



**409S<sup>®</sup> Stainless Steel**

Installation Instructions for:  
**SYSTEM #817650**  
**2007-2009\* TOYOTA TUNDRA TRUCKS**  
\*BUILT BEFORE 08/2008  
4.7L V8 ENGINES • ALL WHEELBASES

05/23/13

**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. Spray a penetrating lubricant onto the two front flanges as well as the rubber mounts that support the system, this will greatly ease removal.
- 2) Using a 12mm socket, unbolt the tailpipe connection where it exits the muffler. Separate the wire hanger on the tailpipe from the rubber mount on the vehicle. Remove the tailpipe and set aside.
- 3) Support the muffler with a stand, then using a 14mm socket, unbolt the 4 bolts at the two front flanged connections. Separate the wire hangers in front and rear of the muffler from the rubber mounts on the vehicle. Remove the muffler inlet pipe assembly and set aside. Save the 4 factory bolts, they will be reused in Installation step 3.

**Installation:**

- 1) Based on production model variations this is a list of cab designs, bed lengths, and wheel bases to cut your new H-pipes, **#86082S** and **#86083S**, to fit your application. Double check all measurements before cutting your H-pipes:

Double Cab/Long Bed = No Trim Required

Double Cab/Standard Bed = Trim 18.750" off both H-pipes

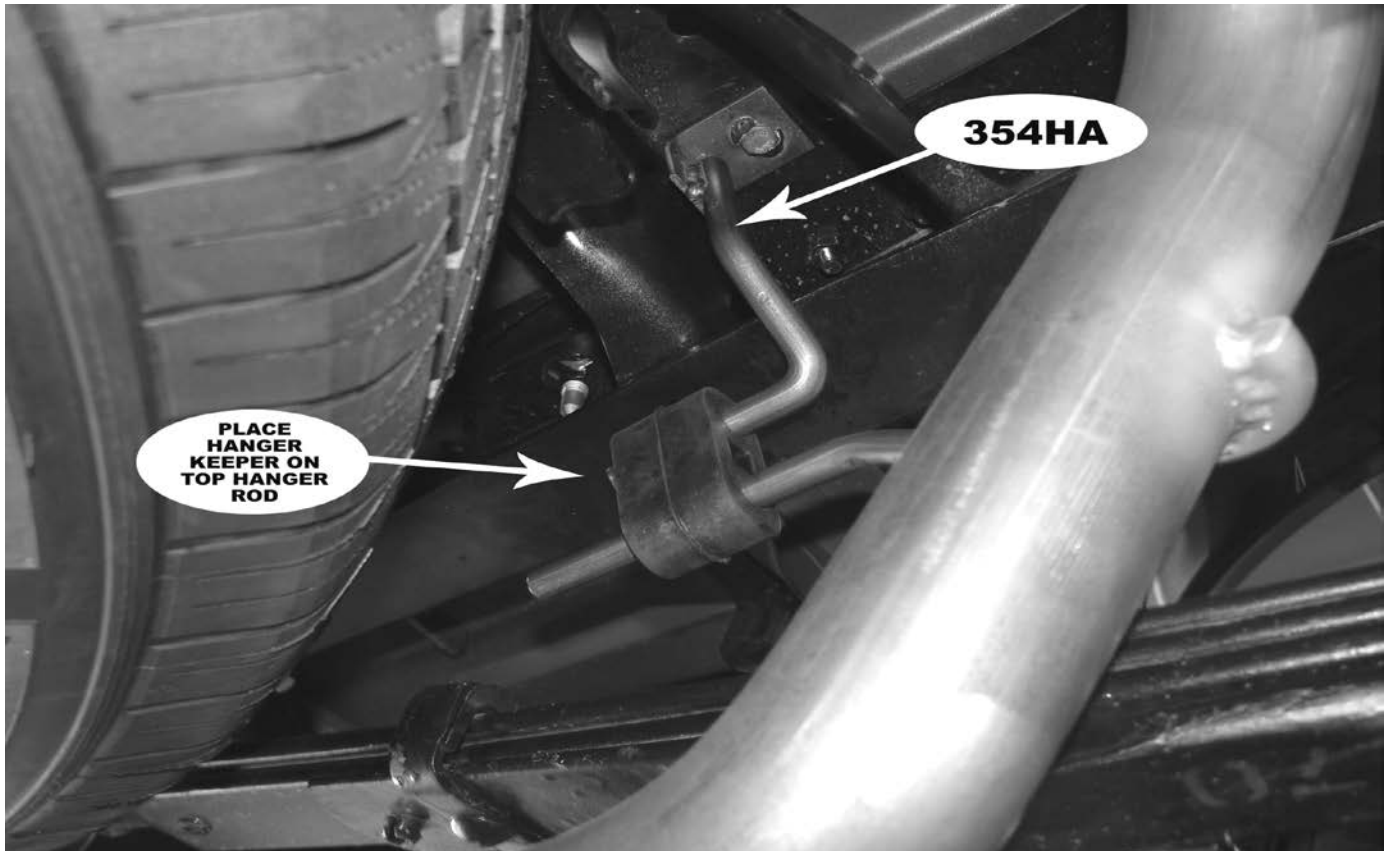
Crew Max/Short Bed = Trim 18.750" off both H-pipes

Regular Cab/Long Bed = Trim 18.750" off both H-pipes

Regular Cab/Standard Bed = Trim 37.750" off both H-pipes

- 2) Place H-pipes **#86082S** and **#86083S** with **GA115 gaskets** into position, sliding the H-pipe connection together onto the two factory flanged connections reusing the factory bolts. Tighten firmly and support with a stand. Next, place the supplied left inlet pipe clamp hanger, **#352HA**, and the right inlet pipe clamp hanger, **#353HA**, onto the inlet pipes and into the factory rubber mounts on the vehicle.
- 3) Place a supplied 2½" clamp onto both muffler inlets, then slide the inlets of the muffler onto the back of the H-pipes. Use a stand to support the muffler. Tighten the clamps enough to hold in place, but still allow for adjustment. Next, place the supplied 2" saddle clamp **#MC200S** over the H-pipe crossover connection and tighten firmly.

4) Install the left rear frame hanger **#354HA** across from the center of the spare tire. Locate a square cavity on the left rear frame rail. Look up into this cavity and locate the large hole at the top of the frame. Install the **#HA566** backing plate on the top side of the frame, then place the **#354HA** hanger assembly up into the cavity using the washers and nut provided. Tighten the hanger firmly using a 9/16" socket or wrench, slide the supplied rubber hanger **#HA168** onto the end of the **#354HA** hanger rod. Once the hanger assembly is bolted into place correctly it will face the rear of the vehicle (see pic).



5) Place a supplied 2½" clamp over the outlets of the muffler; then place right tailpipe **#16543S** into position over the rear axle, and slide into the right muffler outlet. Connect the hanger that is welded to the rear of the pipe into the factory rubber hanger.

6) Place left front section of tailpipe **#16542S** into position over the rear axle and slide the hanger on the pipe into the factory rubber mount on the vehicle while sliding into the left muffler outlet. Then place a supplied band clamp over the back of the rear section. Then place left rear section tailpipe into the front section tailpipe. Connect the hanger welded to the rear of the pipe into the rubber hanger **#HA168**, installed in step 4. Tighten the clamps on both pipes enough to hold but still allow for adjustment.

7) Slide the side exit pipes **#16547S** or the rear exit pipes **#16546S** onto the ends of both over axle pipes and place a supplied 2½" clamp onto these slip-fit connections. Tighten enough to hold but still allow for adjustment. Place the two stainless tips **#ST396** onto the exit pipes and tighten them enough to hold in position. Rotate the exit pipes and tips to the desired distance from the body or bumper, so that the angle cut on the tips are in the desired location.

- 8) Adjust the position of all pipes and muffler and tailpipe to provide a satisfactory fit. Maintain a minimum of 3/4" clearance around all parts of the system; while keeping suspension travel and vibration in mind.
- 9) Tighten down all clamped connections securely. After the system is secure, place the supplied ½ hanger keepers onto the end of the left rear upper frame hanger **#354HA**; slide it up to the rubber mount to firmly hold the system in place.
- 10) 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 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>
1	Muffler	8525504-181
1	Inlet Pipe Left	86082S
1	Inlet Pipe Right	86083S
1	Tailpipe, Right	16543S
1	Tailpipe, Left Front	16542S
1	Tailpipe, Left Rear	16544S
2	Rear Exit pipes R/L	16546S
2	Side Exit Pipes R/L	16547S
2	Stainless Tips	ST396
1	Parts Kit	PK735
1	Inlet Pipe Clamp Hanger, Left	352HA
1	Inlet Pipe Clamp Hanger, Right	353HA
1	Left Rear Frame Hanger	354HA
2	Ring Flange Gasket	GA115
1	Backing Plate	HA566
1	Rubber Hanger	HA168
7	2 1/2" Band Clamps	MC250BS
1	2" Saddle Clamp	MC200S
1	3/8" Nut	HW103
1	3/8" Flat Washer	HW303
1	3/8" Lock Washer	HW309
1	1/2" Hanger Keeper	HW503



Installation diagram for:

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**AMERICAN THUNDER**

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