

IDLE300/301

Idle Lock™ with Autosense Technology

2023 Nissan Titan (A-IDLE300-A)

2023 Nissan Frontier (A-IDLE301-A)

Contact InterMotive for additional vehicle applications

Not for Vehicles with Key-in Ignition Switches



Introduction

The IdleLock for Nissan Titan Trucks will detect when the key fob leaves the vehicle, automatically lock the shifter in Park, and will allow the user to remove the key fob with the engine running. It also provides outputs to disable the weapon rack, trunk release, or other equipment when the vehicle is in IdleLock. The IDLE300 will keep equipment enabled for 10 seconds (configurable) after IdleLock is entered.

Installation Instructions

Disconnect vehicle battery before proceeding with the 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.

The IdleLock module will be installed in the steering column. 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 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. Mount the module with screws or cable ties. Ensure the module can not become loose and interfere with the driver or vehicle controls. Do not rely on double sided tape as the only method of attachment

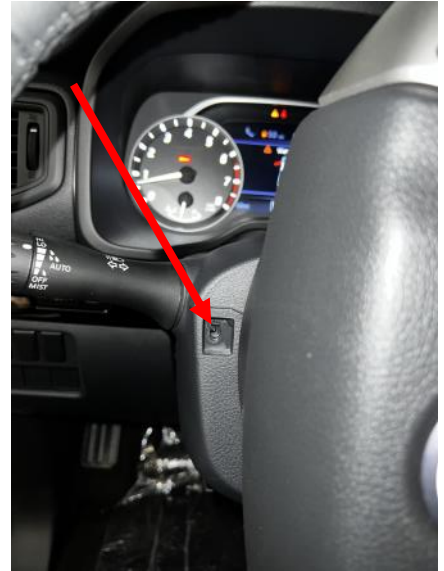
Plug and Play Harness (A-IDLE300)

Nissan TITAN

The Data link harness 840-00287 plugs into a connector located inside the steering column clam shell.

The Clam shell is held on by 3 screws. Two of the screws are behind the steering wheel.

- Turn the steering wheel to the left to get access to one of the screws.

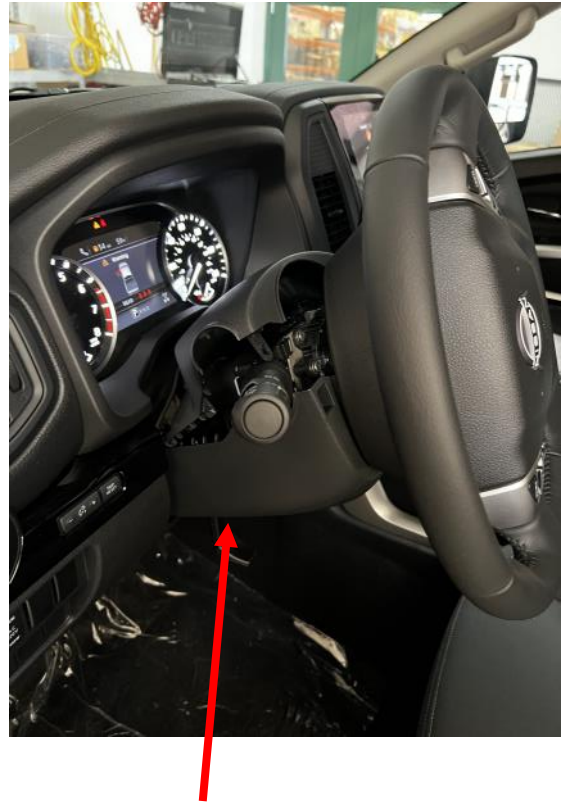


- Turn the steering wheel to the right to get access to one of the screws.



Plug and Play Harness (A-IDLE300)

The 3rd screw is located underneath the clamshell.

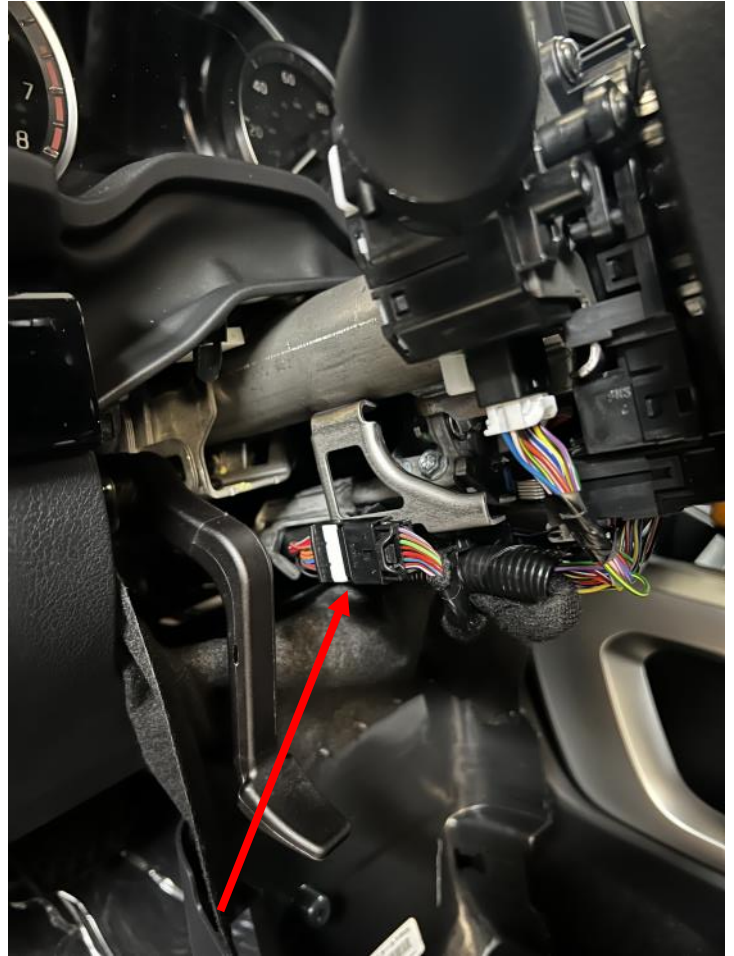


Remove the panel connected on the top side of the clamshell. The top and bottom shells can now be removed from each other.



Plug and Play Harness (A-IDLE300)

- The connector is located on the left side of steering wheel.
- Unplug the 16 pin connector and plug in the Intermotive T-Harness. 840-00287



- Ensure all the 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 two screws or double sided tape.

Plug and Play Harness (A-IDLE301)

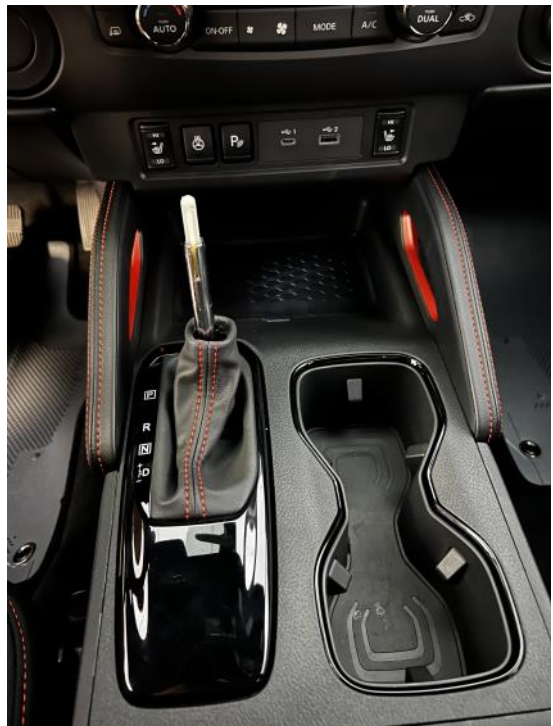
Nissan Frontier

The Data link harness 840-00302 plugs into a connector located underneath the center panel.

- Push down the leather wrap to get access to the shifter



- Remove the metal pin in front of the knob and pull the knob up to separate.



Plug and Play Harness (A-IDLE301)

- Remove the center panel using a panel removing tool.
- The panel is attached to by 6 plastic clips shown here



- Once panel is removed locate the white shift selector connector M156



Plug and Play Harness (A-IDLE301)

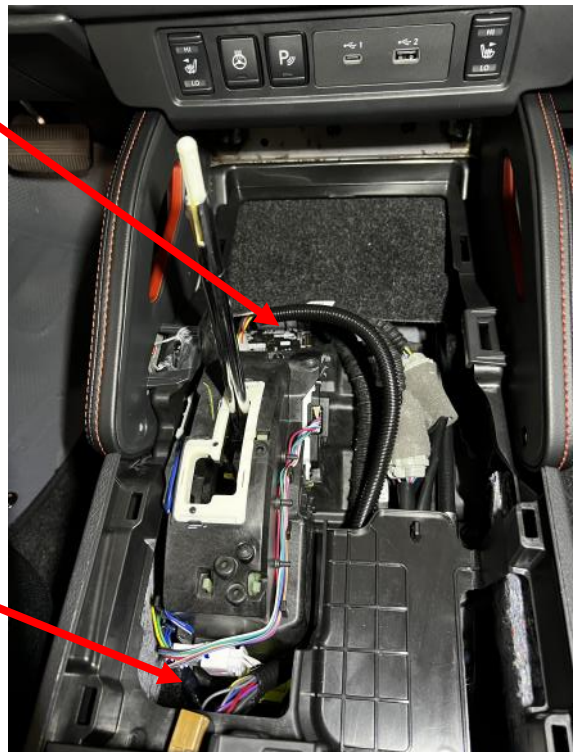
- Unplug the M156 connector



Mount module here

- Plug in IDLE300 datalink connector 840-00302 to M156.
- Route datalink harness underneath the plastic barrier.
- Plug the 6pin connector into the IDLE300 and securely mount the module using double sided tape Velcro in front of the shifter as shown in the picture.

Plug in harness 840-00302



or

I/O Wiring, Features, and Descriptions: (Solder and heat shrink all connections)

12-Pin Connector Pin-Out Definition (OPTIONAL)

This connector contains the IDLE300 output pins. Each output is active ground and rated at 1/2A and is intended to drive relay coils or other low current loads. **Note: when driving relays, a diode-protected type must be used. InterMotive recommends DigiKey #PB682-ND Relay.**

The pins are defined as follows:

- Pin #2 (Green wire) Idle Lock Active Output, Ground with 10 sec delay
- Pin #3 (White wire) Idle Lock Active Output, Ground
- Pin #9 (Orange wire) Driver Door Open, Ground
- Pin #10 (Blue wire) Any Door Open, Ground
- Pin #11 (Yellow wire) Transmission is in Park, Ground

Connect the desired outputs to vehicle equipment as needed. Tape up unused leads. When connecting to relays, use relays with appropriate kick-back suppression, such as Digikey #PB682-ND. Unsuppressed relays will induce very high voltage spikes throughout modern vehicles sensitive computer electronics and should not be used, per Ford, GM, SAE, etc.

Diagnostics

Diagnostic mode is entered by pressing the red test button. The module provides diagnostic LEDs which illuminate according to the following table. LEDs 1-10 show the state of IDLE-LOCK. Contact InterMotive for assistance.



Page 1	
LED	Description
1	n/a
2	Idle Lock Output 10 Second Delay
3	Idle Lock Output
4	n/a
5	n/a
6	Driver Door open Output
7	Any Door open output
8	TR = Park Output
9	n/a
10	n/a

IdleLock Post Installation Instructions

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

1. With the engine running and key inside the cabin, confirm Idle-Lock is off by shifting out of Park.
2. Place transmission in Park, step away from the vehicle with the Key Fob in hand and close the driver door.
3. Place the Key Fob around 10 feet from the vehicle.
4. Open the driver door, get in the driver seat, and confirm the shifter is locked in Park.
5. Grab the key fob and place it in your pocket. Get back in the driver seat and at this point the Idle-Lock should be disabled. Confirm by shifting out of Park.

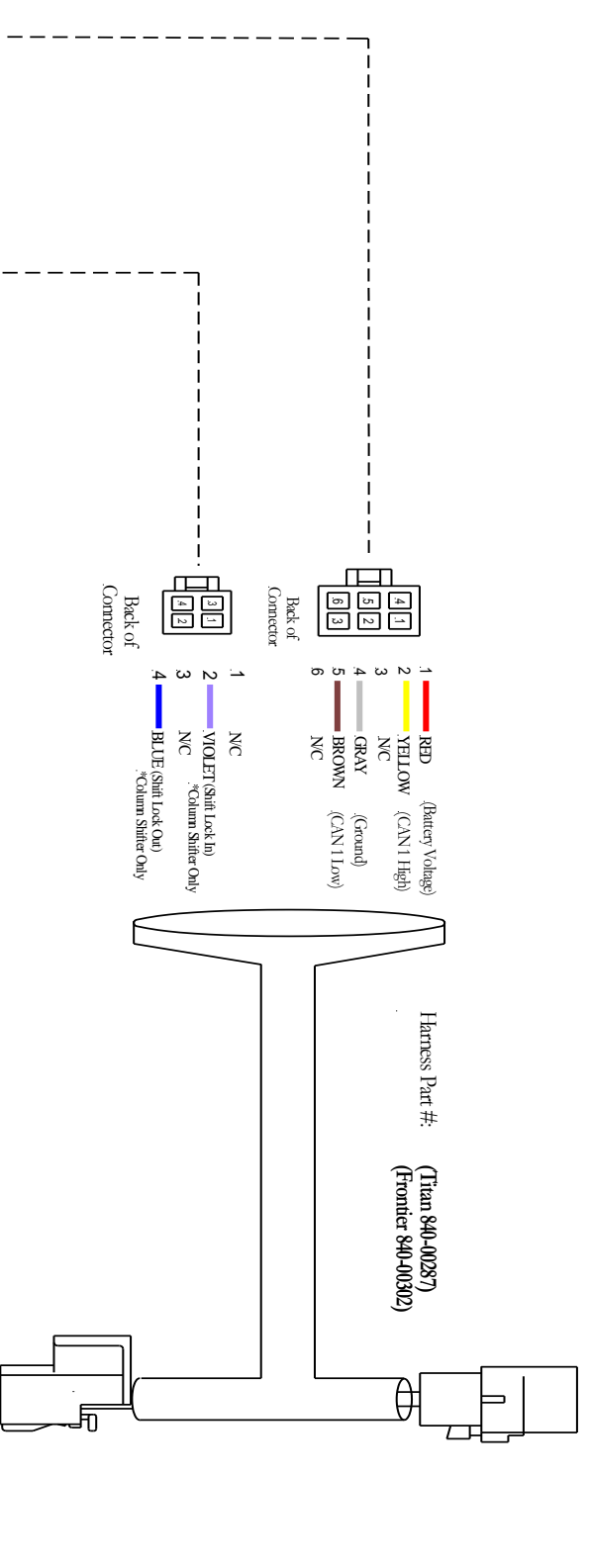
DO NOT PUT VEHICLE IN SERVICE IF IT DOES NOT PASS ALL OF THE ABOVE TESTS
Contact InterMotive at 1-800-969-6080 for technical assistance.

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Harness Part #:
(Titan 840-00287)
(Frontier 840-00302)

- 1 RED (Battery Voltage)
- 2 YELLOW (CAN1 High)
- 3 N/C
- 4 GRAY (Ground)
- 5 BROWN (CAN1 Low)
- 6 N/C

- 1 N/C
- 2 VIOLET (Shift Lock In)
*Column Shifter Only
- 3 N/C
- 4 BLUE (Shift Lock Out)
*Column Shifter Only

Part # S-H64BX

- 1 N/C
- 2 GREEN (Output 2)
- 3 WHITE (Output 3)
- 4 GRAY (Output 4)
- 5 N/C
- 6 N/C
- 7 RED (Jumper)
- 8 BROWN (Output 5)
- 9 ORANGE (Output 6)
- 10 BLUE (Output 7)
- 11 YELLOW (Output 8)
- 12 RED (Jumper)

ALL 6" Flying Leads

A-IDLE300
Part# 820-1211-243

Submit product registration at www.intermotive.net
If the A-IDLE300 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