KN FSPEED 5HGP

2JZ GTE LOG Turbo Kit Installation Guide



Please read this entire guide thoroughly before beginning the installation process.

Important Installation Note: Certified and Experienced Mechanics Only

The installation of the KMP Speedshop 2JZ GTE Turbo Kit should only be performed by certified and experienced automotive mechanics who possess a comprehensive understanding of turbocharger systems, exhaust components, and engine management. This kit involves intricate procedures and adjustments that require specialized knowledge and skills.

Attempting to install this kit without the necessary expertise may result in serious damage to your vehicle, compromised safety, and reduced performance. To guarantee a successful and safe installation, we strongly recommend that you seek the services of a professional automotive technician or a certified mechanic with experience in turbocharger installations.

Improper installation can lead to engine damage, accidents, or voided warranties. If you are not qualified to perform this installation, please do not attempt it on your own. Instead, consult a trusted professional to ensure the best possible results for your vehicle.

For any questions or concerns related to the installation process or finding a certified mechanic, please contact KMP Speedshop's customer support for assistance.

Before you begin, ensure that the vehicle 12V battery is disconnected and securely supported on jack stands. Make sure all safety precautions are in place.

1. Turbo Manifold Installation:

a. Remove the stock exhaust manifold and clean engine head surface to ensure a proper seating fitment with the new manifold .



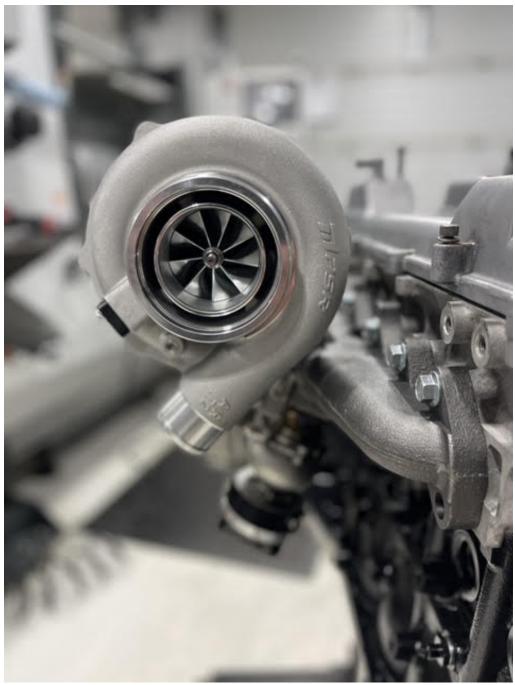
b. Place the KMP Speedshop turbo manifold in position and reuse OEM exhaust manifold gasket and bolts if they are in good condition.

c. Secure the manifold using the OEM hardware, following the torque specifications recommended by the manufacturer (29 ft/lbs).

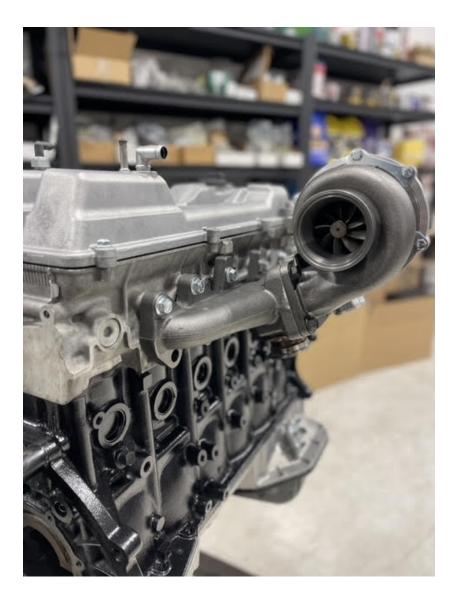
2. Turbocharger Installation:

a. Install the oil feed -4AN flange and oil drain -10AN flange on the turbo before installing it on the manifold (follow the turbo manufacturer installation).

b. Mount the turbocharger onto the manifold's flange.



c. Secure the turbocharger with the provided hardware and gaskets.



d. Torque the bolts to the manufacturer's specifications. (30ft/lbs)

3. Oil Feed Line Installation:

a.Install the -4AN m12x1.25 fitting to the engine block oil feed port. (don't forget to install the crush washer supplied)



b. Route the oil feed line from the engine block to the turbocharger's oil inlet. Use the provided fittings to connect the oil feed line securely.



-4AN PTFE 45 degree to engine block oil feed.



-4AN PTFE 90 degree to the turbo feed fitting

d. Ensure that the oil feed line is free of kinks and properly secured to prevent leaks.

4. Oil Drain Line Installation:

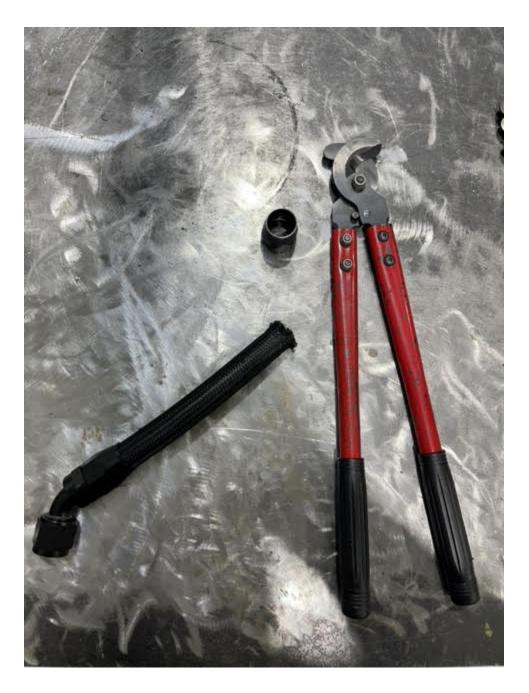
a.Install the oil drain flange -10AN provided with the kit on the return port of the oem gte oil pan.



b.Apply some black Permatex silicone on the flange to ensure a 100% sealed seating.

c.Torque M8 nuts to 16ft/lbs

d.The -10AN return hose comes longer than needed. You will need to cut at the desired length for your setup.





e. Route the oil drain line from the turbocharger's oil outlet to the oil pan.

<u>Caution: Make sure the oil drain hose is not in contact with the manifold, it may result in</u> <u>some sort of leakage, busted hose or melted.</u>

- f. Use the provided fittings to connect the oil drain line securely.
- g. Ensure that the oil drain line is properly routed to facilitate oil flow and prevent leaks.

5. Water Cool Line Installation:

a. If your turbocharger is water-cooled, connect the water lines as per the manufacturer's instructions.



Caution: Make sure the water cooled lines are not touching any turbo hot side parts.

b. Use the provided -6AN 90 degree fittings and silicone hoses to establish a secure connection.

c. Ensure that the water lines are properly routed and free from kinks or obstructions.

6. Downpipe Installation:



a. Install the downpipe onto the turbocharger's exhaust V-Band outlet.

- b. Apply anti-seize to V-Band flange nuts and treads.
- c. Ensure proper alignment and clearance.

d. Some fabrication will be necessary to connect the downpipe to the rest of the exhaust system.

7. Wastegate Installation:

a. Mount the wastegate on the exhaust manifold.



b. Secure the wastegate using the provided hardware.(apply anti-seize to the V-Band flange nut and treads)



<u>The seat ring needs to be in place before installing</u> <u>the wastegate.</u>

8. Dump Tube Installation (external wastegate only):

a. Attach the dump tube to the wastegate's outlet.



b. Secure the dump tube with the provided hardware.(apply anti-seize to V-Band nut and treads)

c. Ensure that the dump tube is properly routed away from the engine bay to release exhaust gases safely.

9. Turbocharger Inlet Installation:

a. Connect the turbocharger inlet pipe to the turbocharger's inlet.



- b. Secure the inlet pipe and the vibrant air filter with the provided clamps.
- c. Ensure a tight and leak-free connection.

10. Final Checks and Testing:

a. Double-check all connections, hoses, and bolts for tightness.

b. Reconnect the vehicle's battery.

c. Start the engine and monitor for any leaks, unusual noises.

d. We suggest the KMP Speedshop 2JZ GTE Turbo Kit should only be tuned by certified and experienced automotive tuners who possess a comprehensive understanding of turbocharger systems, exhaust components, and engine management.

Always refer to the manufacturer's specific instructions included with your kit, as the installation steps may vary slightly depending on the kit's design. Additionally, professional assistance may be required for engine tuning and management to optimize performance and ensure safety.