



UTP 1.0

INSTALLATION &
VERIFICATION INSTRUCTIONS
OBDII ONLY AND
2017 HYUNDAI ACCENT FOB
EMULATION



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The information contained in this Guide is subject to change without notice and should not be construed as a specification.

NOTICE: This device complies with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s)].

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

NOTICE: Changes or modifications made to this equipment not expressly approved by I.D. Systems may void the FCC authorization to operate this equipment.

To comply with FCC/IC RF exposure limits for general population / uncontrolled exposure, the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

La distance entre l'utilisateur et de produits ne devrait pas être inférieure à 20cm

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by

: one or more of the following measures

- . Reorient or relocate the receiving antenna
- . Increase the separation between the equipment and receiver
- . Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- . Consult the dealer or an experienced radio/TV technician for help

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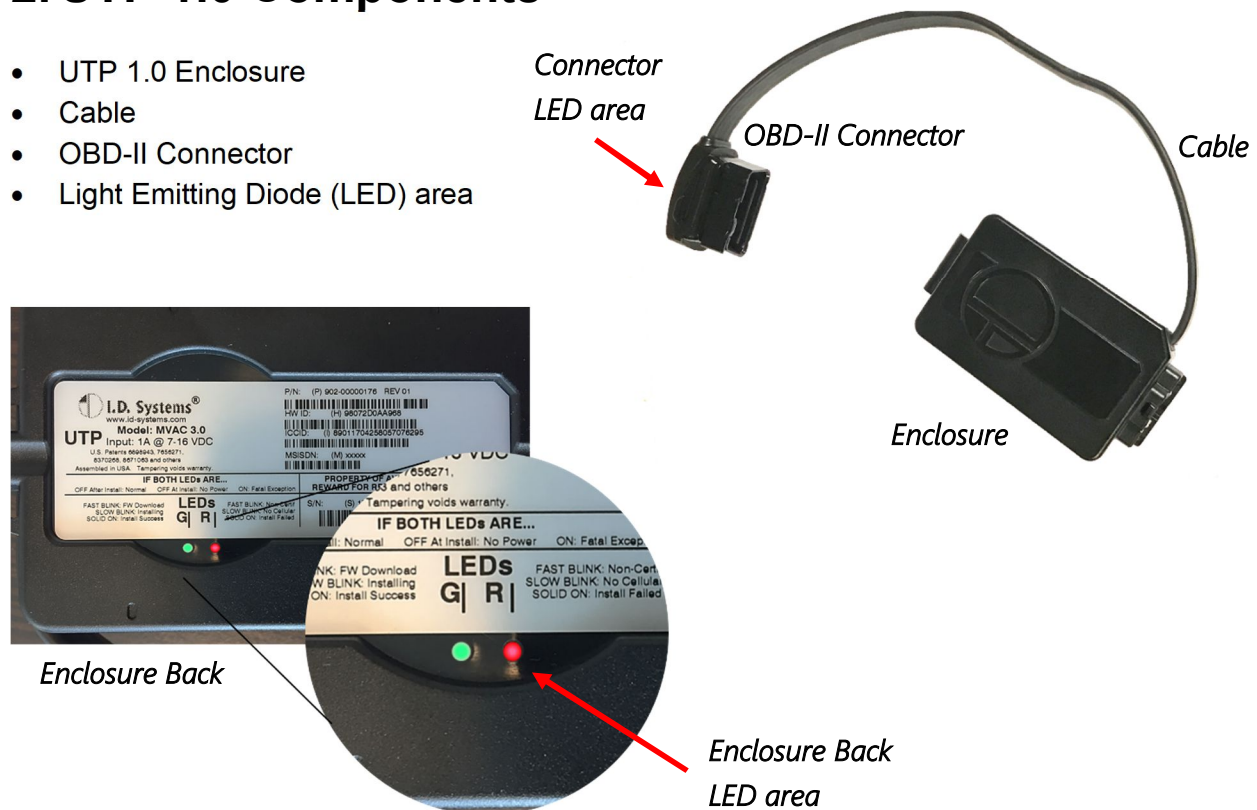
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1. Overview

- This document details UTP 1.0 (remote vehicle monitoring and control hardware) installation and verification process.
- Two main installation processes are documented;
1 – OBD Port Only and 2 – OBD Port and Key Fob Training
- Failure to follow the installation and verification processes may result in improper device operation and/or payment dispute for installation services.
- Contact Avis Budget Group customer support at **xxxxxxxxxx** with any questions regarding installation and/or verification.
- This document can be download in electronic format from [http://**???????**].
- Any recommendations and/or corrections should be forwarded to jborges@id-systems.com.

2. UTP 1.0 Components

- UTP 1.0 Enclosure
- Cable
- OBD-II Connector
- Light Emitting Diode (LED) area



3. Required Tools (Not Provided)

- Five 8" tie wraps
- 4.5" wire cutter
- Small inspection mirror



4. OBDII Only vs. OBDII and Key Fob Training

Some vehicle Make, Model and Year (MMY) combinations require UTP 1.0 OBDII port connection only to successfully In-Fleet.

Other vehicle MMY combinations require UTP 1.0 OBDII port connection and Key Fob Training to successfully In-Fleet.

Key Fob Training processes may differ between vehicle MMY combinations. This document details key fob training for the 2017 Hyundai Accent.

For a list of OBDII Only and OBDDII with Key Fob Training MMYs, contact the Avis Budget Group (ABG) installation coordinator, site manager or ABG Support center (telephone number **??????**).

5. OBD Only Installation and Verification Workflow

(print for reference)

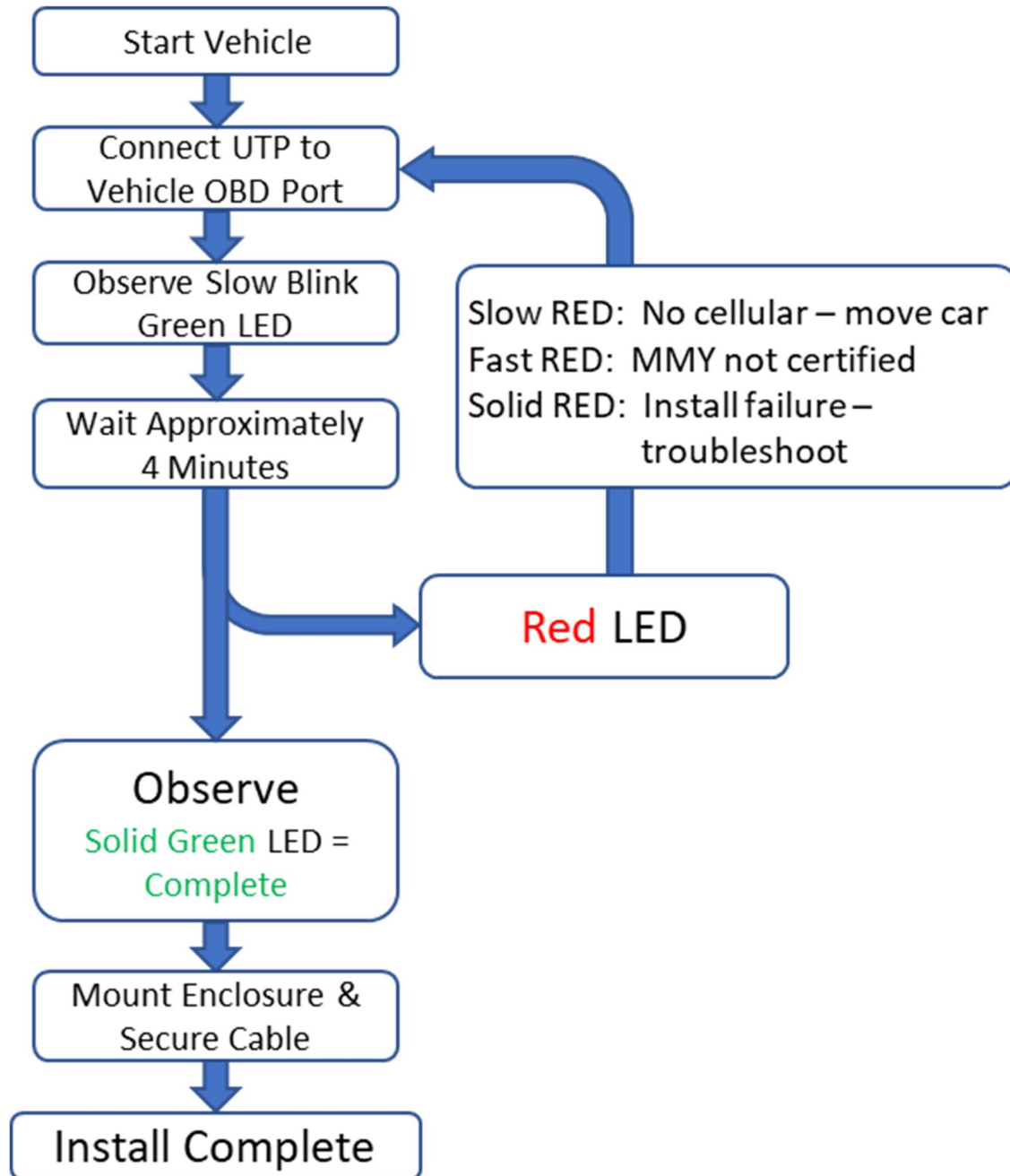


Figure 1 OBD Only Installation Work Flow

6. OBD and Key Fob Training Installation and Verification Workflow

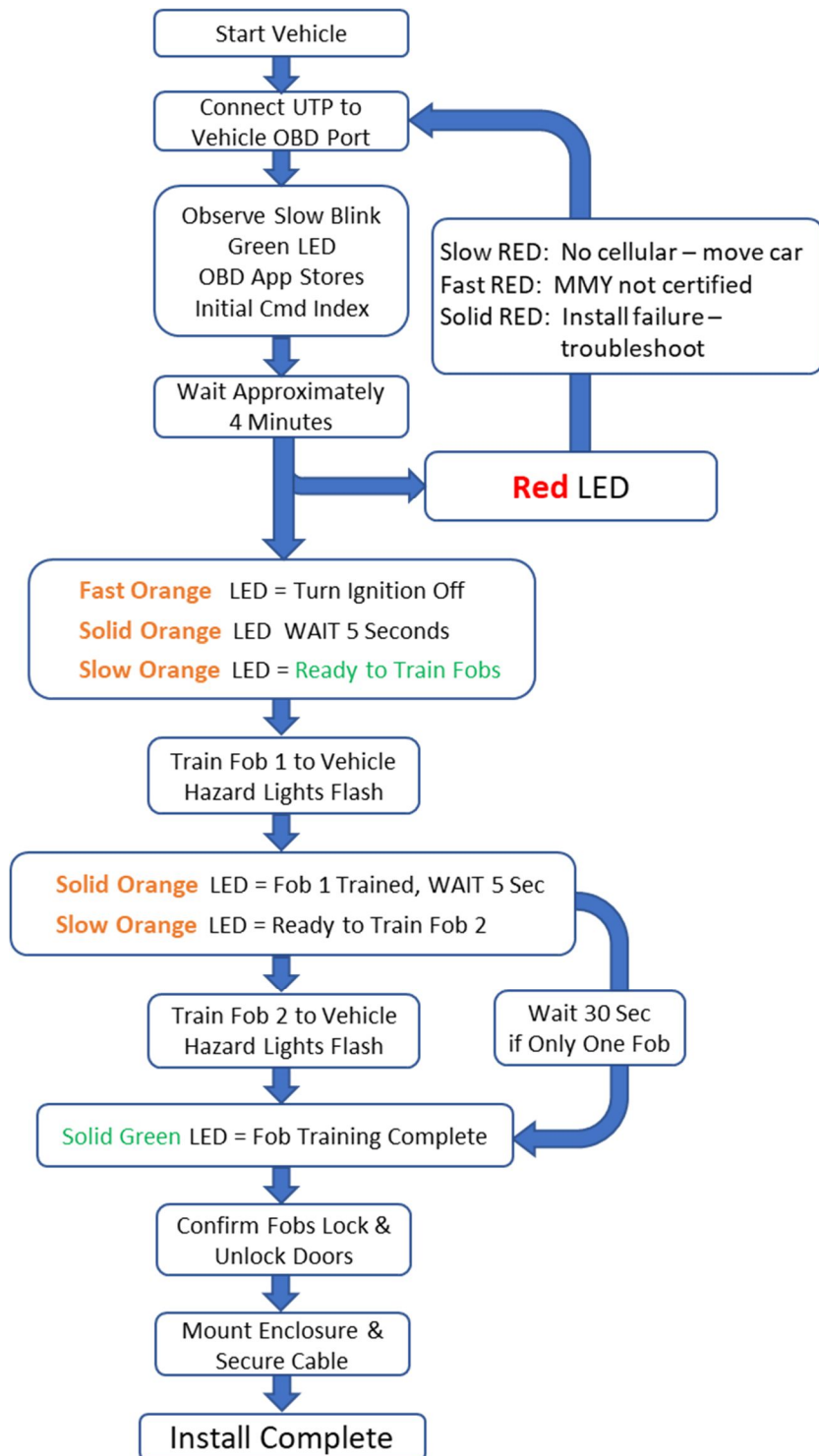


Figure 2 OBD and Key Fob Training Installation Work Flow

7. OBDII Only Installation Steps

NOTE: In all cases, safe location and secure mounting of the UTP 1.0 device is the installer's primary concern.

Installer is responsible for ensuring the UTP 1.0 device is safely and securely mounted and does not interfere with vehicle operation.

- 1) Locate the vehicle's OBD-II port (usually located on the bottom left of the driver's side dash).
 - Depending on the vehicle make/model, sometimes the OBD-II port is located in the bottom middle or bottom right of the driver's side, under the dash area.
 - With Kia and Hyundai vehicles, the OBD-II port is usually located on the front left side of dash through a small access panel.



Example Location of OBD Port (varies by vehicle model)

- 2) Turn the engine on and roll down the driver's side window, leaving the car door open prior to installation.

- 3) Make sure the OBD-II connector latch is in the “open” position, then plug OBD-II connector into the vehicle OBD-II port. Make sure the connector is seated all the way down. After plugging it in, move the latch back to the closed position.



Connector Latch Closed



Connector Latch Open



*UTP 1.0 plugged into OBD-II port
(Port Left - Facing Out Right – Port Facing Down)*

- 4) If the vehicle alarm should sound during installation, use the key fob to unlock the doors and disable the alarm.
- 5) Once the UTP 1.0 connector is plugged in, the green LED light on the connector will begin to flash. It will take approximately 3.5 minutes to in-fleet successfully. (See [LED Indicators](#) for more information.)
 - LED Pattern: Slow blink for approximately 3 minutes and 30 seconds before the LED turns solid green.



**Figure 3 Slow Green LED Blink
UTP 1.0 Configuring Correctly**

- If the LED on the UTP 1.0 connector turns Red, make sure the car/vehicle is a certified make/model.



**Figure 4 OBD Solid green LED indicates
successful in-fleet**

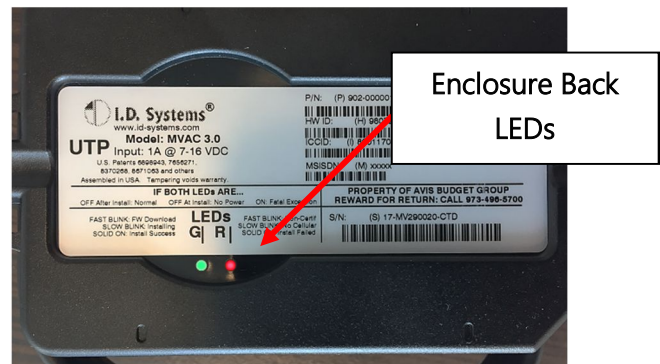


Figure 5 Enclosure Back LED Area

2) Ignition On Then Off to Clear LED

- SOLID GREEN LED will remain on indicating Successful In-Fleet
- SOLID RED LED will remain on indicating Installation Failure
- Ignition Off to clear solid LED

**Ignition Off
to Clear UTP LED**



**Figure 6 Ignition Off
to Clear UTP LED**

**LED Goes Out and Stays Off After
Ignition Off**



**Figure 7 LED Goes Out and Stays Off
After Ignition Off**

3) When the UTP 1.0 in-fleets successfully (the LED turns solid green), the enclosure is ready to be routed under the dash and tie-wrapped to a wire harness. When searching for a wire harness, locate a thick, immovable location.

- Avoid installing the UTP 1.0 in the brake or gas pedal areas. Also, avoid installing on loose wire harnesses.



Locate a wire harness



Do not install near brake / gas pedal area

- 4) When tie wrapping the UTP 1.0 to the vehicle harness, wire tie both sides of the UTP 1.0 enclosure.



Location of tie-wrap insert on enclosure



Tie wraps fed through inserts on both ends of UTP 1.0



UTP 1.0 mounting feature and secured to vehicle harness



UTP 1.0 securely tie wrapped onto wire harness. In this example, one side of the UTP 1.0 is tie wrapped and UTP cable is tie wrapped onto the wire harness as well.

- 5) **Final Install Validation:** Make sure the UTP 1.0 enclosure is tucked in behind the panel and not visible to the customer. Double check to make sure the UTP 1.0 is tie wrapped securely to a wire harness and away from the gas/brake pedal area.



UTP 1.0 installed on 2017 Ford Fusion. UTP is routed and tie wrapped onto a wire harness behind the panel.

8. OBDII Only LED Indicators

 GREEN LED	 RED LED
Fast blink = firmware download	Fast blink = non-certified vehicle
Slow blink = installing	Slow blink = no cellular
Solid on = install successful	Solid on = install failure
If both LEDs are...	
OFF after install = Normal	
OFF at install = No power	
ON = Fatal exception	

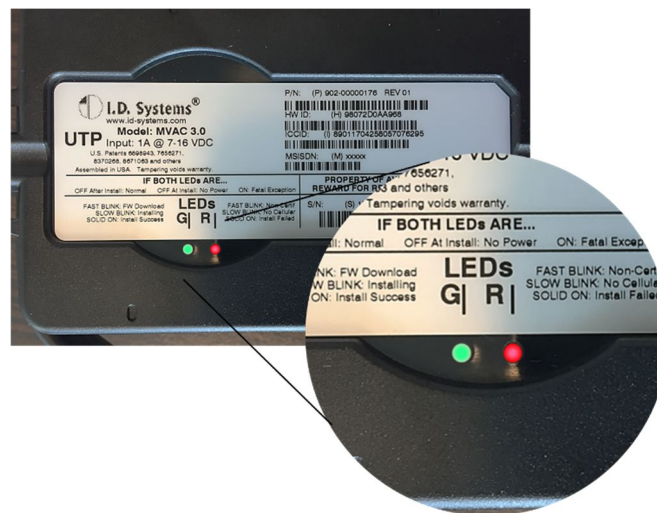


Figure 8 Enclosure Back LED Area

9. Hyundai Accent OBDII and Key Fob Training Installation Steps

NOTE: In all cases, safe location and secure mounting of the UTP 1.0 device is the installer's primary concern.

Installer is responsible for ensuring the UTP 1.0 device is safely and securely mounted and does not interfere with vehicle operation

- 1) Locate the vehicle's OBD-II port (usually located on the bottom left of the driver's side dash).
 - Depending on the vehicle make/model, sometimes the OBD-II port is located in the bottom middle or bottom right of the driver's side, under the dash area.
 - With Kia and Hyundai vehicles, the OBD-II port is usually located on the front left side of dash through a small access panel.



Example Location of OBD Port (varies by vehicle model)

- 2) Turn the engine on and roll down the driver's side window, leaving the car door open prior to installation.

- 3) Make sure the OBD-II connector latch is in the “open” position, then plug OBD-II connector into the vehicle OBD-II port. Make sure the connector is seated all the way down. After plugging it in, move the latch back to the closed position.



Connector Latch Closed



Connector Latch Open



UTP 1.0 plugged into OBD-II port

- 4) If the vehicle alarm should sound during installation, use the key fob to unlock the doors and disable the alarm.

UTP 1.0 and Physical Key Fob Training

Indicates fob training steps specific to 2017 Hyundai Accent*

- 1) Connect UTP to Vehicle OEM Port and Observer Power up
 - a. Start the vehicle and leave ignition in the Run position
 - b. Plug the UTP 1.0 OBDII connector in to vehicle OBDII receptacle
 - c. Expected Response: **Slow Blink Green LED** while UTP 1.0 receives RentalFleet commands over the cellular data network (up to approximately 3 minutes)
 - d. Failure Response: **Solid Red LED** indicates failed in-fleet



**Figure 9 Slow Green LED Blink
UTP 1.0 Configuring Correctly**



**Figure 10 Solid Red LED
Indicates Failed In-Fleet**

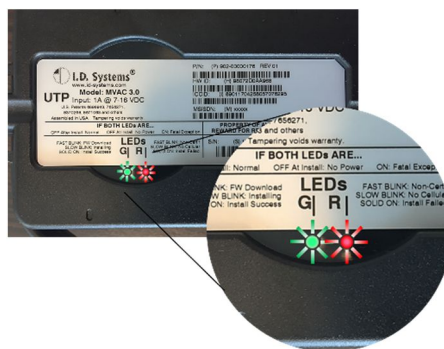
2) UTP 1.0 Trains Itself as a Vehicle Key Fob

- a. **Fast Orange LED**
- b. Turn Ignition to Off*
- c. Wait up to 8 seconds for UTP to recognize vehicle state change
- d. **Solid Orange** while UTP taught as key fob (approximately 3 seconds)
 - i. NOTE: *Hazard lights flash to indicate UTP is trained
- e. UTP is trained as key fob
- f. Expected Response: **Slow Orange LED** indicates UTP fob training completed; UTP has moved on to training Physical key fobs
- g. Failure Response: **Fast Orange LED** if Ignition On

Step 1 **Fast Orange LED**, Turn Ignition Off



Blinking Green and Red Bottom LEDs Equals Blinking Orange on OBD Connector



Step 2 **Solid Orange LED**, UTP Being Trained as Key Fob



Figure 12 **Solid Orange LED**, UTP Being
Trained as Key Fob

**Step 3 Slow Orange LED,
UTP Successfully Trained as Key Fob**



**Figure 13 Slow Orange LED,
UTP Successfully Trained as Key Fob**

**Fast Orange LED,
UTP Fob Training Failed**



**Figure 14 Fast Orange LED,
UTP Fob Training Failed**

3) Train Physical Key Fob(s) to Vehicle

- a. **Slow Orange LED** (vehicle awaiting physical key fob training)
- b. Press Lock* button on first key fob
- c. Observe vehicle Hazard lights flash* to indicate that key fob is trained
- d. LED turns Solid Orange for 5 Seconds to indicate First Key fob Trained
- e. For a second key fob, Press Lock* button on second key fob
- f. Observe vehicle Hazard lights flash* to indicate second fob trained
- g. **Solid Green** after 30 seconds of no fob activity OR after training 2 key fobs
- h. **In-Fleet complete**
 - i. Expected Response: **Solid Green**
 - ii. Failure Response: **Solid Red** if no fobs were trained during training period

Step 1 Start with **Slow** Orange LED,
Ready to Train Physical Fobs



Figure 15 Start with **Slow** Orange LED,
Ready to Train Physical Fobs

Step 2 With **Fob In Vehicle**, Press and
Hold Lock Button On First Physical Fob

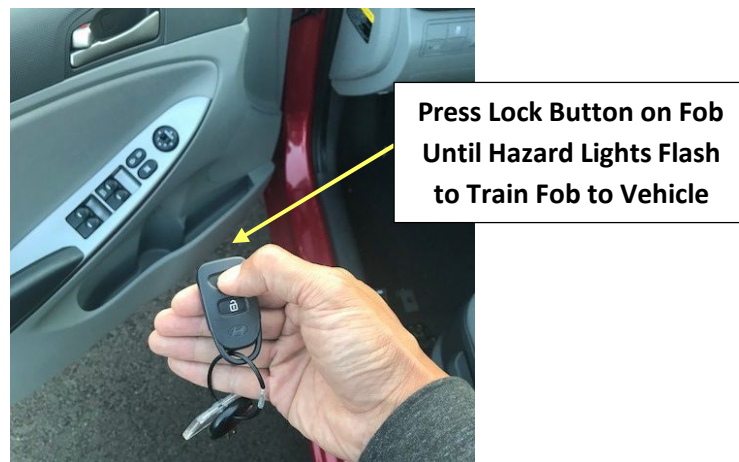


Figure 16 With **Fob In Vehicle**, Press
Lock Button On First Physical Fob

Step 3 Observe Vehicle Hazard Light Flash



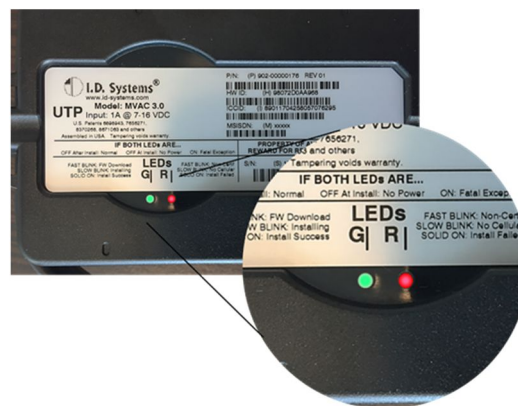
Figure 17 Observe Vehicle Hazard Light Flash

Step 4 Solid Orange LED Indicates Fob Trained



Figure 18 Solid Orange LED Indicates Fob Trained

Solid Green and Red Bottom LEDs Equals Solid Orange on OBD Connector



First Fob Trained to Vehicle

**Step 4 Start with Slow Orange LED,
Ready to Train 2nd Physical Fob**



Figure 19 Start with Slow Orange LED,
Ready to Train 2nd Physical Fob

Repeat Steps 1 – 3 to Train 2nd Fob to Vehicle

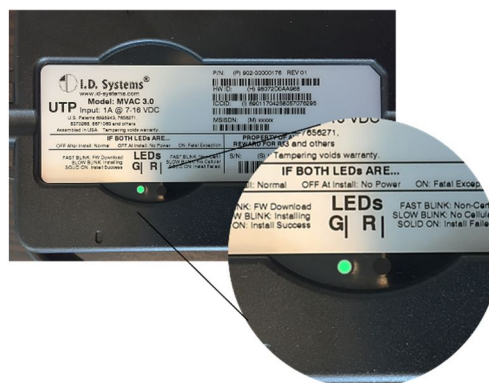
Solid Green LED After 2nd Fob Trained or 30 Seconds Idle

**Solid Green LED,
Fob Training Complete**



Figure 20 Solid Green LED,
Fob Training Complete

Solid Green Bottom LED



Physical Fob Training Complete

- 4) Ignition On Then Off to Clear LED
 - a. SOLID GREEN LED will remain on indicating Successful In-Fleet
 - b. SOLID RED LED will remain on indicating Installation Failure
 - c. Ignition On then Off to clear solid LED

**Ignition On then Off
to Clear UTP LED**



**Figure 21 Ignition On then Off
to Clear UTP LED**

**LED Goes Out and Stays Off After
Ignition Off**



**Figure 22 LED Goes Out and Stays Off
After Ignition Off**

- 5) Verify Physical Key Fob Lock and Unlock
 - a. UTP In-Fleet and all physical key fobs trained
 - b. Fobs in range of vehicle
 - c. For each physical key fob
 - i. Verify Lock via fob
 - ii. Verify Unlock via fob

Step 1 Verify Door Lock and Unlock with Each Physical Fob

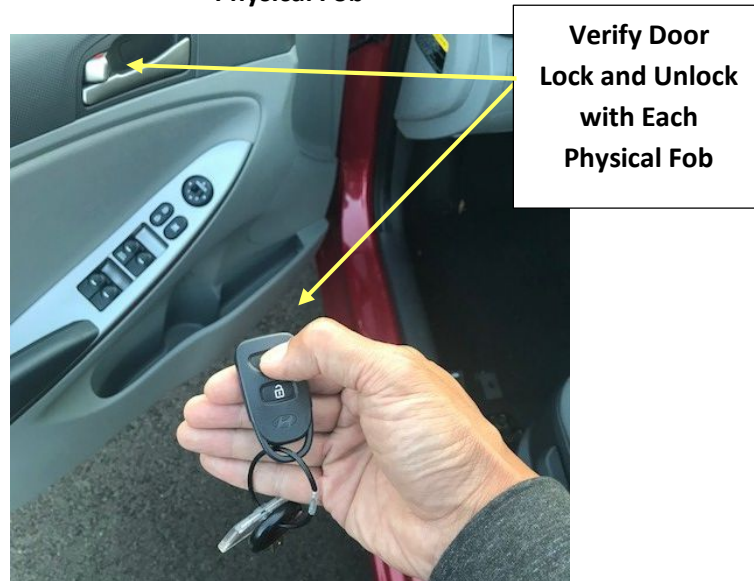
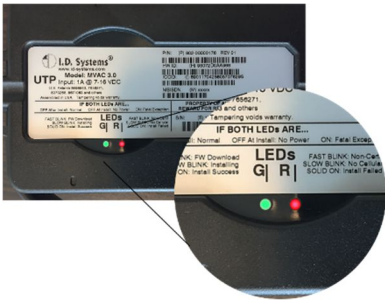


Figure 23 Verify Door Lock and Unlock with Each Physical Fob

- 6) **OPTIONAL** RentalFleet UTP Lock and Unlock Verification
 - a. UTP In-Fleet and all physical key fobs trained
 - b. Use Avis mobile app or RentIFleet web site to lock and unlock vehicle doors

UTP 1.0 In-Fleet and Fob Training Complete

10. OBDII and Fob Training LED Indicators

 GREEN LED	Slow Blink = Receiving Setup Data Fast blink = Firmware Downloading Solid On = Install Complete, Up to Two Fobs Trained
 ORANGE LED  BOTH BOTTOM LED On = Orange LED	Fast blink = Turn Ignition Off Start Fob Teach or UTP Fob Training Failed Solid On = UTP Being Trained as Fob Slow Blink = UTP Fob Training Complete, Ready to Train Vehicle Fobs
 RED LED	Solid on = install failure Fast blink = non-certified vehicle Slow blink = no cellular
If LEDs are...	
ALL OFF after install = Normal	
ALL OFF at install = No power	
RED ON = Fatal exception	

Mount UTP 1.0 Under Dash

- 7) When the UTP 1.0 in-fleets successfully (the LED turns solid green), the enclosure is ready to be routed under the dash and tie-wrapped to a wire harness. When searching for a wire harness, locate a thick, immovable location.
 - a. Avoid installing the UTP 1.0 in the brake or gas pedal areas. Also, avoid installing on loose wire harnesses.



Locate a wire harness



Do not install near brake / gas pedal area

- 8) When tie wrapping the UTP 1.0 to the vehicle harness, wire tie both sides of the UTP 1.0 enclosure.



Location of tie-wrap insert on enclosure



Tie wraps fed through inserts on both ends of UTP 1.0



UTP 1.0 mounting feature and secured to vehicle harness



UTP 1.0 securely tie wrapped onto wire harness. In this example, one side of the UTP 1.0 is tie wrapped and UTP cable is tie wrapped onto the wire harness as well.

- 9) **Final Install Validation:** Make sure the UTP 1.0 enclosure is tucked in behind the panel and not visible to the customer. Double check to make sure the UTP 1.0 is tie wrapped securely to a wire harness and away from the gas/brake pedal area.



UTP 1.0 installed on 2017 Ford Fusion. UTP is routed and tie wrapped onto a wire harness behind the panel.

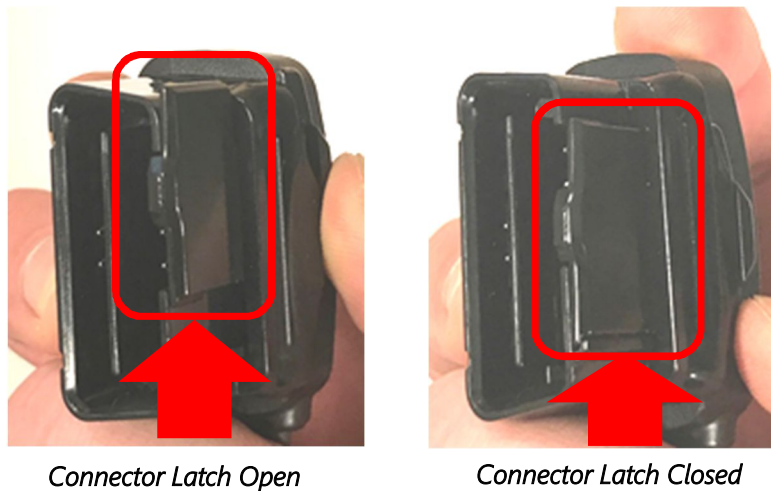
11. Installing on Multiple Vehicles at the Same Time (OBDII Only Vehicles)

The following process is recommended to speed the overall installation when installing UTP 1.0 devices on multiple vehicles at the same time.

- 1) Below process only applies to OBD Only vehicles
- 2) Arrange up to 10 cars side-by-side with enough room to open driver-side doors without hitting the adjacent vehicle.
- 3) Starting with the first vehicle:
 - Turn vehicle ignition on, roll down driver-side window, and leave driver door open.
 - Plug the UTP 1.0 unit into the OBD-II port and leave UTP 1.0 hanging down
- 4) For OBDII Only (no key fob training), waiting for the device to complete the In-Fleet process.
 - Proceed with remaining vehicles.
 - Go back to the first vehicle and make sure the LED on the UTP connector has turned solid green (indicating successful In-Fleet).
 - Turn ignition Off to clear the LED.
- 5) Use two wire ties to attach the UTP 1.0 to a wire harness under the dash panel.
- 6) Make sure the UTP 1.0 OBDII plug is fully seated into the OBD-II port and the slide is in the locked position.
- 7) Repeat the attachment and lock verification process for the remaining vehicles.

12. Reinstall and Verify UTP 1.0 After OBDII Port Maintenance

- 1) The UTP 1.0 device can be removed then reconnected to the same vehicle in the event OBDII port access is required.
- 2) Remove UTP 1.0 Connector - make sure the OBD-II connector latch is in the “open” position, then unplug the OBDII connector from the vehicle OBDII port.
- 3) Use OBDII port for vehicle maintenance.
- 4) Start the vehicle.
- 5) Reconnect UTP 1.0 Connector - make sure the OBD-II connector latch is in the “open” position, then plug the OBDII connector in to the vehicle OBDII port. Make sure the connector is seated all the way down. After plugging it in, move the latch back to the closed position.



- 7) After reconnection with the vehicle running, the UTP 1.0 will communicate with the back office and progress through the installation process



Solid green LED indicates successful in-fleet

- LED Pattern: Slow blink for approximately 3 minutes and 30 seconds before the LED turns solid green.
- If the LED on the UTP 1.0 connector turns Red, make sure the car/vehicle is a certified make/model.
- SOLID GREEN LED will remain on indicating Successful In-Fleet
- SOLID RED LED will remain on indicating Installation Failure

8) Ignition Off to Clear LED

- Ignition Off to clear solid LED

**Ignition Off
to Clear UTP LED**



**Figure 24 Ignition Off
to Clear UTP LED**

**LED Goes Out and Stays Off After
Ignition Off**

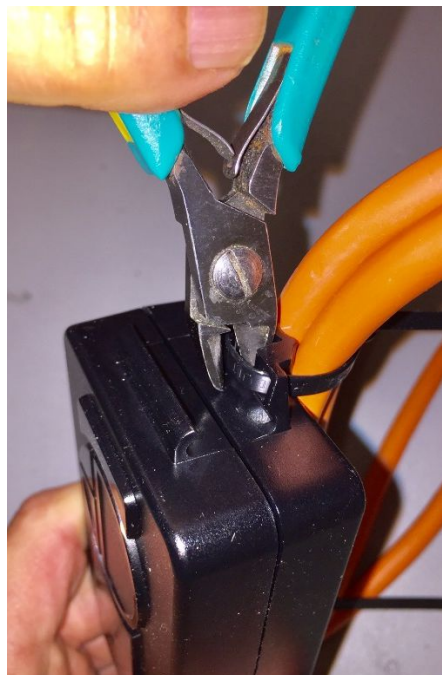


**Figure 25 LED Goes Out and Stays Off
After Ignition Off**

13. Uninstalling the UTP 1.0

To safely uninstall the UTP 1.0, follow these steps:

- 1) Use the built-in tie wrap cutting feature on both side of the UTP 1.0 when cutting/removing tie wraps, so as not to damage the wire harness or the UTP 1.0 enclosure. See photos below.



Carefully cut tie wrap without damaging harness or the UTP 1.0 enclosure

- 2) Move the OBD-II connector latch to the open position and unplug the OBD-II connector from the vehicle OBD-II port.
- 3) Coil the UTP 1.0 cable, securing it to the enclosure, and fasten the OBD-II connector onto the receptacle on the enclosure. Move the latch to the closed position.



Coil the cable, securing it to the enclosure



Fasten OBDII connector to enclosure

- 4) Stack UTP 1.0 devices (as pictured below).



14. Train Fobs to Vehicle After UTP De-Installation (2017 Hyundai Accent Only)

- 1) If the second key fob is at the central repository (Virginia Beach, VA), send email request to "VABKEY" in the ABG global address list with the MVA number and request to have second key fob sent to the site.
- 2) When second key fob received, proceed with following 2017 Hyundai Accent key fob training process
- 3) Connect fob programmer or UTP to the OBDII port
- 4) Follow fob programmer or UTP indications that vehicle is in fob training mode
- 5) Press and hold Lock button of first fob until hazard lights flash
- 6) Repeat process for second fob
- 7) Remove fob programmer or UTP
- 8) Verify both fob lock and unlock vehicle doors
- 9) Post UTP fob training process complete