

COLD AIR INTAKE INSTALLATION INSTRUCTIONS

PART NUMBER D760-0620A APPLICATION: 9/98-2003 E39 540i 4.4L

PARTS LIST

4" Intake Tube
Air Filter w/ clamp
Silicone Hose
80-100mm Hose Clamp
90-110mm Hose Clamp
6x16mm Bolt
6mm Wave Washer
5" Wire Tie Strap
8" Wire Tie Strap
(2) 14" Wire Tie Straps
10" Length of channel rubber
Foam insulation
Air pump bracket
Protection Sock
Air Duct Cover



Congratulations for being selective enough to use a Dinan Corp. Cold Air Intake. We have spent many hours developing this system to assure that you will receive maximum performance and durability with minimum difficulty in installation.

Please take the time to read these instructions thoroughly before proceeding. When performing the installation, read the entire numbered instruction before working on the car. If you feel that you do not have the requisite skill, please arrange for a qualified repair facility to perform the installation.

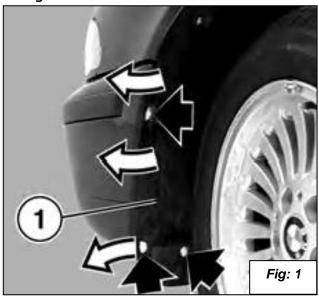
Required Tools: 8 & 10mm sockets with ratchet and 12" extension, small screwdriver, T-50 Torx Socket, 3/8 Torque Wrench, Utility Knife, Power or Air Jig Saw or cut-off wheel, Black Touch-Up Paint, ruler or measuring tape, scribe.

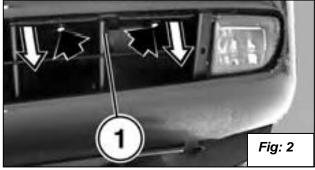
If you encounter any difficulties during the installation, or if these instructions are not clear to you, please call Dinan's Technical Support Staff @ (800) 341-5480.

INSTALLATION INSTRUCTIONS

- 1. The Front bumper must be removed to gain access to where to tube is installed. If you have a car with the M Trim bumper, skip to steps 6 thru 8. If you have a normal bumper, do steps 2 to 5.
- 2. **Normal Bumper:** Remove the three screws on both sides that attach the bumper to the inner fender wells (1). See Figure 1:
- 3. See Figure 2: Both of the small black plastic grills must be removed.

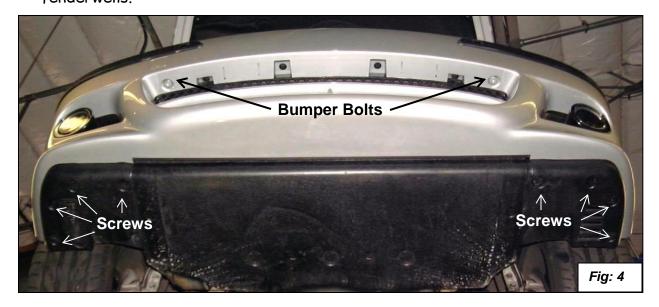
 Remove the two expanding rivets that hold in the small plastic grill (1). First pull out the center section of the rivet almost all the way, and then the outer section can be removed. The grill is removed by pulling in the direction of the white arrows.
- 4. See Figure 3: After removing the small grills you have gained access to the two main bumper bolts. Remove these bolts with a T-50 Torx socket.
- 5. See Figure 1: In order to separate the bumper from the inner fender wells pull in the direction of the white arrows. Pull the bumper slightly forward, but do not remove! The wires for the fog lights must be disconnected at the fog lights. If the car is equipped with headlight washers then the hose must also be disconnected. Once these have been disconnected then slide the bumper all the way out and set aside. Continue with step 9.



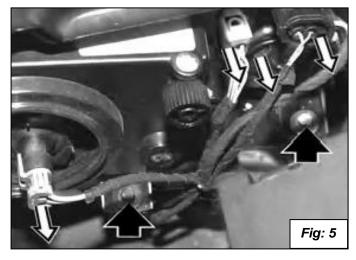




6. <u>M Trim Bumper:</u> First remove both of the lower engine covers. See Figure 4. Remove the one screw on both sides that attach the bumper to the inner fenderwells.

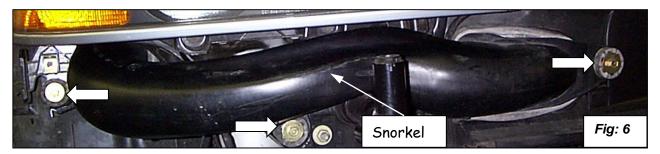


- 7. Unplug the two fog lamps. Next disconnect the headlight washer hose. The main connection is on the passenger side of the car, just to the outside of the air pump. Pull the black plastic clip out and pull the union apart. Some fluid may come out so have rags ready. Disconnect the wires to the Park distance control if equipped.
- 8. There are two bolts that hold the bumper to the bumper shocks. They are located in front just above the center opening in the airdam. Remove these bolts with a T-50 Torx socket. See Figure 4.
- 9. The passenger side headlight must be removed. See Figure 5: Remove the connectors attached to the rear of the headlight; some cars might have only two connectors. Remove the two lower bolts. There are also two other similar bolts on top of the headlight that must also be removed.



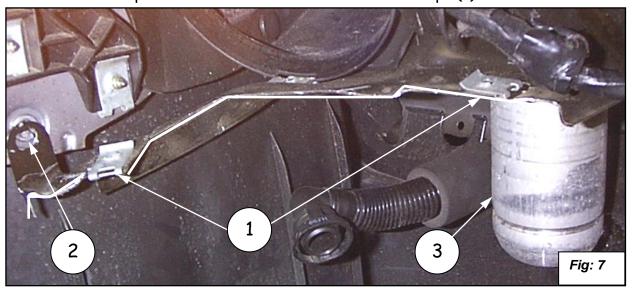
10. Slide the headlight forward to remove and set aside.

- 11. Remove the factory air box from the vehicle. Start by removing the 10mm head bolt securing the air box to the mounting bracket on the front right fender.
- 12. Loosen the hose clamp that attaches the Air Box to the Intake Snorkel.
- 13. Release the clips between the Airflow Meter and the Factory Air Box. Pull the Airflow Meter out of the Air Box and remove the Air Box by lifting it straight up. There might be a rubber adapter that connects a nipple on the air box with the fender, remove this with the air box. The Air Box and adapter will not be reinstalled on the car.
- 14. See Figure 6: The Intake snorkel mounted on the front of the car must be removed. Remove the three bolts that secure it to the car and remove the snorkel, it will not be reinstalled on the car. Install the Air Duct Cover over the hole.



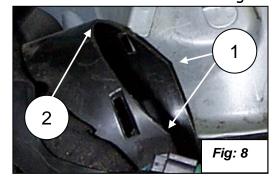
- 15. Remove the air pump that is located in the compartment under the intake snorkel. There are three bolts that hold it to the car. Cut the cable tie that holds the wires to the bracket, and disconnect the electrical cable. Disconnect the outlet tube by squeezing the end of the fitting. Remove the air pump from the car. Remove the three nuts that hold the metal mounting bracket to the air pump. The pump will be mounted later with the supplied bracket.
- 16. In order for the intake tube to fit, a portion of the hole where the Air Box inlet was, and the tray under the Air Box must be trimmed. This is located at the right front of the car under where the right turn signal is located.

17. See Figure 7: Trim steel tray as shown in picture (the picture is of the metal tray under the passenger side front turn signal with the metal try already cut). This is easily done with an air powered Jig Saw or cut-off wheel. A hacksaw will get the job done, but will take a while. Cut along the white line as shown in the picture. Make sure to cut around the clips (1).



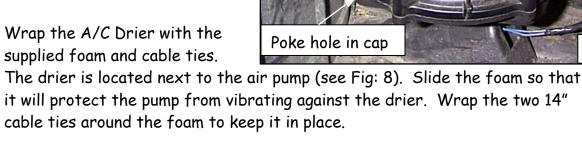
18. See Figure 8: Trim the plastic hole as shown. The plastic part is where the snorkel and Air Box used to meet. The electrical wires near the hole should be moved before trimming so you do not cut them. Cut the cable tie holding

them and replace it later with the supplied 5" wire tie. The wires can be held up with a piece of masking tape while trimming. Start trimming at (1) and continue around the top half of the tube in a half moon shape. At point (2) trim off 1 inch back from the end of the tube.



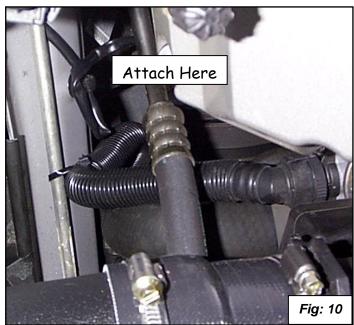
19. After trimming, fit check the tube to make sure it will clear and the bolt can be attached. Temporarily attach the silicon hose to the end of the tube to make sure it will mate with the air flow meter. The tube will fit through the hole if the top is inserted from the outside and the tube is upside down. The Intake Tube bolts to the existing hole, see Fig: 7 (2), using the supplied 8mm head bolt and wave washer. Trim more material if the tube does not fit. Once the tube fits, remove it and sand or file the cut edges smooth. Apply a small amount of Black Touch-Up paint to the exposed metal surfaces.

- 20. After the paint dries, install the Channel Rubber over the edge of the metal tray you just cut. This protects the tube from chafing with the metal tray.
- 21. Mount the Air Pump Bracket to the air pump as shown in Fig: 9. Use the stock nuts. The bracket must be oriented correctly when mounted. There are three ways the bracket will mount to the three studs. Study the picture and note how the electrical connector is oriented on the top of the pump. Also the outlet must point towards the engine so that the outlet tube can clip back on to the pump. The outlet tube has to be pushed back into the engine compartment for it to attach. Re-attach the electrical connector.
- 22. Mount the air pump bracket to the two stock speed nuts. Use two of the three stock bolts that originally mounted the air pump (see Fig: 9).
- 23. Using an awl, poke a small (1/8th inch) hole in the center of the cap on the bottom of the air pump. Water could collect in the cap since the pump is now mounted upside down. The hole will let the water drain out (see Fig: 9).
- 24. Wrap the A/C Drier with the supplied foam and cable ties.



25. Place the smaller 80-100mm hose clamp over the small end of the Silicone hose and slip it over the Air Flow Meter. Install the Intake Tube into place, and attach the tube to the other end of the Silicone hose with the larger 90-110mm hose clamp. There is an amount of play available when tightening down the tube. In order to place the tube in its correct final position, make sure the Air Flow Meter is level and straight and looks aesthetically pleasing. Tighten the tube to the car in this position.

- 26. Install the Air Filter on the lower opening of the tube with the supplied hose clamp. Make sure the filter does not interfere with the mounting of the front bumper. Install protection sock onto air filter.
- 27. Reinstall the headlight, reverse of installation.
- 28. Reinstall the bumper. Remember to connect the fog lights. Make sure the ends of the bumper correctly slide into their corresponding connectors. Reattach the three screws for the inner fender wells. Tighten the bumper mounting bolts to 41 N-m (30 ft-lb).
- 29. The Air Pump outlet hose must be secured in the engine compartment since it is pushed back further because of the Air Pump relocation (see Fig. 10). Using the supplied 8" wire tie to attach the hose to the A/C line shown in the picture. Make sure the hose will not rub against the engine belts.
- 30. Reinstall the two small grills with their rivets.



FOR BEST PERFORMANCE, WE RECOMMEND THAT THIS INTAKE BE USED WITH THE APPROPRIATE DINAN PERFORMANCE SOFTWARE FOR YOUR VEHICLE. There are two methods to install the software:

- A Dinan Exclusive Dealer can download the software directly into your ECU. In this instance, you may proceed directly with the intake installation. Please contact your Dinan representative to locate the facility nearest you.
- You can send your ECU to Dinan for programming. Please contact your Dinan representative so that we may prepare for its arrival.

NOTE:

 We recommend replacing the air filter every 30,000 miles. The Dinan part number is D403-0410.