

An ISO 9001:2015 Registered Company

A-PTM515B-C (Pre-Trip Module)

2015- 2019 Ford Transit



Introduction

The A-PTM515 controls exterior lights for Pre-Trip Inspection. Lamp Test mode cycles lights ON and OFF so the user can verify all exterior lights are working.

Installation Instructions Disconnect vehicle battery before proceeding with the 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.

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.

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PTM Module

Remove the lower dash panel below the steering column and find a suitable location to mount the module. Do not mount the module until all wire harnesses are routed and secure. The last step of the installation is to mount the module. Mount the module is in an area away from any external heat sources (engine heat, heater ducts, etc.). Route the harnesses 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 in order to remove the module if necessary.

Data Link Harness (6-pin connector)

- 1. Locate the vehicle OBDII Data Link Connector. It will be mounted below the lower left dash panel.
- 2. Remove the mounting screws for the OBDII connector. Plug the red connector from the Data Link Harness into the vehicle's OBDII-connector. Ensure the connection is fully seated and secured with the supplied wire tie.



3. Mount the black connector from the Data Link Harness in the former location of the vehicle's OBDII connector.

2w Minifit Sr

BLACK - Connect to clean metal contact near OBDII ground.

RED - Connect to direct 12V battery source.

2w Minifit Sr



PTM 16w Minifit Jr (Red Jumpers)

Connect S-H30EX red wire connector into 16-pin connector. WARNING DO NOT USE BLACK WIRE JUMPER VERSION!



16 Pin Connector

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8w Minifit Jr

Pin #1 - Dark Green/Black wire to momentary Ground input to enable PTI mode (Input 1)

Pin #2 - Tan/Black (Input 2 (Ground)

Pin #3 - Grey/Black (Input 3 (Ground)

Pin #4 - Orange/Black (Input 4 (Ground)

Pin #5 - Red/White wire to momentary +12V input to enable PTI mode (Input 5).

Pin #6 - Dark Blue/White (Input 6 (+12V)

Pin #7 - Violet/White (Input 7 (+12V)

Pin #8 - Brown/White (Input 8 (+12V)



8 Pin MiniFit Connector

4W SABRE Outputs for Cutaway Chassis Lights (NOT USED ON COMPLETE CHASSIS)

PTM will provide Outputs for, Reverse Lamps and Marker/Clearance Lights. Each Output is Rated at 10 amp.

Pin #1 - Blue wire, Connect to Marker/Clearance Lights

Pin #2 - Yellow wire, Connect to Left Turn Signal

Pin #3 - Green wire, Connect to Right Turn Signal

Pin #4 - Orange wire, Connect to Reverse Lamp Circuit



4 Pin Sabre Connector

Installation Instructions

Marker Lights Output

Attach Relay #1 Blue wire to control Marker/Clearance lights. This output is rated at 10A.

Reverse Lamp Output

Attach Relay #4 Orange wire to the reverse lights. This output is rated at 10A .

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Post Installation System Operation Test

Perform the following tests before actually mounting the module, to allow easy viewing of the diagnostic LED's, if needed.

- 1. Place the ignition in the Run position and verify that LED's 1 4 turn On indicating Bluetooth was successfully renamed.
- 2. Cycle the ignition Off and On and verify that LED's 1 4 turn Off when the ignition is in the Run position.
- 3. Place transmission in Park, apply parking brake and start the engine.
- 4. Momentarily apply a ground signal to 4w minifit jr pin #1 (green/white) to enable Pre-Trip mode. Or momentarily apply a +12V signal to 4w minifit jr pin #3 (red/white) to enable Pre-Trip mode.
- 5. When Pre-Trip is engaged the module will cycle the exterior lights. **Note:** This will cycle for about 5 mins and shut off automatically.
- 6. Release parking brake and confirm Pre-Trip is disabled.
- 7. Apply parking brake and repeat step 5 to confirm that Pre-Trip mode can once again be enabled.

If the A-PTM515 fails any of the above tests, check harnesses and review instructions, or check diagnostics below. If necessary, call InterMotive Technical Support at (530) 823-1048.

Diagnostics

Diagnostic mode is entered by pressing the red button switch. There are 4 pages of diagnostics and each page is determined by the number of flashes of the Status LED. The module provides diagnostic LEDs which illuminate according to the following table below.

To exit this mode, press the red button one more time after opening the 4th page of diagnostics.

STATUS LED	Page 1	Page 2	Page 3	Page 4
LED_1	Marker Lights	PB	PTM Mode	BT Connected
LED_2	Left TS	VSS<2	Active High Trigger	n/a
LED_3	Right TS	TR=Park	Active Low Trigger	n/a
LED_4	Reverse	Engine=ON	n/a	n/a



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Leave in Vehicle A-PTM515-C (Pre-Trip Module)

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System Operation

The Pre-Trip Inspection Module cycles the exterior lights in order to assist the customer to verify all lights are working.

Lamp Test mode may be initiated by either a momentary ground or a momentary power input.

Lamp Test Mode:

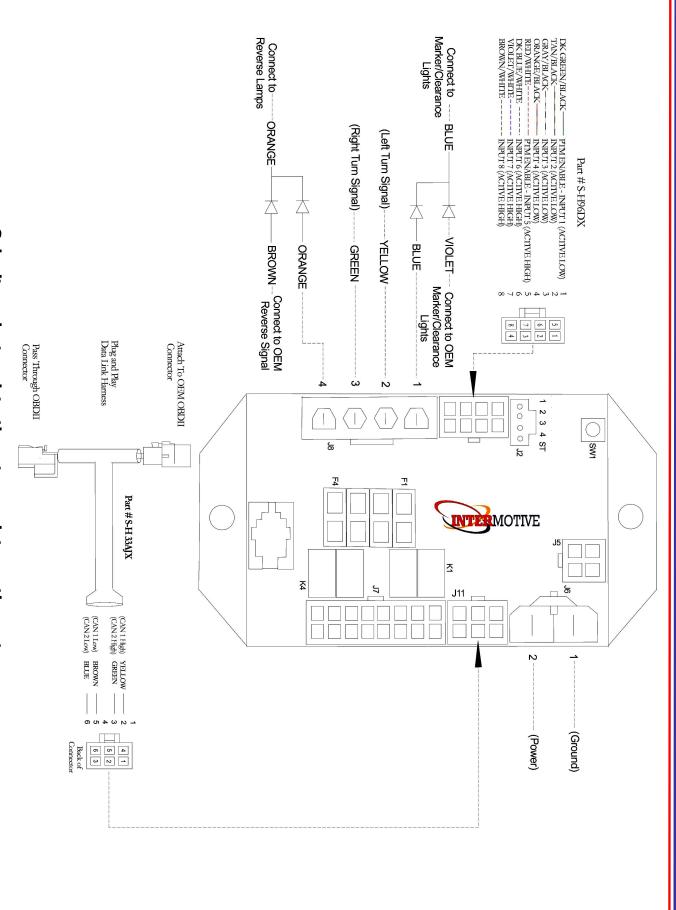
To enter Lamp Test Mode all conditions must be met.

- Transmission in Park
- Apply Parking Brake
- Vehicle speed zero.
- Momentarily ground the Green/White wire or apply 12v to the Red/White wire.

To exit Lamp Test Mode any condition may be applied:

- Momentarily ground the Green/White wire or apply 12v to the Red/White wire.
- · Release Parking Brake,
- Place Transmission out of Park.

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Submit product registration at www.intermotive.net

If the PTM fails any step in the System Operation Test, review the installation instructions and check all connections If necessary, call InterMotive Technical Support at (530) 823-1048