

## Exhaust System Installation

### PN-140415, 140416, 140417, 140438, & 140466



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.

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.

To ensure this part number fits your specific model year, please visit our website for the latest model year listings at [www.BORLA.com](http://www.BORLA.com).

Thank you for purchasing a Borla Performance Cat-Back™ Exhaust System.

**Borla Performance Cat-Back™ Exhaust Systems (140415, 140416, 140417) is designed for the Ford F-150, 5.0L V8 Engine, 2 or 4-wheel drive and automatic transmission.**

**Borla Performance Cat-Back™ Exhaust Systems (140438, 140466) is designed for the Ford F-150, 3.5L V6 EcoBoost engine, 2 or 4-wheel drive and automatic transmission.**

Borla Performance Industries recommends that an exhaust shop or professional after market parts installer perform the installation of this system. However, if you decide to perform the installation on your own it is recommended that two people are used. This installation should not be performed by one person due to the risk of injury. Ensure the installers use 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:**

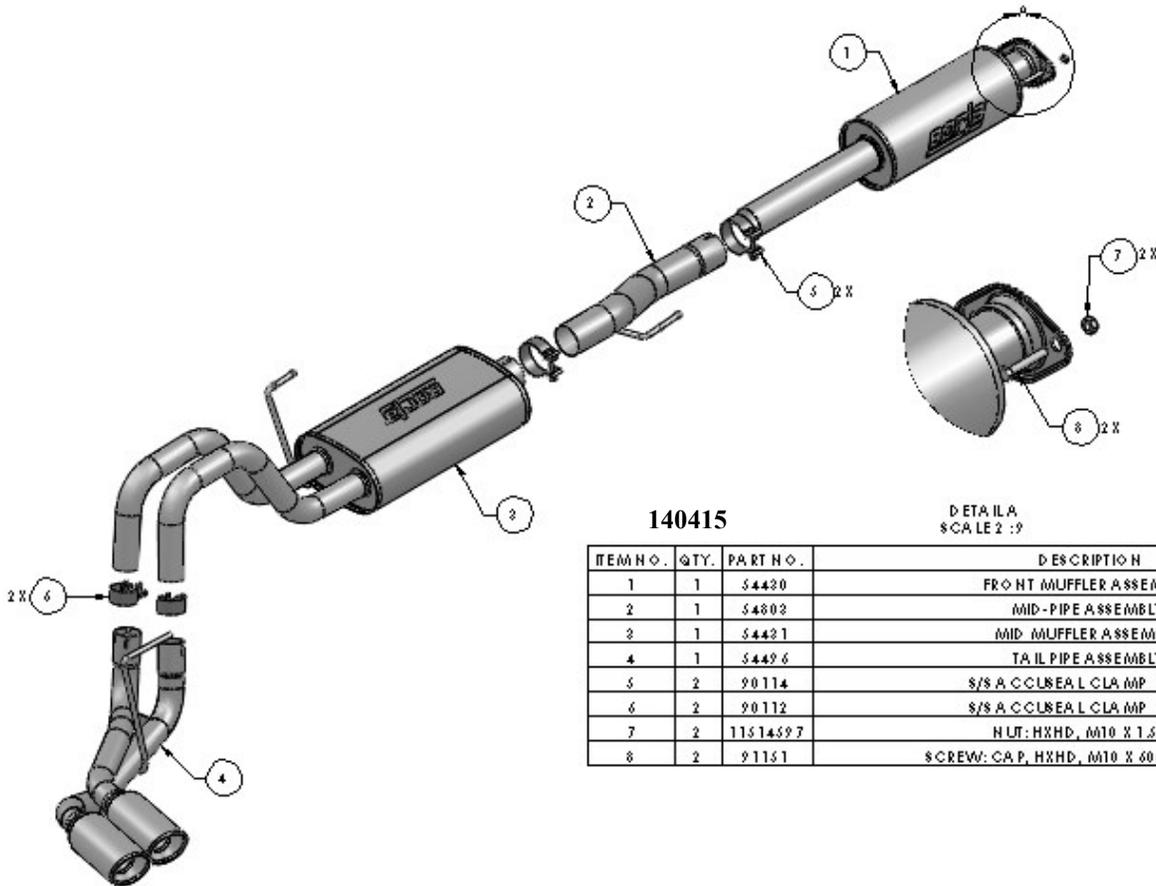
**TOOLS:**

- 1 3/8" Drive Ratchet
- 2 3/8" Drive Extension 6"
- 3 15mm Socket
- 5 Pry Bar

**SHOP SUPPLIES:**

- 1 Spray Lubricant

**Borla Performance Cat-Back™ Bill of Materials**



**140415**

DETAIL A  
 SCALE 2:1

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	54430	FRONT MUFFLER ASSEMBLY
2	1	54803	MID-PIPE ASSEMBLY
3	1	54431	MID MUFFLER ASSEMBLY
4	1	54496	TAIL PIPE ASSEMBLY
5	2	90114	5/8 ACORN NUT CLAMP Ø2.00
6	2	90112	5/8 ACORN NUT CLAMP Ø2.25
7	2	11514597	NUT: HXHD, M10 X 1.50p
8	2	91151	SCREW: CAP, HXHD, M10 X 60mm, 1.50p

**Minimum Required Tool List:**

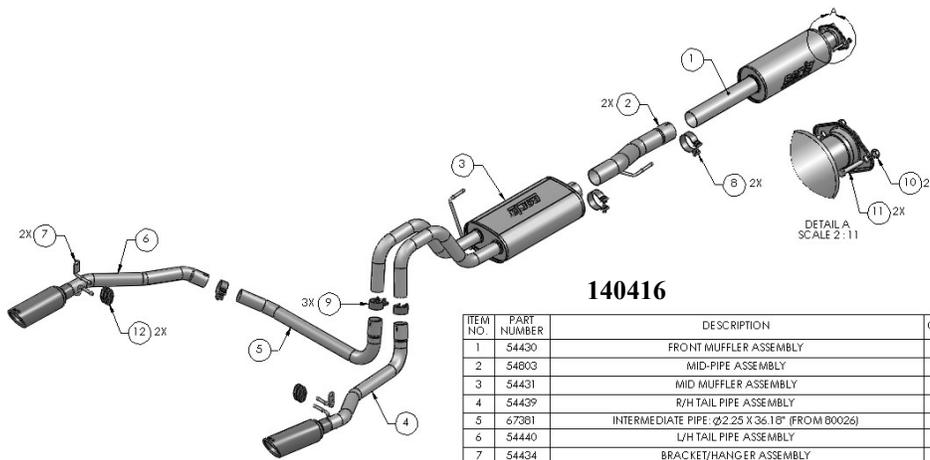
**TOOLS:**

- 1 3/8" Drive Ratchet
- 2 3/8" Drive Extension 6"
- 3 15mm Socket
- 4 21mm Socket
- 5 Pry Bar

**SHOP SUPPLIES:**

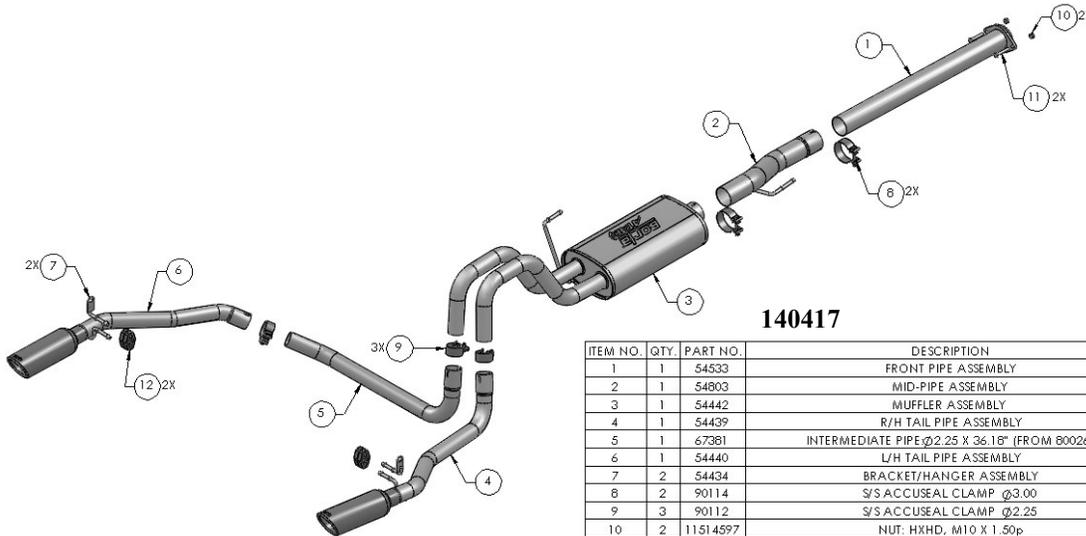
- 1 Spray Lubricant

**Borla Performance Cat-Back™ Bill of Material**



**140416**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	54430	FRONT MUFFLER ASSEMBLY	1
2	54803	MID-PIPE ASSEMBLY	1
3	54431	MID MUFFLER ASSEMBLY	1
4	54439	R/H TAIL PIPE ASSEMBLY	1
5	67361	INTERMEDIATE PIPE: Ø2.25 X 36.18" (FROM 80026)	1
6	54440	L/H TAIL PIPE ASSEMBLY	1
7	54434	BRACKET/HANGER ASSEMBLY	2
8	90114	S/S ACCUSEAL CLAMP: Ø3.00	2
9	90112	S/S ACCUSEAL CLAMP: Ø2.25	3
10	11514597	NUT: HXHD, M10 X 1.50p	2
11	91151	SCREW: CAP, HXHD, M10 X 60mm, 1.50p	2
12	78998	RUBBER HANGER	2



**140417**

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	54533	FRONT PIPE ASSEMBLY
2	1	54803	MID-PIPE ASSEMBLY
3	1	54442	MUFFLER ASSEMBLY
4	1	54439	R/H TAIL PIPE ASSEMBLY
5	1	67361	INTERMEDIATE PIPE: Ø2.25 X 36.18" (FROM 80026)
6	1	54440	L/H TAIL PIPE ASSEMBLY
7	2	54434	BRACKET/HANGER ASSEMBLY
8	2	90114	S/S ACCUSEAL CLAMP: Ø3.00
9	3	90112	S/S ACCUSEAL CLAMP: Ø2.25
10	2	11514597	NUT: HXHD, M10 X 1.50p
11	2	91151	SCREW: CAP, HXHD, M10 X 60mm, 1.50p
12	2	78998	RUBBER HANGER

**Minimum Required Tool List:**

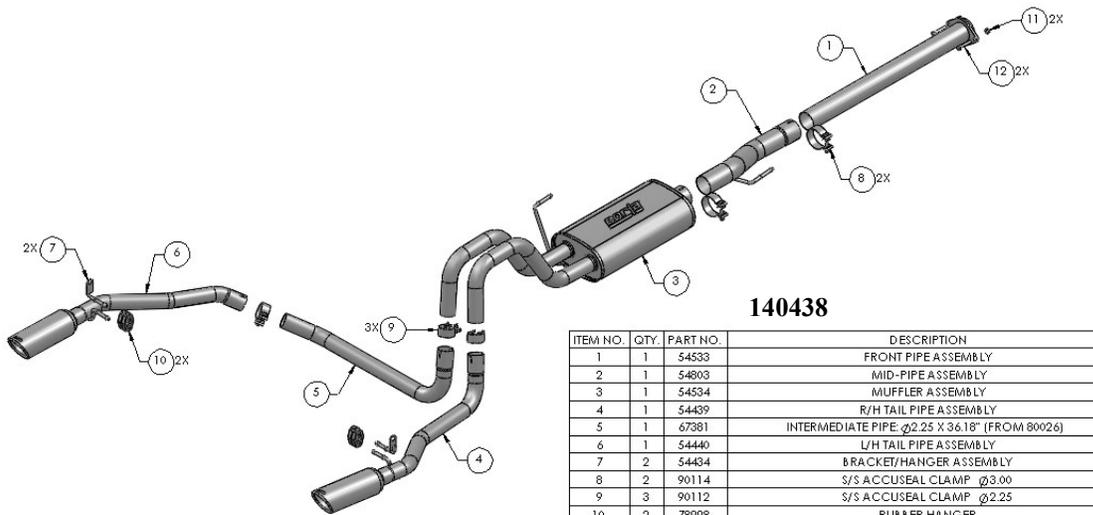
**TOOLS:**

- 1 3/8" Drive Ratchet
- 2 3/8" Drive Extension 6"
- 3 15mm Socket
- 4 21mm Socket
- 5 Pry Bar

**SHOP SUPPLIES:**

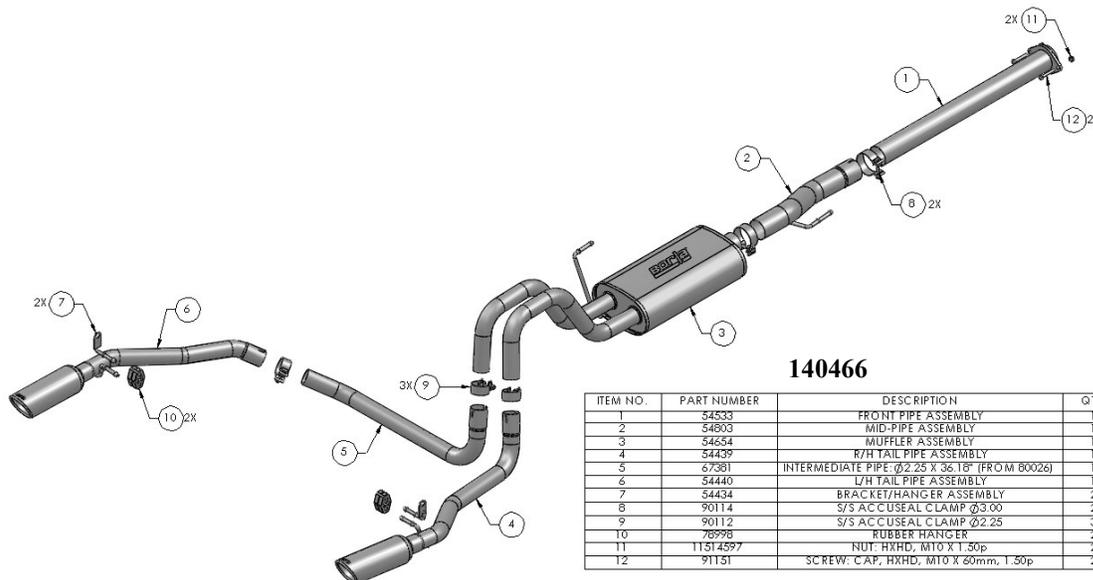
- 1 Spray Lubricant

**Borla Performance Cat-Back™ Bill of Materials**



**140438**

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	54533	FRONT PIPE ASSEMBLY
2	1	54803	MID-PIPE ASSEMBLY
3	1	54534	MUFFLER ASSEMBLY
4	1	54439	R/H TAIL PIPE ASSEMBLY
5	1	67381	INTERMEDIATE PIPE: $\varnothing 2.25 \times 36.18"$ (FROM 80026)
6	1	54440	L/H TAIL PIPE ASSEMBLY
7	2	54434	BRACKET/HANGER ASSEMBLY
8	2	90114	S/S ACCUSEAL CLAMP $\varnothing 3.00$
9	3	90112	S/S ACCUSEAL CLAMP $\varnothing 2.25$
10	2	78998	RUBBER HANGER
11	2	11514597	NUT: HXHD, M10 X 1.50p
12	2	91151	SCREW: CAP, HXHD, M10 X 60mm, 1.50p



**140466**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	54533	FRONT PIPE ASSEMBLY	1
2	54803	MID-PIPE ASSEMBLY	1
3	54534	MUFFLER ASSEMBLY	1
4	54439	R/H TAIL PIPE ASSEMBLY	1
5	67381	INTERMEDIATE PIPE: $\varnothing 2.25 \times 36.18"$ (FROM 80026)	1
6	54440	L/H TAIL PIPE ASSEMBLY	1
7	54434	BRACKET/HANGER ASSEMBLY	2
8	90114	S/S ACCUSEAL CLAMP $\varnothing 3.00$	2
9	90112	S/S ACCUSEAL CLAMP $\varnothing 2.25$	3
10	78998	RUBBER HANGER	2
11	11514597	NUT: HXHD, M10 X 1.50p	2
12	91151	SCREW: CAP, HXHD, M10 X 60mm, 1.50p	2

**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 Cat-Back™ 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.

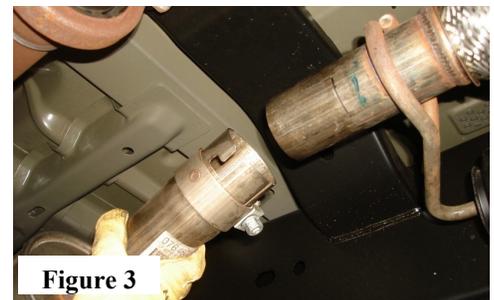
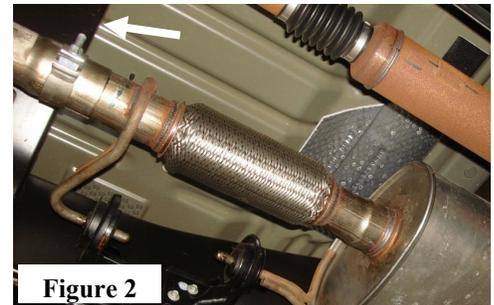
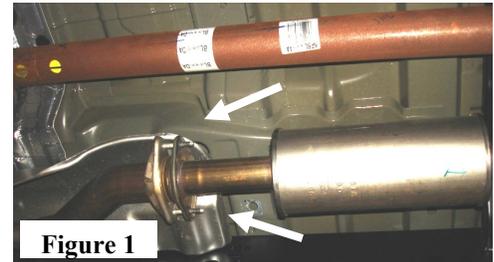
*Note: Before removing the original exhaust system from your vehicle, please compare the parts you have received with the bill of materials provided on the previous page to assure that you have all the parts necessary for the installation of your new Borla Performance Cat-Back™ Exhaust System.*

## Original Exhaust System Removal

*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.*

1. Lubricate all hangers and rubber isolators.
2. Unbolt the front flange bolts. Keep hardware for reinstallation of your new exhaust. (See Fig. 1)
3. Loosen clamp on front muffler. (See Fig. 2)
4. Remove front muffler assembly. (See Fig. 3)
5. Using a muffler stand or an additional person to hold the exhaust system up in place, remove the hangers from the rubber isolators and remove the remaining exhaust system from the vehicle. (See Figs. 4 & 5)

**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.*



## Borla Performance Cat-Back™ Exhaust System Installation

1. Working on a flat surface and referring to drawing on page 2, Assemble Front Pipe and Muffler Assembly with 3" clamp. DO NOT tighten the clamp.
2. Position the assembly over the rear axle and insert hangers into factory rubber isolators. (See Fig. 6)
3. Assemble Front Pipe hardware and tighten hardware. (See Fig. 7)
4. Install Hanger Bracket Assembly to driver's side. (See Fig. 8A)
5. Install Hanger Bracket Assembly to passenger side. (See Fig. 8B)
6. Assemble Intermediate Pipe and L/H Tail Pipe. (See Fig 9) Position inlet pipe into left-side Muffler Assembly and insert hangers into rubber isolators. (See Figs. 10 & 11) DO NOT tighten the clamp.
7. Position R/H Tail Pipe Assembly into right-side Muffler Assembly and insert hangers into rubber isolators. DO NOT tighten the clamp.
8. Check your exhaust system for proper clearance under the vehicle and also for tip alignment. Starting at the front and moving to the rear, tighten the Accuseal clamps to 32-35 ft. lbs.
9. Before starting your vehicle, make sure to check all wires, hoses, brake lines, body parts and tires for safe clearance from the exhaust system.
10. Start vehicle and check for any leaks. If any leaks are found, determine cause (such as loose or incorrectly positioned clamp) and repair as necessary.

*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 tem-*

**Congratulations!!!** You have completed the installation of the world famous Borla Performance Stainless Steel Exhaust System.

**Figure 6****Figure 7****Figure 8A****Figure 8B****Figure 9****Figure 10****Figure 11**