



GM True Dual Systems Header Applications - Instructions

INSTRUCTION FOR ALL '78-88 G-BODY SYSTEMS:

(Intended for vehicles with aftermarket headers needing dual exhausts - FOR STRIP AND OFF ROAD USE ONLY)

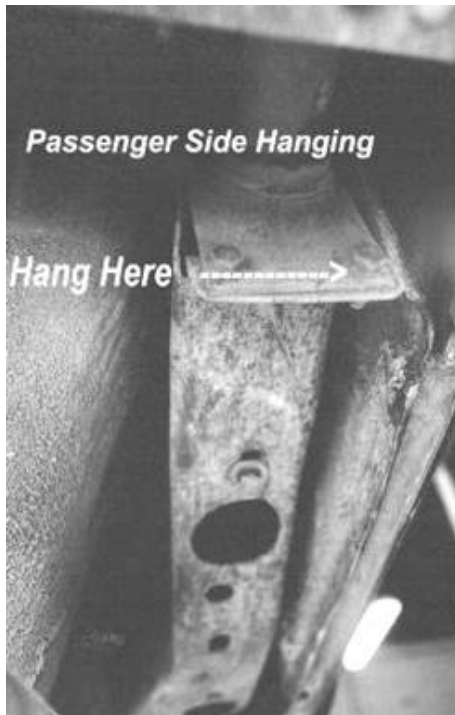
Included with this kit are the following:

- | | |
|------------------------|---|
| 2 - Collector Reducers | Either 3½" X 3", 3" X 2 ½", 3 ½" X 2 ½", or 3" X 3" (Comes with nuts, bolts, washers and gaskets) |
| 1 - Balance Tube Kit A | 1 piece of straight tubing 22" long. If you substituted Kit B, then it consists of 1 piece 16" long, 1 piece 8" long (expanded on one end) and 1 SS Band Clamp. |
| 2 - Headpipes | Pipes that come from mufflers forward to collector reducers. |
| 2 - 10 Degree Adapters | Short length of pipe (approx. 13") with 10 degree bend. Mounts in front of muffler to give Adapters muffler the slight angle so as to meet up properly with the tailpipe. |
| 2 - Tailpipes | Pipes which go over rear end and exit behind rear wheels or under bumper. |
| 8 - Clamps | For securing head pipes and tailpipes to mufflers and collector reducers. |
| 1 - Hardware Kit | Hardware for securing rear of muffler to body (bottom right of photo) and end of tailpipes to body (bottom center of photo). The same hardware works for Behind Wheel and Monte SS Tails. |

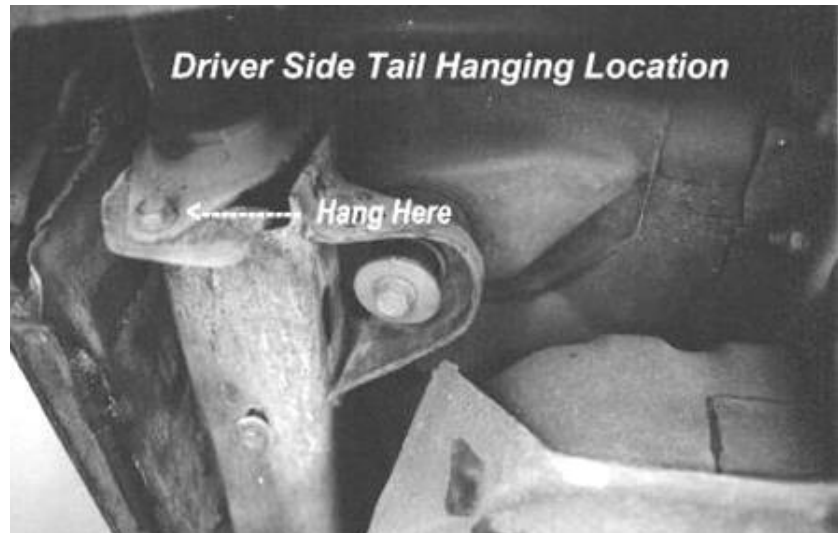
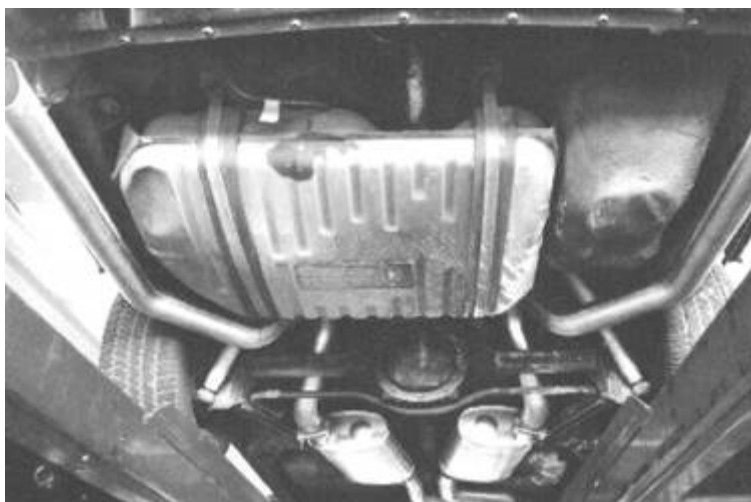
This is a "Slip Fit" installation. No welding is necessary except for the installation of the Balance or Crossover tube purchased with the kit.

TRANNY CROSSMEMBER modification is required on the driver side. Possible solutions among others is to notch (cut out) space for the head pipe to pass and reinforce the crossmember with a piece of flat iron above the top of the cross member. 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 to pinion angle. Better yet, is to purchase an aftermarket Crossmember from David @ Advanced Resources (330-753-5300) or www.crossmembers.com

Below are Tailpipe Mounting Points for the Monte SS Tailpipes

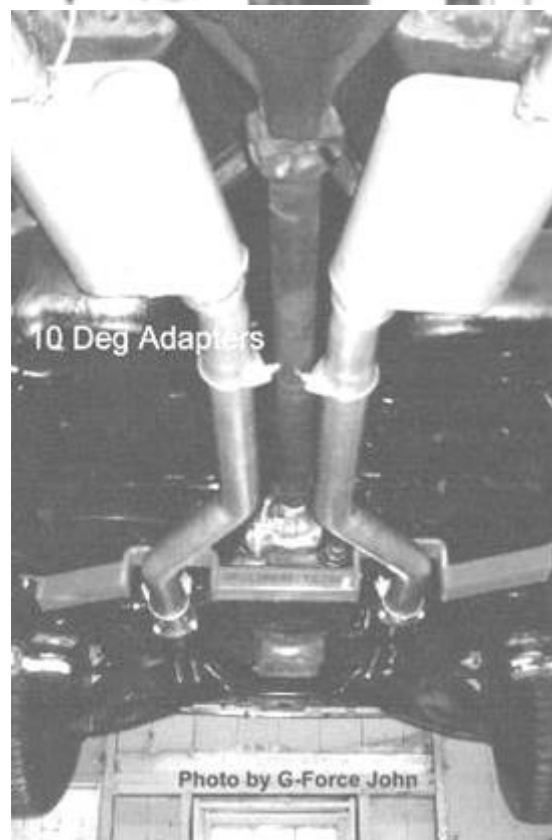
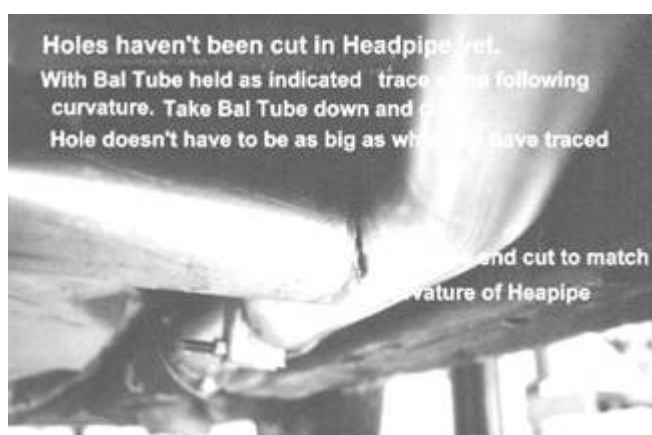


Below are Tailpipe Mounting Points for the Behind Wheel Tailpipes



Installation

1. First begin by **reading the instructions** to get a good overview.
2. Remember, **safety first**. Be sure vehicle is secure and remember that pipes can cut.
3. **Compare hardware** with the list above to be sure you have everything before beginning.
4. First thing is to check collector size. It would be a good idea to first check to be sure the collector size you ordered will fit your vehicle. Also, note if the headers are pointing straight back. If they aren't and you do not have the "No-Weld" Reducers, then you might want to consider ordering them before beginning your project, especially if your vehicle is a daily driver.
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 tailpipe) to the appropriate hole in the frame. Sometimes it may be necessary to bend the bracket to get the fit you need since there is a little variation at the bottom 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 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)



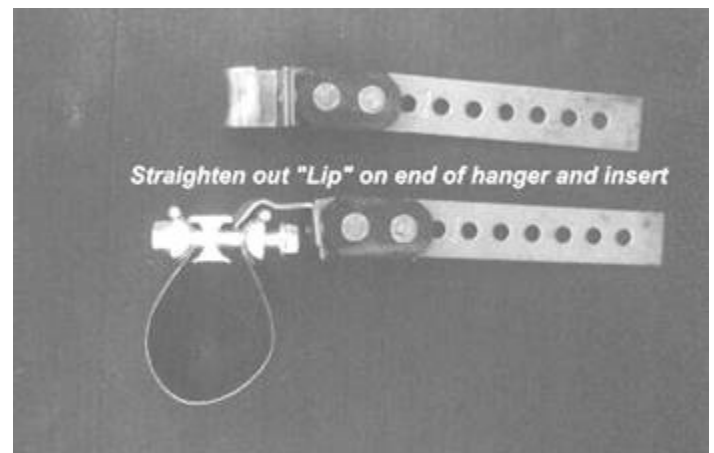
7. **Note:** El Camino/Caballero's do not have this short brace. You should have been provided with the Big "L" bracket and Rubber Hanger to use in this case. The Big "L" bracket will be mounted to the cross frame in an appropriate location to position the tailpipe and muffler correctly. A hole will have to be drilled in this cross frame on each side.
8. With the tailpipes mounted and the mufflers inserted on the front of each tailpipe, next mount the Collector Reducers. With the 10 Degree Adapter on the end of each Headpipe, test-fit assembly. BEFORE cutting or shortening, make sure everything will fit. Sometimes you will have problems with header alignment (pointing inward, outward, downward, upward or just plain being straight back, But too far inward to the center of the vehicle). IF this is the case, you certainly want to know it BEFORE you start cutting.
9. If the headers are fine (which is usually the case), then simply make note of approximately how much you will have to trim off the headpipe and/or collector reducer length. Then, re-measure just to be sure. It's easier to cut off some extra, than it is to add some extra.
10. After you have trimmed the appropriate length, THEN go back to the tailpipes and begin working forward again, this time fine-tuning the fit. Do not tighten clamps any more than necessary until you are through.
11. **Check for leaks** upon completion. Normally good sealing occurs with clamp type installations. However, occasionally we run into a situation where proper sealing is difficult to obtain. If this is the case, first try tightening the clamps a little more. However, with a lot of tightening, it is possible for the pipe to start crimping or the U-Bolt to "break". OR, try relocating the clamp forward or backward from its present position and re-tightening. Another possibility is trying "muffler cement" which can be purchased from any muffler shop, or auto parts outlet, or us. If there is excessive clearance between the two pipes or muffler and pipe, then it may be necessary to cut one or more slots in the outer pipe to allow it to compress further for better sealing. Try to rotate clamps so the bolt part is not pointing downward for a cleaner look-

ing installation.

Now that you have determined where to mount it, you need to determine the length. Remember to allow for the curvature of the Headpipes, as you will want to have some curvature on each end of the Balance Tube. (With Kit B, first install the short piece of pipe into the longer piece and maybe hold together with the Band Clamp – now you know the overall length and can determine everything just as if it were Kit A). Remember, better to cut too long than too short. Now cut the holes in the side of the Headpipes. They DO NOT necessarily have to be as big a diameter as the size of the Balance Tube. Do not allow parts of Balance Tube to protrude into the Headpipe as this will impede flow and be counterproductive. IF hole is cut a little too big OR if Balance Tube is cut a little short, you can "Fill Weld" in the gaps to make fit. It will be a good idea to paint the welds with some Hi-Temp Paint as this will help protect it from rust.

Stainless Steel Band Clamp Upgrade Installation:

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.



HEADER ANGLED WRONG?!

If the collector of one or both headers aim outward, upward or downward (they're supposed to be straight back and parallel to the ground), then we have special collector reducers that may help (we call them "no-welds" simply because we have not welded the tubing part of the reducer to the flange). They are the same as our regular long tapered units, just not welded. These will usually help unless you have a really bad situation. Installation of these "no-weld" units is relatively simple. Mount the flange to the header. Insert the tube part of the reducer onto the head pipe and into the hole of the flange. It will be going into this hole at an angle because of your problem header. Tack weld in several places, then take the assembly off the vehicle and run a bead all the way around. Check to be sure there is no metal protruding through the flange into the collector area as it will impede or hinder flow from the header. Grind off if necessary.

Thanks for buying Torque Tech!