GTWY805

2010-2015 Ford F650/750 (Diesel Only)
2010-2018 Freightliner M2/S2
2018 Durastar 3200 (6.7L Cummins Only)
(See ILISC805 for additional Chassis)

Contact InterMotive for additional vehicle applications.

Introduction

The Gateway 805 is a wheel chair lift interlock and Fast Idle system for Medium Duty J1939 vehicles. It is intended to prevent driving the vehicle when the wheel chair lift is deployed. It can optionally also lock the vehicle down when the passenger door is open. GTWY805 provides system status via a dash mounted LED panel, and may be used on either hydraulic or air brake chassis. It also has the ability to program and control most Allison transmission's Range Inhibit function.

The GTWY805 **must** secure the vehicle in one of three ways: 1) Activate a Shift Lock Solenoid that will physically prevent shifting out of Park, 2) use the Range Inhibit output to prevent the transmission from engaging in a drive gear, or 3) activate a Park Brake Lock Solenoid that will prevent the air Park Brake from being released once applied. The GTWY805 **must not** use an air dump solenoid that could apply the vehicle's air brakes when activated.

GTWY 805 Add-On Options

In addition to Interlock and Fast Idle features, InterMotive offers the following options:

GTWY805-D - Gateway with Door Ajar Display Panel.
GTWY805-P2 - Gateway with Plug and Play J1939 data link harness.

Installation Instructions

Disconnect vehicle battery before proceeding with installation

WARNING
Disconnect the battery to prevent setting a check engine light.

It is the installer's responsibility to route and secure all wiring harnesses where they cannot be damaged by sharp objects, mechanical moving parts and high heat sources. Failure to do so could result in damage to the system or vehicle and create possible safety concerns for the operator and passengers.
It is important to avoid placing the module where it could encounter strong magnetic fields from high current cabling connected to motors, solenoids, etc. Also avoid radio frequency energy from antenna's or inverters next to the module. Finally, avoid high voltage spikes in vehicle wiring by always using diode clamped relays when installing upfitter circuits.

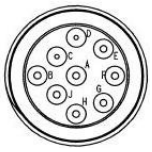
GTWY805 Module

Remove the lower dash panel below the steering column and find a suitable location to mount the module. Do not actually mount the module until all wire harnesses are routed and secure. The last step of the installation is to mount the module. It is recommended the module be mounted with two screws, however 2-sided foam tape or Velcro may also be used. Ensure harnesses are routed such that the tilt steering column does not contact them in the full down position. When installing the harnesses, leave several inches of take-out so the module can be removed if necessary.

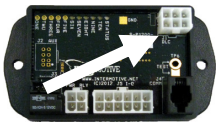
J1939 Data Link Harness (Blunt Cut non-Plug and Play option)

Note: If using the optional P2 or P2G Data Link Harness, skip to next section

Important: On the following wires use solder and electrical tape to make all of the connections.


Back of connector

1. Locate the vehicle's J1939 Connector. It will be mounted below the lower left dash panel. Remove the J1939 Connector from the mounting bracket.
2. Locate Pin A of the J1939 connector. Do not cut the wire! Strip the insulation 1" from the J1939 connector and attach the Black wire from the GTWY805 Data Link Harness.
3. Locate Pin B of the J1939 connector. Do not cut the wire! Strip the insulation 1" from the J1939 connector and attach the Red wire from the GTWY805 Data Link Harness.
4. Locate Pin C of the J1939 connector. Do not cut the wire! Strip the insulation 1" from the J1939 connector and attach the Yellow wire from the GTWY805 Data Link Harness.
5. Locate Pin D of the J1939 connector. Do not cut the wire! Strip the insulation 1" from the J1939 connector and attach the Green wire from the GTWY805 Data Link Harness.
6. Plug the free end of the Data Link harness into the mating 6-pin connector on the GTWY805 module.
7. Secure the GTWY805 Data Link harness so that it does not hang below the lower dash panel.



J1939 Data Link Harness (Optional P2 or P2G Data Link Harness)

1. Locate the vehicle's J1939 Connector. It will be mounted below the lower left dash panel.
2. Remove the J1939 Connector from the mounting bracket.
3. Connect the GTWY805 Data Link harness J1939 female connector to the vehicle's male J1939 connector.
4. Mount the GTWY805 Data Link harness J1939 male connector to the vehicle's J1939 connector mounting bracket.
5. Plug the free end of the Data Link harness into the mating 6-pin connector on the GTWY805 module.
6. Secure the GTWY805 Data Link harness so that it does not hang below the lower dash panel.

LED Display Panel

1. Locate a suitable position on the dashboard within view of the driver for mounting the LED Display Panel. The length of the display harness is 40". This is the maximum distance the display panel can be mounted from the GTWY805 module.
2. Drill a 5/8" hole in the dashboard where the center of the display will be located, being careful not to damage anything behind the dashboard.
3. Attach the 4 Pin LED display harness to the GTWY805 Module's 4-pin connector.
4. Run the free end of the display harness under the dash and out through the 5/8" hole.
5. Attach the end of the display harness to the LED Display Panel.
6. Ensure panel is level, and secure using the supplied screws.

Door Ajar Display Panel (-D option)

If a Door Ajar Display Panel is used, a pre-crimped green wire is included with the panel which may be inserted into the GTWY805 12 pin connector Pin #5. When connected to the passenger door ajar switch, this will cause the Door Ajar LEDs to flash when the passenger door is open. The crimped pin on the green wire MUST be oriented correctly as it is plugged into the Molex connector housing. Observe the orientation on the existing pins in the connector, and match this orientation.

1. Install Door Ajar Panel per instructions above
2. Attach the free end of the green wire to the passenger door switch that provides a ground when the door is open.
3. To shift/brake lock the vehicle when the passenger door is open, also connect this passenger door wire to the module's pin #11 Vehicle Lock Request input.

See System Operating Instructions pages for descriptions of LED indicators meanings.

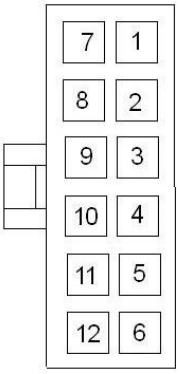
Control Outputs, Input, and Lift Inhibit Connections - 12-pin I/O Connector

The GTWY805 provides three ground side configurable outputs and one configurable input/output. The outputs can provide vehicle information and are configured per customer requirements at InterMotive prior to shipping. These outputs can be used to control upfitter circuits and can sink up to 1/2 amp each. The input pin can be connected to a ground side switch to activate Fast Idle or the Vehicle Lock output.

A 12 pin mating connector and seven terminals are provided. To use any of these outputs, properly crimp a provided connector terminal to the installer supplied wire using the correct crimping tool (Molex Part# 11-01-0197), and insert into the correct connector pin housing. The pin MUST be properly oriented for it to fully seat and click into place. The largest wire that can be used with these terminals is 16 AWG. Snap this connector into the GTWY805 module's 12-pin connector.

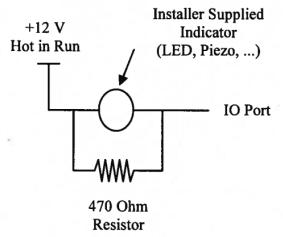
12-pin connector pin out definition

- Pin #1 - Orange - Warning Buzzer 12V Output. See below
- Pin #2 - Yellow - Range Inhibit/Shift Lock 1/2A Output (Active High/Low Configurable)
- Pin #3 - I/O Port Pin #2 - Configured Low True 1/2A Output (Default: RPM>400)
- Pin #4 - I/O Port Pin #3 - Configured Low True 1/2A Output (Default: Park Brake Input)
- Pin #5 - Green - Door Ajar Input (Use with Door Ajar Panel) flashes Door Ajar on panel
- Pin #6 - Not Used
- Pin #7 - Red - From Pin #12
- Pin #8 - Blue - Park Brake Lock 12V 1/2A Output
- Pin #9 - I/O Port Pin #1 - Configured Low True 1/2A Output (Default: VSS>70)
- Pin #10 - I/O Port Pin #4 - Configured I/O Pin (Default: Fast Idle Request Input, low true)
- Pin #11 - Vehicle Lock Request Input. Active Low (GND) locks shifter or Park Brake.
- Pin #12 - Red - To Pin #7

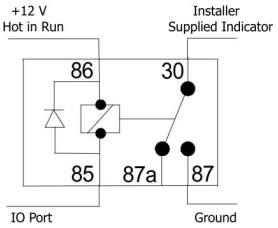


Back of the Connector

Note: When using the I/O port outputs to drive installer supplied low current devices, such as LEDs or Piezo buzzers, a small amount of leakage current when the pin is inactive may cause the external low current device to activate. This is indicated by the LED turning on dimly or the Piezo buzzer sounding faintly when the output is inactive (Conditions not met).



To correct this, install a 470 Ohm 1W resistor across the low current device. Digikey Part # 470WCT-ND. Or, drive a relay with the I/O output to switch ground to the low current device. Digikey Part # PB682-ND.



Warning Indicator Beeper

The beeper will sound when certain safety conditions are violated, such as removing Park Brake while the wheel chair lift is in use.

1. Choose a location to mount the warning beeper. You can either drill a 1 1/8" hole to mount the beeper, or secure it up under the dash. If drilling, be careful not to damage anything behind the dashboard.
2. Attach the beeper Black wire eyelet to a ground source.
3. Insert bezel mounting, secure the beeper into the hole with the supplied nut and rubber washer. The beeper face can be rotated to control the volume.

Vehicle Lockdown

The GTWY805 requires an installer or OEM supplied vehicle locking mechanism (i.e. a Park Brake Lock solenoid or Shift Lock solenoid). This device must allow GTWY805 to prevent the vehicle from moving when the wheel chair lift door is open. This can be done by locking the air Park Brake on so it cannot be released, or locking the shifter so it cannot be shifted out of Park, or enabling Range Inhibit on the TCM so it cannot be shifted into gear. **GTWY805 must NOT be wired to activate air brakes, but can be used to prevent the air Park Brakes from being released, once set.**

CAUTION: On vehicles without a Park position or Park Pawl, the vehicle might still roll in Neutral if the Range Inhibit method is used by itself.

There are two outputs GTWY805 can use to secure a vehicle via the 12 pin connector 1/2A outputs:

- Pin #2 Yellow wire is a configurable low/high true output intended for driving a Shift Lock solenoid or Range Inhibit input to an Allison transmission. For this output to be asserted the vehicle must be stationary, in Park(/Neutral if no Park), and a vehicle lock trigger (Lift Door or Shift Lock Request input) must be active. This output will also be asserted if the Park Brake is set (prevents driving with Park Brake on). The default sense of this output allows it to be connected directly to the Allison Range Inhibit input (output high to prevent shifting). This output may also be used to control a Shift Lock solenoid, and may be inverted if desired (see later).
- Pin #8 blue wire is a 12V output intended for Park Brake locking mechanisms. For this output to be asserted the vehicle must be stationary in Park/Neutral with Park Brake set and a vehicle lock trigger must be active (Lift Door or Shift Lock Request input).

Locking down using the Park Brake Lock output with air Park Brakes

Attach the GTWY805 Park Brake Lock pin #8 (of 12) Blue wire to an installer supplied wire that runs to the Park Brake locking system. This should be wired to prevent air pressure from releasing the Park Brake, but only when it's set. This can be done with an air blocking solenoid and pressure switch to ensure GTWY805 can only prevent the air Park Brake from being released by the dashboard control if the Park Brake is already set. The idea is to prevent undesired release of the Park Brake during wheel chair lift operations. GTWY805 will flash the Vehicle Lock icon on the LED panel if it detects this output becomes disconnected from it's load. This is a safety feature to alert the driver that the vehicle may not be properly "locked."
DO NOT connect this output to an air dump solenoid or equivalent that would allow GTWY805 to apply the brakes. This output should be used only to lock the park brake on once it's applied by the driver.

Locking down using the Range Inhibit/Shift Lock output with a Shift Lock solenoid

Attach the GTWY805 Pin #2 (of 12) Yellow wire to an installer supplied wire that runs to the shift locking mechanism. By default, this output provides 12V@1/2A max to lock the shifter. If an active low signal is desired, perform the following procedure:

1. With the Park Brake set, turn the Key On with the Engine Off.
2. Put the module in Test mode by applying a ground wire to the "test" pad of the module (some modules use a push button instead of a test pad). Several of the LED's on the module will start to flash as confirmation.
3. Quickly press and release the Service Brake 3 times.
4. Press and release the Accelerator Pedal (must be pressed to the floor) 2 times.
5. Press and release the Service Brake 3 times.

When successful, the Park Brake and vehicle lock LED's on the dash panel will flash. They will flash three times if the output is active low and five times if the output is active high.
Note: If no LED's flash, then the sequence was not recognized and should be retried after waiting 10 seconds.

Locking down using Allison's Range Inhibit

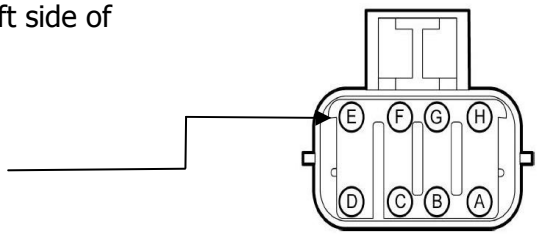
The GTWY805 can operate in conjunction with the Allison transmission Range Inhibit feature. This feature allows the GTWY805 to inhibit the transmission's ability to shift into gear during wheel chair lift operation. The GTWY805 12 pin connector Pin #2 Yellow wire configured as a **high true** output must be connected to the Allison Transmission Control Module for the function to operate, and the Allison transmission must have this feature enabled (see later on how to program the transmission). Some examples of these connections follow.

CAUTION: The Range Inhibit Feature does not lock the transmission in Park, it will only prevent shifting into gear. If the transmission is in Neutral the vehicle may roll even when Range Inhibit is active.

2010 F650/750

1. Locate the C314 Transmission Body Builder connector on the left side of the engine.
2. Attach the GTWY805 12 pin connector Pin #2 Yellow wire to an installer supplied wire, that runs through the firewall, that is connected to the C314 Transmission Body Builder connector Pin E Gray/Yellow wire.

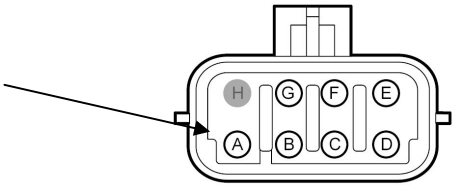
Front of the C314 Transmission Body Builder Connector



2011-2015 F650/750

1. Locate the C3618 Transmission Body Builder connector on the left side of the engine.
2. Attach the GTWY805 12 pin connector Pin #2 Yellow wire to an installer supplied wire, that runs through the firewall, that is connected to the C3618 Transmission Body Builder connector Pin A Gray/Yellow wire.

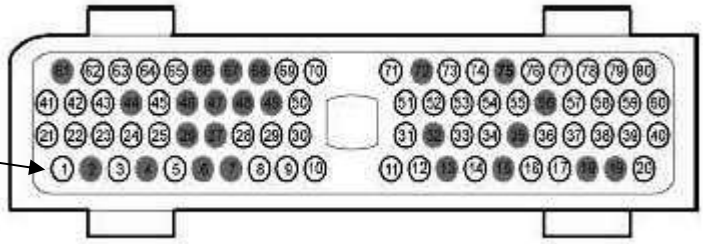
Front of the C3618 Transmission Body Builder Connector



Freightliner M2 Series

1. Locate the Allison Transmission Control Module connector.
2. Attach the GTWY805 12 pin connector Pin #2 Yellow wire to an installer supplied wire that runs to the Transmission Control Module. Attach the wire to the Allison Transmission Control Module connector Pin #1 Gray/Yellow wire.

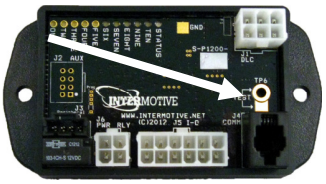
Front of the Allison Transmission Control Module Connector



Allison Range Inhibit Programming Sequence

A functional change was made to the GTWY805 starting with firmware v1.10. The module no longer automatically configures the Allison transmission to support the Range Inhibit input and Park output features. These functions can still be enabled by the GTWY805 by performing the following procedure:

1. With the module installed, engine Off, turn the key to "RUN", and wait for the panel to prove out.
2. Set the Park Brake.
3. Put the module in Test mode by applying a ground wire to the "test" pad of the module (some modules use a push button instead of a test pad). When in Test mode, several of the LEDs on the module will start to flash.
4. Press and fully release the Service Brake 5 times within 10 seconds.
5. Immediately tap the accelerator pedal once.



Once the above sequence is executed, the green Lift Power LED will flash on the panel. This indicates that the range inhibit is now enabled. If the red Park LED, Lift Door Open, and the PB LED flash, then the transmission was not successfully programmed. If no LED's flash, then the sequence was not recognized and should be re-attempted after waiting 10 seconds.

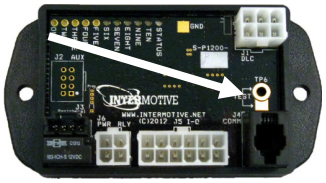
Once the procedure is successfully completed on a vehicle, the Allison programming portion of the Gateway 805 will only work on that particular VIN.

Note: To disable the Allison transmission inhibit feature, repeat the steps above. When the sequence is correctly executed, the Green Lift Power LED and the Red Lift Door Open LED will flash. If no LED's flash, then the sequence was not recognized and should be re-attempted after waiting 10 seconds.
The Allison Range Inhibit Programming Sequence is not available on Gen. 5 Allison Transmissions.

Vehicle Lock LED Programming Sequence

By default, the Vehicle Lock LED on the dash panel will track the Pin #8 Park Brake Lock output. If this output is not used, and the Pin #2 Shift Lock or Range Inhibit output is used instead, the LED will not accurately indicate when the vehicle is locked. The following programming sequence will toggle the Vehicle Lock LED tracking between Pin #2 Shift Lock/Range Inhibit output and Pin #8 Park Brake Lock output.

1. With the module installed, engine Off, turn the key to "RUN", and wait for the panel to prove out.
2. Set the Park Brake.
3. Put the module in Test mode by applying a ground wire to the "test" pad of the module (some modules use a push button instead of a test pad). When in Test mode, several of the LEDs on the module will start to flash.
4. Press and hold the Service Brake.
5. Press and release the Accelerator Pedal (must be pressed to the floor) 2 times.
6. Release the Service Brake.
7. Press and release the Service Brake 3 times.



When successful, two LEDs will flash on the LIN Panel. The Park Brake and Park LEDs will flash five times if the Vehicle Lock LED is tracking the Pin #2 Shift Lock/Range Inhibit output. The Park Brake and Vehicle Secure LEDs will flash five times to indicate that the Vehicle Lock LED is tracking the Pin #8 Park Brake Lock output.

Note: If no LED's flash, then the sequence was not recognized and should be retried after waiting 10 seconds.

Eaton Transmission Discrete Park/Neutral Input

A functional change was made to the GTWY805 in firmware v2.12. This change allowed the Gateway 805 to read the Park/Neutral input discretely instead of over the vehicle CAN network.

Firmware 3.01 and higher

The Eaton transmission data will be determined from the network. No programming sequence is necessary. The Discrete Park/Neutral input is no longer used.

Lift Connector 4-pin

This 12" harness contains the circuits listed below. One end plugs into the GTWY805 module and the other end provides a Molex MLX connector which is intended to plug into the wheel chair lift harness. A mating harness can be fabricated by the installer. The mating connector is Molex Part # 0050841040. The mating terminals are Molex Part # 0002081003. We recommended using Molex terminal extractor tool Part # 0011010168 and Molex hand crimp tool # 0638116800.

Vehicle Secure/Lift Enable Circuit (output) - Connect the Vehicle Secure Orange wire from pin #2 of the white 4-pin Lift connector to the Vehicle Secure (Lift Enable) input on the lift. The Vehicle Secure circuit must only activate the Vehicle Secure input on the lift and must not draw more than 8A (see lift manufacturers installation instructions). **Note:** Do not power any other loads (ie: lights, motors, etc.) from this circuit that increase the current draw to greater than 8A. The "Lightening Bolt" icon on the LED panel is on when this output is active.

Vehicle Secure/Lift Enable Circuit (input) – Connect the Yellow wire from pin #4 of the white 4-pin Lift connector to an appropriately fused ignition power source (Hot in Run). The fuse should support a current draw of 8A.

Lift Inhibit (input) - Since this circuit generally does not connect to the wheel chair lift, no wire is provided in the lift harness. A lift inhibit (or lift enable) switch can be connected to this connector location by crimping one of the provided Molex terminals to a wire and inserting it into the empty pin #1 cavity of this connector. Connecting this wire to a grounding switch will prevent GTWY805 from supplying power to the Vehicle Secure Output, thus disabling the lift.

Lift Door Circuit (input) – Locate the vehicle's lift door switch circuit. Connect the Gray wire from pin #3 of the white 4-pin Lift connector to this circuit. **Note:** the lift door switch must provide a ground when the door is open/ajar. A switch that provides 12V when the door is open will not operate correctly. Plug the White 4-pin connector from the Lift Harness into the GTWY805 module.

GTWY805 Module Mounting

Ensure all harnesses are properly connected and routed and are not hanging below the dash area. Mount the module as described on Page One and secure using supplied screws or double sided tape.

Reconnect vehicle battery

Post Installation Testing

Lift Interlock

1. With the transmission in Park, Park Brake set, start the engine, noting the GTWY805 LED panel. **Note:** In vehicles without Park use Neutral.
2. When the ignition key is turned on, all LED's will turn on for approximately 2 seconds then back off. The Park LED (P) will illuminate when the transmission is in Park/Neutral, and the Park Brake LED (PB) will illuminate when Park Brake is set. Verify these LEDs are tracking properly.
3. Verify the Lift Door LED illuminates when the Wheel Chair Lift Door is opened. The optional Door Ajar Display panel will illuminate in red when the lift door is open, and flash red when the passenger door alone is open (if so wired).
4. With the vehicle in Park, Park Brake set, Lift Door open, Lift Inhibit not grounded, verify that the Vehicle Secure/Lift Power LED (lightening icon) is on, and that the Lift operates. If the Lift does not operate, check the GTWY805 LIFT connector J6. Pin 4 Yellow wire should have 12V (Lift power input), and pin 2 Orange wire should have 12V (Vehicle Secure/Lift Power output).
5. With the vehicle in Park, Park Brake set, Lift Door open, Lift Inhibit not grounded, confirm the vehicle can not be moved. Either the transmission can not be shifted from Park, or the Park Brake can not be released, depending on the installation. It is recommended that GTWY805 does not rely solely on the Range Inhibit function of the transmission, as this can allow the vehicle to be shifted into neutral, allowing the vehicle to roll with the lift deployed.

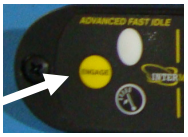
Note: as a safety feature, closing the lift door does NOT release Vehicle Lock. The Park Brake must be released and the Service Brake must be applied to release Vehicle Lock.

Do not place vehicle in service without the Shift Interlock working properly!

Fast Idle (optional AFIS—Advanced Fast Idle System)

The Fast Idle function has several "auto triggers" that will increase engine RPM. These include low battery voltage and an external switch input on pin #10 of the 12 Pin connector (I/O 4).

1. Place vehicle in Park. Manually engage Fast Idle by pressing and releasing the Yellow Engage button on the LED panel. The Green LED will light and the engine RPM will increase in 100 RPM increments each time the button is pressed/released, up to 1500 RPM for Gas, 1200 RPM for Diesel.



2. Press the Service Brake for 1 second. Fast idle will temporarily disengage anytime the Service Brake is pushed, but will automatically reengage after approximately 2 seconds once the Service Brake is released.
3. Exit Fast Idle mode by pressing the Service Brake and the Yellow Manual Engage button together. Fast Idle will cancel and the Green LED will turn off. This disables Fast Idle until the key or transmission range is cycled.
4. Shut down the engine and verify that all LED's turn off, which may take up to a minute. Do not activate any vehicle controls during this time (windows, mirrors, doors, etc.)

The AFIS option of GTWY805 is properly installed only if it passes all of the above steps.

If the GTWY805 fails any step in the Post Installation Test, review the installation instructions and check all connections. If necessary, call InterMotive Technical Support at (530) 823-1048.

Leave in vehicle
System Operating Instructions - GTWY805
2010-2015 Ford F650/750 (Diesel Only)
2018 Durastar 3200 (6.7L Cummins Only)
2010-2018 Freightliner M2/S2

Gateway 805 Operation

The Gateway 805 is a wheel chair lift interlock system which is intended to prevent driving the vehicle when the wheel chair lift is deployed. Gateway 805 also optionally provides an engine Fast Idle system. An LED display panel, usually mounted on the dashboard provides system status.

Gateway 805 initializes when the vehicle ignition is turned on. During initialization, the LED display panel performs a prove-out for 2 seconds. After the initialization, the system collects vehicle data by monitoring the J1939 data port. It uses this information to perform all of its control logic. When the Gateway 805 module has been running and the vehicle ignition is turned to the off or accessory positions, the module goes into a low current "sleep" mode. This may take anywhere from several seconds to a minute.

Lift Operation

Wheel chair lift operation will only be allowed when all of the following conditions are met:

- Vehicle transmission range in Park (or Neutral if the vehicle lacks a Park position).
- The Park Brake is applied.
- The vehicle ignition is on (Engine on or off).
- The Lift Door is open.
- Lift inhibit switch (if equipped) is not activated. (Optional wheelchair lift inhibit/enable switch).

Once the wheel chair lift door is open, GTWY805 will not allow the vehicle to be driven. If the vehicle is not in a secure state, GTWY805 will not allow the lift to operate. When lift operations are completed, and the lift door is closed, the driver must press Service Brake and release Park Brake before the vehicle can be driven.

LED Panel—The LED panel provides the following vehicle status (left to right) when the key is on.

Fast Idle Engage button - Push for 1/4 second to manually engage Fast Idle.
Fast Idle Engaged status - indicates when GTWY805 is commanding engine Fast Idle.
Vehicle Secure - (Lightning Icon) Illuminates Green when lift is enabled. All conditions for lift operation have been met.
Door Open - (not available on "Door Ajar" panels) - Illuminates Red when lift door is open.
Park Brake - Solid Red when Park Brake is set. Flashes when the Park Brake is not set and lift door is open.
Park - Solid Red when in Park (neutral without a park position). Flashes when not in Park and lift door open.
Vehicle Lock - Illuminates in Red when the Park Brake and/or transmission shifter is locked. If other systems in the vehicle are tied into this input, the LED will also illuminate. If the Vehicle Lock LED is illuminated, the driver will not be able to drive or move the vehicle. Flashes when an output is not properly connected. Vehicle must be serviced as soon as possible.
Door Ajar - (Door Ajar Panel only) - Solid Red when the lift door is open, flashes when the passenger door alone is open.

The lower backlit Icons on the Panel will remain illuminated whenever GTWY805 is awake. There are no lower backlit Icons on the Door Ajar Panel. The module will stay awake for several minutes after the ignition is turned off.

System Operating Instructions (continued)

Beeper

The warning beeper will sound when attempting to operate the wheel chair lift when one of the safety conditions is not met, such as opening the lift door while not in Park (neutral if no Park), or not having the Park Brake set, or if vehicle motion is detected (rolling). Beeper volume can be adjusted by rotating the bezel on the beeper. Beeper location is determined by bus manufacturer.

Advanced Fast-Idle Option

Fast Idle is an ***automatic*** system that increases the engine's idle speed under certain circumstances. Fast Idle does not engage when the transmission is in Drive, only when the vehicle is stopped in Park/ Neutral. Fast Idle may occur to "Charge Protect" the vehicle batteries, or to enhance the vehicle's air conditioning, etc. Fast Idle will only occur when all of the following safety conditions are met:

- Vehicle NOT moving (speed = 0 MPH).
- Service Brake NOT pressed.
- Vehicle Transmission Range in Park (or Neutral with the Park Brake applied, if vehicle lacks a Park position).
- RPM inside of safe operating range.
- Transmission Fluid Temperature below 250° F.
- Engine Coolant Temperature below 230° F.

Control/Display Panel

The left side of the Control/Display Panel consists of one LED and a Manual Engage button. The Green LED will illuminate when Fast Idle is in progress. In addition to coming on automatically, Fast Idle can be manually engaged by pushing and releasing the Yellow ENGAGE button.

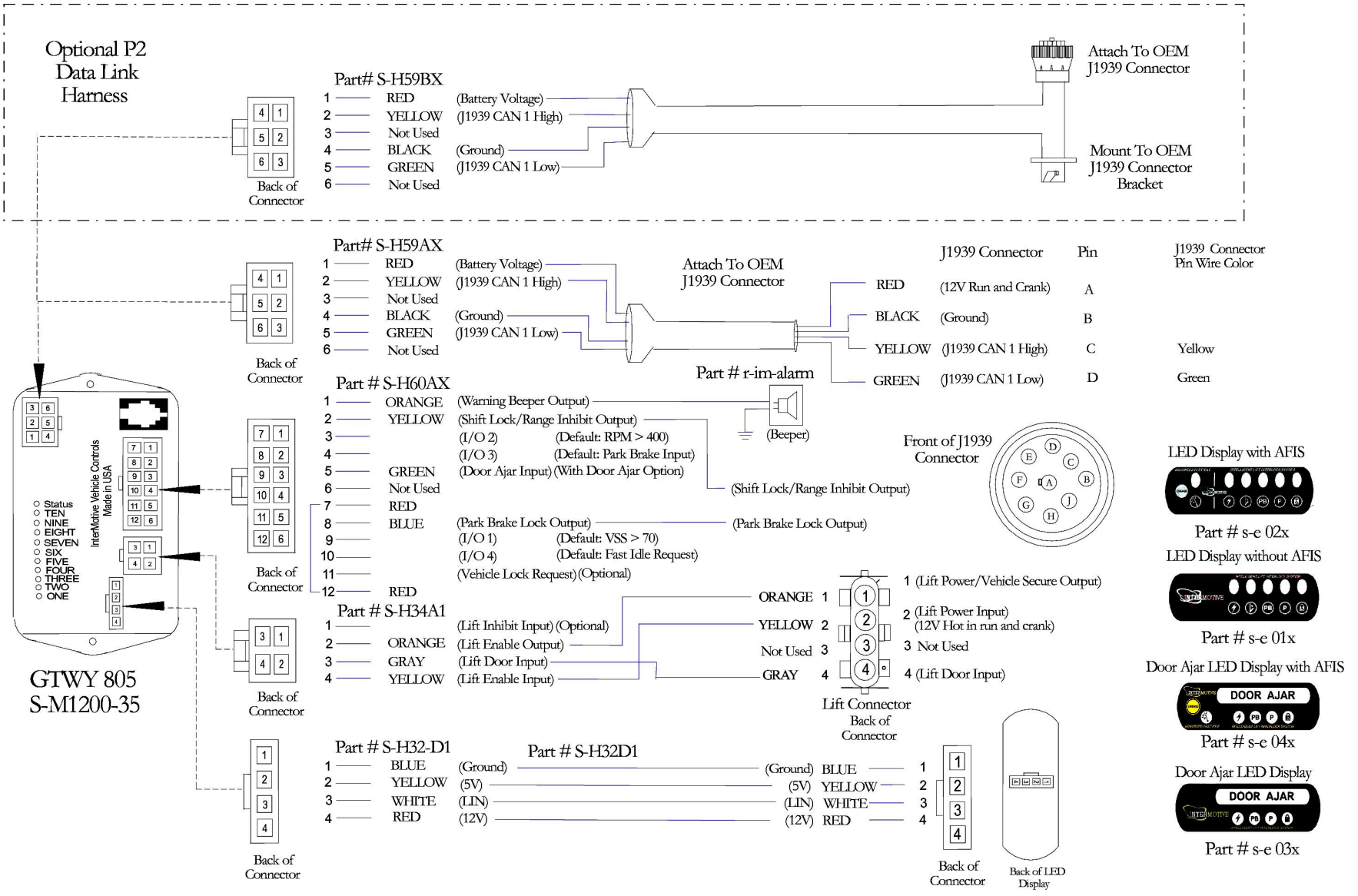
Manual Fast Idle Start Triggers

Manual Engage - Press for 1/4 second.
Merlin Multiplex Network Command. (If vehicle equipped with Merlin system).
Fast Idle Input - Other vehicle systems may request Fast Idle, such as rear coach air conditioning.

Fast Idle Disengagement Triggers

Merlin Multiplex Network Command.
Vehicle moving (speed > 0 MPH).
Vehicle Transmission Range not in Park (or not in Neutral with the park brake applied, if vehicle lacks a Park position).
RPM above safe operating range.
Transmission Fluid Temperature above 250° F.
Engine Coolant Temperature above 230° F.

Note: Fast idle will temporarily disengage when the Service Brake pedal is depressed, but will automatically reengage after approximately 2 seconds once the pedal is released. Fast idle may be manually cancelled by depressing the Service Brake pedal while simultaneously pressing the manual engage button.



Submit product registration at www.intermotive.net

If the GTWY805 fails any step in the Post Installation Test, review the installation instructions and check all connections.
If necessary, call InterMotive Technical Support at (530) 823-1048.