Idle Timer Disable A-ITD707-A
2013-2017 Ram 1500-5500

Introduction

The ITD707 allows a diesel engine to continuously idle when aftermarket equipment requires the engine to keep running. When the operator engages the switch to this equipment, the ITD707 also sees this switch input and prevents the OEM Engine Shutdown System (ESS) from "Timing Out" and shutting down the engine. This allows continuous idling when the equipment is in use. When the equipment switch is disengaged, the Idle Timer Controller module allows the Engine Shutdown System to function normally and shut down the engine.

IMPORTANT—READ BEFORE 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.
Avoid placing the module where it could encounter strong magnetic fields from high current cabling connected to motors, solenoids, etc.   Avoid radio frequency energy from antennas or inverters next to the module. Avoid high voltage spikes in vehicle wiring by always using diode clamped relays when installing upfitter circuits.

ITD707 Module

Remove the lower dash panel below the steering column area and find a suitable location to mount the ITD707 module. Locate the module in an area away from any external heat sources (engine heat, heater ducts, etc.). Do not actually mount the module until all testing is complete and the harnesses are routed and secure. The last step will be to mount the module.

Data Link Harness

1. Locate the vehicle OBDII Data Link Connector. It is a White 16 pin connector in the drivers knee bolster area.

2. There are retention tabs on the sides of the connector that allow it to snap into place. Press the tabs with a screwdriver and push the connector up and out of its bracket. The ITD707 kit includes a Data Link harness (see picture). Plug the Red connector from the ITD707 Data Link Harness into the vehicle's OBDII connector. Ensure the connection is fully seated and secure it with the supplied wire tie.

3. Mount the white connector from the ITD707 Data Link Harness in the former location of the vehicle's OBDII connector, by snapping it into place.

4. Plug the 4-pin connector from the Data Link Harness into the 4-Pin connector on the ITD707 module, and leave it hanging down until testing is completed.

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ITD707-091417-INS

Control Inputs - 8-pin connector

The ITD707 provides two enable inputs (one ground and one 12V) that when either is active, allows the engine to keep running and prevents the OEM (ESS) from timing out and shutting down the engine. Only one of these inputs needs to be connected, the other can be a No Connect (remove, tape or heat shrink the unused input wire).
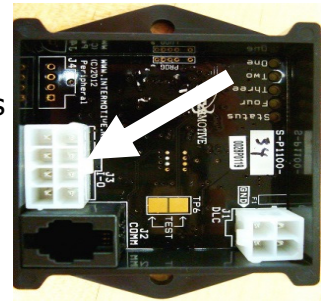
Pin #1 - Not Used
Pin #2 - Not Used
Pin #3 - Not Used
Pin #4 - Orange/Black wire (Ground Input to prevent shutdown)
Pin #5 - Not Used
Pin #6 - Not Used
Pin #7 - Not Used
Pin #8 - Violet/White wire (+12V Input to prevent shutdown)
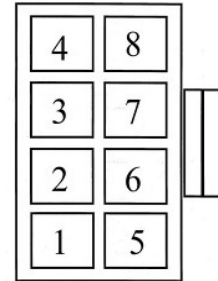
Post Installation System Operation Test

- Start the engine and turn on the auxiliary equipment which is connected to one of the ITD707 enable inputs.

- Make sure the engine does not automatically shut off as usual (dealer settable from 5 minutes to 60 minutes on many chassis). If properly installed and working, the ITD707 will prevent the OEM ESS idle timer from shutting off the engine. Note that any driver input, such as touching the Service Brake, Accelerator pedal, etc., will restart the OEM timer and extend the shut down time. Setting Park Brake can also change the OEM shutdown timer on some systems.

- With the auxiliary equipment off, and no active input to the ITD707, make sure the OEM Idle Timer shuts the engine off.

- If the system works properly, secure the module and harnesses, and replace the lower dash panel.

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- If the system is not working properly, the diagnostics on the following page may be helpful in determining the issue. Recheck connections per the schematic on the last page.

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ITD707 Diagnostics

To enter diagnostic mode, momentarily short the two test pads together on the module (look for "Test" on the printed circuit board) with the ignition on. This will enable the LEDs on the module. The amber Status LED will start flashing.

There are three 'pages' of diagnostic data, in which the LEDs have different meanings. Each time the test pads are momentarily shorted together the module will advance to the next 'page'. The amber Status LED will flash the page number (e.g. the Status LED will flash 3 times when in 'page' 3).
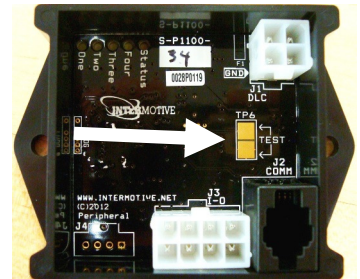
Page 1

LED1 = Vehicle ignition switch data is valid
LED2 = Transmission Range is in Park
LED3 = Pin 4 Orange/Black wire input is active (gnd) preventing shutdown
LED4 = Pin 8 Violet/White wire is active (+12V) preventing shutdown

Page 2

LED1 = Transmission Range is in Drive
LED2 = Transmission Range is in Neutral
LED3 = Transmission Range is in Reverse
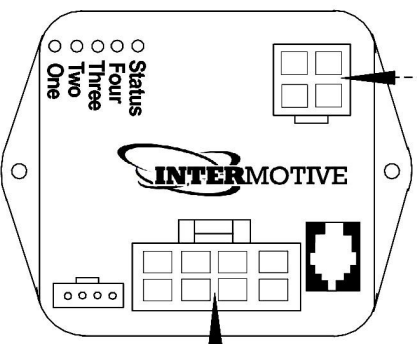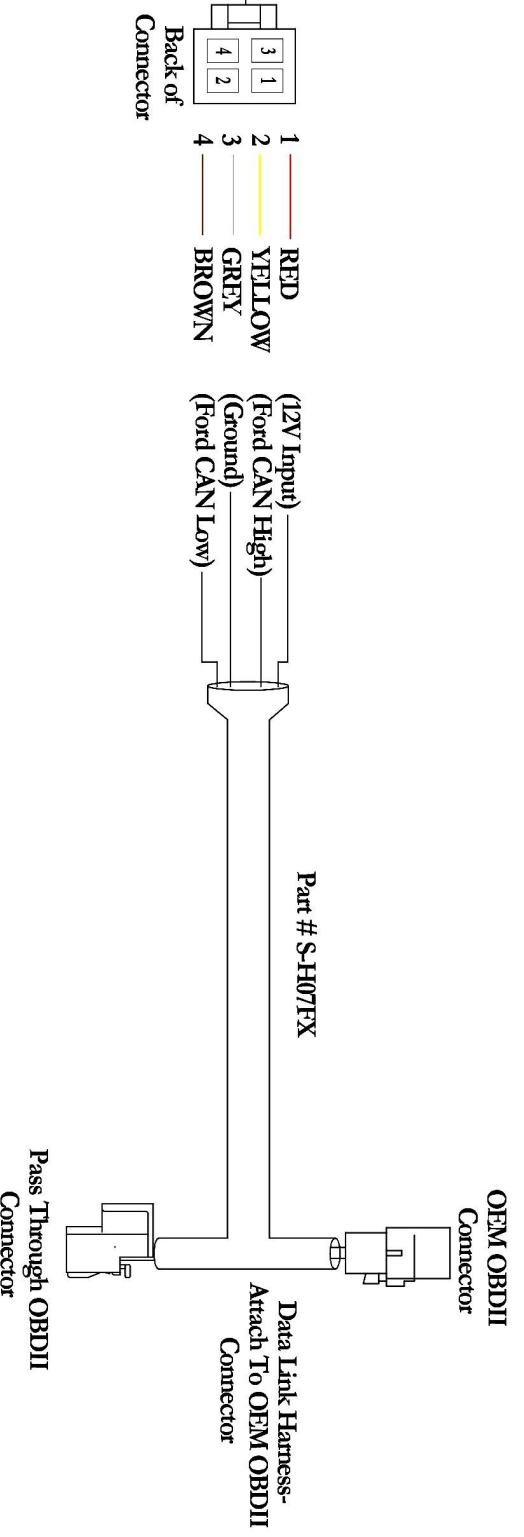LED4 = Transmission Range is in Park
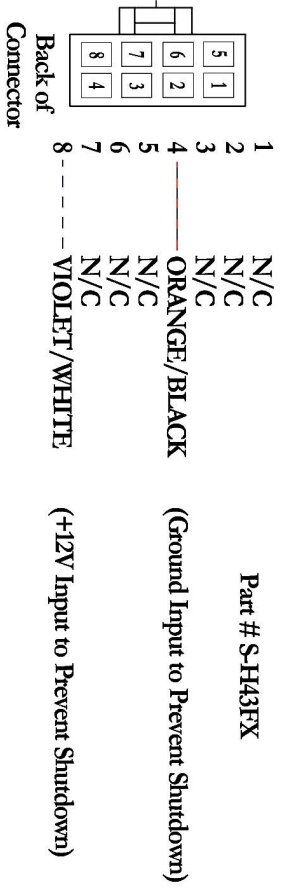
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LED1 = Key position is in Cranking
LED2 = Key position is in Run
LED3 = Key position is in Accessory
LED4 = Not used

Call InterMotive Technical Support if needed: 530-823-1048.

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ITD707-091417-INS

ITD707-A
Part # S-MI100-69

Status
Four
Three
Two
One

INTERMOTIVE

Back of Connector

| 8 | 4 | 7 | 3 | 6 | 2 | 5 | 1 |

Back of Connector

| 3 | 1 |
| 4 | 2 |

1 —— RED (12V Input)
2 —— YELLOW (Ford CAN High)
3 —— GREY (Ground)
4 —— BROWN (Ford CAN Low)

Part # S-H43FX
1 — N/C
2 — N/C
3 — N/C
4 — ORANGE/BLACK (Ground Input to Prevent Shutdown)
5 — N/C
6 — N/C
7 — N/C
8 — VIOLET/WHITE (+12V Input to Prevent Shutdown)

Part # S-H07FX

Pass Through OBDII Connector

OEM OBDII Connector

Data Link Harness- Attach To OEM OBDII Connector

Submit product registration at www.intermotive.net

If the ITD707 fails to operate properly, review the installation instructions and check all connections. If necessary, call

InterMotive technical support @ (530) 823-1048.

ITD707--091417-CAD