

Installation Guide for Ford F-150 PowerBoost PNs 140903, 140903BC, 140904, 140904BC



******* Please compare the parts in the box with the bill of materials provided *****
to assure that you have all the parts necessary for this installation.**

These instructions have been written to help you with the installation of your Borla Performance exhaust system. Please read this document completely before beginning the installation of your system.

To ensure this part number fits your specific model year, please visit our website for the latest model year listings at www.BORLA.com

Thank you for purchasing a Borla Performance Cat-Back™ exhaust system.

Borla Performance Cat-Back™ exhaust systems PNs 140903, 140903BC, 140904, 140904BC are designed for the Ford F-150 Crew Cab Short Bed (145.4" wheelbase), equipped with a 3.5L PowerBoost V6 engine and 2WD or 4WD automatic transmission.

Borla Performance Industries recommends that an exhaust shop or professional after market parts installer, who has all the necessary equipment, tools and experienced personnel needed for proper installation, should perform the installation of this system. However, if you decide to perform the installation, we recommend someone should help you. Ensure the installer uses all under car safety precautions including eye protection.

Please take time to read and understand the following...

By installing your Borla Performance exhaust system, you indicate that you have read this document and you agree with the terms stated below.

It is the responsibility of the purchaser to follow all installation instruction guidelines and safety procedures supplied with your Borla Performance exhaust system.

Borla Performance Industries assumes no responsibility for damages occurring from misuse, abuse, improper installation, improper operation, lack of responsible care, or all previously stated reasons resulting from incompatibility with other manufacturer's products and/or systems.

Included with your Borla Performance exhaust system is a warranty card. Please read it carefully before you begin any work on your vehicle. If you should have any questions regarding our warranty policy, installation, or any other matter pertaining to your new Borla Performance exhaust system, please give us a call at the number provided on the warranty card.

Minimum Required Tool List:

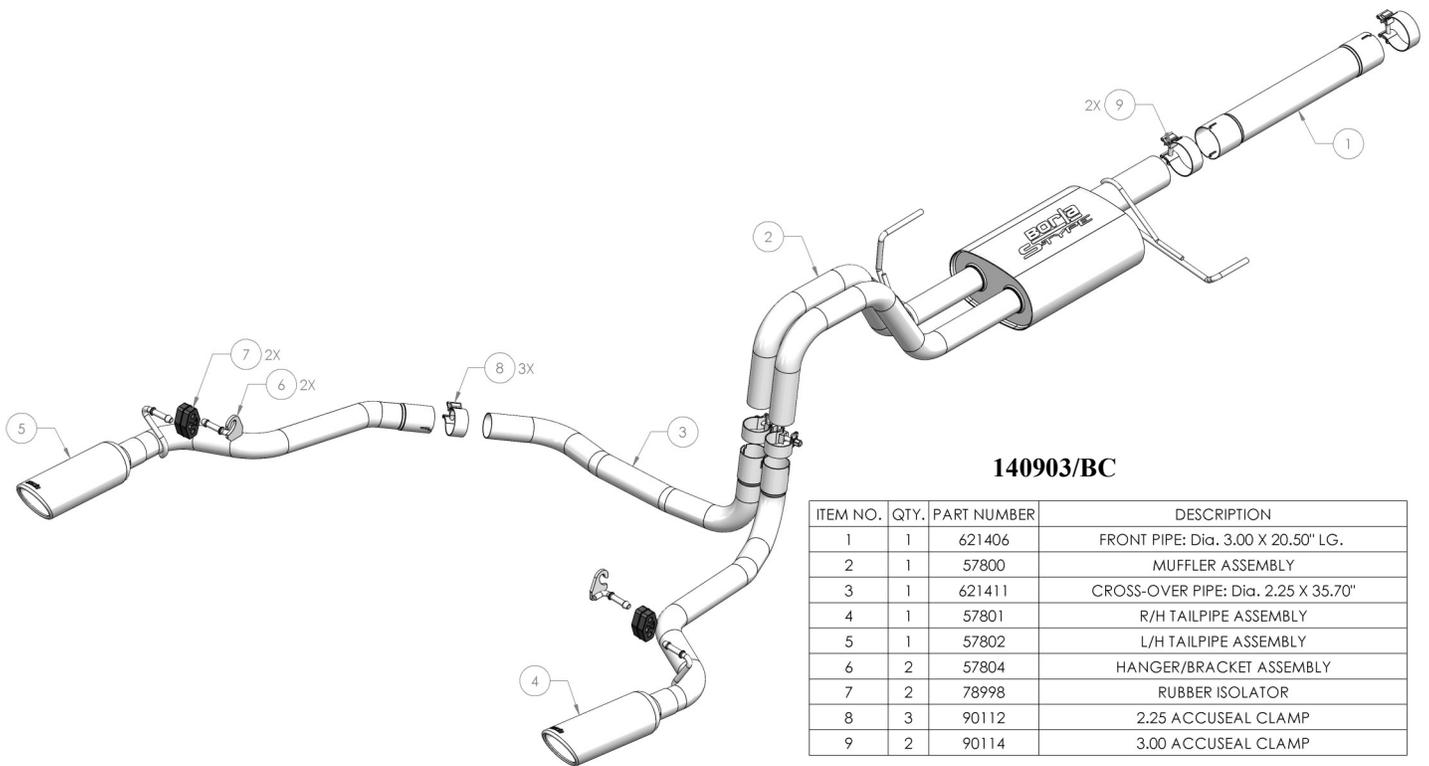
TOOLS:

1. 3/8" drive ratchet
2. 3/8" drive extension 6"
3. 15mm deep well socket
4. 10mm deep well socket
5. 13/16" deep well socket
6. 15/16" socket
7. Pry bar
8. Reciprocating saw with metal cutting blade

SHOP SUPPLIES:

1. Spray lubricant

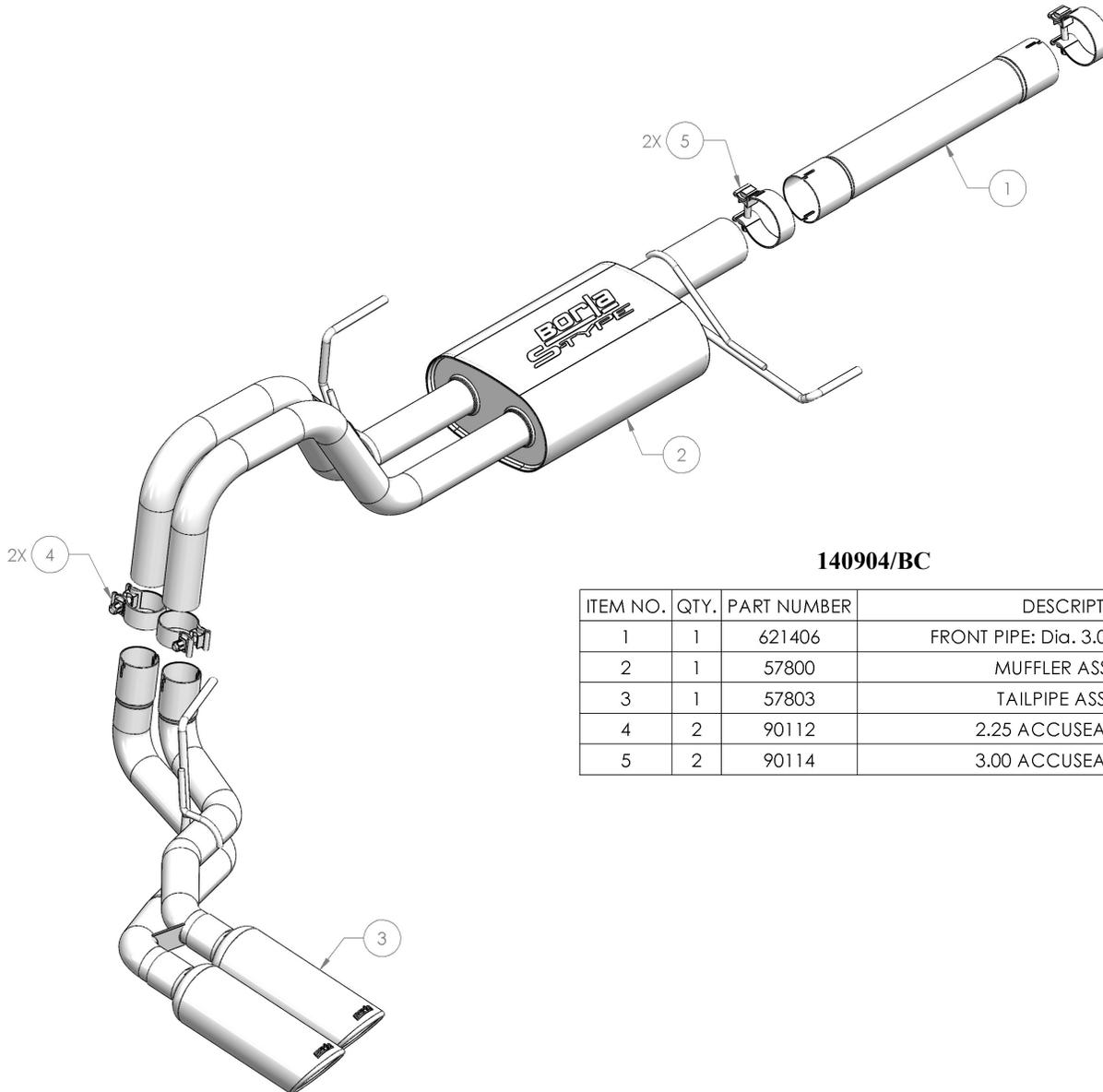
Borla Performance - Bill of Materials



140903/BC

ITEM NO.	QTY.	PART NUMBER	DESCRIPTION
1	1	621406	FRONT PIPE: Dia. 3.00 X 20.50" LG.
2	1	57800	MUFFLER ASSEMBLY
3	1	621411	CROSS-OVER PIPE: Dia. 2.25 X 35.70"
4	1	57801	R/H TAILPIPE ASSEMBLY
5	1	57802	L/H TAILPIPE ASSEMBLY
6	2	57804	HANGER/BRACKET ASSEMBLY
7	2	78998	RUBBER ISOLATOR
8	3	90112	2.25 ACCUSEAL CLAMP
9	2	90114	3.00 ACCUSEAL CLAMP

Borla Performance - Bill of Materials



140904/BC

ITEM NO.	QTY.	PART NUMBER	DESCRIPTION
1	1	621406	FRONT PIPE: Dia. 3.00 X 20.50" LG.
2	1	57800	MUFFLER ASSEMBLY
3	1	57803	TAILPIPE ASSEMBLY
4	2	90112	2.25 ACCUSEAL CLAMP
5	2	90114	3.00 ACCUSEAL CLAMP

Caution!!! Never work on a hot exhaust system. Serious injury in the form of burns can result if the vehicle has been in use and the exhaust system is hot, allow vehicle to cool for at least 1 hour. Always wear eye protection when working under any vehicle.

Note: It is our recommendation that you use a hoist or hydraulic lift to facilitate the installation of your new Borla Performance Exhaust System.

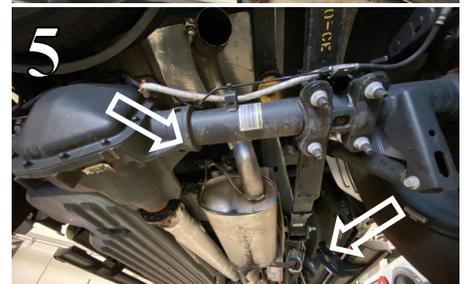
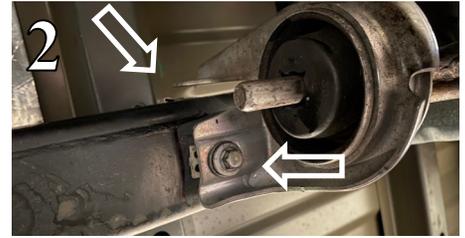
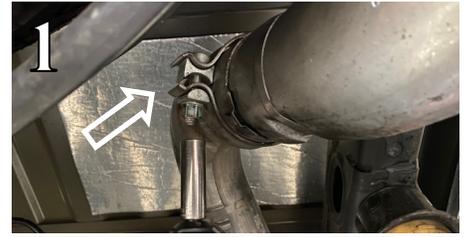
Taking all under car safety precautions, lift the vehicle using a hoist or hydraulic lift. Once this has been done, you may begin the removal of your old exhaust system from your vehicle.

Note: Before removing the original exhaust system from your vehicle, please compare the parts you have received with the bill of materials provided on the previous page to assure that you have all the parts necessary for the installation of your new Borla Performance Exhaust System.

Note: With a used vehicle, we suggest a penetrating spray lubricant to be applied liberally to all exhaust fasteners and allowing a significant period of time for the chemical to lubricate the threads before attempting to disassemble.

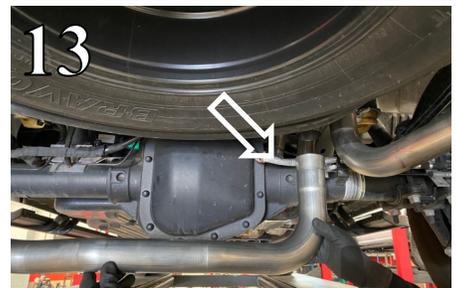
Original Exhaust System Removal

1. Lubricate all hangers, rubber isolators, bolts and nuts.
2. Loosen the clamp connecting the tailpipe to the muffler assembly (Fig. 1)
3. Remove the two bolts attaching the rubber isolator assembly for the tailpipe to the vehicle (Fig. 2).
4. Carefully remove the tailpipe from the vehicle by lowering the entire assembly (Fig. 3).
5. Loosen the clamp connecting the muffler assembly to the resonator (Fig. 4).
6. Using a muffler stand or an additional person, carefully remove the muffler assembly by sliding it toward the rear of the vehicle and removing the two hangers from their rubber isolators (Fig. 5).
7. Using a reciprocating saw with a metal cutting blade, make a cut in front of the resonator. Your cut will be 2.5" from the weld at the back of the heat exchanger (Figs. 6-7).
8. Original exhaust system removed.



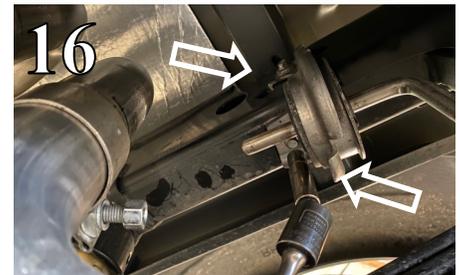
Borla Performance Cat-Back™ Exhaust System Installation

1. Orient components on shop floor according to Borla bill of materials drawing on pages 2-3.
2. Place a clamp over the expanded end of the **Front Pipe** and insert the inlet to the cut end of the heat exchanger (Fig. 8). Do not tighten the clamp.
3. Place a clamp over the expanded end of the **Muffler Assembly** and insert the inlet to the **Front Pipe**. Insert the hangers into their original rubber isolators (Figs. 9-10). Do not tighten the clamp.
- **If installing 140904/BC skip to step 8.**
4. Install **Hanger Bracket Assembly** to left-side and right-side frame rails and install the provided **Rubber Isolators** to each of them (Fig. 11).
5. Place a clamp over the expanded end of the **R/H Tailpipe Assembly** and insert the inlet to the **Muffler Assembly** (Fig. 12). Do not tighten the clamp.
6. Place a clamp on the expanded end of the **Cross-Over Pipe** and insert the inlet into the outlet of the **Muffler Assembly** (Fig. 13). Do not tighten the clamp.



Borla Performance Cat-Back™ Exhaust System Installation Cont'd

7. Place a clamp on the expanded end of the **L/H Tailpipe Assembly** and insert the inlet into the outlet of the **Cross-Over Pipe**. Insert the hanger into the provided rubber isolator (Fig 14). Do not tighten the clamp.
 - **If installing 140903/BC skip to step 10.**
8. Reinstall the original rubber isolator assembly onto the hanger. Place a clamp over each expanded end of the **Tailpipe Assembly** and insert the inlets into the outlets of the **Muffler Assembly** (Fig. 15). Do not tighten the clamp.
9. Install the rubber isolator assembly to the vehicle by using the original hardware (Fig. 16).
10. Once position has been determined to be correct, tighten the Accuseal clamps to 32-35 ft. lbs.
11. Before starting your vehicle, make sure to check all wires, hoses, brake lines, body parts and tires for safe clearance from the exhaust system.
12. Start the vehicle and check for any leaks. If any leaks are found, determine cause (such as loose or incorrectly positioned clamp) and repair as necessary.



WARNING: Use extreme caution during installation. Torque all fasteners according to manufacturer's torque values and tightening sequence. **DO NOT** use air impact tools to tighten fasteners on Borla Performance Exhaust Systems. Use of such tools may result in bent flanges or gasket contact areas leading to exhaust leaks.

NOTE: When you first start your vehicle after the installation of your new Borla Performance Exhaust System, there may be some smoke and fumes coming from the system. This is a protective oil based coating used in the manufacturing of mandrel bent performance exhaust tubing. This is not a problem and will disappear within a very short period of time after the exhaust has reached normal operating temperatures.