



Please consider if this is the right product for your application. Newer vehicles and vehicles with locking columns and or security may make installation more difficult than intended.

**\*DISCONNECT BATTERY BEFORE INSTALLATION\***



Thank you for purchasing state-of-the-art electronics from Phantom Products. We hope you enjoy Touch n Go as much as we have.

Please keep in mind that it is the responsibility of the purchaser / installer to determine if this system is right for the intended application. It is also the responsibility of the purchaser / installer to observe proper and safe installation procedures. For example; using the proper gauge of wires to make connections, and installing a neutral safety switch between Touch n Go unit and Starter. Touch n Go was designed for the easiest possible installation, but it is still recommended that you consult a professional for assistance.

Please read and understand the manual completely before using or installing your Touch n Go ignition replacement system.

## Button Function

You will notice icons in this section that resemble a keyed ignition. These are a representation of the equivalent key position or function state Touch n Go is in.



**Off position:** Button will glow red in two different ways. A rapid flash, followed by a one second pause, means that security is active and Touch n Go is disabled. Touch n Go will not respond to touch input. This is because the security system (security optioned units only) has not detected the proper key fob, or the valet switch is in the on position. A slow fading red light, means that Touch n Go is enabled and security is deactivated due to the presence of the proper key fob, or a valet switch in the off position. Touch n Go will now respond to touch inputs.

Off state (off position) is reached two ways. One way is by cycling from Accessory position, (**1<sup>st</sup> touch**) to the On position, (**2<sup>nd</sup> touch**) to Off (**3<sup>rd</sup> touch**) by briefly providing a touch input to the button. The other way is to touch the button for two seconds while the engine is running to shut the engine off, thus returning to Off state.

\*Once engine off is triggered, accessory output stays on for ten minutes, or until the door is opened\*



**Accessory position:** Button will have a blue glow. Accessory output will be activated. Anything hooked to Accessory output will be supplied with +12 volts.

**1<sup>st</sup> Touch** Accessory output “active state” is reached by touching the button briefly (with no brake input, foot not on brake pedal) while button is slowly glowing red (showing Touch n Go is enabled, but off). Button will give visual indication of received input by switching to a blue glow, and only power consumers connected to Accessory output will

turn on, such as your vehicles radio for example.



**Ignition position:** Button will have a teal glow. Ignition output will be activated in addition to accessory output. Anything hooked to these two outputs will be supplied with +12 volts.

**2<sup>nd</sup> Touch** Ignition output “active state” is reached by touching the button briefly (with no brake input, foot not on brake pedal) while button is glowing blue (showing Touch n Go is in Accessory “active state”). Button will give visual indication of received input by switching to a teal glow, and all power consumers connected to Ignition and Accessory outputs will turn on. This will include everything that is normally activated by turning the key to on position. For example these consumers might include engine control computer, fuel pump etc., in addition to what is connected to Accessory output.



**Off position:** Button will have red glow. All outputs are now off.

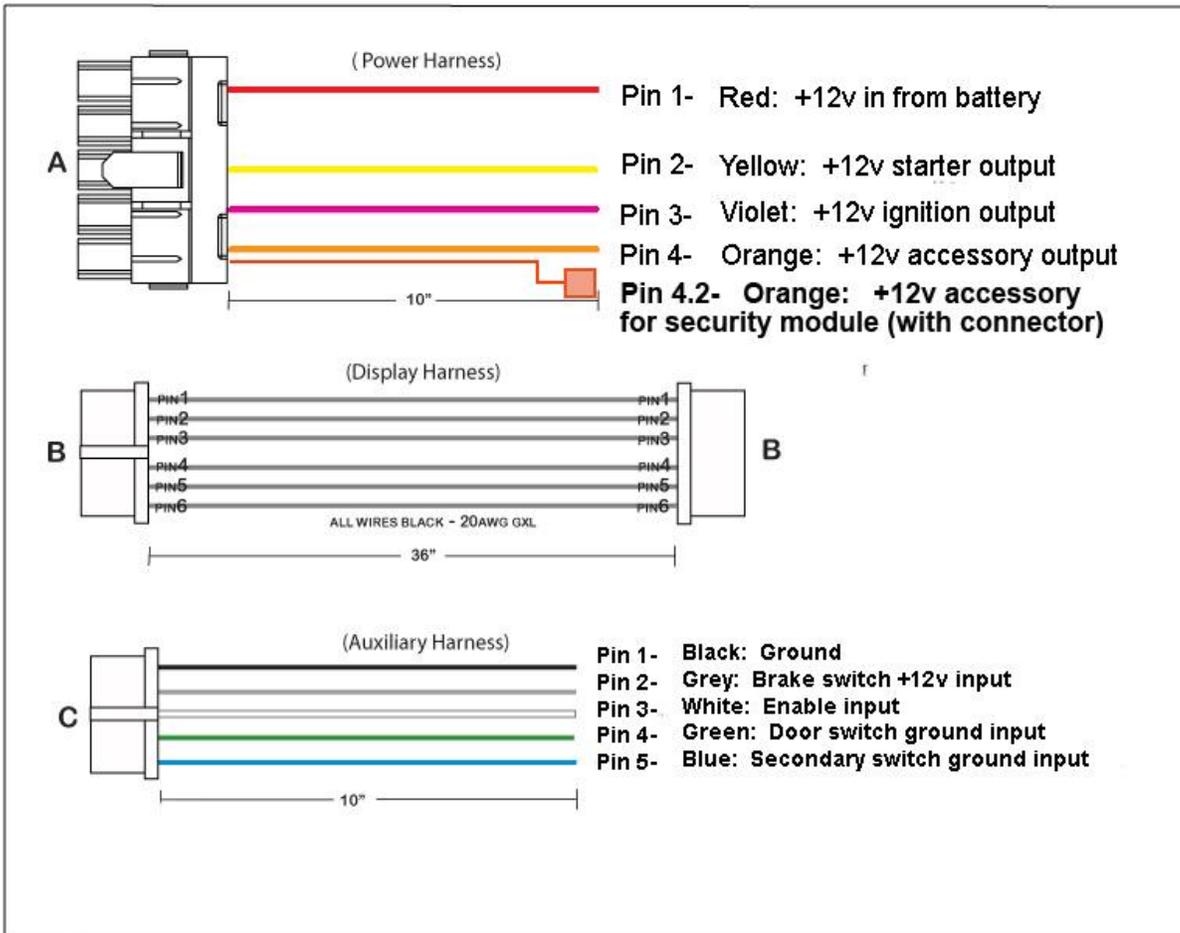
**3<sup>rd</sup> Touch** Off state is now reached by touching button briefly after Ignition output is activated.



**Start position:** Button will have violet glow. Starter output will be activated. Starter solenoid will be supplied with +12 volts for three seconds; or until engine run is determined. In addition to Start output being activated, Ignition output will also be activated, or stay active depending on the “active state” of Touch n Go.

**Place foot on brake and touch anytime** Briefly touch the button, there is no need to hold finger on the button. Touch n Go will automatically start the engine. Starter and Ignition outputs are now activated. Button will have violet glow while the engine is cranking. Once engine run is detected, the starter output will automatically be turned off. Ignition output will stay on and Accessory output will be turned on simultaneously. *If engine needs more than three seconds provided for automatic starting, the user can choose to hold finger on the Touch n Go button for an extended period of time. This will allow the starter to crank for as long as needed.* \*Please note, the user will then have to remove finger once engine starts to prevent starter from staying engaged while running.\*

## Wire instructions



**PLEASE DISCONNECT BATTERY BEFORE INSTALLATION**

## **POWER HARNESS**

**LARGE RED WIRE:** This is the power wire. Connect as directly as possible to the +12 volts side of the battery. It supplies power to Touch n Go.

**YELLOW WIRE:** This is the starter output wire. It provides +12 volts to the starter solenoid during cranking only. A neutral safety switch is required between the yellow output wire and the starter for safety. This is a switch that will only allow power to flow to the starter solenoid if vehicle transmission is in park or neutral positions. Alternatively, on a manual, this can be a switch that only allows power to flow if the clutch is depressed fully.

**VIOLET WIRE:** This is the ignition output wire. It will supply +12 volts to anything that is connected to it when the Touch n Go is in ignition on mode (2<sup>nd</sup> touch, ignition on mode, teal glow), run mode (green glow), and crank mode (violet glow during cranking). It is important that anything that needs to stay live during cranking be connected to this wire, such as; electric fuel pump, coil, engine computer etc. *\*installer may choose to use relay part # A50 to add a second ignition output that will turn off during cranking, but will otherwise be on any other time ignition output is activated (during ignition on mode, and run mode. This is for consumers that user will not want on during accessory mode, does want on during ignition mode, but does not want on during engine starting (cranking). See wiring diagram.)\**

**ORANGE WIRE:** This is the accessory output wire. It will supply +12 volts to anything that is connected to it when Touch n Go is in accessory on mode (1<sup>st</sup> touch, accessory on mode, blue glow) and run mode (green glow). This output will turn off during cranking. Connections to this wire typically include radio, power windows, entertainment devices etc. *\*This allows for use of these devices without running items unnecessarily such as; fuel pump, engine computer and heated oxygen sensors, that could be damaged when left on for periods of time while engine is not running.\**

## **DISPLAY HARNESS**

Alternatively called button harness, this harness is pre-terminated for connection to touch sensitive button input. It will also be used to connect accessory harnesses to, such as optional L.E.D. harness if secondary button input is used. If secondary button input is used, touch sensitive button should be disconnected.

## **AUXILLARY HARNESS**

**Black wire:** This wire connects to -12 volt chassis ground. A good clean (bare metal) ground should be made for this wire, free of paint or any other obstruction.

**Gray wire:** This wire connects to the brake light switch. It requires a +12 volt input. Most brake switches only have two terminals. One terminal has +12 volts supplied to it at all times. The other is connected to the brake light bulbs. If tested with a test light or multi-meter, it will only show +12 volts when the brake pedal is depressed, sending +12 volts to the brake lights, turning them on. This is the “open” side of the switch. The gray wire should be connected to this side. When the brakes are depressed, the Touch n Go unit will get +12 volts via the brake switch. *Some brake switches have more than two terminals, find the terminals that function as described above. Some brake light switches only have power when ignition is on. If this is the case, re-wire the “hot” side of the brake light switch to have +12volts at all times.*

**White wire:** Enable wire. This wire receives a signal from the security system module (when security is used) to allow access to Touch n Go when proper key fob is detected, and adversely to deny access when the proper key fob is not detected. *Disregard blue wire tap.* It goes to one of the terminals of the valet switch (provided with all kits regardless of security option). The other terminal of the valet switch goes to the enable (white) wire of the security unit.

**Valet switch:** Valet switch acts as an override for security. *On security optioned kits;* leave the switch on. If the battery in a key fob goes dead, turn valet switch off and Touch n Go will respond to touch input. *On non-security optioned kits,* the valet switch can act as a security option. Turning the switch on, will arm the system and Touch n Go will not respond to touch inputs. Turning it off, will enable Touch n Go to operate. It is advisable to mount the switch in a hidden location away from plain sight.

**Green wire:** This wire connects to the open side of a door pin switch that will provide a -12 volt ground input. The Touch n Go unit has a “retained accessory” output that will keep the accessory wire activated for up to ten minutes after the engine has been turned off, or until door is opened (a convenient feature found in many new cars). When the Touch n Go module receives the ground input it will turn off the accessory output wire. The Touch n Go module also uses this wire for other functions and needs to be connected for proper operation.

Door pin switches usually have one terminal grounded and the other left open when the door is shut. When the door is opened, the open terminal is connected to ground, turning on dome lights and providing signals to other components when relevant. In rare cases, door pin switches have +12 volts instead of ground. This will need to be changed if your car is so equipped!

**Blue wire:** This wire is a -12 volt ground input wire. This wire is an optional input used only if the supplied touch sensitive button is not used. This wire allows for connection to any normally open monetary switch (such as an engine start switch from a new vehicle). The same full functionality is retained if this option is used. Follow instructions for touch button operation. One terminal of the switch should be connected to ground, and the normally open side of the switch should be connected to the blue wire.

Touch sensitive button should be left unconnected if this wire option is used. An auxiliary L.E.D. display is available through Phantom - Products that will give the same visual light signals for simulated key positions as the touch button.

**Toggle switch (valet switch)**: There is a toggle switch included with your Touch n Go. When not using security, one leg of the switch should be connected to the **white** (enable) wire coming from the Touch n Go unit, and the other leg of the switch should be connected to ground. When using security, connect the **white** (enable) wire from the security unit to the opposite side of the switch as the **white** (enable) wire from the Touch n Go box. **In the event of a dead key fob battery**, this switch can be turned off to de-activate security and allow full use of Touch n Go. The toggle switch can also be used as a valet switch or simple security measure. If no security is used, the toggle switch must be turned off (disconnected from ground) in order for Touch n Go to work. Adversely, the toggle switch can be left on to act as a simpler security measure.

## **Wiring for security module** \*where applicable\*

### **POWER HARNESS**

**Red wire (with 15 amp fuse)**: This is the +12 volt power wire for the security module. It is pre - terminated into the Touch n Go power harness.

**Black wire**: Ground wire. Connect this wire to a clean chassis ground. -12 volts.

**Green wire**: Lock wire. This wire provides a single negative -12 volt pulse to lock motor. Not suggested for door solenoid (shaved door handles).

**Blue wire**: Unlock wire. This wire provides a single negative -12 volt pulse to lock motor. Not suggested for door solenoid (shaved door handles).

### **ACCESSORY HARNESS**

**White wire**: Enable wire. This wire connects to the opposite side of the valet toggle switch. Crimp supplied wire terminal to wire, and then connect to one side of the toggle switch.

**Red Wire**: Accessory wire. This wire connects to the accessory wire on the Touch n Go module via wiretap. Simply plug into orange wire on Touch n Go harness.

### **ANTENNA HARNESS**

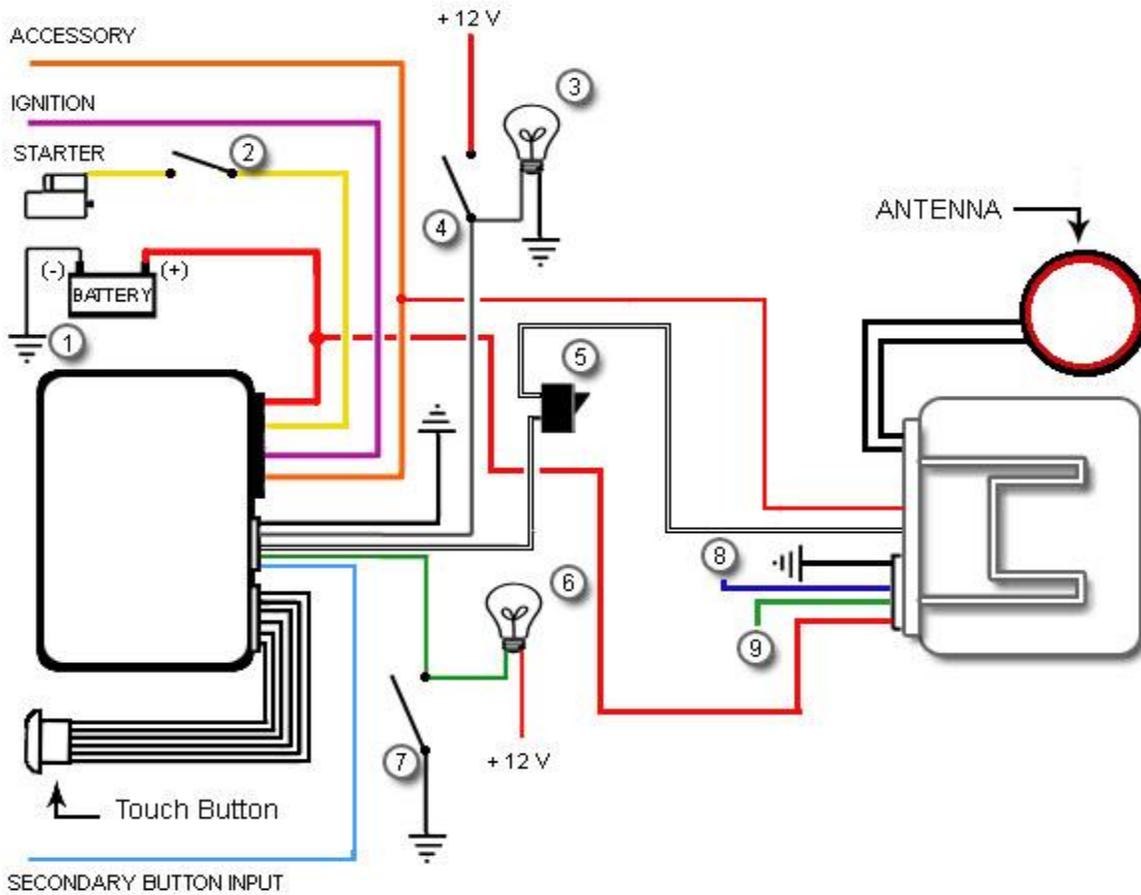
Mount antenna in desired location. The range of the security system will depend on where the antenna is mounted. The closer to the glass the antenna is placed, the longer the range. The antenna is a red and black disc connected to a two wire black lead. Even if the antenna is located under center console (for example) it should still have sufficient range.

**Warning flash:** In the event of a blown fuse, the button will flash red and blue quickly. The only other condition that will cause this flash is when an over current condition is reached. If this is the case and no fuse is blown the channel with too much draw will be shut off temporarily.

A rapid red flash happens when there is another type of over current fault and Touch n Go is in danger of overheating. It will turn off the effected output channel. The output will re-activate once the temperature / current draw is within safe limits for at least 30 seconds.

*If these conditions occur repeatedly, we recommend the use of a high current bypass relay. In this case the output channel effected will be used to activate a relay, which can handle the higher load (20amps or higher continuous.)*

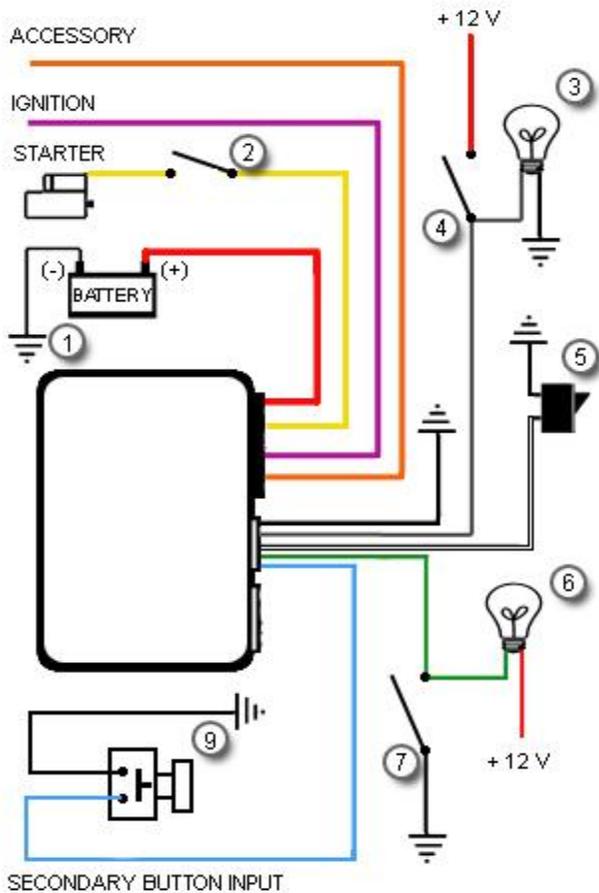
# STANDARD WIRING WITH SECURITY



- ① SYMBOL FOR CHASSIS GROUND
- ② REQUIRED: NEUTRAL SAFETY SWITCH
- ③ BRAKE LIGHT BULB
- ④ REQUIRED: BRAKE LIGHT SWITCH, POSITIVE INPUT
- ⑤ VALET SWITCH
- ⑥ DOME LIGHT
- ⑦ REQUIRED: DOOR PIN SWITCH, GROUND INPUT
- ⑧ UNLOCK (1) PULSE NEGATIVE
- ⑨ LOCK (1) PULSE NEGATIVE



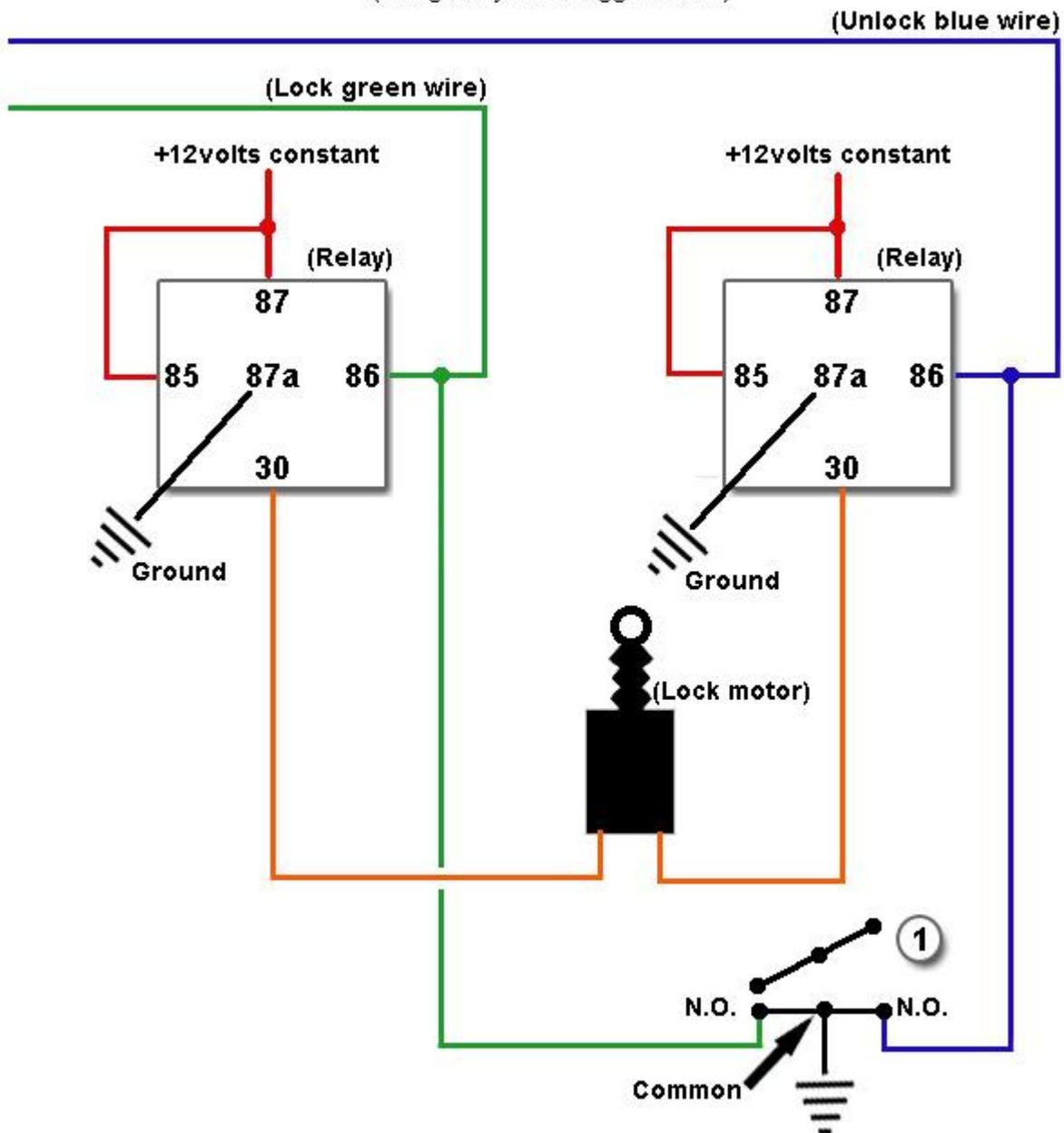
## STANDARD WIRING, WITH SECONDARY PUSH BUTTON INSTEAD OF TOUCH BUTTON



- ① SYMBOL FOR CHASSIS GROUND
- ② REQUIRED: NEUTRAL SAFETY SWITCH
- ③ BRAKE LIGHT BULB
- ④ REQUIRED: BRAKE LIGHT SWITCH, POSITIVE INPUT
- ⑤ VALET SWITCH
- ⑥ DOME LIGHT
- ⑦ REQUIRED: DOOR PIN SWITCH, GROUND INPUT
- ⑨ ANY NORMALLY OPEN MOMENTARY SWITCH / BUTTON

# Wiring for security lock / unlock wires

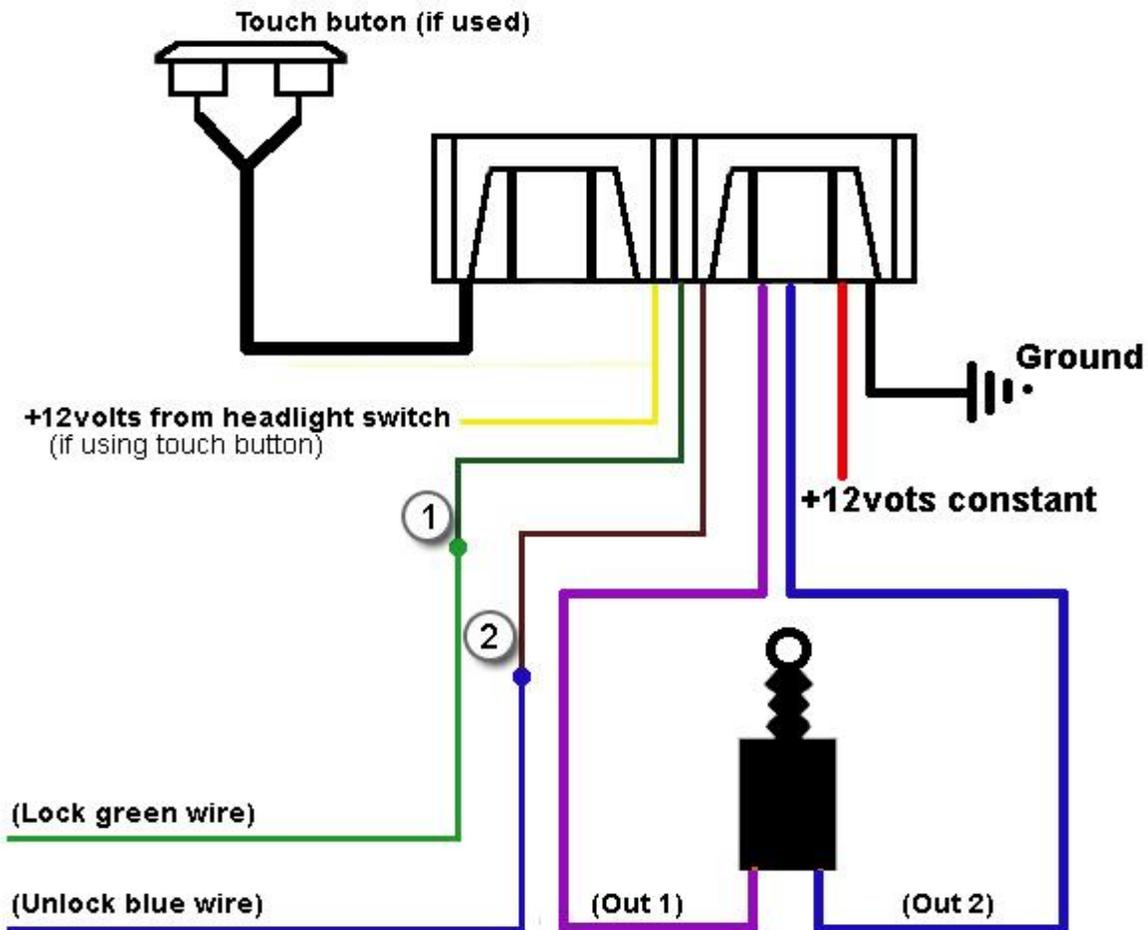
(using relays and toggle switch)



Toggle switch with two normally open contacts and common terminal connected to ground.

\*Relay wire colors are examples only. Refer to numbered terminal location\*

## Wiring for security lock / unlock wires using Phantom switching polarity D.L.R.



① Analog (-12v ground) input for Out 1

② Analog (-12v ground) input for Out 2

\*If lock motor works backwards simply reverse lock and unlock wires from security unit\*

## Further installation notes

Upon installing Touch n Go into some vehicles, certain obstacles could be in place that will complicate installation. From the late 1980's to current day, vehicles have become increasingly more complicated. They implement everything from locking columns to security systems that require coded keys. The internet provides pretty thorough information on wires, their colors, their function and where they might be found. This information is usually available and free from third party manufacturer web sites, such as alarm and remote start manufactures. Here are some suggestions for overcoming these obstacles, and what those obstacles might be.

### Newer vehicles:

**More than 4 wires exist at the ignition switch:** Often times all of the wires still have the same basic functions as an older ignition switch, and can be grouped together based on desired operation. The vehicle manufacturer may have done this for ease of assembly.

**Locking steering column:** Locking steering columns are managed in two ways: Mechanically, usually with a spring loaded pin that locks the wheel when the keyed ignition is in off position, and electronically with a motor. You could simply leave the key in the factory ignition, and turn it to the unlock position or disarm the locking mechanisms. You may even choose to cut the head of the key off so it is less conspicuous, leaving only the actual shaft part of the key.

Depending on your level of mechanical inclination, you can disarm the mechanical column lock by removing the pin / locking mechanism. Or you can install a column with no key tumbler in it.

If the car uses an electric motor to lock, it is possible to disarm it also. Check the two wires going to the motor that activate it. It will use a positive wire and a ground wire, it is possible to independently hook the wires to ground and a keyed power source, so the column unlocks after the accessory or ignition power has been turned on. You must observe and maintain the correct polarity that the vehicles security system uses to activate the motor. It must also be disconnected from whatever device may be controlling it.

If you are not comfortable doing this, check with a qualified body shop or alarm installation shop as they need to access these components regularly and may be able to help.

**Chip in key:** If you have a chip in the key, it may be visible where the exposed metal part of the key is, or it may be contained inside of the plastic portion of the key. Once again, you can leave the key in the factory ignition. You can also purchase a third party "Factory Security Bypass Module." These are available from manufactures of remote start and alarm systems, and can be found at qualified alarm installation shops or online. They should contain detailed instructions about installation in the particular vehicle covered and also the quickest route for disarming the factory alarm.

## **Warranty and Legal**

Phantom Products LLC. (“Phantom”) promises to the original purchaser to repair or replace (at Phantom’s election) with a comparable reconditioned model any Phantom unit (hereafter the “unit”), excluding without limitation remote transmitters, the associated sensors and accessories, which proves to be defective in workmanship or material under reasonable use during the first 90 days from the date of purchase, provided the following conditions are met: the unit was purchased from an authorized Phantom dealer, the unit was professionally installed and serviced; the unit will be professionally reinstalled in the vehicle in which it was originally installed; and the unit is returned to Phantom, shipping prepaid with a legible copy of the invoice or other dated proof of purchase bearing the following information: consumer’s name, telephone number and address; the authorized dealers name, telephone number and address; complete product description, including accessories; the year, make and model of the vehicle and vehicle engine type. All components including without limitation the controller, remote transmitters and the associated sensors and accessories, carry a 90-day warranty from the date of purchase of the same. ALL PRODUCTS RECEIVED BY PHANTOM FOR WARRANTY REPAIR WITHOUT PROOF OF PURCHASE WILL BE DENIED. This warranty is non-transferable and is automatically void if: the unit’s date code or serial number is defaced, missing or altered; the unit has been modified or used in a manner contrary to its intended purpose; the unit has been damaged by accident, unreasonable use, neglect, improper service, installation or other causes not arising out of defects in materials or construction. The warranty does not cover damage to the unit caused by installation or removal of the unit. Phantom, in its sole discretion, will determine what constitutes excessive damage and may refuse the return of any unit with excessive damage.

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