An ISO 9001:2008 Registered Company

ILISP610-A Shift Interlock

Chevy/GMC Full Size Van

6.0L 2011 4.8L, 6.6L 2012

Contact InterMotive for other applications

Introduction

The ILISP610-A module is a wheelchair lift safety interlock which will work with the key on or key off. It will enable the lift when certain vehicle safety conditions are met, and will lock the transmission shifter in Park when the lift is in use. Optional Plug & Play harnesses are available for most applications which makes the installation fast and easy.

Installation Instructions

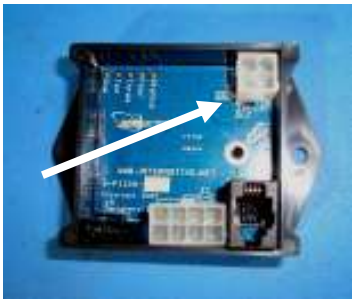
Be sure the vehicle's battery is disconnected before proceeding with installation.

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.

Remove the lower dash panel below the steering column area and find a suitable location to mount the module, ideally so that its Diagnostic LED's can be viewed with the lower dash panel removed. Secure using 2-sided foam tape, screws or wire ties. Locate the module in an area away from any high heat sources. Do not actually mount the module until all wire harnesses are routed and secure (last step of the installation is to mount the module).

Data Link Harness Installation

- Locate the vehicle OBDII Data Link Connector. It will be mounted below the lower left dash panel.
- Remove the mounting screws for the OBDII connector. Plug the red connector from the ILISP610-A Data Link Harness into the vehicle's OBDII connector. Ensure the connection is fully seated and secure with the supplied wire tie.
- Mount the Black pass through connector from the ILISP610-A Data Link Harness in the former location of the vehicle's OBDII connector.
- Secure the ILISP610-A Data Link harness so that it does not hang below the lower dash panel.
- Plug the free end of the Data Link harness into the matching 4-pin connector on the ILISP610-A module.



Shift Lock Solenoid Harness Installation

locate the OEM shift lock solenoid on the right side of the steering column. Remove the OEM 2-pin black connector and install the matching InterMotive T-harness. Verify the green locking tabs are in the locked position.

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LED Display Panel Mounting - Black 4-pin connector

Locate a suitable position on the dashboard, within view of the driver to mount the LED Display Panel. Make sure that there is open space behind the dash where the panel is mounted. The harness is 40" in length, which is the maximum distance the display can be from the module. Drill a 5/8" hole in the dash where you wish the center of the display to be. Attach the Black 4-pin connector of the LED Display Panel Harness to the module. Run the other end of the harness under the dash and out through the 5/8" hole. Attach the end to the LED Display Panel. Ensure the panel is level and secure using supplied screws.

Lift Connections - 8-pin module connector

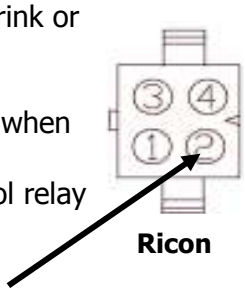
- **Optional Plug & Play Lift Harness, Braun and Ricon lifts:**

Plug the 8 pin connector into the ILISP610-A module and run the lift harness out to the lift and plug it into the lift connector: Braun models use a 9-Pin connector, Ricon models use a 4-Pin connector. If the harness includes a control relay integrated into the harness, peel off the 2-sided tape and stick to the lift housing. Skip to the Park Brake Connection section below.

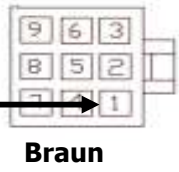
- **Non Plug & Play Harnesses**

The ILISP610-A provides three ground side inputs and one 12V, 1/2 amp output.
Refer to the ILISP610-A CAD drawing page as a reference when reading these instructions. If a control relay is needed to power the lift, a standard rectifier diode (digikey RL202-TPCT-ND or equivalent) **must** be installed between pins 85 & 87 of the relay, as shown on the Blunt Cut CAD drawing.

The **blunt-cut 4 wires** coming from the white 8 pin connector provide control connections to the vehicle as follows. The following **three** wires will need to be lengthened, using solder and heat shrink or tape.



Orange –This "Vehicle Secure" output connects to the lift and provides 12V @ 1/2 amp when it is safe to operate the lift.
Ricon Lift: Connect to pin #2 of the 4-pin lift adapter connector, or if a control relay is used, terminal 86 of the relay.
Braun Lift: Connect to pin #6 of the 9-pin lift adapter connector.



White - Ricon Lift: Connect the White wire (Lift wake up (GND) input) along with the Orange wire (Vehicle Secure) to pin #2 of the 4-pin lift adapter connector. If a control relay is used, terminal 87 of the relay.
Braun Lift: Connect the White wire (Lift wake up (GND) input to pin #1 of the 9-pin lift adapter connector.

Gray – This input is to be connected to the Lift Stowed Switch. It must have a ground signal with the lift is stowed. When lift is not stowed, the vehicle is prevented from shifting out of Park.
Ricon Lift: Connect to pin #4 of the 4-pin lift adapter connector.
Braun Lift: Connect to pin #9 of the 9-pin lift adapter connector.

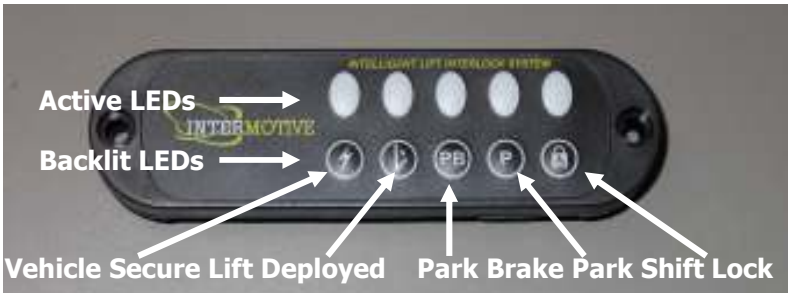
Park Brake Connection

- **Plug & Play Park Brake Harness -** On Plug & Play models, disconnect the OEM connector from the Park Brake Switch and plug in the Park Brake T-Harness.
- **Non Plug & Play Brown wire** – This input connects to the OEM Park Brake switch. Install a standard rectifier diode (Digikey RL202-TPCT-ND or equivalent), as shown in the Blunt Cut CAD Drawing, to isolate the Park Brake ground signal. Strip back some insulation off the WT/VT wire, solder the Brown wire on and tape or use heat shrink tubing.

Post Installation / Check List

ILISP610-A (Electric Lift Door)

The following checks must be made after installation of the system, to ensure correct and safe operation of the lift. If any of the checks do not pass, do not deliver the vehicle. Recheck all connections as per the installation instructions.



Reconnect the battery

Begin the checklist with the vehicle in the following state:

- Lift Stowed
- Lift Door closed
- Park Brake set (PB)
- Transmission in Park (P)
- Ignition off (Key off). Wait until the module goes into "Sleep" mode (all panel LEDs OFF) which takes approximately 5 minutes.

- Press the Lift Deploy Request button on the remote fob (electric door), or for manual door system, open door, press button on pendant. Verify the module wakes up and all 5 LED's on the dash panel illuminate for approximately 2 seconds. The lower icon LEDs are backlit and should remain illuminated whenever the module is awake. You may have to hold the fob button for 2 seconds or more to wake up the system.
- Turn the ignition key on.
- With Lift Door open, Park Brake set and transmission in Park, all LED's except Lift Deployed will be illuminated. Attempt to deploy the lift. The lift should deploy and all 5 LED's will now be illuminated.
- Verify you cannot shift out of Park with the Lift deployed and Service Brake applied.
- Stow the lift but leave door open.
- With Lift Door open, Lift Stowed, transmission in Park, release Park Brake, verify that the Park Brake LED goes out. Attempt to deploy the lift. The lift must ***not*** deploy with Park Brake released.
- With lift door open, Park Brake set, lift stowed, Transmission in Neutral, make sure lift will ***not*** deploy.

Note: The factory default is for the module to enable the lift on wake up (firmware 2.02 & later). This may cause the lift to beep, etc., whenever the key is turned on. To change this behavior, see ILISP510/610-A Application note (www.intermotive.net) or contact InterMotive.

<u>If any of the previous Post Installation tests fail, enter diagnostic mode below.</u>

Enabling Diagnostic Mode allows a visual indication of system status and is a good troubleshooting tool which may be used in conjunction with the above tests. The module is fully functional in this mode. Enter Diagnostic Mode by the following steps.

- Place transmission in Park and turn ignition switch to run position.
- Touch a grounded wire to the Test Pad (on the module) to go into Diagnostic Mode. LED's on the module will prove out, then become status indicators.
- LED 1 should be on when Shift Lock enabled.
- LED 2 should be on when transmission is in Park.
- LED 3 should be on when Park Brake is set.
- LED 4 should be on when Lift is deployed.
- LED marked "status" indicates "Vehicle Secure" or "Lift enabled" meaning there is 12V on Pin 3 (Vehicle Secure wire), which connects to the lift.
- Cycling the key will exit Diagnostic Mode and all LED's will be off.

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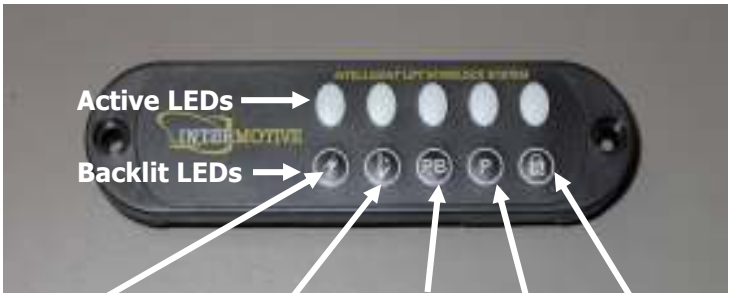
Operating Instructions (To be left in Vehicle)
ILISP610-A Shift Interlock (Electric Lift Door)
2011-2012 Chevy/GMC Full Size Van

ILISP610-A Lift Interlock

The ILISP610-A module is a wheel chair lift safety interlock which will work with the key on or key off. It will enable the lift when certain vehicle safety conditions are met, and will lock the transmission shifter in Park when the lift is in use (not stowed).



Vehicle Secure/Lift Enable, Lift Deployed, Park Brake, Park, Shift Lock

Key off operation:

1. The system will wake up when the fob or pendant deploy buttons are pushed.
2. With the module awake and the vehicle in Park, the (P) and Shift Lock LEDs will be illuminated.
3. When the Park Brake is applied, the (PB) LED will be illuminated.
4. When the Lift is deployed, the Lift Deployed LED will be illuminated.
5. With the Park Brake applied, the PB, P, Shift Lock, and Vehicle Secure LED's will be illuminated, and the lift will be operational (enabled).

Key on function:

1. With the vehicle in Park and the Park Brake applied, the (P), (PB), and Vehicle Secure LED's will be on.
2. When the lift starts to deploy, the Shift Lock and Lift Deployed LEDs will illuminate.

Sleep / Wake Modes

When the lift is stowed and ignition power is off for 5 minutes, the system will enter low power "sleep" mode. The system will not enter sleep mode if the lift is deployed. It is important the lift be stowed so the system enters low power sleep mode to prevent long term battery drain (as in overnight). The backlit LEDs are lit when the system is awake. The module will wake from sleep when the key is turned on or the lift deploy button is pushed on the fob or pendant. You may have to depress the fob button for a second or two to wake the system.

Important note:

Do not leave the lift deployed when the vehicle is not in use for more than a few hours. This will cause a current draw on the vehicle's electrical system and could result in a dead battery.

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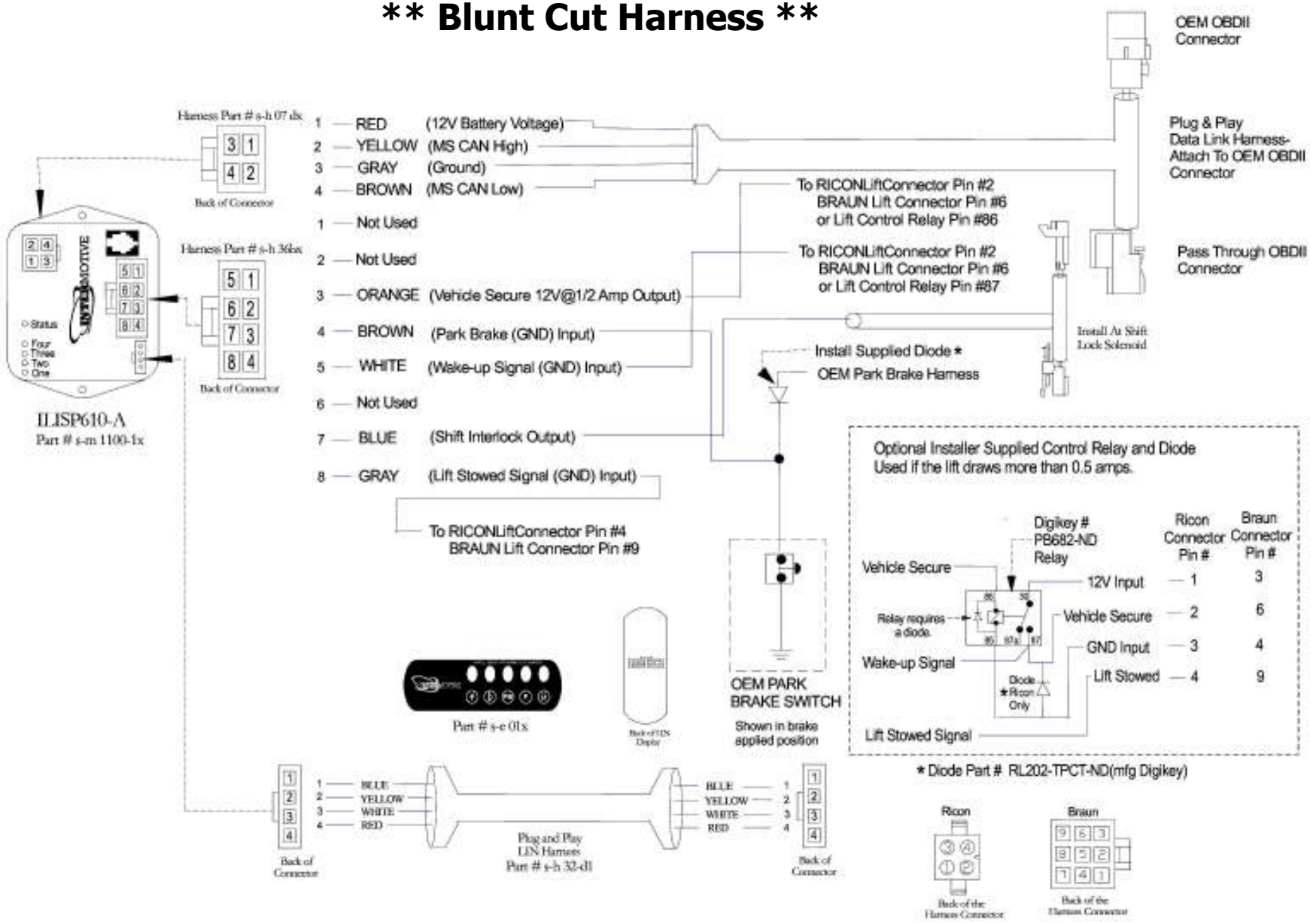
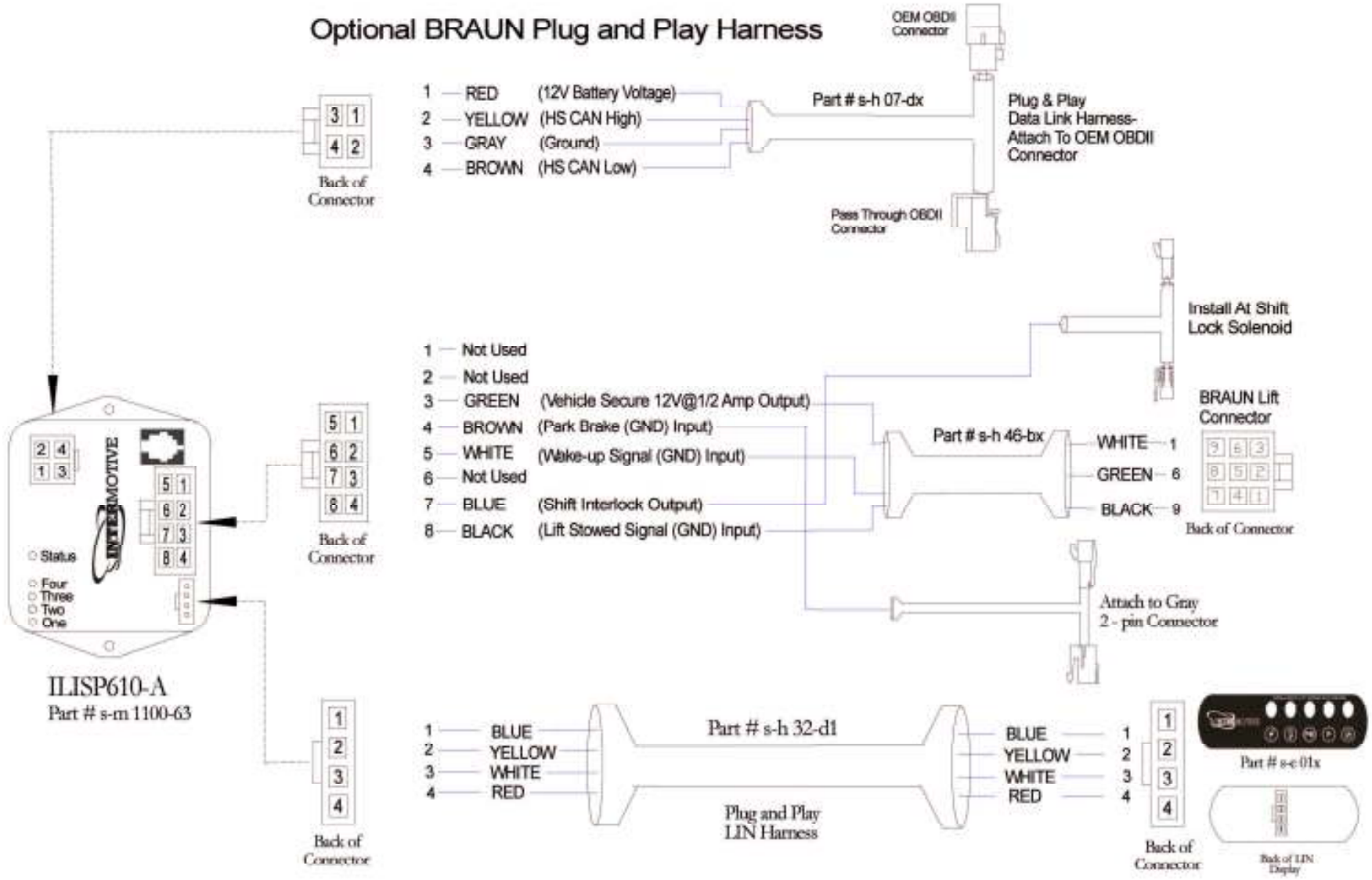
** Blunt Cut Harness **



Submit product registration at www.intermotive.net

If the ILISP610-A fails any step in the Post Installation Test, review the installation instructions and check all connections. If necessary, call

InterMotive Technical Support @ (530) 823-1048.



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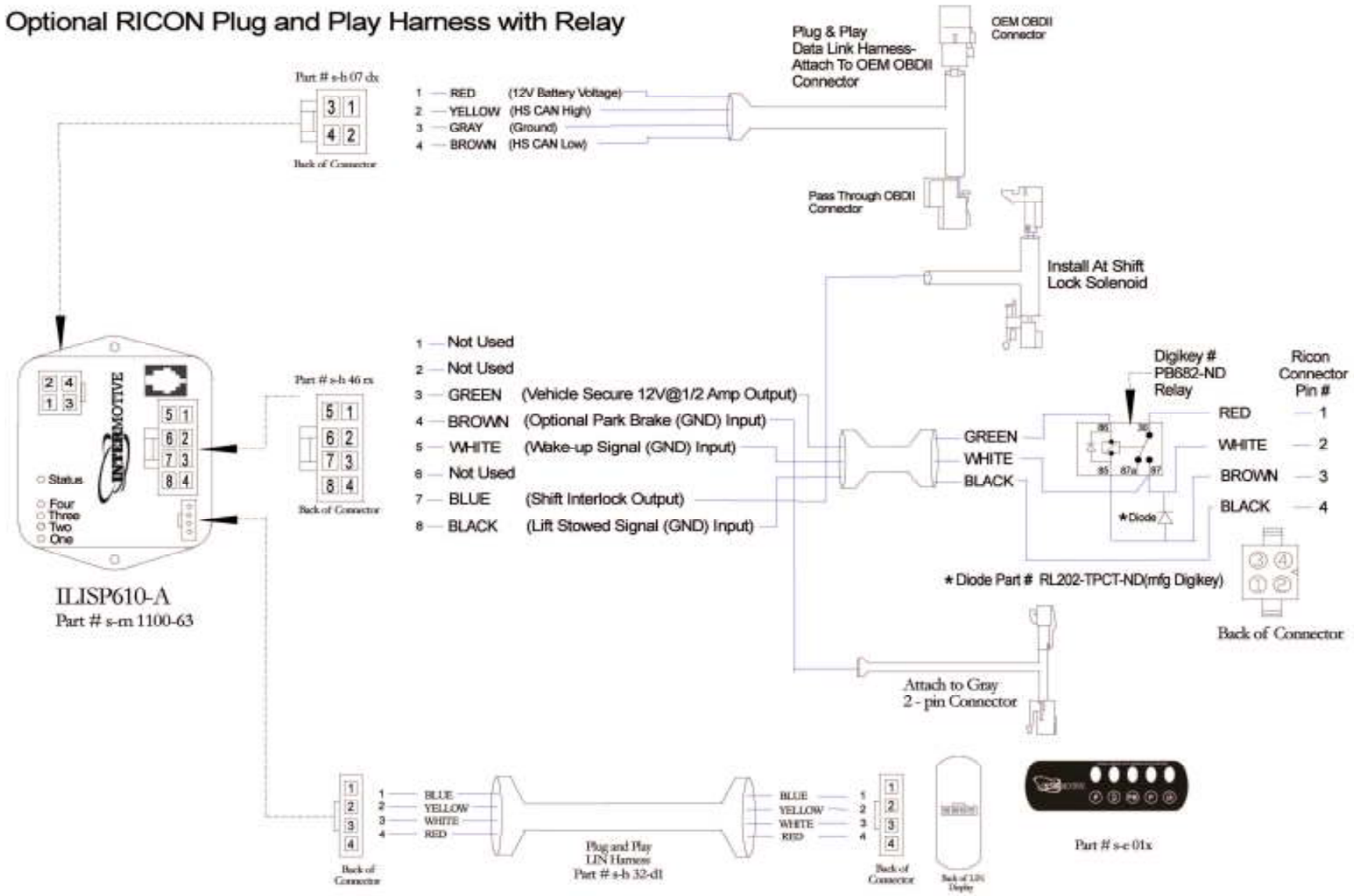
Optional RICON Plug and Play Harness with Relay



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