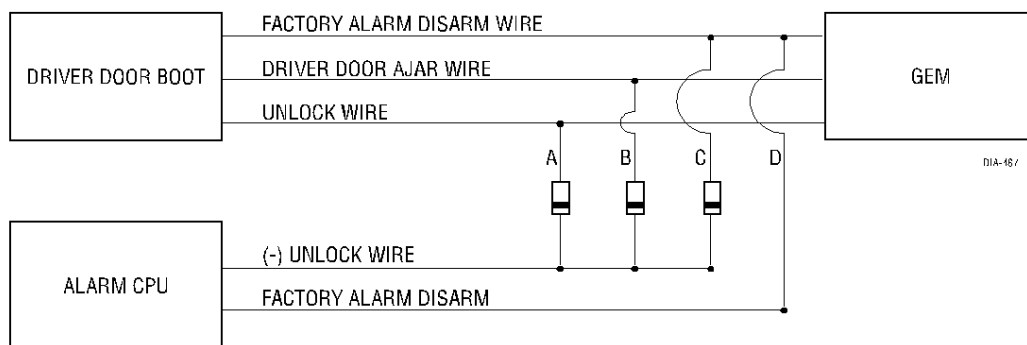


Ford Truck/SUV GEM Wake-Up With Unlock

2001 and Up Ranger/Explorer/Sport Trac/F150/Expedition/Navigator

For the vehicle models listed above that have factory keyless entry, the GEM (Generic Electronic Module) shuts down a few minutes after the doors have been locked to conserve battery power. The indication that the GEM is shutting down will be that the doors will not unlock when disarming the alarm after the vehicle has been sitting for a few minutes. The GEM must be awakened in order for the locks to function properly. The GEM will only awaken if: (a) the factory remote is used, (b) a door is opened, or (c) the factory alarm is disarmed.

GEM Wiring Diagram



To test the GEM

If the remote control is available:

1. With the driver's window rolled down, close all the vehicle doors.
2. Lock the doors using the factory remote control.
3. After 2 minutes, reach in through the driver's window and push the unlock switch in the door. If the doors fail to unlock then proceed with the instructions on the following page.

If the remote control is not available:

1. With the driver's window rolled down, close all the vehicle doors except the driver's door.
2. With the driver's door open, manually lock the door by pressing the driver's door lock switch.
3. Close the driver's door.
4. After 2 minutes, reach in through the driver's window and press the unlock switch in the door. If the doors fail to unlock then proceed with the instructions on the following page.

NOTE: If the vehicle does not have remote keyless entry, then it uses 5-wire door locks and waking up the GEM module is not necessary. Regardless, the GEM test outlined above should still be performed.

Adding an alarm or Valet/remote start to vehicles with remote keyless entry and an alarm system

For remote start systems:

1. Attach wires A and D to the vehicle wires as shown in the **GEM Wiring Diagram**. The wire colors and locations can be found in the Techsoft Database. Do not use diodes in this application.
2. Wire the door locks following the guidelines for Type B door locks.
3. Program the door unlock output to the double pulse setting.
4. When remote starting the vehicle, the factory alarm will disarm and the GEM will awaken without unlocking the doors.
5. When unlocking the doors with the alarm or Valet/remote start, the factory alarm will disarm and awaken with the GEM module. The second unlock pulse will then unlock the doors.

For alarm only systems:

1. Attach wires A and C as shown in the **GEM Wiring Diagram**, using diodes to isolate the wires.
2. Wire the door locks following the guidelines for Type B door locks.
3. Program the door unlock output to the double pulse setting.
4. When unlocking the doors with the alarm or Valet/remote start, the factory alarm will disarm and awaken with the GEM module. The second unlock pulse will then unlock the doors.

Adding an alarm or Valet/remote start to vehicles with remote keyless entry but without an existing alarm system

For systems with both remote start and an alarm:

1. Wire the door unlock using wires A and B as show in the **GEM Wiring Diagram**. Use diodes to isolate the wires. The wire colors and locations can be found in the Techsoft Database.
2. Wire the door locks following the guidelines for Type B door locks.
3. Program the door unlock output to the double pulse setting.
4. Disarm/unlock the system. The first unlock pulse to the door ajar and door unlock wire awakens the GEM module. The second unlock pulse will unlock the doors.

IMPORTANT! This wiring information is being provided free of charge on an "as is" basis, without any representation or warranty. It is the dealer's responsibility to verify any circuit before interfacing with it using a digital multi-meter. Directed Electronics Inc. assumes no responsibility with regards to the accuracy or currency of this information. Proper installation in every case remains the responsibility of the installer.