

## Installation Instructions SYSTEM #817529

**1998-09 FORD RANGER V6** 

3.0L / 4.0L · V6 ENGINE · EXTENDED CAB, SHORT BED



12/15/11

1) Begin by spraying a penetrating lubricant onto the front flange bolts as well as the rubber hangers that support the factory exhaust system. Then, using a hacksaw or sawzall cut the tailpipe just behind the muffler. Remove the hanger at the rear of the tailpipe from the rubber mount on the vehicle and lower the tailpipe from the vehicle.



2) Using a 15mm socket, loosen the bolts at the front flange connection behind the catalytic converter; keep the hardware to reuse with the Flowmaster system.



3) Support the muffler with a stand and remove the two hangers on the muffler from the rubber mounts on the vehicle. Lower the muffler assembly from the vehicle.



4) Connect the two hangers at the rear of inlet pipe **#16695S** to the rubber mounts on the vehicle and support the front of the pipe with a stand.



5) Using the factory bolts, springs and flag nuts, connect the **#16695S** inlet pipe to the flange behind the catalytic converter. Tighten securely.



6) Place a 2½" band clamp onto the inlet of the muffler and place onto the rear of inlet pipe #16695S, support the muffler with a stand. The muffler will be in a vertical position with the inlet at the top. Tighten the clamp enough to hold but still allow for adjustment.



7) Using a ½" socket, loosen the nut on the inside of the frame to remove the factory tailpipe hanger. You will then mount the included #421HA frame hanger to the oval hole in the frame. First place a #HA168 rubber hanger onto the bottom of hanger #421HA, then place the hanger assembly into position and place the included 3/8" bolt thru the hanger and frame. Then place the #HA226 back-up plate followed by the flat washer, lock washer and nut on the inside of the frame and tighten securely into place. Repeat this step with the left frame hanger #422HA.



8) Place a provided 2½" clamp onto both of the muffler outlets. From the rear of the axle, place the left tailpipe **#16696S** over the axle and into the lower muffler outlet. Connect the wire hanger at the rear of the pipe to the rubber mount installed in the previous step. Tighten the clamp enough to hold but still allow for adjustment.



9) From the rear of the axle, place the right tailpipe **#16697S** over the axle and into the upper muffler outlet. Connect the wire hanger at the rear of the pipe to the rubber mount installed in step 6 above. Tighten the clamp enough to hold but still allow for adjustment.



10) Place the ST396 stainless tips onto the ends of the tailpipes and adjust to the desired location. Tighten the nut on the clamp to secure the tip in place.

11) Adjust the position of all pipes and muffler to provide a satisfactory fit. 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**

| Qty  | <u>Description</u>   | Part#   |  |
|--|--|---|--|
| 1<br>1<br>1<br>1<br>2<br>1<br>1<br>1<br>3<br>6<br>2<br>2<br>2<br>2<br>2<br>2 | Inlet Pipe Assembly Muffler Assembly Left Tailpipe Assembly Right Tailpipe Assembly Stainless Tip Parts Kit Right Frame Hanger Left Frame Hanger 2½" Band Clamp 7/16" Hanger Keeper Rubber Mount Back-up Plate 3/8" x 1" Bolt 3/8" Nut 3/8" Flat Washer 3/8" Lock Washer | 16695S<br>8525561-Z<br>16696S<br>16697S<br>ST396<br>PK586 | 421HA<br>422HA<br>MC250BS<br>HW502<br>HA168<br>HA226<br>HW208<br>HW103<br>HW303<br>HA309 |



## Installation diagram for: SYSTEM #817529

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