



An ISO 9001:2000 Registered Company

Intelligent Lift Interlock Systems

ILISCT511-A (Manual Lift Door)

ILISPT511-A (Electric Lift Door)

2010-2011 Ford Transit Connect



Installation Instructions

Installation personnel must be able to remove/replace the vehicle's center console and associated trim pieces to install system. Refer to Ford Service Manual or Dealer for assistance. If needed, refer to the InterMotive website, under product information for instructions on console removal.

Be sure and disconnect the vehicle's battery before proceeding with installation.



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

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ILISCT511A/ILISPT511A-03-INS

Module Installation

Remove the lower dash panel below the steering wheel column (Fig.1). Locate the circular trim piece on the driver's side of the dash (Fig.2), remove as shown in (Fig.3). Plug the 4 pin and 8 pin White harness connectors onto the module along with the Black 4 pin LED panel harness connector. Mount the module (using two-sided tape or screws) to the metal dash support as shown in (Fig.4). Run the harnesses down the side and under the dash.



Fig. 1



Fig. 2



Fig. 3



Fig.4

LED Display Panel Mounting

Suggested mounting area is as shown in (Fig.5), make sure that there is open space behind the dash where the panel is mounted. The LED panel harness is 18" inches long and that is the maximum distance the display can be from the control module. Drill a 5/8" inch hole in the dashboard where you wish the center of the display to be. Locate the loose end of the Black 4 pin LED panel harness connector (under the dash) and run it up through the dash and out the 5/8" inch hole, plugging it onto the LED panel. Mount the panel with screws provided.



Fig.5

Harness Installation

With lower dash panel (under the steering column) and center console removed, run the two-blunt cut harnesses from the module under the steering column and along side the factory wiring harnesses back to the Shifter and Park Brake assemblies (Fig.6). Make sure and secure the harness so that it does not hang down underneath the dash.



Fig.6

Installation Instructions

Input/Output Harness Connections (4-pin) & (8-pin)

For each blunt-cut connection (except Blue and Pink wires), strip insulation from OEM wire to Parallel tap blunt-cut connection to wire with solder and tape. Connect the blunt-cut harness connections to the vehicle as follows:

Red - Locate the Red wire and attach to a fused battery source, 5 to 10 amps.

Black - Locate the Black wire and attach to a ground source.

Locate the C3245 connector at the rear of the shift panel.
Disconnect the connector to identify pin positions.

Yellow - Locate the Green/Black wire at Pin #5 of C3245. Attach the Yellow wire to the Green/Black wire.

Blue - Locate the Green/White wire at Pin #3 of C3245. Cut the Green/White wire 3 inches from the connector. Attach the Blue wire to the connector side of the Green/White wire at Pin #3 of C3245, using solder and the supplied heat shrink tubing.

Pink - Attach the Pink wire to the harness side of the Green/White wire from Pin #3 of C3245, using solder and the supplied heat shrink tubing.

Green - Locate the Black/Yellow wire at Pin #2 of C3245. Attach the Green wire to the Black/Yellow wire.

Purple - Locate the Park Brake switch. Disconnect the connector and attach the Purple wire female connector to the switch.

Brown - Connect the Brown wire male connector to the female OEM harness connector from the Park Brake switch harness.

Note: You will need to extend the Orange, Gray and (White (Electric Door only) wires to be able to attach back at the lift. We recommend using the same wire colors if possible.

Orange - Vehicle Secure (12V) output to Lift. Attach to lift Vehicle Secure input. (Max. 1/2 amp draw).

Gray - Attach the Gray wire to Lift Door switch ground output to apply a ground signal when the lift door is open.

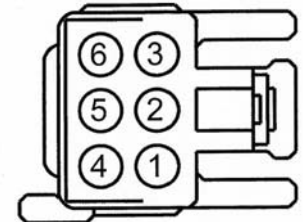
ILISPT511-A (Electric Door only)

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.

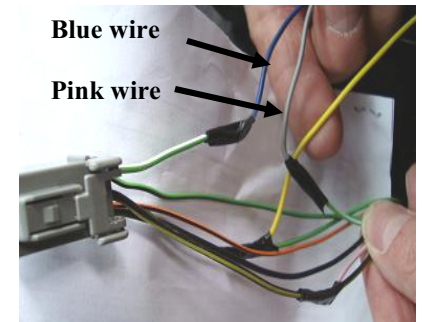
Braun Lift: Connect the White wire (Lift wake up (GND) input to pin #1 of the 9 pin lift adapter connector.



Connector C3245

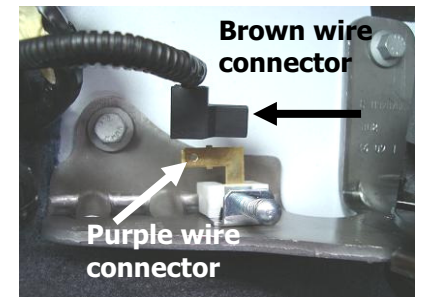


Front of Connector



Blue wire

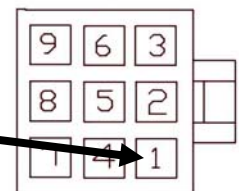
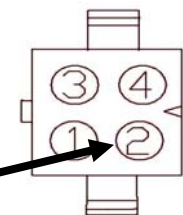
Pink wire



Brown wire connector

Purple wire connector

Park Brake Switch



Reattach the Battery connections.

Post Installation/Check List

ILISCT511-A (Manual 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.

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.



1. Turn ignition key on (to "Run"), verify the module wakes up and all 5 LEDs illuminate for approximately 2 seconds. The lower icon LEDs are backlit and should remain illuminated whenever the module is awake.
2. Verify that the Park LED, the Park Brake LED, and the Shift Lock LED remain illuminated.
3. Attempt to deploy the lift. The lift must not deploy with the Lift Door closed.
4. With key on, Lift Door open, Park Brake set and transmission in Park, all 5 LEDs will be illuminated. Attempt to deploy the lift. The lift should deploy. Stow the lift.
5. With key on, Lift Door open, transmission in Park, release Park Brake, verify that the Park Brake (PB) and Shift Lock LEDs go out, attempt to deploy the lift. The lift should not deploy.
6. With key on, Lift Door closed, Park Brake set, make sure transmission will not shift out of Park.
7. With key on, Lift Door open, Park Brake released, make sure transmission will not shift out of Park.
8. With key on, Lift Door closed, Park Brake released and the Service Brake applied, the transmission shift lever should be able to shift out of Park.

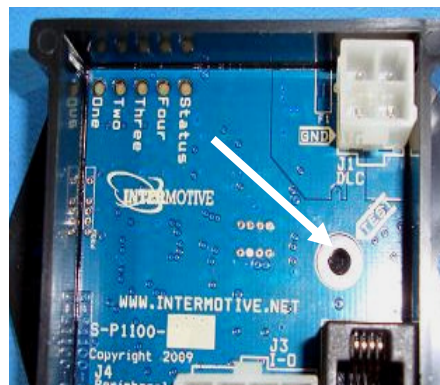
If any of these tests fail, enter diagnostic mode below.

Lift Interlock Diagnostic Mode Testing

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 Door is open.
- LED marked "status" indicates "Vehicle Secure" or "Lift enabled" meaning there is 12V on Pin 3 (green wire) which connects to the lift.
- Cycling the key will exit Diagnostic Mode and all LED's will be off.



Post Installation/Check List

ILISPT511-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.

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.



1. Press the Lift Deploy Request button on the remote control unit, the Lift Door will open. Verify the module wakes up and all 5 LEDs illuminate for approximately 2 seconds. The lower icon LEDs are backlit and should remain illuminated whenever the module is awake.
2. Verify you can shift out of Park with the Lift Stowed and Service Brake applied.
3. Verify you cannot shift out of Park with the Lift Deployed.
4. With Lift Door open, Park Brake set and transmission in Park, all LEDs will be illuminated, except Lift not Stowed. Attempt to deploy the lift. The lift should deploy and all 5 LEDs will now be illuminated. Stow the lift.
5. With Lift Door open, Lift Stowed, transmission in Park, release Park Brake, verify that the Park Brake and Vehicle Secure LEDs go out, attempt to deploy the lift. The lift should not deploy.

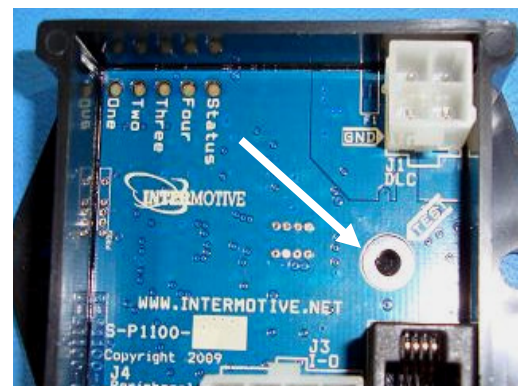
If any of these tests fail, enter diagnostic mode below.

Lift Interlock Diagnostic Mode Testing

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 not Stowed.
- LED marked "status" indicates "Vehicle Secure" or "Lift enabled" meaning there is 12V on Pin 3 (green wire) which connects to the lift.
- Cycling the key will exit Diagnostic Mode and all LED's will be off.



Operating Instructions **ILISCT511-A Shift Interlock (Manual Lift Door)** **2010-2011 Ford Transit Connect**

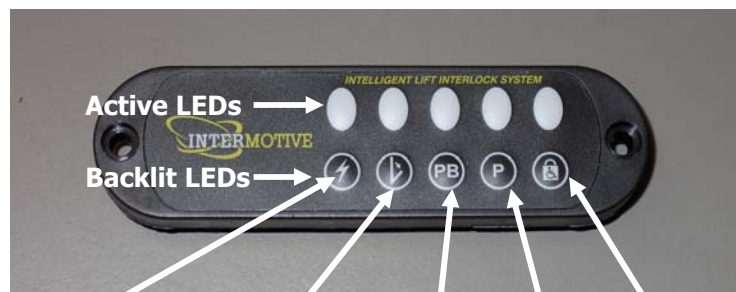
ILISCT511-A (Manual Lift Door)

The ILISCT511-A system is a microprocessor driven system for controlling wheelchair lift operation. The system operates with the vehicle ignition on or off. Lift operation will only be allowed as defined below in step 5.

Note: If "keying on" when module is asleep, all display LEDs will illuminate for approximately 2 seconds as a "prove out". The backlit LEDs remain on as long as the module is awake.

Key On function:

1. When the vehicle is in "Park" the (P) LED will be illuminated.
2. When the Park Brake is applied, the (PB) LED will be illuminated.
3. When the Lift Door is open, the Lift Door LED will be illuminated.
4. When the Park Brake is applied or the Lift Door is open, the Shift Lock LED will be illuminated.
5. With the vehicle in Park, Park Brake applied and Lift Door open, the Vehicle Secure LED will be illuminated and the lift will be operational, at this point **all** active LEDs will be illuminated.



Vehicle Secure/Lift Power, Lift Door, Park Brake, Park, Shift Lock

Key off function: Same as "key on" except the Shift Lock LED is illuminated anytime the vehicle is in Park.

The ILISCT511-A (Manual Lift Door) will not allow the vehicle to be shifted out of Park if the Lift Door is open. As an added feature, it also will not allow the vehicle to be shifted out of Park anytime the Parking Brake is applied. This feature eliminates excessive Parking Brake wear due to driving with the Parking Brake applied.

The ILISCT511-A can operate with the vehicle ignition on or off. When the Lift Door is closed and ignition power is off for 5 continuous minutes, the system will enter a low current "sleep" mode of operation. To wake from "sleep" mode, the ignition must be turned on (key on), or the Lift Door must be opened.

Important note:

Do not leave the Lift Door open when the vehicle is not in use. This will cause a draw on the vehicle's electrical system and may result in a dead battery.

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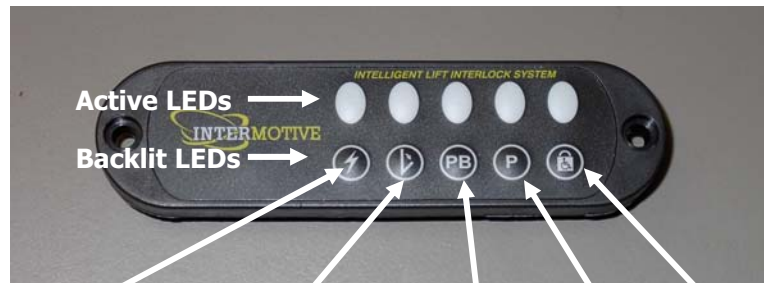
Operating Instructions
ILISPT511-A Shift Interlock (Electric Lift Door)
2010-2011 Ford Transit Connect

ILISPT511-A (Electric Lift Door)

The ILISPT511-A system is a microprocessor driven system for controlling wheelchair lift operation. The system operates with the vehicle ignition on or off. Lift operation will only be allowed as defined below
Note: If the Lift Deploy Request button on the remote control, or in the vehicle is pushed when the module is asleep, all display LEDs will illuminate for approximately 2 seconds as a "prove out". The backlit LEDs remain on as long as the module is awake.

Key off function:

1. When the vehicle is in Park, the (P) and Shift Lock LED will be illuminated
2. When the Park Brake is applied the (PB) LED will be illuminated.
3. When the Lift is deployed, the Lift not Stowed LED will be illuminated.
4. When the vehicle is in Park, Park Brake applied, the Vehicle Secure LED will be illuminated, and the lift will be operational (enabled).



Vehicle Secure/Lift Enable, Lift not Stowed, Park Brake, Park, Shift Lock

Key on function: Same as "key off" except the Shift Lock LED is illuminated anytime the vehicle is in Park and the lift is deployed.

The ILISPT511-A (Electric Lift Door) will not allow the vehicle to be shifted out of Park if the lift is not stowed.

The ILISPT511-A can operate with the vehicle ignition on or off. When the Lift is stowed and ignition power is off for 5 continuous minutes, the system will enter a low current "sleep" mode of operation. To wake from "sleep" mode, the ignition must be turned on (key on), or the Lift Deploy Request button on the remote control unit pushed.

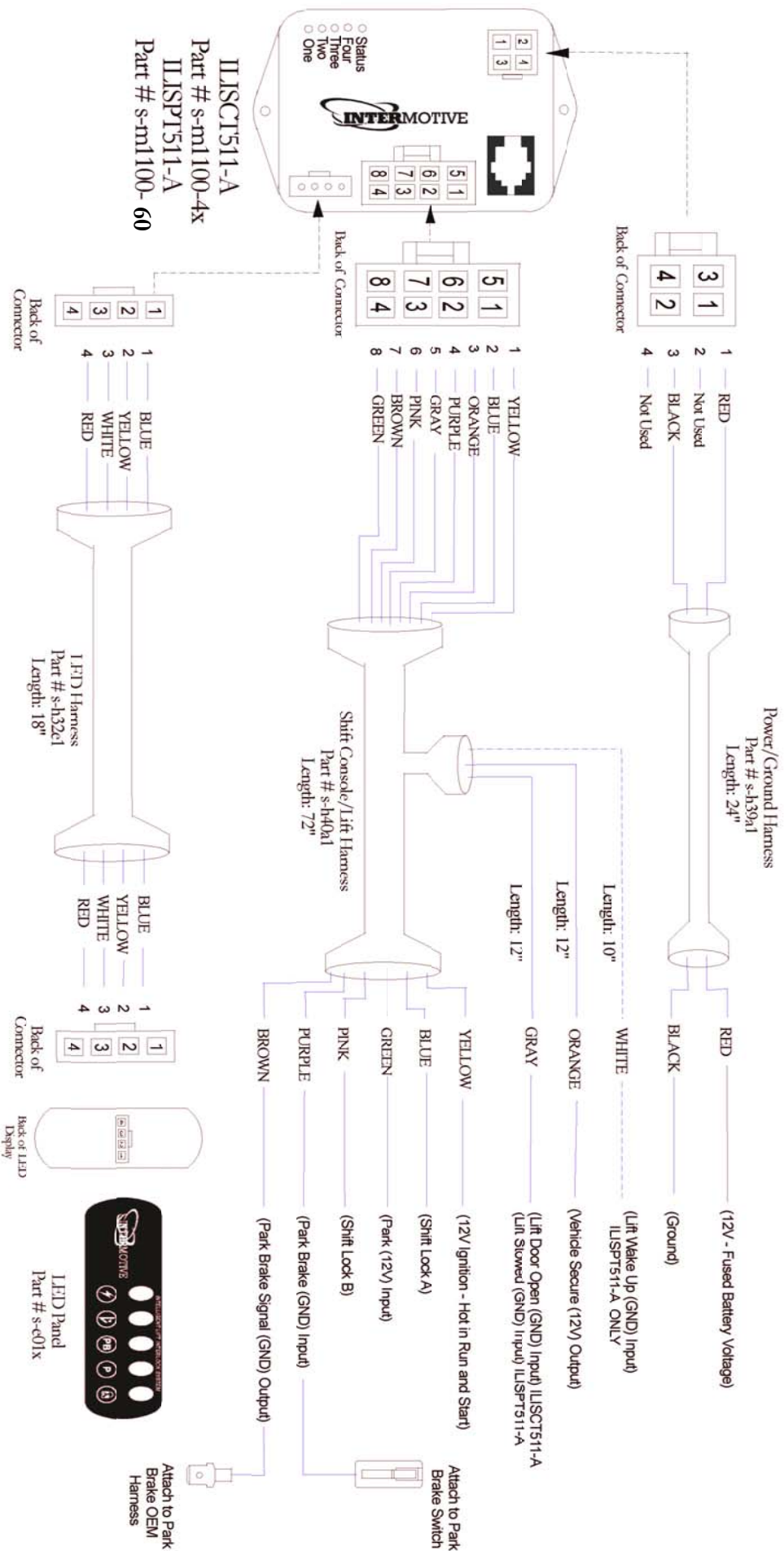
Important note:

Do not leave the Lift Deployed when the vehicle is not in use. This will cause a draw on the vehicle's electrical system and may result in a dead battery.

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Submit product registration at www.intermotive.net

If the ILISCT511-A/ILISPT511-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. ILISCT511A/ILISPT511A-03-CAD