



FILTERCHARGER® INJECTION PERFORMANCE KIT

— INSTALLATION MANUAL —

Toyota Pickup / 4Runner

1988-1995

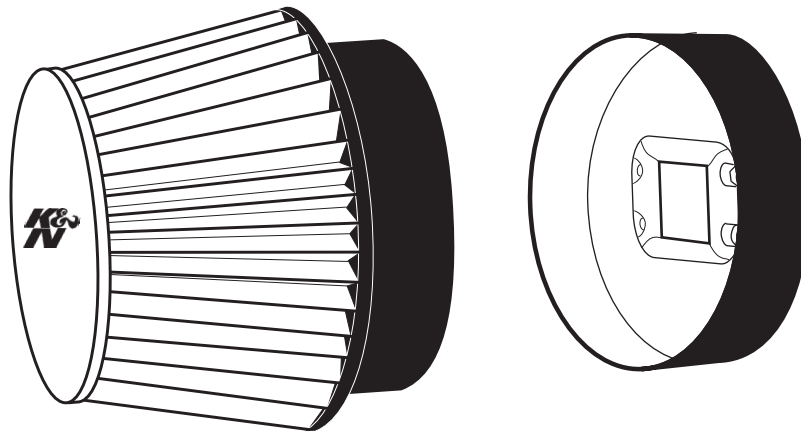
L4-2.4L

2&4 wheel drive

- NOTE -

*This kit was not designed for
vehicles with body lifts.*

P/N 57-9008



K&N Engineering, Inc.

K&N Filtercharger® Injection Performance Kit #: 57-9008

Application: 1988-95 Toyota Pickup / 4-Runner L4-2.4L engine

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.

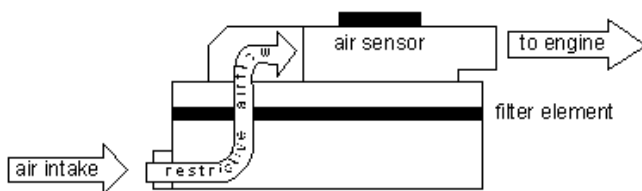
AIR CLEANER DESIGN EFFECTIVENESS

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

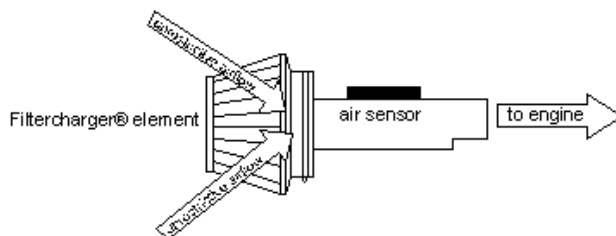
The **FIPK** is street legal for use on the emission controlled vehicles that it was originally designed to fit. These kits replace the original air filter case and do not eliminate the emission controls. The high temperature label contains the EO # assigned by C.A.R.B. that will allow a vehicle installed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



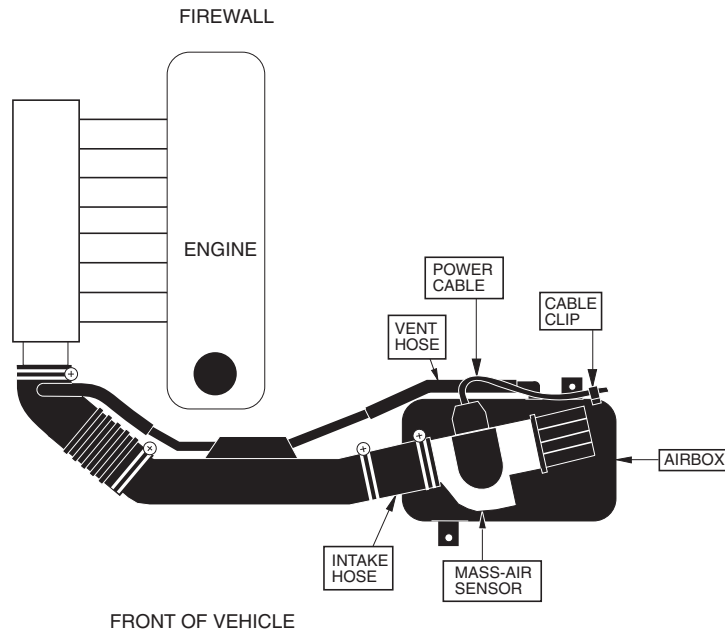
FIPK assembly

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 Filtercharger® Injection Performance Kit.

TOYOTA L4 PICKUP 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) Carefully remove the cable clip that holds the power cable to the airbox.
- 3) Carefully unplug the power cable from the mass-air sensor (held in place by a small spring-clip). Move the wire out of the way until re-assembly time.
- 4) Remove the bolts holding the airbox to the body. There are 3 bolts on the airbox.
- 5) Loosen the hose clamp where the intake hose connects to the mass-air sensor.
- 6) Remove the vent hose from the airbox. Do not remove it from the vehicle.
- 7) Remove the mass-air sensor and airbox as an assembly.
- 8) Unbolt the mass-air sensor from the airbox lid (held in place by 4 nuts and 1 bolt).
- 9) Remove the 4 studs from the mass-air sensor. If you thread two nuts on to the stud, and tighten them together, you can then back the stud out with the bottom nut.
- 10) Install the K&N filter adapter onto the mass-air sensor using the stock gasket and four allen bolts. Use a thread locking compound and do not over-tighten the bolts. (see fig. 1)

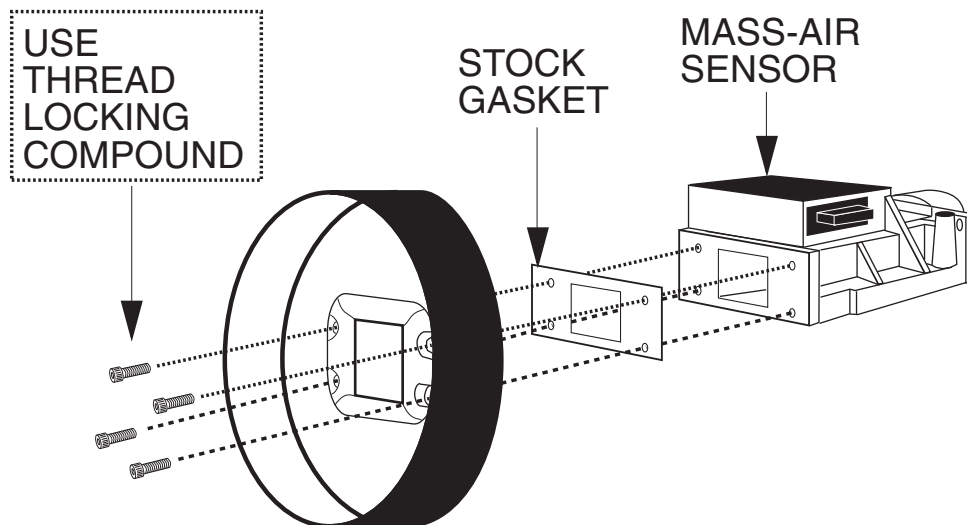


fig. 1

fig. 2

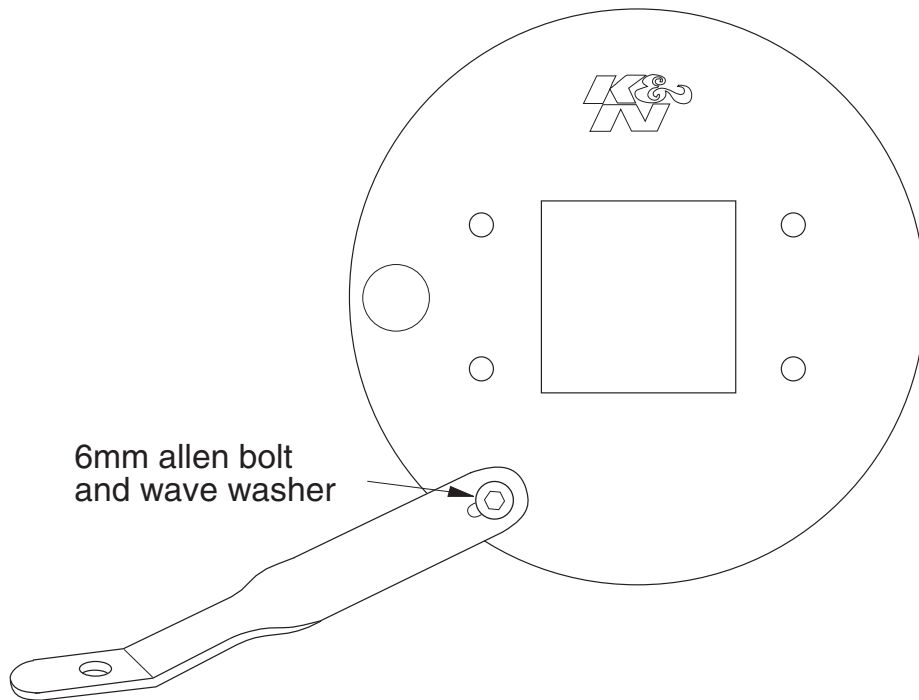
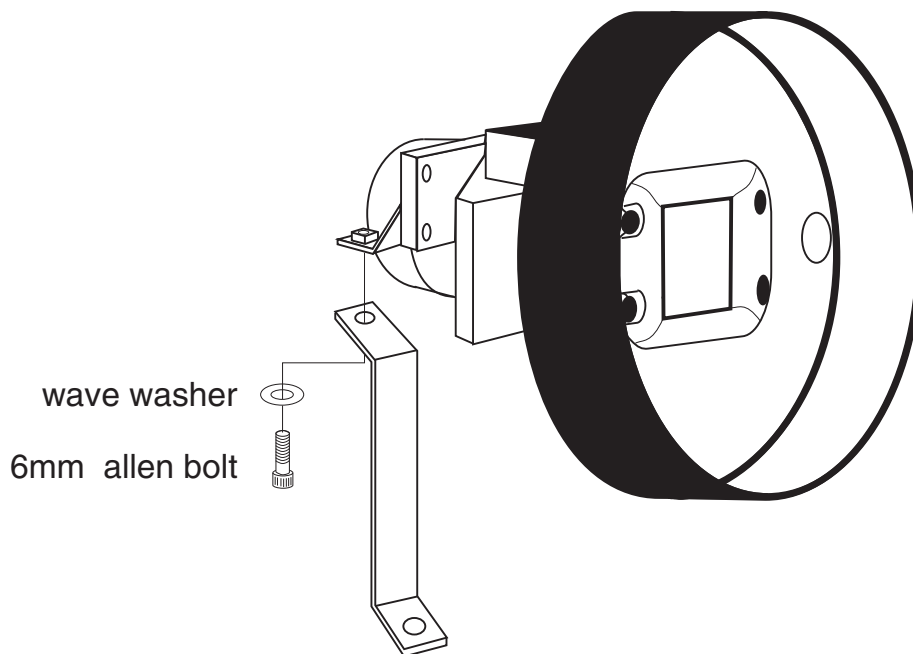
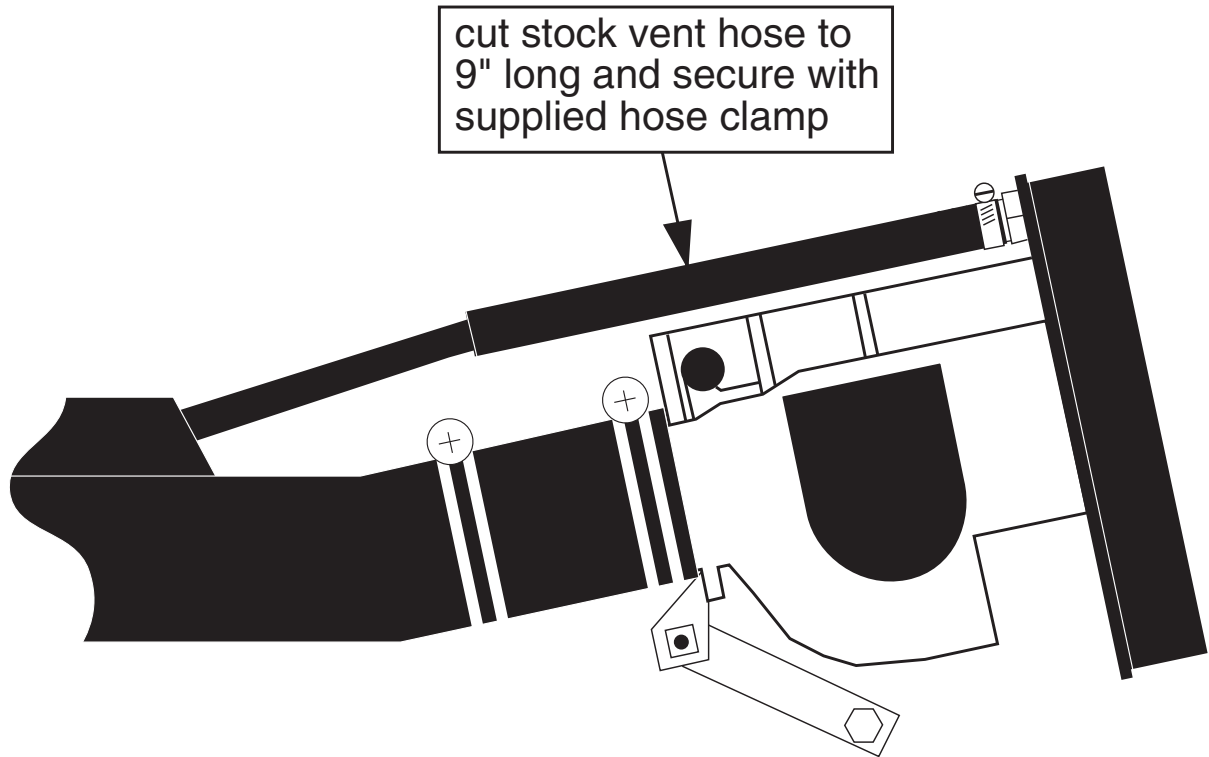


fig. 3



- 11) Install the twist bracket onto the adapter, using the hardware provided, but do not completely tighten at this time. (see fig. 2)
- 12) Install the supplied straight hose fitting into the filter adapter.
- 13) Install the "Z" bracket loosely onto the small angle bracket at the back of the mass-air sensor. (see fig. 3)
- 14) Install the mass-air / adapter assembly into the intake hose, but do not tighten the hose clamp at this time. The two brackets should line up with the existing holes in the fenderwell. Use the supplied hardware to secure the brackets. Do not tighten at this time.
- 15) Cut the original vent hose to 9" long and slide it onto the straight hose fitting in the adapter. Use the supplied hose clamp and tighten at this time. (see fig. 4)

fig. 4



- 16) Position mass-air / adapter assembly for best clearance and tighten the hardware on the brackets. Tighten the hose clamp on the intake hose.
- 17) Re-install the power cable onto the mass-air sensor. Secure the cable to the twist bracket with the supplied cable tie.
- 18) Install the K&N Filtercharger® onto the adapter, do not over-tighten hose clamp!
- 19) Re-connect the battery cable. Double check to make sure everything is tight and properly positioned before starting the vehicle.
- 20) 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.
- 21) It will be necessary for all FIPK's to be checked periodically for realignment, clearance and tightening of all connections. Failure to follow the above instructions or proper maintenance may void warranty.

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.

