

## BEFORE BEGINNING THE INSTALLATION

- ▶ **READ ALL INSTRUCTIONS!** Take the time to read the manuals that come with the system you will be installing, and read over the information included on this guide. Make sure you read and understand the document included in this CD.
- ▶ Take time to check out the vehicle thoroughly. Check what electrical items work and what items don't work. It helps to have someone help you with this to properly check the vehicle's brake lights, reverse lights, turn signals, hazard lights, parking lights, fog lights, and headlights. This may bring to your attention problems you were not previously aware of and prevent unnecessary troubleshooting when the installation is completed.
- ▶ Check the contents of the alarm or remote start system that you will be installing. Make sure the system is complete and that no components are visibly damaged. . It's better to check before getting started than realizing two hours into the install that you are missing a crucial part.
- ▶ Consider what options will be installed. Many alarm and remote start systems have the option and ability for features such as starter kill, keyless entry, trunk release, horn honk, and dome light supervision. Some options will require additional parts or relays. It is always easier to install features when the system is first installed than later.
- ▶ Plan and allow extra time to complete the installation. Most professional installers will admit that their first security installation took 6-10 hours. It is recommended to schedule yourself a weekend to complete the installation so you do not feel rushed.
- ▶ Set up to do the installation in a sheltered, dry, and well-lit area where you will not be disturbed or bothered by other people or pets.
- ▶ Turn off the vehicle's dome light. This prevents draining the battery while you complete the installation. If your vehicle does not have a dome light switch, you can remove the dome light bulb itself. Consult your vehicle's owner's manual on the best procedure to do this. Be careful, as the bulb gets very hot in a short time.
- ▶ Roll down the windows to avoid being accidentally locked out of the vehicle.
- ▶ Protect the vehicle by using floor mats, seat covers, and fender covers. It is also recommended to place an old rug or blanket on the floor on the driver's side of the vehicle. This will help lessen the strain on your knees and prevent any screws, clips, or small parts accidentally dropped from bouncing across the floor.
- ▶ Remove any watches, rings, or jewelry. This will help prevent accidentally scratching or damaging the vehicle or damaging the jewelry itself. Avoid wearing a belt or pants with rivets, metal zippers, or metal buttons that could scratch or damage the vehicle.

## TOOLS AND ADDITIONAL PARTS REQUIRED

### COMMON TOOLS REQUIRED:

- Digital Multi-meter (never use a test light or analog meter to test automotive circuits)
- Wire cutters
- Wire strippers
- Quality wire crimping tool- such as Klein or Snap-On
- Soldering iron
- Cordless power drill
- Nut drivers or socket set in both metric and standard sizes.
- Drill bit set, 1/2" Unibit
- Torx bit set
- Allen bit set
- Phillips head screwdriver
- Small flathead screwdriver (for adjusting sensors)
- Panel removal tool (Available at most auto parts stores)
- Razor blades
- Droplight or flashlight
- Metal coat hanger (used to feed wires through rubber grommet in firewall)

### COMMON MATERIALS REQUIRED:



#### **NOTE:**

Many of these parts or materials may be purchased at Radio Shack or better-equipped hardware stores.

- 3M vinyl electrical tape- 2 or 3 rolls
- Heat shrink tubing
- Plastic wire ties or zip ties in various lengths
- Vinyl split loom or tubing to conceal and protect wiring under the hood
- 60/40 resin core solder
- 12V 30A SPDT relays- the number of relays required will vary depending on the system being installed and the features or options installed with it.
- Door lock actuators- required only if adding remote keyless entry to vehicles without power door locks
- Pack of insulated butt connectors
- Pack of 6 amp diodes
- Pack of resistors of various impedances
- Spring-loaded pin switch- necessary if installing an under hood pin switch

Remote starter and security installations should be attempted by experienced security installers only. Information contained is accurate to the best of our knowledge and experience. Information contained is without any representation of warranty. It is the installer's responsibility to test and confirm all circuits with a digital multi-meter. Proper installation remains the responsibility of the installer. CarInstallExperts.com assumes no liability or responsibility resulting from an improper installation, even in reliance with the information contained in this guide.

### INTERFACE MODULES:

- Immobilizer bypass module- **only available at better-equipped car audio stores**- required when installing a remote start on vehicles equipped with a factory immobilizer. Check your vehicle's owner's manual or this document to help you determine if your vehicle is equipped with a factory immobilizer system.
- Databus module – some newer vehicles have doorlocks and factory security that is controlled by a databus. Interfacing these systems often requires additional vehicle disassembly, additional relays and resistors, and possibly routing wires into each door. Databus interface modules eliminate the need for additional parts and labor and should be used whenever possible. Use this document to determine if a databus module is available or recommended.