

# 5002/3 INSTALLATION INSTRUCTIONS

The Gemini 5002 and 5003 are remote controlled alarm units with built-in central door locking adapters, ultrasonic and total closure facility for selected vehicles.

The 5002 and 5003 are complete with cryptographic coded transmitters complete with Gemini Card which has an alphanumeric code printed on it to enable you to get a replacement at any time. The units offer panic facility. The system also includes passive arming and provides outlets for supplementary sirens and the vehicle hazard lights circuit. There is also the optional audible signalling for arming and disarming. (The 5003 incorporates its own internal battery).

## The alarms offer the following protections:

- The passenger compartment via pin switches and voltage drop sensing (can be isolated).
- Boot and bonnet by pin switches.
- Radio cassette and other accessories by "Accessory Loop" (can be isolated)
- The engine immobilisation is obtained by the interruption of starter crank wire at the back of the ignition switch.

## The alarms also have the following abilities:

- The control of additional sirens and negatively controlled horns.
- Can be connected to microwave, vibration and anti-lifting sensors.
- Can be connected to window closures and sunroof closures providing this operation DOES work off the drivers door key.
- The sensors can be isolated through the transmitter via R.S.D. function.
- **A.C.R. Function (Automatic Current Reduction).** For activation periods of 48 hours or more the unit will automatically switch off flashings LED and additional modules. This will save on current drain from the battery. If any attempted break-in occurs the alarm will trigger instantly.
- **STATUS L.E.D.** If the unit has been triggered, on disarming the system the LED will flash in a certain sequence to indicate which circuit has been violated.

## PRE-INSTALLATION CHECKS

Disconnect terminals of the battery and only reconnect after the installation is complete, giving consideration to the vehicle characteristics. Set the alarm switches as required in Table C<sub>1</sub>. The compact unit must be mounted under the bonnet, away from areas of intense heat and direct water spray. It must be installed using supplied bracket. The harness installation is illustrated in the diagram.

## WIRING INSTRUCTIONS REF. DIAGRAM No. 1.

	CABLE COLOURS	FUNCTION OF THE CONNECTION	CONNECTIONS TO CARRY OUT
1	RED	Positive alarm feed	If the voltage sensing is <b>activated</b> the <b>RED</b> wire must be connected to the interior light circuit in the main fuse box. If the voltage sensing is <b>de-activated</b> the <b>RED</b> wire can be connected to the main feed in the fuse box or directly to the battery positive terminal. The positive supply is protected by a 5 Amp fuse as supplied.
2	BROWN	Negative alarm feed	Connect the <b>BROWN</b> wire to a stable body earth using an existing body earth point or battery negative terminal.
3	RED-WHITE	Hazard Circuit Power Feed	The <b>RED-WHITE</b> wire must be connected to the main fuse feed or directly to the battery positive terminal, using the 10 Amp. fuse as supplied.
4	YELLOW	Ignition Live	Connect the <b>YELLOW</b> wire to an ignition positive feed. This wire <b>MUST</b> remain "live" whilst starting the engine. (It is most important to connect this wire as it will prevent the alarm from being operated with the ignition "on" or the engine running).
5	ORANGE	Hazard Lights	Locate the left and right hand-side indicator wires. Connect one <b>ORANGE</b> wire on to each wire.
6	GREY and WHITE	Engine immobilisation	This function is obtained by locating the engine starter crank wire at the rear of the ignition key switch. (refer to: Vehicle Workshop Manual). Cut this wire and connect one side to the <b>GREY</b> wire and the other side to the <b>WHITE</b> wire. Remember to connect the alarm <b>YELLOW</b> wire (see point 4).
7	GREEN	Boot Bonnet/Tailgate Pin Switches	If there are no original pin switches in the vehicle, use the switches supplied in the kit. The connections for the pin switches are made onto the <b>GREEN</b> wire, suitably mounted to avoid water channel and areas of direct water spray.

8	<b>GREEN-BROWN</b>	<b>Door Switches Pin</b>	Connect the <b>GREEN-BROWN</b> wire on to the courtesy light pin switch circuit. (If you connect on the door pin switches, it may be necessary to connect all the pin switches together).
9	<b>BLACK</b>	<b>Supplementary Siren</b>	Connect the supplementary sirens <b>RED</b> wire to the battery positive terminal. Connect the alarm's <b>BLACK</b> wire to the supplementary siren's <b>BLACK</b> wire. If you are not using a supplementary siren leave the <b>BLACK</b> wire disconnected and insulate.
10	<b>PINK</b>	<b>Positive Outlet When the Alarm is Armed.</b>	The <b>PINK</b> wire is a positive outlet when the alarm is armed for use with Gemini interface units (i.e. Gemini 2244).
11	<b>BROWN-BLACK</b>	<b>Accessory Loop (optional)</b>	Connect the <b>BROWN-BLACK</b> wire to a radio or fog lights negative. If this function is not to be used connect this wire to a stable body earth (see table C).
12	<b>BLACK</b>	<b>Aerial Leads</b>	The <b>BLACK</b> aerial lead must be located in a non-metallic area for best reception. It must not be coiled or connected at the body earth, as this would effect the system's performance.

13. **Sensing connection.** Connect the volumetric, vibration and anti-lighting sensors, colour to colour (i.e. GREEN-BLACK to GREEN-BLACK) on to the main alarm harness. This trigger circuit will not operate more than 3 times (see Table A).
14. **Ultrasonic heads.** These should be mounted with brackets provided at the top of each windscreen pillar facing the opposite corner of the vehicle. They must be connected correctly (i.e. RED sensor lead to RED socket, WHITE sensor lead to WHITE socket) and the leads must not be tightly coiled, cut or lengthened.
15. **Status LED.** Connect L.E.D. to harness as shown in diagram. The unit will give an intermittent feed to the LED with a reduced current draw. (Refer to Table B for sequence).
16. At this point you must check to see which type of central locking is fitted to the car. An easy way to do this is to try and lock all doors from the passenger's door lock. If it locks the driver's door, there is an actuator fitted. If it does not then there is no activator in the driver's door (refer to: Diagram 3, 4, 5, 6 as required).

**Ref.: Diagram No. 2**

For cars already equipped with electrical central locking with an actuator in the driver's door, and for vehicles with Gemini 2249/50 central door locking kit fitted, (i.e. BMW, Ford).

**Ref.: Diagram No. 3**

For cars already equipped with electro-pneumatic central locking with an actuator in the driver's door (i.e. Mercedes, Audi).

**Ref.: Diagram No. 4**

For cars already equipped with electrical central locking with an actuator in the driver's door and where the central locking is controlled only through an existing switch installed inside the passenger's compartment.

**Ref.: Diagram No. 5**

For cars already equipped with central locking without an actuator in the driver's door a Gemini 2305 must be used, (i.e. Nissan).

**Ref.: Diagram No. 6**

For cars already equipped with central locking with a micro switch and not an actuator in the driver's door, (i.e. Volkswagen, Saab) remove the existing micro switch and fit a Gemini 2306 in its place.

**FOR CARS WITH TOTAL CLOSE FACILITY**

**Ref.: Diagram N. 7**

For BMW Series 5, 7 and 8 after 1988, where it is possible to close central locking electric windows and sunroof and dead locking off the driver's door key.

**Ref.: Diagram No. 8**

For Mercedes and Audi, where it is possible to close the windows and sunroof off the driver's door key.

**Ref.: Diagram No. 9**

For Vauxall (Cavalier, Carlton Calibra), Jaguar, Audi 100 with original alarm and Porsche 928 GT 1991 onwards where it is possible to close windows and sunroof off driver's door key (sunroof on Porsche 928 GT and Audi 100 with O.E. alarm is possible).

**Ref.: Diagram No. 10**

A. Specific for Mercedes SE, SEL and SEC (W140, C140 and R129 Series), Volvo 480 ES 1992.

B. Specific for Volkswagen all models except Polo, Passat electric sunroof.

For these connections an additional relay (Gemini 2352) must be used with a diode on pins 85 - positive 86 - earth.

**ULTRASONIC ADJUSTMENT AND TEST PROCEDURE**

- a. Lower one of the front windows approximately 20 cm.
- b. Adjust the sensitivity fully anti-clockwise.
- c. Plug L.E.D. into the back of the unit.
- d. Arm the alarm and push your arm through the window. The L.E.D. will give a one second flash when movement has been detected. If L.E.D. does not flash, turn the sensitivity clockwise, until L.E.D. does pick up movement.
- e. Finally close all windows and gently go round the vehicle tapping the windscreen and window. If the alarm goes off you MUST reduce the sensitivity.
- f. Reconnect L.E.D. into harness and fix fairlead onto siren with screws provided (fig. D).

- g. Reconnect battery to terminal. Turn the external key switch to the "ON" position. The alarm acknowledges this operation as a disconnection and reconnection of the vehicles battery and for this reason will arm itself, after an exit delay time of 5 seconds. On the 5003 with the external key in "ON" position the battery back up circuits are operated, therefore, if the battery is to be disconnected for any reason (i.e. servicing) the external key switch must be turned anti-clockwise to the "OFF" position.

**DO NOT OVERTIGHTEN HARNESS GAITER SECURING SCREWS .**

**PLEASE NOTE: STEAM CLEANING THIS ALARM SYSTEM WILL CAUSE IRREPARABLE DAMAGE AND VOID ANY WARRANTY CLAIM.**

**TABLE A**

This table illustrates the respective arming period of each entry/sensor and the number of alarm cycles that each entry can generate.

<b>Exit Delay Time</b>	<b>Entry Sensors</b>	<b>No. of Alarm Cycles</b>
40 seconds	Door pin switches	3
40 seconds	Bonnet/boot/tailgate switches	3
5 seconds	Ignition live	Unlimited
40 seconds	Volumetric, vibration and anti-lifting sensors	6
40 seconds	Voltage drop sensor	Unlimited
5 seconds	Battery back-up sensor	5
5 seconds	Accessory Loop	3

**TECHNICAL DATA GEMINI 5002/3**

Power supply	12 VDC
Current Draw	12 mA
Working Temperature	- 30° + 85° C
Engine Immobilisation Relay Contacts	30 A
Visual Signalling Relay Contacts	20 A
Audible Tone Relay Contacts	2 A
Central Locking Relay Contacts	10 A
Immunity	50 V/m
Alarm Period	25 < > 30 sec.
Sound Level at 1 metre	122 dB
Minimum Power Absorption to Trigger	5 W

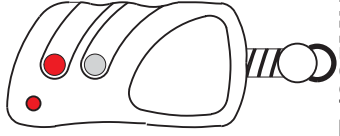
The manufacturer declines every responsibility for any possible defect or failure to the device and to the car's electric system due to a bad installation or to the overcome of the indicated technical features. The alarm has exclusively a dissuasive function against possible thefts.

# WIRING DIAGRAM

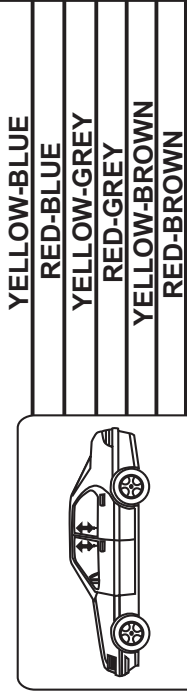
5003-5002



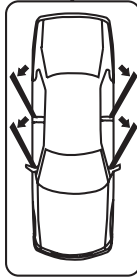
6108GE (325MHz)  
6108E (433MHz)



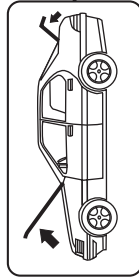
6008GE (325MHz)  
6008E (433MHz)



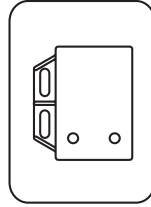
See diagram of centralised locks



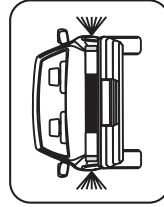
Door pushbutton



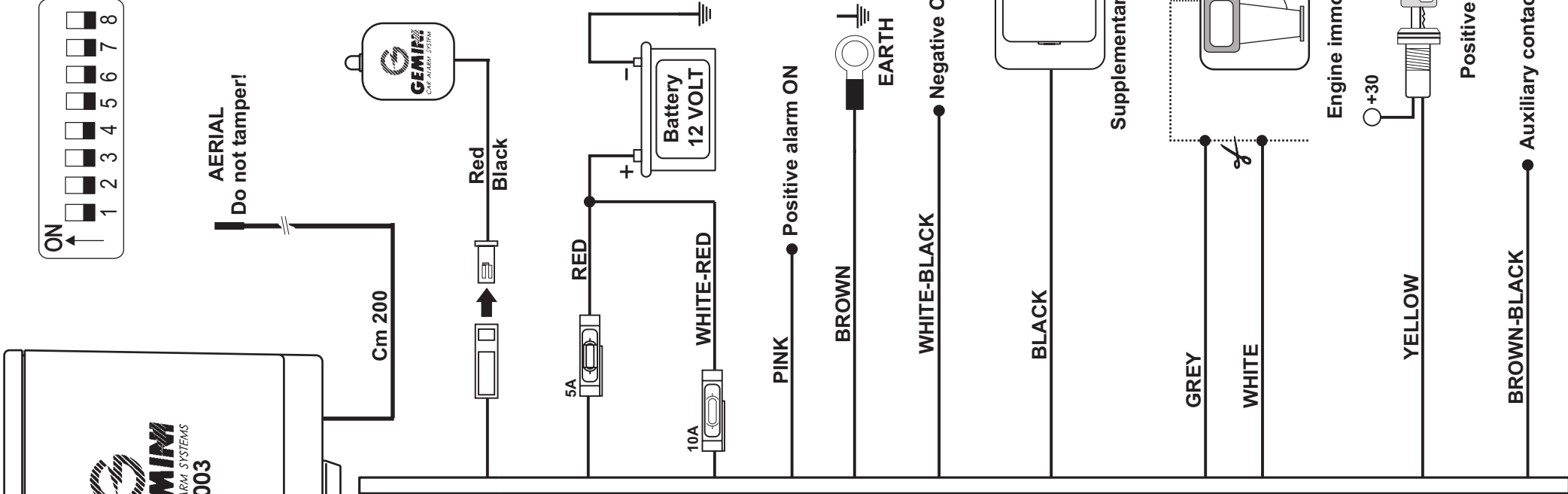
Bonnet / Boot pushbuttons



External Sensor inlet

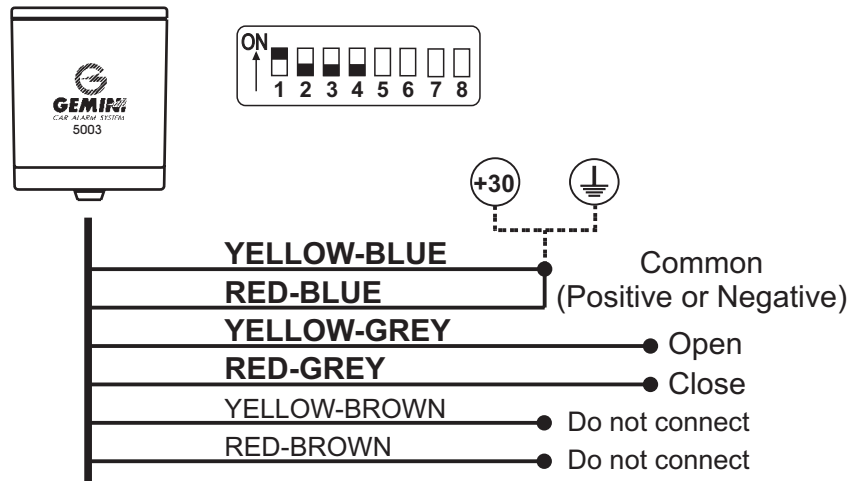


Turn indicators



For cars with electrical centralised door-locking with negative or positive control.

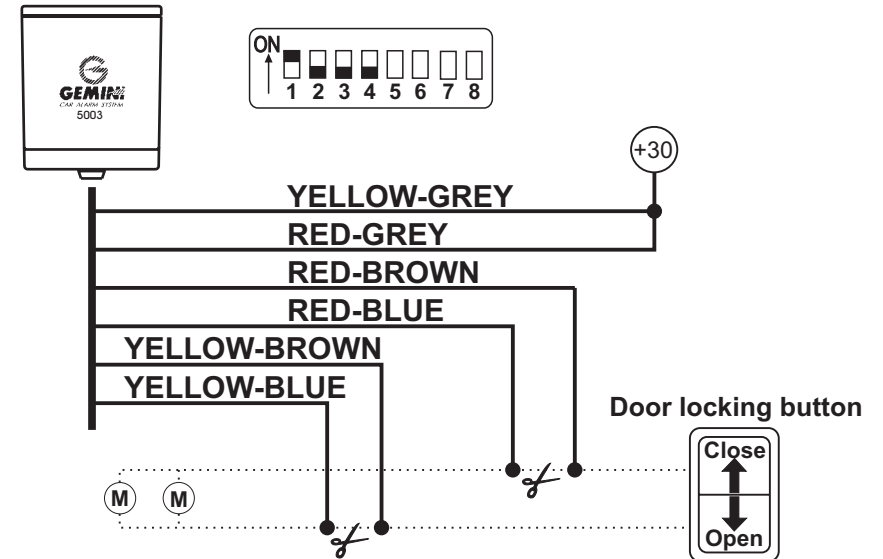
Diagram 2



EX : ALFA, FIAT, FORD, LANCIA, SAAB, SUZUKI IGNIS (02), JIMMY (02)

For cars with electric centralised door-locking controlled only by door-locking button.

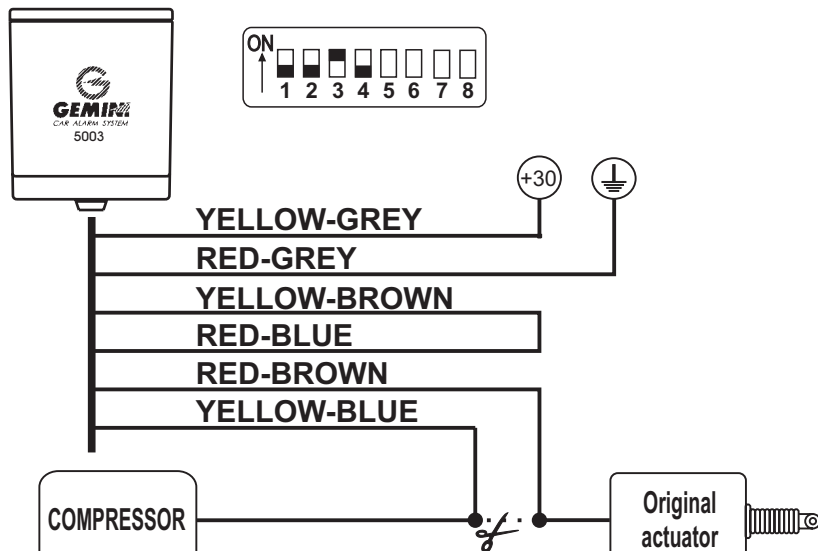
Diagram 4



EX : RENAULT TWINGO (<2000)

For cars with electro-pneumatic centralised door-locking

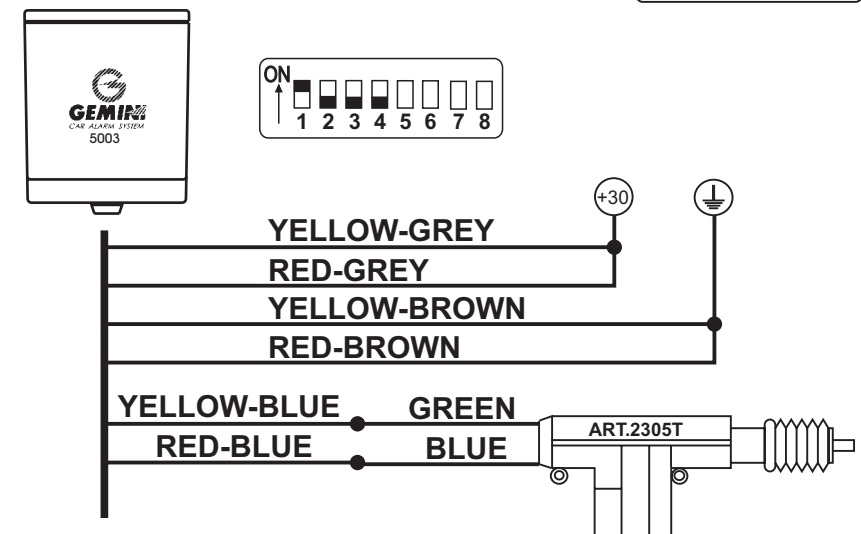
Diagram 3



EX : AUDI 80, MERCEDES 190.

For car with centralised door-locking without actuator in driver's side door.

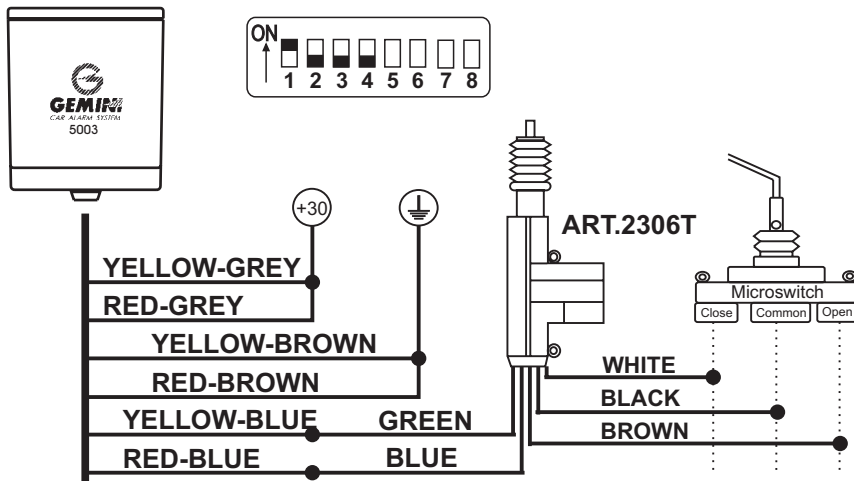
Diagram 5



EX : HONDA CIVIC 5p(96), HYUNDAI ACCENT (96), GALLOPER (98)

For cars with centralised door-locking with microswitch in driver's side door.

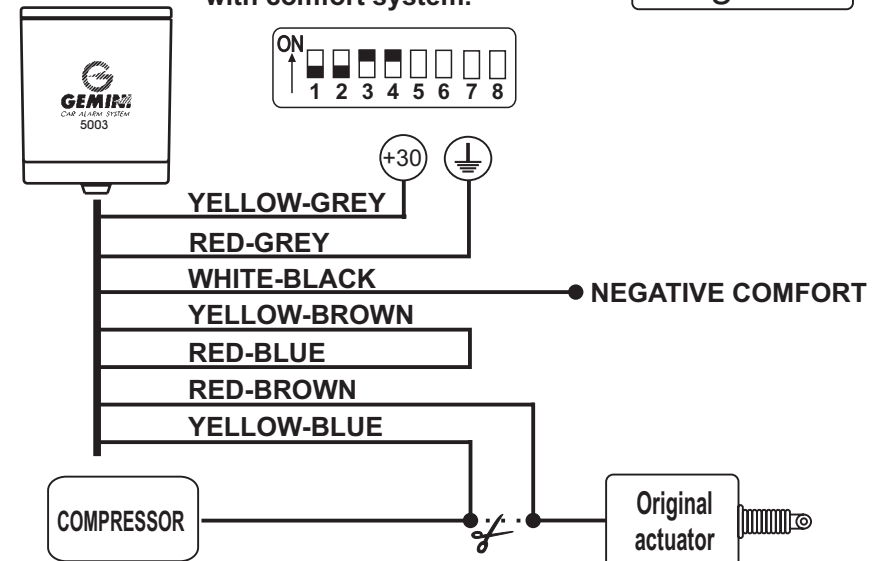
Diagram 6



NOTE : replace microswitch with Gemini art.2306T actuator.  
 EX : DAEWOO NEXIA, OPEL FRONTERA (<99).

For cars with electro-pneumatic door-locking with comfort system.

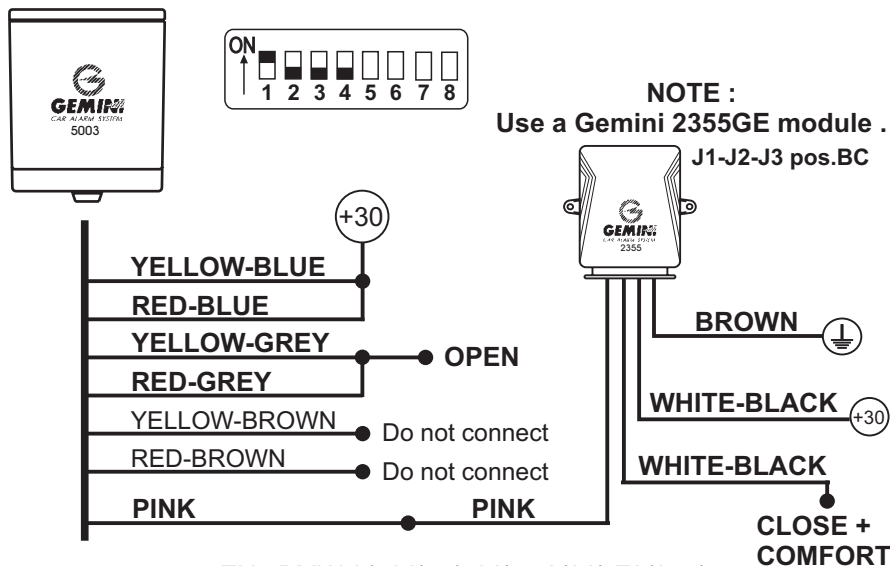
Diagram 8



AUDI 100, MERCEDES with pack-comfort system (<96).

For BMW cars with safety locking.

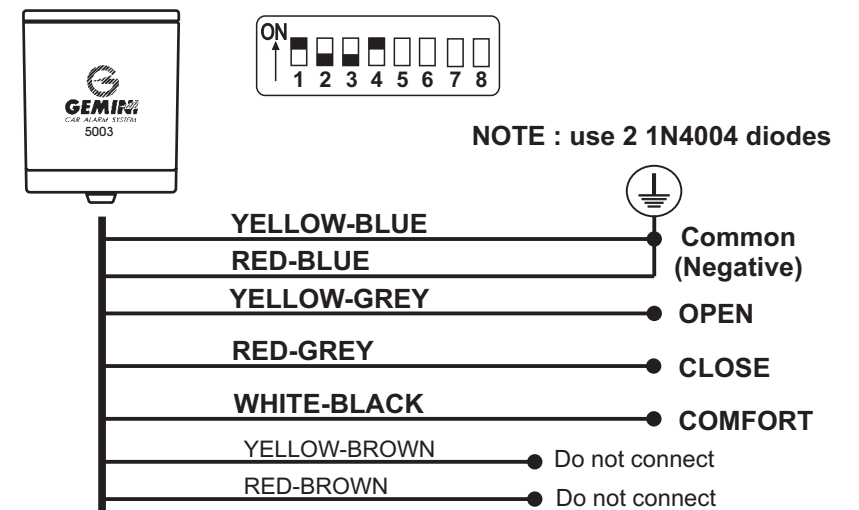
Diagram 7



EX : BMW 3(<98), 5(<96), 7-8(96), Z3(97>).

For cars with negative-control centralised door-locking and comfort system separate from locking.

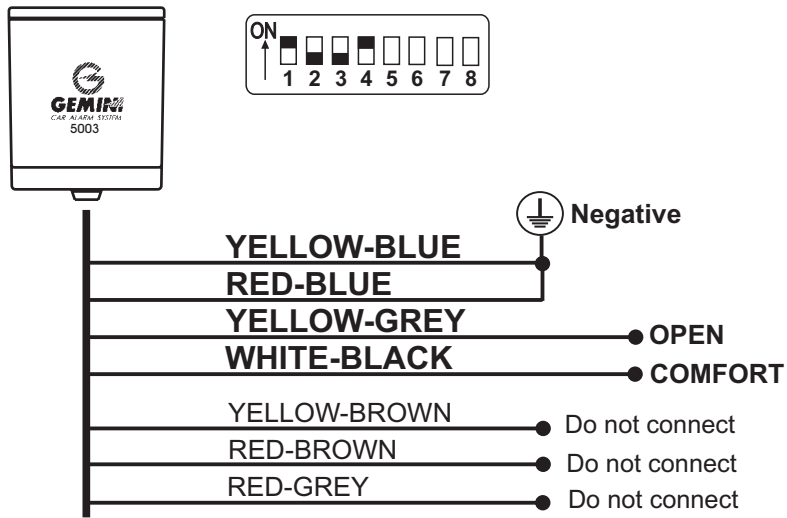
Diagram 9N



EX : AUDI A4 (<96), A6(<96), OPEL VECTRA (<96), OMEGA.

For cars with centralised door-locking and comfort system controlled by locking function.

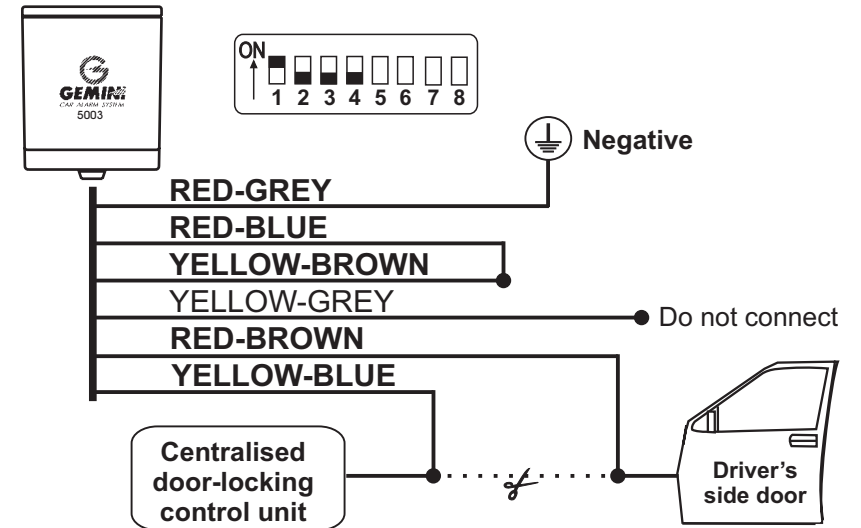
Diagram 10



EX : AUDI A3, A4 (97>), A6 (97>), BMW 3 (98), 5 (96>), OPEL, VW

For cars with electrical centralised door-locking with negative control only on closing.

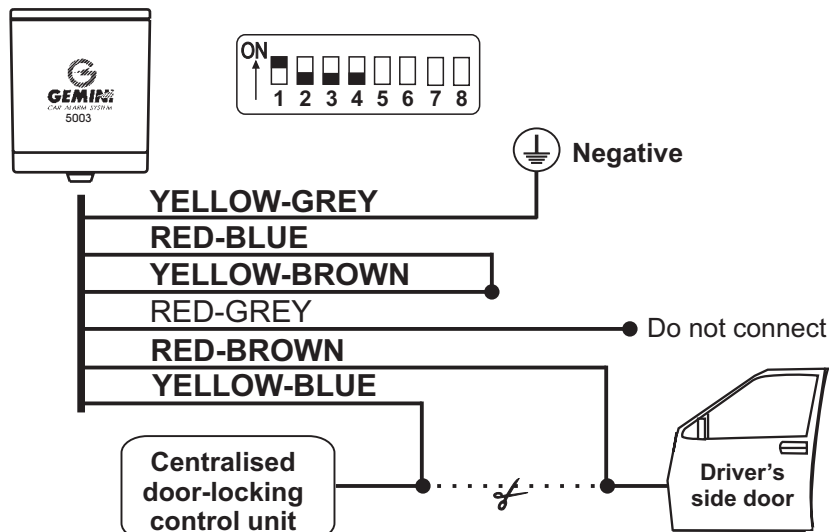
Diagram 23



EX : CITROEN XSARA, FIAT ULISSE (98), LANCIA Z (98), PEUGEOT 306

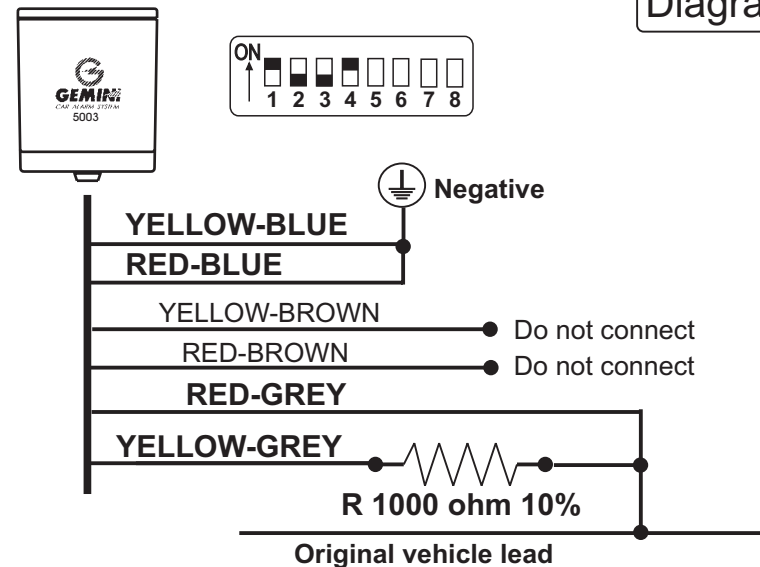
For cars with electrical centralised door-locking with negative control only on opening.

Diagram 22



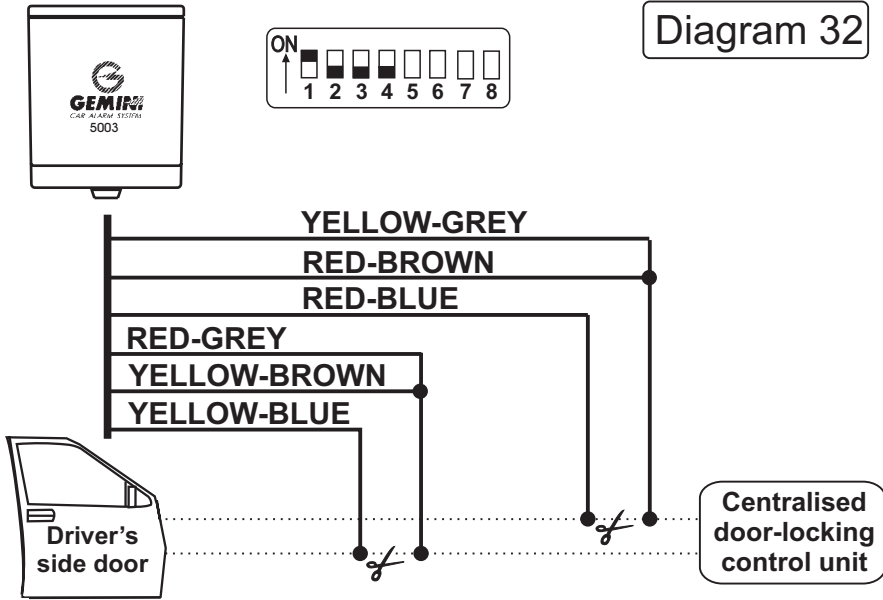
EX : NISSAN MICRA (>97), SUZUKI IGNIS (00), JIMMY (99)

Diagram 31



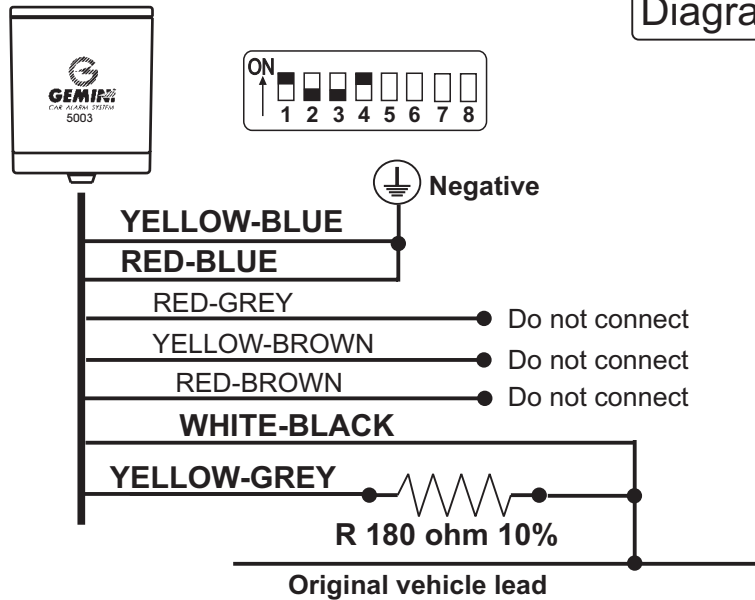
EX : SKODA FABIA, VW POLO (02>)

Diagram 32



EX : PEUGEOT 206 (2002), 307.

Diagram 37



EX : AUDI A3 (03), VW GOLF V (04)