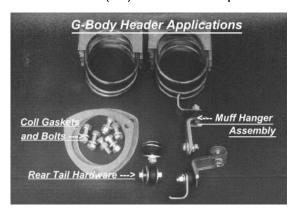


This Complete Kit Includes: The X-Pipe Crossover Kit

Which Includes:

- (2) Collector Flanges
- (2) Collector Gaskets
- (1) Coll. Nuts, Bolts, Washer Kit
- (2) Forward Extensions EXT25X, EXT30X Or EXT35X
- (2) Aft Extensions EXT25038X, EXT30038X Or EXT35038X
- (2) Straight Extension Tubes "Long
- (1) X-Pipe Junction
- (2) 10 Degree Adapters ADP25013 or ADP30013
- (12) U-Bolt Clamps



'79 – 88 G-Body Systems 2.5" & 3" Header Applications

With Torque Tech X-Crossover

- 3-Bolt Flanges, either 2½", 3" or 3½" Depending on the stated Collector Size you gave us.
- 3-Bolt Gaskets the same size as the above flanges.

6 sets of Stainless nuts, bolts and washers for the above flanges.

These have an overall length of approx. 25". The short end is approx. 8" and the bend is 45 Degrees. These pipes slip into the front of the X Junction and go to the Header. These forward Extension will be the same size tubing as the collector size.

These have an overall length of approx. 9". The short end is expanded and the bend is 35 Degrees. These pipes slip into the rear of the X Junction with the Expanded End outward toward the mufflers. These will be the same size as the exit openings of the X Junction.

These Straight Tubes slip into the end of the Aft Extensions and go to the mufflers. They will need to be trimmed to length.

Described by its shape. Entrance size is the same as the collector size of header. Exit size may be the same as the entrance or it may be a size smaller depending on what you are ordering.

Installed immediately in front of muffler. They angle ourward the mufflers so the ends of mufflers will be in position for the tailpipes.

Clamps to be used in assembling X Pipe. They may be discarded if you weld the assembly together upon completion.

Double "L" shaped brackets with rubber grommets, nuts, bolts, etc.

(2) Nut, Bolt Assembly to be used at rear of tailpipe.

INSTALLATION

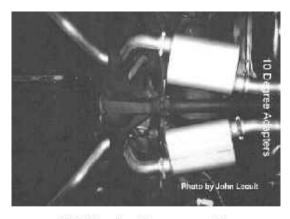
Muffler length is limited to a maximum of 17" case length. Inlet and outlet configuration should be Offset In and Offset Out on opposite sides.

This is a "Slip Fit" installation. No welding is necessary except for maybe the installation of the X-Pipe Crossover.

TRANNY CROSSMEMBER modification is required on the driver side. Possible solutions among others is to notch (cut out) space for the Forward Extensions to pass and reinforce the crossmember with a piece of flat iron above the top of the crossmember. Or, with appropriate measurements of the distance between your frame rails in hand, hit the "bone yards" looking for older early '70 or late 60's vehicles which might have a "dual exhaust" tranny crossmember in an appropriate length. You may have to modify the ends to fit. Be careful about tranny mounting height so as to not change the pinion angle. Bettter yet, is to purchase an aftermarket crossmember from Dave @ Advanced Resources --- 330-753-5300 and on the web at www.crossmembers.com.

- 1. First, be sure to read through the Thank You and Caution Flyer accompanying these instructions.
- 2. Secondly, read these instructions throughout to get a good overview.
- 3. Thirdly, remember, safety first. Be sure vehicle is secure and remember that pipes can cut (fingers & hands).
- 4. Now, compare hardware with the list above to be sure you have everything before beginning. NOTE: To help prevent rust on hangers, you may want to paint all exposed metal before installing.
- 5. To begin, mount the tailpipes first. Do not "Tighten" clamps, etc. With the "Behind the Wheel" Tails, secure the mounting bracket (piece that is welded to end of





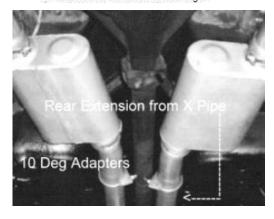
3" 2-Chamber Flowmasters with "Behind the Wheel" Tails attached

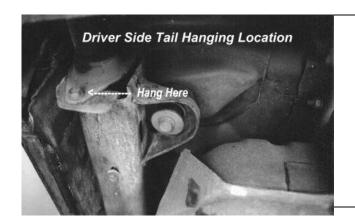


3" Monte SS Tails on El Camino



3" Monte SS Tails on Buick Regal





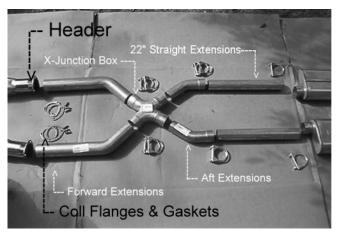
tailpipe) to the appropriate hold in the fame. Sometimes it may be necessary to bend the bracket a little to get the fit you need since there is a little variation at the bottom of the quarter panel from one kind of vehicle

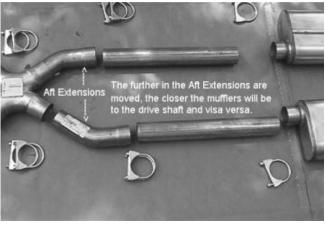
to another. With the Monte SS Tails, secure to the bumper shocks. Take out appropriate lower bolts and install the provided bolts. On the Bumper Shock that has 2 Bolts, use the outermost one.

- 6. To hang at the rear of the muffler, there is a short brace which is adjoining the main frame and the cross frame that crosses from one side of the vehicle to the other. This short brace has several holes in it for mounting the Big "L" bracket. The smaller "L" bracket (the one with the slightly curved end for mounting to the muffler) bolts to the Big "L" bracket (see hardware photo).
- 7. NOTE: El Camino/Caballero's do not have this short brace. You should have been provided wit the Big "L" bracket and Rubber Hanger to use in this case
- 8. The Big "L" bracket will be mounted to the cross frame in an appropriate location to position the tailpipe and muffler correctly. A hole will have to be drilled in this cross frame on each side.
- Mount the muffle onto the front of the tailpipe. You
 may want to temporarily secure the muffles with
 something placed under them. This will allow you to
 devote full attention to the X-Pipe Crossover
 installation. Mount the 10 Degree Adapters into the
 front of the mufflers.
- 10. X-Pipe Crossover Assembly. This is complicated to explain, but you will want to work from the muffler forward keeping in mind what you will need to eventually do on the front end oat the header.
- 11. DO NOT do any welding until you have everything "mocked up" and you are positive everything is like you want.
- 12. Insert the short straight extension (8" long) into the front of the 10 Degree Adapter. This extension may need to be shortened later.
- 13. Use clamps if necessary, but not too tight just enough to hold.
- 14. Now slip the Aft Extensions (the short extensions with the end expanded -- EXT35038, EXT30038 or EXT25038) on the front of the 8" extension.
- 15. Keeping in mind that you may need to trim the 8"

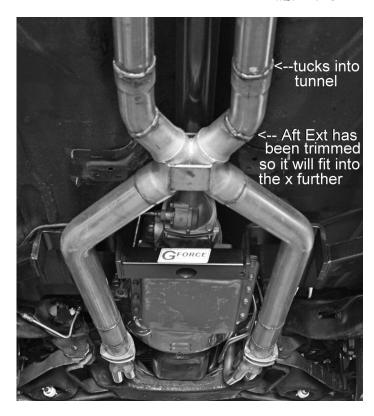








- extension , go ahead and slip the X-Junction onto the Aft Extensions. If you are finding the Aft Extension seems to be too for inward, then this means you will eventually need to trim off some on the front of the Aft Extension. Remember to use the clamps to help hold the pieces together but not too tight!
- 16. Note the location of the front edge of the Aft Extension within the X-Junction. You may want to make a mark on the Aft Extension even with the edge of the X-Pipe where it is inserted. This mark can be used as a reference. Anytime while working with the installation, this mark disappears, then the Aft Extension is inserted too far. You DO NOT want it extending so far into the Junction that it interferes with flow. This will DEFEAT the purpose of the X-Pipe design. Always Keep this in mind.
- 17. AT this point, IF the front edge of the AFT Extensions are obviously needing to extend TOO FAR, farther than they should (see above note), then you might want to trim off some of the excess. Be careful as you don't want to trim too much. 'Tis easier to trim a little short now, than too much! More trimming can always be done later.
- 18. Now with the X-Junction attached, you should have an idea if you need to move it back some. If possible you might try mocking up the Forward Extensions to give a clearer idea of where you are.
- 19. With all this in mind you can determine where to trim. Once you have decided, then proceed being careful NOT to trim too much!
- 20. As you narrow down the trimming and placement of the X-Junction, be sure to keep in mind the placement of the tailpipes. As you narrow this down, you will want to begin "fine tuning:" the tailpipe fit also.
- 21. Continue working with both the front and aft sections until you have everything lined up and adjusted. Only then, should you begin thinking about welding all joints. As you already know or have guessed, you will have to weld the Forward Extensions to the 3-Bolt Flanges. It would be best to "tack" weld each in several locations before taking off the vehicle. Once off the vehicle, run a bead of weld all the way around. Welding the other joints is highly recommended since there are so many. You may leave the clamps on permanently or weld and remove

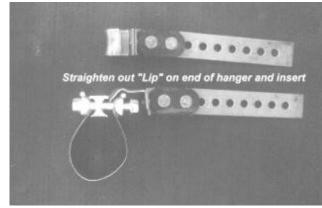


them at a later date. Do Not Weld anything until you are satisfied everything is as you would like. It is recommended to use a Hi-Temp Aluminized paint on all welds.

Caution: When it comes time to "bust off" the engine after installation of the system, it is very likely a good bit of smoke will come from the exhaust for a short time as the oils used in lubricating the mandrel will be burning off.

If you are using Band Clamps, you will need to "flatten out" the little lip that is always on the end of any hanger. This allows you to slip the end of the hanger into or between the bars of the Band Clamp as pictured here. The following photos show how to handle attaching most any hanger or bracket to a Band Type Clamp.





June 29, 2011