# INSTALLATION INSTRUCTIONS P/N 102043

**H.D.** Battery Positive Extender Cable 1986-1987 GN-Turbo Regal The purpose of this kit is 1) to re-locate the fuse links from the starter location to a location in the engine bay for easy access, 2) to allow for easy attachment of accessories to the battery positive terminal, 3) to add extra fuse links so that each power feeder in the car has its own fuse link, and 4) to provide a junction box for remote mounting of the battery (trunk location). **NOTE: This kit is used when a heavy duty (200A) alternator is being used.** 

#### **Tools needed:**

5/16" box wrench Phillips screwdriver #1 Socket set, metric and standard Wire crimper, piercing type Soldering gun Rosin core solder

## Kit contains:

Positive Cable 9 in. with cover Alternator feed cable w/boot ECM MEM fuse link assembly Link/wire feeder assembly (5) Junction box assembly w/nut Conduit 13mm for feeders Conduit 6mm for starter wire Conduit clips (2) 13mm Conduit clips (2) 6mm Starter feed cable Phillips screws for junction box

### BE SURE THE CAR IS PROPERLY SUPPORTED BEFORE YOU GET UNDER IT!

First, remove the positive battery lug using a 5/16'' box wrench. Unplug the ECM Memory wire connector (orange wire) from the positive battery cable. Remove the red alternator feeder from the stud on the alternator. Next, under the car, remove the 9/16'' nut securing the terminals on the starter stud, and the 11/32'' nut securing the terminal and purple wire on the starter solenoid. Pull the alternator feed down from the top of the engine, being sure you remember where and how the feed is routed.

Pull the starter cable out of the clips that secure it to the frame (going to the starter). Also, remove the smaller alternator feed cable from these clips; the alternator feed then goes under the engine directly under the timing cover and is secured by a plastic channel. This channel can be removed from the engine; you will re-use this channel when re-routing the new alternator feed. You can now remove the positive battery cable assembly from the car.

### **BE SURE YOU NOTE HOW THE CABLES ARE ROUTED!**

Install the red junction box beside the radiator overflow bottle as shown in *Illustration A*. Use the two Phillips screws provided in the kit.

Working from the engine bay, you need to pull the feeder wires and purple starter wire up from the starter location to the engine bay. This is a bit difficult and you should remove the three bolts that secure the coil assembly to gain more room. Also, it will be easier to get at these wires if you remove the bolt directly under the coil pack that secures the plastic wiring harness channel. The heater hoses get in your way, but you can bend them to get better access to these wires. Cut any tape holding the flexible conduit to this cluster of wires, and remove the entire conduit. You will notice that the red feeder wires are close to the harness ground wires, and may be secured by electrical tape. Remove the tape to gain better access to the wires. Once you pull the six wires up to the engine bay, look carefully at them. There are five red 12 gage wires, and one purple 12 gage wire. Using the 6mm conduit supplied in the kit, slide this conduit around the purple wire, and use the small plastic clips supplied to secure each end of the conduit. You must place this wire back down to the starter solenoid; route it back down the same way it was routed originally, and reattach to the solenoid stud (the one closest to the engine block). You may want to attach this later, when you are ready to attach the starter cable.

Cut off the three fuse links and the three black plastic splice covers as shown *in Illustration B*. This will leave five red 12 gage wires. Strip approximately  $\frac{1}{2}$ " of insulation from each wire end.

Look at the link/wire assembly included in the kit; you will notice there are five lengths of 12 gage wire with a fuse link attached to each wire, and there is a length of heat shrink tubing slid midway up on each wire assembly. These must stay there while you are crimping and soldering the assembly to the original five wires on the car.

Insert the five stripped wires into each of the five crimp barrels attached to the link/wire assembly included in the kit, one wire at a time, securely crimping each barrel. Using a soldering gun, solder each crimp barrel, being SURE each solder connection is completely saturated with solder. Don't be afraid to use a lot of heat, as a good solder connection requires a considerable amount of heat. Inspect each solder connection after they have cooled, and if it doesn't seem like the solder soaked into the copper wires on each end of the barrel, do it again. After the solder joints are cool, slide the heat shrink tubing onto each barrel and use a heat gun to shrink the tubing around the soldered connections.

Once the five wires are completed, slide the 13mm conduit supplied in the kit over the complete length of red wires, covering the entire length. Use the large plastic clips supplied to secure the conduit on each end. Now that all the red wires are covered, route the conduit along the same route as the flat oval conduit, along the heater box, then place it under the radiator overflow bottle and out to the where the red junction box is located. Attach the three ring terminals to the 10mm stud in the box. See *Illustration C* for routing.

Install the heavy starter cable supplied in the kit thru the dips on the frame rail. This cable goes from the junction box to the starter stud. There is an angled terminal on one end, and a straight terminal on the other end of this cable. Place the angled terminal on the end of the starter stud and securely tighten the nut. Check to see that the solenoid terminal is secured as well.

#### **BE SURE THE CABLE DOES NOT TOUCH THE EXHAUST HEADER or DOWNPIPE**

Attach the fuse link assembly supplied in the kit to the stud, and attach the connector to the original orange wire ECM connector. You can route the orange wire behind and around the radiator overflow bottle. Now you can attach the short red positive battery cable to the stud, then tighten the hex nut securely.

The last thing you will do is attach the positive lug to the battery positive post. Use the 5/16" wrench to tighten. Don't over-tighten the bolt as it could damage the threads on the battery positive post. Snap the red cover over the terminal and close the hinged door on the junction box. Start the car and check to make sure all electrical functions are working normally.

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