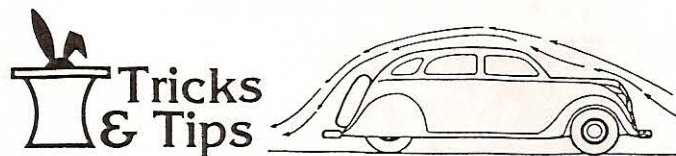


# How to Build a Combination Portable: Auto Body Panel Welder, 110-Volt D.C. Generator, and Battery Charger by Tom Deneen



## BASIC INFORMATION -

As an auto body panel welder, this unit works well; it also serves as a 110-V D.C. generator and a battery charger. After you've assembled the components as shown in the diagram and want to use it as a body panel welder, plug in the welding cables to the power converter. Use a small clamping grip-pliers to hold a small 1/16" coated welding rod. Turn on the switch to the power converter and commence welding. The RPM of the drive engine or motor will determine how hot the arc is. A "fast idle" is usually enough to weld thin body panels. For less spattering you may want to try reversing the polarity of the black and red clips.

## PARTS NEEDED -

- 1) An old GM or Ford alternator without a built-in voltage regulator. An older Chrysler unit with a single field terminal will also work.
- 2) A 4-6HP gas engine or a 1 1/2 - 2 HP electric motor. Some may elect to mount a second generator on a car or truck engine just to power the converter.
- 3) A power converter. This \$30 - \$45 item will probably need to be ordered if you can't find one locally. Drop a S.A.S.E. to Tom Deneen for a couple of sources, if you'd like.
- 4) A V-belt and pulleys to create approximately a 2.8 to 1 ratio. You may elect to measure the size of the belts and pulleys on a current automotive set-up.
- 5) A standard 3-prong plug; 8 ft. of #12-3 rubber-coated electrical cord; a pair of battery charger clips (one red, one black).

## SPECIAL WARNINGS -

**NEVER** hook-up the charging cables to a vehicle equipped with computerized ignition, etc., systems. YOU MUST REMOVE BOTH BATTERY CABLES, BEFORE CHARGING

A BATTERY IN SUCH A VEHICLE! This unit will charge any 6;8;12;24;32 battery. Charge batteries at a low RPM of the drive engine/motor.

As a generator please realize the power is D.C. only! The unit will power most small lawn and garden tools plus numerous hand held power tools. The speed of the alternator will determine the speed of the tool. DO NO USE ON ANY VARIABLE SPEED TOOLS, RADIOS, TV's, AIR CONDITIONERS, NOR ANY ITEM WITH A STARTER OR A CAPACITOR-START SYSTEM!

USE ACCEPTABLE SAFETY PRACTICES AS YOU WOULD WITH ANY ELECTRICALLY POWERED EQUIPMENT, WITH THIS UNIT.

Anyone who would like more information on this system may forward a self-addressed, stamped envelope to:

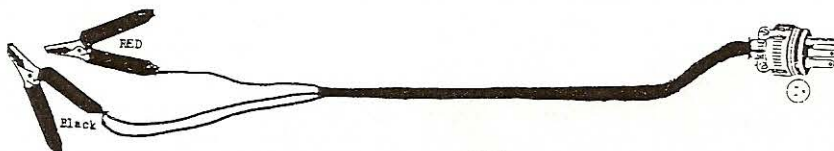
TOM DENEEN  
732 Hulett Avenue  
Fairbault, Minnesota 55021

Editor's Note: The Airflow Club of American assumes no liability for building or using this equipment.

\*\*\*\*\* HELP! HELP! HELP! \*\*\*\*\*  
More than any other feature of the NEWSLETTER, "Tricks and Tips", over the last three years, has received many, many requests for more information in this section. No other single feature has generated as many requests for MORE information than this section. Generally, there is a dearth of information to publish. IF YOU HAVE A PRACTICAL "TIP" OR "TRICK", THAT MAY HELP OTHER CLUB MEMBERS, PLEASE, WRITE IT OUT AND MAIL IT!  
David R. Askey - Editor

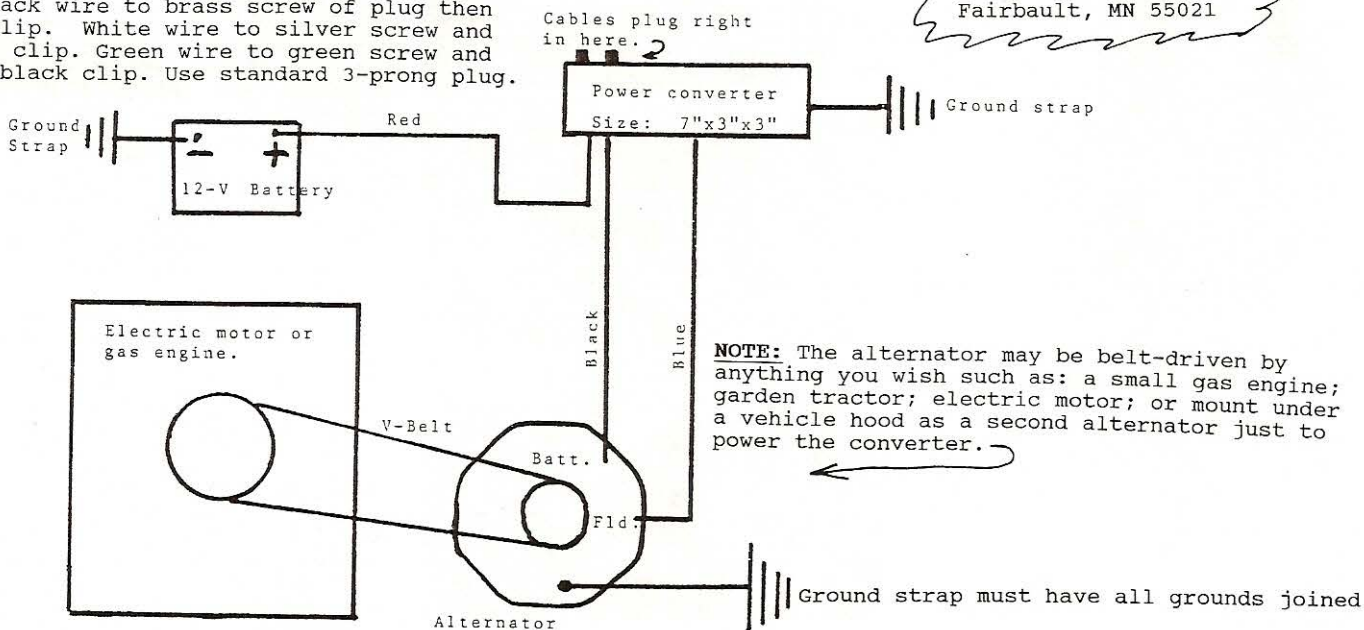
## PLANS FOR A COMBINED PORTABLE

- a. 110-volt DC Generator
- b. Body panel welder
- c. Quick battery charger



Plans are courtesy of:  
TOM DENEEN  
732 Hulett Avenue  
Fairbault, MN 55021

**CAUTION:** Never plug into 110-volt outlet! Make cables from 8' section of #12-3 rubber cord. Black wire to brass screw of plug then to red clip. White wire to silver screw and to black clip. Green wire to green screw and also to black clip. Use standard 3-prong plug.



**NOTE:** The alternator may be belt-driven by anything you wish such as: a small gas engine; garden tractor; electric motor; or mount under a vehicle hood as a second alternator just to power the converter.