# Scan Tool Hookup

The scan tool must be connected to the data link connector (DLC) for communication between the vehicle computers and the scan tool. If the New Generation Star (NGS) Tester is used to communicate with the vehicle, an adapter cable must be connected to the NGS Tester. Refer to the NGS Tester owner's manual or manufacturer's manual for specific information.

Note: The DLC is located under the instrument panel.

### New Generation Star (NGS) Tester

- Key off.
- Verify that the proper memory (EPROM) card is inserted in the NGS Tester.
- Connect DLC adapter cable to the NGS Tester.
- Connect NGS Tester DLC adapter cable securely into the vehicle DLC.
- Connect the NGS Tester power supply cable to vehicle battery power supply through cigarette lighter, at the vehicle battery with alligator clip adapter, at the dashboard power point or into the pigtail power connector attached to the DLC adapter cable.
- Turn ignition key to the on position or start vehicle if necessary. The NGS Tester is ready to communicate with vehicle computers.
- Follow instructions on the NGS Tester or in the diagnostic manual.
- To disconnect NGS Tester, turn ignition key to the off position and disconnect NGS Tester from DLC and power supply.

#### **Generic Scan Tool**

• Refer to scan tool manufacturer's manual for specific cables and/or adapters required for scan tool hookup.

## **Data Link Connector**

The DLC is located under the dash to the right of the steering column on Econoline applications, and below the glove compartment in F-Series applications.

The DLC is rectangular in design and capable of accommodating up to sixteen terminals. The connector has keying features to allow easy connection in a one handed/blind operation. The vehicle connector and the test equipment connector have latching features that ensure the test equipment connector will remain mated when properly connected.

## **Communication Error**

It is possible to get a communication error from a scan tool when initiating a test or viewing PIDs. The communication error could be caused by operator error, the vehicle wiring or connectors, or the powertrain control module (PCM) and other control modules connected to the DLC wiring. The PCM will respond to a scan tool whenever the scan tool requests a test. Some are normal responses to valid requests. The others are communication error responses. If the scan tool displays any of the communication error responses, refer to Pinpoint Test AF — Step <u>AF1</u>, after checking scan tool connections, cable/adapters and entry of vehicle information. Verify auxiliary powertrain control (rpm control) is off when trying to perform self tests.

On Board Diagnostics II Diesel PCED