#### **Door Locks**

WARNING: If the power door locks do not operate properly when the system is armed and disarmed, DO NOT USE THE VEHICLE'S DOOR LOCK SWITCH! If the control unit's door lock wires are miswired, permanent damage to the control unit or to the car's electrical system and door lock servos will result. If you require assistance, call the Clifford Technical Support Helpline PRIOR to wiring the door locks.

All Clifford systems provide power door lock interface capabilities and are able to interface with any power door lock configuration including some Mercedes Benz and Audi vehicles that require a 3-second lock pulse (pulse duration is installer-programmable) and with any car (VW's and Nissans, for example) that require double unlock pulse. If the vehicle is not equipped with power door locks, you may optionally add up to four #60-516 DoorLock Servos. Some systems may require adding relays.

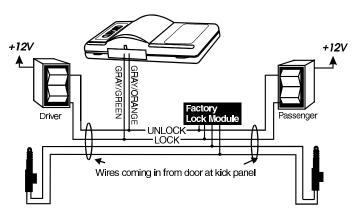
#### Determining the Door Lock System Type

- 1. Remove the door lock switch on the driver's side of the vehicle to reveal the switch wires.
  - a. If there are four or more wires, make the connections shown in Diagram 4 for reverse polarity.
  - b. If there are three wires, proceed to step 2.
  - c. If the vehicle is a Nissan and it does not have a door lock switch, find the single wire in the driver's kick panel that shows ground when the locks are unlocked and "open" when the locks are locked. Cut this wire and make the connections shown in Door Lock/Unlock Diagram 3.
- 2. Connect the negative voltmeter lead to ground and probe each wire while locking/unlocking. If the voltmeter show + 12v while activating the switch, make the connections shown in Door Lock/Unlock Diagram 1 for positive trigger. Otherwise, go to step 3.
  - a. On systems without lock/unlock relays (Arrow 3, etc.) you must program for positive door locks (factory setting is negative)when the system has been powered up.
- 3. Repeat step 2 with the negative voltmeter lead connected to +12v. If the voltmeter shows +12v while activating the switch, make the connections shown in Door Lock/Unlock Diagram 2 for negative trigger.
- 4. Locks controlled from the driver's door key require installation of just one #60-516 servo in the driver's door. Vehicles without factory power locks require a servo in each door. Mount the servo(s) and make the connections shown in Door Lock/Unlock Diagram 5 for adding servos.
- 5. On a vacuum-pump-type Mercedes Benz or Audi, make the connections shown in Door Lock/Unlock Diagram 6, then (if 1989 or older) program the system for a 3-second lock pulse.
- 6. Clifford systems can also provide two pulses (+ or -) for lock and/or two pulses (+ or -) for unlock required by some vehicles (such as some Nissans, VW's, and Audis). Wire the door locks following the steps above and select the 2x lock or unlock feature in installer-programming.

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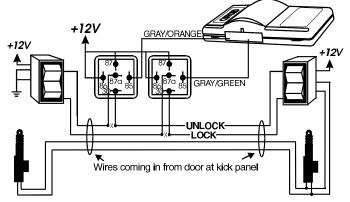
## Door Lock/Unlock Diagrams Arrow 3, Concept 100, Concept 200, IntelliGuard 6000, IntelliGuard 7000, OmniStart and Solaris

#### Diagram 1: Positive Trigger



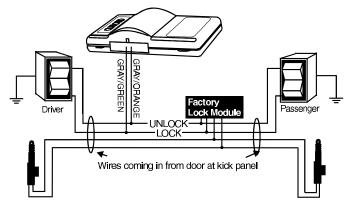
**NOTE:** Doorlocks must be programmed for positive outputs

#### Diagram 4: Reverse Polarity



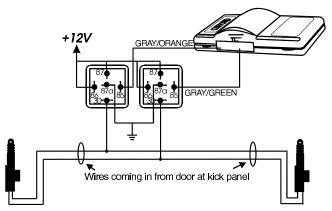
**NOTE**: Doorlocks must be programmed for negative outputs

#### Diagram 2: Negative Trigger



**NOTE:** Doorlocks must be programmed for negative outputs

#### Diagram 5: Adding Servos



NOTE: Doorlocks must be programmed for negative outputs

### Diagram 3: One-Wire Type (Some Nissan, Mitsubishi and Lotus cars)

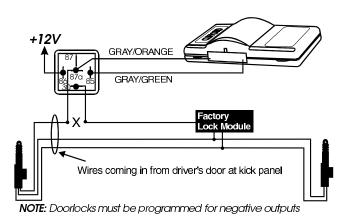
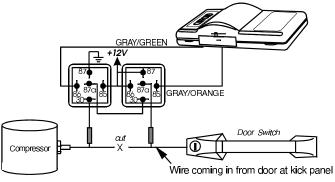


Diagram 6: Vacuum Pump



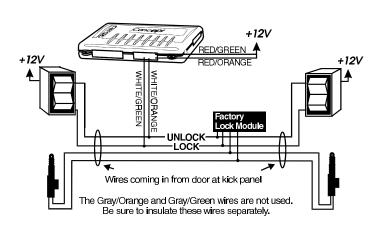
**NOTE:** Doorlocks must be programmed for negative outputs. For '89 and older vehicles, the system must be programmed for a 3 second pulse.

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# Door Lock/Unlock Diagrams Concept 400, Concept 600, IntelliGuard 8000, IntelliGuard 9000, IntelliGuard Millennia and AvantGuard 4

Diagram 1: Positive Trigger

Diagram 4: Reverse Polarity



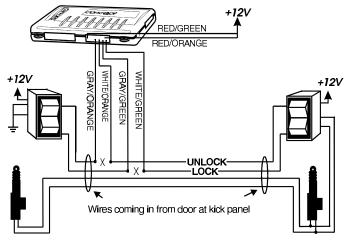
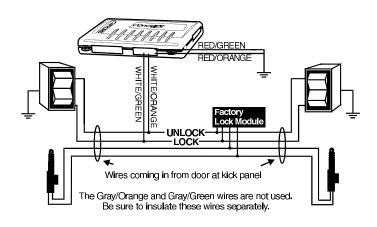


Diagram 2: Negative Trigger

Diagram 5: Adding Servos



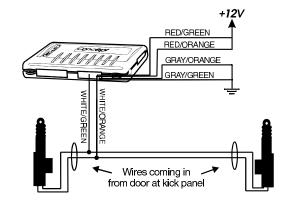
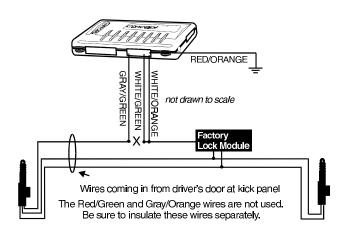
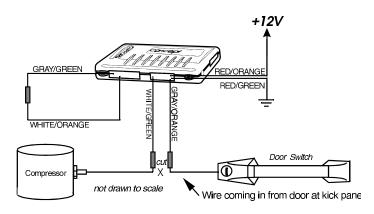


Diagram 3: One-Wire Type (Some Nissan, Mitsubishi and Lotus cars)

Diagram 6: Vacuum Pump





For '89 and older vehicles, the system must be programmed for a 3 second pulse.

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