

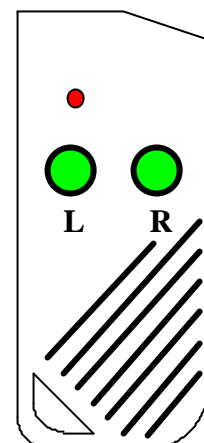
OPERATION INSTRUCTIONS FOR
ROLLING CODE ALARM: RA96
INSURANCE APPROVED SPLIT SYSTEM MODEL WITH
ENGINE IMMOBILISATION AND BOOT RELEASE



MADE IN AUSTRALIA

EMERGENCY PANIC BUTTON OPERATED VIA REMOTE

The panic feature is activated by pressing the right button on the remote control transmitter for 3 seconds. This sets off the siren. To cancel “panic”, press the right button on the transmitter for 1 second. NOTE: Panic does not work when the ignition is on by requirement of Australian Law (EPA).



TO ARM/DISARM ALARM

The alarm is activated by pressing the **RIGHT** button on the remote control transmitter. 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 **RIGHT** button again. The blinkers will flash twice and the siren will beep twice. THE ALARM IS NOW OFF.

For audible arm / disarm use the **RIGHT** button.

For silent arm / disarm hold **BOTH** buttons down for approximately **4 seconds**.

PAT™ PAST ALARM TRIGGER MEMORY

If the alarm was triggered by an intruder while your alarm was set, it will beep the siren and flash the blinkers four times on disarm. The system will also store the ten last times the alarm has been activated in its memory, and can tell you what has triggered the system. Please refer to “Features used by Installers/Service men” contained later in this instruction.

DOME LIGHT EXTENSION

The interior light will be automatically illuminated for 20 seconds when the driver disarms the alarm. This allows the owner to verify that the vehicle is safe to enter plus giving the added convenience of being able to see inside the vehicle even when the doors are closed. The interior light will automatically turn off if the ignition is turned on, or if the alarm is armed again. This feature is automatically disabled when passive arm and auto rearm are enabled.

DOOR AJAR WARNING FEATURE

If the vehicles doors are not properly closed when you try to activate your alarm system, the blinkers will flash and the siren will continuously beep for 3 seconds to alert you that the vehicle is not secure.

SELECTABLE PASSIVE ARM & RE-ARM FEATURE

These two features as outlined below can be turned on only if desired by the owner. When the alarm initially has power connected to it, or when the system is turned off by the master switch on the back of the siren, these features will be turned off.

PASSIVE ARMING: The alarm can automatically arm itself one minute 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 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.

These features can either be both activated or both deactivated. To turn the features on/off follow this procedure:

- A) Turn the ignition on. N.B. The bonnet must be closed.
- B) Immediately press the **right** button on the remote control once only.
- C) Immediately turn the ignition off.
- D) 1. If you turned the features **on**, the dash LED will flash once and the siren will beep **once** after the ignition is turned off.
2. If you turned the features **off**, the dash LED will flash twice and the siren will beep **twice** after the ignition is turned off.

BOOT RELEASE - Available on cars fitted with electric boot release motors.

The alarm is fitted with remote boot release capability. This feature enables the user to unlock the boot by pressing the **left** button for **3 seconds**. The boot will unlock and the alarm will disarm without audible beeps. NOTE: For safety reasons the remote boot release will not work when the ignition is on.

REMOVING OR ADDING ALARM SENSORS VIA THE REMOTE CONTROL

~ To turn the Auxiliary and Shock sensor on or off, follow the procedures below;

- A. Turn the ignition on.
- B. Immediately press the Left button on the remote control once only.
- C. Immediately turn the ignition off.
- D. 1. If you turned the Auxiliary (Ultrasonic or Microwave Detector) and Shock Body Impact Sensor **on**, the dash LED will flash once and beep **once** after the ignition is turned off.
2. If you turned the Auxiliary (Ultrasonic or Microwave Detector) and Shock Body Impact Sensor **off**, the dash LED will flash twice and beep **twice** after the ignition is turned off.

PRE-ALERT IMPACT WARNING WITH ETS™

This special feature provides a two stage impact sensing system. It gives the security conscious owner a very sensitive impact sensor that will give a potential thief prior warning that the vehicle is protected by this most formidable alarm system. On detection the siren will simply beep for a few seconds to warn away the 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 the impact caused by any thief attempting to break in or other heavy impacts. This process allows a trouble free sensitivity that ordinary alarms simply can not provide.

LEARNING NEW TRANSMITTERS

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

- A.** Turn the vehicles ignition on.
- B.** Immediately press and hold the right button on the original remote control until the siren starts to beep (approximately 4 seconds) and then release the button.
- C.** Immediately press and hold the right button on the new remote control for at least 4 seconds.
- D.** Turn the vehicles ignition off.
- E.** The new remote control is now programmed into the alarm.

RHINO ALARM MODEL: RA96 **SYSTEM FEATURES**

- ~ All Microprocessor Controlled
- ~ Rolling Code Technology (Anti-Scanning, Anti-Code Grabbing)
- ~ Two SSR™ Solid State Remote Controls with Two Function Operation
 - ~ Long Life Lithium Cell Remote Control Batteries
 - ~ Ultra-Bright Red Flashing LED Light
- ~ Intelligent Pre-Alert Impact (Shock) Sensor with ETS™
 - ~ Personal Panic Button via Remote Control
 - ~ Automatic Siren Reset Period (30 Seconds)
 - ~ Arming and Disarming Confirmation Beep
 - ~ Visual Arming and Disarming via Blinkers
 - ~ Selectable Current Sensing Circuit
 - ~ All Points of Entry Protection
- ~ Passive Arming Programmable via Remote Control
 - ~ Dome Light Extension
 - ~ Door Ajar Warning (If a Door is Left Open)
 - ~ Automatic Re-arm in case of Accidental Disarm
- ~ Auto Re-lock for Accidental Disarm where Central Locking is connected
 - ~ PAT™ Past Alarm Trigger Memory History Reporting Mode
 - ~ Service and Override Mechanical Keyswitch
 - ~ Safety Circuit Prevents Arming While Ignition On
- ~ Learning Mode for Optional Transmitters (Remote Controls)
 - ~ Negative Pulse Central Locking Interface
 - ~ Engine Immobilisation
 - ~ Quiet Arming Selectable via Remote Control

~ Impact Sensor and Ultrasonic Isolation Programmable via Remote Control
~ Electric Boot Release Output via Remote Control

FEATURES USED BY INSTALLERS / SERVICEMEN

1. INSTALLER / SERVICE MODE:

Service mode is accessed by turning the keyswitch to the off position. This enables complete deactivation of the system without using the remote control. This is normally done when other mechanical/electrical work is performed on the vehicle. Installer mode is accessed by turning the keyswitch to off then back to the on position. The installer test mode is used to quickly test and fault find; it is used to check each sector input when door, hood, aux or voltage drop is triggered. A signal is given via the blinkers, the dash LED light and the siren.

2. IMPACT SENSOR AND PRE-ALERT ADJUSTMENT: There are only two positions of Impact (Shock) Sensor and Pre-Alert adjustment, and this is based on the position mounting of unit. When the unit is fitted in a horizontal position, the impact sensor and pre-alert are more sensitive. When fitted in a vertical position, they are less sensitive.

3. PAT™ PAST ALARM TRIGGER MEMORY READ OUT VIA SIREN AND LED:

To access the PAT™ memory, turn the ignition to on with the bonnet opened i.e. bonnet switch grounded. By pressing the remote control once, the alarm history is indicated via the siren and LED. The memory is cleared whenever the power is removed from the alarm or if the keyswitch is turned to off on the SB41 siren(service mode).

- 1 Beep, 1 Flash - Voltage Drop Alarm
- 2 Beep, 2 Flashes - Not Used On This Model
- 3 Beep, 3 Flashes - Shock Sensor Alarm
- 4 Beep, 4 Flashes - Power Fail Alarm
- 5 Beep, 5 Flashes - Ignition Alarm
- 6 Beep, 6 Flashes - Aux Alarm
- 7 Beep, 7 Flashes - Door Alarms
- 8 Beep, 8 Flashes - Bonnet / Boot Alarm

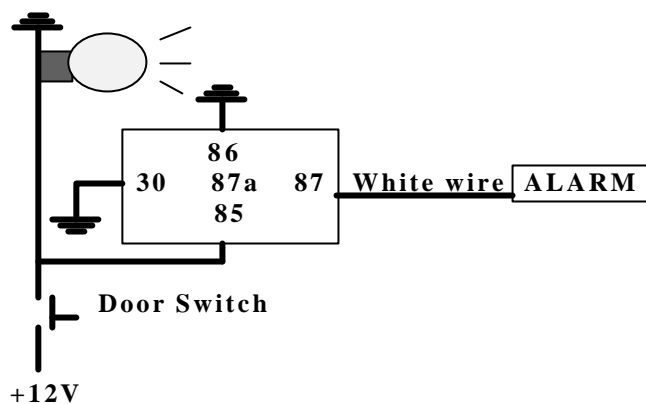
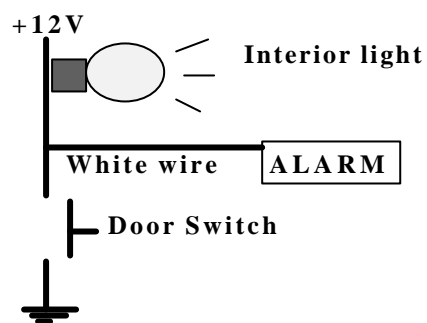
If two previous alarms were caused by i.e. voltage drop and shock sensor the LED will flash and the siren will beep once for voltage drop, then no noise for 1 second then beep three times for shock sensor. The memory will hold ten alarm memories. **The last memory heard is the most recent alarm sector triggered.** To exit the memory mode, turn the ignition off and close the bonnet.

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.



WIRING INSTRUCTIONS

RED	- 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.
BLACK	- CONNECT TO A SUITABLE EARTH ON THE CAR BODY
ORANGE (x2)	- CONNECT TO THE LEFT AND RIGHT INDICATOR CIRCUITS OF THE VEHICLE TO FLASH THE INDICATORS
YELLOW	- CONNECT TO A +12 VOLTS IGNITION SWITCHED LEAD, WHICH <i>DOES NOT FALL TO 0 VOLT WHEN THE ENGINE IS CRANKED</i>
DARK BLUE	- CONNECT TO PIN SWITCHES FOR BONNET - CONNECT TO PIN SWITCHES FOR BOOT (PLEASE NOTE: IT IS ADVISABLE TO WIRE THE BOOT TO THE DOOR SWITCHES: THIS WILL PROVIDE "DOOR AJAR" WARNING ON THE BOOT, AND ALSO SIGNAL THE AUTO RE-ARM FEATURE TO CANCEL IF THE BOOT IS OPENED BY THE OWNER ON DISARMING THE SYSTEM.)
WHITE	- CONNECT TO EXISTING DOOR SWITCHES. (PLEASE NOTE: ONLY NEGATIVE SWITCHING DOORS, IF POSITIVE DOOR SWITCHING - MUST USE RELAYS TO REVERSE TO NEGATIVE - SEE DIAGRAM)
GREEN (X2) Inside black cover	- LOCATE THE POSITIVE FEED WIRE TO THE STARTER, CUT THAT WIRE AND JOIN THE TWO GREEN WIRES TO EITHER END OF THE STARTER FEED WIRE WHICH YOU HAVE JUST CUT
GREEN (X2) Outside black cover	- LOCATE THE POSITIVE FEED WIRE TO THE FUEL PUMP, CUT THAT WIRE AND JOIN THE TWO GREEN WIRES TO EITHER END OF THE FUEL PUMP FEED WIRE WHICH YOU HAVE JUST CUT
YELLOW/ BLACK	- THIS IS A SWITCHED NEGATIVE OUTPUT (-VE 150mA). CONNECT TO THE NEGATIVE WIRE (USUALLY BLACK) ON ANY ACCESSORY USED i.e. ULTRASONIC / GLASS BREAKAGE / MICROWAVE DETECTORS OR ETC
LIGHT BLUE	- THIS IS A NEGATIVE TRIGGER, AND SHOULD BE CONNECTED TO THE OUTPUT CIRCUIT WIRE ON ANY ACCESSORY TO BE USED. (ie ULTRASONIC, MICROWAVE, OR GLASS BREAK DETECTORS, ETC.)
BROWN	- THIS IS THE NEGATIVE OUTPUT (150mA MAXIMUM) FOR THE BOOT RELEASE. (Optional for use where electric boot release is to be connected)
VIOLET/BLACK	- NEGATIVE TRIGGER ON ALARM TO BE USED TO INTERFACE TO PAGER OR OPTIONAL SIREN (100mA MAXIMUM)
ORANGE/BLACK	- NEGATIVE PULSE LOCK SIGNAL
PINK/YELLOW	- NEGATIVE PULSE UNLOCK SIGNAL
PINK	- CURRENT SENSING OVERRIDE. CONNECT TO POSITIVE POWER TO DISABLE CURRENT SENSING
RED/WHITE	- NEGATIVE TRIGGER TO SIREN. CONNECT TO THE BROWN WIRE OF AN SB41.
VIOLET/YELLOW	- ALARM OVER RIDE. CONNECT TO THE WHITE WIRE ON AN SB41.

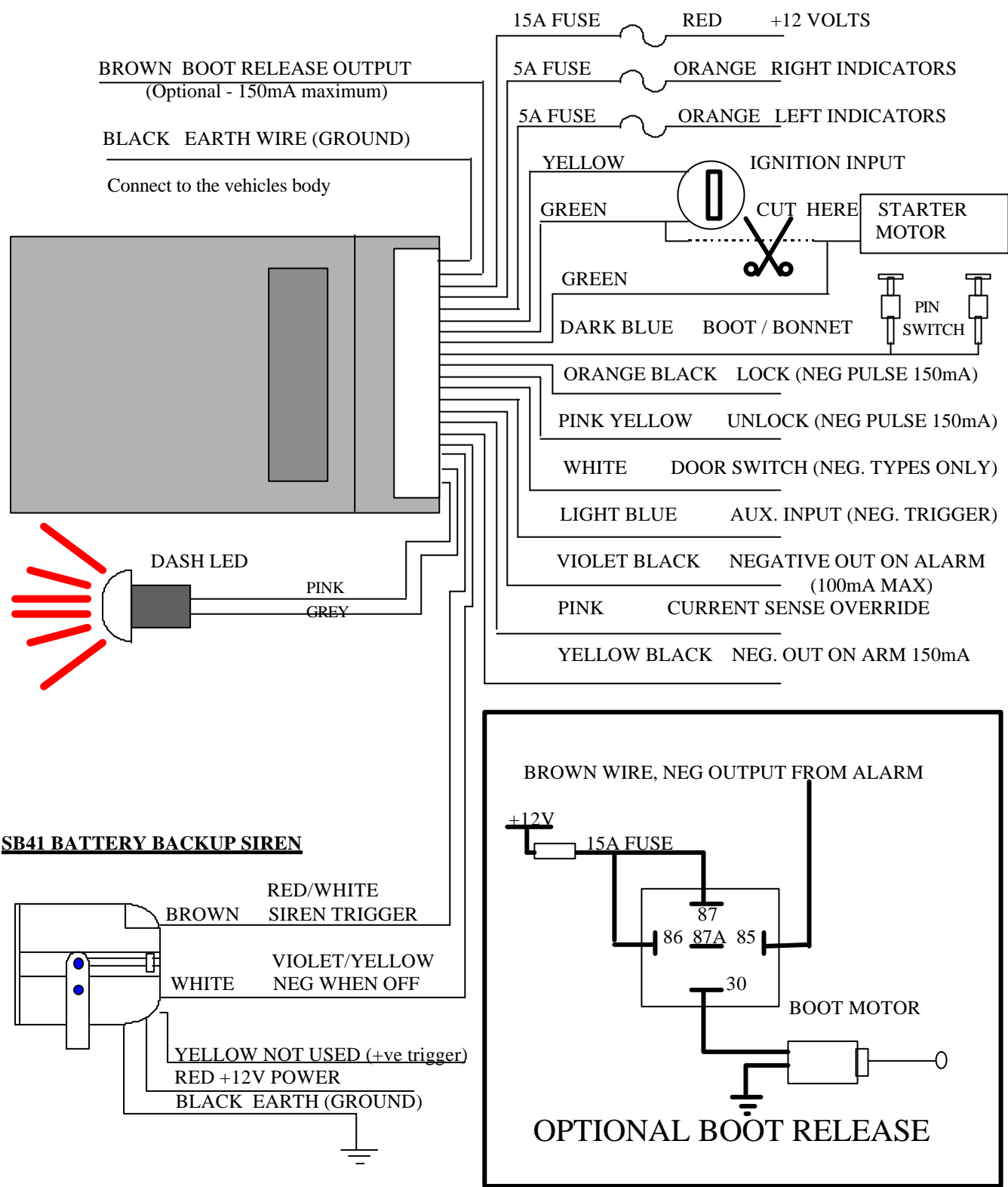
CURRENT SENSING

The alarm is fitted standard with current sensing. This feature incorporated in Rhino systems has been proven to be very reliable. The alarm will detect any sudden drop in voltage in the vehicle's electrical system, for example if the interior light comes on, or if the electrical system shows a voltage drop through tampering.

If removal of this feature is necessary, this can be achieved by connecting the pink wire coming out from the loom tubing to the red power wire + 12V.

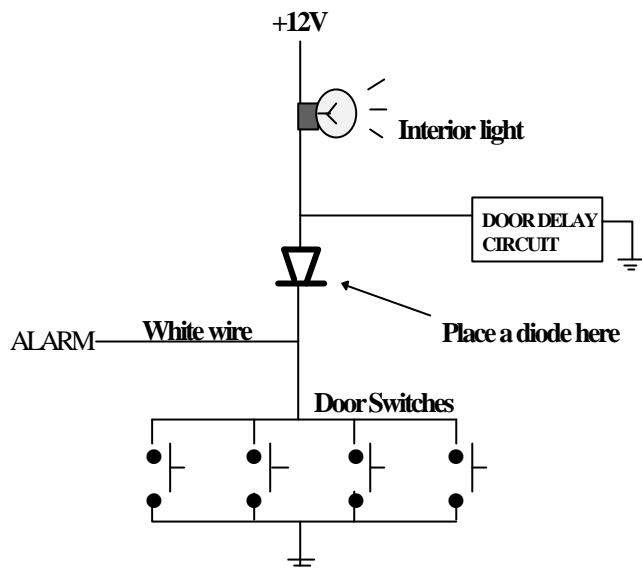
WARNING: If turbo cooling fans run after the ignition key is turned off, you then must connect the pink wire to the positive power feed wire of the electric cooling fan. This will override the fan from causing false alarms due to voltage drop.

ALARM WIRING DIAGRAM

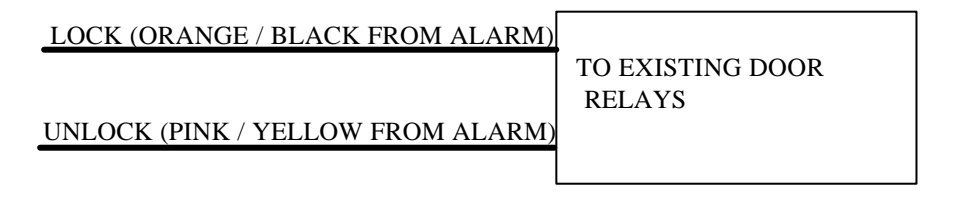


IMPORTANT NOTE: Vehicles fitted with an interior light delay.

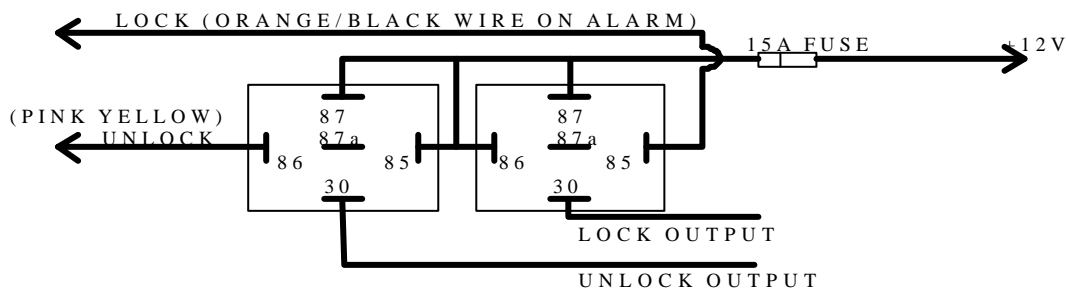
Vehicles fitted with an interior light delay require a diode to be added to prevent the alarm giving a door ajar warning. Please follow the wiring diagram below:



FOR “NEGATIVE TRIGGER” ORIGINAL POWER LOCK SYSTEM

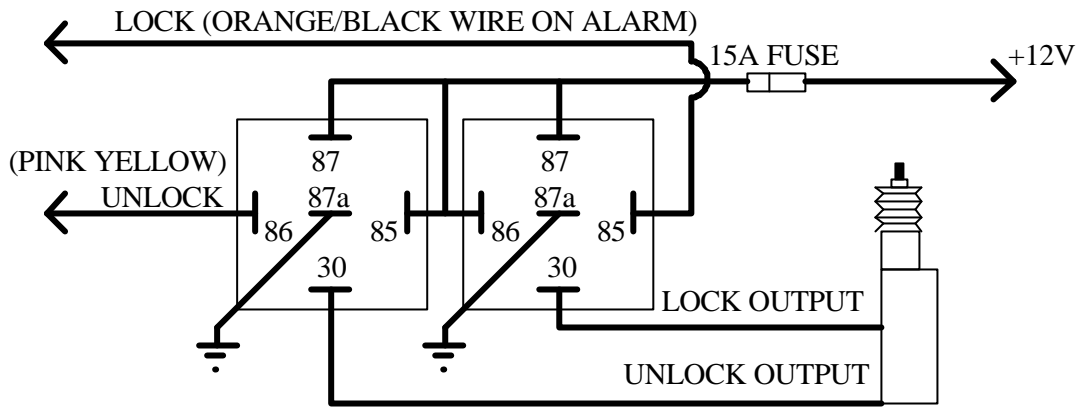


FOR “POSITIVE PULSE” POWERLOCK SYSTEM
CONNECT OPTIONAL RELAYS AS SHOWN



TO INSTALL NEW DOOR LOCK MOTORS

CONNECT OPTIONAL RELAYS AS SHOWN



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

