



Installation Instructions

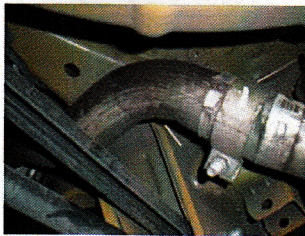
SYSTEM #817510

2005-09 FORD MUSTANG V6

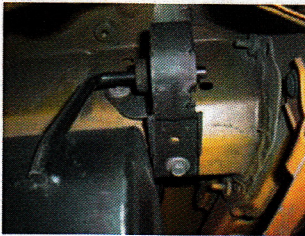
FORCE II

409S® Stainless Steel

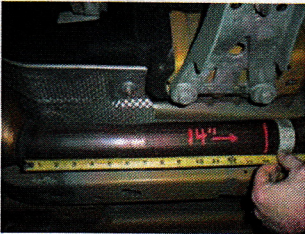
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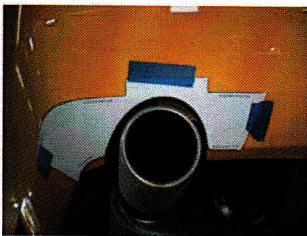
1) Loosen the 15mm nut on the clamped connection between the muffler and over-axle pipe and also the over-axle pipe to the factory Y-pipe.



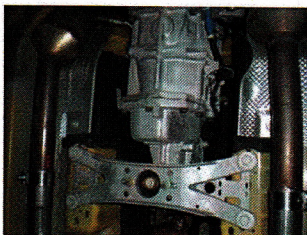
2) Unbolt the mounting brackets that mount the muffler to the frame (these are the two that connect the hangers on the *muffler body* to the frame). The mount connecting the hanger welded to the *inlet pipe* should remain bolted to the frame. Once these two hangers are unbolted, lower the muffler from the vehicle. Do not discard the OEM mounting brackets or hardware as they will be used in the installation of the new system. Lower the factory over-axle pipe from the vehicle and set aside.



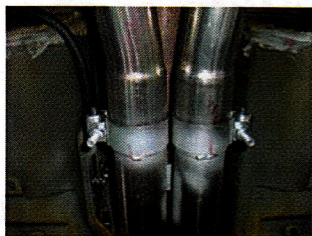
3) To install the new Flowmaster Scavenger X-pipe assembly **#16676S**, the factory Y-pipe must be removed. To do this, measure back 14.00" from the weld at the rear of each of the catalytic converters and make a mark on both pipes. Be sure to double check that the measurements are correct and cut both pipes on the marks. Remove any burrs.



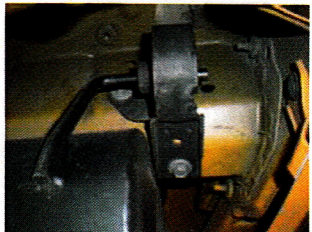
4) Because there is no cutout in the rear valance for the left side tailpipe, it will be necessary to make a new cutout. Follow the instructions on the attached template to properly align and make the cutout.



5) Place a 2¼" band clamp onto the inlets of the new Scavenger X-pipe assembly **#16676S**. Place the assembly up into position and fully slide onto the back of the factory front pipes, support the rear of the assembly with a stand. Tighten the clamps enough to hold but still allow for adjustment. Flowmaster embossing should be facing the ground.



6) Place a 2¼" clamp onto the slip-fit of over-axle pipe **#16679S** and slide onto the back of the right Scavenger outlet and support with a stand. Repeat this step with the left over-axle pipe **#16680S**.



7) Install the OEM hanger bracket removed from the rear of the factory muffler onto the rear hanger of muffler **#852467-229**. Place the muffler up into position and connect the muffler inlet to the over-axle pipe. Bolt the hanger bracket to the frame using the OEM hardware. Connect the hanger on the front of the muffler to the factory mount on the vehicle.



8) Install the OEM hanger bracket removed from the front of the factory muffler onto the rear hanger of muffler **#852467-230**. Place the muffler up into position and connect the muffler inlet to the over-axle pipe. Bolt the hanger bracket to the frame using the OEM hardware.



9) Place the **HA168** rubber hanger onto the hanger welded to the front of the muffler. Connect hanger assembly **#415HA** to the rubber mount and secure to the existing hole in the frame using the supplied 5/16" x 1" thread cutting bolt.

10) Adjust the position of all pipes and mufflers to provide a satisfactory fit. This is a tight fitting system, so take your time and be patient, tightening and adjusting a little bit at a time. Be sure to maintain an adequate clearance around all parts of the system to avoid rattles or damage to heat sensitive components. Once you're happy with the fit, tighten all connections down securely. For a cleaner appearance and more secure installation, we highly recommend welding all slip-fit connections.

PACKING LIST

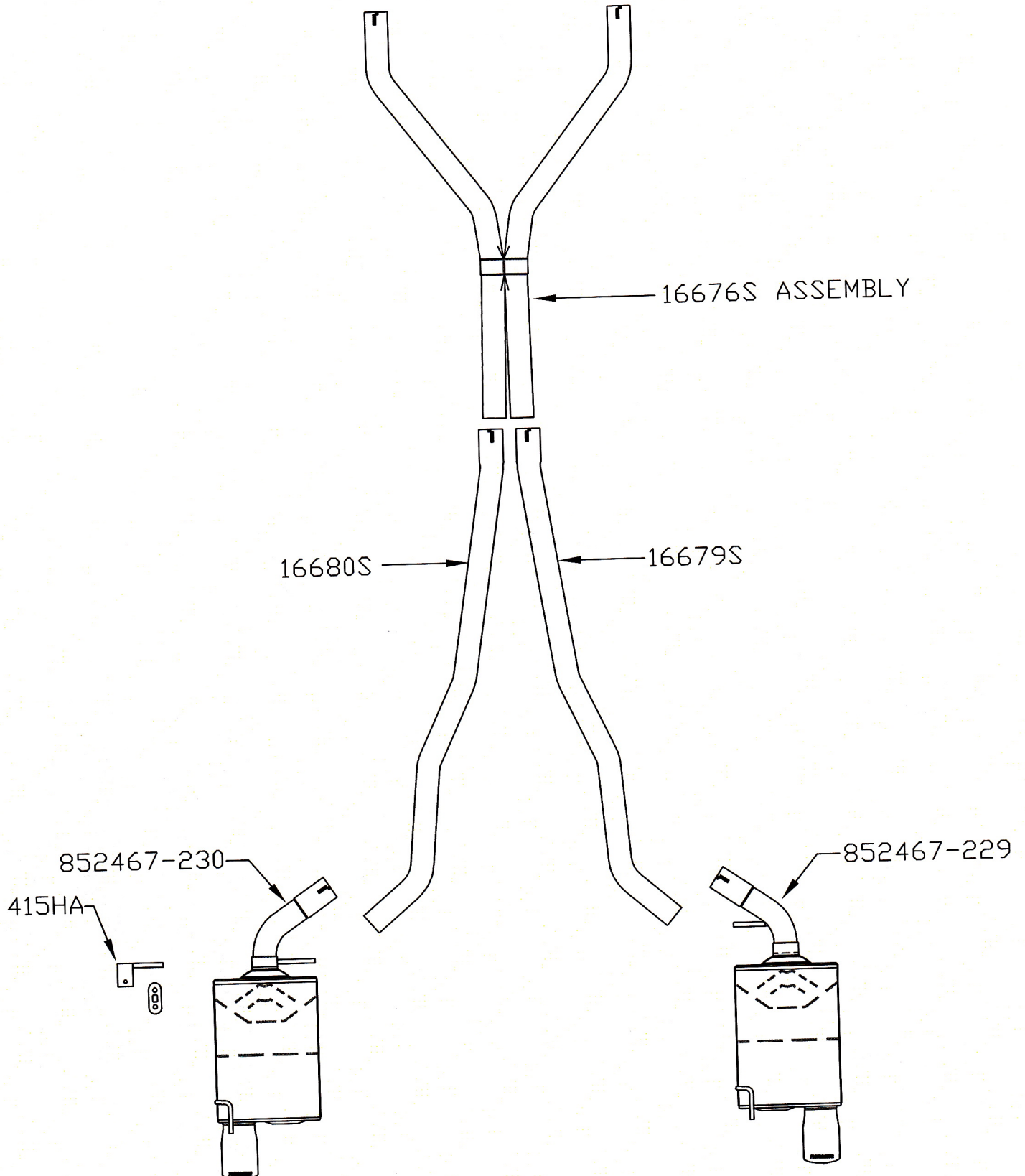
<u>Qty</u>	<u>Description</u>	<u>Part#</u>
1	Left Muffler Assembly	852467-230
1	Right Muffler Assembly	852467-229
1	Scavenger Assembly	16676S
1	Left Intermediate Pipe	16680S
1	Right Intermediate Pipe	16679S
1	Parts Kit	PK576
1	1 Frame Hanger	415HA
6	2¼" Band Clamp	MC225BS
2	3/8" Hanger Keepers	HW501
2	7/16" Hanger Keepers	HW502
1	5/16" x 1" Bolt	HW229
1	Rubber Hanger	HA168



Installation diagram for:
SYSTEM #817510
2005-09 MUSTANG V6

FORCE II

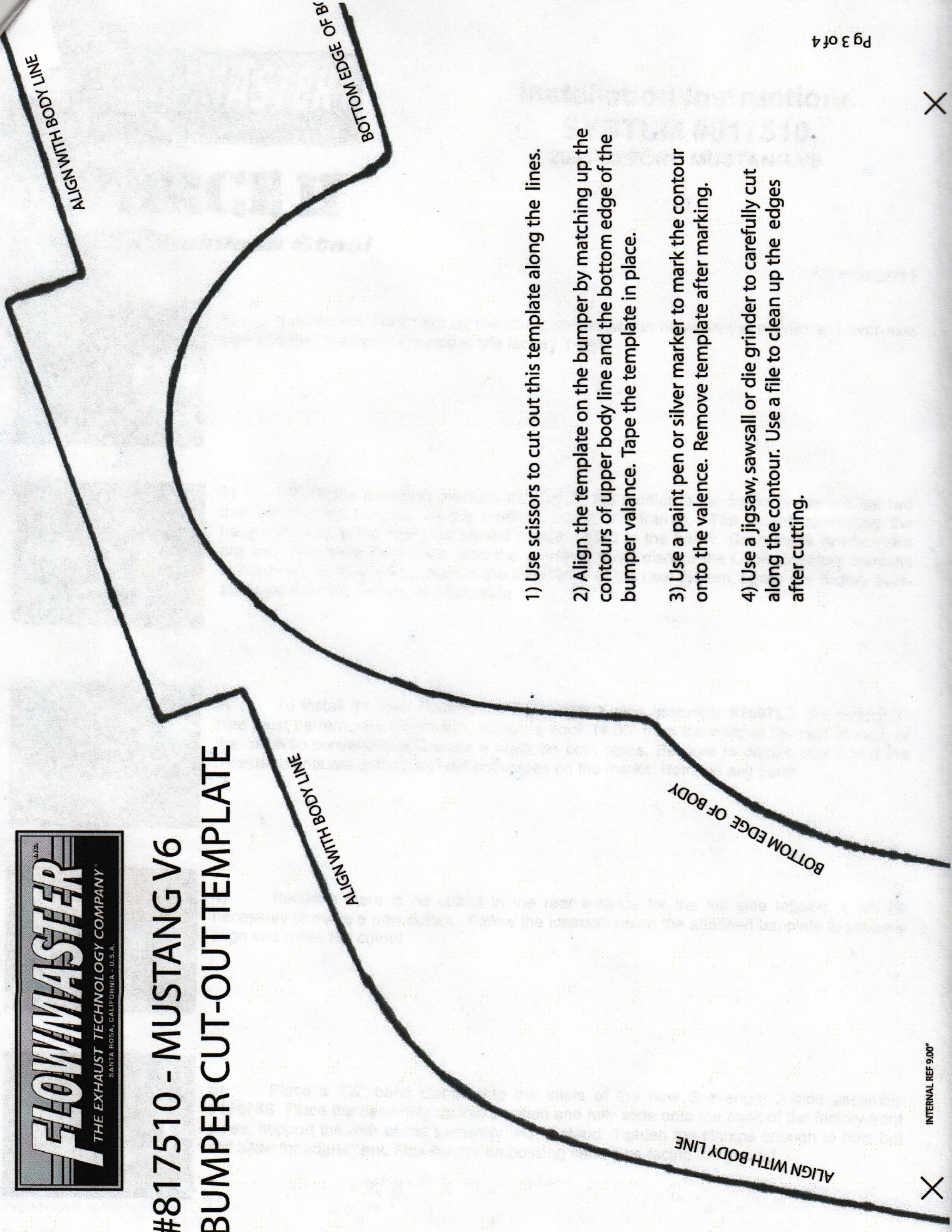
409S. Stainless Steel



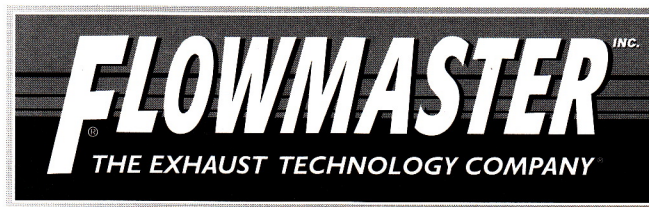
Technical Support (800) 544-4761



#817510 - MUSTANG V6 BUMPER CUT-OUT TEMPLATE



- 1) Use scissors to cut out this template along the lines.
- 2) Align the template on the bumper by matching up the contours of upper body line and the bottom edge of the bumper valance. Tape the template in place.
- 3) Use a paint pen or silver marker to mark the contour onto the valance. Remove template after marking.
- 4) Use a jigsaw, sawsall or die grinder to carefully cut along the contour. Use a file to clean up the edges after cutting.



GENERAL INSTALLATION / TECHNICAL NOTES

DO I NEED TO INSTALL AN H-PIPE IN MY DUAL EXHAUST SYSTEM?

Flowmaster® strongly recommends using a crossover tube, otherwise known as an H-pipe or balance pipe on all true dual exhaust systems. The crossover pipe equalizes the exhaust pulses and allows the sound waves to communicate between both banks of the engine. Not only does this usually improve torque in the low to mid rpm range, it also creates a deeper mellower tone both inside and outside of the vehicle and helps eliminate "back-rap" on deceleration.

IS AN X-PIPE BETTER THAN AN H-PIPE?

Over the years, Flowmaster has performed extensive testing of all types of crossovers and X-pipes, and has revealed no substantial performance benefits over H-pipes in street applications. We have experienced that some specialized race applications such as small cubic inch engines and / or restricted (small bore) carburetors, will respond well to the addition of an X-pipe over an H-pipe. X-pipes will however, produce a unique and smoother exhaust tone. Flowmaster offers a line of patented Scavenger® X-pipes if desired by the customer.

DO I NEED TO RUN TAILPIPES AFTER THE MUFFLERS?

Yes, Flowmaster highly recommends running a minimum of 12" tailpipe after the muffler. This will not only greatly help in sound control; it will also provide an increase in exhaust efficiency (more power). Running tailpipes out from under the car in street applications will also direct potentially harmful exhaust fumes away from the vehicle, as well as minimize the sound transmitted into the cab area of the vehicle.

HOW DO FLOWMASTER MUFFLERS WORK WITH COMPUTER CONTROLLED VEHICLES?

Late model computer controlled vehicles are constantly in a learning process that will adapt and tune itself to the exhaust efficiency increases generated by Flowmaster mufflers. Removing the negative side of the battery terminal for 1-2 minutes will reset the computer immediately and speed up this learning process.

THE IMPORTANCE OF EXHAUST HANGERS

When installing an exhaust system, it is very important that it be supported to the frame with flexible rubber mounting hangers. Using mounts that are stiff or mounted to the floorpan can transmit a great deal of sound directly to the body, creating a droning condition in the interior of the vehicle. Avoid this by using the common, flat "L" brackets with rubber insulator donuts.

HEAT SHIELDING

In the process of lowering underhood temperature, the exhaust system may in some cases be subject to increased radiant heat. It is advised that all RV and or heavy duty tow vehicle installations be reviewed for proper heat shielding between the exhaust plumbing and surrounding vehicle components. Aftermarket heat shields are available at most muffler shops or through Flowmaster. We do not recommend wrapping the muffler body with "header wrap" as the trapped heat will degrade the muffler at an accelerated rate.

THE DANGERS OF CARBON MONOXIDE

When an exhaust pipe exits the rear of a car, truck, van, SUV or station wagon, there is the potential for highly poisonous carbon monoxide gas to be drawn into the rear compartment. Even a slight exhaust opening or faulty gasket can allow significant exhaust fumes to enter. Rear exit exhaust systems should only be installed on pickups without camper shells or where camper shells are never used to carry people or animals. If you tow a trailer or carry passengers inside a camper shell in the back of your truck, you should select a single or dual side exit system. In addition, with rear exit systems you may find exhaust soot on the trailer you're towing.