

## Installation Instructions for: SYSTEM #817565 2011-2016 CHEVY CRUZE 1.4L & 1.8L ENGINE

1) Raise the vehicle up on a hoist or rack to working height. Spray a penetrating lubricant onto the two front flange bolts as well as the rubber hanger mounts that support the system. This will greatly ease removal of the factory system.



2) To remove the factory exhaust system you will have to cut the system into three pieces. Cut the tailpipe off where it exits the muffler, then remove the hanger on the tailpipe from the rubber mount on the vehicle and lower the tailpipe from the vehicle



3) Your second cut will be just before the pipe goes up over the rear axle; this will allow the rest of the system to be removed easily. After cutting, support the rear muffler with a stand and remove the two hangers on this section from their rubber mounts. You can now lower this rear section from the vehicle.



4) Support the large center muffler with a stand and remove the two nuts at the flanged connection just behind the catalytic converter. Once unbolted, you can now lower the front of the system from the vehicle.



5) Using the 5/16" bolts, nuts and washers provided, bolt inlet pipe **#16745S** to the back of the catalytic converter flange. Using two of the supplied **HA168** rubber hangers, remove and replace the two factory rubber mounts just behind the rear axle. The new rubber hangers will provide much better support to the new Flowmaster system. See Figure A and B in step 10 below for how the **HA168** hanger should be placed onto the factory hangers.



6) Place a supplied clamp onto the muffler inlet and slide onto the back of the inlet pipe. Level the muffler and support with a stand. Tighten the clamp just enough to hold, but still allow for adjustment.



7) Place a supplied clamp onto the muffler outlet, then slide the short end of mid pipe **#16746S** into the muffler outlet and support with a stand. Tighten the clamp at the muffler outlet enough to hold, but still allow for adjustment.



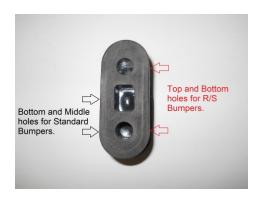
8) Place a supplied clamp onto the back end of mid pipe **#16746S**. Place Y-pipe assembly **#16747S** into position over the rear axle from the rear and slide onto the back of the mid pipe. Connect the hanger on the Y-pipe to the rubber mount on the vehicle. Tighten the clamp at the front of the Y-pipe enough to hold, but still allow for adjustment.



9) Because there is no cutout in the rear valance for the right side tailpipe, it will be necessary to make a new cutout. Follow the instructions on pages three and four below as well as the attached template to properly align and make the cutout.

10) You will need to remove the factory tailpipe hanger at the rear left of the vehicle. Remove the bolt and lower the hanger from the vehicle. Using the factory bolt and one of the metric bolts provided, replace the factory hanger with frame hanger #442HA. Place one of the supplied HA168 rubber hangers onto the end of the frame mount as shown. See photos below. Bolt on frame hanger #441HA in the same manner on the right side of the vehicle.







- 11) Place a provided clamp over the left Y-pipe outlet. Slide the expanded end of the left tailpipe **#16752S** onto the Y-pipe outlet and connect the hanger at the rear of the pipe to the rubber mount installed in step 10 above. Tighten the clamp enough to hold, but still allow for adjustment.
- 12) Place a provided clamp over the right Y-pipe outlet. Slide the expanded end of pipe **#16750S** onto the Y-pipe outlet and connect the hanger on the pipe to the rubber mount on the vehicle. Tighten the clamp enough to hold, but still allow for adjustment.
- 13) Place a provided clamp over the expanded end of right tailpipe #16751S. Slide the expanded end of the tailpipe onto the back of pipe #16750S and connect the hanger at the rear of the pipe to the rubber mount installed in step 10 above. Tighten the clamp enough to hold, but still allow for adjustment.

14) Adjust the position of <u>all pipes and mufflers</u> to provide a satisfactory fit. This is a tight fitting system, so take your time and be patient, tightening and adjusting a little bit at a time. 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	Inlet Pipe	16745S
1	Muffler	842455-Z
1	Mid Pipe	16746S
1	Y-Pipe Assem.	16747S
1	Left Tail Pipe	16752S
1	Right Tailpipe, Front	16750S
1	Right Tailpipe, Rear	16751S
1	Parts Kit	PK622
1	Rear Frame Hanger, Right	441HA
1	Rear Frame Hanger, Left	442HA
6	3/8" Hanger Keepers	HW501
6	2¼" Band Clamp	MC225BS
4	Rubber Hanger	HA168
2	5/16" x 11/4" Hex Bolt	HW205
2	5/16" Hex Nut	HW102
2	5/16" Flat Washer	HW302
2	5/16" Lock Washer	HW308
3	M8-1.25x28MM Hex Bolt	HW228



### **Cut-out Template Instructions:**

1) Cover the bumper area just above the right tailpipe with masking tape to protect the finish while marking and cutting.



2) Use scissors to carefully cut out one of the provided paper templates and securely tape it to the bumper. Make sure to follow the lines on the body as well as the bumper mount to line up the template properly. There are two templates included, one for the R/S package bumper and one for the standard models.



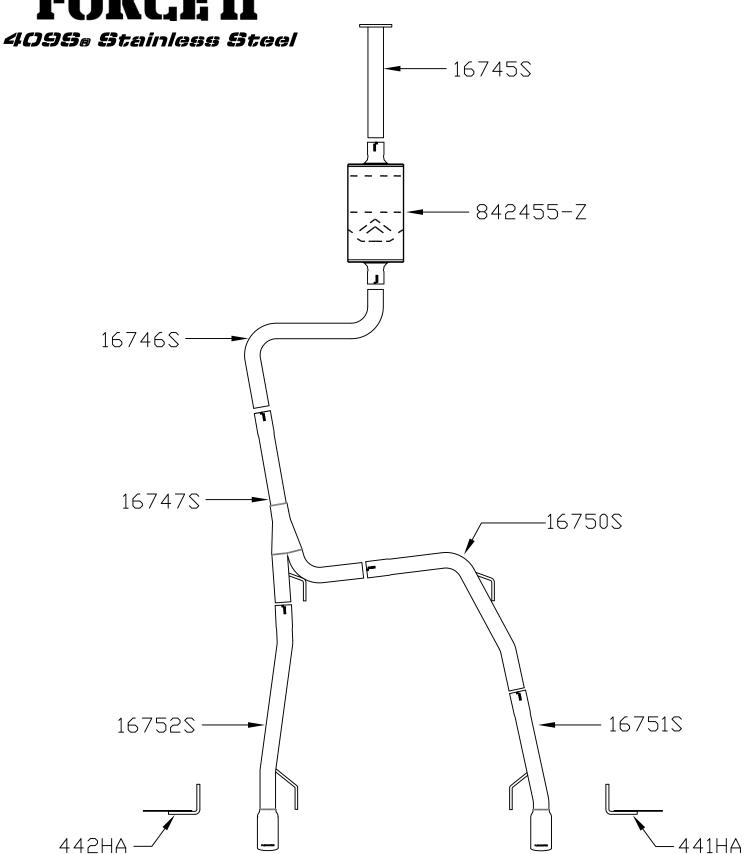
3) Use a marker and trace the cut-out template onto the masking tape. Remove the template after marking.

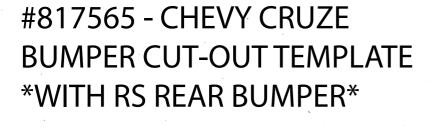


4) Use a jigsaw, sawsall or die grinder to carefully cut along the contour. Use a file to clean up the edges after cutting.



# Installation diagram for: **SYSTEM #817565 2011-2016 CHEVY CRUZE** 1.4L & 1.8L ENGINE





ALIGN WITH BODY LINE

1) Use scissors to cut out this template along the lines.

ALIGN WITH BODY LINE

- 2) Align the template on the bumper by matching up the contours of lower edge of the bumper valance. Tape the template in place. (See photos)
- 3) Use a paint pen or silver marker to mark the contour onto the valence. Remove template after marking.
- 4) Use a jigsaw, sawsall or die grinder to carefully cut along the contour. Use a file to clean up the edges after cutting.

ALIGN WITH BODY LINE

# #817565 - CHEVY CRUZE BUMPER CUT-OUT TEMPLATE \*WITH STANDARD BUMPER\*

1) Use scissors to cut out this template along the lines.

2) Align the template on the bumper by matching up the contours of lower edge of the bumper valance. Tape the template in place. (See photos)

3) Use a paint pen or silver marker to mark the contour onto the valence. Remove template after marking.

4) Use a jigsaw, sawsall or die grinder to carefully cut along the contour. Use a file to clean up the edges after cutting.

ALIGN WITH BODY LINE

ALIGN WITH BODY LINE

ALIGN WITH BOOY LINE

X

ALIGN WITH BODY LINE

