



409S® Stainless Steel

Installation Instructions for:
SYSTEM #817457
1978-1988 GM A/G-BODY
V8 ENGINE · HEADER BACK
OFF ROAD USE ONLY

09/14/10

Removal:

- 1) Raise the vehicle up on a hoist or rack to working height and support securely with jack stands.
- 2) Remove existing system from the header collector or manifold down pipes back.

Installation:

- 1) On the frame, above where the outlet of the mufflers will be, you will need to mount the two hanger brackets **#378HA** (L) and **379HA** (R). (See Diagram)
- 2) After the mounts have been bolted in place, slide a **#HA168** rubber hanger onto each of the mounts. Place clamp/hanger assembly **#380HA** into the bottom hole of the rubber hanger on the left side. Repeat on the right side using with **#381HA**. Both hangers will point toward the center of the vehicle. (See Diagram)
- 3) Place right tailpipe **#16585S** over the rear axle and so that the rear of the tailpipe exits between the quarter panel and the leaf spring. Do the same for the left tailpipe **#16586S**. To simplify the installation of the tailpipes, we recommend raising the rear of the vehicle to gain additional axle clearance. After placing both tailpipes over the axle, lower the vehicle to the original height.
- 4) Raise the mufflers up into position and place the outlet into the clamp hangers installed in previous steps. Position the mufflers so they're level and support with a stand. Place the tailpipes into the outlets, and tighten the clamp/hangers enough to hold the tailpipe in place but still allow for adjustment.
- 5) Once the mufflers are in position with the tailpipes in the muffler outlets, install the supplied **#HA572** hangers as shown in the diagram to the rear hanger of each pipe. The hanger will line up with an existing hole in the frame. Use the provided 5/16" bolts, nuts and washers to secure the hangers to the frame.
- 6) Place a clamp onto the inlet of each muffler. Install the front X-pipe assembly **#16636S** by placing the rear of the assembly into the inlets of both mufflers and centering it in the drive line cavity. Support the front of the assembly with a stand. Be sure the mufflers and front pipe assembly are level. Once the mufflers and front pipe assembly are in place, check the hangers at the rear of the mufflers to see if they are hanging straight down. Adjust front pipe and mufflers forward or back as needed to get the correct fit.

- 7) The **#16647S** front connector pipes are long enough to allow for many different header combinations, therefore, it is necessary to determine the proper length of the inlet connector pipes. Place one of the adapter pipes under the front slip fit joint of the front pipe assembly, and also under the header collectors or manifold down pipes and accurately mark the pipes where they need to be cut. Once the proper length is determined, trim the front connector pipes.
- 8) Once the pipes are cut to the proper length, raise them into position and connect them to the H-pipe and header collectors or manifold down pipes using a standard Header Flange or FLOWMASTER reducer Cone.
- 9) Adjust and align the position of all the pipes to provide a satisfactory fit. Maintain at least 1/2" clearance around the new system and all drivetrain and chassis components. Be sure to keep suspension travel in mind.
- 10) After the hangers are adjusted to their final position, place the provided hanger keepers onto the end of all hanger rods above the mufflers and hangers that support the tailpipes. This will keep the hangers from slipping out of the rubber mounts.
- 11) For a cleaner appearance and more secure installation, we highly recommend welding all slip-fit connections. If you live in a geographical area that has harsh winters or sees a great deal of precipitation, the use of high temperature paint over the welded areas can help to prevent surface rust and premature corrosion.

PACKING LIST

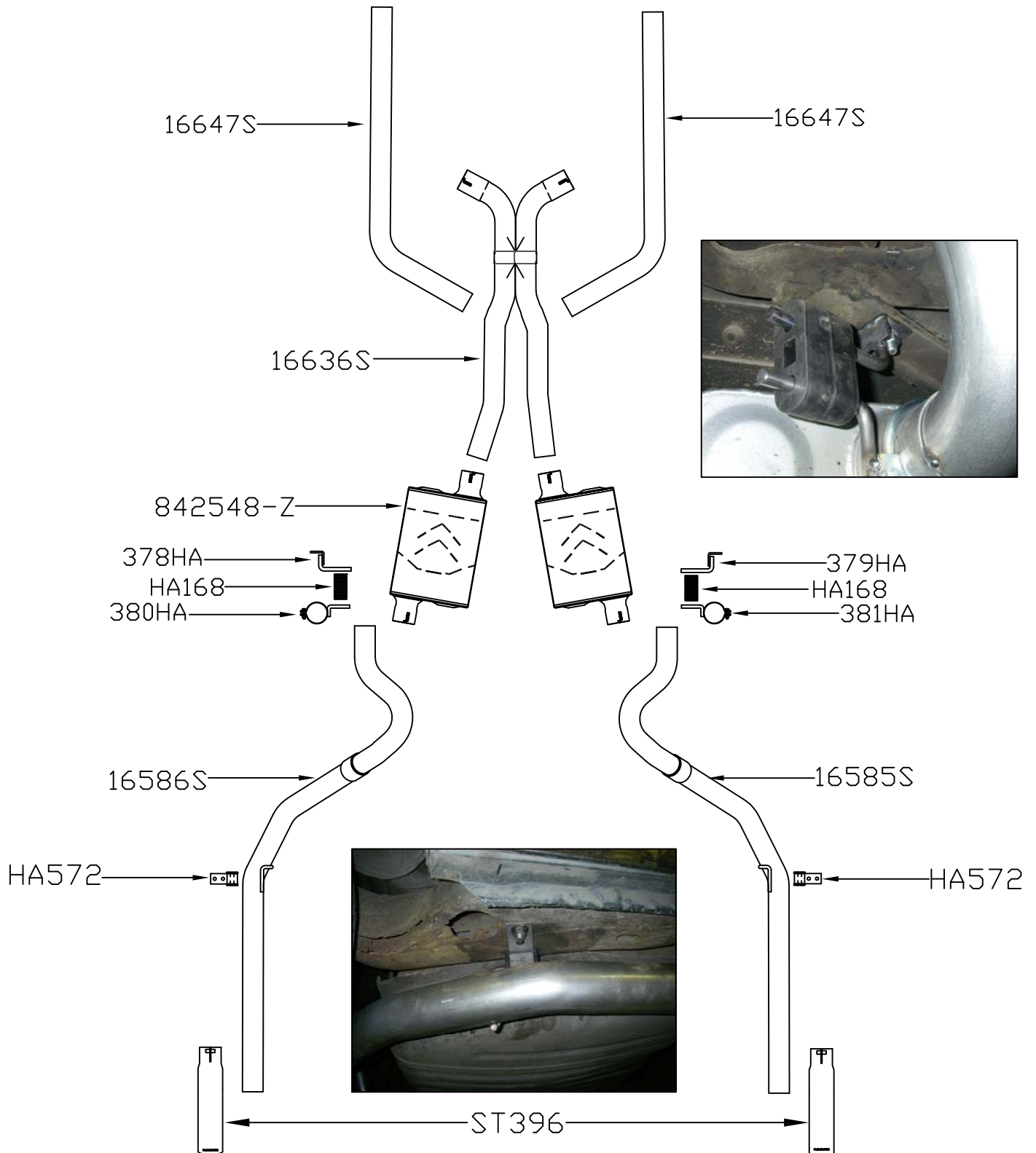
<u>Qty</u>	<u>Description</u>	<u>Part#</u>
2	Mufflers	842548-Z
2	Inlet Adapters	16647S
1	Scavenger X-Pipe Assembly	16636S
1	Left Tailpipe Assembly	16586S
1	Right Tailpipe Assembly	16585S
2	Stainless Tips	ST396
1	Parts Kit	PK487
1	Upper Muffler Mount (L)	378HA
1	Upper Muffler Mount (R)	379HA
1	Muffler Clamp/Hanger (L)	380HA
1	Muffler Clamp Hanger (R)	381HA
2	Tailpipe Hanger Mount	HA572
2	Rubber Hanger	HA168
4	2 1/2" Band Clamp	MC250BS
4	7/16" Hanger Keepers	HW502
4	5/16" x 1" bolts	HW204
6	5/16" Flat Washers	HW302
4	5/16" x Lock Washers	HW308
4	5/16" Nuts	HW102



Installation diagram for:
SYSTEM #817457
1978-1988 GM A/G-BODY
V8 ENGINE · HEADER BACK
OFF ROAD USE ONLY

**AMERICAN
THUNDER**

409S Stainless Steel



Technical Support (707) 544-4761