

OPTIMA EXHAUST INSTALLATION INSTRUCTIONS (page 1 of 4)

Please take time to read and understand these installation instructions.

Kinetic recommends that installation of this system be performed by a qualified service center or professional muffler installer who has the necessary equipment, tools and experienced personnel. However, if you decide to perform this install, the use of a hoist and an additional person will be required.

CAUTION: Never work on a hot exhaust system. Allow time for the vehicle to cool. Always wear eye protection when working under a vehicle.

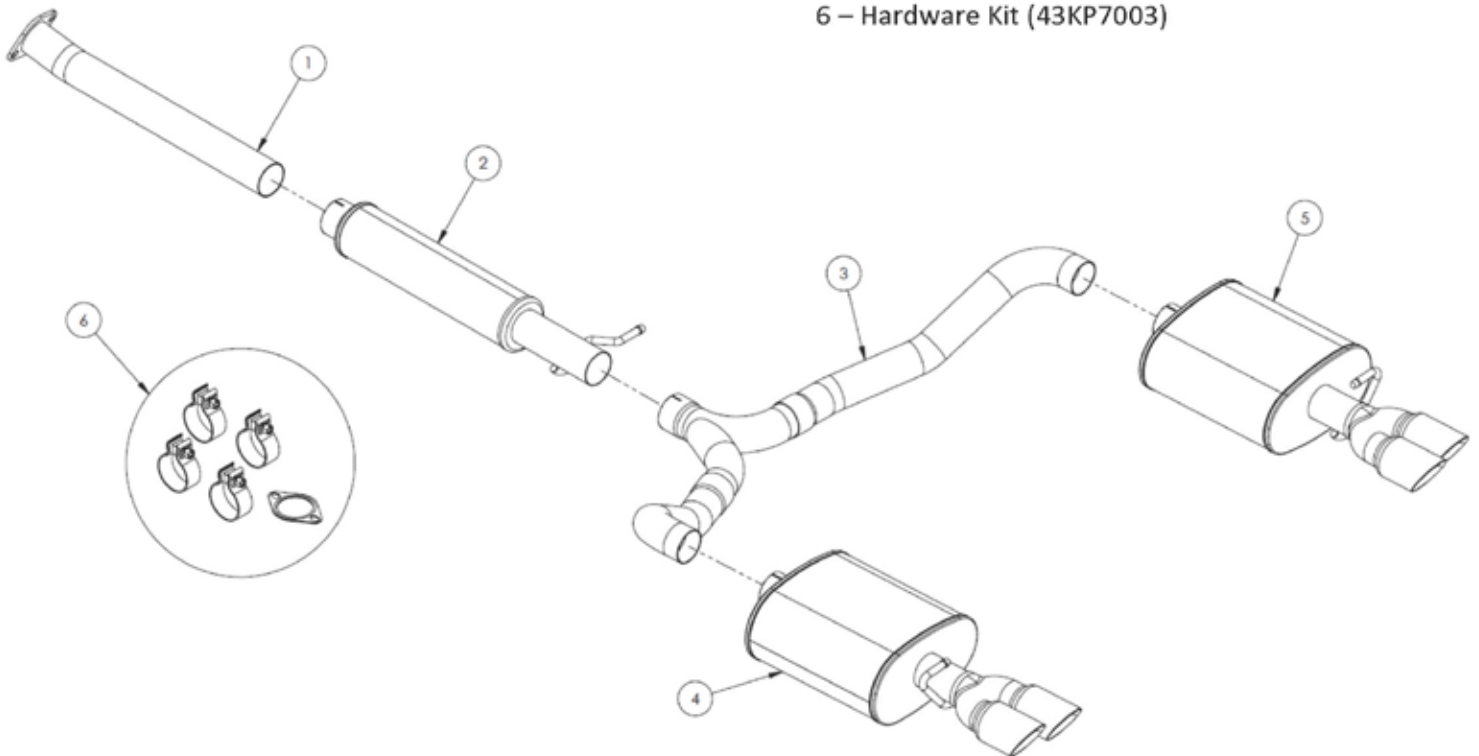
Please confirm that all parts are present before beginning the factory exhaust system removal and Kinetic exhaust system installation.

Recommended Tools:

- Safety Glasses
- 19mm Socket
- 15mm Socket
- 12mm Socket
- Ratchet
- Torque Wrench
- Soap & Water Solution
- Grommet Puller

Bill of Materials:

- 1 – Head Pipe (43KP4003)
- 2 – Tunnel Muffler Assembly (43KP2003)
- 3 – Y-Pipe Assembly (43KP4010)
- 4 – Driver Side Rear Muffler Assembly (43KP2000)
- 5 – Passenger Side Rear Muffler Assembly (43KP2001)
- 6 – Hardware Kit (43KP7003)



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Removal of Stock System:

1. Remove both nuts at the factory cat-back flange connection using a 19mm socket and ratchet. Set the nuts aside. They are reused during the installation process. (See Fig. A)
2. Remove the bolt mounting on the center exhaust hanger to the grommet using a 12mm socket and ratchet. Remove the metal sleeve from the hanger grommet. The bolt and the sleeve are not reused. (See Fig. B)
3. Support the factory exhaust system. Remove the bolt mounting the driver side exhaust hanger to the car using a 12mm socket and ratchet. (See Fig. C) Set this bolt aside. It is reused during the installation process.
4. Remove the bolt mounting the passenger side exhaust hanger to the car using a 12mm socket and ratchet. Set this bolt aside. It is reused during the installation process. The stock cat-back exhaust is now free to be removed from the vehicle. (See Fig. D)
5. Using grommet pullers or a similar device, remove the rear hanger grommets from the exhaust hangers. (See Fig. E) These grommets will be reused during the installation process. (See Fig. F)
6. The stock system removal is now complete. Installation of your Kinetic performance exhaust system can now begin.



Fig. A



Fig. B



Fig. C



Fig. D



Fig. E



Fig. F

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Installation of Kinetic Exhaust System:

NOTE: Apply the anti-seize lubricant (supplied) to the threads **ONLY** of all the clamps and flange bolts. Failure to follow this procedure can cause nuts to seize on clamps and potentially destroy threads. After applying anti-seize lubricant, be sure to thoroughly clean hands as lubricant will tarnish stainless steel.

NOTE: Align all clamps so that the center of the clamp bolt is 90 degrees from the notch in the pipe (See Fig. A, CLAMP, to the right.)

All clamps should be tightened using a properly calibrated Torque Wrench. Using an air impact gun will damage the clamp and reduce its ability to effectively seal the joint. It may also cause the joint to separate thereby causing damage to your exhaust system and your vehicle.

1. Remove all exhaust system components from the shipping carton, including the four 2.5" clamps, and the new flange gasket.
2. Locate the new Kinetic flange gasket to be used at the outlet of the factory catalytic converter. This new gasket has a larger center hole size, which is designed to work with the larger than stock diameter piping that is utilized in this exhaust system. Discard the OEM catalytic converter flange gasket, and place the new Kinetic flange gasket over the studs coming out of the catalyst outlet flange. (See Fig. B)
3. Locate the Kinetic head pipe assembly, and the two 19mm nuts set aside in step 1 of the removal process. Slide the head pipe connection flange over the catalyst outlet studs until it contacts the gasket, and hold it in the approximate position it will occupy when installed. Thread the nuts onto the studs but do not tighten them fully. (See Fig. C)
4. Slide a clamp over the end of the tunnel muffler. Slide the tunnel muffler assembly over the end of head pipe. Insert the tunnel muffler exhaust hanger into the hanger grommet. Snugly tighten the clamp to retain the tunnel muffler.

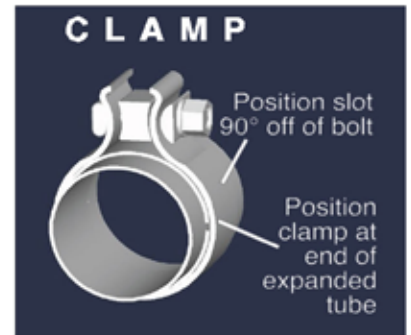


Fig. A



Fig. B



Fig. C



Fig. D



Fig. E

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5. Locate the Kinetic Y-pipe assembly and a 2.5" clamp. Next, properly align the clamp on the Y-pipe inlet, and slide it over the end of the tunnel muffler assembly. **(See Fig. F)** Rotate the Y-pipe until its middle section is parallel to the ground, and then snugly tighten the 2.5" clamp to retain the Y-pipe section. **(See Fig. G)**
6. Locate the Kinetic passenger side rear muffler assembly, a 2.5" clamp, and the OEM hanger grommet and bolt set aside in step 4 of the removal process. Secure the hanger grommet to the car using the bolt. Properly align the clamp on the rear muffler inlet, and slide it over the end of the Y-pipe assembly. **(See Fig. H)** Insert the rear muffler hanger into the grommet. **(See Fig. I)** Rotate the assembly until the tips are parallel to the ground. Snugly tighten the clamp to retain the passenger side rear muffler. **(See Fig. J)** Repeat step 6 for the driver side of the vehicle.
7. Visually inspect the exhaust system position, tip alignment, clamp orientation, and exhaust pipe clearance. Position and depth adjustment can be made at the tunnel muffler, the Y- pipe inlet and the rear muffler inlets.
8. With the tip(s) held in the desired location, start at the front of the vehicle and tighten the nuts on the clamps. Torque the nuts on the clamps to 45 ft-lbs (61 N-m).

It is **STRONGLY SUGGESTED** that all clamps be checked and re-tightened (if necessary) to the recommended torque after initial road testing of the vehicle, as thermal cycling has occurred on the system. Please wait until system has fully cooled to perform this step.

Note: During cold weather start-ups, you may experience an exhaust sound that is deeper and louder in tone than usual. This is temporary and will diminish to normal levels once your engine has reached its normal operating temperature.

Note: Immediately following the installation of your exhaust system, you may experience a trace of smoke after initial start-up. **DO NOT** be alarmed. The smoke is caused by the burning of a small amount of forming oil residue from the manufacturing process.



Fig. F



Fig. G



Fig. H



Fig. J



Fig. I