

INSTALLATION GUIDE

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OWNER'S GUIDE

UNIVERSAL LEARNING BYPASS MODULE • MODEL 791

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Technical Assistance

All tech personnel are expertly qualified to answer any technical questions.
Technicians are available Monday through Friday from 9:00 a.m. until 8:00 p.m. and Saturday 10:00 a.m. until 4:00 p.m.

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UNIVERSAL BYPASS OPERATIONS

The Bulldog Model 791 interface module is used when installing remote start products in any vehicle equipped with an anti-theft system including BMW, Audi, Volvo and Mercedes. **The Ford PATS, GMs PK3, VATS, Passlock I, Passlock II or any other transponder systems.** This model allows easy interfacing while maintaining the OEM system's integrity. The Model 791 has no affect on factory anti-theft system when the remote start is not in use. The factory anti-theft system remains fully functional.

BEFORE YOU BEGIN

Refer to your system's instruction manual, and our website at www.bulldogsecurity.com, to determine what type of anti-theft system your vehicle is equipped with.

It will be necessary to open the 791 Module to remove the wiring harness before installation. To do so, simply insert a straight shank screwdriver into the two wide slot holes in the bottom of the module. Plug the wiring harness into the module. **NOTE: If you are using the 791 Module as a transponder bypass you must insert a spare ignition key inside the plastic ribbon coil (as illustrated on page 3) then snap both halves of the module back together.**

PASSKEY (VATS) INSTALLATION (GM only)

This **FUEL SYSTEM** shutdown anti-theft system is based on a pellet (resistor) built into the steel shaft of the ignition key. When the key is inserted into the ignition switch, the **VATS** (vehicle anti-theft system) computer reads the value of the resistor to make sure that it matches the programmed code and then turns on the fuel system so the vehicle can be started.

1. Locate two (2) wires in an orange vinyl tube coming down from the ignition switch. This tube will contain two (2) **WHITE** 22 ga. wires or one **WHITE** and one **PURPLE** wire.
2. If you have the **PURPLE** and the **WHITE** wires, cut the **WHITE** wire in two. If your vehicle has two (2) **WHITE** wires, you will need to test both of these wires with the ignition key turned to the ON or RUN position. One will show ground and the other will show positive voltage. Cut the **WHITE** wire that shows voltage in two.
3. Attach the **GREEN** wire to the key switch end of the cut **WHITE** wire. See Making Connections. Page 2, figure 1.
4. Attach the **YELLOW** wire to the remaining end of the cut **WHITE** wire.
5. Attach the **WHITE** wire to the ignition I wire (white heavy gauge wire from the remote starter or from the 4-relay pack) that is tied into the ignition wire on the vehicles ignition switch harness.
6. Attach the **RED** wire to a constant 12V wire fused at 3 amps.
7. Connect the **ORANGE** wire securely to ground.
8. Connect the **BLUE** wire to the smaller of the two (2) **WHITE** wires on the remote starter.
9. The **PURPLE** and the **YELLOW with BLACK stripe** wires are not used and should be taped up.
10. Put the key in the ignition switch and start the vehicle.
11. Wait until the L.E.D. light on the 791 goes out.
12. Turn off the vehicle the system has learned the resistor value.

NOTE: If the light does not illuminate on the 791 when you first plug it in, you need to erase the memory. See page 3.

Never cut, or probe into a small yellow tube as this controls the airbag.

PASSLOCK I INSTALLATION (GM only)

This **FUEL SYSTEM** shutdown anti-theft system is based on a resistor built into the ignition switch. The system is recognized by a security light on the dashboard cluster.

1. Locate the harness coming from the ignition switch inside, find the three small wires **YELLOW**, **BLACK** and **WHITE** wire or (1) **BLACK WITH WHITE STRIPE** wire and (2) **BLACK** wires.
2. If your vehicle has the **WHITE**, **BLACK**, and **YELLOW** wires, cut the **YELLOW** wire in two. If your vehicle has the **BLACK WITH WHITE STRIPE** wire and two (2) **BLACK** wires, you will need to test the two (2) **BLACK** wires WITH THE IGNITION KEY IN THE ON OR RUN POSITION. Test both of these wires, one will show ground and the other will show positive, cut the **BLACK** wire that shows positive in two.
3. Attach the **GREEN** wire to the ignition switch side of the cut **YELLOW** or **BLACK** wire. See Making Connections, page 2, figure 2.
4. Attach the **YELLOW** wire to the remaining end of the cut **YELLOW** or **BLACK** wire.
5. Attach the **ORANGE** wire to ground.
6. Attach the **RED** wire to a constant +12V wire fused at 3 amps.
7. Attach the **VIOLET** wire to the bulb check wire. A 22 ga. **BLACK** wire in slot "D" or "E" coming from the ignition switch on the left hand side of the steering column located along with the heavy **RED** power wires in the ignition switch harness. This wire will test negative only during cranking.
8. Attach the **BLUE** wire to the smaller of the two (2) **WHITE** wires on the remote starter.
9. Attach the **YELLOW WITH BLACK STRIPE** wire to the larger of the two (2) **YELLOW WITH BLACK STRIPE** wires on the remote starter.
10. Attach the **WHITE** wire from the bypass module to the larger of the two (2) **WHITE** wires on the remote starter.
11. Put the key in the ignition and start the vehicle.

12. Wait until the L. E. D. light on the 791 goes out.
 13. Turn off the vehicle, the system has learned the resistor value.
- NOTE:** If the light does not illuminate on the 791 when you first plug it in, you need to erase the memory. See page 3.

PASSLOCK II INSTALLATION (GM only)

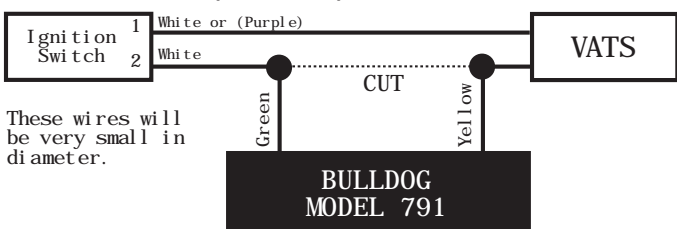
1. Locate the wire harness coming from the ignition switch. Inside, find three (3) small gauge wires, a **RED WITH WHITE STRIPE** wire, an **ORANGE WITH BLACK STRIPE** wire, and a **YELLOW** wire on trucks, vans and SUVs. On cars find a **BLACK** wire, a **YELLOW** wire and a **WHITE** wire. Cut the **YELLOW** wire in two.
 2. Attach the **GREEN** wire to the key switch side of the cut **YELLOW** wire. See Making Connections, figure 3 below.
 3. Attach the **YELLOW** wire to the remaining end of the cut **YELLOW** wire.
 4. Attach the **RED** wire to a constant +12V wire fused at 3 amps.
 5. Connect the **ORANGE** to ground.
 6. Connect the **BLUE** wire to the smaller of the two (2) **WHITE** wires on the remote starter.
 7. Attach the **WHITE** wire to larger of the two (2) **WHITE** wires on the remote starter.
 8. The **PURPLE** and **YELLOW WITH BLACK STRIPE** wires are not used. Tape these wires up and do not use.
 9. Put the key in the ignition switch and start the vehicle.
 10. Wait until the L. E. D. light on the 791 goes out.
 11. Turn off the vehicle, the system has learned the resistor value.
- NOTE:** If the light does not illuminate on the 791 when you first plug it in, you need to erase the memory. See page 3.

TRANSPONDER INSTALLATION

1. You must have a spare transponder key. If not, you must get one from your dealer. You will need to insert this spare key inside the module. See page 3, figure 5 for this procedure.
2. The wiring loop needs to be positioned so that there are five loops around the ignition switch. Slide the heat-shrink tube up toward the ignition switch to tighten the loops - you can heat the heat-shrink or use tape to hold in place. Place the transponder loop around the ignition switch and as close to the key hole as possible.
3. Connect the **RED** wire from the module to a fused +12v constant wire making sure to fuse this wire at 3 amps.
4. Connect the **BLUE** wire to the smallest of the two (2) **WHITE** wires on the remote starter.
5. Attach the **ORANGE** wire to ground. **All other wires on the module are not used. Tape the ends.**
6. Plug the loop wire into the white plug inside the module.
7. When bypassing GM's transponder, attach the **RED** wire to the vehicle's starter/crank wire. (The heavy gauge **YELLOW WITH BLACK STRIPE** crank wire from your remote starter.)

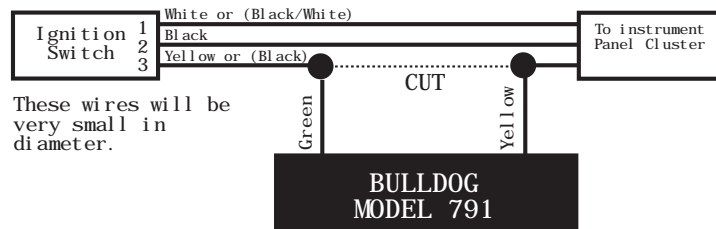
MAKING CONNECTIONS (Non-transponder)

FIGURE 1 • Passkey (VATS) System



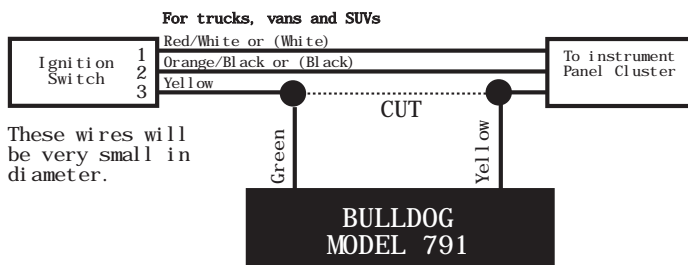
NOTE: Do not plug the **WHITE** loop connector into the module unless your vehicle is equipped with a transponder system.

FIGURE 2 • Passlock I System



NOTE: Do not plug the **WHITE** loop connector into the module unless your vehicle is equipped with a transponder system.

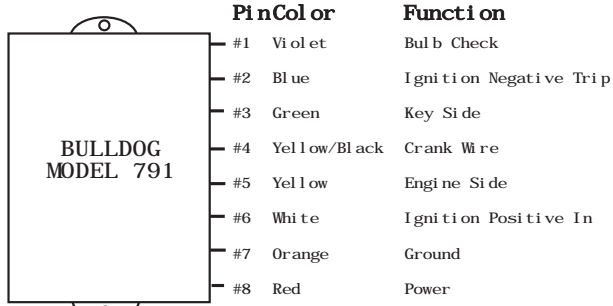
FIGURE 3 • Passlock II System (GM only)



NOTE: Do not plug the **WHITE** loop connector into the module unless your vehicle is equipped with a transponder system.

PIN OUT AND WIRE COLORS

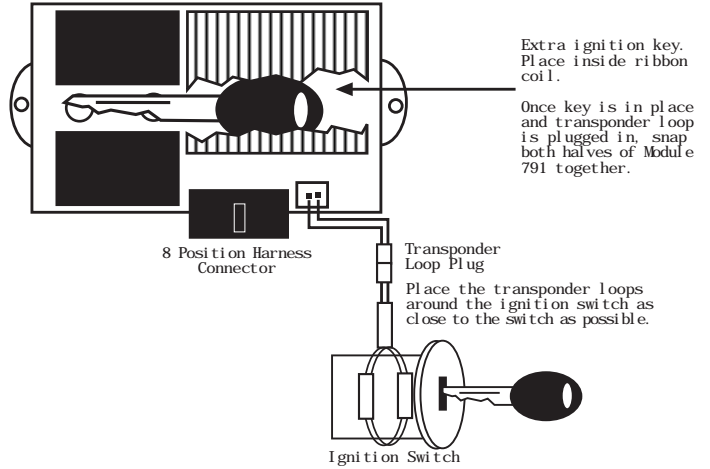
FIGURE 4



Plus 2-PIN: TRANSPONDER LOOP

MAKING CONNECTIONS (CONT.)

FIGURE 5 • Transponder Bypass



ERASING MEMORY

To Erase the Memory

Ground the **BLUE** wire and power up the unit. When the red light illuminates, unhook the power and the **BLUE** wire. The module is now ready to learn a new system.