Installation Guide

2007-2013 GM Silverado/Sierra1500 |
2007-2014 2500/3500 & SUVs |
2008-2017 Full Size Vans | Key-to-Start | 3x Lock

Kleinn SKU # - RSGM4

Years	Chevy (Standard Key)											
2007-2013	Avalanche	07	08	09	10	11	12	13				
2008-2017	Express		08	09	10	11	12	13	14	15	16	17
2007-2013	Silverado 1500	07	08	09	10	11	12	13				
2007-2014	Silverado 2500/3500	07	08	09	10	11	12	13	14			
2007-2014	Suburban	07	08	09	10	11	12	13	14			
2007-2014	Tahoe	07	08	09	10	11	12	13	14			

Years	Cadillac (Standard Key)											
2007-2014	Escalade	07	08	09	10	11	12	13	14			
Years	GMC (Standard Key)											
2008-2023	Savanna (Also 18-23)		08	09	10	11	12	13	15	15	16	17
2007-2013	Sierra 1500	07	08	09	10	11	12	13				
2007-2014	Sierra 2500/3500	07	08	09	10	11	12	13	14			
2007-2014	Yukon	07	08	09	10	11	12	13	14			

Automatic transmission vehicles manufactured for sale in the US and Canada Only

Introduction:

- This guide covers multiple GM models, but all the connections are in the same location at the ignition barrel.
- This is a pre-wired plug and play kit and all the required connections have been made within the harness.
- We have already loaded the correct firmware into the remote start module. You will need to pair the module to your vehicle when the installation is complete. Programming Instructions begin at Step 3.
- This remote start will monitor the vehicle lock circuit and use the pulses generated by pressing lock 3 times on your OEM remote to start the vehicle.

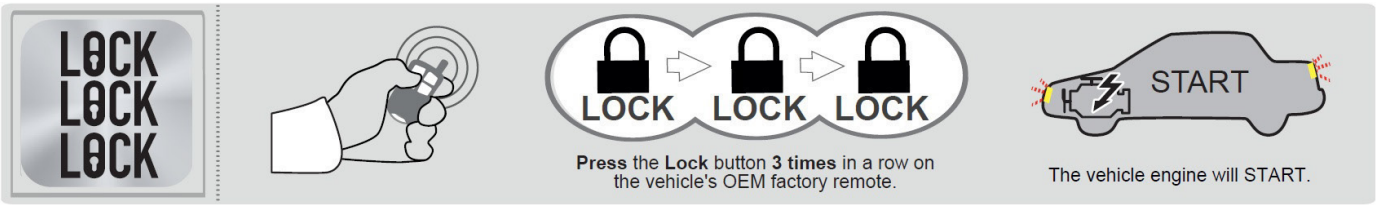
Disclaimer:

Neither the manufacturer nor the distributor of these components are responsible for damages of any kind either indirectly or directly caused by the components, except for the replacement of the components in case of manufacturing defects. This guide is subject to change without notice. Refresh your browser cache or use different browser (Edge, Chrome, Firefox, etc.) to view the latest update.

Remote Start Activation:

Remote Starter Activation: Press Lock>Lock>Lock on your OEM remote to start the vehicle.

(If your vehicle is not equipped with keyless entry or for increased activation range, you can upgrade to the Kleinn RFKIT, RFKIT2W, RFKIT4, or MOBILE2W Smart Phone kits to activate remote start)



Check out our extended range RF Remote or Smartphone Control upgrade kits

Click Here for Upgrade Options

- **Firmware pre-loaded:** As part of the service Kleinn provides, we have pre-flashed the compatible firmware version and options into your **HCX** module for you so you are ready to begin the installation in the vehicle. You will need to program the module to the vehicle when the installation is complete.



Parts Required:

- Idatalink HCX Module Pre-Flashed (RSA GM10) Firmware
- T-Harness HCX-GM10

Overview

There are 5 basic steps to this remote start installation:

Step1: Preparation

Step 2: Wiring Diagram Overview **Page 4.**

Step 3: Programming **- Page 6 Programming optional RF remote kits Page 7.**

Step 4: Take Over Procedure - **Page 8**

Step 5: Diesel Delay Setting - Pages 9-11

Troubleshooting Page 12

STEP 1: PREPARATION

This remote start kit is a **PLUG & PLAY INSTALLATION TYPE** utilizing custom T-Harnesses which eliminate the "wire-to-wire" connections typically required. The physical attachment of this product will require only plug-in connections unless RAP shutdown or Keyless Entry control from RF remotes or Smartphone upgrade kits are desired. Simply plug the T-Harness into the vehicle, then program the module and the remote starter will be ready for use.

- Any vehicle panels required to gain access to the needed plugs outlined in this Tip Sheet will need to be removed. The bulk of the installation typically takes place in the driver's side under dash area. You may need to access the passenger side under dash area for some vehicles. Refer to the Wire Diagram for the locations that need to be accessed in the vehicle. Remember the order that you remove the panels.

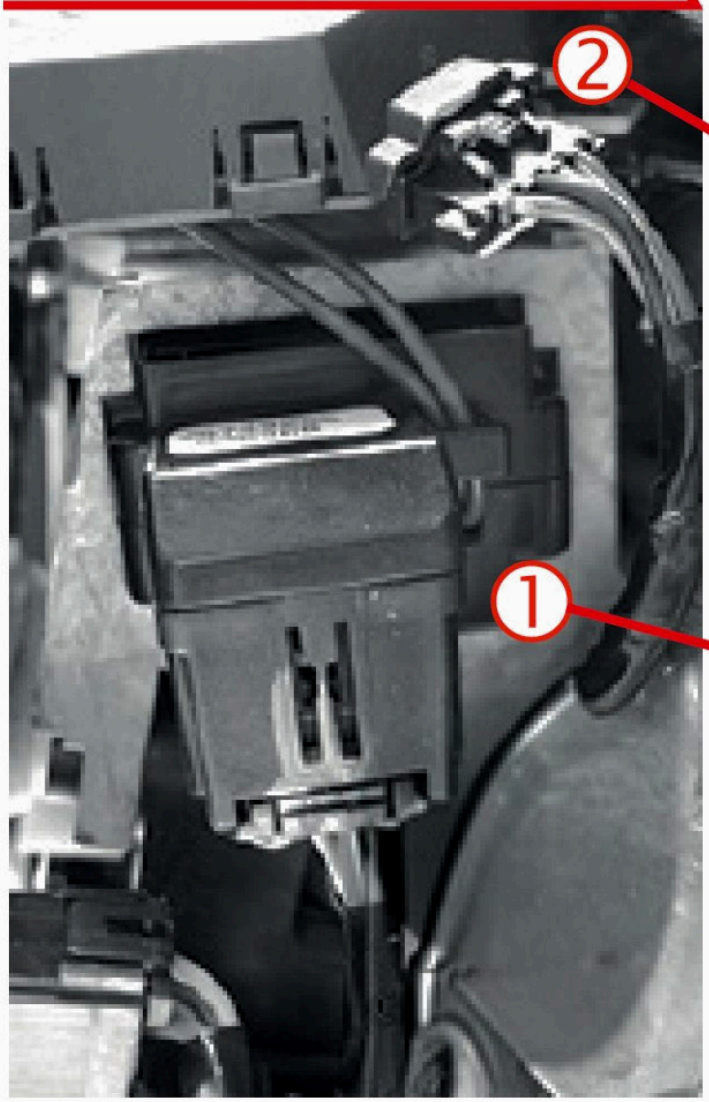
- Wait to mount the remote start component(s) in the vehicle until after you have completed the wiring and have tested the system. Keep in mind where you plan to mount the component(s) when routing your wires to avoid having to unplug after programming. The component(s) can be mounted to a rigid wire bundle under the dash using zip ties. Look for an open and convenient location in the vehicle that will fit the component(s). Pay attention to moving parts like the pedals, e-brake and steering column. Be sure to route your wiring away from those areas. It is best to route your wires along with the vehicles factory wires, as this is typically a safe location and it keeps the install neat.

- If your T-harness has loose wires with no plugs at the end they will not be needed for standard installation in this application. Tape up any extra wires or tuck them away with the T-harness and isolate them so they are not in the way. Adding options may require additional wiring connections.

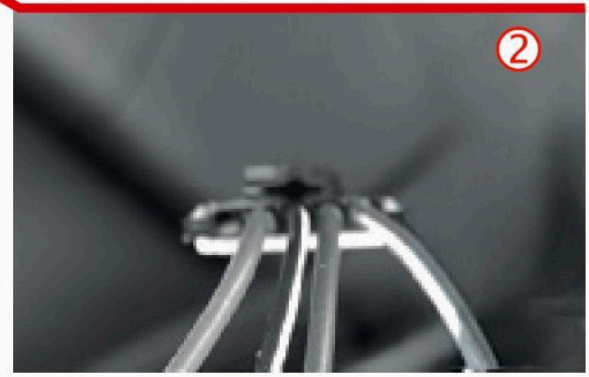
CONNECTION LOCATION



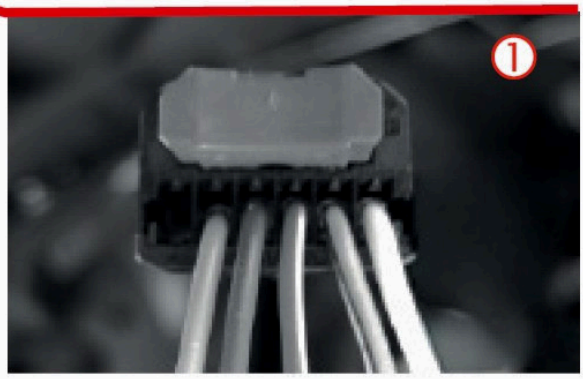
Ignition Barrel



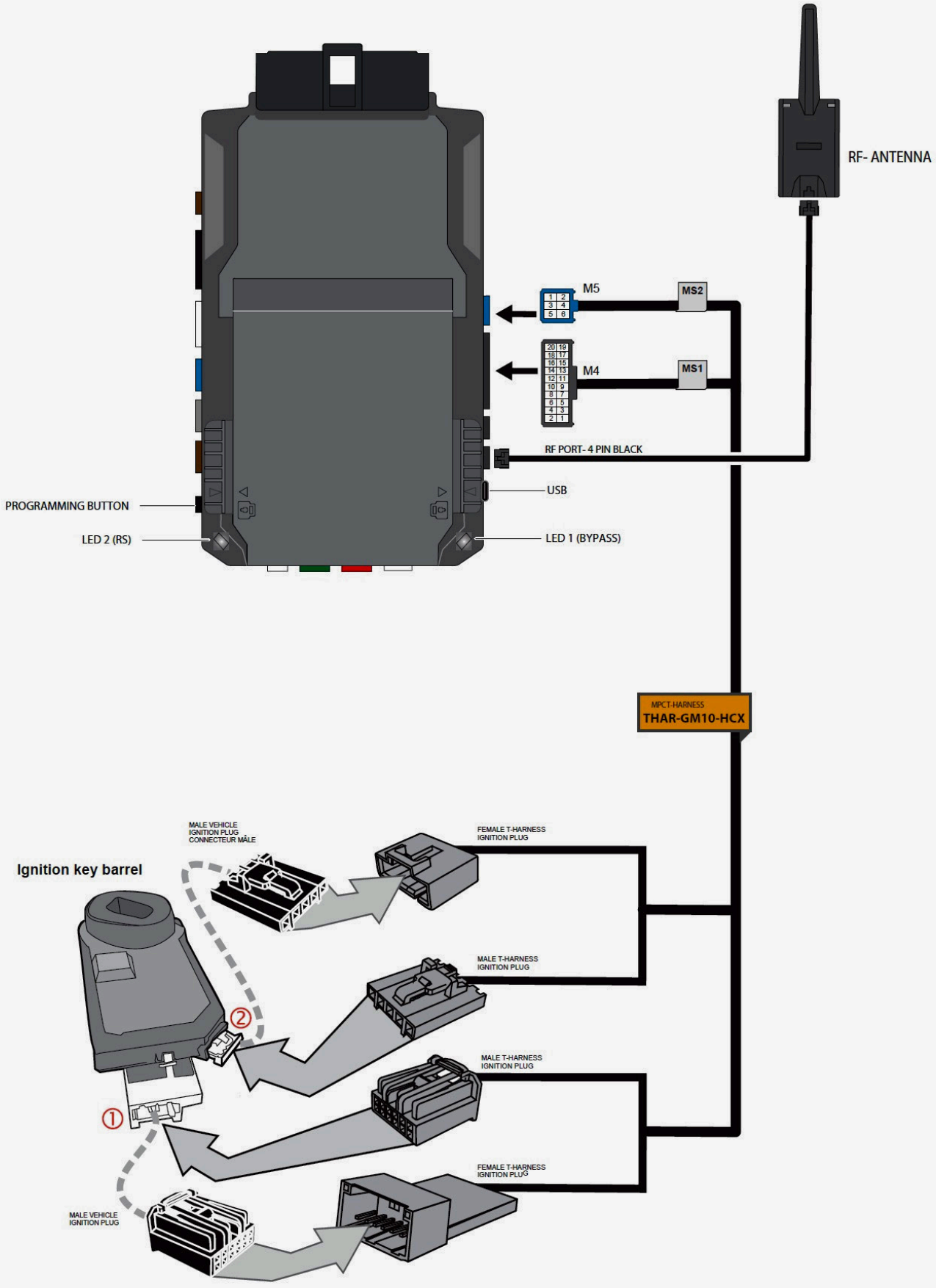
Transponder Connector



Ignition connector*

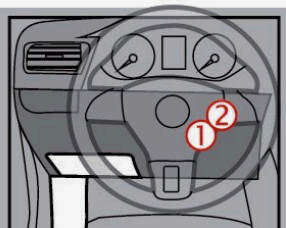


STEP 2: WIRING DIAGRAM OVERVIEW



① Back view Ignition Connector

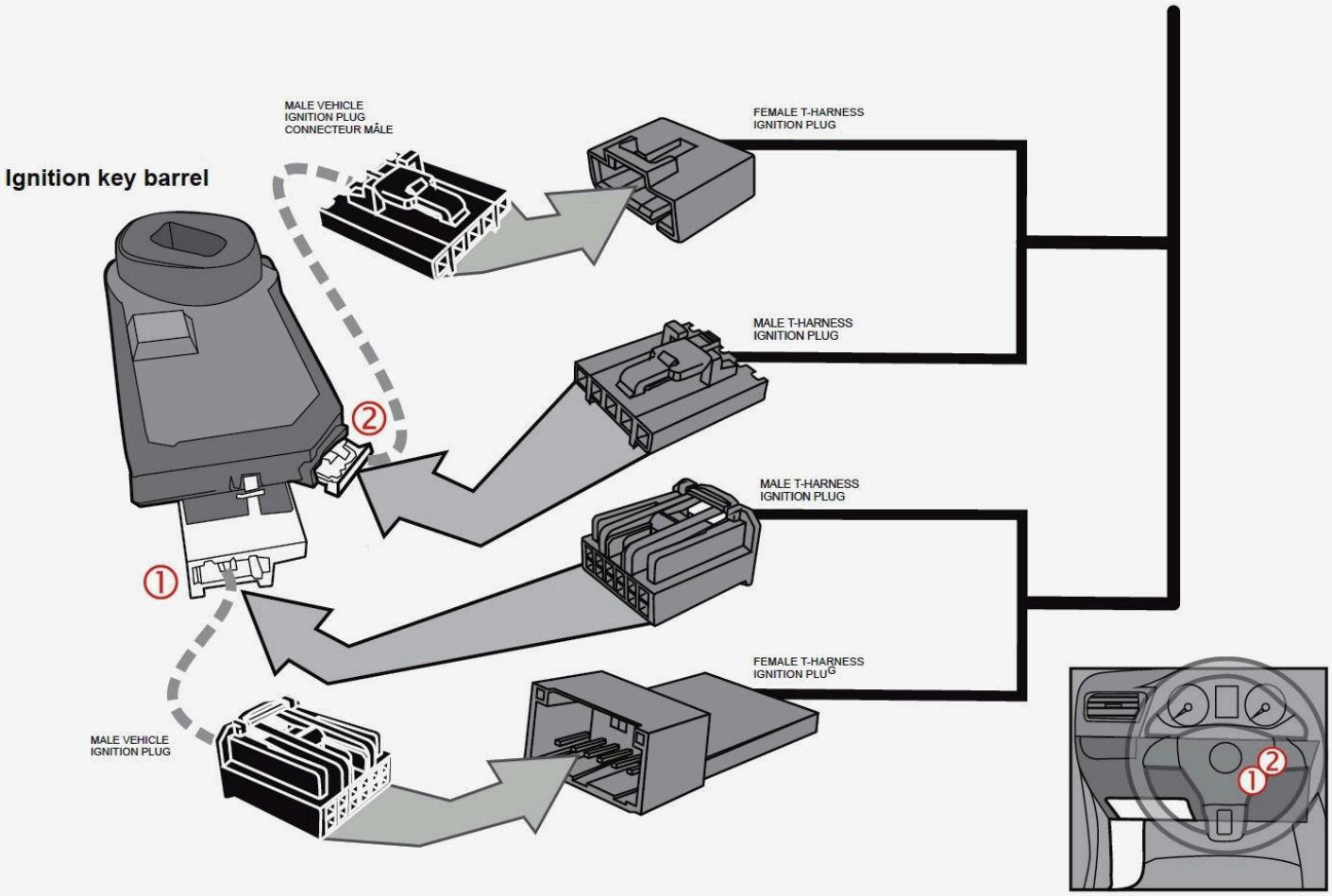
② **Key Bypass IMMO connector** Back view Connector



STEP 2.1: CONNECTING THE T-HARNESS

CONNECTING THE T-HARNESS

Locate the Ignition switch and Transponder siwtch located at the bottom of the main Ignition switch. Locate the factory 6-pin ignition plug at the bottom of the ignition switch. Remove the factory 6-pin connector and plug it into the female t-harness 6-pin conector. Then take the male t-harness 6-pin connector and plug in into the ignition connector at bottom of factory Ignition switch. (see #1)
Take the 5-pin factory transponder connector from the bottom right ignition switch and connect it to the t-harness female 5-pin connector. Then take the male t-harness 5-pin conector and plug it into the 5-pin transponder connector at bootom right of the igniton switch.(see #2)



STEP 3: PROGRAM THE MODULE

Your Remote Start module now needs to be paired to your vehicle. Before starting the programming sequence, make sure that all of the connectors are plugged into the module. Instructions for programming the Remote Start are below. Here are two important tips to help you avoid common mistakes:

- Follow the programming instructions for the LED1 and LED2 descriptions to monitor flashes.



MODULE PROGRAMMING PROCEDURE - 1 OF 1

01 
Close driver door.

02 
Re-open driver door to wake up data bus.

03 

Insert key into ignition.

04 

Turn key to ACC position.

05 
Wait, LED 1 will turn solid RED.



06 

Turn key to ON position.

07 
Wait, LED 1 will turn solid GREEN for 2 seconds. (This may take up to 1 minute.)



08 

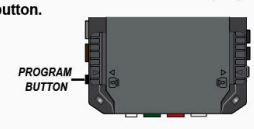
Turn key to OFF position.

09 

START vehicle wait for 15 seconds.

10 
Press and hold the brake pedal.

11 
Press and release the module's programming button.



12 
Release the brake pedal.

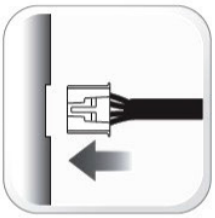
07 
Wait, LED 2 will flash GREEN.



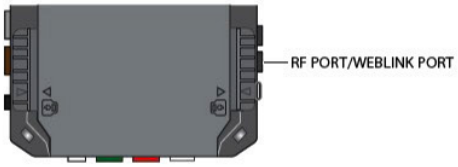
08 
Module Programming Procedure completed.

Programming Optional RF Remote Upgrade Kits RFKIT1-2W-4

>>



Plug the antenna into the RF/Weblink port of the module (4 pin black).



01



WARNING: Complete the module programming procedure and tach programming procedure before programming the remotes. A maximum of four [4x] aftermarket remotes per system.

02



Set ignition to ON position.

03



Press and release the antenna button, then press and hold the antenna button. The antenna's LEDs will turn ON solid.

04



Parking Light will flash once [1x].
The HCX brain will click [1x].

05



While holding the antenna button, press once [1x] on the START button of each aftermarket remote

06



The antenna's LEDs will flash once [1x] for each successful pairing.

07



Release the antenna button. The antenna's LEDs will turn OFF.

08



Set ignition to OFF position.

09



Remote Programming Procedure completed.

Finishing up!

After confirming that everything works properly, cap off or tape the ends of any wires you're not using to avoid grounding or other contacts.

- Now gather up all the wiring and neatly bundle it together using zip ties or electrical tape to prevent the wires from interfering with any of the moving parts under the dash.
- Find a secure place to put the remote start module and use zip ties to secure it. Be careful not to zip tie near your connections as it may create a bad connection.
- Replace any interior vehicle panels that were removed to gain access to the needed wires, in reverse order that they were removed.
- Test the system as you reinstall the panels in your vehicle to make sure you do not pull something loose or pinch a wire. Be careful not to run a screw through a wire or pinch a wire while reinstalling panels.
- If your test was unsuccessful, go back and re-check your wiring and programming. Make sure the connections are tight with no bent pins or pulled wires and follow the programming steps again closely.

STEP 4: Vehicle Take Over Procedure

This system will run for 15 minutes then turn off. If you approach the vehicle while it is still running, unlock the doors, enter the vehicle and close the door, within 45 seconds, press the brake pedal and hold it down for 3 seconds, you will hear a click from the remote starter turning off and you can drive away.

01 
All vehicle doors must be closed and locked prior to remote start sequence.

02 

Press the Lock button 3 times on the vehicles OEM factory remote.

03 
The vehicle engine will start.

04 
Press Unlock on OEM remote.

05 
Open driver door and enter vehicle.

06 
Close driver door.

07 

Insert key into ignition.

08 

Turn key to ON position.

08 
Press and release BRAKE pedal.

10 
The vehicle can now be put in to gear and driven..

>> 
failure to follow procedure will result in no take over and vehicle engine will shutdown.

If you have any installation questions or problems,
you can create a support ticket for help at:
install.kleinn.com/support

Kleinn Automotive Accessories

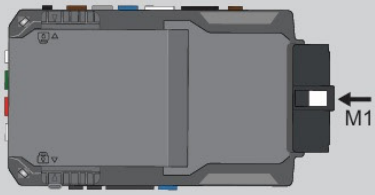
520-579-1531

Copyright 2026 Kleinn Automotive Accessories

STEP 5: DIESEL DELAY SETTING FOR DIESEL ONLY PART 1

***This setting is an option to delay start on Diesel Trucks.**





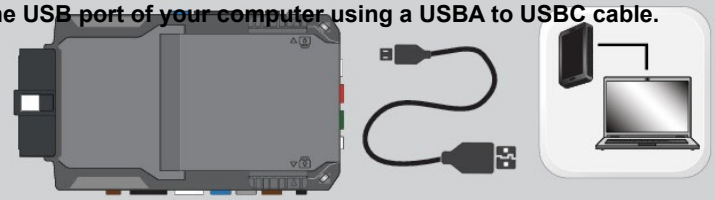
Warning: Disconnect the power connector last when unplugging from the vehicle. Unplug all the connectors first then unplug the M1 8-Pin Main Wiring Harness and bring to your PC or Laptop.

Click Here for WEBLINK Software

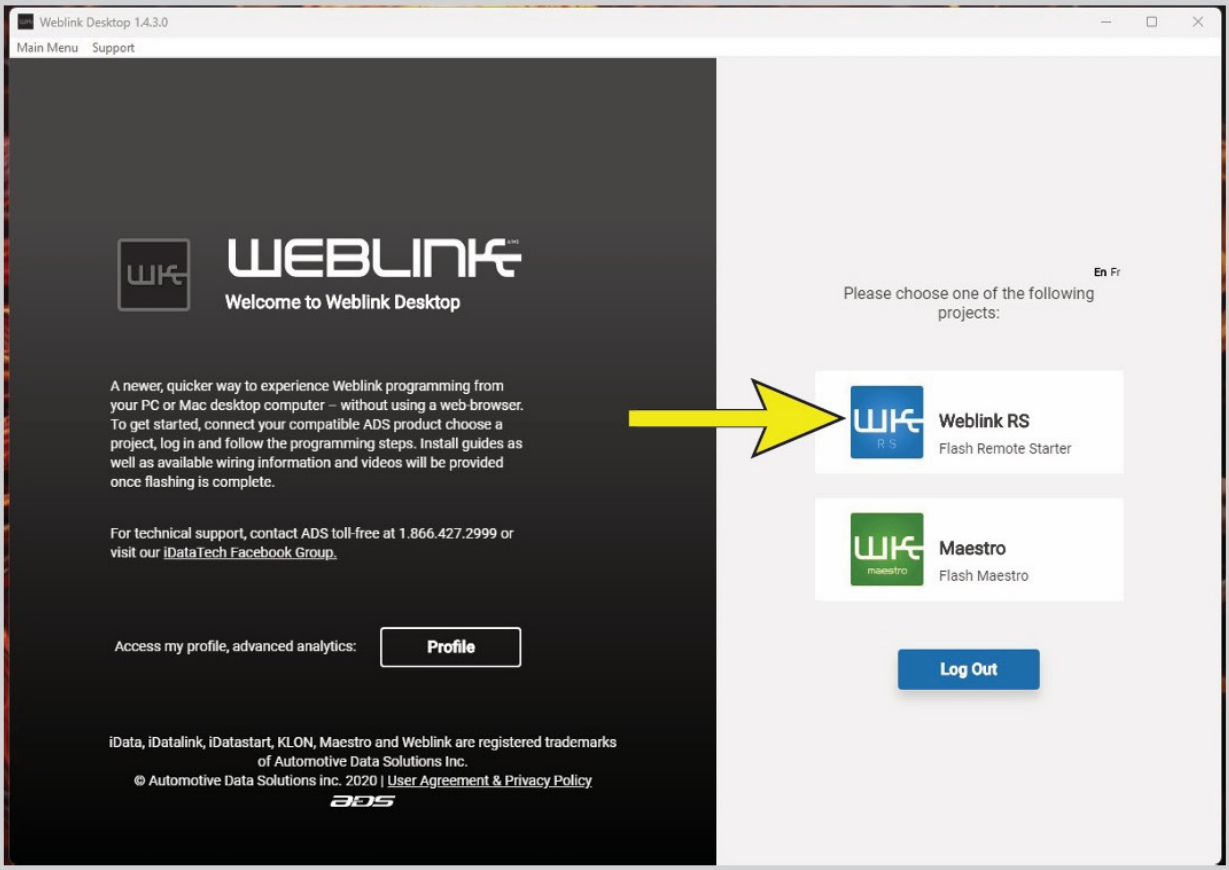
Login with this User Name: **flash@mypushcart.com** **Download WEBLINK updater program then**

Use Tl **o your Windows or MAC computer. Plug the module into**

the USB port of your computer using a USBA to USBC cable.

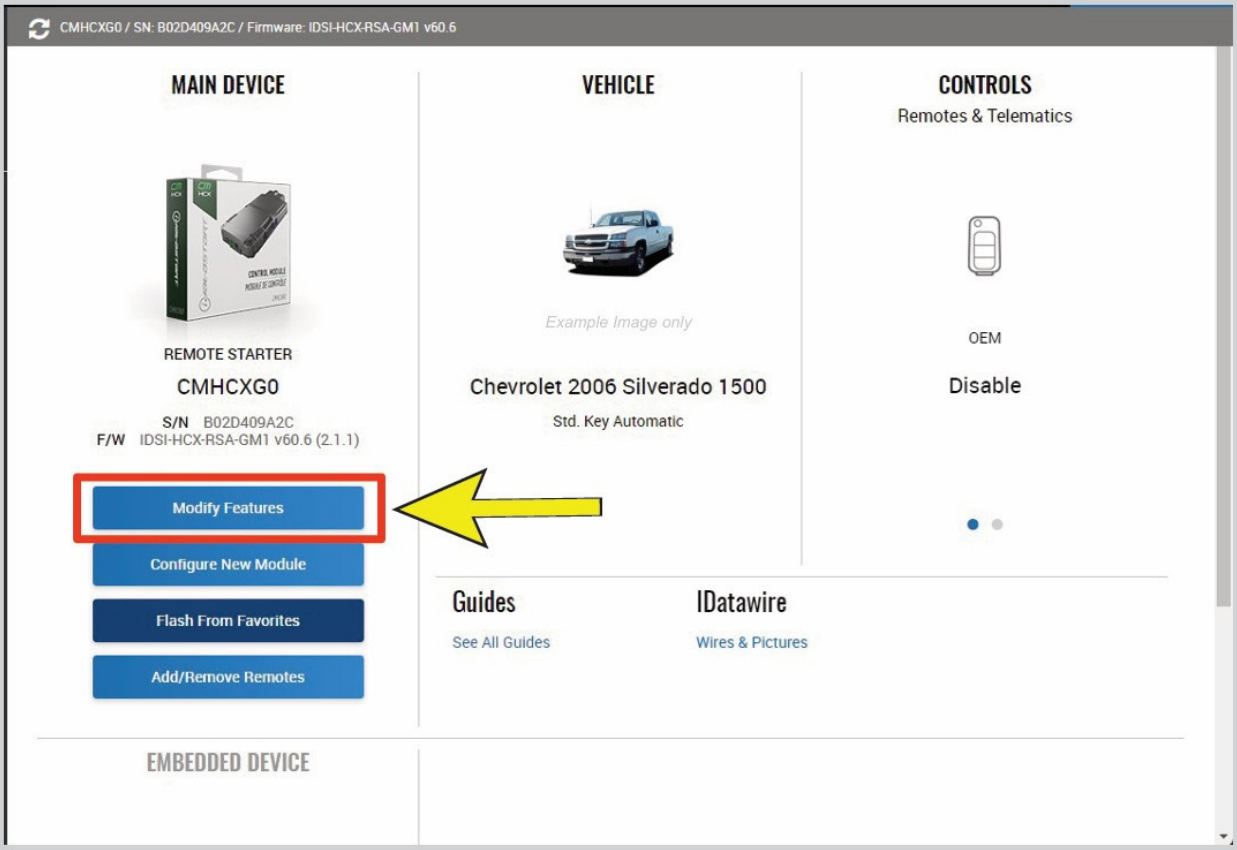


weblinkupdater.com/weblinkdesktop/en

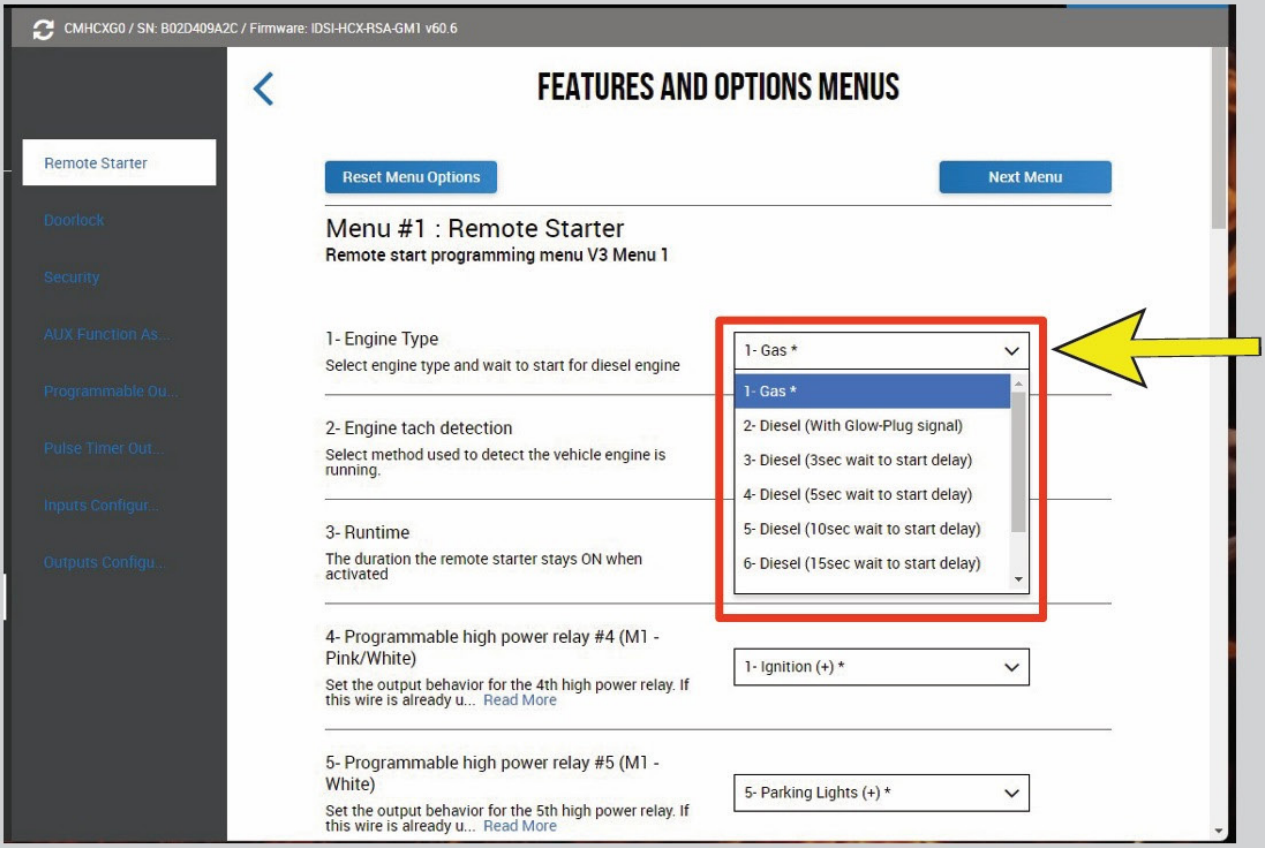


Install and Login in to WEBLINK Updater. Select Weblink RS Flash remote Starter.

DIESEL DELAY SETTING FOR DIESEL ONLY PART 2



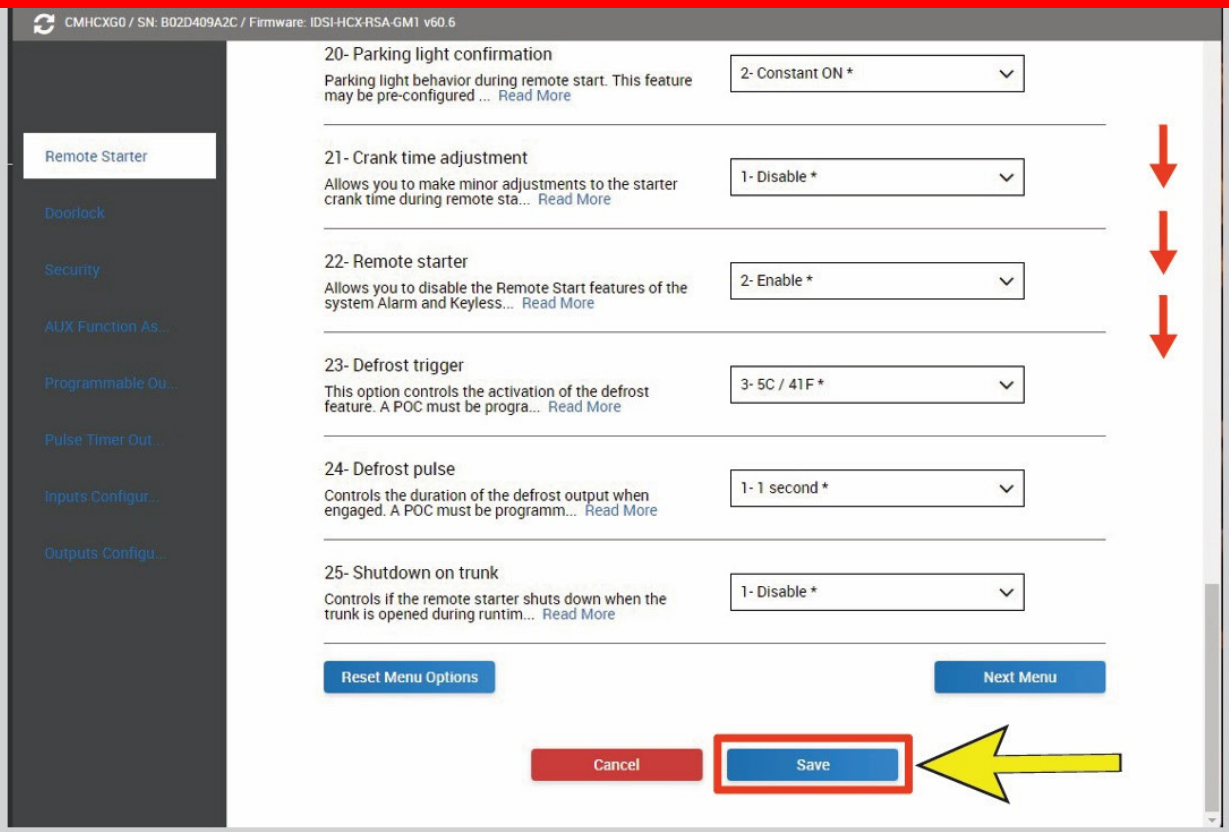
Once the device loads, select Modify Features.



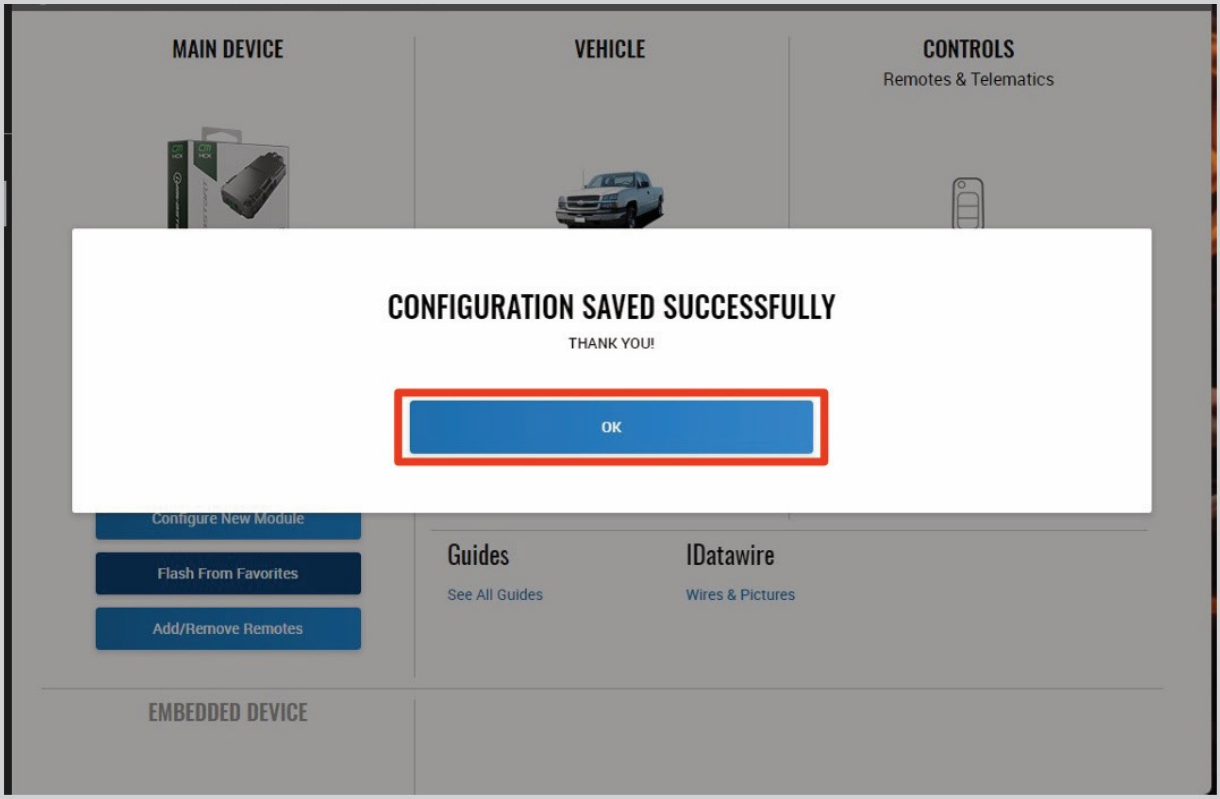
Select 1-Enigine Type drop down menu. Select your desired Diesel delay option.

Option #2 Diesel (with Glow-Plug Signal) reads the signal over data and will crank as soon as the Wait-to-Start light shuts off.
Options #3 to #8 are preset Wait-to-Start times.

DIESEL DELAY SETTING FOR DIESEL ONLY PART 3

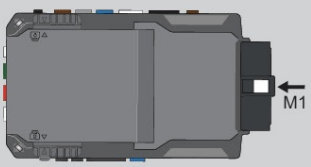


Scroll to the bottom of the page and select Save..



Once Configuration is Saved Sucessfully, select OK.

When programming is complete take the module back to vehicle. Connect the M1 8-Pin (Main-Harness).
Then the rest of the connectors.
After all connections have been made, continue with testing the remote start.





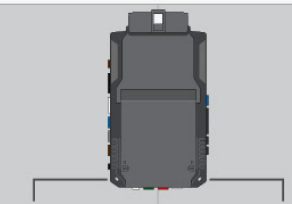
Install back in to the Vehicle

Troubleshooting Charts

When the system receives an activation command and you hear clicks from the HCX remote start module brain but the vehicle fails to start, Parking lights flash and HCX brain will click 3x times followed by a number of flashes and clicks for the diagnostics code. The second number of flashes/clicks corresponds to a remote start diagnostic error code. This will tell you why the remote starter is failing to start. The codes are as follows:

REMOTE STARTER ERROR CODES: NOTES	PARKING LIGHT FLASHES	DIAGNOSTIC
I WARNING: The following applies only when the parking lights are connected and supported by the system. II After a remote starter failure, the parking lights will flash three [3x] times followed by the error code. See table.	3 + 1	Tach is not programmed OR engine is already running.
	3 + 2	Key is in ignition ON position.
	3 + 3	Door is open.
	3 + 4	Trunk is open.
	3 + 5	Foot brake is ON.
	3 + 6	Hood is open.
	3 + 7	Loop is not cut.
	3 + 8	Vehicle failed to remote start.
	3 + 9	Vehicle movement detected (VSS).
	3 + 10	System is in Valet Mode.
	3 + 11	CAN communication failure
	3 + 12	RS not synchronized. Start vehicle with OEM key for 15 sec before trying a new RS sequence.
	3 + 13	Bypass problem.
	3 + 14	Idle mode or takeover is not available on this vehicle.
	3 + 15	Overheat protection.

REMOTE STARTER SHUTDOWN ERROR CODES: NOTES	PARKING LIGHT FLASHES	DIAGNOSTIC
I WARNING: The following applies only when the parking lights are connected and supported by the system. II If the engine shuts down after a remote starter sequence use the query command from a compatible aftermarket remote to display the shutdown error code. The parking lights will flash four [4x] times followed by the error code. See table.	4 + 1	Engine tach signal was lost.
	4 + 2	Emergency brake signal was lost.
	4 + 3	Foot brake ON detected.
	4 + 4	Hood open detected.
	4 + 5	Tach over rev detected.
	4 + 6	Glow plug timeout error.
	4 + 7	Vehicle movement detected (VSS).
	4 + 8	Check engine light ON.
	4 + 9	Low fuel level.
	4 + 10	Open door detected.
	4 + 11	CAN communication failure during RS sequence.
	4 + 12	RS not synchronized. Start vehicle with OEM key for 15 sec before trying a new RS sequence.
	4 + 13	Bypass problem.
	4 + 14	Idle mode or takeover is not available on this vehicle.
	4 + 15	Overheat protection.

MODULE STATUS DURING:	 LED 2*	LED 1**	LED STATUS	DIAGNOSTIC
REMOTE START SEQUENCE	●		Flashing rapid RED	Remote start shutdown sequence.
	●		Flashing slow RED	Remote start shutdown error code. Contact technical support.
	●		Solid RED	Remote start crank delay.
	●		Flashing rapid GREEN	Remote start cycle in progress. Working correctly.
	●		1 GREEN flash	Remote start initiated successfully.
	●		3 GREEN flashes	Idle mode cycle in progress.
	●		4 GREEN flashes	Turbo mode cycle in progress.
		●	Flashing GREEN	Remote start cycle in progress. Displays vehicle platform during runtime.
		●	Rapid GREEN flashing	Secure takeover initiated. Waiting to complete takeover after brake press.
TRANSMITTER PROGRAMMING	●		Solid RED	Remote programming in progress, waiting for remote pairing.
	●		1 GREEN flash	Remote programmed.
	●		4 RED flashes	Shutdown remote starter before attempting remote programming.
	●		5 RED flashes	Engine must be off before attempting remote programming.
	●		6 RED flashes	System must be unlocked/disarmed before attempting remote programming.
	●		7 RED flashes	Module must be learned to the vehicle before attempting remote programming.

* LED 2 (RS) displays generic diagnostic codes specific to the remote start module. Orange LED flashes may appear red.
** LED 1 (Bypass) displays diagnostic codes specific to the firmware loaded on the module.
Visit the programming diagnostics page for more information.