ENGINE SERVICE TIPS,
JUMPER CABLES USE

Farm Machinery Fact Sheet FM-11

By Dr. Von H. Jarrett, Extension Agricultural Engineer

When using jumper cables, the following procedure is recommended:

1. First, make sure you need a jump start. Many seemingly dead batteries are actually suffering from loose or corroded connections. Check them out and make sure the battery fluid level is okay (if yours is not the sealed variety).
2. Park the live vehicle so that no part of it is touching the dead vehicle. Also, take care that the clips on the red cable (+) don't make accidental contact with any vehicle part.
3. Put out that cigarette, pipe or cigar.
4. Switch off accessories in both machines (except lights if needed).
5. Remove caps from both batteries to allow the hydrogen gas to escape.
6. Connect the red clamp (+) of the jumper cable to the positive pole of the dead battery.
7. Connect the other end (red) of the same cable to the positive pole of the booster battery.
8. Connect the second cable (black) to the negative pole of the booster battery.
9. Connect the other end of the second cable (black) to the engine block of the disabled vehicle as far away from its battery as possible. Keep your face away from the proximity of the battery when you do this.
10. After starting the disabled vehicle, first remove the cable from the engine block, then its other end from the booster battery. Disconnect the red cable first from the recharging battery, and then from the booster battery.

These procedures are for vehicles with negative grounds, the rule for those made in America and Canada. However, many European and Japanese cars, and some older U.S. and Canadian models, have positive grounds. The cable from the positive battery terminal is the one connected to the engine block or metal body part.

If the car with a bad battery has a positive ground, the negative terminals should be connected first. Then the cable from the positive terminal of the booster battery is connected to the engine block of the car with the positive ground. Remember to always hook positive to positive and negative to negative.

You could draw the hook-up diagram for the vehicle (and for positive-ground cars, if you might be asked to help start them) on a card and keep it in the glove compartment or tool box, or tape it somewhere in the engine compartment.
Your vehicle's instruction manual may include such a diagram or description. Consult your dealer, mechanic or battery salesman for information.