

# Extended Bridge Plank Socket

## For more information:

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## What was the challenge you set out to solve?

The bolts that secure the timber bridge decking began to loosen. To avoid the challenge of setting up scaffolding in the middle of a creek, we decided to create a long socket. This would allow us to reach the bottom of the bridge decking from the creek without needing scaffolding.

## How did you develop and implement your solution?

The team collaborated and decided to buy an impact socket of the appropriate size. They cut the socket in half and welded each half to either end of a long piece of round metal tubing. A couple of feet up from the bottom of the socket, they installed a swiveling handhold. This allows the person operating the impact tool to hold onto the long socket and enables it to spin freely in their hands.

## What did it take to make this solution a reality?

Our mechanic used cutting tools and a welder to construct the final product.

## What was the cost of implementation?

Socket/steel - \$100; 3 labor hours - \$115

## What was the impact and results of your efforts?

Linn County has many timber bridges, and this tool will be used for years to come to ensure that the bolts on the decking of these bridges remain tight. This will save a significant amount of time, as there will be no need for scaffolding to reach loose bolts.

