

# **FORCEII**

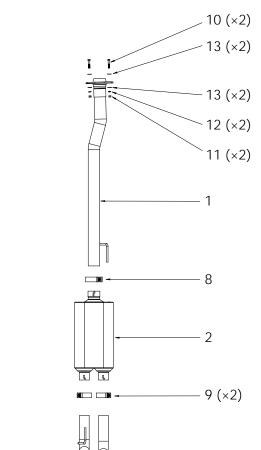
ITEM	PART NO.	DESCRIPTION	QTY.
1	266258	HEAD PIPE	1
2	8530552-Z	FORCE II MUFFLER	1
3	863235	LEFT OVER-AXLE PIPE	1
4	86327S	RIGHT OVER-AXLE PIPE	1
5	863245	LEFT TAILPIPE	1
6	26629S	REAR EXIT PIPE	2
7	ST462	TIP, STAINLESS STEEL	2
8	MC300BS	CLAMP, STAINLESS, 3"	1
9	MC250BS	CLAMP, STAINLESS, 2-1/2"	5
10	HW211	BOLT, 3/8-16 × 2"	2
11	HW103	NUT, 3/8-16	3
12	HW309	LOCK WASHER, 3/8"	3
13	HW303	FLAT WASHER, 3/8"	4
14	226HA	FRAME HANGER	1
15	HW234	BOLT, 3/8-16 × 3-1/2"	1
16	HA226	BACKING PLATE	1
17	HA168	HANGER, RUBBER	1
18	HW502	HANGER KEEPER, 7/16"	2
19	HW505	CABLE TIE, 15"	1

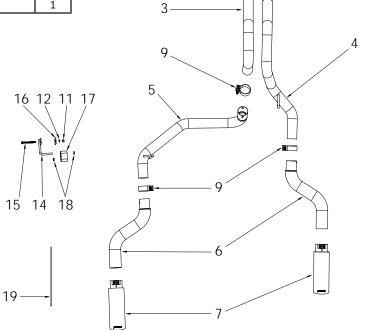
### **Installation Instructions**

### 818147

## 2015-20 FORD F-150 with 2.7L, 3.5L, and 5.0L ENGINE

**2- or 4-WHEEL DRIVE; 145-INCH. WHEELBASE ONLY** See "Applications" tab on the product web page for specific applications.



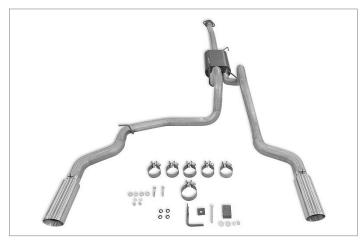


#### **NOTES**

- Installation requires moderate mechanical skill. If this job is beyond your abilities, seek the services of a qualified technician.
- If you do not understand any part of these instructions, please call Flowmaster Technical Support at (866) 464-6553 for assistance.
- Use stands to support exhaust system components, both when removing the stock system, and when installing your new kit.
- Apply penetrating oil generously to clamps, fasteners, pipes, and hanger rods for ease of disassembly.

### REVIEW THE INSTRUCTIONS & VERIFY THE KIT CONTENTS

Take a moment to read and understand these instructions before installing your Flowmaster Force II exhaust kit.

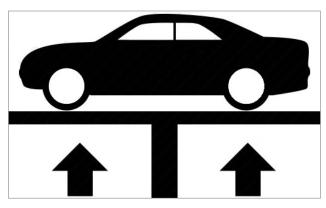


Use the parts drawing and list to verify your kit's contents. In the unlikely event that any parts are missing, please contact Flowmaster Technical Support for replacements.

### **REMOVE THE FACTORY EXHAUST SYSTEM**

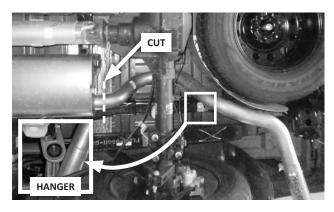
### **WARNINGS**

- AVOID BURNS! Exhaust systems get extremely hot. Allow the vehicle to cool down fully before starting work.
- AVOID SERIOUS INJURY OR DEATH BY CRUSH-ING! Never work under a vehicle that is supported by jacks.

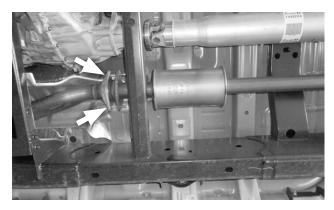


**1. Raise the vehicle** to working height on a lift. If you do not have a lift, securely support the vehicle on jack stands.

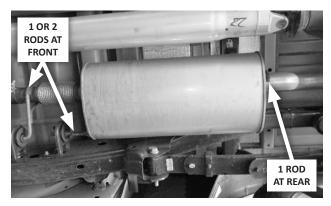
**NOTE:** If a lift is used, the entire stock exhaust system can be removed, whole, by two persons. But cutting the tailpipe off makes removal easier, especially if the job is performed on jack stands.



2. Cut the tailpipe off just behind the muffler. Disengage the tailpipe's hanger rod from its rubber isolator, and remove the tailpipe from the vehicle.

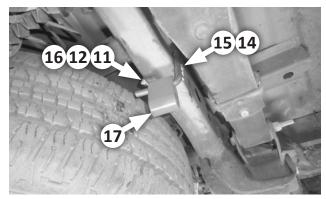


3. Remove and discard the 2 fasteners from the inlet pipe flange

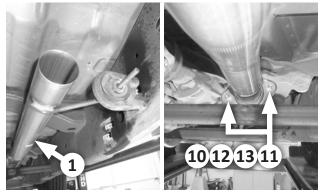


 Slide exhaust system back, disengage the 2 or 3 hanger rods on the muffler from their isolators, and remove the inlet pipe and muffler from the vehicle.

#### **INSTALL YOUR FLOWMASTER EXHAUST SYSTEM**



5. On the driver's side frame, between the leaf spring and the spare tire, install frame hanger (14) (with its rod pointing inboard) using the 3-1/2" bolt (15) (against the hanger, on the outside of the frame), and backing plate (16), lock washer (12), and nut (11) (on the inside of the frame). Lastly, slide rubber hanger (17) onto the rod.

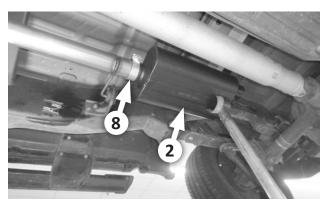


6. Slide the head pipe's (1) hanger rod into the to the (rear) isolator. (If there is a front isolator, it may be removed if desired.) Then attach the head pipe to the catalytic converter flange using two 2" bolts (10), lock washers (12), and nuts (11), and four flat washers (13). Lightly snug the fasteners (to allow final adjustment later).

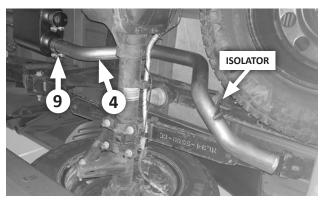


**7. Before installing any clamps,** remove their nuts, apply antiseize compound to the bolt threads, and re-install the nuts.

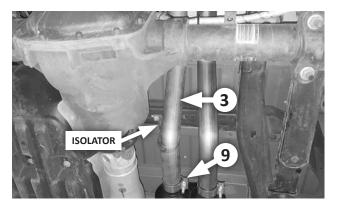
**NOTE:** All **pipe-to-pipe** slip-fit connections must seat **3" deep.** All **pipe-to-muffler** connections must seat **2" deep.** Mark the male ends of each pipe in advance, to ensure proper insertion during assembly.



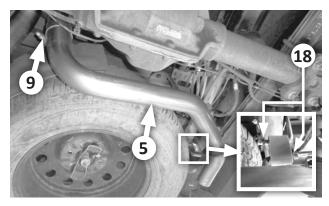
8. Slip the 3" clamp (8) onto the head pipe. Slip muffler (2) onto the head pipe, support it with a stand, verify 2" of insertion, and snug the clamp slightly (just enough to allow final adjustment later).



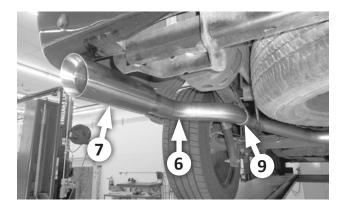
9. Slip a 2-1/2" clamp (9) over the muffler's right outlet. Move the right over-axle pipe (4) into place, and slide its hanger rod into the isolator. Then slip the end of the pipe into the muffler's outlet, verify 2" of insertion, and snug the clamp slightly.



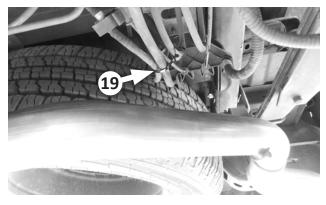
10. Slip a 2-1/2" clamp (9) over the muffler's left outlet. Move the left over-axle pipe (3) into place, slide its hanger rod into the isolator, and slip the end of the pipe into the muffler's outlet. Verify 2" of insertion, then snug the clamp slightly.



11. Slip a 2-1/2" clamp (9) over the front of the left tailpipe (5), and move the pipe into place. Slip it onto the left over-axle pipe, slide its hanger rod into the rubber hanger installed at Step 5, and install the two hanger keepers (18). Verify 3" of insertion, and snug the clamp slightly.



12. Slip a 2-1/2" clamp (9) over each rear exit pipe (6), and install each one on its tail pipe. Align each exit pipe as desired, verify 3" of insertion, and snug each clamp slightly. Install a tip (7) on each rear exit pipe. Align each tip as desired, and tighten its clamp.



13. Adjust all components to give 1/2" to 3/4" clearance (about a finger's width) around them, and allowing for suspension travel and vibration. When you are satisfied with the system's clearance and fit, tighten all clamps. Use cable tie (19) to keep electrical and fluid lines away from exhaust components.

**RECOMMENDED:** Tack weld each slip-fit connection (approx. 1" weld) for added security, then paint each weld with high-temp spray paint to protect against corrosion.



Congratulations, the installation of your Flowmaster Force II performance exhaust system is complete!

### KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE

Flowmaster maintains a highly-trained technical service department to answer your technical questions, provide additional product information and offer various recommendations.



FLOWMASTER TECHNICAL SUPPORT: (866) 464-6553