



Tips: The light blue ignition 3 output can sink 300ma of current. Do not operate more than two standard Bosch type 332-204-150 (or equivalent) relays directly with this output, as this could damage the remote starter.

Note: This interface requires the use of a programmed key. One of the customer's spare keys may be used, or another key can be purchased and programmed. For some vehicles it is necessary to program a blank key with the factory diagnostic tool, others will require that a specific programming procedure be followed. In either case, the vehicle must be programmed to recognize the key that is to be used.

Installing a Remote Starter into a Vehicle with a Factory Transponder.

Many vehicles today are equipped with a factory immobilizer. This system utilizes a radio frequency identification device (RFID) called a transponder, imbedded in the head of the ignition key; and, an antenna ring mounted around the ignition lock cylinder. When starting the car with the key, the antenna ring provides an electromagnetic field, which causes the transponder to transmit a unique electronic code back to the antenna ring. Upon receiving this signal, the electronic control module verifies the code and allows the vehicle to start.

In order to successfully install a remote starter, it is necessary to interface with this factory immobilizer while the remote starter is operating the vehicle. You will need to use a key that has been programmed for the vehicle as part of the interface. Since this key will be hidden in the car, the blade of the key must be cut off so that it can no longer be used to start the car. Verify that the key is programmed to the vehicle before removing its blade.

To construct the interface you will need to wrap a six – turn coil around the head of the key and another six – turn coil large enough to fit in front of the ignition cylinder's antenna coil. Use 30 AWG insulated wire to wrap the coils. Wrap the coils as tightly as possible. After wrapping and securing the coils connect larger gauge wire (18 AWG or larger) to the ends of each coil. These connections should be soldered. Be sure that the smaller gauge wire is fastened securely to a rigid surface because it will not withstand vibration or flexing stress (i.e. provide adequate strain relief). Select a mounting location for the key head where a thief can not easily find it. Carefully secure the coil in front of the ignition cylinder and wire the circuit as shown below. It may be necessary to adjust the position of the coil on the key head in order to achieve optimum performance. After adjustments are made, remember to secure the coil and its connections to the key head and, mount the assembly in a hidden location.