## 2021+ F-150 Active Exhaust Kit

## Installation Instructions

## P/N: 422264 (1121-5E292), 422264-BLK (1121-5E292BLK) 422265 (1121-ACTUPG)



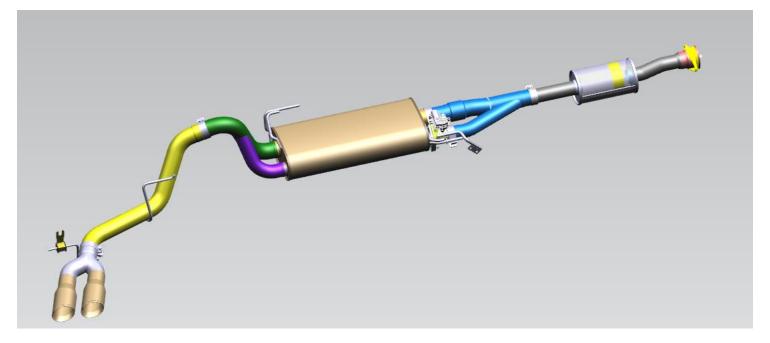


| 800.59.ROUSH



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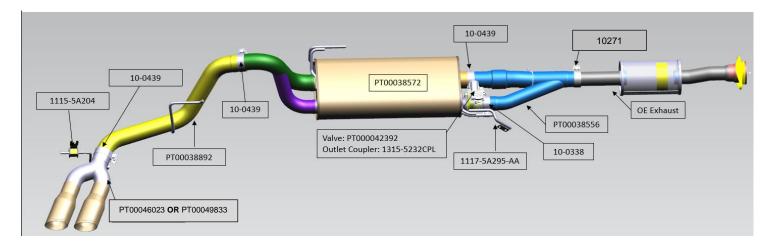
## **Application:** 2021+ Ford F-150 5.0L Coyote 141" – 163" Wheelbase **Important Note:**

Before installing your ROUSH Active Exhaust, please read through the installation procedure and verify that all items are present. If you are missing hardware or have any questions, please contact ROUSH Performance at 1-800-59-ROUSH, 9:00 AM to 5:00 PM weekdays.



#### TABLE OF CONTENTS

Packaging List for Active Exhaust Kits	. 3
Equipment and Supplies Required	
Limit of Liability Statement	
Safety Precautions	
Work Safely!	. 4
Section A – Disassembly	. 5
Section B – Assembly	. 5
Exhaust Hardware Installation	. 5
Wiring Harness Installation	. 9





### PACKAGING LIST FOR ACTIVE EXHAUST KIT 422264 & 422264-BLK & 422265

Description PN: 422264 & 422264-BLK	Part Number	Quantity
Pipe Assembly - Muffler Inlet 304SS	PT00038556	1
Outlet Coupler, Pipe LH	1315-5232CPL	1
GASKET - EXHAUST FLANGE	CV6Z-9450	2
HEX FLANGE NUT - M8X1.25	NM8X125HF-S437	2
BRACKET - Y PIPE SUPPORT	1115-5A204	1
BRACKET - MUFFLER HANGER	1117-5A295	1
MUFFLER ASY - OVAL (PASSIVE/ACTIVE) - 304SS	PT00038572	1
PIPE ASY - OVERAXLE 3 IN	PT00038892	1
21+ F150 EXHAUST TIP-DUAL-VENTED-POLISHED (422264) <b>OR</b> 21+ F150 EXHAUST TIP ETCHED AFTER COATED BLACK (422264-BLK)	PT00046023 <b>OR</b> PT00049833	1
EXHAUST HARDWARE KIT	1121-EXHWK	1
Clamp -Ø2.5 TORCA BAND	10-0338	1
Clamp -Ø2.75 304SS	10271	1
CLAMP - TORCA ACCUSEAL 3IN	10-0439	3
Description PN: 422265	Part Number	Quantity
HEX FLANGE NUT - M8X1.25	NM8X125HF-S437	2
GASKET - EXHAUST FLANGE	CV6Z-9450	1
VALVE ASSY - ACTIVE EXHAUST RH	PT00042392	1
WIRING HARNESS - IO ACTIVE EXHAUST	PT00042555	1
ACTIVE EXHAUST SWITCH - ON/OFF	FS00056841	1

#### EQUIPMENT AND SUPPLIES REQUIRED

- Metal Cutting device (Band Saw, Hack Saw, Cut-off Wheel)
- Tape Measure
- Ratchet with Extensions
- Metric Socket Sets (deep recommended)
- Torque Wrench

If you are missing any items, please call us toll free at 1-800-59-ROUSH.



### LIMIT OF LIABILITY STATEMENT

The information contained in this publication was accurate and in effect at the time the publication was approved for printing and is subject to change without notice or liability. ROUSH Performance Products (RPP) reserves the right to revise the information presented herein or to discontinue the production of parts described at any time.

#### SAFETY PRECAUTIONS

### 5TO STOP

## CAREFULLY READ THE IMPORTANT SAFETY PRECAUTIONS and WARNINGS BEFORE PROCEEDING WITH THE INSTALLATION!

Appropriate disassembly, assembly methods and procedures are essential to ensure the personal safety of the individual performing the kit installation. Improper installation due to the failure to correctly follow these instructions could cause personal injury or death. Read each step of the installation manual carefully before starting the installation.

- Always wear safety glasses for eye protection.
- Place ignition switch in the OFF position.
- · Always apply the parking brake when working on a vehicle.
- Block the front and rear tire surface to prevent unexpected vehicle movement.
- If working with a lift, always consult vehicle manual for correct lifting specifications.
- · Operate the engine only in well-ventilated areas to avoid exposure to carbon monoxide.
- Do not smoke or use flammable items near or around the fuel system.
- · Use chemicals and cleaners in well-ventilated areas.
- Batteries produce explosive gases, which can cause personal injury. Therefore, do not allow flames, sparks or flammable substances to come near the battery.
- Keeps hands and any other objects away from the radiator fan blades.
- · Keep yourself and your clothing away from moving parts when the engine is running.
- Do not wear loose clothing or jewelry that can get caught in rotating parts or scratch surface finishes.
- Allow the engine, cooling system, brakes and exhaust to cool before working on a vehicle.

#### WORK SAFELY!

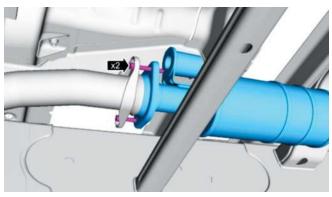
Perform this installation on a good clean level surface for maximum safety and with the engine turned off.



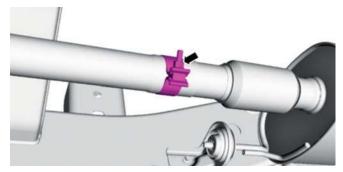
#### SECTION A – DISASSEMBLY

The following section will guide you through the disassembly and removal of the stock components. Longer wheelbase vehicles will also have an intermediate pipe (not shown) between the factory resonator and the muffler.

1. Remove the two (2) bolts from the flange securing the muffler to the Y-pipe.



2. Loosen the clamps that secure the intermediate pipe/resonator to the muffler.



3. Remove the hanger in front of the rear axle, just below the bed.



- 4. Remove the intermediate pipe and resonator from the vehicle.
- 5. Slide the exhaust hangers out of the rubber mounts and remove the factory muffler/tail pipe assembly from the vehicle.

 Remove the hangers from the passenger side frame. Retain the fasteners for later use.
NOTE:On the eco-boost model vehicles, there are two

(2) hangers in this location. The most forward hanger position will not be used.

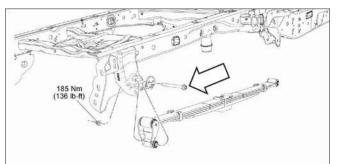
7. Remove the hanger on the passenger side frame rail near the rear tire.

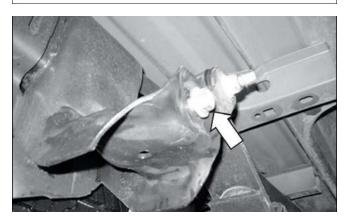
### SECTION B - ASSEMBLY

The following section will guide you through the assembly and installation of the ROUSH components.

#### EXHAUST HARDWARE INSTALLATION

1. Loosen the rear spring support bracket bolt so there is a 7-10 mm gap of threads showing.





 Install a hanger (1117-5A295) using the takeoff fasteners from step 6 of the Disassembly procedure. Place a rubber isolator on the hanger. Torque the fasteners to 25 Nm.



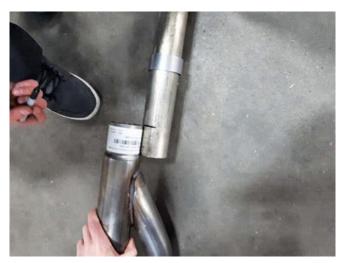


3. Determine the wheelbase of the vehicle. Measure from the center of the front wheel to the center of the rear wheel. Using the wheelbase and year of the vehicle, determine the cut length.

	Cut length (in mm)
Wheelbase mm (in)	2021 F150
3,581 (141)	190
3,683 (145)	290
3,988 (157)	590
4,140 (163)	764

- 4. Measure from the rear of the resonator. Locate the correct cut point.
- 5. Cut and deburr the outer edge of the pipe. Use the Y-pipe (PT00038556) to mark the factory pipe as shown. (This will help with setting the Y-pipe in the correct location on vehicle.)





 Using the supplied gasket (CV6Z-9450-C) and two (2) nuts (NM8X125HF-S437), install the exhaust valve (PT00042392) onto the muffler (PT00038572) as shown. If installing the PASSIVE system, use two Gaskets (CV6Z-9450-C) and the outlet adapter (1315-5232CPL) Torque the nuts to 25 Nm.



 Slide a 3" clamp (10-0439) over the Y-pipe (near the flex joint) at location 1. Slide a 2.5" clamp (10-0338) at location 2. Slide a 2.75" clamp (10271) at location 3. Install the Y-pipe onto the factory resonator pipe as shown.





8. Slide the muffler onto the Y-pipe as shown.



9. Install the mid-bed isolator onto the bed. Torque to 25Nm. (10mm Socket)



10. Raise the muffler assembly (as shown) and slide it into the hanger on the passenger side frame rail. Move the resonator forward to line up the flanges.





- 12. Slide the muffler until it is positioned so you can see the mark made in step 5 of the Assembly procedure. Tighten the clamps to keep the pipes from moving.



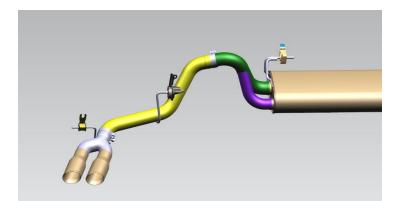
13. Install the takeoff hanger as shown onto the 3" over-axle pipe (PT00038892).



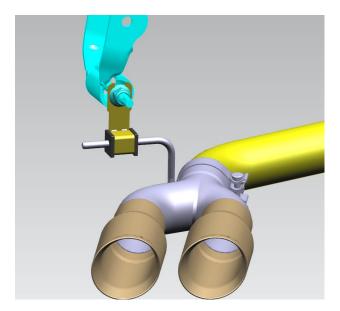
14. Install the supplied hanger (1115-5A204) onto the dual exhaust tip (PT00046023 **OR** PT00049833).



11. Tighten the bolts on the OEM Y-pipe flange. Torque to 40 Nm.  Slide a 3" clamp (10-0439) on the tip and slide onto over-axle pipe (PT00038892). Install the hanger onto the passenger side frame rail with the over-axle exhaust pipe and tip attached.



16. Install the 3" over-axle pipe onto the muffler and slide the hanger onto the leaf spring shackle bolt. Snug up the shackle bolt so that the pipe is supported. Do not torque yet.



17. Align Tips to your liking, and starting at the front, tighten the clamps making sure everything is aligned to 55Nm.





18. With the vehicle on the ground, torque the spring shackle bolt to 235 Nm.





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### WIRING HARNESS INSTALLATION

**NOTE:** The active exhaust switch can be installed in multiple different locations. Wire lengths are longerthan needed for custom installations.

1. Remove the glove box.



2. Remove the Passenger side trim panel.



3. Remove the passenger side rear Pillar trim panel. This is held in with clips.



- Route harness up passenger side of vehicle, with 12v power source and 12v red fuse tap facing forward.
- 5. Remove the two dash trim pieces by pulling firmly, a plastic trim removal tool will help with this procedure to not damage the trim. Remove the screws holding the HVAC control plate to the dash.



6. Locate the connector for the 12V power outlet Using a small pick, remove the red locking piece that is in the end of the connector. Carefully lift the tab for the WHITE with BLUE wire in the connector and remove the terminal from the connector.



7. Take the yellow lead from the active exhaust harness and insert it into the spot in the 12V power outlet connector that was de-pinned in the previous step. Replace the red locking piece that was in the end of the connector.

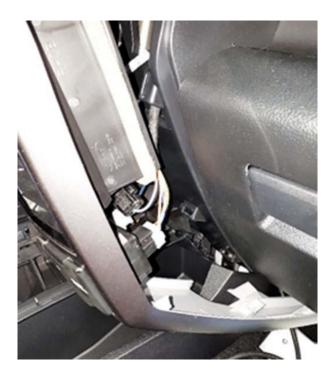




8. Install the supplied connector onto the WHITE with BLUE wire. Connect the mating electrical connectors together. Engage the red locking tab.



9. Plug the 12V and 110V connectors into the trim panel and leave loose. (The switch can be installed next to the power port if the vehicle doesnot have the 110V power source.)



- 10. Determine a switch location. Remove the paneland drill a 20 mm hole. Route the wires to the switch. The switch is fastened using a lock washer, you must unplug the switch and install from the front of the panel then plug in the switch.
  - 11. Remove the fuse block cover and kick panel.

11





12. Locate the fuse tap portion of the harness. Remove fuse #2 from the fuse block (You may have to remove the green fuse at the top to ease in removal/installation). Insert fuse#2 into the fuse tap, and insert the fuse tap into the fuse #2 location on the block.





13. Secure the harness (CTUV740) up under the dashusing the supplied zip ties.

14. Remove the zip ties that cover the OE wiring harness that runs the length of the vehicle.

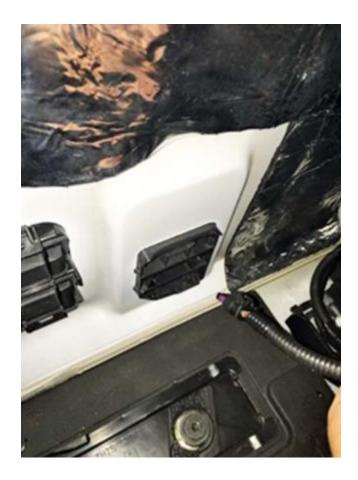




15. Loosen the B-pillar trim piece by pulling just below where the seat belt comes out. Do not remove.



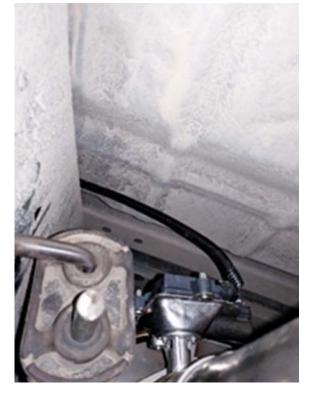
- 16. Route the active exhaust harness along the outer floor to the passenger rear corner of the vehicle. Route the harness under the front scuff plate, behind the B-pillar trim (under the seat belt bracket), under the rear scuff plate, and behind the C-pillar trim.
- 17. Route the plug out of the rear cab vent.



18. The wire will run down in between the cab and the bed of the vehicle. Pull the wire past the rubber seal that bridges the gap between the cab and bed. Add a zip tie shown.



19. Plug the connector into the valve on the muffler.



20. From inside the cab, pull gently on the wire until all slack is taken up. Use a zip tie to secure the wire to the wall of the cab. Zip tie the relay to the rear wall of the cab.



## 21. Remove the ground and attach the active exhaust ground to OEM location.



22. Reinstall all the trim panels that were removed in the previous steps.

Congratulations, the installation is complete!