



SYSTEM #817456

1978-1988 GM A/G-BODY

CAT-BACK - V8 ENGINE

10/19/09

Removal:

- 1) Raise the vehicle up on a hoist or rack to working height. If you do not have access to a hoist or rack raise the vehicle and support securely with jack stands.
- 2) Begin the removal of the stock exhaust system by first cutting off both of the tailpipes just behind the mufflers. Unbolt the hangers at the front and rear of each tailpipe and remove the tailpipes from the vehicle. Remove all stock hangers as they will not be needed for the new Flowmaster system.
- 3) Support the muffler or mufflers (depending on vehicle model) with a stand and remove the bolts at the flanged connection behind the catalytic converter. Once the connection is loose remove the remainder of the system from under the vehicle.

Installation:

- 1) Place the Scavenger pipe assembly **#16584S** into position behind the catalytic converter. **Note:** If your vehicle has a different flange on the cat, you will need to use the 512TBS cat adapter pipe for its flange and piping. Level and center the assembly in the drive line tunnel and support with a stand. Using the 7/16" hardware included, attach the two flanges together, making sure to attach the factory hanger to the two upper bolt holes. The factory uses no gasket for this connection, so we recommend using a high temp sealer between the flanges.
- 2) Place a supplied clamp onto the inlet of each muffler. Then fully slide the mufflers onto the back of the Scavenger pipe assembly and support with stands. Level the mufflers and tighten the clamps enough to hold but still allow for adjustment.
- 3) To support the rear of the left muffler, connect together hanger numbers **#378HA**, **#HA168** & **#380HA** as shown in the kit diagram. Place the combined hangers onto the left muffler outlet as shown in the diagram and rotate fully upright. The metal plate on 378HA will line up with an existing hole in the diagonal brace connecting to the cross member. Use a provided 5/16" bolt, nut and washer to secure the hanger to the frame. Repeat this step on the right side using hanger numbers **#379HA**, **#HA168** & **#381HA**.
- 4) 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.

5) Place the left tailpipe **#16586S** into position over the rear axle and place into the left muffler outlet. Connect one of the supplied **#HA572** hangers as shown in the diagram to the hanger on the pipe. The hanger will line up with an existing hole in the frame. Use the provided 5/16" bolt, nut and washers to secure the hanger to the frame. Adjust the tailpipe so that all hangers are level and tighten clamp enough to hold but still allow for adjustment. Repeat this step for right tailpipe **#16585S**.

6) Adjust the position of all the pipes and mufflers to provide a satisfactory fit. A minimum of 1/2" clearance around all parts of the system must be maintained; while keeping suspension travel and vibration in mind. After adjustments have been made, you may now securely tighten all clamps. Connect the **#ST396** stainless tips to the end of the tailpipes and adjust to the desired location, tighten the bolts to secure the tips in place.

7) After the system is secure, slide the 7/16" hanger keepers onto the ends of the hangers located at the rear of the mufflers. These will prevent the hangers from slipping out of the rubber mounts.

8) 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 prevent surface rust.

PACKING LIST

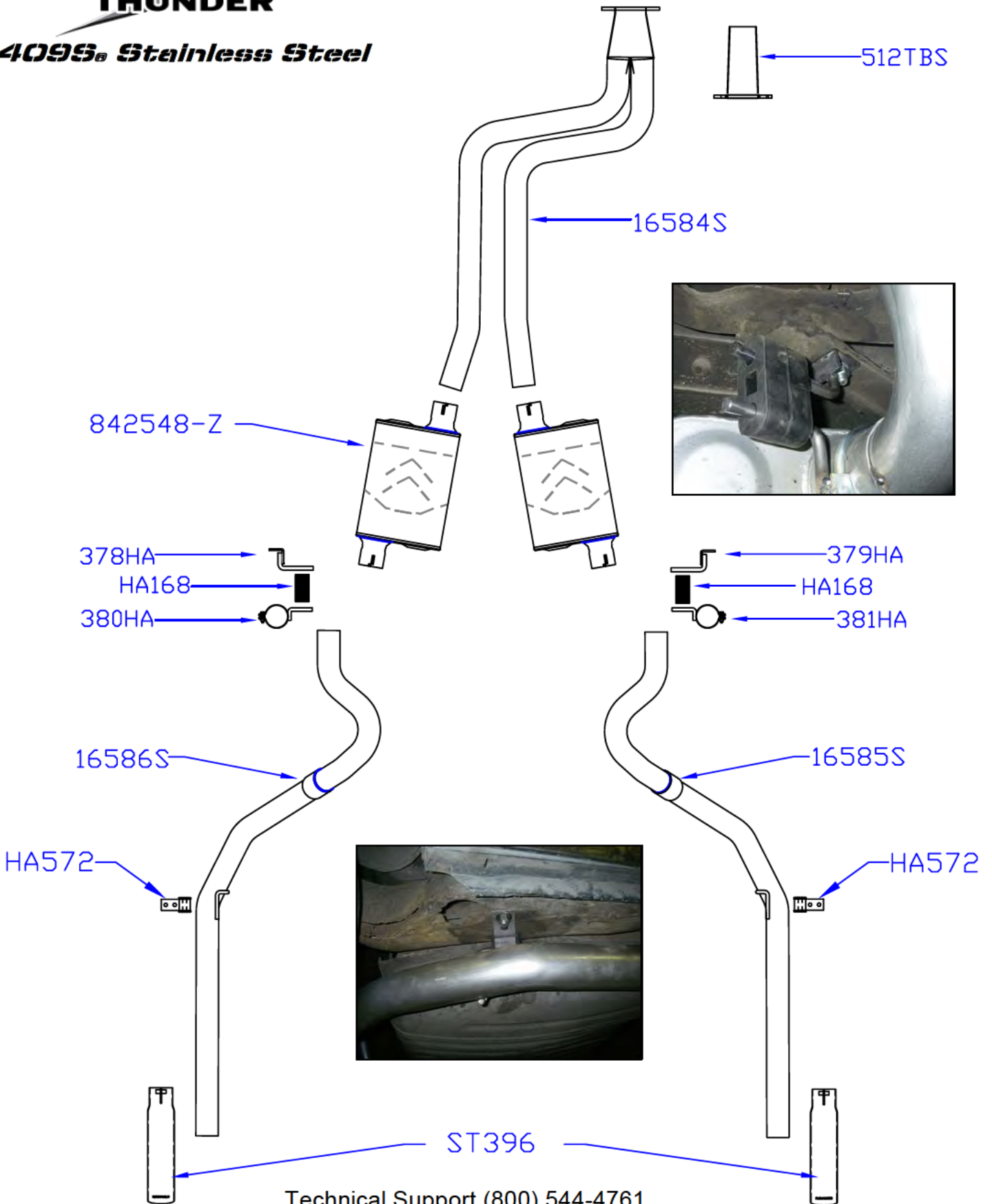
<u>Qty</u>	<u>Description</u>	<u>Part#</u>
2	Mufflers	842548-Z
1	Scavenger Assembly	16584S
1	Left Tailpipe Assembly	16586S
1	Right Tailpipe Assembly	16585S
2	Stainless Tips	ST396
1	Cat. Delete Pipe	512TBS
1	Parts Kit	PK486
1	Upper Muffler Hanger (L)	378HA
1	Upper Muffler Hanger (R)	379HA
1	Lower Muffler Hanger (L)	380HA
1	Lower Muffler Hanger (R)	381HA
2	Rear Hanger Mount	HA572
2	Rubber Hanger	HA168
2	2 1/2" Band Clamp	MC250BS
4	7/16" Hanger Keepers	HW502
4	7/16" x 1 1/2" bolts	HW224
6	7/16" Flat Washers	HW304
4	7/16" Nuts	HW104
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:
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AMERICAN THUNDER

409S Stainless Steel



Technical Support (800) 544-4761