

# AstroStart

REMOTE  
CONTROL  
ENGINE  
STARTER

## USER MANUAL

# SERIES 1000

Models  
1002 and 1003



(Français au verso)



For all automatic  
transmission  
diesel and  
fuel injection vehicles



DO NOT INSTALL ON MANUAL TRANSMISSION VEHICLES.  
PLEASE READ THE SAFETY PRECAUTIONS BEFORE USING THIS PRODUCT.

SOME FUNCTIONS MAY REQUIRE ADDITIONAL EQUIPMENT (NOT INCLUDED).

PATENT NUMBERS  
CAN: 1.130.426  
USA: 4.345.554 - 5.614.883 -  
5.617.819 - 5.673.017

AND OTHER PATENTS PENDING

Manufactured in Canada by:  
**Astroflex**

**INTRODUCTION**

Thank you for choosing the AstroStart remote starter. Your remote starter is the result of intensive research by a company specializing in the design of high-quality automotive products.

It is designed to provide many years of reliable, trouble-free service. Its advanced microchip circuitry incorporates billions of different access codes, which makes it virtually impossible to interfere with another remote-controlled vehicle.

Your remote starter offers the ultimate in safety, is simple to use and has many features to make your life easier.

Please read the following instructions carefully so that you understand how your remote starter works and can take advantage of all the features. Some of the functions described below may not be applicable to your vehicle.

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## **SAFETY PRECAUTIONS**

Please read all the following safety precautions before using this product.

- If you have any operating problem, please report it immediately to the AstroStart dealer who did the installation.
- Under no circumstance can this product or its use be modified.
- Always turn main switch off when vehicle is parked in an enclosed, unventilated area or is in for servicing.
- Always turn off main switch when not using your remote starter for extended periods of time.
- Keep remote controls away from children.
- Have your engine tuned regularly to ensure optimum performance of your remote starter.
- Make sure your windshield wipers are turned off before leaving vehicle.
- Regularly check safety features that stop engine. (See Safety Checks on page 10).
- Make sure you comply with all local regulations which may prohibit leaving your engine running when vehicle is unattended in a public place.
- Always advise service personnel that your vehicle is equipped with a remote starter.
- Have your remote starter checked annually. Contact the AstroStart dealer in your area.

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## **BEFORE USING YOUR REMOTE STARTER**

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Before leaving your vehicle, set the various controls in order to use your Remote Starter.

- Set heating/cooling system to desired position. When remote starter starts your engine, it will also turn on your climate control system.
- Turn your windshield wipers to OFF position.
- Make sure gearshift is in PARK.

### **THE REMOTE CONTROL**

The remote control works off a small long-life 12 volt alkaline battery (GP-23A).

The range of your remote control can be affected by a weak battery, interference from nearby metal structures, hydro poles or crowded parking lots.

With an electronic code learning device, up to three additional remote controls can be assigned to your vehicle. See your dealer for replacement batteries or additional remote controls.

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### **USING YOUR REMOTE CONTROL**

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(2- and 3-button remotes)

To make sure commands are transmitted properly, press desired button for 2 seconds.

Indicator light on remote will flash while your command is being sent.

A command will not be executed if you do not press button long enough.

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### **CONFIRMATION**

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Parking lights will flash to confirm that command has been received.

In this manual, confirmation signals are written in abbreviated form, for example: (lights, 2 - horn, 1).

This means that parking lights will flash twice and horn will sound once.

**TABLE OF COMMANDS**

COMMANDS	2 Button	3 Button	CONFIRMATION
START/STOP			Lights, 1
START			Lights, 1 - Horn, 1 ♥
LOCK			Lights, 1
UNLOCK (ANTITHEFT)			Lights, 2
LOW TEMPERATURE MODE	&  ⚡	&	Lights, 4 / 2 / 3
STOP		&	Lights, 1
TRUNK RELEASE	&  ⚡	&	Lights, 3 ♦

♥ Horn confirmations require an additional connection or parts (not included).

♦ This command is ignored if ignition key is in ON position (Lights, 1).

⚡ This command & has been set for: Low Temperature  or Trunk Release .

**START COMMANDS**

**START/STOP**

(2-button remote)

The Start/Stop command is in fact the reason for being of your remote starter. It allows you to start or stop your vehicle without stepping outdoors.

To start or stop your engine:

- Press button once (lights: 1).

**Upon starting:** Parking lights flash once to confirm that command has been received then stay on all the time engine is running\*, i.e. for 2, 4, 8, 16, 18 or 36 minutes depending on the programming.

- Runtime has been set for:

Gas engine:            2 min.     4 min.     8 min.     18 min.

Diesel engine:        4 min.     8 min.     16 min.     36 min.

**Upon stopping:** Engine will stop and parking lights will go out.

This command only applies when engine is kept running by remote starter.

\* A runtime of 2 min. (4 min. for a diesel engine) is not recommended for most vehicles unless you intend to drive off right after the remote start.

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## START

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(3-button remote )

The Start command is in fact the reason for being of your remote starter. It allows you to start your vehicle without stepping outdoors.

- Press  button once (lights: 1; horn: 1).

Parking lights flash once to confirm that command has been received then stay on all the time engine is running\*, i.e. for 2, 4, 8, 16, 18 or 36 minutes depending on the programming.

If engine has already been started by remote when Start command is sent, parking lights will flash once to confirm that command has been received, horn sounds once to let you know that engine is already running and runtime starts again from the beginning.

- Runtime has been set for:

Gas engine:	2 min. <input type="checkbox"/>	4 min. <input type="checkbox"/>	8 min. <input type="checkbox"/>	18 min. <input type="checkbox"/>
Diesel engine:	4 min. <input type="checkbox"/>	8 min. <input type="checkbox"/>	16 min. <input type="checkbox"/>	36 min. <input type="checkbox"/>

Horn confirmations require an additional connection or parts (not included).

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## START SEQUENCE

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System automatically adjusts ignition contact time depending on your vehicle.

For vehicles with diesel engines, remote starter waits until engine is preheated before starting engine. Maximum preheat time is set at one minute, after which remote starter initiates start cycle.

### IF ENGINE DOES NOT START

If your system cannot start engine at first attempt, it will wait for a few seconds and then try again (it could try again twice depending on reason for failure to start).

After three attempts, it will shut down automatically and wait for a new command.

### TO DRIVE YOUR VEHICLE...

- Do not apply brakes when you enter vehicle; this will stop engine immediately.
- Place key in ignition and turn it to ON position.



**DO NOT TURN IGNITION KEY TO START POSITION**

- Drive as usual.

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\* A runtime of 2 min. ( 4 min. for a diesel engine) is not recommended for most vehicles unless you intend to drive off right after the remote start.

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## **CONTINUOUS MODE**

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Continuous Mode consists of sending a Start command while engine is kept running by ignition key.

This function allows you to leave engine running after removing ignition key so that you can leave vehicle for a few minutes and also leave heating/cooling system on.

- Send a Start command while engine is running; do not apply brakes (lights: 1).

Parking lights will come on and you can remove key. Engine will run for programmed runtime (see START or START/STOP) then stop automatically if you have not returned.

If engine is still running when you return to your vehicle (before programmed runtime expires), place key in ignition, turn it to ON position, then drive as usual.

All actions which normally stop engine after a remote start (applying brakes, opening hood, etc.) will have same effect during Continuous Mode runtime.

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## **WHAT STOPS THE ENGINE**

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For your safety, engine will not start or will stop if:

- Remote control sends a stop message
- Hood is open
- Brakes are applied
- Transmission is in gear
- The engine over-rev's
- Main switch is OFF
- Engine turns over too slowly during start cycle

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## **MAIN SWITCH**

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Main switch is usually mounted under dashboard. It is a toggle ON/OFF switch.

This switch is used to cancel start functions. It does not disable other commands which remain active.



## LOW TEMPERATURE MODE



(2- and 3-button remotes)

In Low Temperature (also called Sentinel) mode, system starts your engine automatically when temperature falls below  $-15^{\circ}\text{C}$  ( $5^{\circ}\text{F}$ ).

Engine will run for programmed time, after which Low Temperature mode will wait 2½ hours and then start engine again if temperature is still below  $-15^{\circ}\text{C}$  ( $5^{\circ}\text{F}$ ).

All actions which normally stop engine after a remote start (applying brakes, opening hood, etc.) will have same effect during Low Temperature mode runtime.

To activate or deactivate this command:

- Press  and  buttons simultaneously (lights: 4, 2 or 3).

Parking lights will flash 4 times to confirm that Low Temperature mode has been activated and twice to confirm that it has been deactivated.

Three flashes mean that system is not ready (hood open, main switch OFF, etc.).



Applying brakes or sending a Start command cancels Low Temperature mode.

- Low Temperature mode runtime has been set for:

Gas engine:            4 min.     8 min.     18 min.

Diesel engine:        8 min.     16 min.     36 min.

On a 2-button remote, this command can be replaced by Trunk Release command (see Table of Commands on page 3).

- Command  &  has been set for: Low Temperature  or Trunk Release .

## LOCK COMMAND

If your vehicle is equipped with a central locking system, several functions can be operated by remote control.

These functions are optional and may require purchasing additional equipment (not included). Consult your dealer for advice.



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## **2-BUTTON REMOTE**

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### **LOCK AND UNLOCK**

With a 2-button remote, locks toggle back and forth between lock and unlock every time this command is sent; i.e. if doors are locked, command will unlock them and vice versa.

Parking lights indicate whether doors are locked or unlocked.

To lock or unlock doors:

- Press  button (lights: 1 or 2)

Parking lights flash once when doors are locked and twice when doors are unlocked.

### **TRUNK RELEASE**

- Press  and  buttons simultaneously (lights: 3).

Trunk is released and parking lights flash three times to confirm that command has been received.

Trunk cannot be released if ignition key is in **ON** position. In this case, lights flash once to confirm that command has been received and to let you know that trunk could not be released.

This command can be replaced by Low Temperature command (see Table of Commands on page 3).

- Command  &  has been set for: Low Temperature  or Trunk Release .

If you are not sure you have received confirmation, repeat command. System will repeat confirmation as often as you wish.

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## **3-BUTTON REMOTE**

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### **LOCK**

- Press  button (lights: 1).

Doors are locked and parking lights flash once to confirm that command has been received.

### **UNLOCK**

- Press  button (lights: 2).

Doors are unlocked and parking lights flash twice to confirm that command has been received.

### **TRUNK RELEASE**

- Press  and  buttons simultaneously (lights: 3).

Trunk is released and parking lights flash three times to confirm that command has been received.

## SERIES 1000

Trunk cannot be released if ignition key is in **ON** position. In this case, lights flash once to confirm that command has been received and to let you know that trunk could not be released.

If you are not sure you have received confirmation, repeat command. System will repeat confirmation as often as you wish.

### AUTOMATIC LOCK/UNLOCK

Programmable as **Active** or **Inactive** during installation.

This function locks doors when ignition key is in **ON** position, engine is running and brakes are applied. Doors are unlocked when key is turned from **ON** to **OFF** or when Continuous Mode is activated.

This function is:    active                     inactive .

## OTHER FUNCTIONS

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### DOME LIGHT

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Dome light will come on for 35 seconds every time Unlock command is sent. This 35-second period is cancelled if Lock command is sent, brakes are applied or key is inserted in ignition and turned to **ON** position.

This function is optional and requires an additional connection and equipment during installation.

This function is:    active                     inactive .

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### ANTITHEFT

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Programmable as **Active** or **Inactive** during installation.

Your remote starter is equipped with an antitheft system. This system consists of an output that can control a relay which, when activated, cuts all circuits required to operate vehicle (optional connection).

Antitheft arms automatically one minute after ignition key is turned from **ON** to **OFF** and remains **OFF** for one minute. It can also be armed manually by sending Lock command (unless ignition key is in **ON** position).

**DISARMING:** Antitheft system is disarmed for one minute when you send Unlock command.

If ignition key is not turned to **ON** position within one minute, system automatically rearms, thus preventing an intruder from starting your vehicle, even with ignition key.

Antitheft system can be connected so that horn sounds if an intruder tries to start your vehicle when it is in ANTITHEFT ACTIVE mode.

This function is:    active                     inactive .

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## REMOTE STARTER TIMER

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A timer (RST-2, optional accessory) can be added to your system to start your vehicle on a preprogrammed schedule.

This timer is neutralized when you start vehicle with remote or when Low Temperature mode is activated.

When runtime expires or when Low Temperature mode is deactivated, timer is automatically reactivated.

Timer cannot be connected to system if system is programmed for a diesel engine.



### SAFETY CHECKS

In order to maintain a high safety standard, proceed with following checks every month.

#### HOOD SWITCH

- Start your vehicle with remote starter.
- Open hood.
- Engine should stop as soon as hood is opened.

If engine does not stop immediately, turn main switch to **OFF** position **and leave it off until situation is rectified**. Contact your service centre.

#### DETECTING P AND N GEARSHIFT POSITIONS

Your starter is designed to check gearshift position at all times.

If key must be in ignition for gearshift to be moved out of P, your vehicle is safe as long as keys are kept away from children.

If, on the other hand, gearshift can be put in gear without key being in ignition, proceed with this simple check.

- Put gearshift in gear. Be ready to apply brakes.
- Start your vehicle with remote starter.
- Repeat these steps with gearshift in Drive and Reverse.

If starter reacts within 10 seconds when gearshift is in gear (which would be abnormal), turn main switch to **OFF** position **and leave it off until situation is rectified**. Contact your service centre.

#### REPLACING OR BOOSTING VEHICLE BATTERY

If you have to replace or boost your battery for any reason, do the following.

First turn main switch to OFF position and leave it OFF until battery is replaced or fully charged.

Reversing polarity when boosting your battery could permanently damage your remote starter.

## LIMITED LIFETIME WARRANTY

### ASTROSTART remote starters

Astroflex Inc., the manufacturer of the AstroStart remote starters ("Product"), warrants to the original end-user purchaser that the Product's various control modules protected with fuses ("Modules") shall be free from defects in material and workmanship for as long as the original end user purchaser continuously owns the automobile the Products was originally installed in and the Product remains continually installed in the automobile during the warranty period. In accordance with the terms of this limited warranty, Astroflex, at its expense (except as stated below), shall either repair or replace the Module or part thereof which is proven defective.

### ASTROSTART accessories

Astroflex warrants to the original end-user purchaser that it will repair any AstroStart accessory part installed contemporaneously with the Product ("Accessory") which is defective due to workmanship for a period of two (2) years from the date of purchase provided the original end-user purchaser owns the automobile the Accessory was originally installed in and the Accessory remains continually installed in the automobile.

### Warranty limitations

- The warranty period begins on the date the Module or Accessory was purchased. In the event the date of purchase can not be verified, the manufacturer's date as indicated by the serial number of the Product or Accessory covered by this warranty shall be the date the warranty period begins.
- Installation, repair and service of any covered Module or Accessory must be performed by an authorized Astroflex technician.

### Warranty is void if

- The Product has: (i) a defect or damage due to accident, neglect, fire, misuse, flood, lighting, shipping and handling, or other condition beyond the control of Astroflex, (ii) has been altered in any way, (iii) has been installed or repaired by anyone other than an authorized technician, or (iv) has improperly installed or used.

### Warranty does not cover

- Costs of removing the Product or Accessory, sending the defective Product or Accessory to Astroflex, return of the repaired Product or Accessory and installation of the repaired or replaced Product or Accessory.
- Batteries.

### Owner's responsibilities

- Provide a written proof of purchase for the Product/Accessory, showing the date of purchase, installer's name, and the name of the purchaser.
- Send the defective Product/Accessory, postage pre-paid, to Astroflex at the address below and pay the postage costs for the return the Product/Accessory.

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, WHETHER ORAL, WRITTEN, EXPRESS OR IMPLIED. THERE ARE NO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. ASTROFLEX'S WARRANTY OBLIGATIONS AND PURCHASER'S REMEDIES HEREUNDER ARE SOLELY AND EXCLUSIVELY AS STATED HEREIN. ASTROFLEX'S LIABILITY, WHETHER BASED ON CONTRACT, TORT, WARRANTY, STRICT LIABILITY, OR ANY OTHER THEORY, SHALL NOT EXCEED THE PRICE OF THE INDIVIDUAL UNIT WHOSE DEFECT FOR DAMAGE IS THE BASIS OF THE CLAIM. IN NO EVENT SHALL ASTROFLEX BE LIABLE FOR ANY LOSS OF PROFITS, LOSS OF USE OF FACILITIES OR EQUIPMENT, OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. Similar exclusions or limitations, including those as to non-assignment, may be applicable in some Canadian Provinces. This warranty gives you specific legal rights and you may also have other rights which vary from state to state or province to province.

### Astroflex Inc.

1164 Route 220  
St-Élie D'Orford  
JOB 250  
(Québec) Canada

### GOVERNMENT REGULATIONS



This device complies with the requirements of Industry Canada (IC) - Management of Radio frequencies, as specified in document RSS-210. Its use is authorized only on a no-interference, no-protection basis; in other words, this device must not be used if it is determined that it causes harmful interference to services authorized by IC. In addition, the user of this device must accept any radio interference that may be received, even if this interference could affect the operation of the device.



This device complies with Part 15 of the FCC rules.

Operation is subject to the following two conditions:

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

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 instruction manual, 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, 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

  
**Astroflex Inc.**  
1164 Route 220  
St-Élie d'Orford, Québec, Canada  
JOB 250

  
**Astroflex**  
ELECTRONIC CORP.  
516A Elm Street  
Manchester, NH 03101  
U.S.A.

<http://www.info@astroflex.com>

Note: Operation, specifications and design of our products are subject to change without prior notice.