

2003/2004 MUSTANG COBRA
BAP and Wiring Upgrade Step-by-Step Instructions

CHECK COLOR OF RELAY SOCKET WIRES TO RELAY AND MAKE NOTE

- 1) Remove driver's side and rear felt insulation panels from inside the truck area.
- 2) Decide on location in the trunk for mounting of BAP, Boost Controller, and Wiring Upgrade Adapter Plug, but do not mount them at this time. (The BAP should be located within 8" or so of the FPDM and the Adapter Plug is commonly attached to the lower mounting bolt of the FPDM. Some like to mount the Boost Controller inside the cabin, but the majority locate it in the trunk. Your choice.)



Example of Common Mounting Points for BAP, Boost Controller, & Adapter Plug

- 3) On a suitable work area, attach the ring terminal lugs to the BAP grounding wire (Black) and the Wiring Upgrade Adapter Plug grounding (**BLACK**) wire.
- 4) In the same work area, solder and shrink wrap the red 30amp fused wire from the BAP to the (**Yellow**) wire from the Wiring Upgrade Adapter Plug
- 5) To have your BAP run full time, (the most common application), take the red and black wires which are inside of the BAP's other Black wire and solder and shrink wrap them together. This wire is approximately 16' long and you can cut this to 6-8" before soldering.

6) Disconnect negative terminal at battery.

7) In the trunk of your Terminator, disconnect the harness plug that goes into the FPDM and peel back the tape and loom on the harness for approximately 8". Locate the Green/Yellow wire in the harness and cut this wire so that you have equal length of it on both ends. (This is for attaching the BAP before the FPDM! To attach it after the FPDM, you will need to locate and cut the Brown/Pink wire.)



Fuel Pump Driver Module & Harness

8) Mount the BAP, Boost Controller, and Wiring Upgrade Adapter Plug to the locations you decided upon in Step #1.

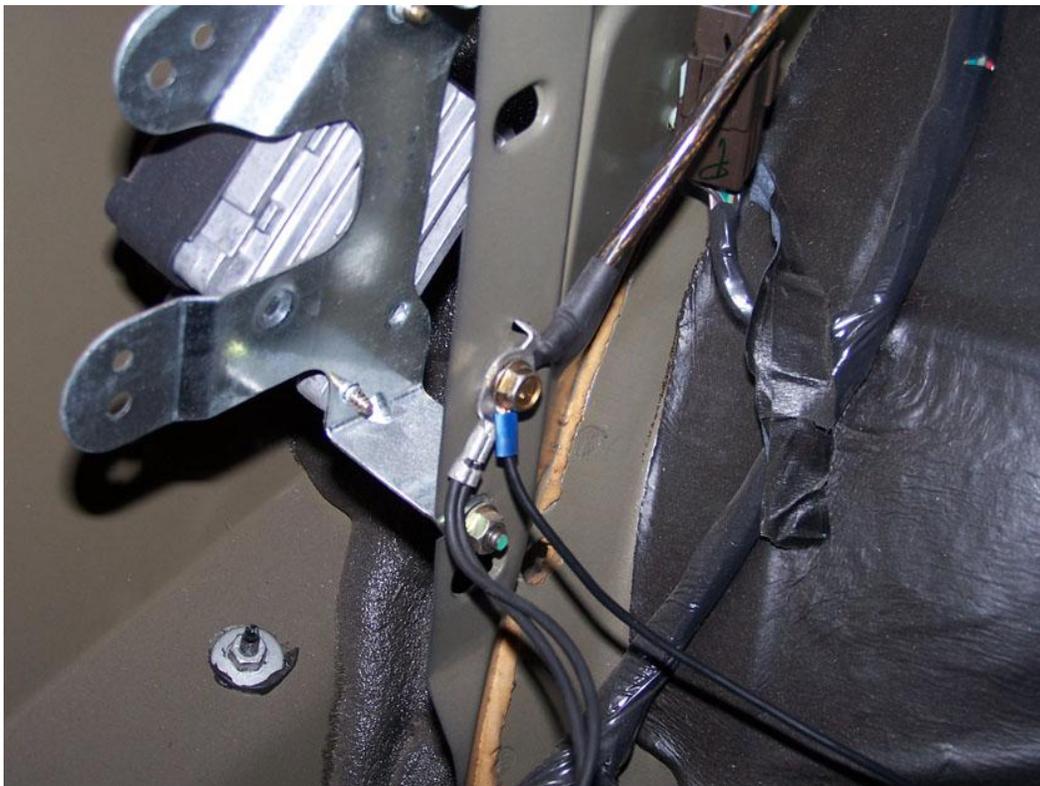
9) Solder/shrink wrap the the following wires:

- Connect the (**BLUE**) wire from the Wiring Upgrade Adapter Plug to the Green/Yellow wire from the FPDM wire harness.

- Connect the Non-fused Red wire form the BAP to the Green/Yellow wire from the connector side of the FPDM..

10) Reconnect the harness plug that goes into the FPDM

11) Attach the BAP grounding wire (**Black**) and the Wiring Upgrade Adapter Plug grounding (**BLACK**) wire to the location where the FPDM is grounded.



BAP & Wiring Upgrade Grounding Location

12) Time to run the 10 awg power wire from the trunk to the battery.

- Remove the rear seat by pulling it up slightly and reaching in and pressing in the two clips on either side of the transmission tunnel.
- Run the 10 awg into the cabin of the vehicle on the drivers side.
- Run the wire underneath the door sill and then behind the driver's side kick panel.
- Pass the 10awg power wire into the engine compartment through the firewall.

-Here are different 2 procedures that can be utilized for running the 10 awg wire through the firewall. (see above picture for Option #2)

Option 1: Using a big screwdriver, gently work the top edge of the 2" diameter rubber grommet on the firewall outwards until you have enough room to feed the 8-awg wire through to the interior. From under the dash, carefully pull the wire through to the interior. Wrap several layers of electricians tape around the 10-awg wires that is in contact with the firewall sheet metal for extra protection for the wire insulation. Reinstall the rubber grommet onto the firewall.

Option 2: Using a very sharp razor blade, carefully put a cut into the grommet on the topside. Be carefully not to go too deep and cut any of the factory wires. Use a metal coat hanger and tape the 10-awg wire to it. Make sure you use enough tape so that when you pull the coat hanger from inside the car through the grommets you do not pull the coat hanger out of the tape. You can use WD-40 or a silicone spray lubricant on the grommet

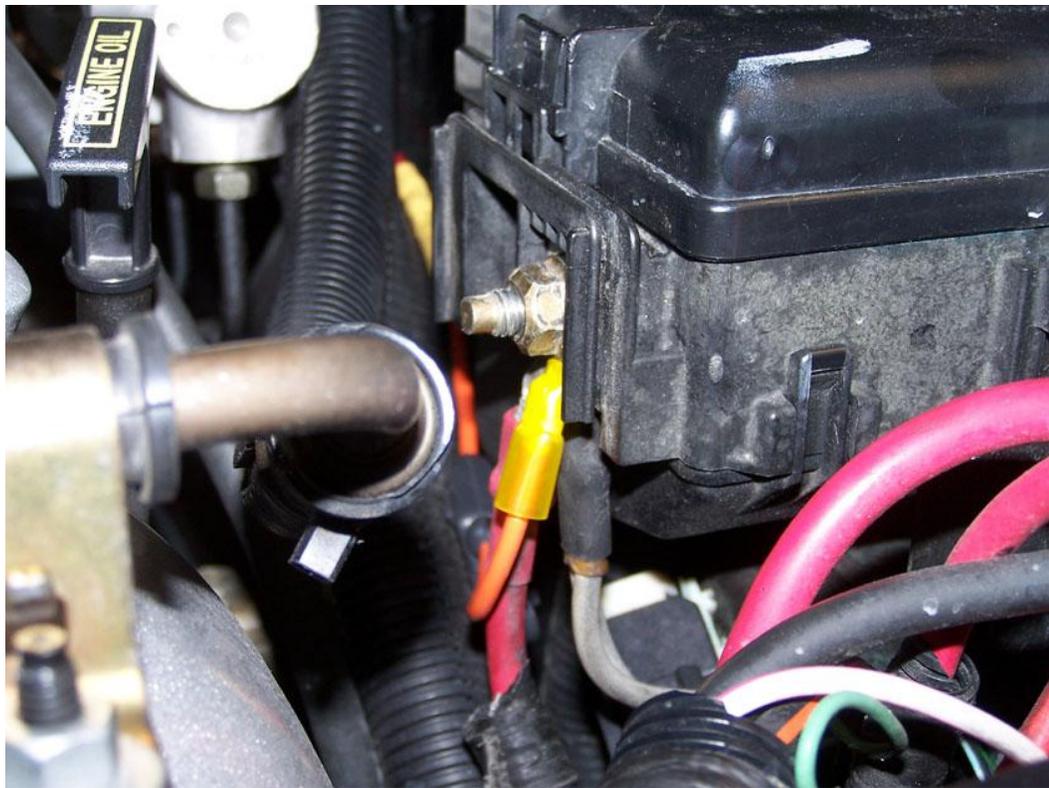
and electricians tape to help in this process.

Once the 10awg power wire is in the engine bay run it along the drivers side to the power distribution box located by the battery.

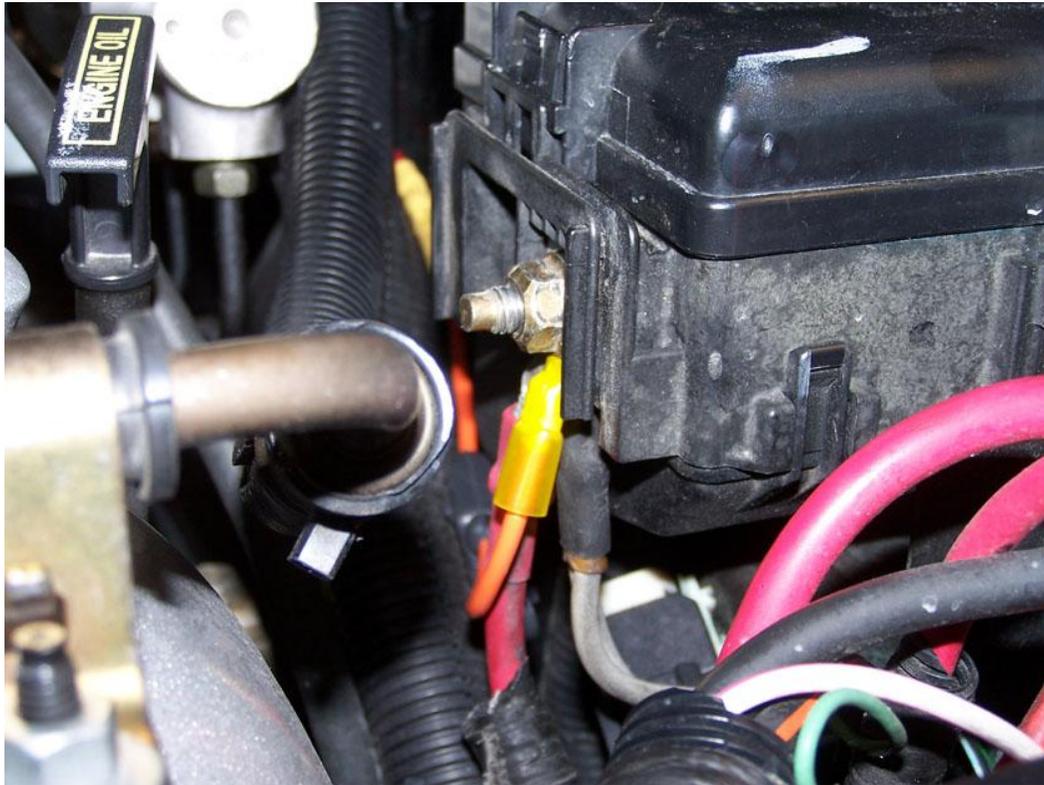
Install the fusible link included in the wire upgrade kit onto the positive (+) lug on the power distribution box.

Slide a piece of heat shrink over the fusible link.

Then connect and crimp the 10awg power wire onto the fusible link. Heat shrink the connection after you've made sure it's secure.



Under Hood Power Distribution Box Terminal



Notes: -These directions are intended for installation of the 40 amp BAP kit which is the most commonly used for the 03/04 Cobra.

-The Red wire in the Wiring Upgrade Adapter Plug is NOT used. This is also the center plug on the relay so there is no need for it.

-The initial setting of your BAP Boost Controller can be anywhere from 25 to 30%, but to properly determine what you should set it at, you should datalog the car and pumps to indicate the proper setting for your application.

-If you would like the ability to have the BAP turn on and off based on boost pressure, eliminate Step #5 and wire the appropriate Hobbs switch to the red and black wires which are inside of the BAP black wire.

REFERENCE NOTES:

CHECK COLOR OF RELAY SOCKET WIRES TO RELAY AND MAKE NOTE

BAP WIRES

RED FUSED to Yellow relay adaptor

RED NON-FUSED to Green/Yellow FPDM Connector side

RELAY ADAPTOR WIRES

Red 10 gauge power cable from battery

Yellow Fused Red wire on BAP

Blue Green/Yellow FPDM wire side

Black to Ground