



◀ **ANDY WEYENBERG**

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: Intermediate
TIME COMMITMENT: 2 hours

/ **TOOLS AND MATERIALS**



Multimatic® 220 AC/DC multiprocess welder



Brass filter



6063 or 6061 alloy aluminum round tubing (1-5/8" x 1/8") (5" long)



1-1/2" x 4" x 1/8" aluminum plate or flat stock for the mounting bracket



1/4" aluminum plate or flat stock for the end caps



Hole saw



Sander/grinder



Hand drill



Drill bits (5/16", 7/16", 33/64", 9/16" x 18" fine tap and 1/4" pipe tap)



Vise



3/32" 4043 or 4943 filler metal



5/16" rivet nuts (2)



Rivet nut setter



1/2" wrench

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

EXPANSION TANK

Leaking axle vent hose? Fix those worn seals or small seeps with this expansion recovery tank project.



AS SEEN ON REAL GARAGE

[YouTube.com/RealGarageWithAndy](https://www.youtube.com/RealGarageWithAndy)



STEP BY STEP

STEP 1



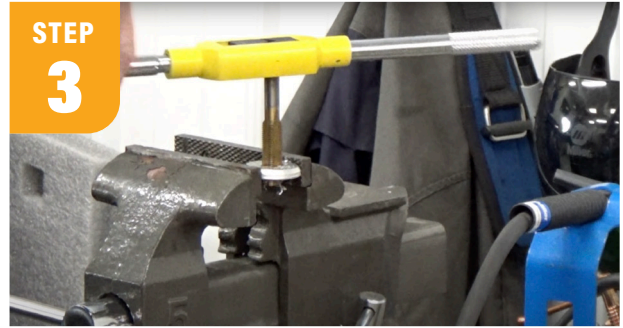
Take your round tubing and cut to desired length; remember to deburr the edges. Mine was cut to 5" long.

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STEP 2
Using your 1-3/4" hole saw, cut two end caps out of the 1/4" aluminum. Sand or grind the rough edges if needed.



STEP 3
Using a hand drill and vise, drill 7/16" hole and thread with 1/4 NPT tap for the brass air filter. I used a 33/64" bit and 9/16" x 18" fine tap for the bottom fitting.



STEP 4
Set the Multimatic 220 AC/DC to 200 amps, 73% balance and frequency set to 90 hertz; then TIG weld the end cap to the round tubing.



STEP 5
Take your mounting bracket and drill two 5/16" holes 1/2" from each end and 3/8" from the edge. Weld to the round tubing.



STEP 6
Attach expansion tank to vehicle by drilling two 7/16" holes into an area with backside clearance, and use 5/16" rivet nuts with 5/16" x 1" bolts and lock washers.



STEP 7
Finish by attaching the vent hose to the new expansion tank.



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