



## HIGH FLOW COLD AIR INTAKE SYSTEM INSTALLATION INSTRUCTIONS

D760-0321B

1998 E36 323is  
1996-1998 E36 328i  
1996-1999 E36 328is  
1996-1999 E36 M3 (3.2L)

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### PARTS LIST

1	3 1/2" Intake Tube
1	Airflow Meter Bracket Assembly
1	Air Filter Assembly
1	Air Filter Bracket
1	Silicone Hose
1	Retaining Clip
1	Nut Insert Toolkit / 6mm
1	#36z Hose Clamp
1	#48z Hose Clamp
2	6mm Wave Washers
2	6mm x 10mm Bolts
4	6mm x 16mm Bolts
6	6mm x 18mm Fender Washers
2	6mm Nuts
1	Tie Strap

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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 time to read these instructions. If you feel that you do not have the requisite skill, please arrange for a qualified repair facility to perform the installation.

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

#### NOTES:

- This kit is designed for use with US specification headlights. The intake pipe will not fit in vehicles modified with European headlights.

**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.

**Removing the Factory BMW Air Box:**

1. Locate the two 10mm nuts securing the Airbox to the mounting bracket on the front left fender. Remove these nuts.
2. Locate the clip securing the inlet snorkel to the front of the chassis near the left front headlight assembly. Remove this clip and detach the inlet snorkel from both the front of the car and the air box.
3. Locate the two spring clips securing the Airbox to the Airflow Meter. Carefully remove these two clips. Do not remove the rubber boot on the other end of the Airflow Meter. You will not be removing the Airflow Meter.
4. The air box should no longer be connected to any other parts and can now be carefully removed from the engine compartment and set aside.

**Installing the Air Filter and Bracket:**

5. Locate the Air Filter Bracket and Hardware included with your Kit. The Air Filter is to be mounted in the triangular space at the front of the left side wheelwell. First you must relocate the horn which is mounted to the frame rail.
6. Disconnect the wiring harness from the horn and remove horn. Remove the C-shaped bracket where applicable.
7. Use a die grinder with a fiberglass disc, to cut off the horn mounting bracket flush with the frame rail. Be very careful not to cut any wires!
8. Sand off any sharp edges and cover any bare metal using some touch-up paint.

## Relocating Horn:

9. Notice the screw that goes through the lower half of the aluminum bumper to the far left. This retains the fog light bracket. Remove this screw.
10. Reconnect the wiring harness to the horn, you may want to switch the horn wires for one is longer than the other.
11. Mount the horn to the bumper using the fog light screw. Position the horn so it is clear of the area where the filter will be mounted. Carefully slide the air filter down into the space you have created and check for clearance.

## Mounting Filter Bracket:

12. With the air filter located in this new space, there should be at least 1/8" of clearance between the filter and any surrounding parts.
13. Set the air filter bracket over the air filter. It will be mounted using two 6x10mm bolts, two 6mm nut insert fasteners, and one retaining clip. The two bolts and nut inserts will use both the single hole on the far outside end of the air filter bracket, and the rearmost hole (i.e., closest to the passenger compartment) on the engine side of the bracket. The two remaining engine side holes (i.e., closest to the front of the car) will not be used for this installation. Instead, a retaining clip has been included with this kit and will be located between these two unused holes.
14. Position the bracket for the best fit, then use a scribe to mark the two mounting holes you're going to be using onto the sheet-metal surfaces beneath. Be sure to hold the air filter bracket still while marking these holes.
15. Remove the air filter and bracket from the car.
16. Use a center punch and hammer to carefully mark the center of both of the holes scribed in step 14. Be sure that they are well centered!
17. Use a small pilot drill (about 1/8") to start each of the two holes. Be careful not to drill through anything under the wheel well panel. Finish drilling out each hole using a 3/8" drill bit or Unibit.
18. Carefully deburr the two holes using a small round file.
19. Use the Nut Insert Installation Tool (included) to install the nut inserts. The tool consists of a hex tool, a 6x30mm bolt, and an internal tooth lockwasher.

### Nut Insert Installation (refer to figure included with installation tool):

- a. Place the 30mm long bolt through the hex tool.
- b. Slip on the lockwasher.

- c. Thread on one nut insert with the large end against the lockwasher. Finger tighten the nut insert.
  - d. Push the small end of the nut insert into one of the 3/8" holes you drilled until it is inserted up to the lip on its sleeve.
  - e. Tighten the bolt while holding the hex tool with a wrench. Tighten firmly.
  - f. Remove the bolt and repeat the process for the next hole.
20. After installing the two nut inserts, locate the black, spring-steel retaining clip included with your kit. Look closely at this clip. You will notice that the gap on one side is larger than on the other. The larger gap is designed to fit snugly over the car's unibody. The smaller gap will fit snugly over the edge of the air filter bracket.
  21. Install this retaining clip by carefully sliding it over the edge of the air filter bracket, between the two unused mounting holes. Be sure to install this clip with the larger gap in the inside of the bracket (toward the air filter) as the air filter bracket is designed to fit on the outside of the unibody flange.
  22. After placing the air filter in its desired position, place the air filter bracket over the filter (the neck of the filter should be protruding from the hole in the bracket). With the bracket in position, slide the side of the bracket with retaining clip attached over the edge of the sheet-metal unibody directly beneath. The open side of the clip should fit snugly over the car's sheet-metal.
  23. Carefully adjust the air filter bracket so that the two mounting holes are lined up with the two nut inserts. Finish mounting the bracket using the two 6x10mm bolts and 6mm wave washers supplied. Do not over-tighten these bolts or use any loc-tite on the bolt threads!
  24. Place a rag over the air filter inlet to prevent dirt and foreign objects from entering the filter.

### **Installing Air-Flow Meter Bracket:**

25. For this kit we will be utilizing the bracket located on the inner fenderwell under the Air Flow Meter. Some vehicles have a purge valve located on this bracket and some do not. For the vehicles that have the purge valve use steps 26-31. Vehicles with the purge valve on the manifold use steps 32-33.
26. The purge valve is attached to the bracket via two rubber mounts. Each of these rubber mounts has a 17mm hex molded at either end. Please loosen, but do not remove, the two 10mm nuts that secure the charcoal canister assembly to the rubber mounts (a few turns should be fine). It may be necessary to use a 17mm wrench to keep each mount from twisting while loosening the nuts.
27. With these nuts loosened, use the 17mm wrench to carefully loosen the each rubber mount from the mounting bracket (approx. 1/8" is sufficient). Be sure to use the wrench on the bracket-side of each rubber mount to prevent the mount from twisting.

28. With the two rubber mounts loosened, carefully slide the L-shaped Airflow Meter Bracket in place between the mounting bracket and the two rubber mounts. The folded end of the bracket points toward the front of the car, and you will find that the two slotted holes in the Airflow Meter Bracket match the two exposed studs. Do not tighten the two rubber mounts yet.
29. The horizontal length of the bracket should now be right next to the Airflow Meter. Carefully insert the folded end of the Airflow Meter Bracket into the square cut-out in the forward flange of the air flow meter. You may want to loosen the hose clamp to rotate the Airflow Meter around to help in alignment. The other end of the Airflow Meter bracket should fit in front of the rear flange of the Airflow Meter.
30. Use the large zip-tie to secure the Airflow Meter Bracket to the rear of the Airflow Meter by looping it around both the Airflow Meter and the bracket. Before tightening the zip-tie completely, slide it back against the rear flange of the Airflow meter and rotate it so that the business end of the zip-tie is underneath the Airflow Meter and out of sight.
31. Tighten the zip-tie and trim off the excess length, leaving at least 1/4" or so in case you need to tighten it further. Tighten the two rubber mounts, be sure to slide the bracket down to the end of the slots. Skip to step 34.
32. You may want to loosen the hose clamp to rotate the Airflow Meter around to help with alignment. Slip the folded end of the bracket into the Airflow Meter slot on the side; push in until the other end sits against the Airflow Meter.
33. Locate the 6x16mm bolts and washers. These will mount the lower leg of the Airflow Meter Bracket to the factory bracket on the fenderwell. Once you are satisfied with the fit, wire tie the back of the bracket to the Airflow Meter, and tighten the 6mm bolts and the hose clamp, be sure to slide the bracket down to the end of the slots.

### **Installing the Intake Tube:**

34. Locate the Silicone Hose and the #36z hose clamp from the kit. Slip the reduced end of the hose onto the Airflow Meter and tighten it down with the clamp.
35. Remove the rag covering the top of the air filter. Please place the large, #48z hose clamp supplied with the air filter around the 'mouth' of the air filter, and place the other #48z hose clamp on the large end of the Silicone Hose.
36. Locate the 3 1/2" Intake Tube, the Dinan Logo goes up towards the Silicone Hose. Slip the Intake Tube into the Air Filter then rotate it into the Silicone Hose. When satisfied with the fit, tighten the hose clamps. There should be approximately 1/4" gap between the Intake Tube and the headlight adjuster.
37. If the car was equipped with cruise control, reattach the actuator to the original airbox mounting tabs using the remaining 6x16mm bolts, 6mm fender washers, and nuts.

You are now done installing this kit. **Enjoy!**

NOTE:

- We recommend replacing the air filter every 30,000 miles. The Dinan part number is D403-0350.
- For best performance, we recommend that this intake be used with the appropriate Dinan Performance Software for your vehicle. Please contact your Dinan representative for details.