



# WHAT'S IN YOUR WEEKEND?



Andy Weyenberg began welding at his father's business a few years before joining the Army. After going to school for electro-mechanical, he started working for Miller Electric Mfg. LLC as a technical service rep and training instructor. Andy has built and raced stock cars since he was a teenager — and now builds high-performance street vehicles while also managing the Miller motorsports program.

**SKILL LEVEL:** MEDIUM  
**TIME COMMITMENT:** 2.5 hours

## TOOLS AND MATERIALS



Miller® Multimatic® 220 AC/DC multiprocess welder with spool gun and TIG torch (or other TIG welder)



Hobart® MaxalTig® 1/16 or 3/32 size, 4943 or 5356 alloy aluminum filler metal (or similar filler metal)



.080" thick 5052 aluminum sheet  
Options: 3003 aluminum sheet for the charger shelf or steel can also be used for the entire project



Stomp shear (or other cutting tool)



Bending brake or hand bending tool



Rotex punch or hole saw



Stainless steel wire brush



Acetone



Drill



Step drill bit

## Optional Equipment/Tools



Marker



Tape measure



Square



Level



Dual flowmeter regulator

**WARNING: READ AND FOLLOW ALL LABELS AND THE OWNER'S MANUAL.**



# CORDLESS TOOL CHARGING STATION

Is it a challenge to find spaces for all your tools in your shop or garage? Follow these instructions to build wall-mounted storage shelves for your cordless tools and chargers so you can get them organized and out of the way!

## STEP BY STEP



Decide how many tools you want your organizer to hold, and then determine the width of your charger shelf to hold, and then determine the width of your tool holder shelf. I used three aluminum pieces to make a tool shelf, a charger shelf and a connecting back piece to be mounted to the wall. I wanted my shelf to hold six tools, so I made my charger shelf 23" long and added extra length on each end of my tool shelf so I could bend the sides up.



- Cut the 23" tool holder shelf with two 10" sides added to the dimensions (final cut is 8 1/2" x 43") or cut the sides to add separately.
- Cut the sides of the tool holder shelf at an angle — 5 1/2" in on the front edge to the back corner of the 10" side.
- Cut the 9" x 23" piece for the charger shelf. Last, cut the 10" x 23" back piece that the two shelves will be welded to.

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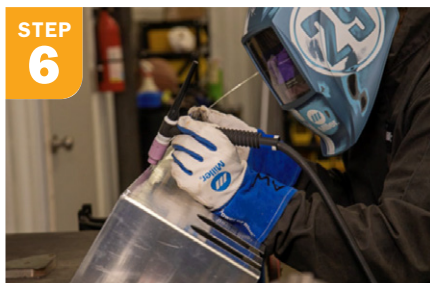
Determine the distance you want between your tools and the dimensions for each tool slot, and then punch or drill holes that you then cut into slots in the tool holder shelf. I used 2" between tools and made all of my slots 1 3/4" wide by 4 1/2" to the end of the hole.



Using the brake, bend the sides of the tool holder shelf and the front 1/2" lip on the charger shelf.



Remove the protective film from the aluminum pieces, then use a stainless steel wire brush to remove the oxide layer from the area to be welded. This will reduce contamination in the weld. After you're done wire brushing, use acetone to wipe away any remaining oxide dust on the material.



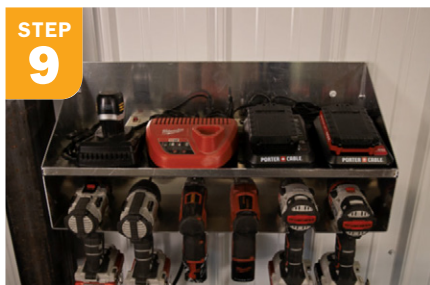
Tack and weld the bottom tool holder shelf to the back piece that will be mounted on the wall. I used the Spoolmate 150 spool gun for tacking since the pieces are quite large and MIG welding with the spool gun makes it easier to hold the pieces in place. After tacking with a spool gun, I TIG welded the bottom tool holder shelf in place.



- Next, tack weld the top charger shelf in place. Again, I used the spool gun for tack welding followed by TIG welds along the seam.
- The charger shelf is 4" above the bottom tool shelf. The top of the charger shelf's 1/2" front lip should be flush with the angled side.



Now that the tool holder is welded together, decide the position of the power strip, drill a hole for the cord and place or mount the power strip onto the piece. I placed my power strip on the back base of the charger shelf to keep the plugs up and out of the way. Your power strip cord may have to exit the shelf on one of the sides.



Mount the tool holder to the wall and place your chargers on the top shelf and the tools in their slots on the holder shelf. Hopefully, this helps tidy up your workspace!



**OPTIONAL:** Add two bottom shelf braces to the shelf for additional stability. To complete, cut filler to appropriate length, leaving it a little long to blend in while welding. Insert filler through bottom hole into top hole. Tack weld into place on both top and bottom.

Have a project you'd like to show off?

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