PROCEDURE: BATTERY - JUMP START & BOOST

RISK RANKING: LOW

HAZARD ASSESSMENT:

<table>
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<tr>
<th>HAZARD</th>
<th>POTENTIAL EFFECTS</th>
<th>CONTROL</th>
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<tr>
<td>1. Incorrect booster connections.</td>
<td>1. Battery could explode.</td>
<td>1. Follow procedure to properly connect booster connections.</td>
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<tr>
<td>2. Sparks from booster connections if improperly connected.</td>
<td>2. Possible flash fire or explosion if in proximity to hydrocarbon.</td>
<td>2. Ensure vehicles are &gt;25 M from hydrocarbon source — if not, perform atmospheric check prior to connecting booster cables.</td>
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SAFETY EQUIPMENT:
Safety Glasses with side shields, hard hat, steel toe boots, FR Clothing, gloves, and Personal gas monitor.

PROCEDURE:

1. If vehicle is equipped with a mobile field radio (XJ type), disconnect. Prior to boosting. Reconnect after boosting.

2. Connect batteries that have the same nominal voltage (i.e.: connect 12V to 12V or 6V to 6V only).

3. The source of the boost power will be either the battery of your truck or a free standing portable battery.

4. Position the vehicle in a safe manner close enough to reach the unit being boosted with proper cables.

5. Before connecting jumper cables, determine how each vehicle is grounded. A vehicle is negatively grounded when the negative battery terminal is connected to the engine block or frame; it is positively grounded when the positive terminal is connected to the block or frame.
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6. When both vehicles are negatively grounded:
   • Connect the ends of one cable to the positive (red) terminal of each battery.
   • Connect one end of the other cable to the negative terminal of the good battery and the other end to the engine block of the stalled vehicle. Do not connect the cable to the negative (black) terminal of the dead battery.
   • Disconnect the batteries by reversing this procedure.

7. When both vehicles are positively grounded
   • Connect the ends of one cable to the negative (black) terminals of each battery.
   • Connect one end of the other cable to the engine block of the vehicle with the good battery and the other end of this cable to the engine block of the stalled vehicle.
   • Disconnect by reversing the procedure.

8. When one vehicle is positively grounded and the other vehicle is negatively grounded:
   • Never allow any part of one vehicle to touch the other.
   • Attach the positive cable to the positive terminal of the negatively grounded vehicle.
   • Attach the other end of this positive cable to the engine block of the positively grounded vehicle.
   • Attach one end of the negative cable to the negative terminal of the positively grounded vehicle.
   • Attach the other end of this negative cable to the engine block of the other vehicle.
   • Disconnect by reversing the above procedure.

Caution Note: Batteries can produce hydrogen gas which is dangerously explosive. Care must be taken not to cause any spark near battery. Do not allow clamps to touch each other once both cables are connected at the other end to a good battery.


10. When preparing to back away from the work location, walk around the vehicle to be certain nothing or no one has got in the way.