

INSTRUCTION MANUAL FOR THE NEW:



# Rhino GXa

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



Proudly Designed  
in Australia



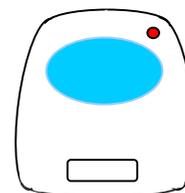
## TO ARM/DISARM ALARM

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 20 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, one press of the button will cancel the siren and disarm the alarm. 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 siren will beep 4 times upon disarm rather than give the normal 2 beeps to indicate alarm activation has occurred.

## 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 IMPACT WARNING WITH ETS™

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 for a few seconds to warn away the would-be thief. If the vehicle is attacked any further, the system will move into full siren mode. The unique ETS™ Environment Tuned Sensor is able to distinguish between environmental shocks caused by aircraft, trucks, or extreme weather conditions, and the impact caused by any thief attempting to break in or other heavy impacts. Furthermore the system features the unique Rhino "Auto Adjust" process, where during the 20 sec. arming delay, the alarm samples the background noise where the vehicle is parked, and will if necessary automatically reduce the sensitivity of the impact sensor to an appropriate level. This process allows a trouble free sensitivity that ordinary alarms simply can not provide. 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.

### **AUTOMATIC RE-ARM FEATURE :**

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 within one minute 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 NEW TRANSMITTERS (A maximum of 4 remotes can be programmed).**

To add a new transmitter to your alarm, simply follow the procedure below:

- A.** Turn the vehicle's ignition on.
- B.** Immediately press and hold the button on an original remote control until the siren starts to beep (approximately 5 seconds) and then release the button.
- C.** Immediately press and hold the button on the new remote control for at least 5 seconds.
- D.** Turn the vehicle's ignition off.
- E.** The new remote control is now programmed into the alarm.

# ***ALARM MODEL: RHINO GXa***

## **STANDARD SYSTEM FEATURES**

- ❖ All Microprocessor Controlled
- ❖ Two Remote Controls with Multi Function Operation
- ❖ Red Flashing LED Dash 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 4)
- ❖ Two Stage Car Body Impact Sensor with ETS™
- ❖ Panic Function - Emergency Panic

## **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. GLTX)                      |
| Engine Immobilisation Relay    | (Part No. 4OARELAY)                  |
| Automatic Electric Window Lift | (Part No. GLU400 - Closes 2 Windows) |
| Ultrasonic Sensors             | (Part No. UD6)                       |
| Microwave Sensor               | (Part No. UD5)                       |

# *PROGRAMMABLE FEATURES*

## *for Rhino GXa 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:**

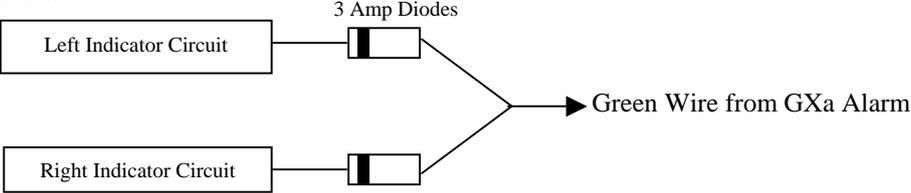
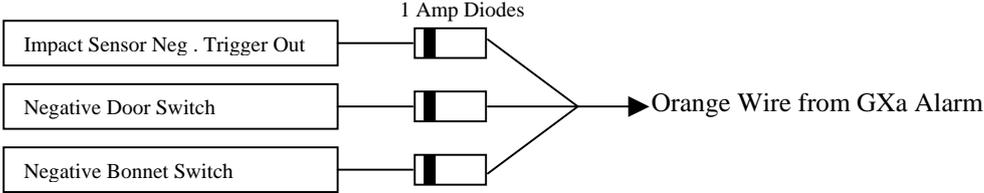
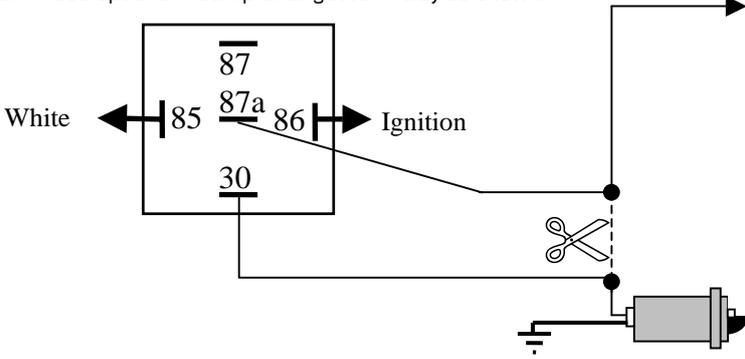
eg to disable audible arming.

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 6 times for auto-rearm). **Leave a 2 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 then confirm which features are activated via audible readout. If a feature is enabled the siren will chirp out its code in beeps from the siren corresponding to the number shown in the column "**Press Remote This Many Times**". The siren in this example will beep in order Once, then 4 Times, then 6 times. The system skips voltage drop (2 beeps), and door ajar (3 beeps) as these features are off. Please note that features 9-11 are excluded from the confirming number of beeps. Feature 5 is not used.

| PROGRAMMABLE FEATURE           | Press Remote This Many Times | INITIAL FACTORY SETTING | DESCRIPTION   |
|--------------------------------|------------------------------|-------------------------|---|
| Audible Arm/Disarm             | 1                            | ON                      | This feature when turned off, stops the siren from beeping for arm & disarm confirmation i.e. only the blinkers will flash.   |
| Voltage Drop (Current) Sensing | 2                            | Off                     | If activated, 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. |
| No Door Ajar Warning           | 3                            | OFF                     | When this feature is on, the door ajar warning feature is removed (the siren & indicators will <u>not</u> beep & flash for 3 sec. if a door is not closed properly).  |
| Shock Sensor                   | 4                            | ON                      | Activate Two Stage Shock Sensor.  |

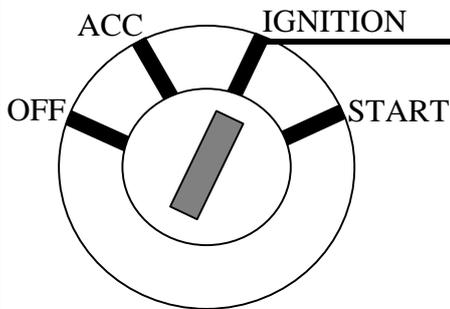
|                                |    |                                 |  |
|--------------------------------|----|---------------------------------|--|
| Auto Re-arm                    | 6  | OFF                             | If system is disarmed and a door is not opened within 60 seconds, the system will rearm & relock.  |
| Central Closure                | 7  | OFF                             | When on, the lock & unlock outputs become a 5 second negative pulse instead of 0.5 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.  |
| Door Lock on Ignition          | 8  | OFF                             | When this feature is on, the doors will lock when the ignition is turned to on, and unlock when the ignition is turned to off.   |
| Shock Sensor Adjustment        | 9  | 6<br>SELECT the level required. | After pressing the remote 9 times to enter this mode, turn the ignition to off. There are 8 levels of adjustment. The factory default setting is level 6. Pressing the remote once will increase the sensitivity by one level ie to level 7. The LED will then flash seven times to confirm the new level. Pressing the remote again will increase the sensitivity to level 8 (max). Pressing the remote again will return the adjustment to level 1 (least sensitive). Once you have adjusted the sensitivity level to the desired setting, turn the ignition on to exit this mode.   |
| PAT™ Past Alarm Trigger Memory | 10 | SELECT to replay memory.        | <p>After pressing the remote 10 times to enter this mode, turn the ignition off. Your Rhino Alarm offers a unique memory that stores the ten last reasons why the alarm was triggered. This memory cannot be erased.</p> <p>2 Beeps, 2 Flashes - Shock sensor alarm<br/> 3 Beeps, 3 Flashes - Ignition<br/> 4 Beeps, 4 Flashes - Power Fail Alarm<br/> 6 Beeps, 6 Flashes - Negative trigger/Door</p> <p>If two previous alarms were recorded ie voltage drop and shock sensor the LED will flash and the siren will beep once for voltage drop, then no noise for 1 second then beep three times for shock sensor. <b>The last memory heard is the most recent alarm sector triggered.</b> Turn the ignition to on to exit this mode.</p> |
| Installer Mode                 | 11 | SELECT The Mode Required        | <u>After pressing the remote 11 times to enter this mode, turn the ignition to off.</u> This mode allows the installer / owner to verify that each trigger of the alarm system is working, without having to arm & disarm the system each time & set off the siren. The siren will beep and the blinkers will flash to indicate a trigger eg push the bonnet switch, open a door, hit the vehicle. The siren will beep four times to indicate a pre-warning impact sensor detection, or once to indicate full alarm trigger level. <u>Turn the ignition to on to exit this mode.</u>   |

# WIRING INSTRUCTIONS FOR RHINO GXa ALARM

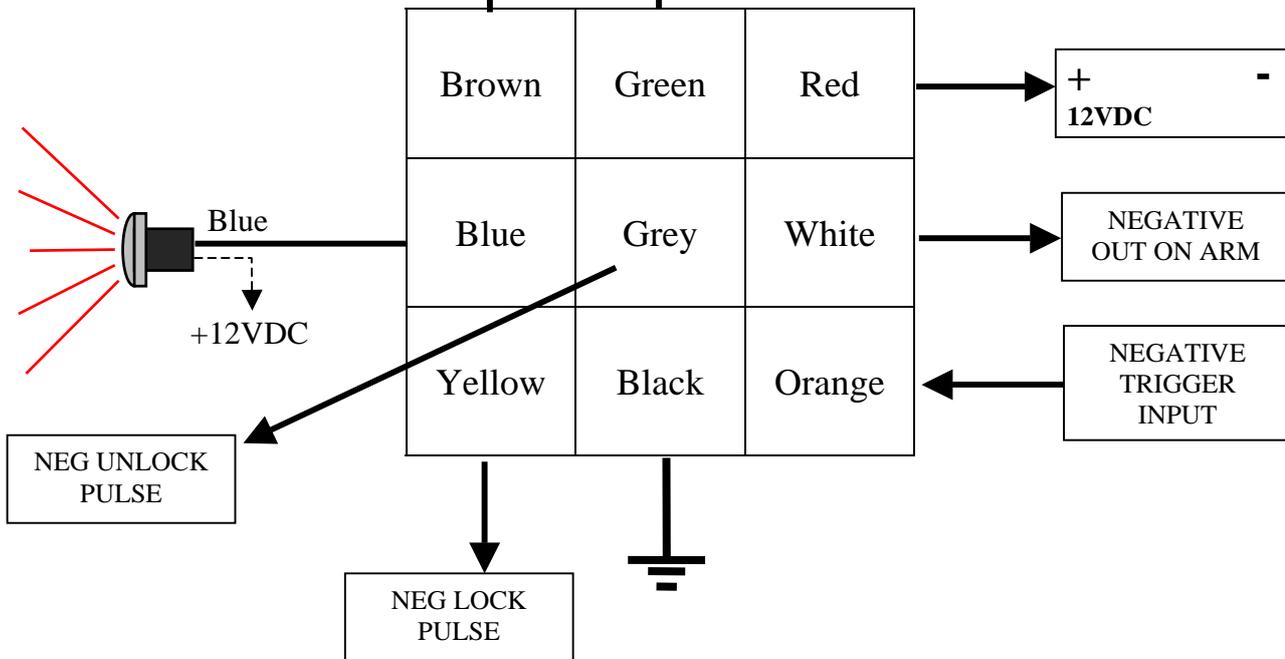
|               |   |
|---------------|---|
| <b>RED</b>    | - <b>Positive Power.</b> Connect to constant +12 volts . Preferably via the fuse box at the point where the interior light circuit is powered. Current (voltage) sensing will not work if this procedure is not followed.   |
| <b>BLACK</b>  | - <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 for 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 GXa ALARM WIRING DIAGRAM

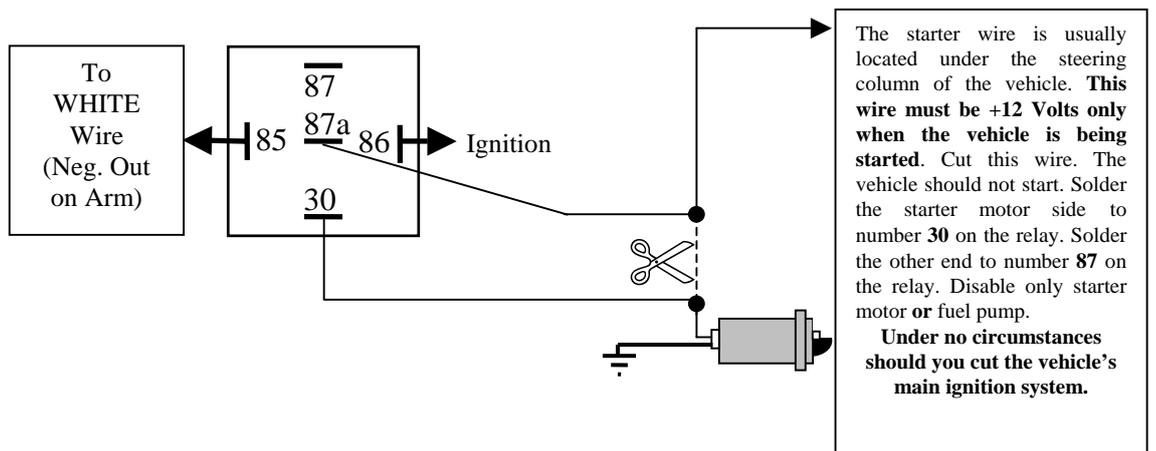
REFER TO WIRING INSTRUCTIONS ON PAGE 5 FOR FULL EXPLANATION



To Parking Light Circuit (10Amp)

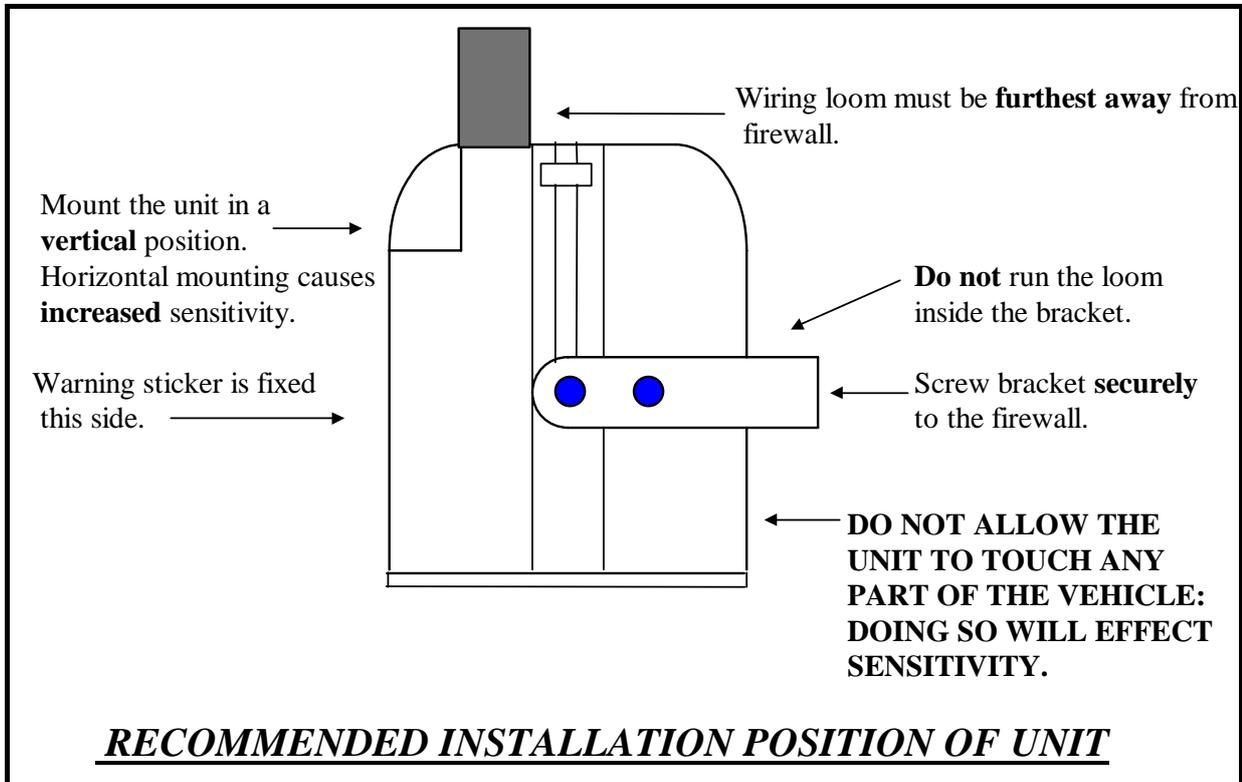


## OPTIONAL ENGINE IMMOBILISATION CIRCUIT: Use 40Amp Changeover Relay as shown



## 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..



**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.

## **WARRANTY TERMS & CONDITIONS**

RhinoCo Technology (The Company) warrants its products to be in conformance with its own plans and specifications and to be free from defects in materials and workmanship under normal use and service for 12 months from the date stamp control on the product, or for products not having a date stamp, for twelve months from the date of original purchase unless the installation instructions or catalogue sets forth a shorter period, in which case the shorter period shall apply. The Company's obligation shall be limited to repairing or replacing, at its option, free of charge for materials or labor, any part which is proved not in compliance with The Company's specifications or proves defective in materials or workmanship under normal use and service. The Company shall have no obligation under this Limited Warranty or otherwise if the product is altered or improperly repaired or serviced by anyone other than The Company.

**For warranty service, return transportation prepaid, to RhinoCo Technology, 9 Hannabus Place McGraths Hill NSW 2756 Australia.**

There are no warranties, expressed or implied, of merchant ability, or fitness for a particular purpose or otherwise, which extend beyond the description on the face hereof. In no case shall The Company be liable to anyone for any consequential or incidental damages for breach of this or any other warranty, express or implied, or upon any other basis of liability whatsoever, even the loss or damage is caused by its own negligence or fault.

The Company does not represent that the products it sells may not be compromised or circumvented; that the products will prevent any personal injury or property loss by burglary, robbery, fire or otherwise; or that the products will in all cases provide adequate warning or protection. Customer understands that a properly installed and maintained alarm system may only reduce the risk of a burglary, robbery, or fire without warning, but it is not insurance or a guarantee that such will not occur or that there will be no personal injury or property loss as a result.

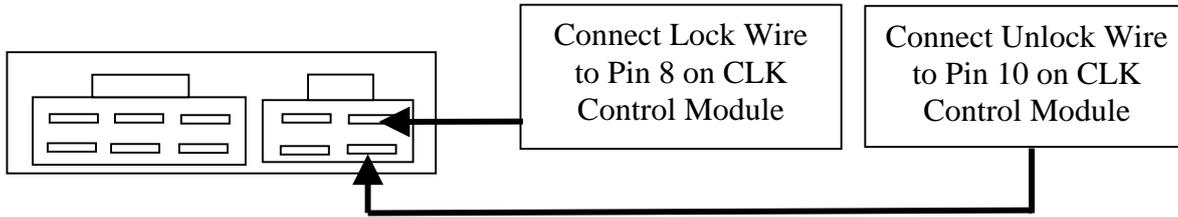
Consequently, The Company shall have no liability for any personal injury; property damage or other loss based on a claim the product failed to give any warning. However, if The Company is held liable, whether directly or indirectly, for any loss or damage arising under this limited warranty or otherwise, regard less of cause or origin, The Company's maximum liability shall not in any case exceed the purchase price of the product, which shall be the complete and exclusive remedy against The Company.

This warranty replaces any previous warranties and is the only warranty made by The Company on this product. No increase or alteration, written or verbal, of the obligations of this Limited Warranty is authorised.

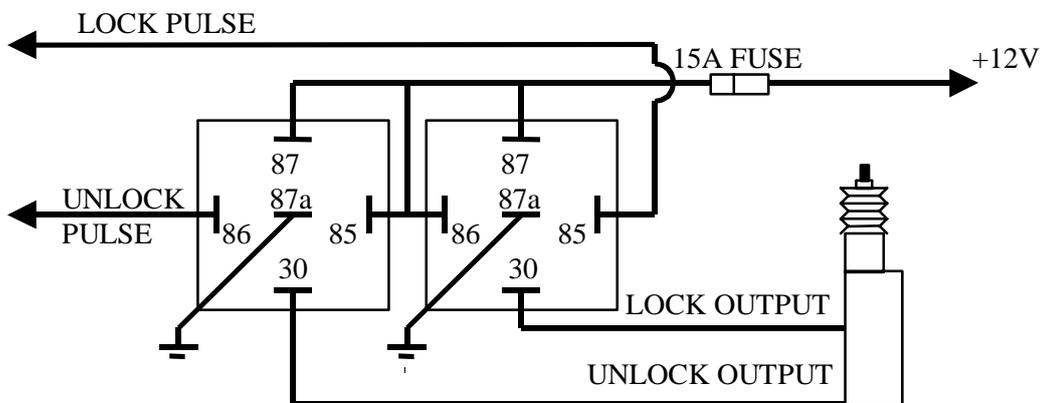
# CENTRAL LOCKING CONNECTION DIAGRAMS FOR RHINO GXA CAR ALARM

All relays depicted are changeover type.

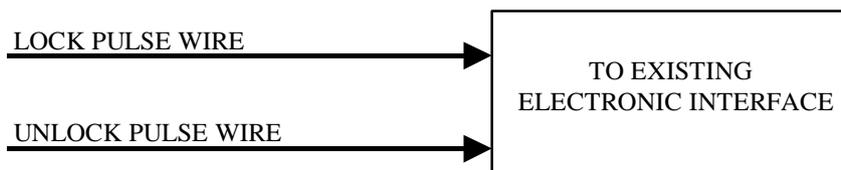
## CONNECTING TO RHINO CENTRAL LOCKING KIT (CLK)



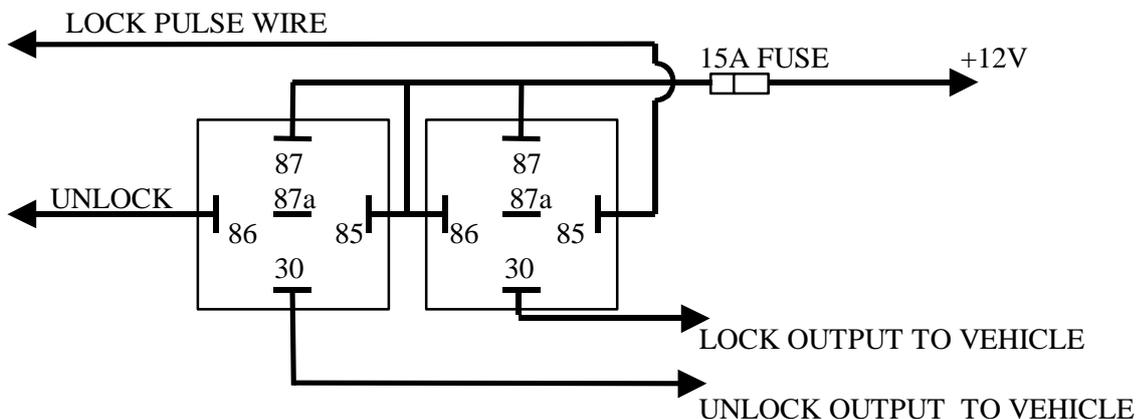
## INSTALLING A NEW MOTOR – often required in vehicles that have factory locking but have no motor in the driver’s door, or you would like “keyless entry” on driver’s door.



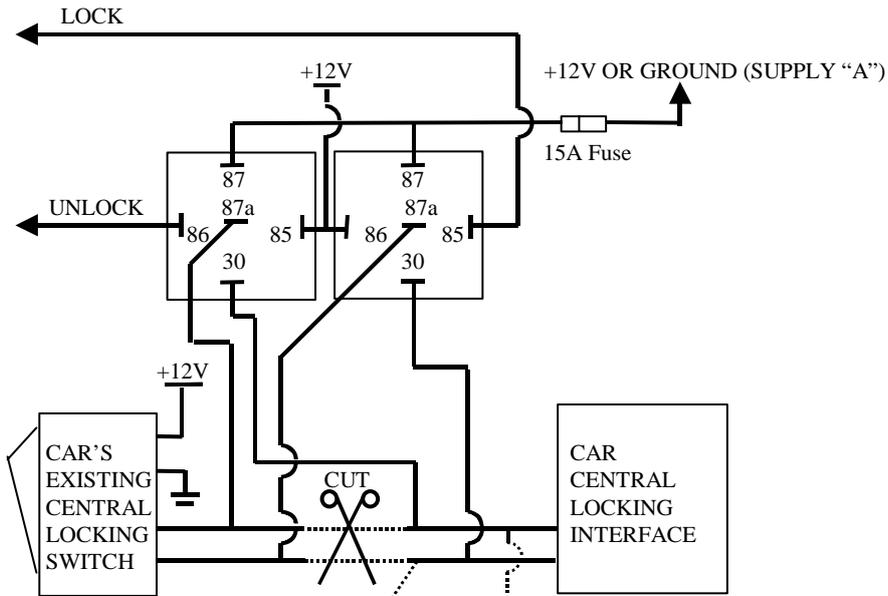
## “NEGATIVE TRIGGER” ORIGINAL CENTRAL LOCKING SYSTEM (LOW CURRENT)



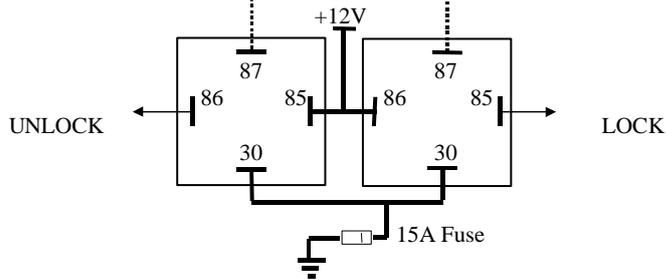
## FOR INTEFACING TO “POSITIVE PULSE” CENTRAL LOCKING SYSTEMS



**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.

