

# 2005-13 C6 Corvette (All except Z06 & ZR1) Axle-back Exhaust System Installation Instructions 51602FLT (2005-2008) 51603FLT (2009-2013)



Thank you for making FLOWTECH EXHAUST your choice in a high-performance exhaust system. Extensive dyno/track testing has enabled FLOWTECH to offer the most advanced design in exhaust systems. The installation, while not complex, will take a certain amount of time. However, the additional horsepower and improved performance will more than justify your efforts. Proper installation and maintenance will ensure long life and maximum performance from your FLOWTECH exhaust system.

# **BEFORE STARTING:**

Your vehicle must be raised a minimum of 18 inches. A floor hoist is ideal. If no hoist is available, we strongly urge the use of axle stands as a safety measure. Please read and understand these instructions and disclaimer in their entirety before attempting installation.

CAUTION! WORK ONLY ON A LEVEL SURFACE. USE JACKS /JACK STANDS OF SUFFICIENT CAPACITY TO LIFT AND SUPPORT YOUR VEHICLE. NEVER WORK UNDER A VEHICLE SUPPORTED BY A FLOOR OR BUMPER JACK.

# **INCLUDED HARDWARE:**

Accessory Pack Contents:		Parts List:	
Qty.	Description	Qty.	Description
2	Band Clamps	1	Left Over-Axle Pipe
1	Instruction Sheet	1	Right Over-Axle Pipe
		1	Left Muffler Assembly
		1	Right Muffler Assembly

Tools Needed:				
Spray Lube (WD 40®)	3/8 Socket Wrench			
13mm & 15mm Deep Socket	13mm Wrench			
12" 3/8 Drive Extension	3/8 Universal			
15mm & 18mm Socket	18mm Box Wrench			

#### **INSTALLATION:**

- 1. Place the vehicle on flat a surface, set the parking brake, and block the front wheels.
- 2. Disconnect the negative terminal of the battery.
- 3. Lift the vehicle and support with jack stands.

### WARNING! Never support a vehicle with a floor or bumper jack.

#### **REMOVING THE OEM EXHAUST:**

- 1. Spray the muffler isolators, muffler clamp bolts, and the H-pipe flange nuts with WD-40® or equivalent.
- 2. Remove the (x2) nuts and (x2) bolts from the rear sway bar center mounting bushings. Do not remove the lower control arm bolt. Allow the sway bar assembly to swing down and away from the mufflers. See **Figure 1**.

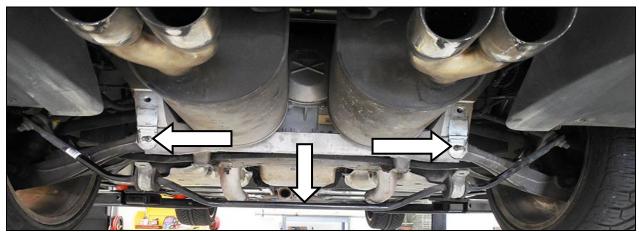


Figure 1

- 3. Loosen the clamps at the end of the H-pipe where it connects to the muffler inlet pipes.
- 4. Remove the (x4) nuts at the H-pipe where it connects to the catalytic converter down pipes. Remove the (x2) nuts at the center spring hangers. Slide the flanges off of the studs and remove the H-pipe from the muffler inlet pipes.
- 5. Remove the (x2) bolts from the muffler hangers on each muffler and remove the muffler assembly from the car. Take note of the direction the isolators are installed on the hanger rods.



Figure 2

## **INSTALLATION OF YOUR FLOWTECH AXLE-BACK EXHAUST:**

- 1. Inspect the exhaust hanger isolators and any OEM hardware to be reused. Replace, if necessary.
- 2. Reinstall the sway bar.
- 3. Place a clamp over the expanded end of left and right inlet pipes located on the muffler inlet pipes assembly with the bolts on the inside of the pipe and nut facing down.

- 4. Install the muffler isolators on to the FLOWTECH muffler hanger rods in the same direction they were removed from the O.E.M mufflers. See **Figure 2** above.
- 5. Install the **Left** muffler into the car with the inlet pipe on top of the parking brake cable. Align the isolator assemblies as shown in **Figure 2**. Install the isolator bolts. **NOTE:** Be sure the parking brake cable is routed under the exhaust pipe.
- 6. Install the **Right** muffler into the car with the inlet pipe on top of the parking brake cable. Align the isolator assemblies as shown in **Figure 2**. Install the isolator bolts. **NOTE:** Be sure the parking brake cable is routed under the exhaust pipe.
- 7. Install the Left side over-axle pipe into the muffler. Leave the clamp loose for now.
- 8. Install the Right side over-axle pipe into the muffler. Leave the clamp loose for now.
- 9. Slide the H-pipe on to the over-axle pipes (spring hanger bracket facing up). Connect the H-pipe to the catalytic converter down pipes, and install the flanges and nuts. Tighten the flange nuts to allow for adjustment. Install the spring hanger and nuts.
- 10. Tighten the clamps on the H-pipe where it connects to the over-axle pipes to allow for adjustment.
- 11. Position the band clamp at the muffler inlet pipe and tighten the clamp enough to allow for adjustment.
- 12. Tighten the (x4) bolts at the muffler isolators.
- 13. Check all the hardware and the connection points for proper installation and clearance. Adjust and tighten all clamps and hardware (32-35 ft./lbs.) starting at the front and working towards the tailpipes.
- 14. Check your exhaust system for proper clearance under the vehicle and also for tip alignment.
- 15. Before lowering and starting your vehicle, make sure to check all wires, hoses, brake lines, body parts and tires for safe clearance from the exhaust system.
- 16. Remove the jack stands and lower the car. Re-connect the battery and remove the wheel blocks.
- 17. Start the vehicle and check for leaks and loose hardware.
- 18. Check all hardware again after the first 150 miles of driving.

Enjoy your FLOWTECH Axle-Back Exhaust!