Access Cover Lifter, Version 1.0

By R. G. Sparber

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This access cover is surprisingly heavy. It is cut from rock and is about 1 inch thick. Lifting it out requires sticking a finger down each square hole. Not only is this a bit hard on

the fingers, there are a number of spiders down there and some bite.





An X-ray view of the edge of this cover would reveal that the square holes are tapered. This gives my fingers a better grip.



What I wanted was an easy-on/easy-off handle that would make lifting this cover less of a chore.

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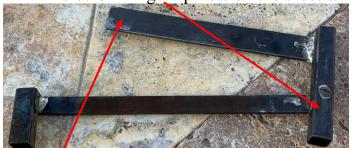
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This tool does the trick. The parts are brazed together but they could have been welded. Initially I used Pop Rivets but they were far too weak.

This "finger" was placed into one of the square holes while the cross arm rested on the face of the cover. I clamped them together and then brazed.

The other "finger" pivots on the cross arm. I placed it into the other square hole,



clamped it to the cross arm, and drill a hole through both pieces using an "F" drill. Then I ran a ¼-20 bolt through and secured it with a locking nut.

With both fingers in contact with the sloped part of the square holes, I set the

handle approximately horizontal and clamped it. Then brazed.



To use the lifter, I drop the two fingers down into the square holes.



As I lift up on the handle, the pivoting finger rotates in and pulls both fingers to the tapered angles. This locks the cover to the lifter tool.

The handle is angled so my hand lifts at near the center of gravity. This keeps the cover level as I pick it up.



To release the lifter, I lower the cover down on the deck. Then the handle is lowered which pivots that one finger and the tool is free.



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Rick Sparber

Rgsparber.ha@gmail.com

Rick.Sparber.org