Diagnostics – Parking Light Flash Table

Flashes	Description	
1	• Doors locked, starter kill armed • Run time has expired • I & II buttons pressed • Start signal received by the module • Cold weather mode cancelled	
2 slow flashes followed by 8 quick flashes	• Reset from manual to automatic	
2	• Doors unlocked, starter kill disarmed • Remote start attempt cancelled by remote • Exiting ignition valet	• Power-up reset • Board set from manual to automatic; power ON • Power ON to OFF (**automatic transmission**).
3	• Entering and exiting ready mode	• Entering ignition valet
4	• +12 V detected on the brake input wire either while cranking or during run time • Entering multi-speed tach programming • Entering time delay adjustment in virtual tach system • Board set from automatic to manual; power ON • Power ON to OFF (**manual transmission**).	
5 Fast	• Tach signal programmed • New transmitter programmed	
6	• A remote start was attempted while a tach-before-crank signal was detected before cranking	
8	• Unit reset. See "Resetting the Module" (p. 6)	
10	• A ground (-) signal was detected on the hood pin input wire when attempting to remote start or during run time	
When pressing II 15 quick flashes…	• The parking brake is connected to ground (**automatic transmission**)	
1 – pause – 2	• There was a remote start attempt while the vehicle was in valet mode • Failed start: vehicle's low battery voltage	
ON SOLID for 3 seconds….	…followed by 1 flash	Exiting cold weather mode
	…followed by 3 flashes	Entering cold weather mode
ON continuously	• **Idle mode:** Idle mode is engaged • **Run time:** The vehicle has been remote started and is in run time	
ON 2 seconds	• The hood has been opened and a ground (-) signal has been detected on the hood pin input wire	
ON 4 seconds	• Locking or unlocking a door (with door pulses configured to 4 sec.)	
ON 20 seconds	• The hood pin has been flashed and you now have access to the programming options	
Constantly flashing up to 25 sec.	• Panic mode is triggered	

Internet Explorer Firefox Netscape

To obtain a copy of the installation guide, please visit the http://www.autostart.ca website and click on the « Download » tab.

AS-1251v / AS-1252v

Quick Installation Guide

Table of Contents

Please note:
Button I is for the **START** functions (by default).
Button II is for the **STOP** functions (by default).
Buttons I & II (together) is for the **TRUNK** release function.
The LED is NOT included in this model.

How to Flash the Hood Pin

THE INSTALLER …	THE MODULE …
• Press and hold the hood pin for 4 seconds. • Release the hood pin (the parking lights will turn ON). • While the parking lights are on, press the hood pin once more and release immediately. • You now have 20 seconds to select one of the sub-menus.	Parking Lights "ON" "ON" for 20 seconds

Manual or Automatic Transmission

This module may be installed on vehicles with manual or automatic transmissions. It is originally configured for manual transmissions although if the vehicle you are working on is automatic, it is mandatory to make a few quick and easy modifications before the unit is connected. **In the event that the TACH is learned and that the configuration requires changes afterwards, a complete reset will be necessary before those changes become effective.**

To install this unit in a vehicle with a manual transmission:

1. Make sure the **Yellow** loop on the PC board is connected.
2. Connect the **Orange** handbrake wire located on the 12-pin harness to the vehicle handbrake switch.
3. Connect the **Blue/White** (+) door input **OR** the **Grey** (-) door input wire located on the 12-pin harness to the vehicle door pin wire which monitors all the doors of the vehicle (only use 1 of the 2 door trigger inputs).
4. Make sure the **Purple** tach wire is plugged in – the purple TACH wire **MUST** be hooked up when the module is set for a manual transmission.
5. Make all your regular connections.

Notice

The manufacturer will accept no responsibility for any electrical damage resulting from improper installation of the product, be that either damage to the vehicle itself or to the unit. This unit must be installed by a certified technician using all safety devices supplied. Please note that this guide has been written for properly trained Autostart technicians: a certain level of skills and knowledge is therefore assumed. Please review the installation guide carefully before beginning any work.

Warning

Before installing the unit, if installing on a vehicle with a **manual** transmission, test that the OEM Door Switch contacts of the vehicle work well, and that the Parking Brake system operates properly. If installing on a vehicle with an **automatic** transmission, test that the vehicle does not start when the gearshift lever is in the "Drive" position. If it starts in gear, install a manual-transmission remote starter system instead.

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6. Power up the unit by first inserting the 5-pin connector, then the 6-pin connector and finally the 12-pin connector. The parking lights will flash 4 times to confirm that the unit is in Manual mode.

To install this unit in a vehicle with an automatic transmission:

1. Cut the loop on the pc board (**Yellow** wire)
2. Make sure the **Orange** handbrake wire is not connected to any of the vehicle circuits.
3. Make all the regular connections
4. Power up the unit. The parking lights will flash twice to confirm that the unit is in Automatic mode.

If you wish to put the unit back in Manual transmission mode, reconnect the loop at any time. There is no need to reset the module.

Warning for automatic transmissions: If upon pressing the **II** button, the parking lights flash 15 times, make sure the **Orange** handbrake wire is not connected, then put the system in and out of Valet Mode (remote valet, ignition valet or using the valet switch; for more details, consult the user guide) or simply reset the system.

Transmitter Programming Procedure

1. **Flash the hood pin (see page 1) —** the parking lights will stay on for up to 20 seconds.
2. Before the lights go out, turn the ignition key to the **IGNITION ON (RUN)** position and immediately to the **OFF** position.
3. Press and hold the **I** button and keep it down until the parking lights flash 5 times quickly.
4. The transmitter has been stored in memory.
5. To exit: close the hood. **Note:** Each unit can store 4 remotes in its memory.

Entering Programming Options

1. **Flash the hood pin switch (see page 1) —** the parking lights will stay on for up to 20 seconds.
2. Before the lights go out, press and hold the brake pedal and then press one of the following buttons:
   BUTTON I ..... to access mode 1; or
   BUTTON II ..... to access mode 2
3. The parking lights will flash and the horn will honk (if programmed) once or twice to confirm entry into a mode.
4. Release the brake pedal.

Once the desired mode has been selected, the unit will fall (by default) into function #1 of that mode; you can now select the option you want in function 1. Once this option has been chosen, the unit will move on to function 2 of the mode selected, and so on.

BUTTON I	for	Option 1,
BUTTON II	for	Option 2,
BUTTON I & II	for	Option 3.

Programming Options

MODE 1 ** INDICATES DEFAULT SETTING*

FUNCTION 1 – Ignition-controlled door locks

OPTION 1*	**Ignition-controlled door locks DISABLED**
OPTION 2	Ignition-controlled door locks **ENABLED**

FUNCTION 2 – Secure Lock

OPTION 1*	**Secure lock DISABLED**
OPTION 2	Standard secure lock **ENABLED**

FUNCTION 3 – Starter Kill arming mode

OPTION 1*	**Passive arming (60 sec.)**
OPTION 2	Active arming
OPTION 3	Passive arming (1 min.)

Note: When SK is armed, pressing **I** will always give an **UNLOCK** output (when in MODE 2 FUNCT. 6, opt.1)

FUNCTION 4 – Door lock pulse timing

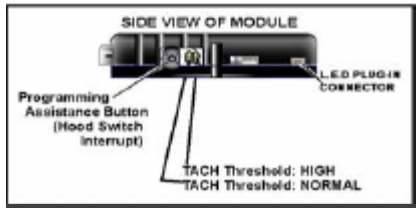
OPTION 1*	**7/10-sec. lock / unlock pulses**
OPTION 2	4-sec. lock / unlock pulses
OPTION 3	7/10-sec. lock pulse and two 1/4-sec. unlock pulses

FUNCTION 5 – LED flashing

OPTION 1*	**ENABLED (without starter kill → will flash only when ignition is OFF)**
OPTION 2	**DISABLED**
OPTION 3	**ENABLED** (with starter kill → will **ONLY** flash when the starter kill engages. This option should be selected **ONLY** if the starter kill is installed.)

Tach jumper settings

Some new vehicles have a higher TACH voltage threshold, which would fall out of the normal TACH trigger circuit of the remote car starter. Changing the jumper to TACH Threshold HIGH will allow the module to properly detect the TACH signal.



Testing

Before putting back the vehicle together, it is recommended to check that the system operates properly. The following testing procedures should be used to verify proper installation and operation of the system. Before testing, make sure that all connections are soldered and that the unit is plugged in.

- **Make sure the system properly enters and exits ready mode:**

  Ready mode is a sequence of steps that must be followed in order to allow manual transmission vehicles to be remote started. To get into ready mode:

	If Ready Mode is enabled by remote	If Ready Mode is enabled by handbrake
1.	Ensure that all the doors, hood and trunk are closed. Make sure that the gear selector is in the neutral position.	
2.	With the engine already running, apply the parking brake **once** and release the brake pedal. **Make sure to release the brake pedal.**	2. With the engine already running, apply the parking brake **twice** and release the brake pedal. **Make sure to release the brake pedal. The parking lights will flash 3 times quickly and remain lit. Skip to step 4.**
3.	Within 20 sec. of engaging the parking brake, press and hold **I** or **II** on the transmitter. **The parking lights will flash 3 times quickly and remain lit.**	-
4.	Remove the key: the engine will continue running.	
5.	Exit the vehicle and close all doors, hood and trunk.	
6.	Press for approx. 1 second either button **I** or **II.**	

  The system will exit ready mode if a door or the hood is opened, if the brake pedal is pressed, if the parking brake is disengaged or if the ignition key is turned to the **IGNITION ON (RUN)** position.

- **Remote-start the engine and listen for starter drag.** If the starter cranks for too long, carry out another tach programming procedure.
- **Hood switch shutdown.** With the vehicle running under the remote car starter, open the hood; the vehicle should shut down. If it does not shut down, check the hood pin-switch and its connector.
- **Brake shutdown circuit.** With the vehicle running under the remote car starter, press and release the brake pedal. The engine should shut down immediately. If the engine continues to run, check the brake switch connection.
- **Parking brake shutdown circuit.** With the vehicle running under remote start, disengage the parking brake. The engine should shut down immediately. If the engine continues to run, check the parking brake switch connection.
- **OEM alarm control.** Make sure the module is able to arm and disarm the OEM alarm (if applicable).
- **Door pin shutdown circuit.** Make sure the system **exits ready mode** when each door is opened while the vehicle is running under a remote start. (Test each door.)
- **Door locks and trunk testing.** Make sure each of these options respond to the transmitter (if installed).
- **Starter kill option.** Sit inside the vehicle with all doors closed. Arm the vehicle, then try to start the engine with the key. They engine should not start. If the engine starts, rewire the starter kill to reach proper operation.
- **Valet mode.** Make sure the remote car starter is able to properly enter and exit valet mode. When setting the remote car starter into valet mode, pressing the lock button will lock the doors without activating the starter kill. (Refer to the user guide for further information on valet mode.)
- **Idle mode.** Make sure the vehicle properly enters and exits idle mode.
- **Most comebacks are the result of misunderstandings about how a product works or performs. Take the time to properly explain all functions and features to the customers before they leave the premises. Doing this will save time and money.**

Virtual Tach System

***** Virtual Tach System combines the latest microcontroller technology and a complex algorithm that took years to develop. VTS is able to effectively monitor the engine starting sequence and release the starter at the right time without physically connecting the tach wire to the remote starter. The VTS constantly monitors the data and readjusts itself automatically in order to maximize its capability to start the engine properly in any weather or deteriorating battery condition *(automatic transmission only).*

Optional Time Delay Adjustment in Virtual Tach System

Follow these steps to program crank time adjustment, if needed:

1. **Flash the hood pin (see page 1)** — the parking lights will stay on for up to 20 seconds.
2. Before the lights go out, press and hold the brake pedal and press the **I** and **II** buttons simultaneously — the parking lights will flash 4 times. **Do not release the brake pedal.**
3. Press the **I** button if you wish to increase the time delay or the **II** button if you want to decrease it. **The time delay will be increased or decreased by 50ms. and the parking lights will flash once every time the I or II button is pressed.**
4. Press the **I** and **II** buttons together to save the settings you have entered.
5. Release the brake pedal – the time delay programming is now complete.

Tach Programming

1. **Flash the hood pin (see page 1)** — the parking lights will stay on for up to 20 seconds.
2. Before the lights go out, press and hold the brake pedal and press the **I** and **II** buttons simultaneously — the parking lights will flash 4 times. At that point, release the brake pedal.
3. Start up the engine and allow the vehicle to reach regular engine idle speed.
4. Once the engine is running at normal idle speed, press the brake pedal and keep it down until you hear the parking lights output click 5 times.
5. Release the brake pedal **—** the tach programming is now complete.

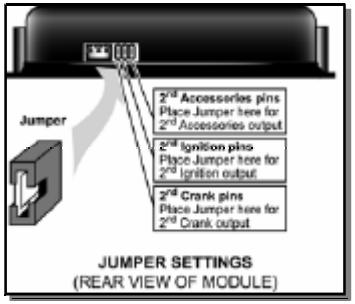
Resetting the Module

WARNING! By resetting the module, all programmed values are erased — i.e.: tach, transmitter as well as programming options. The programming options are returned to their default values.

1. **Flash the hood pin (see page 1).**
2. Once having reached the programming mode, quickly press and release the brake pedal until the parking lights flash 8 times.

Supplementary Information

Fifth Relay Output (2nd IGN, ACC or CRANK)



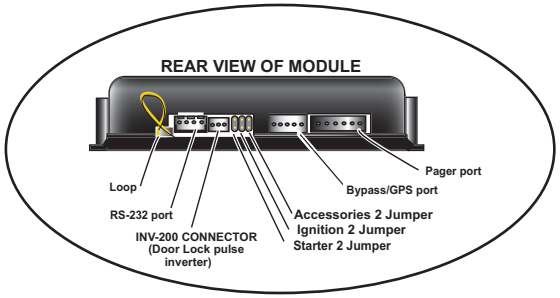
Remote car starters of this series are equipped with an on-board high-current programmable 5th relay that can be used to power a second ignition, accessory or crank wire. The unit uses 3 sets of pins; each set corresponds to a specific function of the output. In order to activate one of the three possible functions, you must place the jumper (supplied) on one of the three sets of pins and connect the 14 AWG wire to the second **IGN. / ACC. / CRANK** wire of the vehicle.

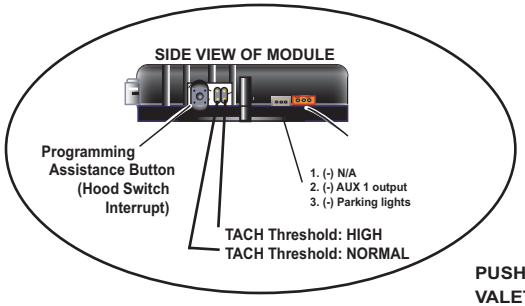
Caution!

Only one set of pins can be used at one time. Using more than one jumper may result in serious damage to the vehicle. The relay output rating on this unit is 25 a at most. Defective oem solenoid switches can sometimes draw up to 50 or 60 a, causing the 30 a fuse to blow. Always verify your circuit with an appropriate measuring device.

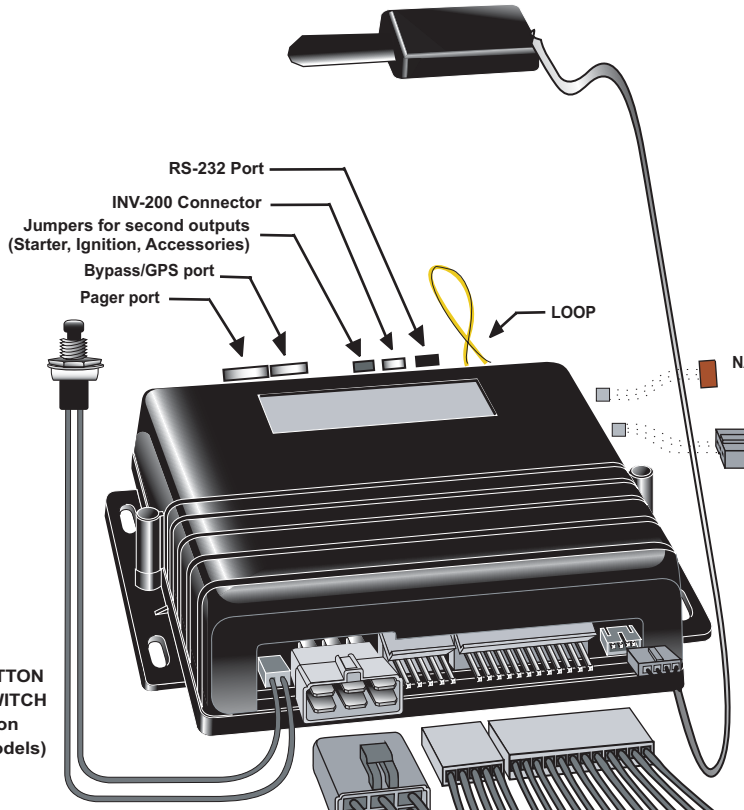
MODE 2	* INDICATES DEFAULT SETTING
FUNCTION 1 – Engine Run Time	
OPTION 1	Run Time = 3 minutes in **gas** mode / 8 minutes **diesel** mode
OPTION 2*	**Run Time = 15 minutes in gas mode / 20 minutes diesel mode**
OPTION 3	Run Time = 25 minutes in **gas** mode / 30 minutes **diesel** mode
FUNCTION 2 – Idle Mode & Turbo Mode (auto) / Turbo Mode (manual)	
OPTION 1	Idle mode & turbo mode **DISABLED (AUTO)** / turbo mode **DISABLED (MANUAL)**
OPTION 2*	**Idle mode & turbo mode ENABLED (AUTO) / turbo mode DISABLED (MANUAL)**
OPTION 3	Idle mode & turbo mode **ENABLED (AUTO)** / turbo mode **ENABLED (MANUAL)**
FUNCTION 3 – Engine type and Cold Weather Mode	
OPTION 1	Diesel mode with 20-minute run time in cold weather mode (30-sec. wait to start delay)
OPTION 2*	**Gas mode with 3-minute run time in cold weather mode**
OPTION 3	Diesel mode with 8-minute run time in cold weather mode (18-sec. wait to start delay)
FUNCTION 4 – Lock / unlock or horn output (when Mode 2, Function 6, Option 1 is programmed)	
OPTION 1	N/A
OPTION 2*	**Constant output when button I is pressed > 3 sec. (first press will give a (-) output on LOCK wire; second press will give a (-) output on UNLOCK wire)**
OPTION 3	Horn confirmation upon the 1st press of the **LOCK** button.
FUNCTION 5 – Pager (Pager sold separately)	
OPTION 1	Pager **ENABLED**
OPTION 2*	Pager **DISABLED**
FUNCTION 6 – Remote Functions	
OPTION 1	Button **I** = Lock/Unlock, Button **II** = Start/Stop, Button **I & II** = Trunk
OPTION 2*	**Button I = Start, Button II = Stop, Button I & II = Trunk**
FUNCTION 7 – Ready Mode Option	
OPTION 1	Enabled by handbrake
OPTION 2*	**Enabled by remote**

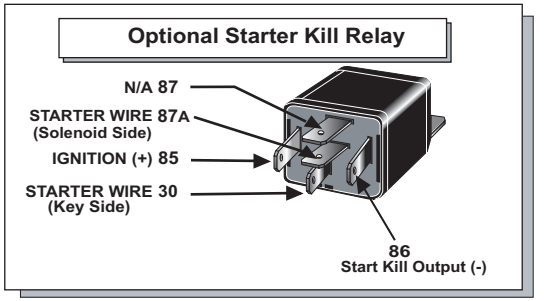
WIRING SCHEMATIC

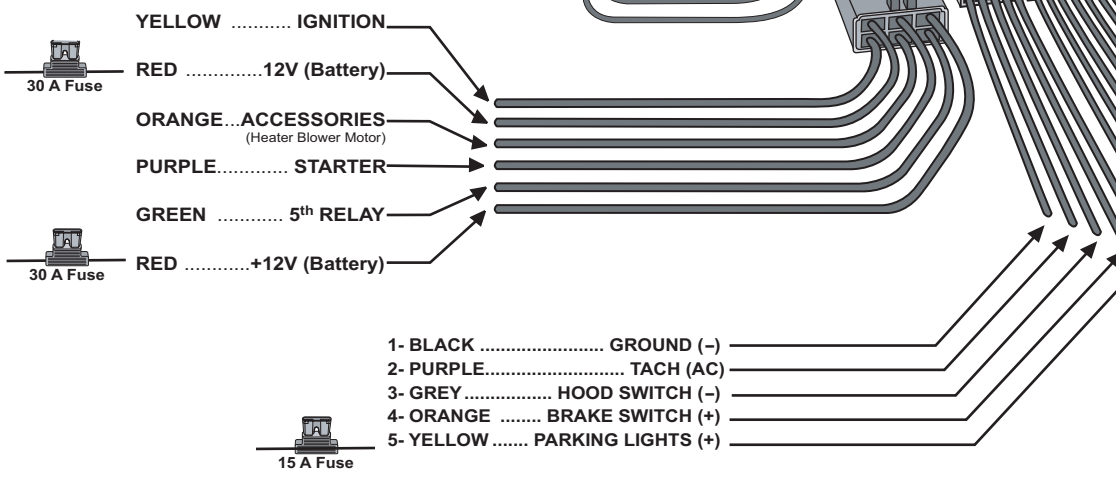




For Automatic Transmissions:
Leave Orange wire unconnected.







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