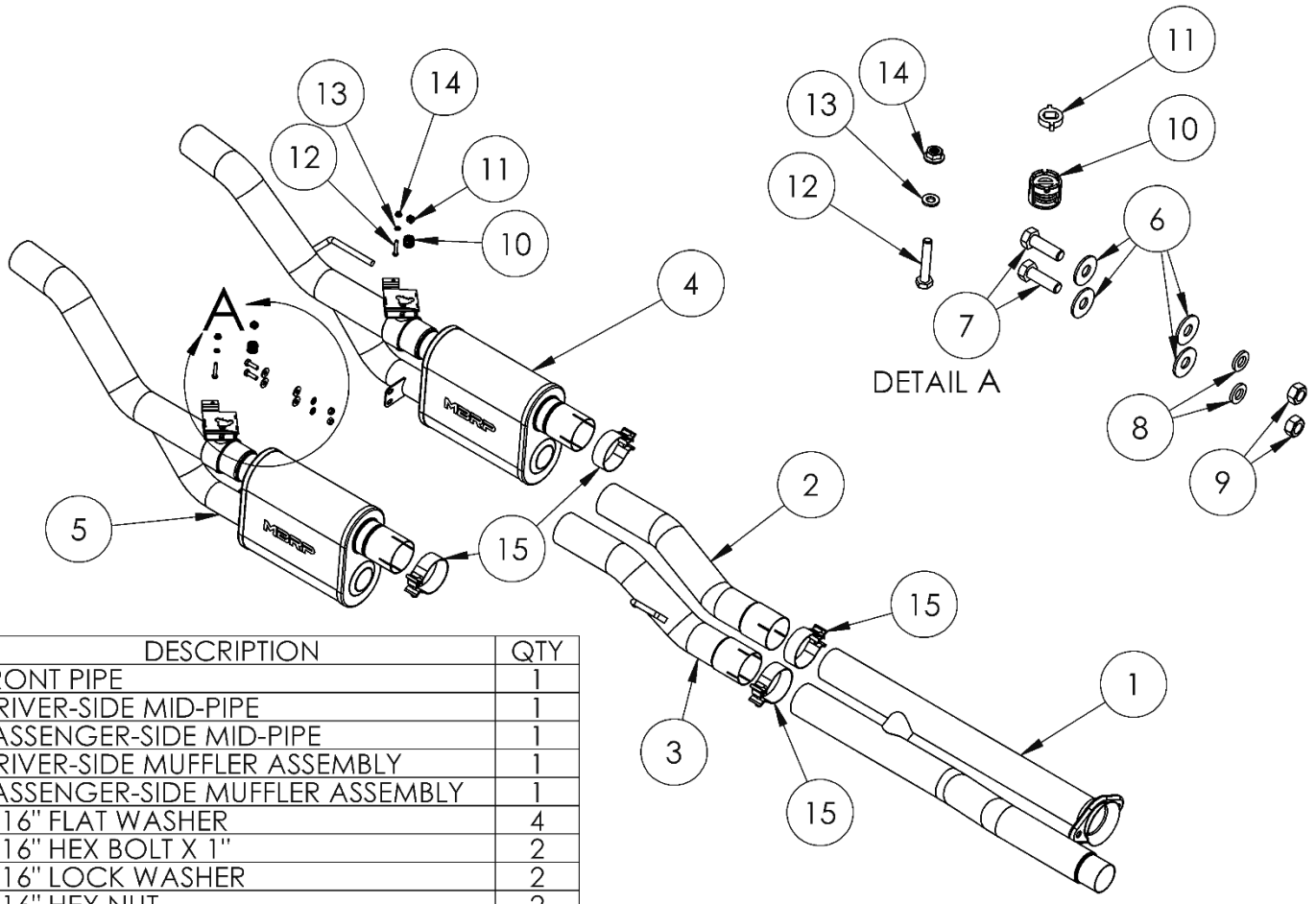
S5282

2023-UP FORD F150, RAPTOR R, 5.2L, MUFFLER REPLACEMENT, 3.0", ACTIVE
NOTE: MAY REQUIRE EXHAUST VALVE RELEARN THROUGH FORD DEALERSHIP



ITEM	DESCRIPTION	QTY
1	FRONT PIPE	1
2	DRIVER-SIDE MID-PIPE	1
3	PASSENGER-SIDE MID-PIPE	1
4	DRIVER-SIDE MUFFLER ASSEMBLY	1
5	PASSENGER-SIDE MUFFLER ASSEMBLY	1
6	5/16" FLAT WASHER	4
7	5/16" HEX BOLT X 1"	2
8	5/16" LOCK WASHER	2
9	5/16" HEX NUT	2
10	VALVE DRIVE SPRING	2
11	VALVE DRIVE HUB	2
12	BOLT	2
13	M6 LOCK WASHER	2
14	M6X1.0 FLANGE NUT	2
15	3.0" CLAMP	4

Refer to this LOT NUMBER when contacting customer service: _____

PLEASE READ BEFORE STARTING INSTALLATION

While MBRP has made every effort to ensure that all components of this system are of superior quality and properly packaged, it is the installer's responsibility to ensure the following before removal of the factory exhaust:

- that ALL components shown above are present.
- that ALL mating components fit together.
- that there are no damaged components.
- that the system you have purchased is appropriate for your vehicle year, model and configuration.
- that the system will not interfere with any modifications previously installed or planned.
- that you have read and understand these instructions.

If you have any questions or are uncertain about any aspect of the installation of this system to your vehicle please contact your dealer before commencing installation.

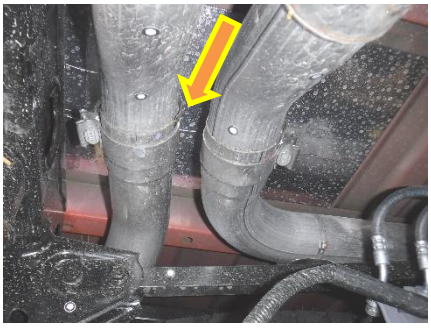


Figure 1



Figure 2



Figure 3

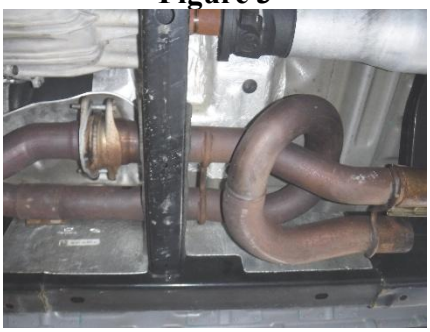


Figure 4

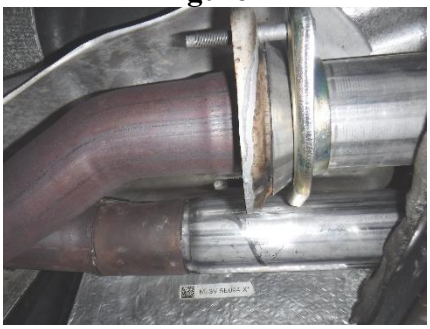


Figure 5

<u>Note:</u> May require exhaust valve relearn through Ford: FDRS, PCM-Exhaust Tailpipe Actuator Position Relearn app.
It is recommended to have a Ford dealership run the above procedure after installation to ensure full functionality of the exhaust modes and to maximize exhaust valve actuator life. It is required if any exhaust valve related codes or loss of valve function occur.

Removal of Stock System

1. Apply penetrating lubricant liberally to all exhaust fasteners, hangers, and rubber insulators.

2. Loosen the tail pipe clamps located above the axle and pry the small retaining clips away from the locating bosses on each pipe.
Refer to Figure 1.

3. Remove both passenger-side tail pipe insulators' hardware. Retain the hardware and insulators for the installation.
Refer to Figure 2.

4. Remove the passenger-side tail pipe, with insulators, from the over-axle pipe and vehicle.

5. Repeat steps 3 and 4 for the driver-side.

6. Disconnect both valve actuator wiring connections and strain reliefs. There is a white locking tab that needs to be pulled towards the wires to allow the tab to be pressed and release the connector.
Refer to Figure 3.

7. Loosen the clamps in front of the muffler assembly and slide off of the front pipes and out of the two insulators. An assistant is helpful.

8. Loosen the barrel clamp on the front pipe and remove the two flange bolts to remove the front pipe. Retain the hardware for the installation.
Refer to Figure 4.

9. Remove the valve actuators from the factory muffler assembly by removing the retaining stud and rotating the actuator and heat shield 1/4 turn counterclockwise. **Ensure you identify the passenger-side and driver-side. Installing them on opposite sides will cause a Check Engine Light (CEL) and loss of valve function.**



Figure 6

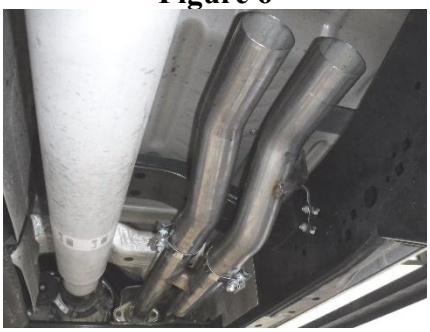


Figure 7



Figure 8



Figure 9



Figure 10

Installation of MBRP Performance Exhaust

1. Using the factory hardware, loosely install the **Front Pipe**.
Refer to Figure 5.

2. Using a **3.0" Clamp**, loosely install the **Passenger-Side Mid-Pipe** onto the **Front Pipe** and into the rubber insulator.
Refer to Figure 6.

3. Using a **3.0" Clamp**, loosely install the **Passenger-Side Mid-Pipe** onto the **Front Pipe**.
Refer to Figure 7.

4. Install the **Valve Drive Springs** onto the valve shaft on the **Muffler Assemblies**.
Refer to Figure 8 and page 1.

5. Install the **Valve Drive Hubs** into the **Valve Drive Springs**.
Refer to Figure 9 and page 1.

6. Ensure each valve actuator and heat shield is returned to the original side of the exhaust. Align the factory valve actuator hub tang with **Valve Drive Hub** and while compressing the **Valve Drive Spring**, insert the factory valve actuator, with the factory heat shield, into the **Muffler Assembly** bracket and rotate clockwise to lock in place. Use the **M6 Hardware** to retain the factory actuator. Repeat for the other **Muffler Assembly**.
Refer to Figure 10.

7. Using a **3.0" Clamp**, loosely install the **Passenger-Side Muffler Assembly** onto the **Passenger-Side Mid-Pipe**.
Refer to Figure 11.

8. Using a **3.0" Clamp**, loosely install the **Driver-Side Muffler Assembly** onto the **Driver-Side Mid-Pipe** and into the factory insulator.
Refer to Figure 12.

9. Loosely attach the **Driver-Side Muffler Assembly** to the **Passenger-Side Muffler Assembly** using the **5/16" Hardware**.
Refer to Figure 13.

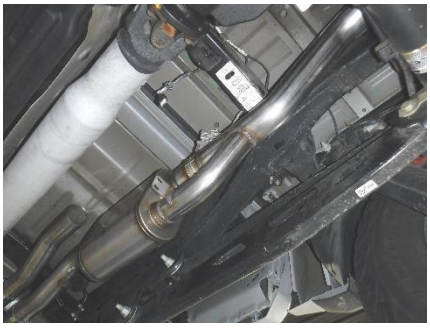


Figure 11



Figure 12

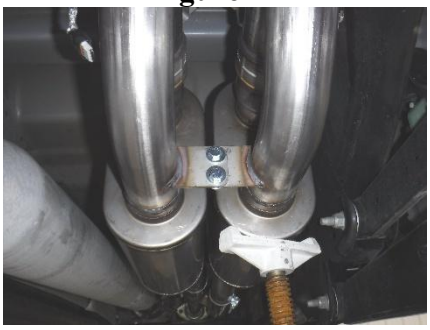


Figure 13



Figure 14



Figure 15

10. Connect the valve actuator wiring. Attach the strain reliefs onto the extra thread on the **M6 Bolts**.
Refer to Figure 14.

11. Reinstall the factory tail pipes and insulators.
Refer to Figure 15.

Or improve your ride with a set of MBRP tail pipes! Part Number S52663CF, S5278304, or S5278BLK.

12. Carefully align the system and tips. Align the edge of each band clamp with the edge of the joint it is connecting. Tighten all hardware and clamps, starting at the front and working rearward to secure the system. Check along the full length of the exhaust system to ensure there is adequate clearance for fuel lines, vent lines, brake lines, frame, bodywork, suspension and any wiring, etc. If there is any interference detected, relocate or adjust to provide adequate clearance. Ensure all clamp connections are secure and components are unable to rotate or slide. Band clamps (excluding tip hardware) require approximately 45 lb-ft (60 N-m) of torque. Verify clearances, system security and band clamp torque after 30-60 miles (50-100 km) of driving.



S52663CF shown

Congratulations! You are ready to begin experiencing the improved power, sound and driving experience of your MBRP Performance Exhaust.

We know you will enjoy your purchase!