



Installation Instructions

2003-2004 Cobra 80275PRO & 80275NFAN



AFCO RACING
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Please read and understand each of the steps involved with the installation of your new control arms prior to getting started. The AFCO team takes pride in providing the utmost in quality and performance. Should you have a concern about the product you receive, please call 1-800-632-2320 and press 2 for AFCO customer service.

Special Notes Before You Get Started

NOTE: This product is intended for racing and off-road applications. AFCO products are not covered under any warranty, either expressed or implied.

AFCO highly recommends hiring a professional installer, one that is familiar with the installation of after-market performance products.

AFCO is not responsible for any product that has been improperly installed, crashed, welded to, or modified in any way. AFCO does not cover damage to any related components. Neither the seller nor AFCO will be responsible or liable for any loss, damage, or injury resulting from the direct or indirect use of this product or inability by the purchaser to determine the proper use or application of this product.

Parts List (80275PRO)

- 1 - Heat exchanger
- 1 - Fan shroud with dual Spal fans
- 1 - Dual relay wiring harness
- 1 - .080" Aluminum power steering cooler bracket
- 1 - .125" Aluminum power steering cooler bracket
- 1 - 3M 3-way Scotchlock connector
- 4 - Wire ties
- 6 - 1/4-20 Jam nut
- 5 - 1/4"-20 x 3/4" Carriage bolt
- 1 - 1/4"-20 x 3/4" Socket head screw
- 6 - 1/4" Lock washer
- 1 - M6 x 16mm bolt
- 4 - Hose clamps SAE #12
- 1 - 3/4" Heater hose
- 1 - 3/4" Molded hose
- 1 - Lit-706 Installation manual

Parts List (80275NFAN)

- 1 - Fan shroud with dual Spal fans (Qty. 1)
- 1 - Dual relay wiring harness (Qty. 1)
- 1 - .080" Aluminum power steering cooler bracket (Qty. 1)
- 1 - .125" Aluminum power steering cooler bracket (Qty. 1)
- 1 - 3M 3-way Scotchlock connector (Qty. 1)
- 1 - Wire ties (Qty. 4)
- 1 - 1/4-20 Jam nut (Qty. 6)
- 1 - 1/4"-20 x 3/4" Carriage bolt (Qty. 5)
- 1 - 1/4"-20 x 3/4" Socket head screw (Qty. 1)
- 1 - 1/4" Lock washer (Qty. 6)
- 1 - M6 x 16mm bolt (Qty. 1)
- 1 - Lit-706 Installation manual (Qty. 1)

Tool List (80275PRO or 80275NFAN)

- | | |
|--------------------|---------------------------|
| 7/16" socket | Drill |
| 8mm socket | 3/16" Allen wrench |
| 13mm socket | Phillips head screwdriver |
| 1/4" Drive ratchet | Pliers |
| 5/16" Drill bit | Wire cutters |

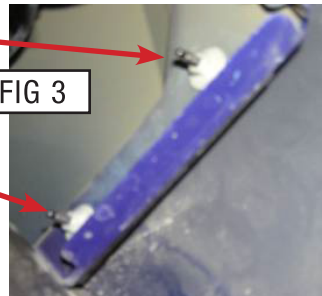
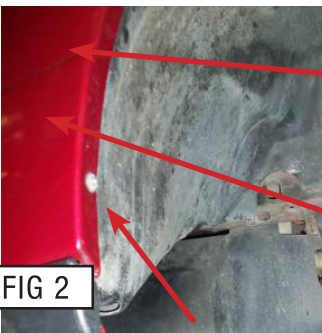
WARNING:

1. Radiator fluid must be handled properly. Please observe local ordinances with regards to handling and disposal.
2. Allow vehicle and components to cool a minimum of 1 hour before handling.
3. Never attempt to open the radiator cap when hot.
4. Do not allow any tools or limbs to contact fans—SERIOUS INJURY MAY RESULT.
5. Always follow directions and disconnect the battery before attempting installation.
6. AFCO is not responsible for personal injury or damage to vehicle resulting from improper installation of this product.
7. Due to vehicle variations / tolerances it is ultimately up to the installer to determine proper installation.

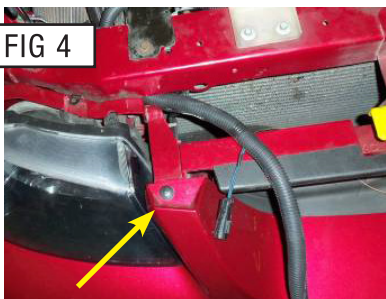
1. Disconnect the negative battery terminal.
2. Removal of the front bumper cover is not mandatory, but aids in the heat exchanger removal and installation. From underneath the vehicle, remove the 4 plastic clips that attach the air deflector to the radiator support. Then remove the 2 plastic clips that attach the front bumper cover to the radiator support (Fig. 1).



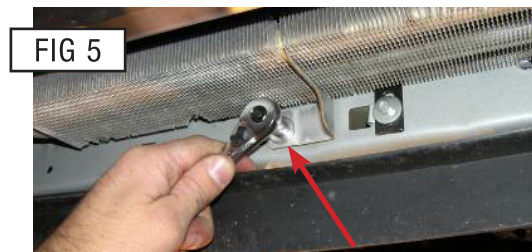
3. Next, remove the two lower screws in the bumper cover located in front of the wheel well (Fig. 2). Remove the 4 nuts located on the inside of the bumper cover (Fig. 3).



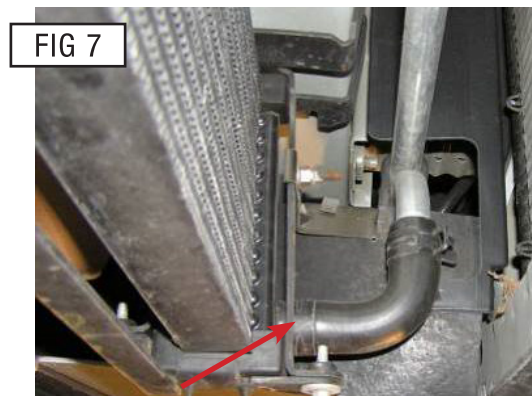
4. Disconnect the wiring harness to the fog lights. Then remove the top 2 screws holding the bumper cover on. Once these have been removed, the bumper cover can be removed (Fig. 4).



5. Remove the 2 bolts securing the power steering cooler and unhook the 2 rubber hoses running to it (Fig. 5 & 6). The reservoir will be full of fluid so have a drain pan ready. Remove the power steering cooler from the vehicle.



6. Disconnect the lower hose from the heat exchanger in order to drain the coolant (Fig. 7).

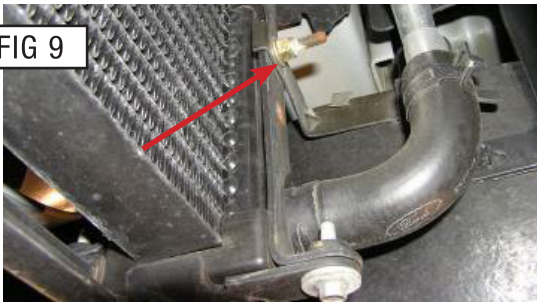


7. Disconnect the upper heat exchanger hose (Fig. 8).
8. Remove the nut securing the hose assembly bracket to the passenger side heat exchanger bracket. Detach the hose bracket from the heat exchanger (Fig 9).

FIG 8



FIG 9



9. Remove the 4 bolts securing the factory heat exchanger to the front mounting brackets (Fig. 10).

FIG 10



10. Move the assembly up and towards the radiator to unhook the heat exchanger brackets from the back of the bumper. Gently lower the heat exchanger out of the car.

11. Disconnect the heat exchanger hose from the coolant pump located under the passenger side fender (Fig. 11).

FIG 11



12. Disconnect the heat exchanger outlet hose from the engine. It is connected to a steel line just below the A/C compressor. You will disconnect the lower of the two hoses (Fig. 12).

FIG 12



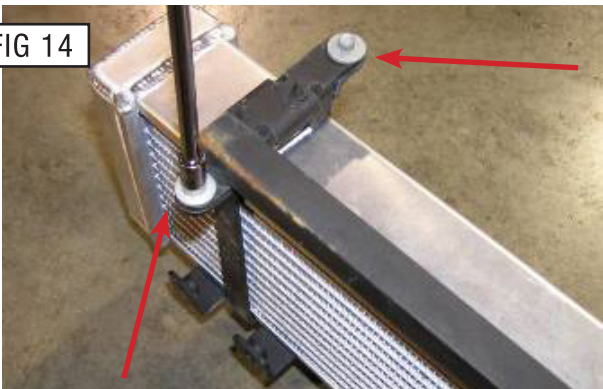
13. Remove the hose assembly from the vehicle.

FIG 13



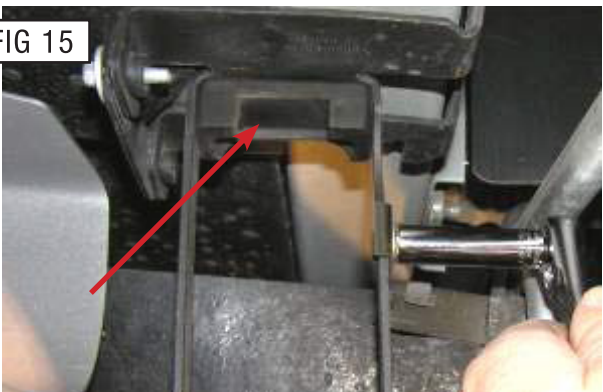
14. Remove the factory bracket assembly from the factory heat exchanger by removing the 4 bolts from the bottom bracket (Fig. 14).

FIG 14



15. Remove the 2 rubber inserts from the top bracket. Leave the lower rubber inserts in place (Fig. 15).

FIG 15



16. Drill the top driver side hole with a 5/16" drill bit (Fig. 16) and then install the 3 supplied 3/4" carriage bolts into the heat exchanger bracket. The bolts should extend away from the heat exchanger (Fig. 17).



17. Place the factory upper brackets on the AFCO heat exchanger by inserting the dowel pins on the heat exchanger into the holes in the upper brackets (where the rubber inserts were removed in step 15). Make sure not to damage the heat exchanger while installing the bracket. The "hook" on the bracket goes to the rear (hose side) of the heat exchanger (Fig. 18).



18. Install the lower bracket onto the heat exchanger. It will mount just like it did on the factory unit. Install the 4 bolts and tighten.
 19. Install the AFCO Heat Exchanger assembly into the vehicle by hooking the bracket onto the bumper support in the factory location. Install the 4 bolts from the grill opening and tighten (Fig. 19).



20. Place the fan shroud onto the 4 bolts (3 bolts that were installed and the factory stud on back side of the heat exchanger bracket) on the engine side of the heat exchanger. The bend on the bottom of the shroud should go over the heat exchanger, and the bend on the top should go away from the heat exchanger (Fig. 20). Attach using the factory nut and the supplied lock washers and nuts.



21. Position the molded hose so the 90 degree end attaches to the top fitting on the heat exchanger and the 120 degree end attaches to the coolant pump. Install and tighten the clamps.
 22. Route the straight 34" piece of hose from the coolant line below the A/C compressor, through the splashguard opening, and to the heat exchanger.
 23. Attach the other end of the hose to the lower fitting on the heat exchanger. Install and tighten the hose clamps.
 24. Reposition and attach the passenger side shield next to the heat exchanger hose connections.



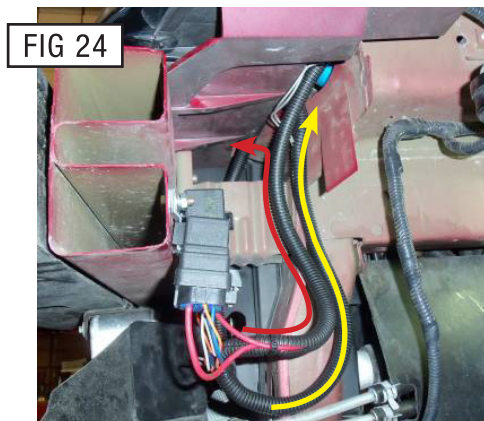
25. Install the black wire tie to prevent the lower hose from rubbing on the splash shield (Fig. 22).



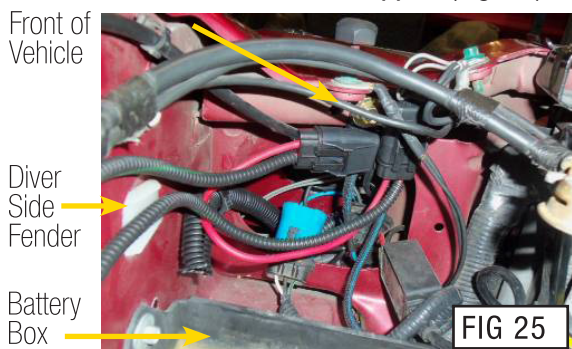
26. Next you will run the wiring for the unit. The locations specified for mounting the fuses and relays are the best locations for these components. The locations were chosen to reduce the amount of heat exposure to the components. First, remove the battery from the vehicle.
27. Attach the two relays to the back side of the bumper reinforcement with the supplied socket head bolt and nut (Fig. 23).



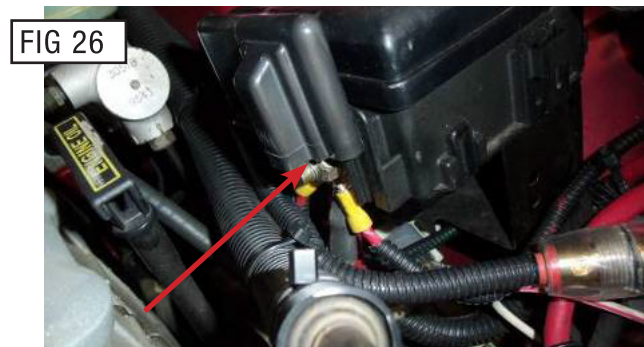
28. Run the fuse holders up through the opening behind the driver's side headlight (Fig. 24 Yellow).



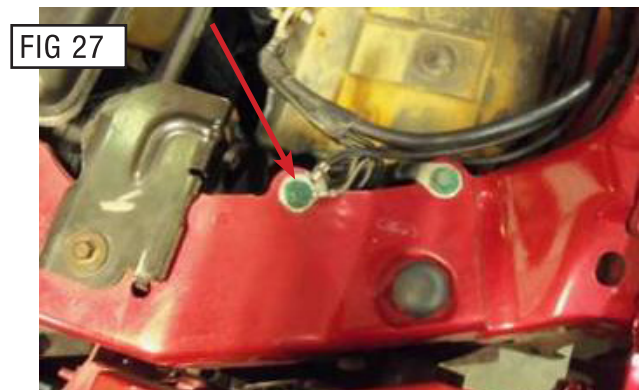
29. Use the supplied M6 x 16mm bolt to attach the fuse holders to the radiator core support (Fig. 25).



30. Next, run the red fuse leads along the driver's side fender up to the fuse panel. The ring terminals will be connected to the main power supply of the fuse box (Fig. 26).



31. Attach the black and gray ground leads to the green bolt in the radiator support where the factory ground wires are attached (Fig.27).



32. Run the remaining wires from the relays, over the frame of the vehicle (Fig. 24 Red) and along the top of the fan shroud (Fig. 28). Use the wire ties to attach the harness to the fan shroud. Plug the fans into the harness at this time.



33. The orange wire will run across the fan shroud to the passenger side of the vehicle. Remove the plastic loom on the coolant pump harness and locate the red and yellow wire. This wire will have battery voltage when the pump is activated. Cut this wire approximately 2" from the pump connector (Fig. 29).

FIG 29



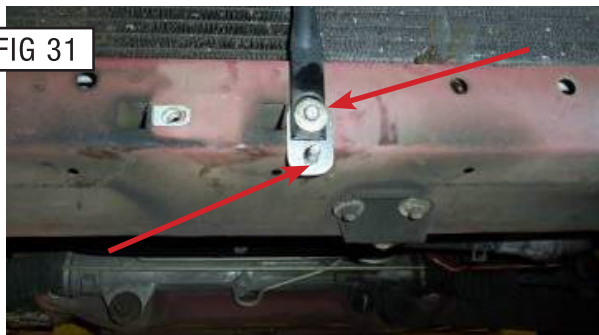
34. Insert the two ends of the red and yellow wire from the coolant pump and the orange wire into the blue/clear 3M Scotchlock 3- way splice connector supplied. Note: It is not necessary to strip the wires, and the order of the wires inserted does not matter. Once the button is depressed, the connector is difficult to reuse. Be sure the wires are inserted completely. Using slip joint pliers, (or similar tool) press the blue button down into the connector until the button locks. The connector is filled with EG-3 sealant. Just wipe off any excess with a rag. You may wrap the connection with electrical tape, although it is not necessary (Fig. 30).

FIG 30



35. Unbolt the supporting rod in the center of the radiator support and attach the short .08" aluminum bracket. Insert the carriage head bolt into the bottom hole (Fig. 31).

FIG 31



36. Attach the .125" bracket to the radiator support on the driver's side, where the power steering cooler was removed, using the factory bolt (Fig. 32).

FIG 32

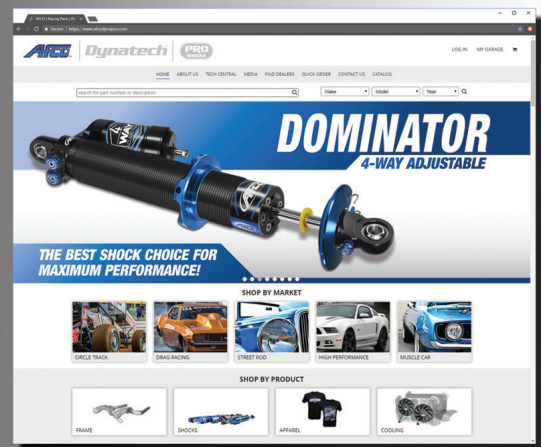


37. Bolt the power steering cooler to these mounts with the supplied hardware. Attach the power steering lines to the cooler by routing them outside of the radiator support (Fig. 31). Check for proper clearance between the heat exchanger, fans, and power steering cooler
38. Reinstall the front bumper in the reverse order that it was removed. Reconnect the driving lights.
39. Reinstall all the fasteners on the lower fascia.
40. Slowly refill the system with coolant. Refilling slowly lessens the possibility of trapping air in the system.
41. Run the vehicle at idle until the pump is activated. Activation is controlled by a timer and temperature, so be patient. Add coolant if necessary.



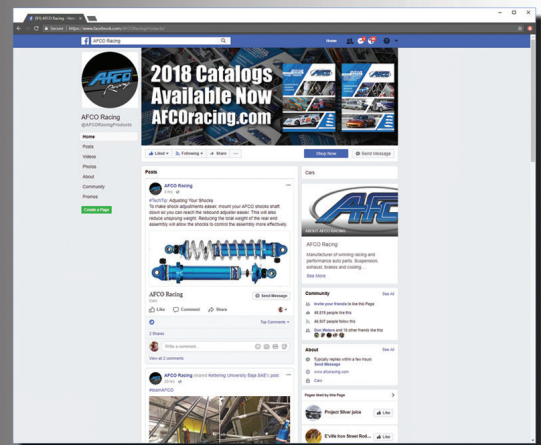
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