



FILTERCHARGER[®] INJECTION PERFORMANCE KIT

— INSTALLATION MANUAL —

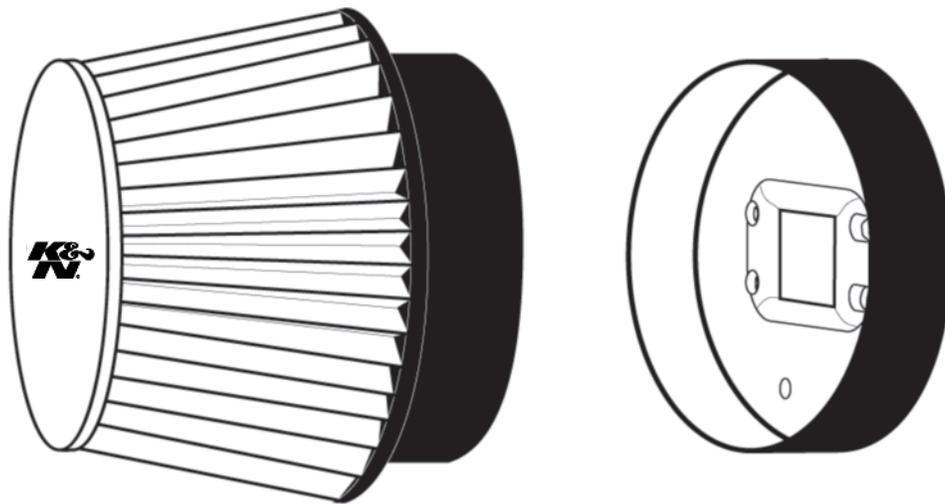
TOYOTA MR2

2.0L TURBO

1990-1995

P/N 57-9001

INTAKE SYSTEMS FOR VEHICLES LISTED ARE 50
STATE LEGAL. SEE KNFILTERS.COM FOR CARB
STATUS ON EACH PART FOR A SPECIFIC VEHICLE.



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K&N Filtercharger® Injection Performance Kit #: **57-9001**

Application: **1990-95 Toyota MR2 L4-2.0L Turbo**

Air-flow sensing device: **Nippondenso flap-door air flow meter**

BASIC DESIGN CONCEPT

This K&N Filtercharger® Injection Performance Kit (hereafter referred to as: **FIPK**) is designed to be less restrictive than the OEM air filter system. Low restriction air filters allow the engine to have better throttle response as well as more power throughout the RPM band. K&N has designed this **FIPK** to exactly replace the OEM factory air cleaner case, with a precision engineered aluminum adapter and all the necessary mounting brackets, bolts, screws and nuts. Additionally, it is important to note, if the O.E.M. air cleaner case has emission control devices and/or hoses, that all these parts will be installed as necessary to the new assembly.

Each **FIPK** has a specially designed filter with woven cotton fabric sandwiched between 2 layers of wire mesh screen. The screen and fabric combination creates a grid-like effect which actually straightens out the incoming air as it passes through the filter. In addition to the filter, this kit has a uniquely designed adapter with a built-in velocity stack. This velocity stack is beneficial in further smoothing out the incoming air flow and allowing for a less restrictive entry into the engine. (Air moving in a straight direction moves faster than tumbling air thus creating an increase in air flow). See the figure below.

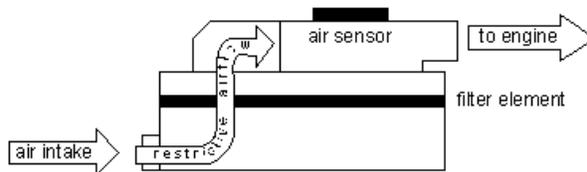
AIR CLEANER DESIGN EFFECTIVENESS

To design an effective performance air filter assembly, two factors must be considered: the air filtering element and the air filter adapter. On fuel injected, computer controlled vehicles, there can be a substantial gain in performance by using a less restrictive air filter assembly. Original equipment air filter assemblies tend to be more restrictive than the performance enthusiast would like, therefore, by changing to the less restrictive K&N **FIPK**, the air flow potential of the engine can be fully maximized without jeopardizing important emission standards. (see figures below)

EMISSIONS LEGAL

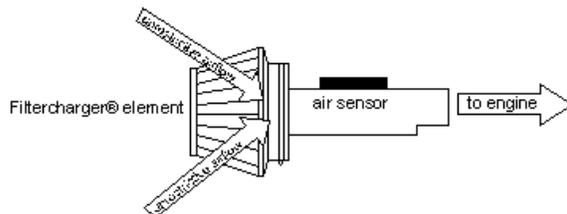
The **FIPK** is street legal for use on the emission controlled vehicles that it was originally designed to fit. These kits replace the original air filter case and do not eliminate the emission controls. The high temperature label contains the EO # assigned by C.A.R.B. that will allow a vehicle installed with the **FIPK** to pass the visual inspection at an authorized Smog Inspection station.

BEFORE F.I.P.K.



OEM air filter assembly

AFTER F.I.P.K.



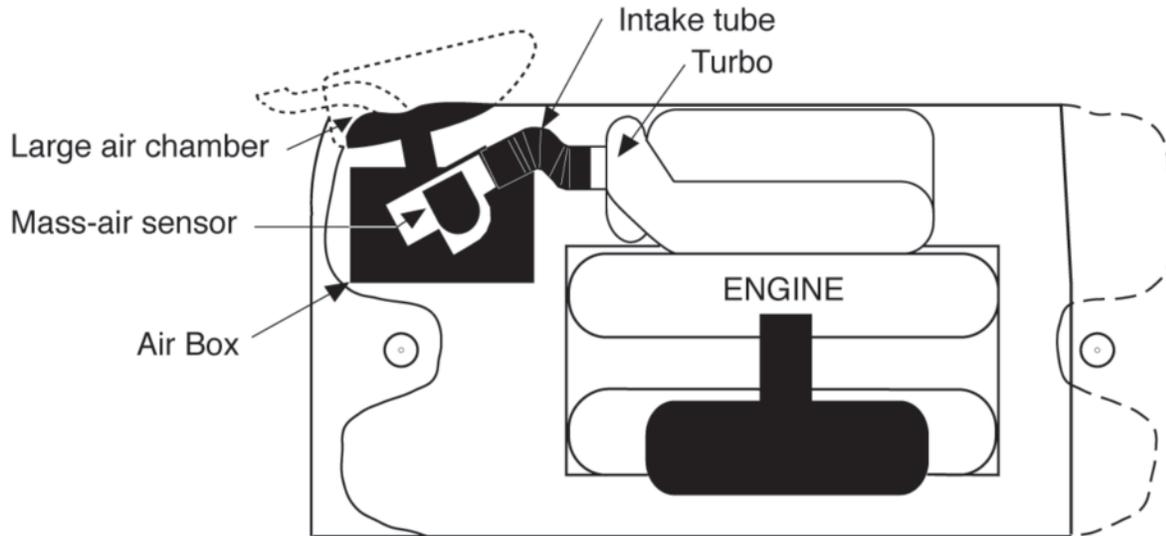
FIPK assembly

INSTALLATION INSTRUCTIONS

CAUTION!! PLEASE READ CAREFULLY AND COMPLETELY BEFORE BEGINNING WORK ON YOUR VEHICLE.
K&N suggests that you have a repair manual available for reference during installation of the K&N F.I.P.K..

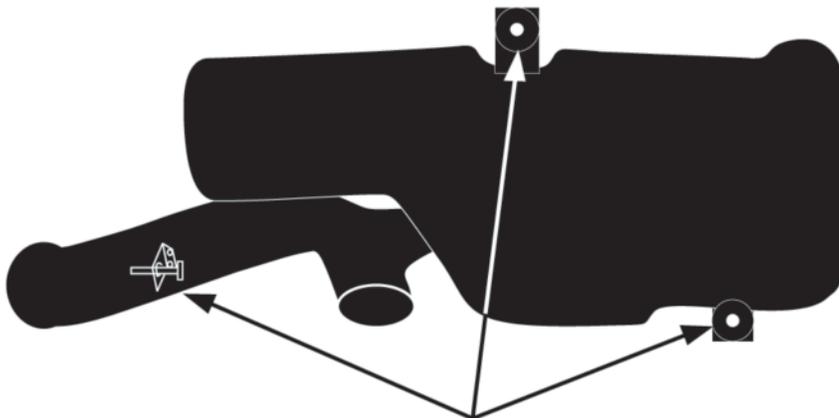
**TOYOTA MR2 TURBO
ENGINE COMPARTMENT**

Refer to this diagram for the location of the various parts listed in the installation instructions.



INSTALLATION

- 1) Disconnect the vehicle's negative battery cable.
- 2) Remove the left engine cover panel above airbox, it is held in place by 2 bolts and one safety wire.
- 2) Carefully remove the electrical plug connector at the mass-air sensor. (held in place by a small spring-wire clip)
- 3) Loosen the intake tube connected to mass-air sensor.
- 4) Unclip the airbox-lid and remove it along with the mass-air-sensor from the vehicle.
- 5) Unclip the electrical plug wire from side of airbox base, and carefully remove the airbox-base. (held in place with three bolts)



**3 Bolt locations to
air resonator chamber**

fig. 1

- 6) Remove large air chamber it is held in place with three bolts. (see fig. 1)
- 7) Remove the mass-air sensor from the airbox-lid which is held by four nuts and one bolt.
- 8) Remove the studs that held the mass-air sensor to the airbox. If you thread two nuts on to the stud, and tighten them together, you can then thread the stud out with the bottom nut.

- 9) Install the adapter, with stock gasket, using the allen bolts provided. (see fig 2)
- 10) Install the "L" bracket on the adapter with the hardware provided. (see fig 2)

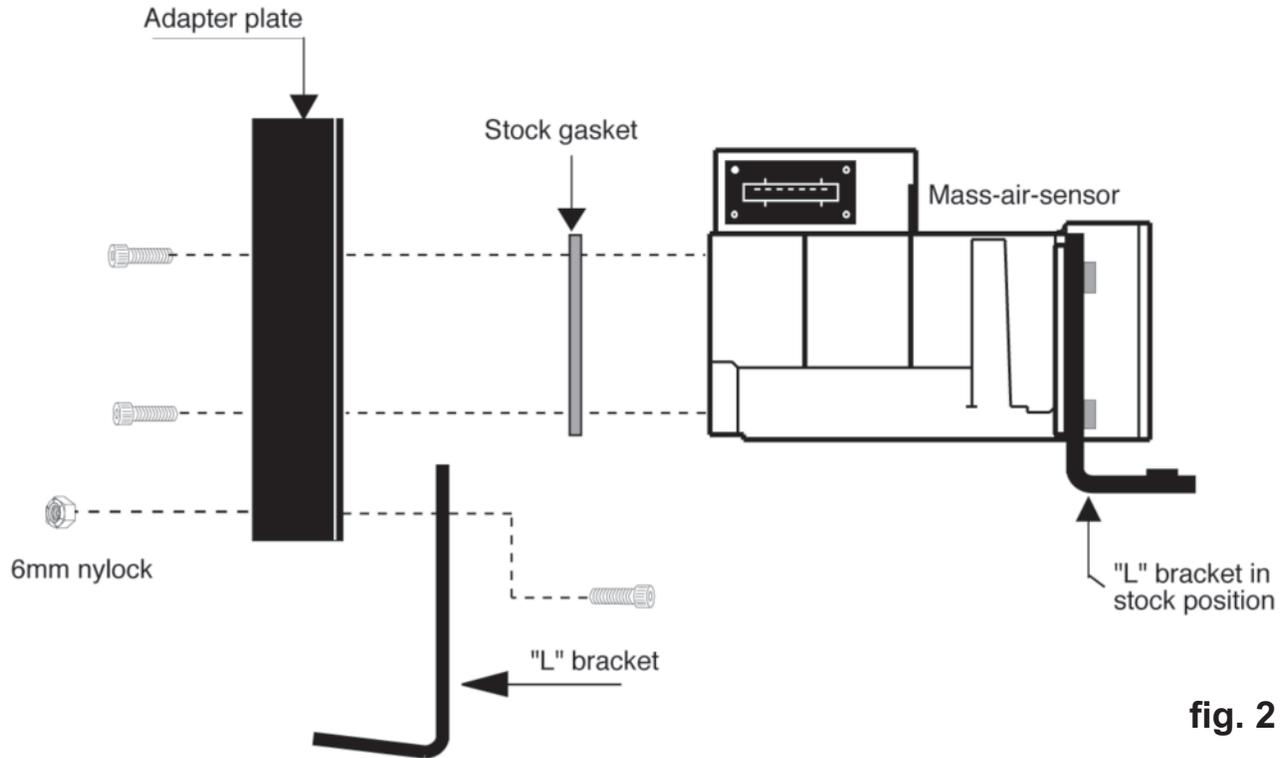


fig. 2

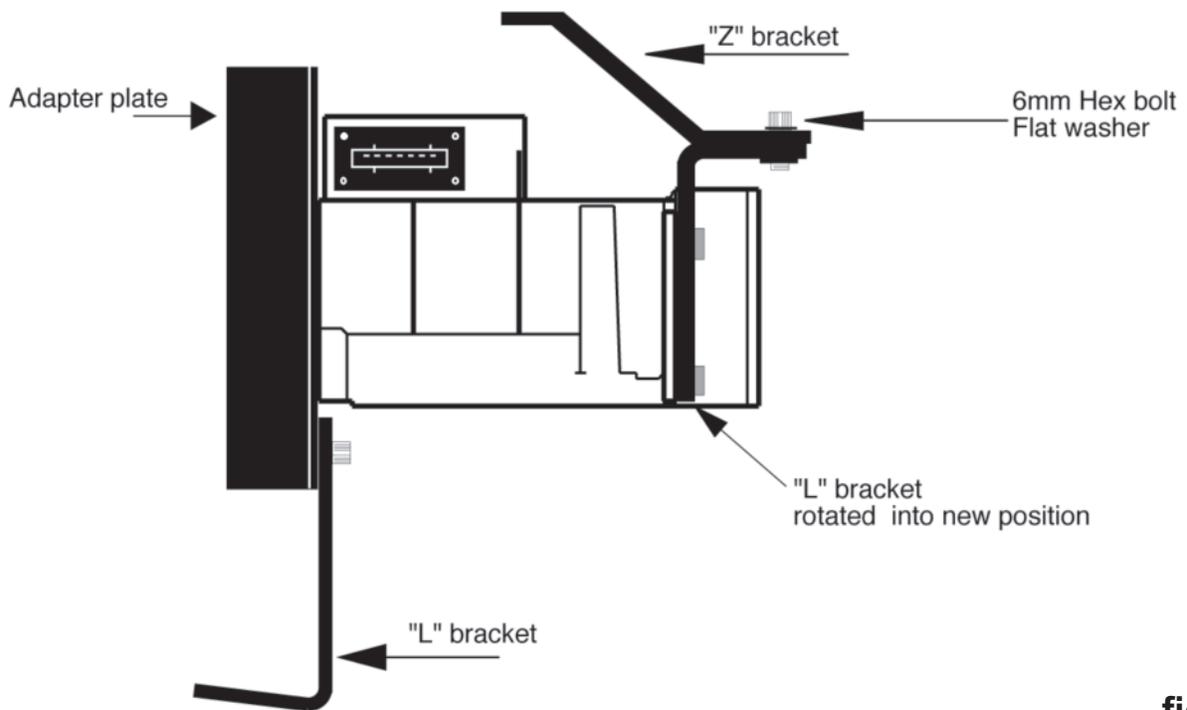


fig. 3

- 11) Unbolt the small angle bracket at the back of the mass-air-sensor and rotate 180'. after this is done you may Bolt the "z" bracket to "L" bracket, using supplied hardware. (see fig. 3)
- 12) Slip Mass-air/adapter assembly back into the intake tube, The "L" bracket will line up with an existing hole. (secure with the provided hardware)

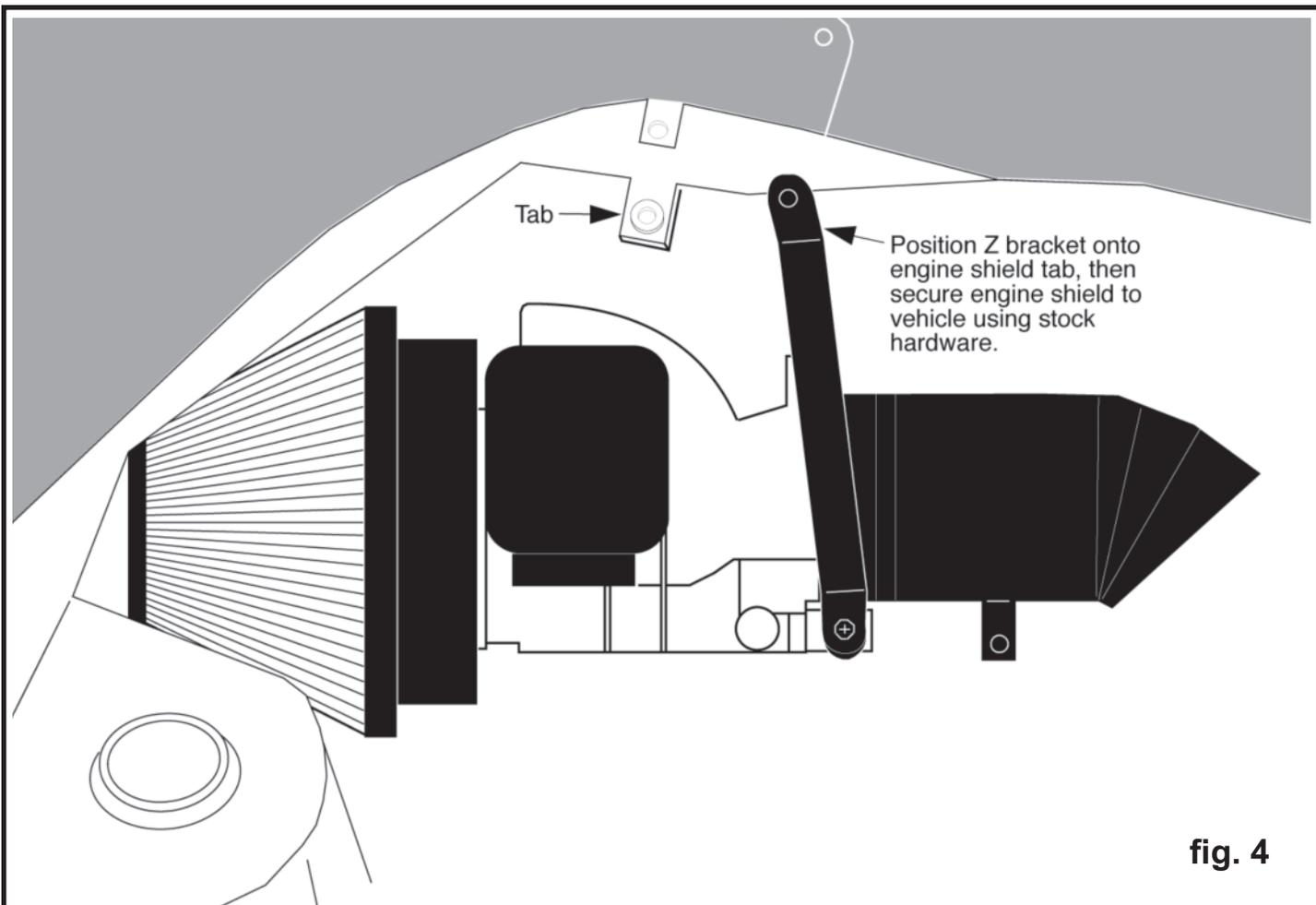


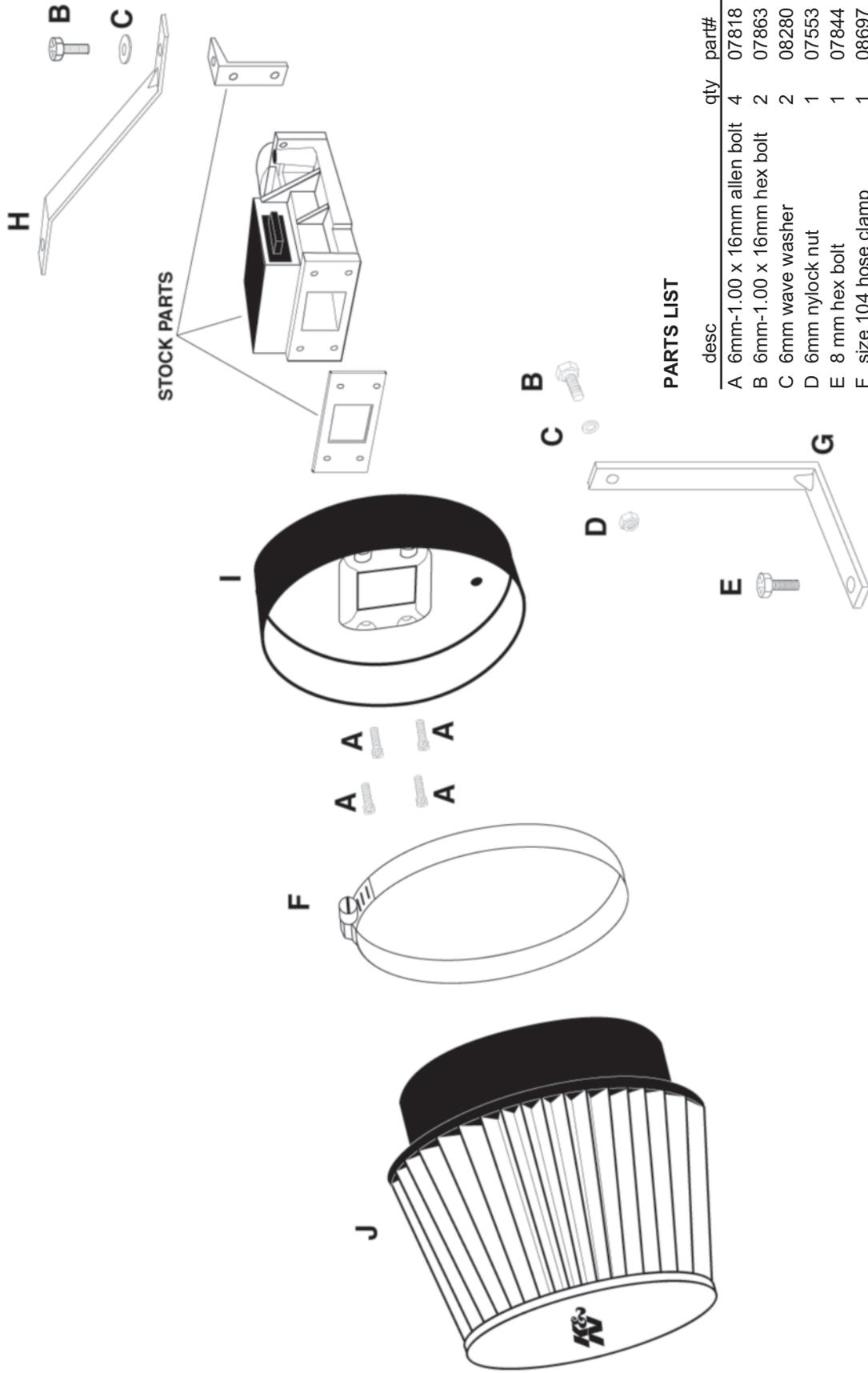
fig. 4

- 13) Install K&N Filtercharger® onto adapter, do not over-tighten hose clamp!
- 14) Reconnect the left engine cover panel, attach the "Z" bracket to front engine panel bolt , and to the small "L" bracket at the back of the mass-air (see fig.4))
- 15) Position for best clearance and tighten all remaining hardware.
- 16) Use the wire tie to secure any loose wires.
- 17) Re-connect battery cable. Double check to make sure everything is tight and properly positioned before starting vehicle.
- 18) The C.A.R.B. exemption sticker, (attached) must be placed in a visible area under the hood, so that an emissions inspector can see it when the vehicle is required to be tested for emissions. California requires testing every two years, other states may vary.

ROAD TESTING

Start the engine with the transmission in neutral or park, and the emergency brake on. Listen for any air leaks or odd noises. If there are air leaks, make sure the hose connections are secure. If there are any odd noises, check for the cause and repair before proceeding. The K&N Filtercharger® Injection Performance Kit will function identically to the factory air filter with the exception of being slightly louder than stock and much more responsive. If all preliminary checks are okay, then a road test is necessary. Listen carefully for rattling or other odd noises and fix as necessary. If the road test is fine, you can enjoy driving as normal with the added response and power. We suggest that the Filtercharger® element be checked periodically for dirt. This is now very easy due to the open element configuration. If the filter material is overly dirty, service it according to the instructions that are in the Recharger service kit, part number 99-5050 or 99-5000. If you have any questions or problems, inquire at your nearest K&N dealer, or directly to K&N Engineering at (909) 684-9762.

FREE K&N DECAL To register your warranty, please see us online at knfilters.com/register. FREE K&N DECAL



STOCK PARTS

PARTS LIST

desc	qty	part#
A 6mm-1.00 x 16mm allen bolt	4	07818
B 6mm-1.00 x 16mm hex bolt	2	07863
C 6mm wave washer	2	08280
D 6mm nylock nut	1	07553
E 8 mm hex bolt	1	07844
F size 104 hose clamp	1	08697
G "L" bracket	1	07074
H "Z" bracket	1	07076
I die-cast filter adapter	1	08808
J Filtercharger® element	1	RF-1009

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