

Installation Instructions for 3" Mandrel Bent S.S. Dual Muffler Exhaust  
By Applied GMC

To work on the manifold lift the front end off the ground with a jack stand and remove the inside fender panel.

Several small screws hold the panel in place at the wheel opening.

1. Remove the mufflers and tailpipe all the way.
2. Remove the manifolds and clean the head surface. Make sure no gasket material or carbon build up is on the surface. Also make sure the bolts are clean.
3. Install the Thorley headers using the instructions provided by them in the box. Please note the following:
  - 3.1. In order to install the left header you must remove 9/16ths headed 3/8ths bolt that holds the transmission oil dipstick in place, the dipstick can be disconnected in the center at the union. Pull the top part up and out of the way. Be careful not to bend it to much and do not try to remove the oil dipstick tube. The header flange must go over and between the tube and head surface.
  - 3.2. Start all bolts using star washers & silicone cement or Loctite 271 on threads to keep them tight. Use 65lbs. of torque to tighten the end and re-tighten once, instead of the specifications provided by Thorley.
  - 3.3. Installing the right side is easy. On a 403 engine, you must use a 45 degree angle fitting, provided in the kit, on the oil cooler lines. Check your oil cooler lines, if they are brittle or old they should be replaced. You should be able to find the lines at a parts store or hydraulic shop for \$50-\$75.00
4. To install the mufflers begin by placing all 6 header collector bolts in place loosely. The mufflers have a 2.5" inlet and outlet. Slip the inlet end over the Thorley header adapters, do this for each one. Once the mufflers are in place take the 2.5" clamps and loosely clamp over the inlet pipe. Check the direction of flow.
5. Now slip the "y" pipe adapter into the muffler(s) outlet. Make sure the 3" section of the "y" pipe is inline with the hole in the frame.
6. Now that the "y" pipe and muffler(s) are in place, go back and tighten the 6 header collector bolts and the 2.5" clamp(s) at the muffler inlets. Install the 2.5" clamps onto the muffler outlets and tighten.
7. Place the 3" elbow in to the frame.
8. Connect the "Y" pipe to the elbow using the small piece of tubing. If the tube is too big, then it can be cut to size. Loosely place a 2.5" clamp over both sides of the connection.
9. Install the two large sections of tubing by slipping them thru the frame and into the elbow, using the coupler provided between the two pieces. Clamp on loosely at the elbow and both sides of the coupler.
10. Now install our 3" tailpipe by taking the expanded end and slipping that section over the last section of long tubing. Use a 3" clamp loosely at the slip fit.
11. Now that everything is in place, go back and check for clearance and tighten all clamps.