

## Table I – Vehicle Operating Instructions

### CAUTION

Do not press battery-connect button on vehicle when START-RUN switch is in RUN position.

### Normal Start-Up

1. Press vehicle battery-connect button to connect batteries.
2. Turn START-RUN switch to RUN position.
3. Wait until glow plug light goes off.
4. Turn START-RUN switch to START position and crank engine.
5. Return switch to RUN position when engine starts.
6. If engine fails to crank, turn START-RUN switch to OFF position, repeat steps 1-5.
7. If engine still fails to start, the EPM could be damaged.

### WARNING

Do not leave vehicle cabling connected as described in steps 7a-b. Diagnostic and repair must be performed as soon as possible.

- a. Remove cables from “Load” side of EPM and temporarily attach to “Battery” side of EPM.
- b. Follow steps 2-5 above.

### Emergency Start-Up

### WARNING

This procedure will bypass EPM and batteries in system. Use this procedure ONLY when vehicle must be removed immediately from location in an EMERGENCY.

1. Connect slave vehicle Nato connector to vehicle.
2. Follow steps 2-5 above.
3. Disconnect slave NATO connector after engine is running.

### Shutdown Procedure

1. Place gear shift in park or neutral and set parking brake.
2. Turn START-RUN switch to OFF position to stop engine.
3. Batteries will be disconnected from vehicle in 3 minutes unless emergency flashers are on, then batteries will stay connected until flashers are turned off or battery is discharged.



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<b>TABLE 2 – N3225 Regulator LEDs Diagnostics</b>	
<b>N3225 LEDs COLOR</b>	<b>N3225 STATUS</b>
Off (Clear)	Regulator is not energized. Measure IGN terminal voltage. If voltage is above 21 V, regulator is defective.
Flashing AMBER (either 28 V or 14 V)	Respective system voltage is reading high voltage.
AMBER (either 28 V or 14 V with the other LED off)	Alternator is shut down and is not producing power for either voltage. 28 V side trips after 2 seconds of reading voltage above 32 V. 14 V side trips after 2 seconds of reading voltage above 16 V. Regulator remains in this mode until reset by restarting engine or if system voltage drops below 22 V or 11 V, respectively. See Chart 3 on page 9 of Troubleshooting Guide for 28V systems, Chart 4 for 14 V systems.
GREEN (both flashing once every 5 sec.)	Regulator is energized, but waiting for AC signal from alternator.
Steady AMBER	Respective system voltage is below regulated setting or is processing soft start (20-second delay).
GREEN	Normal operation (respective system voltage is at regulated setting)
<b>TABLE 3 – EPM LED Diagnostics</b>	
<b>EPM LED COLOR</b>	<b>EPM STATUS</b>
Off (Clear)	EPM is not energized or EPM is defective.
Flashing GREEN	EPM has connected the batteries during start-up and has prevented automatic disconnection for 3 minutes after vehicle shuts down when only vehicle battery-connect button is pressed.
Steady GREEN	Normal operation (batteries are connected to the system and engine is running)