2, 1-7/8 and 2-1/4 inch. Total materials cost \$10 with 30 minutes of labor.

## For More Information Contact:

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Additional photos can be seen by accessing the Innovations Challenge homepage at: http://wwwi/intranet/cr/SolutionsAtWork/Innovations.htm.

