QUICK INSTALLATION GUIDE

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The wiring diagram is at the middle of this guide.

MANUAL OR AUTOMATIC TRANSMISSION SETUP

This module may be installed on vehicles with manual or automatic transmissions. It is originally configured for manual transmissions. 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 configuration requires changes afterwards, a complete reset (page 6) 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 (default).
2. Connect the Orange handbrake wire located on the 12-pin harness to the vehicle handbrake circuit.
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). Make sure the Purple TACH wire is wired to a tach source – the TACH wire MUST be hooked up when the module is set for a manual transmission.
4. Make all your regular connections.
5. 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.
6. When learning the transmitter, the parking lights will flash 5 times quickly.
7. Upon the first successful remote start, the system will lock the transmission settings to 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 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.

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, reset the remote starter to manual transmission.

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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.

TROUBLESHOOTING

Problem: D2D brake could not be detected.
Cause: The unit is locked in wire to wire brake communication mode.
Solution: Unplug the remote starter's power and then plug it back in.

DIAGNOSTICS – PARKING LIGHT FLASH TABLE

Diagnostic table for start failure.

<table>
<thead>
<tr>
<th>Parking lights flashes</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ready mode is not activated.</td>
</tr>
<tr>
<td>(Manual transmission only)</td>
<td></td>
</tr>
<tr>
<td>1 slow ≥ 2 quick</td>
<td>The system is in valet mode.</td>
</tr>
<tr>
<td>1 slow ≥ 2 quick ≥ 2 quick</td>
<td>The system is in Home valet</td>
</tr>
<tr>
<td>3</td>
<td>The parking brake is active.</td>
</tr>
<tr>
<td>(Automatic transmission only)</td>
<td>Yellow loop is connected.</td>
</tr>
<tr>
<td>4</td>
<td>Brake wire is active.</td>
</tr>
<tr>
<td>5</td>
<td>Tach signal is not learned.</td>
</tr>
<tr>
<td>(Manual transmission only)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>A tach signal is detected before ignition.</td>
</tr>
<tr>
<td>10</td>
<td>Hood wire is active.</td>
</tr>
</tbody>
</table>

Diagnostic table for shutdown.

<table>
<thead>
<tr>
<th>Parking lights flashes</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Runtime has expired.</td>
</tr>
<tr>
<td>2</td>
<td>Shutdown by remote.</td>
</tr>
<tr>
<td></td>
<td>Ready mode is activated.</td>
</tr>
<tr>
<td>3</td>
<td>Failed start (VT5 or tach failure, depending on selected).</td>
</tr>
<tr>
<td>4</td>
<td>Brake shutdown.</td>
</tr>
<tr>
<td>10</td>
<td>Hood shutdown.</td>
</tr>
<tr>
<td>Flash for 30 sec.</td>
<td>Panic mode.</td>
</tr>
<tr>
<td>Flash for 60 sec.</td>
<td>Alarm triggered.</td>
</tr>
</tbody>
</table>

Note: The installer can also use the PRG-1000 to diagnose shutdown and remote start failures. Refer to the PRG-1000 manual guide.
4. Remove the key; the engine will keep on running.

5. Exit the vehicle. All doors should be closed, including the hood and trunk.

Now there are three possible options:

**OPTION 1: No lock**

- The engine stops.

**OPTION 2: Manual shut down (default)**

- The engine keeps going until you press either:
  - to lock the doors and shut down the engine;
  - to unlock the doors and shut down the engine;
  - to shut down the engine without affecting the doors.

**OPTION 3: Automatic shut down**

- The engine runs for 8 sec. then locks the doors before finally shutting down the engine, without user interaction.

**WARNING:** The vehicle is not armed or locked down.

**WARNING:** Engine runs until the pre-programmed run time expires.

**WARNING:** Do not leave your keys in the vehicle!

6. The Parking lights will flash twice to indicate Ready mode is set.

The system will exit ready mode if a door, the hood or the trunk 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 or VTS adjustment (page 5).
- 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 it 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 locks and trunk testing. Make sure each of these options respond to the transmitter (if installed).
- Door pin shutdown circuit. Make sure the system exits ready mode when each door is opened. (Test each door.)
- Starter kill option. Sit inside the vehicle with all doors closed. Arm the vehicle, then try to start the engine with the key. The 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.
- Door. Make sure that when the system is armed, opening any door or opening the trunk will trigger the alarm (if installed).
- Hood trigger. Make sure that when the system is armed, opening the hood should trigger the alarm.

NOW THERE ARE THREE POSSIBLE OPTIONS

5. When learning the first transmitter, the parking lights will flash 5 times quickly then give 2 slow flashes.

6. Upon the first successful remote start (once the yellow loop has been cut), the system will lock the transmission settings to automatic mode.

**Note:** If upon pressing the START button the parking lights give 3 slow flashes, make sure that the Orange isolated/taped.

**DEISEL VEHICLE WARNING:** The G-Plug wire must not be connected when the brake is detected through D2D.

**NEW FEATURE – HYBRID OPTION**

Warning: For automatic transmissions only.

This option is disabled by default. It can be enabled in Mode 3 of the programming options.

HYBRID mode is a special feature that is intended to facilitate the remote starter installation on most Hybrid vehicles. With HYBRID mode enabled, the remote starter will give a 4-second crank output on its crank wire (it will not rely on VTS to stop the crank cycle). The only way to shorten the 4-second crank output is to program a tach signal to the remote starter. If a tach signal is programmed, the remote starter will act like normal (the HYBRID feature should be used when no tach reference is available from the vehicle or the bypass being used at the time of installation).

**ENTERING PROGRAMMING MODE**

These are the programming buttons:

- **The Hood Pin**
- **The Antenna Programming Button (the A.P.B.)**
- **The Programming Button (a.k.a. the P.B.)**

The P.B. is located on the side of the module. This push button mimics the hood-pin switch in order to avoid having to get out of the vehicle to press the hood-pin switch. The P.B. will work only when the hood pin is installed and the hood is up. (Ground on the hood line.)

Complete step by step module programming

1) Entering Programming Mode
2) Programming the transmitter to the module
3) Entering Programming Options
4) Programming the options
5) Adjusting the Horn output (if installed)
6) Setting up the TACH, VTS or Multi-speed Tach

**DIESEL VEHICLE WARNING:** The G-Plug wire must not be connected when the brake is detected through D2D.
### Entering programming mode using the Hood Pin (or the P.B.)

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Press and hold the hood pin down for 4 seconds.</td>
</tr>
<tr>
<td>2.</td>
<td>Release the hood pin. The parking lights will turn ON for 1 second.</td>
</tr>
<tr>
<td>3.</td>
<td>While the parking lights are ON, press the hood pin once more and release immediately. The parking lights will come ON solid for 20 seconds.</td>
</tr>
<tr>
<td>4.</td>
<td>You now have 20 sec. to select a submenu.</td>
</tr>
</tbody>
</table>

#### Note 1:
- To exit programming mode, close the hood.
- To exit programming mode, press on the antenna button once (the LED will come ON) and release.

#### Note 2:
For vehicles that require the ignition to be turned ON to activate the brake circuit, follow these steps to select a submenu:
- After flashing the hood pin, turn the ignition ON and wait for the parking lights to come ON (4 seconds). Then, press the brake pedal to access the sub-menus.

### Entering programming mode using the A.P.B.

<table>
<thead>
<tr>
<th>Step</th>
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<tbody>
<tr>
<td>1.</td>
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<td>2.</td>
<td>Release the hood pin. The parking lights will turn ON for 1 second.</td>
</tr>
<tr>
<td>3.</td>
<td>While the parking lights are ON, press the hood pin once more and release immediately. The parking lights will come ON solid for 20 seconds.</td>
</tr>
<tr>
<td>4.</td>
<td>You now have 20 sec. to select one of the sub-menus.</td>
</tr>
</tbody>
</table>

#### Note 1:
- To exit programming mode, press on the antenna button twice (the LED will come ON) and release.

### WARNING!
Please note that the wire to wire brake communication is locked once an analog signal is detected on the remote starter's brake input. To detect D2D brake again, after being locked in "wire to wire" mode, make sure no connection is made at the brake input wire, unplug the remote starter's power and then plug it back in.

### Programming the Transmitter to the Module

1. In programming mode (page 2) - the parking lights will stay on for up to 20 seconds.
2. While the lights go out, turn the ignition key to OFF (if not OFF already), then ON, then OFF.
3. Press and hold the button and keep it down until the parking lights flash 5 times quickly.
4. The transmitter has been stored in memory. Each unit can store 4 remotes in its memory.
5. You have 50 more seconds to select one of the sub-menus if needed.

### To program a transmitter on the second vehicle for multi-car operation;
- press the button (instead of ) in step 3 of the transmitter programming procedure.

### Enter Programming Options

1. In programming mode (page 2)—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:
   - LOCK to access mode 1;
   - TRUNK to access mode 3;
   - UNLOCK to access mode 2;
   - START/STOP to access mode 4.
3. The parking lights will flash 1, 2, 3 or 4 times to confirm entry into a mode.
4. Release the brake pedal.

### Programming the Transmitter to the Module

1. In programming mode (page 2) - the parking lights will stay on for up to 20 seconds.
2. Before the lights go out, turn the ignition key to OFF (if not OFF already), then ON, then OFF.
3. Press and hold the button and keep it down until the parking lights flash 5 times quickly.
4. The transmitter has been stored in memory. Each unit can store 4 remotes in its memory.
5. You have 50 more seconds to select one of the sub-menus if needed.

### Testing Before putting the vehicle back 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.

- 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:

  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 running, apply the parking brake once and release the brake pedal.
  3. With 20 sec. of engaging the parking brake, press and hold or on the transmitter (SmartStart™ uses only the SmartStart™ icon). The parking lights will flash 3 times quickly and remain lit. Release the button.

### Resetting the Module

To reset 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.
FUNCTION 1 – Ignition-controlled door locks
  OPTION 1* Ignition lock DISABLED
  OPTION 2* Ignition lock ENABLED
  OPTION 3 Ignition lock enables 60 sec.
  OPTION 4 Ignition lock disables 60 sec.

FUNCTION 2 – Secure Lock
  OPTION 1* Passive arming (60 sec.)
  OPTION 2 Active arming
  OPTION 3 Passive arming (3 min.)

FUNCTION 3 – Door lock / unlock 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
  OPTION 4 1/10 sec. lock / unlock pulses

FUNCTION 4 – LED flashing
  OPTION 1* ENABLED (LED turns OFF when ignition is ON)
  OPTION 2 DISABLED
  OPTION 3 ENABLED (will only flash when Starter kill engages [depends on Mode 1, Function 3 programming])

FUNCTION 5 – Bypass
  OPTION 1 ADS (1-way D2D)
  OPTION 2* Xpresskit (2-way D2D)
  OPTION 3 Fortin (1-way D2D)
  OPTION 1* ENABLED (LED turns OFF when ignition is ON)
  OPTION 2 N/A
  OPTION 3 N/A

FUNCTION 6 – Disarm option
  OPTION 1 DISARM with Ignition, Accessory and Ground Out
  OPTION 2 DISARM only

PROGRAMMING OPTIONS

MODE 1
  FUNCTION 1 – Ignition-controlled door locks
    OPTION 1* Ignition lock DISABLED
    OPTION 2 Ignition lock ENABLED
    OPTION 3 Ignition lock enables 60 sec.
    OPTION 4 Ignition lock disables 60 sec.
  FUNCTION 2 – Secure Lock
    OPTION 1* Passive arming (60 sec.)
    OPTION 2 Standard secure lock ENABLED
    OPTION 3 Smart secure lock ENABLED
  FUNCTION 3 – Starter Kill
    OPTION 1* Passive arming (60 sec.)
    OPTION 2 Active arming
    OPTION 3 Passive arming (3 min.)
  FUNCTION 4 – Door lock / unlock 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
    OPTION 4 1/10 sec. lock / unlock pulses
  FUNCTION 5 – LED flashing
    OPTION 1* ENABLED (LED turns OFF when ignition is ON)
    OPTION 2 Disable
    OPTION 3 ENABLED (will only flash when Starter kill engages [depends on Mode 1, Function 3 programming])
  OPTION 1* ENABLED (LED turns OFF when ignition is ON)

MODE 2
  FUNCTION 1 – Safe Start
    OPTION 1 Safe start ENABLED
    OPTION 2 Safe start DISABLED
    OPTION 3 Swap Start
  FUNCTION 2 – 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 3 – Idle Mode & Turbo Mode
    OPTION 1 Idle mode & 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 4 – 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)
    OPTION 4 Diesel mode with 8-minute run time in cold weather mode (7-sec. wait to start delay)
  FUNCTION 5 – Door lock / unlock 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
    OPTION 4 1/10 sec. lock / unlock pulses
  FUNCTION 6 – LED flashing
    OPTION 1* ENABLED (LED turns OFF when ignition is ON)
    OPTION 2 Disable
    OPTION 3 ENABLED (will only flash when Starter kill engages [depends on Mode 1, Function 3 programming])

MODE 3
  FUNCTION 1 – Home Valet
    OPTION 1 Home Valet ENABLED
    OPTION 2 Home Valet DISABLED
  FUNCTION 2 – AUX 1 Programming
    OPTION 1 Horn confirmation upon the 2nd press of the LOCK button
    OPTION 2 Priority door access
    OPTION 3 Horn confirmation upon the 1st press of the LOCK button
    OPTION 4 Negative Accessory output
  FUNCTION 3 – AUX 2 Programming
    OPTION 1 Constant output
    OPTION 2 Toggle ON/OFF – max 30 sec.
    OPTION 3 Toggle ON/OFF – max 4 min. (only when remote started)
    OPTION 4 Negative Starter output
  FUNCTION 4 – AUX 3 / Trunk output
    OPTION 1 1-sec. output
    OPTION 2 Constant output
    OPTION 3 Trunk output with disarm and rearm pulses
For Automatic transmissions:
Cut the yellow loop before plugging the module.