

# COLD AIR INTAKE INSTALLATION INSTRUCTIONS

# D760-0029 Fits: 2009-10 335i/xi (E90; with N54 engine)



Congratulations for being selective enough to use a Dinan Engineering 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.

If you encounter any difficulties during the installation, or if these instructions are not clear to you, please call Dinan's Technical Support Staff at (408) 779-8584.

### PARTS LIST

Qty	Part #	Description
Ĩ	D401-0016	Round Air Filter with clamp
I	D762-0107	Power Steering Bracket
I	D762-0115	Carbon Intake Tube
I	D762-0116	Airbox Hose
I	D762-0117	Carbon Airbox Lid
Ι	D762-0120	Filter Bracket
Ι	D762-0121	Filter Shield
Ι	D762-0127	Heat Shield (for E90 LCI)
I	KN33-2367	Panel Air Filter
I	D763-0064	Open Lower Grill
I	D763-0059	Hardware Kit; includes:
		(1) D671-0108 Spacer
		(1) #64Z (90-110) Hose Clamp
		(1) #48Z (80-100) Hose Clamp
		(2) M6X35 Bolts
		(I) M6X25 Bolt
		(11) M6X16 Button-head Stainless Bolts
		(14) M6X18 FENDER Washers
		(2) M6X25 FENDER Washers
		(3) M6 FLAT Washers
		(8) M6 NYLOK Nuts
		(3) M6 WAVE Washers

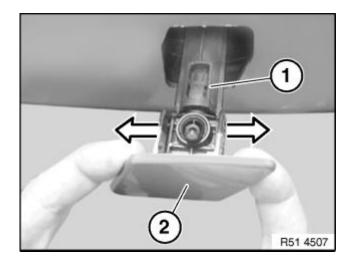
## NOTES:

- This kit is designed for cars with a standard or BMW M-Technic front bumper.
- This kit may not fit cars equipped with alternate bumpers.

## **INSTALLATION INSTRUCTIONS FOR 3-SERIES**

#### Remove Front Bumper Skin

 Remove the doors for the headlight cleaning system if your car is equipped with them. Pull out spray nozzle (1) by cover (2). Hold spray nozzle and carefully unclip cover sideways and remove. <u>Important! Do not</u> let go of Spray Nozzle when removing Cover! Grip spray nozzle firmly. See figure below. Your car may have a different looking cover with metal springs.



- 2. Remove the front wheels.
- 3. Remove the screws that secure the painted bumper skin to the large front lower splash shield and wheel well liners at the front edge. When reinstalling these screws, use hand tools only to prevent stripping the threads.
- 4. Remove the screws that are in the front side of each wheel well that secure the wheel well liners to the bumper skin.
- 5. Carefully pull out the wheel well liners from the bumper skin to expose the two screws (per side) that connect the top edge of the bumper skin to the front of the fenders. These screw heads point down. You may want to completely pull out the passenger side (right side) liner to get to the screws but the left side liner must be left in the car to install this kit. Remove the four screws. Notice that these screws have special threads just for plastics and must be reused in the original holes. These screws must not be over tightened!
- 6. Disconnect the fog light plugs and harnesses from the bumper skin.
- 7. Remove the four Torx head screws that secure the top of the bumper skin to the radiator support frame.
- 8. Prepare a stand or cart for storing the delicate bumper skin.
- 9. Remove and safely store the bumper skin.

- 10. Remove the stock grill cover next to the driver's side (left side) fog light. You should remove the painted center bar first where applicable.
- 11. Locate the D763-0064 Open Lower Grill. Install this new grill in place of the old partially blocked off grill. Reinstall the painted center bar if so equipped.

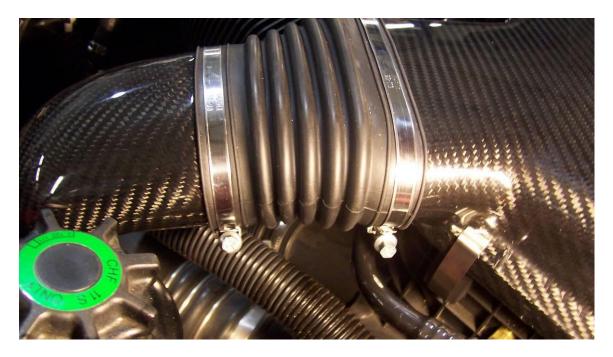
#### **Relocate the Power Steering Reservoir**

- 12. The long metal power steering reservoir bracket will need to be removed to create space for the new Carbon Intake Tube.
- 13. Remove the PS reservoir from the original bracket, saving the nuts and washers.
- 14. Remove the PS reservoir bracket. This part will not be reused.
- 15. If present, remove the large metal tube that runs from the top of the left front frame rail to the upper front corner of the engine compartment. This part will not be reinstalled.
- 16. Locate the D762-0107 Power Steering Bracket the D671-0108 Spacer, one M6x25 bolt, two M6x16 bolts and two M6 wave washers. See the photo at beginning of these instructions. Install the front M6x16 bolt with M6 wave washer finger tight first to see if the Spacer and longer mounting bolt will be needed. If there appears to be a large gap at the rear hole of the Bracket then you should use the Spacer and M6x25 bolt with M6 wave washer to secure the rear of this Bracket. If there is no gap and the Bracket sits fairly flat against the rear threaded hole then use the M6x16 bolt and M6 wave washer. Tighten both bolts.
- 17. Mount the reservoir to the Bracket using the supplied M6x35 bolts, and the original washers and lock nuts. Make sure the stock metal spacer bushings are still in place in the two rubber grommets.

#### Install Airbox Lid and Intake Tube

- 18. Remove the stock airbox lid.
- 19. Install the KN33-2367 Air Filter.
- 20. Locate the **D762-0117 Airbox Lid**. This lid mounts the same as the stock lid but requires a little finesse to install. Insert the three Airbox Lid tabs into the airbox slots. Push the front of the Lid downward and rearward while wiggling a little side to side. Now concentrate your effort on getting the front right (closest to valve cover) corner of the Lid to fit slightly over the top edge of airbox. This will take some downward pressure and a little side-to-side motion. As soon as the corner is correctly positioned engage the mounting clip at the front corner. Next engage the clip next to the valve cover then the remaining clips.

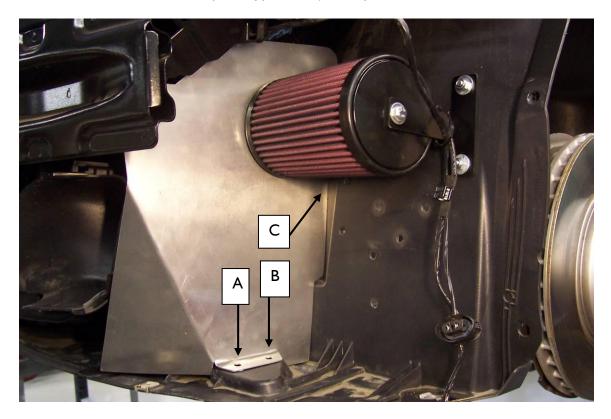
21. Locate the **D762-0116 Airbox Hose** and one **#64Z** (90-110) **Hose Clamp**. Fit the clamp onto the Hose as shown below. You will need to gently bend the hose clamp into an oval before installation. Tucking the screw head under the side of the Hose makes for a nicer look. Place the clamp in position on the Hose and slide the assembly over the lip on the Airbox Lid inlet. Make sure the hose clamp is evenly situated behind the lip all the way around, then tighten the clamp. Notice that the Hose curves downward.



- 22. Locate the **D762-0115 Carbon Intake Tube** and one **#48Z** (80-100) **Hose Clamp**. Fit the clamp onto the Airbox Hose as shown previously and install the Tube down into the space below the headlights and into the Hose. Tighten the hose clamp with the Intake Tube rotated so it has the most "wiggle room" at its lower end.
- 23. Locate the **D401-0016 Air Filter with Clamp**. Install the Filter onto the Intake Tube with the clamp screw below the Tube and facing forward. Rotate the Air Filter so it is parallel with the wheel well liner face and level when viewed from the front. Tighten clamp.

#### Install the Heat Shield and Air Filter

24. Locate the **D762-0127 Heat Shield**, three M6x16 bolts, three M6 flat washers, three M6 fender washers and three M6 nylok nuts. The Heat Shield will mount to the forward wheel well liner using three bolts (Bolt C is hidden under the Air Filter in this shot of the prototype shield). See photo for location.



- 25. Carefully insert the Heat Shield between the end of the Air Filter and the brake duct. Hold the Heat Shield against the brake duct, snug along the wheel well liner and even with the front edge of the brake duct opening. Gently lift up the forward-most edge of the wheel well liner, as it would be when the bumper skin is installed. Now scribe the two hole locations onto the brake duct surface. (If your car has M-Technic Bumper use holes A and C only)
- 26. Temporarily remove the Heat Shield. Use your sharp scribe to "center-mark" the two hole centers. Push the scribe hard into the center of each hole with a circular motion to leave a good "pilot mark".
- 27. Use a small drill bit (1/8" or smaller) to drill the two pilot holes in brake duct.
- 28. Drill the holes out to 9/32".
- 29. Deburr the holes if needed using a much larger sharp drill bit, turning the bit **by** hand a couple of turns.
- 30. Mount the Heat Shield with the above hardware to the two lower <u>wheel well liner</u> holes using standard flat washers under the bolt heads and inserting the bolts <u>from</u> <u>the Heat Shield side first</u>. Use two M6x18 fender washers on the wheel well liner side.

- 31. Use the remaining M6x16 button-head bolt and hardware to attach the Heat Shield to the upper wheel well liner hole using the M6x18 flat washer under the bolt head, and inserting the bolt from the rear of the wheel well liner.
- 32. Locate the **D762-0120 Filter Bracket**, three M6x16 button-head bolts, five M6x18 flat washers, two M6 nylok nuts and one M6 wave washer. Loosely mount the bracket to the end of the Air Filter using one M6x16 bolt, one M6 wave washer and one M6x18 flat washer. The base of the bracket will face towards the outer edge of the wheel well liner as shown previously. Hold the Air Filter/Bracket Assy so the Filter is level and the bracket base is flat against the wheel well liner. Scribe the two mounting holes onto the wheel well liner while holding the assembly in the correct position. See the photo below but please ignore the Heat Shield as it is for another 335i kit.



- 33. Center-mark and drill the holes (9/32") as done previously.
- 34. Mount the Filter Bracket to the wheel well liner using the remaining above hardware. Insert the two <u>button-head</u> bolts from the rear side of the wheel well liner.
- 35. Tighten the single bolt at the Filter.
- 36. Locate the **D762-0121 Filter Shield**, three M6x16 <u>button-head</u> bolts, six M6x18 flat washers and three M6 nylok nuts. See previous photo for position of the Filter Shield. This Shield prevents water from directly hitting the Air Filter. Hold the base of the Shield flat against the wheel well liner level with the filter and about 3/4" from the Filter at the closest point. The Shield should be centered with the Filter element when viewed from the front. Remove the tire pressure receiver if it prevents proper fitment of the Shield. Mark the three mounting holes in this position.

- 37. Center-mark and drill the holes (9/32") as done previously.
- 38. Mount the Filter Shield using the above hardware. Again insert the <u>button-head</u> bolts from the rear of the wheel well liner.
- 39. To relocate the tire pressure receiver if necessary, simply move it down about 1" from its original location then mark and drill two new 9/32" holes.
- 40. Deburr the holes and reinstall the receiver.
- 41. Reinstall the front bumper skin and headlights washer covers where applicable.
- 42. Reinstall and torque the front wheels.

Happy Motoring!