



**An ISO 9001:2000 Registered Company**

## **Gateway<sup>HL</sup> HiLock (GTWY201-B1) - Installation Instructions**

**Ford Econoline Gas/Diesel 2008-2010  
Ford F-Series 5.4L, 6.4L, 6.8L 2008-2010  
Chevy 610 6.0 Gas & 6.6L Diesel 2008-2010**

It is not necessary to cut any OEM wires during the installation of the wire harnesses. Always disconnect the battery before installing any electrical devices.

*It is imperative that each harness be installed into the correct module connector, or damage to the module will result. The connections are color coded to assist with proper installation.*

### **GATEWAY MODULE INSTALLATION**

- Ensure that the ignition is in the OFF position.
- Determine if the ambient temperature in the area of the module is at or below 150 °F during system operation. If above 150 °F, determine the external heat source. This will typically be caused by engine heat if the module is mounted near the engine cover or hot air being supplied by the heater ducts. Locate the module in an area away from the external heat sources.
- Identify each harness connector before installation into the Gateway module.
- **Do not** simply match up the number of pins in a harness connector with the number of pins in a module connector receptacle. There are two 6-pin connections on the harness and module that, if swapped, may cause permanent module or vehicle damage.
- The harness will have a colored tape on the module connector end that will identify which module receptacle to plug it into. The color of the tape on the harness should be matched up to the color of the lettering that identifies the connector receptacles on the module.

### **Gateway Module Suggested Mounting 2009 Ford Econoline**



- Mount the Gateway module above the foam knee bolster, which is attached to the lower dash panel.
- Secure the control module using 2-sided foam tape.
- Verify that the harnesses are routed such that the tilt steering column will not contact them in the full down position.
- When installing the harnesses, leave several inches of take out such that the lower dash panel can be removed if necessary.

## 2008 Ford Econoline



- Mount the Gateway module above the foam knee bolster which is attached to the lower dash panel.
- Secure the control module using 2-sided foam tape.
- Verify that the harnesses are routed such that the tilt steering column will not contact them in the full down position.

## 2008-2009 GM/Chevy

- There are several mounting options, however, the module must not be installed in the direct flow of heater ducts, or too close to the engine compartment.
- Secure the control module in its mounting location using 2-sided foam tape or screws.

### **DATA LINK HARNESS (6-Pin Connector - Red)**

- Locate the vehicle Data Link Connector. It will be mounted below the lower dash panel on the driver's side. (See photo).
- Attach the red connector from the Gateway Data Link Harness to the OEM Data Link Connector.
- Ensure the connection is fully seated, and secure with the supplied nylon wire tie.
- Mount the black connector from the Gateway Data Link Harness where the vehicle OEM Data Link Connector originally was.
- Secure the Data Link Harness such that it does not hang below the lower dash panel.
- Plug the 6 pin connector from the Data Link Harness (red tape) into the connector labeled in red, "Data Link" on the Control Module.
- The white, two pin, connector in this harness **is only used** when installing lift interlock kit ILIS501-H5 for 2009 Ford Econoline.



### **AFIS LED (6-Pin Connector- White)**

- AFIS LED connector with resistor jumper **must remain** in AFIS LED Port. (Factory Installed)

### **FAST IDLE MANUAL ENGAGE (optional)**

Gateway<sup>HL</sup> has the option of installing a fast idle manual engage switch.

- Attach one side of a latching switch to a wire and crimp the other end of the wire to one of the provided terminals. Only one terminal is needed, one extra is provided. This is a logic level circuit that will draw only milliamps, so a 20 Gauge wire is more than adequate.
- Insert the crimped terminal into cavity 4 of the 4-pin connector (connector will be supplied in kit and pin 4 will be outlined in red). Attach the other side of the switch to a known good ground point.
- Insert the 4-pin connector into the header on the Gateway<sup>HL</sup> module marked "I/O Port".
- **Check system for proper operation** (see Post-Installation Instructions).



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## **Gateway<sup>HL</sup> HiLock (GTWY201-B1) – Post Installation Testing**

### **THE FOLLOWING PROCEDURE MUST BE PERFORMED TO VERIFY PROPER INSTALLATION:**

1. Place wheel chocks at front and rear of one tire and set the Park Brake. Place transmission in the “Park” position and start engine.
2. If equipped with optional manual engage switch, engage fast idle. The RPM should increase to 1500 RPM for gas and 1200 RPM for diesel vehicles. If not equipped with (optional) manual engage switch, turn on all vehicle loads, when battery voltage drops below 12.5 volts fast idle should engage.
3. With foot firmly on service brake, shift vehicle out of Park and the fast idle should disengage when vehicle is removed from the Park position.
4. Shift back into Park position and fast idle should re-engage.
5. Depress the service brake for 1 second. Fast idle should temporarily stop anytime the brake pedal is depressed, but should automatically reengage after approximately 2 seconds once the brake pedal is released.
6. Place transmission shift lever in the “Neutral” position. If equipped, attempt to manually engage fast idle or allow the vehicle battery voltage to drop below 12.5 volts. The system should not activate.
7. Place transmission shift lever in the “Park” position and turn off the engine.
8. The AFIS option of Gateway<sup>HL</sup> is properly installed only if it passes all of the above steps.
9. Fill out warranty registration card and return to InterMotive Vehicle Controls.

*If any irregular operational issues persist, contact InterMotive Vehicle Controls at 530-346-1801 for technical assistance.*



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## **Gateway<sup>HL</sup> HiLock (GTWY201-B1) – Operating Instructions**

### **GATEWAY<sup>HL</sup>**

The Gateway is a sophisticated module designed to obtain real-time data from the onboard vehicle data port and use the received information for intelligent control applications. Ford/GM specific chassis data is obtained by communicating across the Ford/GM onboard Controller Area Network (CAN) data network.

### **GATEWAY OPERATION:**

The Gateway connects to the vehicle through the diagnostic data link and initializes when the vehicle ignition is on. After the initialization, the Gateway requests various vehicle data by sending data request messages across the OEM CAN data network and all control logic is performed. To prevent interference with scan tool communication, the Gateway will refrain from transmitting CAN messages for 10 seconds if a scan tool CAN communication is detected. If during these 10 seconds another scan tool message is received, an additional 10 seconds will be added to the end of the first 10 second timeout. When no scan tool messages have been received for at least 10 seconds, the Gateway module will restart communication.

### **ADVANCED FAST IDLE OPTION**

The Advanced Fast-Idle System (AFIS) option of the Gateway includes Charge-Protect mode and optional manual engage mode (installer supplied switch). Charge-Protect is a feature that maintains vehicle charging system voltage by increasing and controlling vehicle idle speed when necessary. Whenever charging system voltage falls below 12.5 volts for 2 seconds, this AFIS feature will increase idle speed and maintain fast idle until one of the safety conditions is no longer met or the voltage is raised above 13.0 volts. Charge-Protect and (optional) manual engage modes require that all safety conditions are met. The type of engine (gas or diesel) in the vehicle determines the fast idle RPM level. For gas engine vehicles, the idle speed is 1500 RPM and 1200RPM for diesel.

#### **Safety conditions that must be met to engage or maintain Fast Idle operation**

- Vehicle NOT moving (speed = 0 MPH).
- Service Brake NOT pressed.
- Vehicle Transmission Range in Park
- RPM inside of safe operating range.
- Transmission Fluid Temperature below 250° F.
- Engine Coolant Temperature below 230° F.

**Note: Fast idle will temporarily stop anytime the brake pedal is depressed, but will automatically reengage after approximately 2 seconds once the brake pedal is released.**

**If accelerator is depressed, Fast idle will disengage completely.**

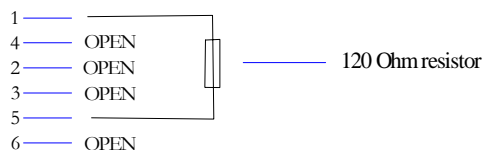
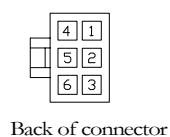
***Note: When additional electrical or A/C loads are in use, engine RPM may drop. The AFIS feature will then raise the RPM back up to the fast idle speed. When the load is removed, engine RPM will increase. AFIS will then lower the RPM back to the fast idle speed. This may be more noticeable on cold engine startup.***

# REVISIONS

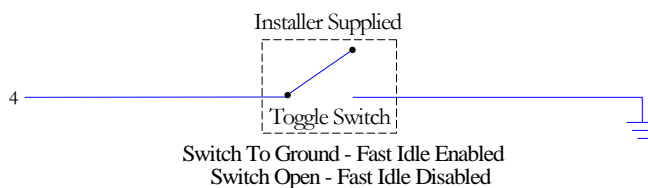
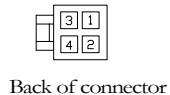
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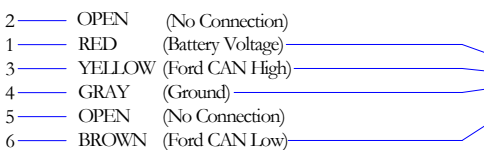
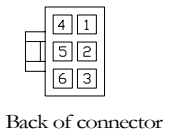
## AFIS LED



## I/O Port



## Data Link



ONLY USED WITH  
INTERLOCK KIT ILIS501-H5  
(2009 ECONOLINE)

Data Link



PRODUCT :

# GATEWAY HL

DRAWN BY:

Bruce  
Hodge

PART  
NO:

GTWY201-B1

DATE DRAWN :  
10/27/08

CHECK BY :

Keith Thomas

DATE CHECKED :  
10/27/08