

### **INSTALLATION INSTRUCTIONS**

MAKE: Chevrolet MODEL: Corvette (C7) YEAR: 2014-2019 ENGINE: V8-6.2I

### **Twisted Steel Header/X-Pipe**

48C34110 (HDR) 48C34111-YC (X-pipe w/Cats) 48C34111-YN (X-Pipe w/o Cats) 48-34112-YC (Combo w/Cats) 48-34112-YN (Combo w/o Cats)



#### Parts Included:

- Clamp, 2-3/4" (x2)
- Clamp, V-Band (x2)
- 02 Sensor Extension
- Gasket (x2)
- Fire Sleeve
- 02 Plug

**CAUTION:** Allow time for your vehicle to cool down prior to installation. When working on or under your vehicle proceed with caution. Exhaust systems reach high temperatures and may cause serious burns. Wear protective safety equipment; eye goggles and gloves to ensure a safe installation. aFe recommends professional installation on our products.

- 1. Disconnect the battery from the vehicle.
- 2. Securely support the vehicle on a lift or on jack stands with at least 24 inches of clearance from the frame rail to the ground.
- 3. Remove the plastic fuel rails covers (or Plastic shroud on the ZR1 models).
- 4. Remove the spark plug wires and spark plugs to avoid damaging then during installation.
- **5.** Remove the oil dip stick.
- 6. Disconnect the primary and secondary O2 sensors from the engine wiring harness. (Primary O2 sensor connectors are black, Secondary are gray) If equipped: Remove the two dry sump lines from the passenger side of the pan approximately 9 quarts of oil will drain from the sump system. Be sure to have 10 quarts of fresh oil handy after new header install.
- 7. Remove the mid-pipe hander springs to the mid-pipe. Also remove the bolts and nuts attaching the mid-pipe and cat pipe.
- 8. Loosen the O-band clamps connecting the mid-pipe to the over axle, then remove the OE mid-pipe from vehicle.
- 9. Remove the nuts securing the cat pipe to the exhaust manifold and remove the cat pipe. (raise the engine with a floor jack if necessary)
- 10. Remove the nuts securing each exhaust manifold to the cyl head.
- 11. Remove OE manifold gaskets from vehicle. (If needed replace the exhaust manifold gasket if damaged).
- 12. Clean surface of cyl head to avoid debris catching with installing new header system.
- 13. Remove primary and secondary 02 sensors from OE exhaust.
- 14.Install the provided O2 sensor extensions to the engine wiring harness. (For Catted Systems please make sure your O2 sensors sit properly on both header and mid-pipes and if using wideband O2 sensors carefully enlarge holes without damaging O2 weld bungs)

  If the vehicle is equipped with oil cooler mounted on the driver side of the oil pan it must be removed for header installation.
- **15.**Install driver side header from the bottom if the vehicle. (It may be necessary to raise the engine slightly to allow enough clearance to fit the header between the sub-frame and the side of the block.

#### If the oil cooler was removed in previous step, reinstall it at this time.

- 16. Install passenger side header from the bottom of the vehicle. Do not install header bolts at this time; just leave the headers sitting in place.
- 17.Install the header gaskets using the provided header bolts.
- **18.**Install one primary O2 sensor (Black Connectors) in each header. (If a wide-band sensor will be used, install it in the extra bung in the passenger side header otherwise install O2 plug)
- 19. Connect the primary 02 sensors to the extensions installed previously and tuck the wires out of the way of the headers.

## If the Pfadt Tri-Y exhaust system has catalytic converters, install the secondary 02 sensors (Grey Connectors) If the exhaust system does not have catalytic converters you will no longer need the secondary 02 sensors.

- 20. Slide the provided O-band clamps onto the rear ends of the mid-pipe and slip the mid-pipe onto the overaxle. (Leave clamps loose)
- **21.** Install the mid-pipe hanger bolts through the holes in the hanger bracket and install the nuts.
- 22. Align the V-band flanges on the headers to the mid-pipe and install the V-band clamps. (Do not tighten but loose enough to avoid flanges from slipping out)
- 23. Re-connect secondary 02 sensors to the extensions installed previously.
- 24.Install the heat resistant sleeve.
- 25. Route the O2 sensor wires at the corners of the transmission tunnel and secure them in place with the retention tabs included in the kit. (3 per side)
- **26.**Torque the header bolts. Begin with the center and work your way toward the outside bolts.
- 27. Torque the O-band clamps at the rear of the mid-pipe.
- **28.**Torque the V-band clamps.

## Re-install Dry Sump lines if equipped at this time. Re-install dipstick tube if required in the previous step.

- 29. Reinstall spark plugs and wires.
- **30.** Double check all fasteners have been tightened, wiring is not dangling on headers.
- **31.**Re-connect the battery.

NOTES: aFe recommends that the tailpipe be at least 1/2"-1" away from any body panels to avoid heat related body damage. Tighten and secure.



### **NSTALLATION INSTRUCTIONS**

MAKE: Chevrolet MODEL: Corvette (C7) YEAR: 2014-2019 ENGINE: V8-6.21

## **Twisted Steel Header/X-Pipe**

48C34110 (HDR) 48C34111-YC (X-pipe w/Cats) 48C34111-YN (X-Pipe w/o Cats) 48-34112-YC (Combo w/Cats) 48-34112-YN (Combo w/o Cats)



#### Parts Included:

- Clamp, 2-3/4" (x2)
- Clamp, V-Band (x2)
- 02 Sensor Extension
- Gasket (x2)
- Fire Sleeve
- 02 Plug

**CAUTION:** Allow time for your vehicle to cool down prior to installation. When working on or under your vehicle proceed with caution. Exhaust systems reach high temperatures and may cause serious burns. Wear protective safety equipment; eye goggles and gloves to ensure a safe installation. aFe recommends professional installation on our products.

# For Catted Systems please make sure your 02 sensors sit properly on both header and mid-pipes and if using wideband 02 sensors carefully enlarge holes without damaging 02 weld bungs.

- **16.** Install the driver side header from the bottom of the vehicle. (Do not install the header bolts at this time: just leave the header sitting in place.
- **17.** Install the passenger side header from the bottom of the vehicle. (Take care not to damage the wiring harness heat sleeve running along the firewall with the header flange during installation.
- **18.** Reinstall header gaskets and header bolts. Orientation of the gaskets is critical for fitment and good sealing. Pay attention to the gasket labels and be sure the "Manifold side" lettering is facing the header and not the engine.
- **19.** Install one primary O2 sensor in each header. (Black Connectors) To ensure the front O2 sensors will reach, be sure to remove the connectors from the retaining clips on the heat shield. This will give the wires enough length to be properly installed.
- **20.** Connect the primary O2 sensors to the extensions installed previously and tuck the wires out of the way of the headers. If the Pfadt Tri-Y exhaust system has catalytic converters, install the secondary O2 sensors (Grey Connectors) if the exhaust system does not have catalytic converters you will no longer need the secondary O2 sensors.
- 21. Slide the provided O-band clamps onto the rear ends of the mid-pipe and slip the mid-pipe onto the over-axle. (Leave clamps loose)
- 22. Install the mid-pipe hanger bolts through the holes in the hanger bracket and install the nuts.
- 23. Align the V-band flanges on the headers to the mid-pipe and install the V-band clamps. (Do not tighten but loose enough to avoid flanges from slip ping out)
- **24.** Raise the sub frame back into position and start the four front sub frame bolts.
- **25.** With all six bolts started slowly raise the sub frame into place.
- **26.** Reinstall the four lower shocks mounts bolts into the lower control arms.
- **27.** Carefully lift the upright and upper control arm into place and replace the eight fasteners.

  Be sure to put the correct number of washers in the correct location as noted during disassembly!
- **28.** Connect the primary O2 sensors to the extensions installed previously and tuck the wires out of the way of the headers.
- **29.** Re-connect secondary O2 sensors to the extensions installed previously.
- **30.** Install the heat resistant sleeve. Route the secondary O2 sensors and extensions to avoid damaging the harness from Mid-pipe Heat. (**Shown in photos**)
- **31.** Torque the header bolts. Begin with the center and work your way toward the outside bolts.
- **32.** Torque the O-band clamps at the rear of the mid-pipe.
- **33.** Torque the V-band clamps. Reinstall Dry Sump Line (if equipped)
- **34.** Reinstall dipstick tube if it was removed.
- **35.** Reinstall spark plugs and wires.
- **36.** Reinstall the tunnel brace.
- **37.** Reinstall fuse block and tray (Be carefully as to not damage the pins on the underside of the fuse block. Failure to do so will result in electronics damage to the car.
- **38.** Re-connect the battery.





NOTES: aFe recommends that the tailpipe be at least 1/2"-1" away from any body panels to avoid heat related body damage. Tighten and secure.