|--|

## TUBULAR EXHAUST SYSTEM For 1988-1992 Camaro & Firebird, 5.0L V8 T.B.I., Auto & Standard Transmission, with A.I.R. *Catalog #68752, #68753*

# **INSTALLATION INSTRUCTIONS**

Please study these instructions carefully before installing your new *Tubular Exhaust System* (TES). If you have any questions, please contact our **Technical Hotline at : 1-800-416-8628** from 7 am - 5pm, Monday-Friday, Pacific Standard Time or e-mail us at **Edelbrock@Edelbrock.com**.

**TUBULAR EXHAUST SYSTEM:** These components are designed as a system to improve the exhaust efficiency of the GM T.B.I. (Throttle Body Injection) V8 engine. A performance gain can be expected by the installation of the system. This system requires no welding for installation and retains all 0.E.M. emissions equipment.

Suggested Tools Needed for Installation: This vehicle has metric fasteners.

- □ 3/8" ratchet socket set with extensions and universal 13mm and 15mm swivel sockets
- □ Combination set of open-end wrenches
- □ Jackstands, screwdrivers, pliers, crescent wrench, etc.
- Liquid penetrant, (GM #1052627) anti-seize compound (GM #5613695)

**SPECIAL NOTICE:** This Edelbrock Tubular Exhaust System has received an Executive Order number (E.O.#) from the California Air Resources Board (C.A.R.B.) making it legal for street use in all 50 states. To assist you with emission equipment certification, we have included a silver fan shroud decal to help testing personnel verify the this part is a legal replacement on the vehicle for which it is cataloged. The adhesive-backed decal should be affixed next to the existing emission and engine specifications decal. Do not cover any part of your original emission decal.

**WARNING:** The use of "Thermal Wrap" or any aftermarket coating process <u>will void the warranty</u> on your Edelbrock Tubular Exhaust Systems. Those products can cause excessive heat and moisture buildup resulting in corrosion and failure of the system.

NOTE: High temperature spark plug wires and boots are recommended to withstand heat from T.E.S.

#### IMPORTANT NOTE: Proper installation is the responsibility of the installer. Improper installation will void warranty and may result in poor performance and engine or vehicle damage.

#### KIT CONTENTS Catalog #68752 (Ceramic-Coated), #68753 (Ti-Tech Coated)

Qty.	Description
<b>□</b> 1	Header left side #25-9331 (#68752)
<b>□</b> 1	Header right side #25-9332 (#68752)
<b>1</b>	Header left side #25-9003 (#68753)
<b>1</b>	Header right side #25-9004 (#68753)
<b>□</b> 1	Extension pipe right side #25-9503
<b>□</b> 1	Extension pipe left side #25-9504
<b>□</b> 1	Umpco clamp; 3/8" I.D.
<b>□</b> 1	Umpco clamp; 1-5/8" I.D.
<b>□</b> 1	Hex nut; 10-32
<b>□</b> 1	Hex capscrew; 10-32 x 1"
<b>□</b> 1	Star washer; 3/16" internal
<b>□</b> 1	Tube spacer; 5/8" x .724" long
2	Tube spacer; 5/8" x 1.530" long
<b>□</b> 1	Tube spacer; 5/8" x .375" long
<b>1</b>	Donut gaskets; 2-1/4"
<b>□</b> 1	Adapter #79-9553
<b>□</b> 1	Adapter gasket

Qty.	Description
<b>□</b> 1	Flange connector
<b>□</b> 1	U-Muffler clamp; 2-1/4"
<b>□</b> 1	02 Sensor pigtail wire; 12"
<b>□</b> 1	Coolant tube bracket
2	Chevy V8 port gaskets
<b>□</b> 1	Hex bolts; 3/8" - 16 x 1-1/2"
2	Hex bolts; 3/8" - 16 x 2"
2	Hex bolts; 3/8" - 16 x 3"
<b>1</b> 2	Hex header bolts; 3/8" x 1"
<b>1</b> 6	Lock washers; 3/8"
<b>□</b> 1	Hose (A.I.R.); 5/8" x 10"
<b>4</b>	Flat washers; 3/8"
<b>□</b> 1	Hose connector; 5/8"
2	Ferry bolts; 3/8" x 2-3/4"
3	Spark plug connector boots
<b>3</b>	Spark plug terminal ends

## • DISASSEMBLY

- 1. Disconnect negative cable from battery.
- 2. Raise vehicle and support with jackstands.
- 3. Use penetrating oil on all nuts and bolts to be removed. This will prevent the possibility of broken or stripped nuts and bolts.
- 4. Making sure the converter is cool, remove the exhaust crossover pipe.
- 5. Lower vehicle to the ground.

## • DISASSEMBLY - LEFT SIDE

- 1. Remove air cleaner system (note position of line and hose connections).
- 2. Disconnect A.I.R. (Air Injection Reactor) tube from exhaust manifold.
- 3. Remove air conditioner compressor rear support bracket (if air conditioning equipped).
- 4. Remove power steering pump support bracket (if power steering is applicable).
- 5. Disconnect spark plug wires and remove spark plugs.
- 6. Remove 02 sensor, being careful not to rupture or destroy the unit. **WARNING:** Do not clean this unit in any cleaning solvent and do not rupture wire.
- 7. Disconnect temperature sensor wire at cylinder head.
- 8. Remove temperature sensor wire support bracket from valve cover bolt and lay wire back over engine.
- 9. Remove bolts and exhaust manifold from top side.
- 10. Disconnect steering column connector and lower slip tube down to steering box. **CAUTION:** Do not turn steering wheel or front wheels while this system is disconnected. **USE EXTREME CAUTION IF VEHICLE IS EQUIPPED WITH AIR BAG!**

#### • DISASSEMBLY - RIGHT SIDE

- 1. Disconnect A.I.R. injection tube from exhaust manifold and catalytic converter tube.
- 2. Disconnect electrical connector and vacuum hoses from A.I.R. diverter valve assembly (note position of hose and electrical connections).
- 3. Remove A.I.R. pump feed hose from diverter valve assembly.
- 4. Remove nut from diverter valve support bracket at exhaust manifold and loosen alternator pivot bolt, then remove diverter valve assembly.
- 5. Disconnect spark plug wires and remove spark plugs.
- 6. Remove dipstick and tube from engine. **CAUTION:** Do not damage tube.
- Remove air conditioner compressor rear support bracket. If A/C compressor is mounted on right side of engine, this bracket will require bending in a vise before re-installation (See Figure 1).



- 8. Remove bolts and exhaust manifold from top side.
- 9. Clean exhaust flange surfaces on cylinder heads at this time.
- 10. Unbolt oil coolant tube from frame rail and bend brace around tube. Bolt new flat brace (supplied) to frame rail. This will move coolant tube above and on top of frame which will allow more clearance for exhaust system.

## • ASSEMBLY - LEFT SIDE

- 1. Install T.E.S. flange gasket and one 3/8"-16 x 1" bolt, lock washer, and flat washer at rearmost bolt hole (leave bolt loose enough to accept T.E.S.).
- 2. Install left side T.E.S. manifold from top side.
- 3. Install all but the front three bolts and washers on left side (do not tighten at this time).
- 4. Re-install rear power steering support bracket (do not tighten at this time).
- 5. Re-install rear A/C support bracket with bolts, lock washers, and spacers supplied *(See Figure 2 for spacer locations).*
- 6. Align all parts and tighten left side bolts and nuts at this time.
- 7. Re-connect steering column coupler. **WARNING:** Make sure coupler bolt is tight and check to see that steering wheel is in same orientation as prior to disassembly.
- 8. Form brake lines to clear TES pipes.
- 9. Re-install spark plugs and re-connect wires on left side.
- 10. Change spark plug wire ends and boots as needed.
- 11. Re-install temperature sensor wire support bracket and reconnect wire to temperature sensor.
- Re-install 02 sensor. Use anti-seize on threads of sensor and torque to 30 ft./lbs. Re-route 02 sensor wire from wire loom to 02 sensor making sure all wires are clear of exhaust system (02 sensor extension wire is included in kit).

## • ASSEMBLY - RIGHT SIDE

- 1. Install T.E.S. flange gasket and one 3/8"-16 x 1" bolt, lock washer and flat washer at rearmost bolt hole (leave bolt loose enough to accept T.E.S.).
- 2. Install right side T.E.S. manifold and dipstick tube from top side.
- 3. Install remaining bolts, lock washers, and dipstick tube clamps *(See Figure 3).* Do not tighten bolts at this time.
- 4. Re-install O.E.M. front stud bolt with spacer (supplied). Align all parts and tighten all right side bolts at this time.
- 5. Re-install spark plugs and re-connect wires.
- 6. Change spark plug wire ends and boots as needed.
- 7. Re-install diverter valve assembly in front O.E.M. stud bolt and tighten.
- 8. Re-connect electrical connections and vacuum lines to diverter valve assembly.
- Remove A.I.R. check valves from original manifolds and reinstall them on T.E.S. For 1986 & 1987 models, use plastic connector and 5" hose supplied. Re-connect air hoses. For 1988 models remove 1/2" from formed rubber O.E.M. elbow and install plastic connector. Use 2" of hose supplied and reconnect air hose. Re-connect all A.I.R. injection hoses at this time.
- 10. Raise vehicle and support with jackstands.

#### • CROSSOVER PIPE ASSEMBLY

- Install crossover pipe assembly on vehicle using adapter and gasket provided between right manifold and extension pipe.
  NOTE: The gasket goes between the adapter and the manifold; there is no gasket between the adapter and the extension pipe. Use two 3/8" x 2" bolts with lock washers and donut gasket supplied for the left side, and use two 3/8" x 3" bolts and lock washers on the right side. Do not tighten at this time.
- 2. Form A.I.R. injection tube to catalytic converter. Align and tighten all bolts and clamps.

#### LOWER VEHICLE TO THE GROUND

- 1. Connect negative cable to battery. At this point, it would be a good idea to look everything over and make sure nothing is missed in assembly.
- 2. Start vehicle and bring up to normal operating temperature and check for possible leaks.
- 3. Turn engine off and let cool. Tighten all bolts again.hose. Reconnect all injection hoses at this time.



Edelbrock Corporation, 2700 California St., Torrance, CA 90503 Tech Line: 1-800-416-8628 E-Mail: Edelbrock@Edelbrock.com