

*Thrifty Shop Owners Use . . .*

*Drawing  
A-186*

# THE MILLER MODEL A



If you want a durable welder with outstanding arc characteristics, you will find the Model A a highly satisfactory unit.

Available in two sizes, 140 and 200 amperes, this model has been designed especially for garages, home workshops, blacksmith, welding or sheet metal shops, and it is heavily constructed to give lasting service. Fiberglas insulation is used throughout and all other materials are of the finest quality to assure trouble-free operation.

The arc characteristics are unexcelled by any machine of comparative size and price. It is easy both to strike and maintain the arc and the weld metal is deposited in a nice, even bead. Good penetration can be secured, assuring fine, dense welds with high tensile strength, and the machine will handle any electrodes of the A.C. or neutral variety.

The unit is extremely simple to operate, due to the plug-in type control which gives fifteen heat stages. Amperage steps are clearly marked and all the operator need do is plug into the socket delivering the amperage he desires.

No magnetic blow or grain structure is encountered when using one of these machines, of the A.C. transformer type, and it is therefore ideal for the beginner.

Sufficient output is provided to handle general work. The Model A is thoroughly practical in all respects and offers one of the best values to be had for the money.

Due to the low power consumption, this welder is economical to operate and in most instances can be installed on present power services, eliminating the expense of rewiring.

The attractive cabinet is of all-welded steel, mounted on heavy duty casters so the unit can be readily moved. The transformer is rigidly mounted in the case, which eliminates vibration and unnecessary noise. Of compact design, it does not require a large amount of floor space and is easy to handle.

The Model A is listed by the Underwriters' Laboratories, Inc., and carries the Standard Electrical Manufacturers' Guar-

antee. You are assured of quality and lasting service when you invest in one of these units, and you will find it will soon pay for itself.

Accessories furnished include a good quality helmet, light in weight for comfort, with No. 10 lense, and twelve feet of welding leads complete with a cast copper, manganese alloy, electrode holder having a fully ventilated fibre handle and large fibre guard, a "C" type ground clamp, and two fully insulated panel plugs.

## Specifications

### Model A

Amperes—140.  
Standard Line Voltage—110-220.  
Line Voltage Special on Order—220-440.  
K. V. A.—5.  
K. W.—2.5.  
H. P.—3.3.  
Phase—Single.  
Cycles—60.  
Maximum Input Amps. 110 Volts—46.  
Maximum Input Amps. 220 Volts—23.  
Maximum Input Amps. 440 Volts—12.  
Required Fuse Size 110 Volts—60 Amps.  
Required Fuse Size 220 Volts—30 Amps.  
Required Fuse Size 440 Volts—15 Amps.  
Required Primary Wire Size N.E.C.—110 V. #8 R.C.  
Required Primary Wire Size N.E.C.—220 V. #10 R.C.  
Required Primary Wire Size N.E.C.—440 V. #12 R.C.  
Size—17"x17"x28".  
Approximate Weight—185 pounds.

### Model AA

Amperes—200.  
Standard Line Voltage—220.  
Line Voltage Special on Order—220-440.  
K. V. A.—7.8.  
K. W.—3.9  
H. P.—5.2.  
Phase—Single.  
Cycles—60.  
Maximum Input Amps. 220 Volts—35.  
Maximum Input Amps. 440 Volts—18.  
Required Fuse Size 220 Volts—50.  
Required Fuse Size 440 Volts—25.  
Required Primary Wire Size N.E.C.—220 V. #6 R.C.  
Required Primary Wire Size N.E.C.—440 V. #8 R.C.  
Size—17"x17"x28".  
Approximate Weight—215 pounds.

Model A—140 Amperes .....	\$98.00
Model AA—200 Amperes .....	\$140.00
Extra for 440 Volts.....	\$10.00

(Units can be furnished to meet any line voltage requirements).

Specifications and Prices on Power Factor Corrected Welders on Request.



MANUFACTURED BY

Miller Electric Mfg. Co., Appleton, Wisconsin, U. S. A.

## INSTRUCTION SHEET FOR MODEL A & AA

### UNCRATING THE WELDER

To uncrate the welder remove the top of the crate, then loosen the four metal ears on one corner. The sides can then be removed and the base unbolted from the machine. The four casters then may be slid into the holders in the four corners.

### CONNECTIONS

The name plate indicates the line voltage on which the welder operates. A welder for 220 volts has two line wires in the outlet box on the back of the case. These connect to the line. On 110-220 volt units there are four wires in the outlet box numbered 1, 2, 3, and 4; for a 110 volt line connect 1 and 3 to one line lead and 2 and 4 to the other line lead. For a 220 volt line connect 2 and 3 together and connect one line lead to #1 and the other line lead to #4. On 220-440 volt units there are four wires in the outlet box numbered 1, 2, 3, and 4. For a 220 volt line connect 1 and 3 to one line lead and 2 and 4 to the other line lead. For a 440 volt line connect 2 and 3 together and connect one line lead to terminal #1 and other line lead to terminal #4. This welder should be connected to a single phase or any one phase of a two or three phase line.

The switch to turn the welder ON or OFF is located in the front of the case.

The welder should be connected to the following size line and fuses.

LINE WIRE SIZE			FUSE SIZE	
Line	Model A	Model 1A	Model A	Model AA
110	#6		60	
220	#8	#6	45	60
440	#10	#8	30	30

### CURRENT CONTROL

The ground lead plugs into one of the three sockets at the bottom of the panel, and the electrode lead plugs into one of the five sockets at the top of the panel. There are five welding heats for each position of the ground. The welding amperage is indicated directly below the electrode sockets. If the ground terminal is in left hand socket the top amperage scale on electrode sockets is the welding current. If the ground terminal is in the center socket the center amperage scale on the electrode sockets is the welder current. If the ground terminal is in the right hand socket the bottom amperage scale is the welding current.

### LOCATION

The transformer should be located in a dry place. If casters are removed the base of the machine should be blocked up to allow free air passage through the bottom of the welder.

### MAINTENANCE

The transformer needs little or no attention. If the atmosphere is exceptionally dusty, it is good practice to clean the transformer once a year with a stream of compressed air. This removes all accumulation on the coils and permits the coil to cool better.