



NOT LEGAL FOR SALE OR USE ON ANY POLLUTION CONTROLLED MOTOR VEHICLE IN CALIFORNIA OR STATES ADOPTING CALIFORNIA EMISSION PROCEDURES.

See knfilters.com for CARB status on each part for a specific vehicle

# **INSTALLATION INSTRUCTIONS**

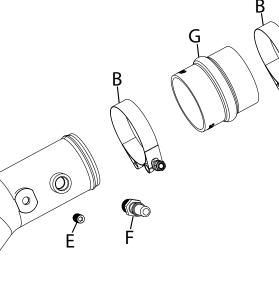
D

# 77-1007KC FORD 2019-23 Ranger L4-2.3L

NOTE: This kit was not designed to fit vehicles with a body lift.

#### TOOLS NEEDED:

Ratchet Extension 7/16" Deep Socket Small Flat Blade Screw Driver 3/16" Allen Key Thread Sealent



## PARTS LIST:

Description		Qty.	Part #	
A	COUPLER; QC, 2.75"OD CLAMP	ON	1	088103
В	HOSE CLAMP; T-BOLT, #312		4	21852
С	HOSE; ADAPTER 2.75" X 15 DEC	GREE	1	5-277
D	TUBE; 2.75"OD X 13"L, (AL)		1	25882C
Е	PLUG; STAINLESS STEEL 1/8" N	IPT	1	1-1014
F	FITTING; .5"OD QC. TO 3/8NPT,	(AL)	1	82641
G	HOSE; HUMP 2.75"ID X 3"L		1	08439

If you need any assistance please call 1-800-858-3333 to speak with a representative in our Customer Service Center before returning the product.

## NOTE: FAILURE TO FOLLOW INSTALLATION INSTRUCTIONS AND NOT USING THE PROVIDED HARDWARE MAY DAMAGE THE INTAKE TUBE, THROTTLE BODY AND ENGINE.

### TO START:

1. Turn off the ignition and disconnect the negative battery cable.

NOTE: Disconnecting the negative battery cable erases pre-programmed electronic memories. Write down all memory settings before disconnecting the negative battery cable. Some radios will require an anti-theft code to be entered after the battery is reconnected. The anti-theft code is typically supplied with your owner's manual. In the event your vehicles anti-theft code cannot be recovered, contact an authorized dealership to obtain your vehicles anti-theft code.





4. Release the charge pipe to intercooler quick connect fitting clip and lock it into the unlock position as shown.





6. Remove the factory charge pipe from the vehicle.



2. Loosen the hose clamp that secures the factory charge pipe coupler to the throttle body.



3. Release the white locking clip that secures the vent line quick connect fitting to the factory charge pipe and then disconnect the vent line from the charge pipe.



5. Disconnect the factory charge pipe from the throttle body and intercooler.

7. Carefully remove the factory O-Ring from the quick connect fitting. **NOTE: Be sure to note the direction of the lip on the seal.** 

## Continued

## **INSTALLATION INSTRUCTIONS**





8. Using a small screwdriver or similar tool, bend the small tabs that retaining the locking clip onto the factory quick connect fitting and then remove the clip.



9. Install the factory O-Ring and retaining clip into the provided quick connect fitting, **NOTE: Be sure** to install the O-Ring in the correct direction for proper sealing. The lip should be towards the inter cooler just how it was in the factory fitting.



10. Install the K&N quick connect fitting onto the intercooler fitting. Push the fitting on until an audible "click" is heard as the retaining clip locks the fitting onto the intercooler.



13. Install the clamps and angled coupler onto the K&N charge tube.



14. Set the K&N charge tube into position and align with the throttle body and intercooler connection.





15. Connect the angle coupler onto the K&N inter cooler quick connect fitting and slide the clamps into position.





17. Connect the factory vent line to the quick connect fitting installed into the K&N charge tube and secure with the factory white locking clip.



18. Apply the K&N decal to the charge tube as shown.



19. Reconnect the vehicle's negative battery cable. Double check to make sure everything is tight and properly positioned before starting the vehicle.

20. It will be necessary for all K&N<sup>®</sup> high flow intake systems 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:**

1. Start the engine with the transmission in neutral or park, and the parking brake engaged. Listen for air leaks or odd noises. For air leaks secure hoses and connections. For odd noises, find cause and repair before proceeding. This kit will function identically to the factory system except for being louder and much more responsive.

2. Test drive the vehicle. Listen for odd noises or rattles and fix as necessary.



11. Using pipe sealant on the thread, install the quick connect vent fitting and 1/8npt pipe plug into the K&N charge tube.



12. Install the provided hump coupler and clamps onto the K&N charge tube but do not tighten the clamps at this time.

16. Slide the hump coupler onto the throttle body and then set the hose clamps into position. Align the couplers and tube for best fit and then secure all of the hose clamps. 3. If road test is fine, you can now enjoy the added power and performance from your kit.

4. K&N Engineering, Inc., requires cleaning the intake system's air filter element every 100,000 miles. When used in dusty or off-road environments, our filters will require cleaning more often. We recommend that you visually inspect your filter once every 25,000 miles to determine if the screen is still visible. When the screen is no longer visible some place on the filter element, it is time to clean it. To clean and re-oil, purchase our filter Recharger<sup>®</sup> service kit, part number 99-5050 or 99-5000 and follow the easy instructions.

NOT LEGAL FOR SALE OR USE ON ANY POLLUTION CONTROLLED MOTOR VEHICLE IN CALIFORNIA OR STATES ADOPTING CALIFORNIA EMISSION PROCEDURES.

See knfilters.com for CARB status on each part for a specific vehicle