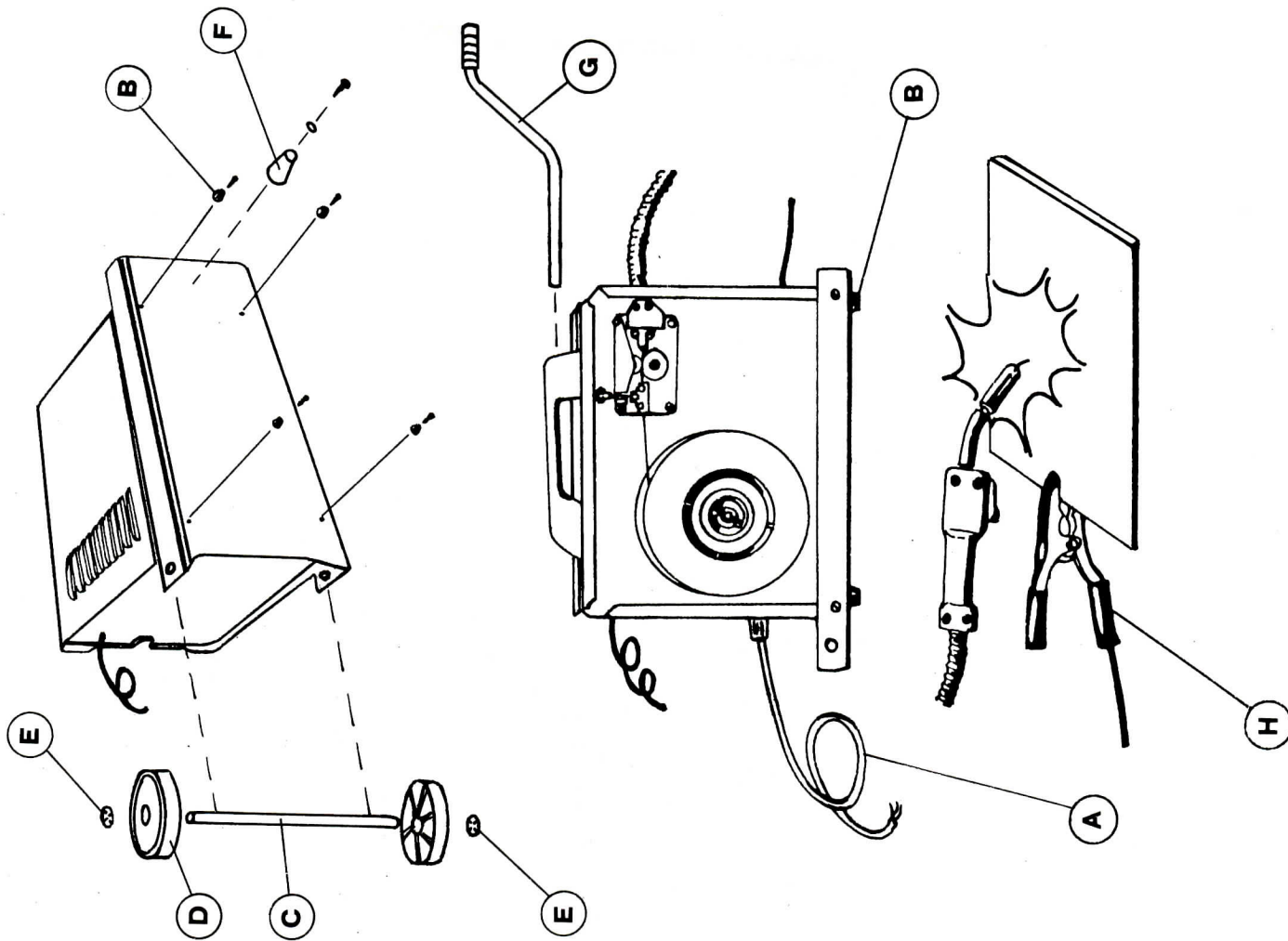


DIAGRAM 1



It is possible to spot-weld thicker material by drilling one or both of the pieces first so an effective weld may take place.

Welding techniques

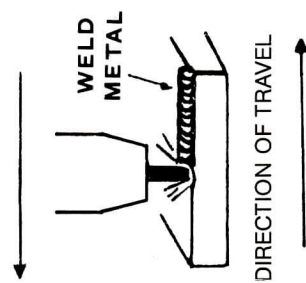
Before welding, READ THE FOLLOWING SAFETY INSTRUCTIONS carefully: make sure flammable materials are removed from the work area. **Keep a fire extinguisher handy. Wear protective clothing so that all skin areas are covered. Use approved helmet and gloves.**

Tuning the welder

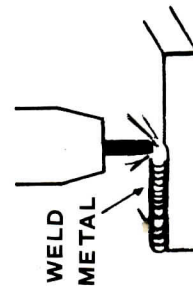
TO SET VOLTAGE: Use proper "stick out". Wire "stick out" is the distance from the CONTACT TIP to the WORK. Wire "stick out" (sometimes incorrectly called arc length) should be between 5 and 10 mm. to achieve optimum welding conditions (and sound).

- 1) First turn the voltage setting to desired number. Lower settings for light sheet metal, higher settings for thicker metal.
- 2) Next adjust wire feed speed. Start with a piece of scrap metal that is free of paint and rust. Attach the ground clamp to the scrap metal. Turn the wire feed to a high setting. Pull trigger, (Please, note that the trigger must be pulled firmly and fully in order to produce its three operations ie gas flow, wire feed, and welding current). Initiate an arc and start to turn the wire feed down slowly. Listen as you continue to decrease the wire feed speed. The sound will go from a sputter to a high pitched buzz (like the sound of bacon frying). This buzz will indicate the proper wire speed setting for the thickness of metal you are welding. You must retune the wire speed whenever the amperage setting is changed. Always start with a higher wire feed speed setting. This will help to prevent damage to the contact tip during the welder tuning procedure. As you weld, the gun should be held at approximately a 45 degree angle. Keep the tip of the nozzle 5 to 10 mm. from work.

DIRECTION OF TRAVEL



FOREHAND WELDING - A welding technique in which the welding torch or gun is directed toward the progress of welding.



BACKHAND WELDING - A Welding technique in which the welding torch or gun is directed opposite to the progress of welding. Sometimes referred to as the "pull technique".