



### INSTALLATION INSTRUCTIONS



### P/N 76-1000

#### VEHICLE APPLICATIONS

2003-2007

Dodge Ram 2500, 3500

5.9L Cummins Turbo Diesel

#### WARNING!

DO NOT APPLY MORE THAN 5 PSI TO THE ELBOW WITH THE HOOD RAISED. AS SERIOUS INJURY AND OR DEATH COULD OCCUR!

#### PARTS LIST

QTY	DESCRIPTION	QTY	DESCRIPTION
1	(J) Intake Elbow	4	(D) M8 Washer
2	(E) M8x90mm Bolt	2	(O) M8 Jamb Nut
2ea	(G) M8x95mm & 85mm Studs	1	(F) Gasket
2	(C) M8 Lock nut	1	(H) O-Ring
1	(K) Thread Locker	1	(P) 11" Black Zip Tie
5	(I) 1/8" NPT plug	1	(B) M4x10mm Bolt
		1	(A) M4 Washer

#### TOOLS REQUIRED

- 10mm Wrench or Socket
- 13mm Wrench & Socket
- 13mm Crows Foot
- 7mm Wrench or Socket
- 7/16 Deep Socket
- Torque Wrench (In.lb.)
- Gasket Remover (scraper)
- 3/16" Hex Drive vacuum (optional)

1. With the ignition switched off, place the vehicle in Park and or set the Parking Brake. Now disconnect the negative battery cables.



2. Loosen the upper hose clamp at the OE elbow and disconnect the hump hose from the elbow. **Note:** Care should be taken not to let any debris fall into the boost tube.



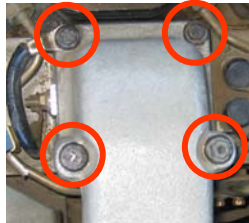
3. Remove the bolt that secures the dip stick tube to the elbow.



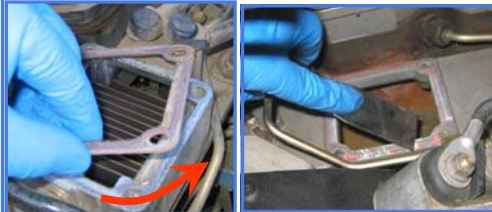
4. Remove the lock nut and pull the prong out that secures the wiring harness to the elbow and push the harness back away from the elbow.



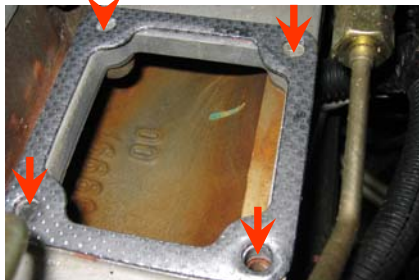
5. Remove the 4 bolts that secure the elbow to the manifold and remove the elbow from the vehicle. Careful not to let any debris fall into the manifold. **Note:** If the OE bolt threads were corroded and rust deposits have fallen through the bolt holes into the manifold use a vacuum to clean it out.



6. You will need to remove the nut that secures the ground wire to the heater block to gain access and to remove the lower gasket. A scraper may be necessary, be careful not to damage the sealing surface and to not let any debris fall into the manifold.



7. Place the supplied Graphite Gasket (F) on the manifold under the heater block, make sure all four bolt holes in the gasket line up correctly.



8. This kit has 2 long studs and 2 short studs, to determine the correct length studs for your application thread each a long and short stud (short threaded end first) into the manifold bolt holes farthest from the valve cover. Measure the height of the stud from the heater grid block upward. Use the studs that have a height of approximately 1.125". Remove the studs place a small amount of the supplied Thread Locker (K) to the correct Studs (G) and thread the studs by hand into the two bolt holes farthest from the valve cover. Stage the Bolts (E) by applying Thread Locker as well.



9. Double nut a stud using the supplied Jamb Nuts (O). Turning only the top nut torque the stud to 40 In. lbs. Remove the Jamb nuts and repeat process on the other stud then discard the Jamb nuts. **Note:** All required torque specs. are called out in **Inch pounds NOT** foot pounds!



10. Apply a thread sealant (Teflon tape) to each 1/8 NPT plugs (I) and insert the plugs into the ports you will not use on the S&B elbow. Use a 3/16 hex socket and torque the plugs to 50 In. lbs.



11. Install the supplied O-ring (H) into the groove in the base of the S&B Elbow. Start in a corner and work your way around, avoid rolling the O-ring during installation.



12. Place the S&B elbow (J) over the studs and onto the heater block, use the supplied M8 bolts (E) and M8 washers (D) and hand thread the bolts into place. Next place an M8 washer over each stud and thread on the M8 lock nuts (C). Torque both the lock nuts and bolts to 145 In. lbs. If you use a 13mm crow foot to torque the nuts, see crow foot torque wrench calculation on page 2. Replace the ground wire back in the same location and secure it with the original nut. **NOTE:** You may need to lift the elbow up slightly, to get the nuts threaded onto the studs.



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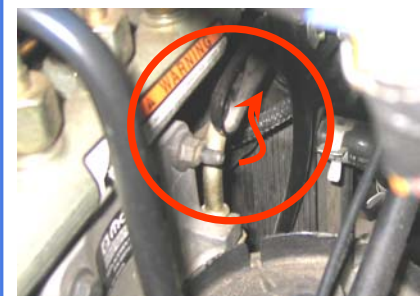


### INSTALLATION INSTRUCTIONS (continued)

13. Wipe clean then slide the OE hump hose and hose clamp onto the S&B Elbow and torque the clamp to 90 In. lbs.



14. Remove the OE nut at the lower dip stick tube bracket and push the tube back about one inch.



15. Secure the dip stick tube upper bracket to the S&B Elbow, apply thread locker to the supplied M4 Bolt (B), place the M4 Washer (A) over the bolt and thread the bolt into the elbow. Torque to 36 In. lbs.



16. Use the supplied Zip-Tie (P) to secure the wiring harness behind the elbow. Reconnect the batteries. Inspect your installation, make sure kit is properly positioned and all fasteners are secure.

17. Adhere the C.A.R.B. exemption sticker in plain sight under the hood.

#### PERFORMANCE TESTING

##### WARNING!

DO NOT APPLY MORE THAN 5 PSI TO THE ELBOW WITH THE HOOD RAISED AS SERIOUS INJURY AND OR DEATH COULD OCCUR!

- \* Engage parking brake and start your engine. Listen for abnormal noises. If an air leak is detected, re-inspect hoses and connections as they may need to be repositioned and tightened.
- \* **Important!** S&B FILTERS recommends that you keep your OE intake elbow in the event it is required in the future.
- \* In order to maintain your warranty, all connections and components must be checked periodically for alignment and for proper tension on all connections. Failure to do so may void your warranty.

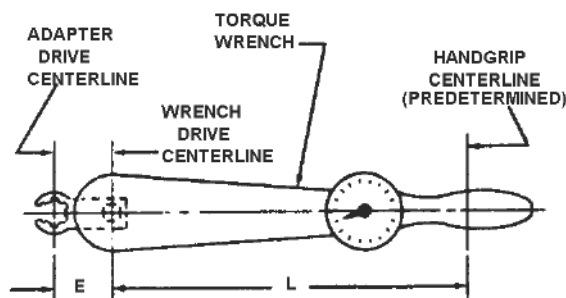
#### Emission Standards

The California Air Resource Board (CARB) requires that an E.O. identification label be applied to the vehicle in order to pass a smog check inspection when a Performance Intake Elbow has been installed.

You must place the E.O. label provided on or near the intake elbow after installation so that a smog check technician can easily verify the E.O. number.

As of 10/31/08, S&B has never had a product where CARB denied an exemption request; however, the exemption process with CARB can take as long as 18 months. Check the status of the exemption process by looking up a specific part number at [www.sbfilters.com](http://www.sbfilters.com). The CARB Exemption number and/or status is listed under the Product Details section for each part number. If the status shows as "Pending," CARB has yet to issue an exemption. Products that have not been issued an EO number are street legal in most states, but may not be used on emission controlled vehicles in the state of California.

**Note:** This is a calculation to adjust your Torque Wrench for use with a Crow Foot attached.



$$\text{FORMULA } \frac{T \times L}{L + E} = Y$$

EXAMPLE: (WITH "E" AS PLUS DIMENSION)

T = 135 LB. IN.      Y =  $\frac{135 \times 10}{10 + 1.5} = \frac{1350}{11.5} = 117.39$

Y = UNKNOWN

L = 10.0 IN.

E = 1.5 IN.      Y = 117 LB. IN.

#### CONTACT S&B FILTERS

(909) 947-0015 Phone (909) 947-0603 FAX  
[www.sbfilters.com](http://www.sbfilters.com)

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# S&B FILTERS

Performance Intake Elbow



## S&B PIN 76-1000



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Performance Intake Elbow



## Intake Elbow Product Warranty

The warranty period for S&B Intake Elbows is 5-Years. Returns are not accepted once the parts have been installed.

Tests conducted by an independent third party found that the Intake Elbow (part # 1001) did not rupture until reaching 165 PSI under ambient conditions. For more information including additional test results visit [www.sbfilters.com](http://www.sbfilters.com). Never run more than 5 PSI through the Intake Elbow with your hood raised. Special care should be taken when running a vehicle on a dyno to protect all personnel from flying debris in the event of a rupture of the part.

### Warranty Conditions

Product returned for warranty resolution must be accompanied by a Return Material Authorization (RMA) number obtained in advance from an S&B customer service representative. S&B will be the final authority on all warranty decisions.

The original consumer who purchased the S&B product must also provide proof of purchase to be eligible for the warranty. Those S&B products used in any type of racing or for off-road use are not covered by the warranty. S&B products that are modified or that are used on custom applications are also not covered. Products made and/or sold by S&B on a private label basis are also not covered by the warranty.

This warranty shall not apply to any unit which has been improperly stored or installed; subjected to misapplication, improper operating conditions, accidents, or neglect; or which has been improperly repaired or altered or otherwise mistreated by the owner or his agent.

### Warranty Coverage

S&B Filters, Inc. (S&B) warrants to the original purchaser that any parts purchased shall be free from defects in material and workmanship. A defect is defined as a condition that would render the product inoperable. This warranty does not cover deterioration of plating, paint or any other coating. S&B's liability is limited to the repair or replacement, at S&B's option, of any warrantable product returned prepaid with a complete service history and proof of purchase to the factory. A valid proof of purchase is a dated bill of sale. Repaired or replaced product will be returned to the customer freight collect. Accepted warranty units which have been replaced become the sole property of S&B. Mileage is not a factor. All S&B products are subject to the provisions stated herein regardless of mileage.

Except as set forth in this warranty, S&B disclaims any implied warranty, including implied warranties of merchantability and fitness for a particular purpose. **S&B also disclaims any liability for incidental or consequential damages including but not limited to, repair labor, rental vehicles, hotel costs or any other inconvenience costs.** This warranty is in lieu of all other warranties or guarantees, either expressed or implied, and shall not extend to any consumer or to any person other than the original purchaser residing within the boundaries of the continental U.S. or Canada.

Warranty does not cover conditions where heat-damage resulted due to overly-rich fueling conditions.

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