

advanced FLOW engineering

Instruction Manual P/N: 46-11011 / 46-11012 / 46-11013

Make: **Dodge** Model: **RAM 2500/3500** Year: **03-07** Engine: **L6-5.9L (td) Cummins**



- Please read the entire instruction manual before proceeding.
- Ensure all components listed are present.
- If you are missing any of the components.
- Ensure you have all necessary tools before proceeding.
- Do not attempt to work on your vehicle when the engine is hot.
- Disconnect the negative battery terminal before proceeding.
- Retain factory parts for future use.

Label	Qty.	Description	Part Number
A	1	Manifold	05-60170
B	1	Gasket	05-60003
C	2	Screw: M8x1.25x160	03-50155
D	2	Screw: M8x1.25x80	03-50374
E	1	Tool, 6mm x 6" Hex Bit	03-50161
F	2	Plug: 3/8"NPT	03-50158
G	2	Plug: 1/8"NPT	03-50029
H	4	Washer, Flat	03-50228
I	1	Washer, Flat: M6	03-50160
J	3	Screw: M6x1x8mm	03-50317
K	1	Bracket	05-60002
L	1	Threadlocker	03-50162
M	1	Coupling, Reducer	05-60296 (In Kit P/N: 46-11011)
N	1	Clamp, Spring: 3.25" Dia.	03-50530 (In Kit P/N: 46-11011)
O	1	Clamp, Spring: 3.75" Dia.	05-60024 (In Kit P/N: 46-11011)
P	1	Coupling, Hump	05-60025 (In Kit P/N: 46-11012 or 46-11013)
Q	1	I/C Tube	05-60265 (In Kit P/N: 46-11012 or 46-11013)
R	2	Clamp, Spring: 3.75"Dia	05-60024 (In Kit P/N: 46-11012 or 46-11013)

Installation will require the following tools:

5/16 Allen Wrench, 7/16 Socket/Wrench, 5mm Allen Wrench, 6mm Allen Wrench and 6mm Socket/Wrench

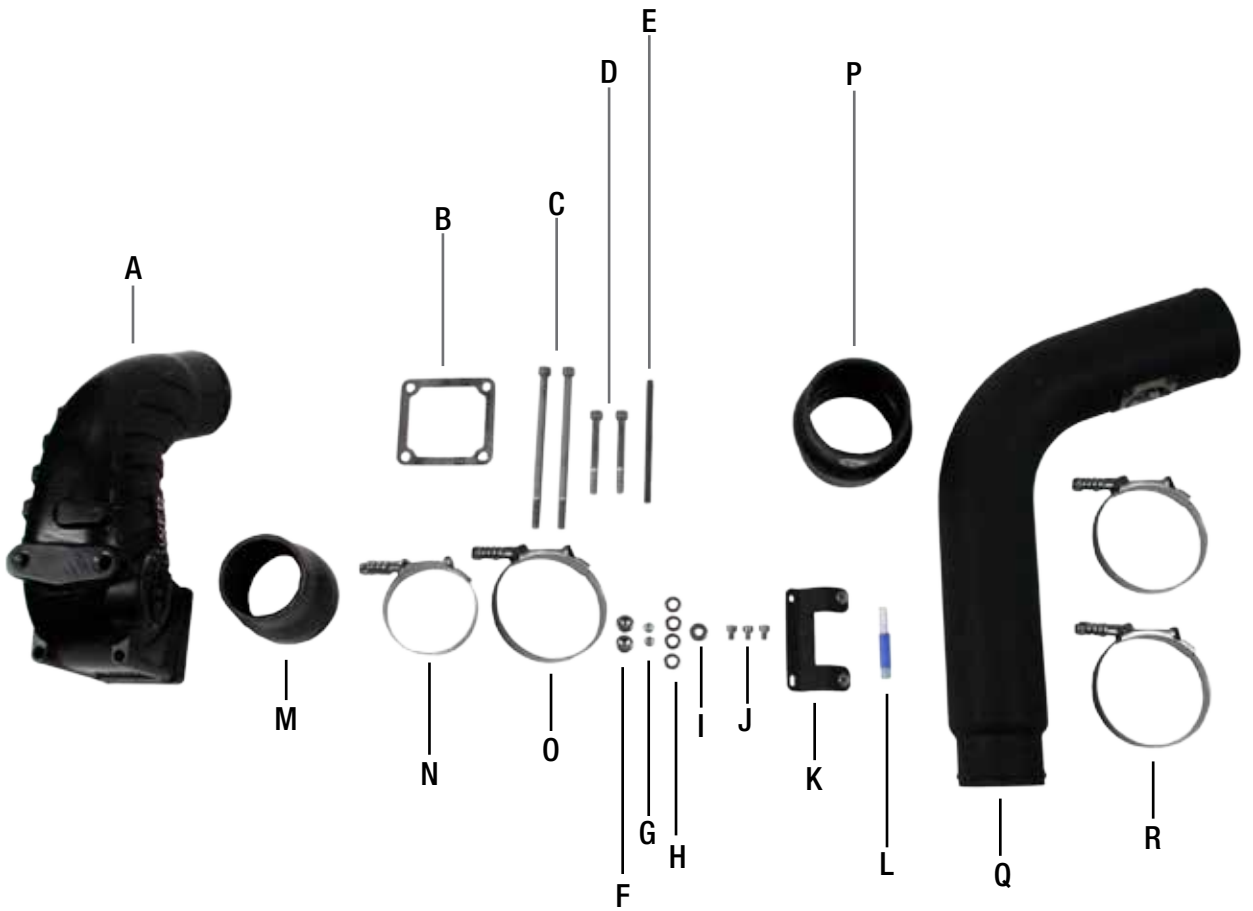




Figure A

Refer to Figure A for steps 1-4

Step 1: Remove dipstick from the intake manifold.

Step 2: Loosen the hump hose clamps.

Step 3: Remove the bolt retaining wires to intake manifold (on the firewall side). Save the bolt to be reused later.

Step 4: Loosen four bolts on intake manifold and remove intake manifold from vehicle.



Figure B

Refer to Figure B for steps 5-6

Step 5: Remove the (2) 10mm nuts from the intake heater.

Step 6: Remove the intake heater.

**Figure C****Refer to Figure C for steps 7-8**

Step 7: Follow the (2) battery cables from the intake heater to the (2) relays under the battery on the passenger side. Remove the wires from the relays.

Step 8: Remove the wires from the vehicle.

REMOVAL



Figure D

Refer to Figure D for step 9-10 (For Kit P/N: 46-11012 or 46-11013)

Step 9: Remove the clamps on the hump hose at the intercooler.

Step 10: Remove the boost tube from the vehicle. The hump hose and clamps will be reused.



INSTALL

Figure E

Refer to Figure E for step 11 (For Kit P/N: 46-11012 or 46-11013)

Step 11: Install the aFe boost tube in the vehicle. Insert in the hump hose at the intercooler and leave loose at this time.

**Figure F****Refer to Figure F for step 12-16**

Step 12: Clean and prepare the aFe intake manifold mating surfaces.

Step 13: Install 1/8" NPT plugs into aFe intake manifold.

Step 14: Position supplied coupler with 3 3/4" spring clamp. (Use reducer coupler in 46-11011 and hump coupler in 46-11012.)

Step 15: Position supplied M8 x 1.25 bolts and washers. Drop the shorter 80mm bolts through the larger holes on top while positioning the M8 washer from the bottom, passing the bolt through manifold and washer. Position the longer 160mm bolts and washer through the smaller two holes.

Step 16: Install the bracket for the stock wire loom with M6 socket cap screws provided. Install engine wire harness bolt (saved from Step 3) to the bracket.

**Figure G****Refer to Figure G for steps 17-19**

Step 17: Install the aFe intake manifold. Place the intake manifold gasket on the intake. Start the (2) bolts installed in step 15. Then install the M8x1.25x160mm bolts. Tighten the intake manifold, torque to 18ft. lbs. Tighten the hump hose clamps at both the intercooler and the intake manifold, torque to 18ft. lbs.

Step 18: Install the 2-3/8" NPT plugs to the top of the aFe intake manifold, torque to 18ft. lbs. Attach the dipstick tube using the M6x1x8mm and M6 fender washer. Attach the engine wire harness to the aFe intake manifold.

Step 19: Your installation is now complete. Please check all bolts and screws periodically, retighten if necessary.