## INSTALLATION INSTRUCTIONS

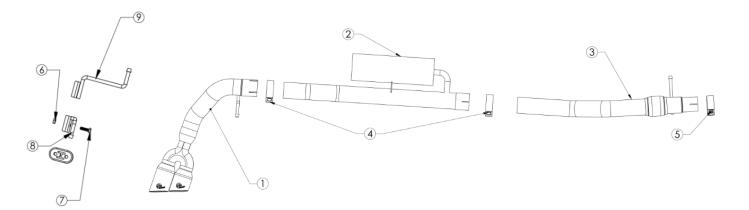


 MAKE:
 FORD

 MODEL:
 RANGER

 YEAR:
 2019-2023

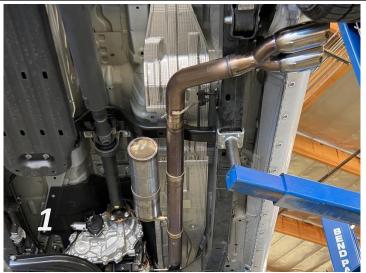
 ENGINE:
 L4-2.3L (t)



Item	Description	Part Number	Quantity
1	Tail Pipe Assembly (Black)	05-145697B	1
1	Tail Pipe Assembly (Polished)	05-145697P	1
2	Helmholtz Assembly	05-245031	1
3	Mid- Pipe Assembly	05-145680	1
4	Clamp, Band: 3″	05-41055	2
5	Clamp, Band: 2-1/2"	05-41061	1
6	Nuts	03-50189	1
7	Bolts	03-50452	1
8	Hanger Bracket	05-46376	1
9	Hanger Bracket	05-46397	1

**aFe POWER recommends professional installation on this product.** Thoroughly inspect the aFe POWER exhaust system to make sure there is no damage from shipping (if damage is noted, immediately contact aFe POWER customer service). Allow time for your vehicle to cool down prior to installation. When working on your vehicle proceed with caution. Wear protective safety equipment; eye goggles and gloves to ensure a safe installation.

Install band clamps to proper torque specifications of 40-45 ft-lb.



## **INSTALLATION INSTRUCTIONS**



 MAKE:
 FORD

 MODEL:
 RANGER

 YEAR:
 2019-2022

 ENGINE:
 L4-2.3L (t)

- 1. **(Read instructions prior to installation.)** It is recommended to not fully tighten the exhaust until it has been fully installed. Leave loose for adjustability.
- 2. Secure vehicle on jack stands (refer to your manual for specified jack stand positions).
- 3. For faster installation, spread out the parts of the exhaust alongside your vehicle as shown in the diagram above.
- 4. Secure the stock exhaust with jack/stands.
- 5. Remove the O.E muffler section at the clamp joint located at the front of the muffler.
- 6. Remove the O.E mid pipe section located at the next clamp joint.
- Install one of the two provided hanger brackets depending on the configuration. For the crew cab short bed install hanger bracket 05-46376 according to FIG 2. For the extra cab long bed install hanger bracket 05-46397 according to FIG 3.
- 8. Remove one O.E isolation mount which will be used for step 11.
- 9. Install front pipe using the provided 2.5" band clamp and the O.E isolation mount.
- 10. Install the Helmholtz chamber assembly using the provided 3" band clamp.
- 11. Install the tail pipe with tip using the provided 3" band clamp and the O.E isolation mount
- 12. Adjust the tip to desired position and tighten all clamps and hardware
- 13. Ensure that all the components of the aFe POWER exhaust system are aligned and are at a safe clearance from all wires, hoses, brake lines, body parts, and tires.
- 14. Start from the front of the aFe POWER exhaust system and evenly tighten all clamps and fasteners.
- 15. Start the vehicle and check for any leaks. If any leaks are found, determine cause and repair as necessary.
- 16. Remove vehicle from jacks stands.
- 17. It is recommended to re-tighten all clamps and hardware after 50-100 miles.



