

# REMOTE CONTROL ENGINE STARTER

# **MODEL RS-20X**

Designed for use in all manual transmission, gasoline fuel injection powered, vehicles.

Made in Canada by: **ASTROFLEX Inc.** 

Patents Pending

Patent no. U.S. 4.345.554 Patent no. CDN 1.130.426 Thank you for choosing the ASTROSTART™ Remote Control Engine Starter. Your ASTROSTART™ is the product of extensive research by a company specializing in the design of high quality electronic equipment for automotive vehicles. ASTROSTART™ is designed to provide years of reliable, trouble-free service. Its advanced microprocessor circuitry incorporates billions of possible access codes to prevent interaction with other remote controlled vehicles. ASTROSTART's safe and convenient features will make your life easier.

Please take time to read these instructions carefully. Some features may not be installed or applicable to your vehicle.

## Safety Precautions!

- Always turn OFF the main switch when parking your vehicle in a closed, non-ventilated garage or when the vehicle is being serviced.
- Always turn OFF the main switch when the ASTROSTART™ is not being used for extended periods of time.
- Keep the transmitter away from children's reach.
- For proper ASTROSTART™ operation, regular engine tune-ups are recommended.
- Always turn OFF the wiper switch before leaving your vehicle.
- Test your hood pin switch regularly to ensure safe operation. This switch stops the engine when hood is open.
- Check for any local legislation that would prohibit leaving a running vehicle unattended on public streets.
- Always advise service personnel that your vehicle is equipped with an ASTROSTART™.
- A yearly check up of your Remote Starter is strongly recommended. Contact the ASTROSTART™ dealer in your area.

## BEFORE YOU USE YOUR ASTROSTART™

- Select the desired setting for the heater/AC system (when the ASTROSTART™ starts the vehicle the heating / AC system will resume operation).
- Make sure that:
  - the transmission shifter is in the "NEUTRAL" position
  - the hand brake is applied
  - your ASTROSTART<sup>™</sup> has sent the code 1 to confirm that the system is ready to receive a command.

This code is sent as an audio signal (beep) generated by the
ASTROSTART™ system. This code is sent each time the brake pedal is
released in absence of the ignition key, or when the ignition key is turned from
START to OFF.

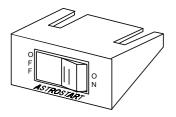
If the remote starter sends a different code, rectify the situation as per the table below:

- Code 2 The transmission shifter is out of the "NEUTRAL" position.
- Code 3 The hand brake is not applied properly.
- Code 4 The security sequence has not been recognized

♠ This sequence is part of the security features, it checks the position of the transmission shifter at all times. This sequence is validated each time the transmission shifter passes form the "IN GEAR" position to the "NEUTRAL" position when the hand brake is not applied.

#### USING THE MAIN SWITCH

The ASTROSTART™ main switch should be mounted under the dash. Turning OFF this switch prevents using remote start functions. Optional features remain active.



#### THE REMOTE TRANSMITTER

A small 12 Volt alkaline battery (GP23A) powers your remote. Under normal use, it should last approximately 6 months. Range may be affected by a weak battery or by location (i.e. crowded parking lot, metal structures, hydro poles, etc.).

Using microprocessor-controlled **CODE LEARNING**, up to 3 additional ASTROSTART $^{\text{TM}}$  transmitters can be added at any time (for a total of 4). See your ASTROSTART $^{\text{TM}}$  dealer.

## USING YOUR REMOTE CONTROL

Press on the desired button for 2 seconds. While pressing, the LED will flash and stay on for 1 second while your command is being transmitted. Commands will not be transmitted when the button is not pressed long enough (LED does not stay on).

## TO START THE ENGINE

1 button remote transmitter
2 button remote transmitter
press the button once
press the "A" button once

The tail lights will flash once to confirm the reception of the command, then will stay ON as long as the engine will be running by remote, (10 or 20 minutes according to the programming).

#### TO DRIVE YOUR VEHICLE

- Do not apply the brakes at this point. ©
- Put the key in the ignition at the "RUN" position.
- Drive as usual.

© Remember that the engine will also stop if, the hand brake is released, or if the transmission shifter is moved.

# WARNING DO NOT TURN THE KEY TO THE **START** POSITION

#### TO STOP THE ENGINE

1 button remote transmitter press the button once
2 button remote transmitter press the "A" button once

2 button remote transmitter
press the "A" button once

The engine will stop and the tail lights will shut "OFF". (when started by remote)

## WHAT STOPS THE ENGINE?

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

- The transmitter sends the STOP command.
- The hood is opened.
- The brake pedal is depressed.
- The transmission is shifted out of the NEUTRAL position.
- The engine over-rev's.
- The main switch is OFF.
- The hand brake is removed.

### **CONTINUOUS MODE**

In the Continuous Mode, you are able to leave your engine running after removing the key from the ignition (only when the vehicle has been started using the ignition key). This is a convenience feature that allows you to leave the vehicle for short periods of time while the climate controls and engine remain active.

1 button remote transmitter press the button once while the engine

is running, do not press the brake

pedal.

press the "A" button once while the 2 and 3 button remote transmitter

engine is running, do not press the

brake pedal.

The parking lights will turn ON, the engine will keep running for the chosen run time. Remove the ignition key, exit your vehicle, and lock all doors. The steering column will remain locked and all security features remain active. If the engine is still running when you get back to your vehicle, put the key in the ignition switch, turn it to the "RUN" position, then drive as usual.

## LOW TEMPERATURE MODE (SENTINEL MODE, RS-202 AND RS-203)

The Low Temperature mode enables the ASTROSTART™ to run the engine **AUTOMATICALLY** for the programmed run time when the temperature falls below -15°C (5° F)\*.

2 button remote transmitter press the "B" button once press the "A" and "B" buttons 3 button remote transmitter

simultaneously The parking lights will flash once to confirm the activation, and twice to confirm the deactivation. Three parking lights flash to indicate "system not ready". All normal shut off devices (brake pedal, hood, etc...) will shut the vehicle off.

Depressing the brake pedal, or starting by remote deactivates the Low Temperature Mode.

# START ONLY (RS-202 AND RS-203)

This command is used when you want to make sure that your ASTROSTART™ did receive the command, but you can not see your vehicle.

2 button remote transmitter press the "A" and "B" buttons simultaneously

3 button remote transmitter press the "A" and "C" buttons

simultaneously

Your ASTROSTART™ receives the command to start only, which means that if the engine is already running, this command will be ignored.

You can send this command as many times as you wish until you are sure that the engine is running.

# **LOCKING AND UNLOCKING THE DOORS (RS-203)**

Three button remote transmitter only

To lock doors press the "B" button To unlock doors press the "C" button

To release the trunk press the "B" and "C" buttons simultaneously.

#### LIMITED TWO YEAR WARRANTY

The product manufactured by ASTROFLEX Inc. is warranted to the original consumer purchaser to be free from defects in workmanship and material within two (2) years of the date of purchase. ASTROFLEX shall repair or replace the product or any part of the product which ASTROFLEX agrees is defective without charge provided the product is returned to ASTROFLEX freight prepaid and accompanied by a copy of the purchase receipt. This warranty does not cover damages resulting from accident, physical or electrical misuse or abuse, improper installation, alteration, any use contrary to its intended function, unauthorized service by anyone other than ASTROFLEX or its authorized service personnel. ASTROFLEX shall not be responsible for removal and/or reinstallation charges, damage to or theft of the vehicle or its contents, or any incidental or consequential damages caused by any failure of the product to function properly.

The sole remedy for breach of this warranty and the sole obligation of ASTROFLEX hereunder is the repair or replacement of the defective product as ASTROFLEX's option. ASTROFLEX shall have no liability whatsoever at any time for any personal injury or property damages or for any special, indirect or consequential damages of any kind howsoever arising.

This warranty is strictly limited to its terms and is in lieu of any kind and other warranties and conditions, written or oral, whether expressed or implied.

#### WARNING

Changes or Modifications not expressly approved by ASTROFLEX would void the User's authority to operate the equipment.

#### DOC DOCUMENT:

This device complies with the requirements of the Department of Communications (DOC), Canada, as specified in document RSS0-210. The device is permitted only on a no-interference no-protection bases, that is, it must cease operation when it is determined that it causes harmful interference to services authorized by DOC. Also, the operator must accept any radio interference received, including interference that causes undesired operation of the device. DOC Certification No: 1854 K1066 FCC Document:

This device complies with Part 15 of the FCC rules.

Operation is the subject to the following conditions:

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

#### NOTE

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 the receiver is connected
- Consult the dealer or an experienced radio / TV technician for help

FCC APPROVAL No. J5FRS-3R

Due to continuing product improvement, specifications and design are subject to change without notice

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