

## INSTRUCTION MANUAL FOR

# *Rhino GX*

**Remote Control Compact Car Alarm  
with 2 Stage Impact Sensor, plus  
Central Locking & Immobilisation Outputs.**



A.C.N 001 621 610



Build Date:

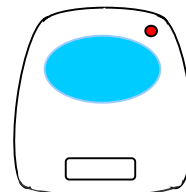
## **TO ARM/DISARM ALARM**

The alarm is activated by pressing the button on the remote control transmitter once. The blinkers will flash once, and the siren will beep once. The dash LED-light will stay on for 10 seconds then flash, THE ALARM IS NOW ON.

To deactivate the alarm, press the button again. The blinkers will flash twice and the siren will beep twice. THE ALARM IS NOW OFF.

**If the siren is sounding**, and you wish to disarm, the first press will cancel the siren - the system will then return to an armed state. A second press is required to fully turn the alarm off. The blinkers will flash twice and the siren will beep twice. THE ALARM IS NOW OFF.

**Note:** If power is removed from the alarm system, i.e. when replacing your car battery, the alarm will automatically return to the mode it was in prior to disconnecting power.



## **ALARM TRIGGER**

When triggered, the siren will sound for 30 seconds and then will automatically rearm. If the alarm has been triggered in your absence, the dash LED will be flashing twice as fast as normal when you return to your vehicle.

## **EMERGENCY PANIC BUTTON**

The panic feature is activated by pressing & holding the button on the remote control transmitter for 3 seconds. The system will arm or disarm first depending on what state it was in. The siren will then sound & the blinkers will flash for 30 seconds. To cancel "panic", follow disarm procedure as described above.

NOTE: Panic does not work when the ignition is on by requirement of Australian Law (EPA-Environmental Protection Authority).

## **PRE-ALERT (2 STAGE) IMPACT WARNING**

This special feature provides a two stage impact sensing system. It gives the security conscious owner a sensitive car body impact sensor that will give a potential thief prior warning that the vehicle is protected by this most formidable alarm system. On detection of a low level impact i.e. from a tyre kick, the siren will simply beep 5 times to warn away the would-be thief. If the vehicle is attacked any further, the system will move into full siren mode. The sensitivity level reference point can be adjusted to suit your particular needs. Please refer to the programming section contained later in this manual.

## **PROGRAMMABLE FEATURES:**

The features outlined below are the most popular that can be turned on or off to suit your requirements. Please refer to the section in this manual marked "Rhino Programmable Features" for full details.

**PASSIVE ARMING:** The alarm can automatically arm itself 30 seconds after you leave your vehicle provided that the ignition is turned off, and that at least one door has been opened and closed i.e. the owner has parked and has exited the vehicle. This feature **will not lock** the vehicle where central locking is connected.

**AUTOMATIC RE-ARM :** This feature prevents accidental disarming by the owner i.e. the owner turns the alarm off but is then distracted and forgets that they have deactivated the system. If a door is not opened, or the ignition is not turned on within 60 seconds from when the system is turned off by the remote, the system will **re-arm**, and if central locking is connected, it **will re-lock** the vehicle.

**QUIET ARM/DISARM :** This feature when turned on, stops the siren from beeping for arm & disarm confirmation i.e. only the blinkers will flash.

## **LEARNING REMOTES** (Up to 3 remotes can be used with this alarm system)

Before entering this mode, make sure you have **all** remotes present that you wish to utilise with this alarm system, as the alarm **automatically erases all remotes** when you enter this mode.

- A. While the system is disarmed, open and close your driver's door & sit in the vehicle.
- B. Now, turn the car ignition key from the off position to the ignition on position 20 times within 30 seconds.
- C. 30 seconds later, the parking lights will flash 3 times to confirm that you have entered the remote learning mode. Repeat steps A & B if you do not hear the confirmation.
- D. Now press the button on the first remote you wish to learn in. The siren will sound briefly to confirm this code has been learnt. Now press your second remote. The siren will sound briefly again to confirm this code has also been learnt. Repeat this step for up to three remotes.
- E. The system exits learning mode once it has received 3 remote codes - press one of your learnt remotes repeatedly to fill up all coding locations if you do not have 3 remotes. The system will exit to disarmed mode.

# ***ALARM MODEL: RHINO GX***

## **STANDARD SYSTEM FEATURES**

- ❖ All Microprocessor Controlled
- ❖ One Remote Control with Multi Function Operation
- ❖ Red Flashing LED Light
- ❖ Inbuilt High Power Siren
- ❖ Automatic Siren Reset Period (30 Seconds)
- ❖ Visual Arming and Disarming via Parking Lights or Indicators
- ❖ Negative Pulse Central Locking Outputs
- ❖ Negative Trigger Input (Can be used for doors, boot, bonnet & optional sensors)
- ❖ Alarm Trigger Memory
- ❖ Safety Circuit Prevents Arming While Ignition On
- ❖ Learning Mode for Additional Remote Controls (Max 3)
- ❖ Security Override Procedure

## **SELECTABLE SYSTEM FEATURES (Can be turned on or off)**

- ❖ Shock Sensor Sensitivity Adjustment via Remote
- ❖ Passive Arming
- ❖ Auto Rearm & Relock
- ❖ Audible or Quiet Arm/Disarm
- ❖ Silent Operation
- ❖ Current Sensing (Voltage Drop) Circuit
- ❖ Central Locking Output Time Selectable - 0.8 or 5 Seconds

## **OPTIONAL ACCESSORIES:**

Additional Remote Controls	(Part No. GXTX)
Engine Immobilisation Relay	(Part No. 40ARELAY)
Automatic Electric Window Lift	(Part No. GLU400 - Closes 2 Windows)
Ultrasonic Sensors	(Part No. UD6)
Microwave Sensor	(Part No. UD5)

# ***PROGRAMMABLE FEATURES***

## ***for Rhino GX Car Alarm***

Your Rhino Security system incorporates the latest in high security & convenience features. It is possible to customise your security system so that it suits your requirements perfectly. Detailed below is the full list of programmable features that can either be turned on or turned off.

We have set at the factory, the most common configuration chosen and these settings are listed in the REGISTER Settings listed below. Once the desired features have been selected, the selection is permanently retained in memory, even if power is removed.

**To turn on or turn off any feature use the following procedure:**

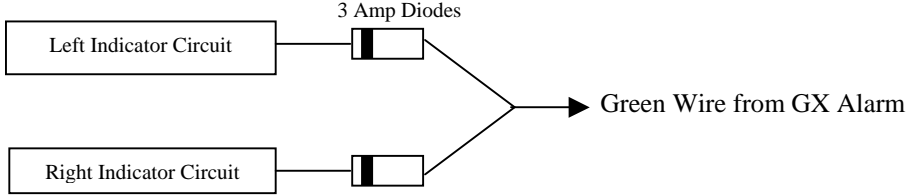
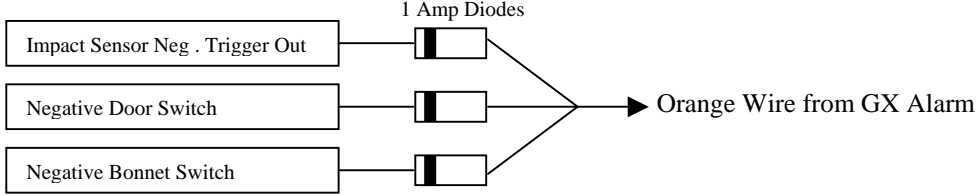
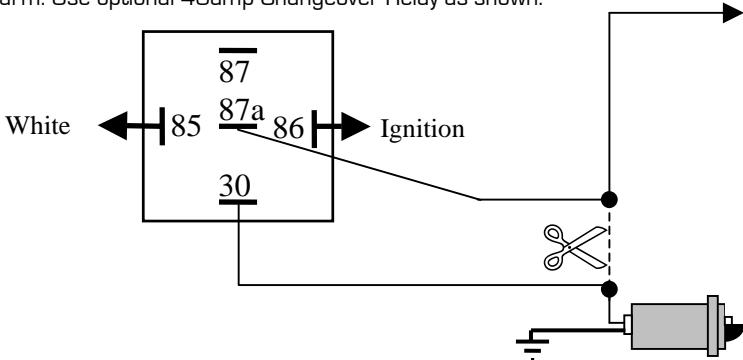
**eg** to disable audible arming.

1. Arm then disarm the alarm system.
2. Within 20 seconds of disarming, turn the ignition key to on.
3. Press the remote control button an equal number of times to the selected feature's **code** no. (eg 5 times for audible arming). Leave a 0.5 sec. gap between each press. The siren will chirp to confirm each press.
4. Immediately turn the ignition to off after the last press.
5. The system will now confirm whether the feature has been turned on or off via visual readout. One flash of the Parkers means the feature is on. Two flashes means the feature has been turned off.

PROGRAMMABLE FEATURE	Press Remote This Many Times	Indication	INITIAL FACTORY SETTING	DESCRIPTION
Audible Arm/Disarm	5	1 Flash On 2 Flash Off	ON	This feature when turned off, stops the siren from beeping for arm & disarm confirmation i.e. only the blinkers will flash.
Passive Arming	6	1 Flash On 2 Flash Off	OFF	The alarm can automatically arm itself 30 seconds after you leave your vehicle provided that the ignition is turned off, and that at least one door has been opened and closed ie. the owner has parked and has exited the vehicle. This feature <b>will not lock</b> the vehicle where central locking is connected.
Voltage Drop (Current) Sensing	7	1 Flash On 2 Flash Off	OFF	If deactivated, this feature will prevent the alarm triggering via sensing a drop in voltage in the vehicle's electrical system. This may be necessary where engine thermo fans cut in automatically or there are other accessories active even when the ignition is turned off eg fridges, car phones.
Auto Re-arm	8	1 Flash On 2 Flash Off	ON	If system is disarmed and a door is not opened, or the ignition turned on within 60

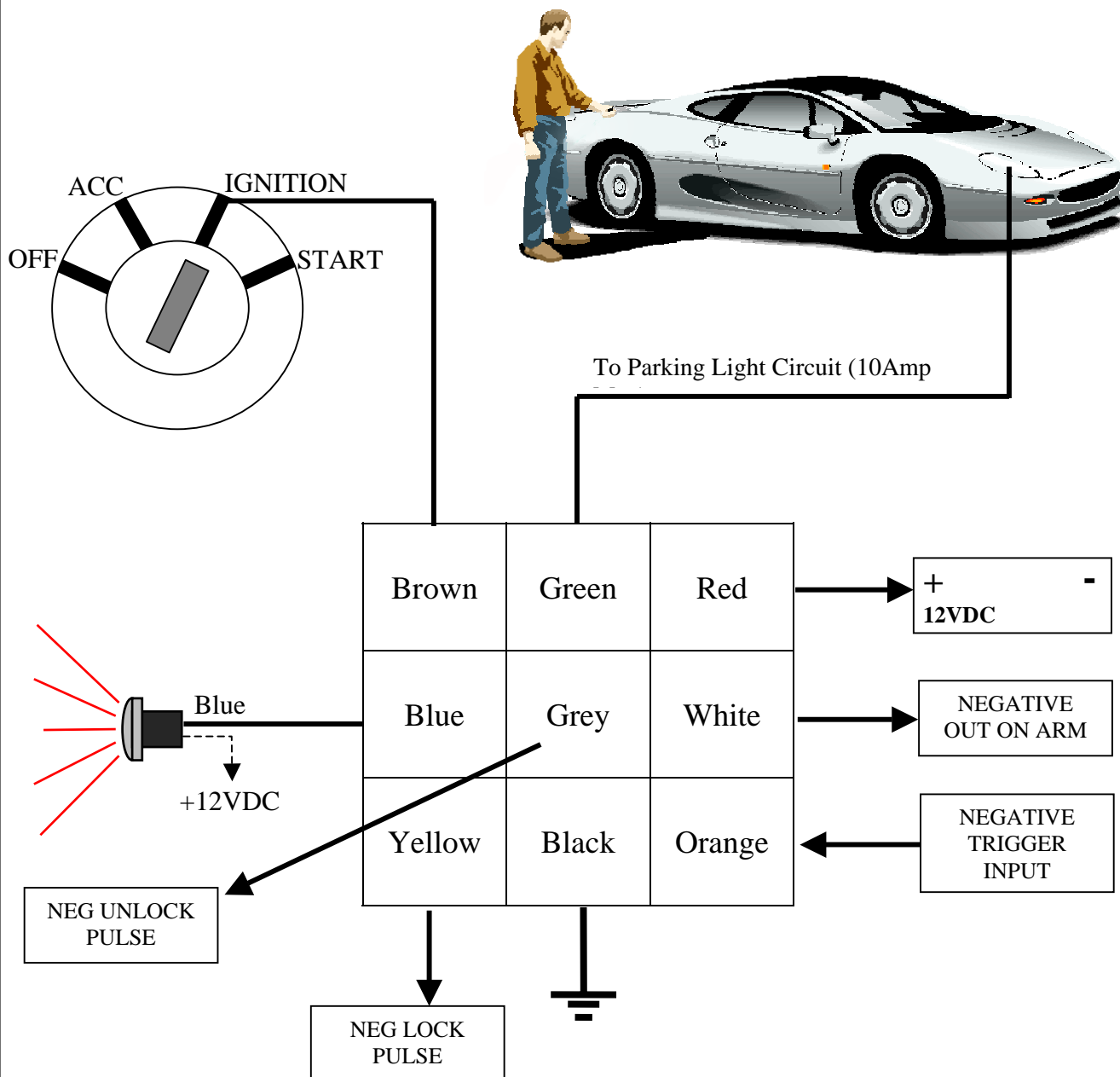
				seconds, the system will rearm & relock (where central locking is connected).
Central Closure	12	1 Flash 0.8 2 Flash 5 sec	0.8 sec	You can select the lock & unlock outputs to become a 5 second negative pulse instead of 0.8 seconds. This feature is for certain vehicles with vacuum central locking or those with a central closure wire (some BMW, Mercedes) ie doors lock, electric windows wind up, sunroof closes automatically.
Impact Sensor Sensitivity Adjustment	14	Flash 14 Times	Maximum Sensitivity	There are 25 levels of adjustment for the impact sensing system. Press remote to decrease sensitivity by one level from present setting with each press. A confirmation chirp will be heard for each press. Turn the ignition to on save new setting and to exit this mode, or if no buttons are pressed within 15 seconds the system will automatically exit this mode, back to disarmed status. <b>Note:</b> To reset the sensor back to maximum sensitivity, simply enter the Impact sensor adjustment mode and then wait 15 seconds for the system to automatically exit.
Security Reset Code	18	No of Flashes is the Code	5	The security reset code relates to the Security Override Mode detailed later in this manual. Choose a Code number between 5 & 25. Press remote once to increase code from factory setting of 5 by one digit i.e. 1 <sup>st</sup> press will change code to 6, second press changes code to 7 and so on. (Once you reach 25, the code will start at 1 again). A confirmation chirp will be heard for each press. Turn the ignition to on to exit this mode. <b>Note:</b> To return the reset code back to 5, simply enter the reset code mode, and then wait 15 seconds for the system to automatically exit.
Valet Mode	17	5 Siren Chirps	OFF	When on, this feature disables the alarm functions but still allows central locking control via remote. To exit Valet Mode, turn ignition to on & then press & hold remote for 3 seconds. The siren will chirp 5 times, & the alarm will be in disarmed mode.

# WIRING INSTRUCTIONS FOR RHINO GX ALARM

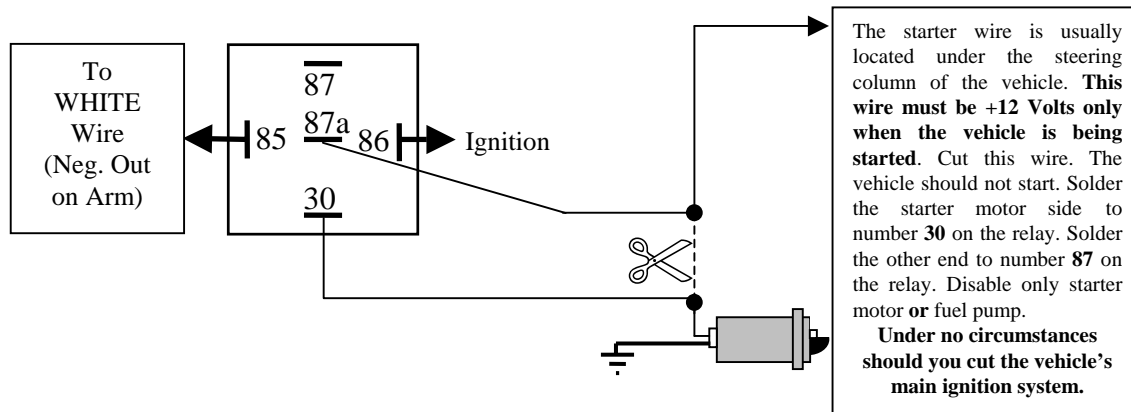
<b>RED</b>	- <b>Power.</b> Connect to constant +12 volts via the fuse box at the point where the interior light circuit is powered. Current (voltage) sensing will not work if this procedure is not followed.
<b>BLACK</b>	- <b>Earth.</b> Connect to a suitable earth on the car body.
<b>GREEN</b>	<p>- <b>Parking Light Flash Wire (Positive Output 10Amp max).</b> Connect to the parking light circuit of the vehicle. Note: If you wish to flash the indicators instead of the parking lights, you will need to wire 2 x 3 Amp Power Diodes as shown:</p> 
<b>BROWN</b>	- <b>Ignition Input.</b> The ignition wire is usually located under the steering column of the vehicle. <b>This wire must be +12V only when the vehicles keyswitch is at the ignition position, and must not fall to 0 volt when the engine is cranked.</b>
<b>ORANGE</b>	<p>- <b>Negative Trigger Input.</b> Connect to existing door switches, bonnet switch, or negative trigger wire from optional, ultrasonics, or microwave sensor. <b>Please note:</b> only negative switching doors. If positive door switching - must use relays to reverse to negative - see diagram on page 9 of this manual. If you are using more than one trigger device i.e. doors, bonnet, and impact sensor, then the 1 Amp Diodes supplied must be used on each wire coming from each trigger input i.e.</p> 
<b>BLUE</b>	- <b>Negative LED Output.</b> Connect to the blue wire from the LED supplied. (Connect Red wire from LED to +12VDC).
<b>WHITE</b>	<p>- <b>Negative on Arm.</b> This wire enables an effective engine immobilisation circuit to be configured with this alarm. Use optional 40amp Changeover Relay as shown:</p>  <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>The starter wire is usually located under the steering column of the vehicle. <b>This wire must be +12 Volts only when the vehicle is being started.</b> Cut this wire. The vehicle should not start. Solder the starter motor side to number <b>30</b> on the relay. Solder the other end to number <b>87</b> on the relay. Disable only starter motor or fuel pump.</p> <p><b>Under no circumstances should you cut the vehicle's main ignition system.</b></p> </div>
<b>YELLOW</b>	- <b>Negative Pulse Lock Signal.</b> Refer to diagrams contained later in this manual for connection options.
<b>GREY</b>	- <b>Negative Pulse Unlock Signal.</b> Refer to diagrams contained later in this manual for connection options.

# RHINO GX ALARM WIRING DIAGRAM

REFER TO WIRING INSTRUCTIONS ON PAGE 5 FOR FULL EXPLANATION

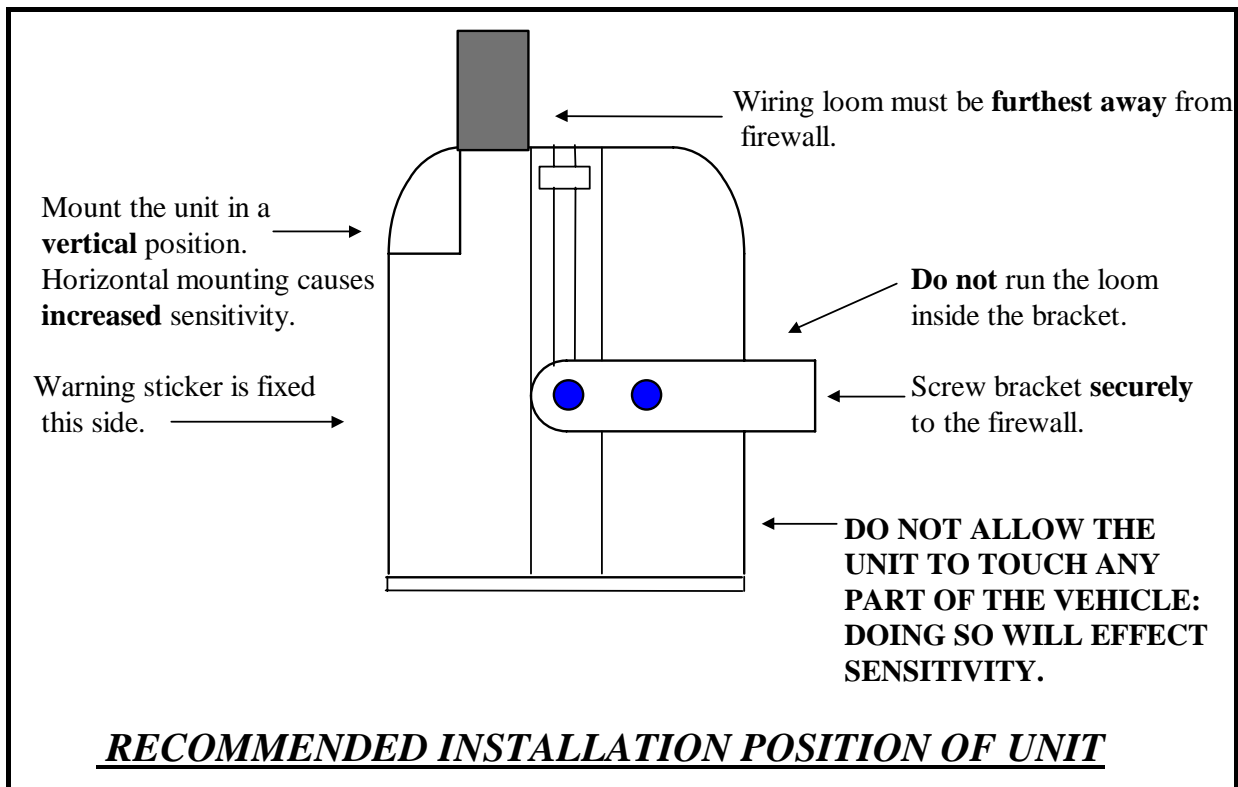


## OPTIONAL ENGINE IMMOBILISATION CIRCUIT: Use 40Amp Changeover Relay as shown



## LOCATION GUIDE FOR MAIN UNIT

**RECOMMENDED MOUNTING INSTRUCTIONS:** The recommended position to mount the unit is **vertically** as illustrated below. Where possible, mount the unit as close as possible to the centre of the firewall. Unit should be at least 25cm away from high tension leads, distributor, or ignition coil. **Horizontal** mounting **increases** the sensitivity of the shock sensor. **IMPORTANT:** Do not allow any part of the vehicle to touch the unit - no hosing, wiring, or other car components should be able to touch or rub on the unit, as this will affect the sensitivity of the shock sensor. The unit must only be connected to the vehicle by the mounting bracket. To adjust the sensitivity level of the alarm shock sensor via the remote controls, please refer to "Programmable Features" located on page 3..



## SECURITY OVERRIDE MODE:

If a customer loses a remote control, or it fails to disarm the alarm system, the following procedure will disarm the alarm system.

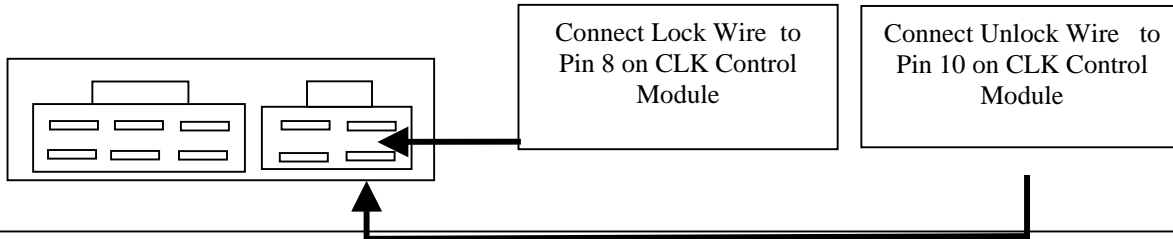
1. Open & close the drivers door. (The siren will sound).
2. Within 30 seconds, turn the ignition from off to on 5 times (if you have changed your Security Reset Code as detailed on page 4, you must turn the ignition from off to on equal to your chosen reset code. 5 times is the standard setting)
3. The system will disarm, (the siren will stop sounding) and the parking lights will flash for 3 minutes. You can now start your vehicle. **Note:** This procedure will only allow you to start the vehicle once. You will have to repeat this procedure to restart the vehicle again.
4. Contact your Rhino Dealer for further assistance.

**INSTALLERS PLEASE NOTE:** If power is removed from the alarm system, it will automatically return to the mode it was in (armed or disarmed) before power was disconnected.

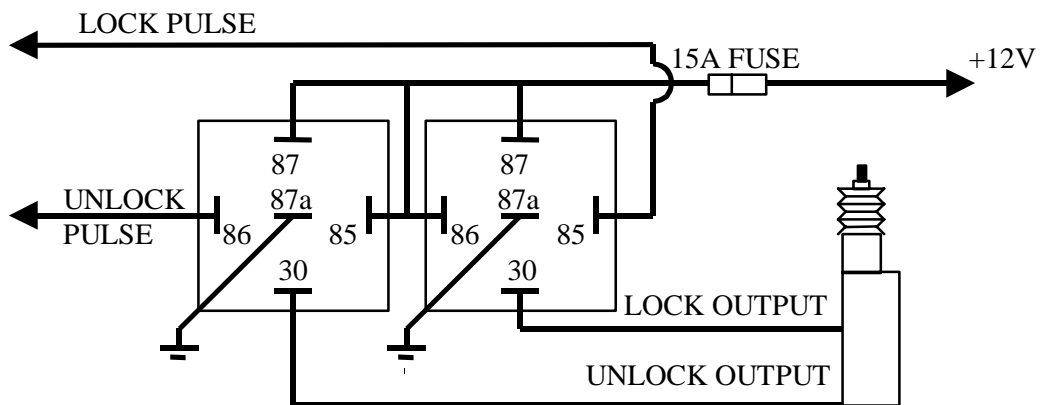
# CENTRAL LOCKING CONNECTION DIAGRAMS FOR RHINO GX CAR ALARM

All relays depicted are changeover type.

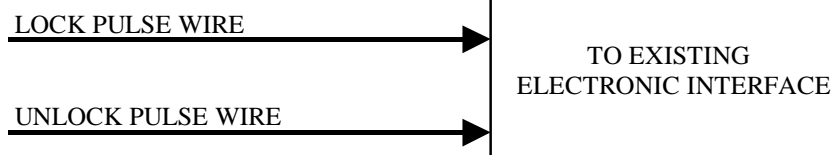
## CONNECTING TO RHINO CENTRAL LOCKING KIT (CLK)



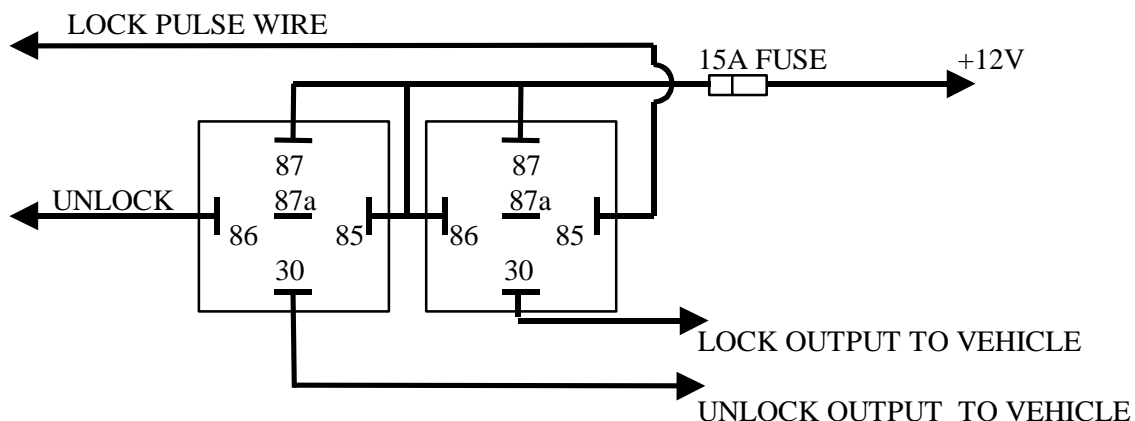
## INSTALLING A NEW MOTOR – often required in vehicles that have factory locking but have no motor in the driver's door, or you would like "keyless entry" on driver's door.



## "NEGATIVE TRIGGER" ORIGINAL CENTRAL LOCKING SYSTEM (LOW CURRENT)

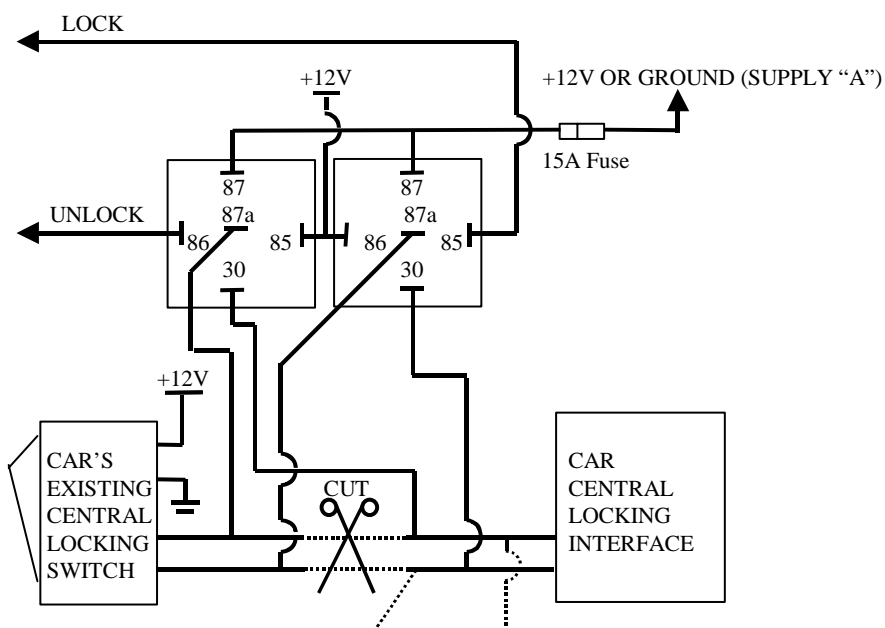


## FOR INTEFACING TO "POSITIVE PULSE" CENTRAL LOCKING SYSTEMS

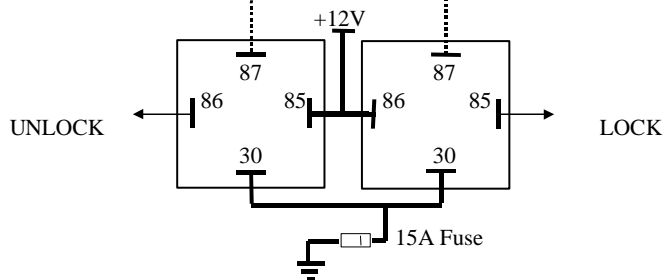




**FOR POSITIVE AT REST THEN GOING NEGATIVE "OR" NEGATIVE AT REST THEN GOING POSITIVE PUT 87'S TO 12V & CONNECT RELAYS AS SHOWN**



**FOR FLOATING SWITCHES - NEITHER +12V OR GROUND AT REST**  
Hook up the following extra relays & connect Supply "A" to +12V. Both pairs of lock / unlock wires must be connected.



**IMPORTANT NOTE FOR INSTALLERS: Vehicles fitted with negative or positive switching doors.**

In order for the alarm system to function correctly, it is necessary for the doors to be hard wired to the system. Please follow the wiring diagrams below:

**NEGATIVE SWITCHING DOORS:**      **POSITIVE SWITCHING DOORS:** Use relay.

