



## **409S Stainless Steel**

Installation Instructions for:  
**SYSTEM #817417**  
2004-2008 FORD F-150  
V8 • ALL WHEELBASES

### **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) Using a hacksaw or sawsall, cut the tailpipe off where it exits the muffler. Remove the tailpipe and set aside.
- 3) Support the muffler with a stand. Separate the three rubber hangers on the muffler and tailpipe from the rubber mounts on the vehicle (a lubricant of some kind will make this easier).
- 4) Remove the band clamp that secures the factory inlet pipe to the converter Y-Pipe. Remove the inlet pipe/muffler assembly and set aside.

### **Installation:**

- 1) Before installing anything, prep the clamps supplied in the hardware kit by removing the nuts, and applying a thick lubricant such as white grease or anti-seize to the threads.
- 2) Depending on your cab/bed configuration, the inlet pipe **#26202S** may need to be trimmed to accommodate the difference in wheelbase length. Double check all measurements before cutting your inlet pipe:

#### Regular Cab

- 6.5' Bed = Trim 18.50" from the rear of inlet pipe 26202S.
- 8.0' Bed = Requires no trim of the inlet pipe.

#### Super Cab

- 5.5' Bed = Trim 12.0" from the rear of inlet pipe 26202S.
- 6.5' Bed = Requires no trim of the inlet pipe.
- 8.0' Bed = No trim required, add 26206 ext. pipe

#### Super Crew

- 5.5' Bed = Trim 6.0" from the rear of inlet pipe 26202S.
- 6.5' Bed = No trim required on 26202. Add extension pipe **#26206** and trim 12.0" off of it.

3) Slide a 2-1/2" clamp over the reduced end of the inlet pipe. Then place the inlet pipe onto the back of the existing OEM head pipe (by lining up the notch). Tighten the clamp just enough to hold the pipe in place.

4) Slide the inlet hanger **#292HA** over the back of the inlet pipe and insert the hanger into the factory rubber mount. Tighten the clamps just enough to hold in position.

Note: \*Reg Cab/6.5' Bed: This hanger is not used.

\*Super Cab/6.5' Bed, Super Cab/8.0' Bed and Super Crew – The rubber mount is bolted to the side of the frame, and must be relocated forward to the cross brace where you will find another factory mounting hole location.

5) Slide a 3" clamp onto the inlet neck of the muffler. Then place muffler onto the inlet pipe and support with a stand. Tighten the clamp just enough to hold in position.

6) Using the 5/16" bolt, washers and nuts provided, secure the left hanger bracket **#211HA** to the frame on the driver's side of the vehicle, using the factory holes on the bottom of the frame next to spare tire, place the 5/16" bolt and a flat washer up into the square hole using a flexible head magnet through the larger round hole in the side of the frame guide the bolt up and down into place in the round hole. Mount the **#211HA** onto the 5/16" bolt sticking down and install a flat washer, lock washer and nut. Using two 1/2" wrenches tighten firmly (do not over tighten). Once the hanger bracket is secured, slide on rubber hanger **#HA168**.

7) Slide a 2 1/2" clamp onto each muffler outlet neck. Then place the right side tailpipe **#16503** into position over the axle and into the right side muffler outlet. Place the tailpipe hanger rod into the factory rubber mount. Tighten the clamp just enough to hold in position.

8) Place the front section of the left side tailpipe **#16444S** into the left side of muffler outlet and insert hanger welded to pipe into the factory rubber mount. Tighten the clamp enough to hold in position. Place another 2 1/2" clamp onto rear (expanded) end of the pipe.

9) Place the left rear tailpipe section **#16506S** into the expanded connection of the front section **#16444S**. Connect the hanger rod to the rubber mount installed in step 5. Tighten the clamp just enough to hold in position.

10) Then slide either the side exit pipe **#16317S** or rear exit pipe **#16397S** onto the ends of both over axle pipes. Place a 2 1/2" clamp onto these slip-fit connections, tighten enough to hold in place. Place the two stainless tips onto the exit pipes and tighten the pinch bolts enough to hold in place. Rotate the exit pipe and tip to the desired distance from the fender or bumper, so that the angle cut on the tips are in the desired location. We highly recommend tack welding the tip to the exit pipe to prevent possible slippage and loss of the tip.

11) Adjust the position of all the pipes and muffler to provide a satisfactory fit. A minimum of 3/4" clearance around all parts of the system must be maintained; while keeping suspension travel and vibration in mind. After adjustments have been made, securely tighten all clamps.

12) After the system is secure, slide the 7/16" hanger keeper onto the left tailpipe hangers. This keeper will prevent the hanger rods from slipping out of the rubber mount.

13) 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>
1	Inlet Pipe	26202S
1	Extension pipe	26206S
1	Muffler	8530452-176
1	Right Tailpipe	16503S
1	Left Tailpipe, Front	16444S
1	Left Tailpipe, Rear	16506S
2	Side Exit Pipes	16317S
2	Rear Exit Pipes	16397S
2	Stainless Tips	ST396
1	Parts Kit	PK503
1	Ring Clamp Hanger	292HA
1	Frame Hanger, Rear	211HA
1	Rubber Hanger	HA168
6	2-1/2" Clamp	MC250BS
2	3" Clamp	MC300BS
1	5/16" x 1-1/4" Bolt	HW205
2	5/16" Flat Washer	HW302
1	5/16" Lock Washer	HW308
1	5/16" Nut	HW102
2	7/16" Hanger Keeper	HW502



Installation diagram for:  
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**AMERICAN THUNDER**  
*409S. Stainless Steel*

