RV6® Front Pipe for 17+ Civic Type-R 2.0T FK8

This is an install guide written for the RV6 Performance front pipe for the 2017+ FK8 Civic Type R. This front pipe features 3" OD pipe throughout made from 304 stainless steel fully TIG welded sections, with a double lined interlock flex pipe. Black and silver ceramic coatings are also available to help minimize heat transfer to the engine bay. The front pipe is supplied with 3x nuts to replace at the front pipe to downpipe connection, and 3x internal hex head bolts and 3x nuts to use at the front pipe to main exhaust connection (along with the corresponding allen wrench to tighten the bolts.) Two new gaskets are also provided to assemble between connection points at both ends of the front pipe. The new components supplied by RV6 Performance are shown alongside the OEM front pipe below. Note the rubber exhaust hanger at the top of the image is from the OEM vehicle and must be reused.

Specifically, this guide details a front pipe with silver ceramic coating installed on a 2017 Type R, #00561. This vehicle had the RV6 Performance catted downpipe with a stock exhaust from that point rearward. This process will be the same regardless of if any of the exhaust components installed on the vehicle are stock or aftermarket. It may not be required to remove all the components mentioned in this procedure, but removal will give more space to work in. For this document all directions mentioned are the same as if you are seated in the vehicle (IE forward means towards the front of the vehicle.)

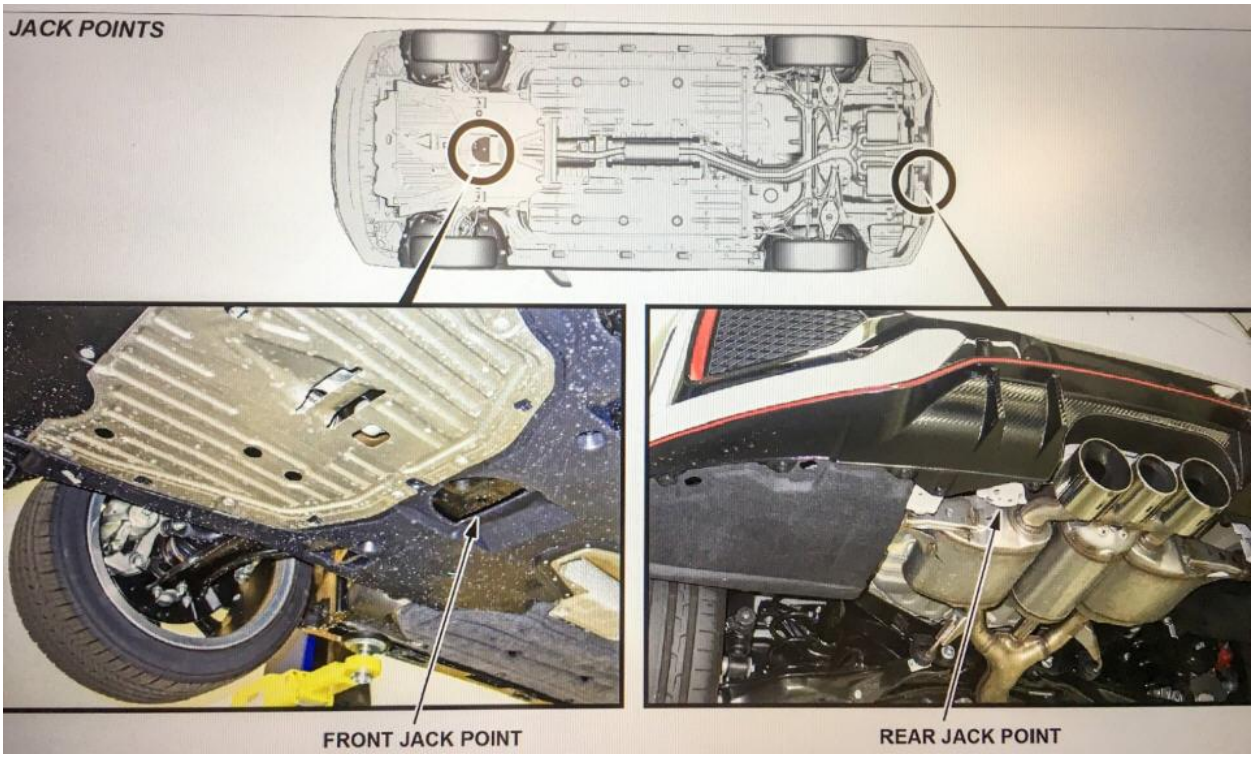
Always perform auto work in a safe manner. Never work underneath a vehicle without appropriate retention devices (jack stands or a lift.) Always wear proper protective equipment. Safety glasses and gloves are recommended. Other tools may be substituted based on availability or personal preference from the list provided below.

Tools Recommended:

- 3/8" or 1/2" Sockets:
- 3/8" or 1/2" Socket Wrench / Breaker Bar
- 10 mm Socket
- 14mm Socket (Recommend a Deep Socket)
- Various Extensions
- Phillips Head Screw Driver
- Flat Head Screw Driver
- Primary Car Jack
- Secondary Small Car Jack
- Jack Stands (2-4x)
- PB Blaster (Or Similar Penetrating Liquid)

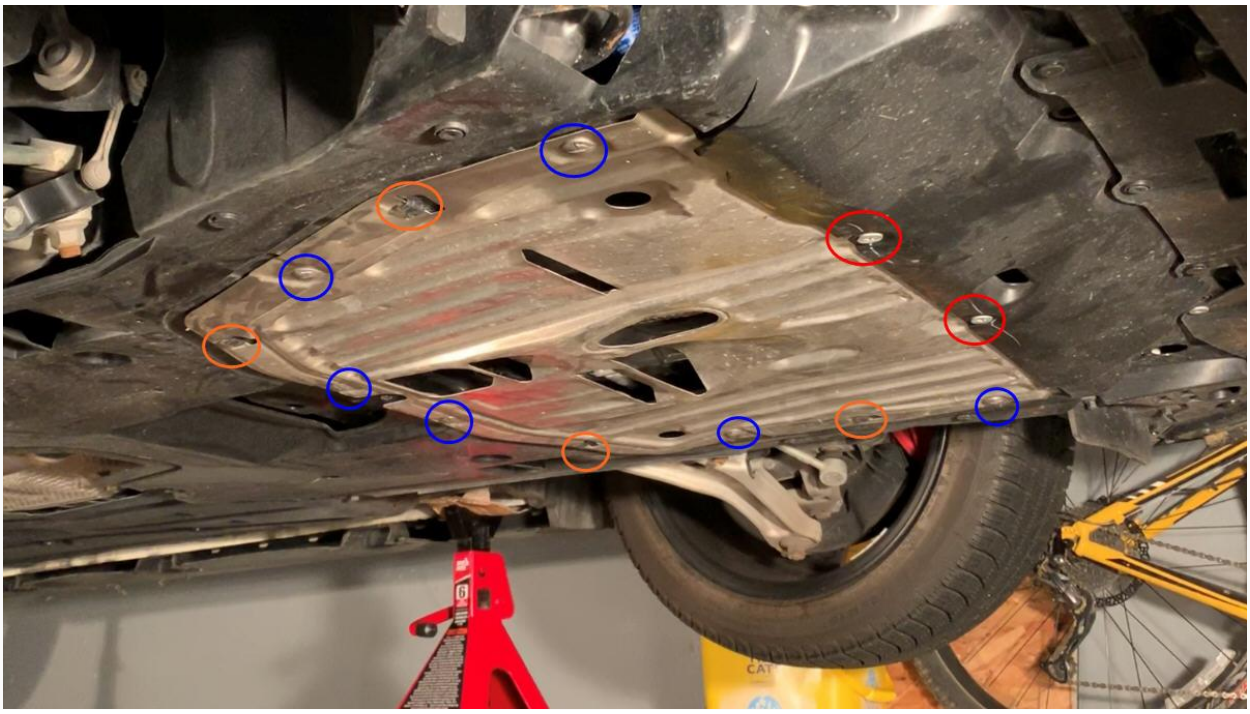
Step 1: Raise Vehicle and Install Jack Stands

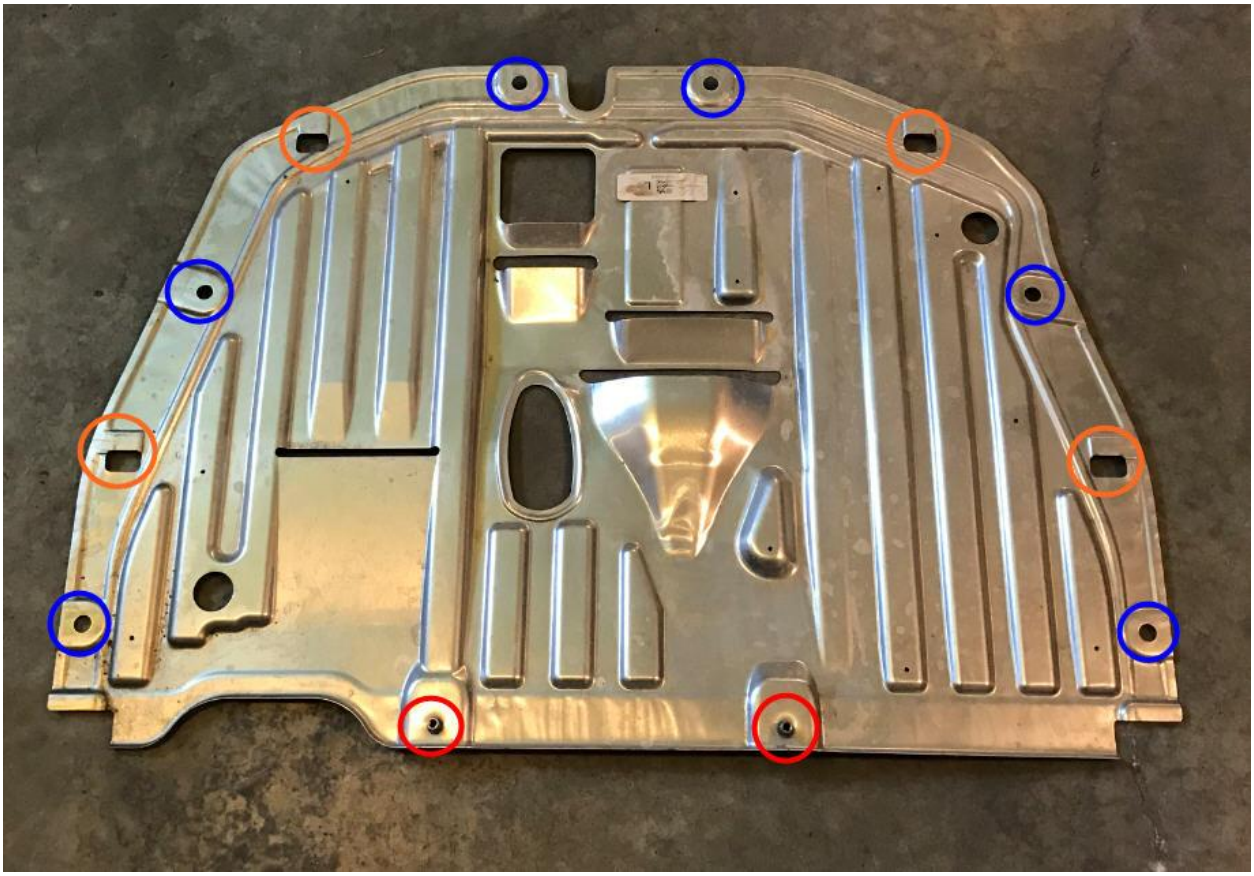
- 1.1: Utilize the center jack location shown below or other means to raise the vehicle and install jack stands under the side life points. Due to the location of the central jacking location, a smaller secondary jack may be used to partially lift the vehicle using the vehicle tow hook underneath the engine in order to gain access for the primary jack. Install jack stands when enough clearance is obtained underneath the vehicle.



Step 2: Remove Belly Pan

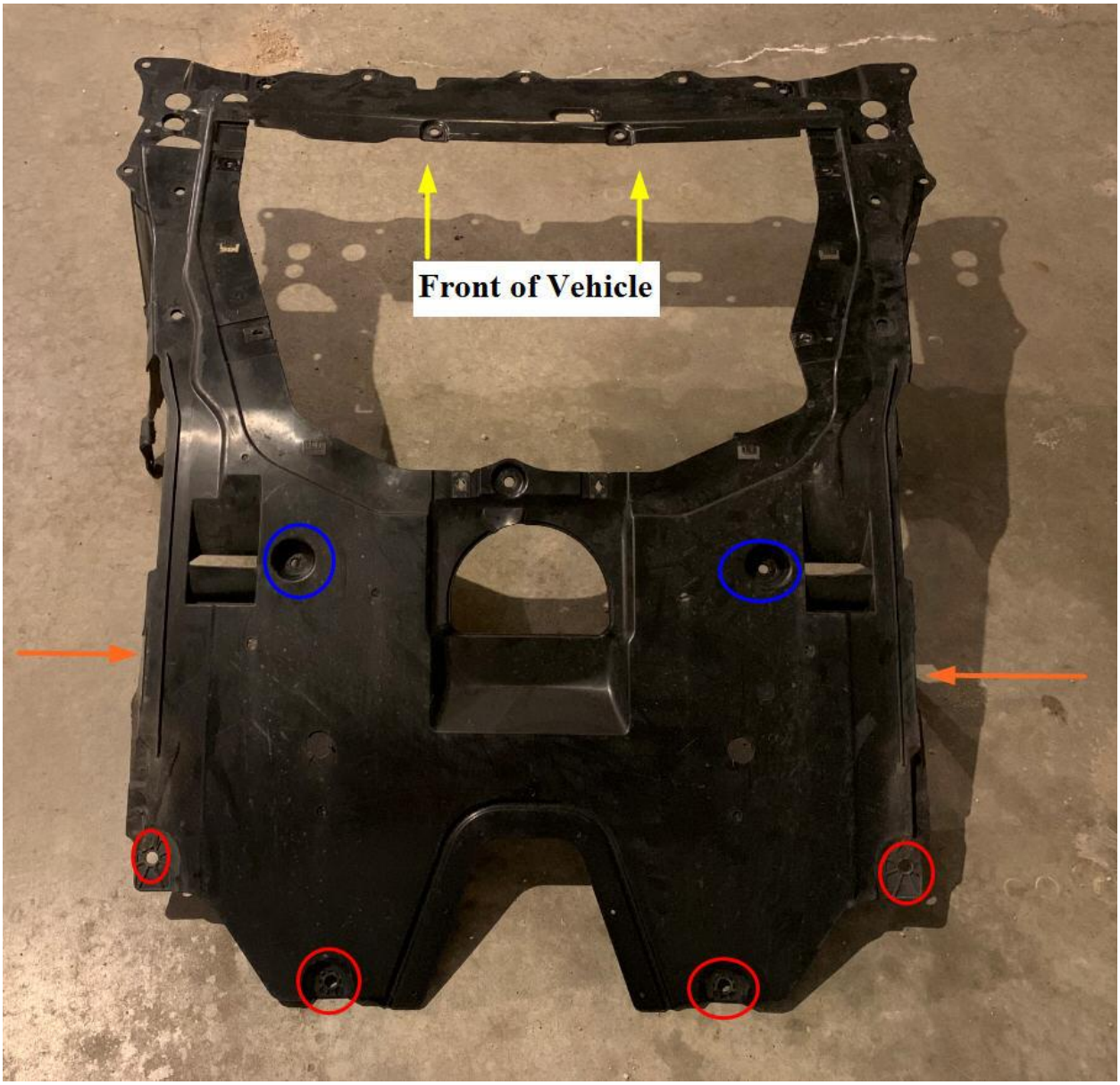
- 2.1: Remove 2x Phillips head machine screws at the front edge of the belly pan (Red Circles.) Remove 6x 90 degree plugs with a flat head screwdriver (Blue Circles.) Slide belly pan rearward to release it from the 4x tabs (Orange circles.)





Step 3: Partially Remove Plastic Cover

- 3.1: Remove the 4x 10 mm head bolts at the rearmost edge of the plastic under tray (Red Circles.) Using a flathead screwdriver remove the 2x pop clips on the bottom side of the tray (Blue Circles) and 2x pop clips securing the tray where it wraps around the chassis (Orange Arrows.) Removal of this hardware should allow enough flex of the plastic tray to gain access to the front pipe to main exhaust pipe hardware. If desired, the remaining pop clips and one additional 10 mm head bolt can be removed in order to completely remove the plastic tray to give the maximum amount of clearance to other components. This is not necessary but may aid in the process.



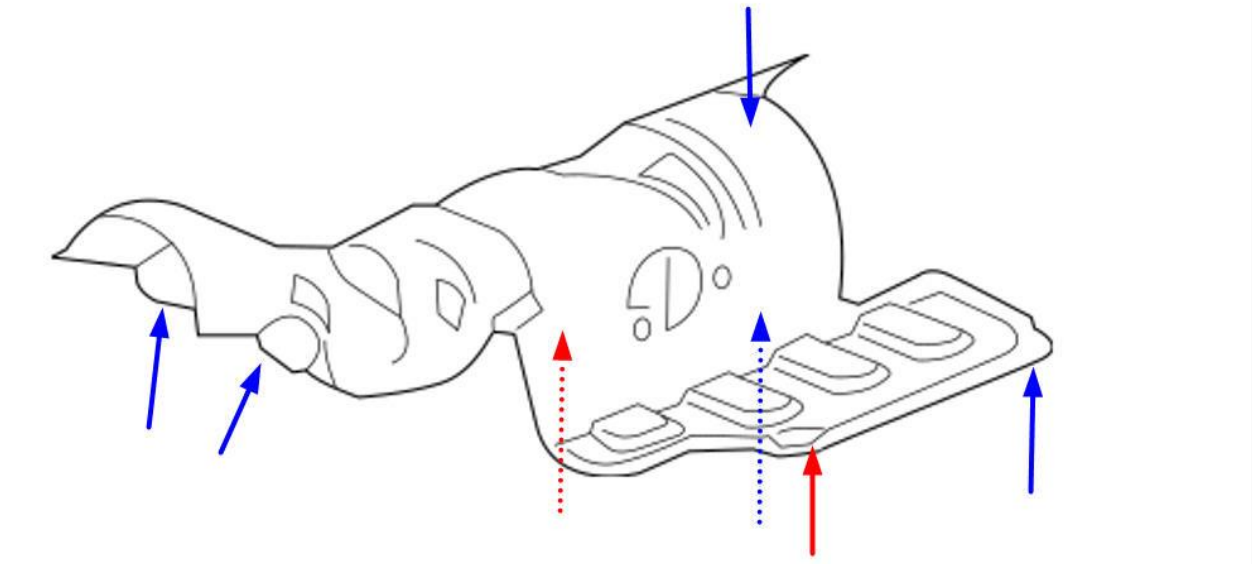
Step 4: Spray Penetrating Liquid on Exhaust Pipe Hardware (Optional)

- 4.1: Coat the 3x nuts / studs connecting the down pipe to the front pipe and the 3x nuts / studs connecting the front pipe to the remaining exhaust pipe with penetrating liquid. It is recommended to then let the liquid soak into the joint for an hour for best results. Re-apply penetrating liquid a few times during this time period for maximum effect. This will help break loose the bolts after being exposed to the high heat of exhaust gasses and the elements. Proceed with step 5 while the liquid soaks into the joints. Reference step 6.1 for photographs of the hardware specified in this step.

Step 5: Remove Exhaust Heatshield Hardware and Shift Rearward

- 5.1: To provide enough clearance for the flanged connection at the rear edge of the front pipe to slide forward when removing, it will be necessary to relocate the heat shield above the first resonator and front section of the main exhaust pipe. Remove the 5x 10 mm head bolts (Blue Arrows) and 2x 14 mm head bolts (Red Arrows.) The heat shield

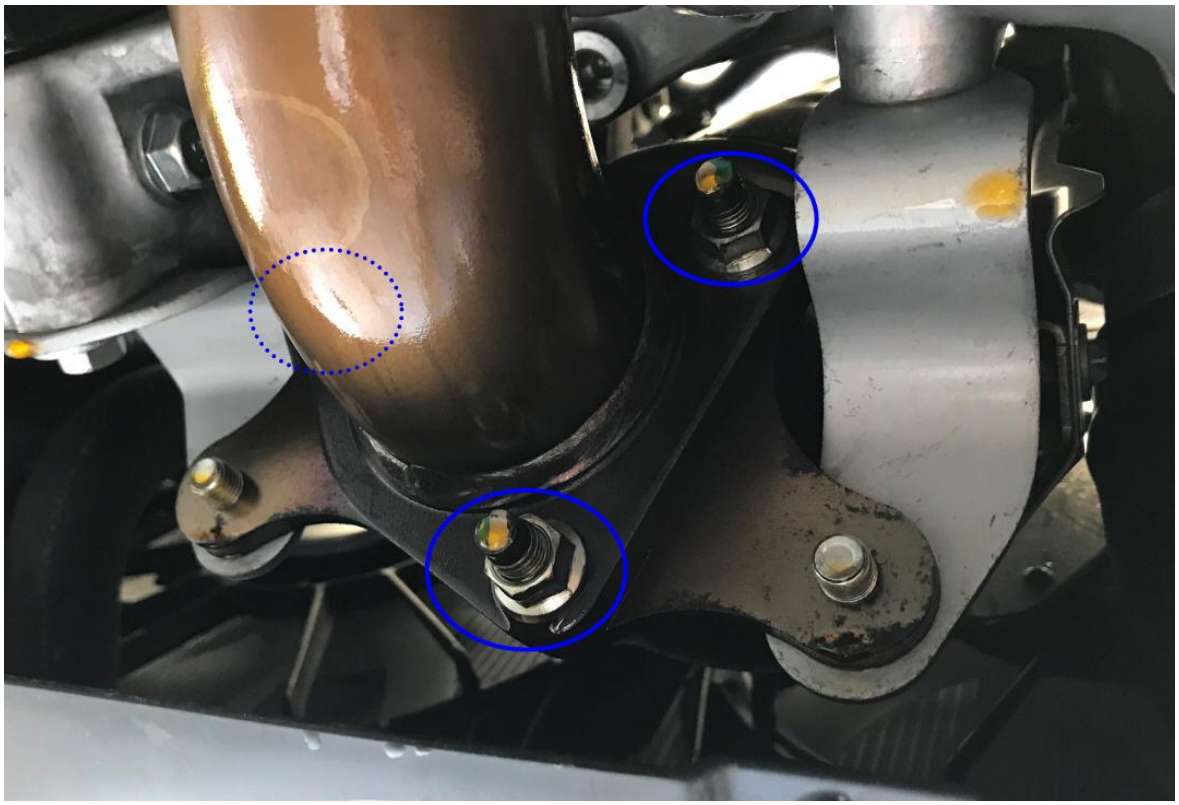
cannot be fully removed with the main exhaust pipe still in place but does need to be shifted rearward. Take note to slide the rearmost edge of the shield above the rubber exhaust hanger as shown below (Orange Circle.) Due to the difficult photographing this component, an image from the parts catalog is also included to better illustrate where the hardware is on this component (dashed arrows indicate the hardware is present on the opposite side of the current view.)

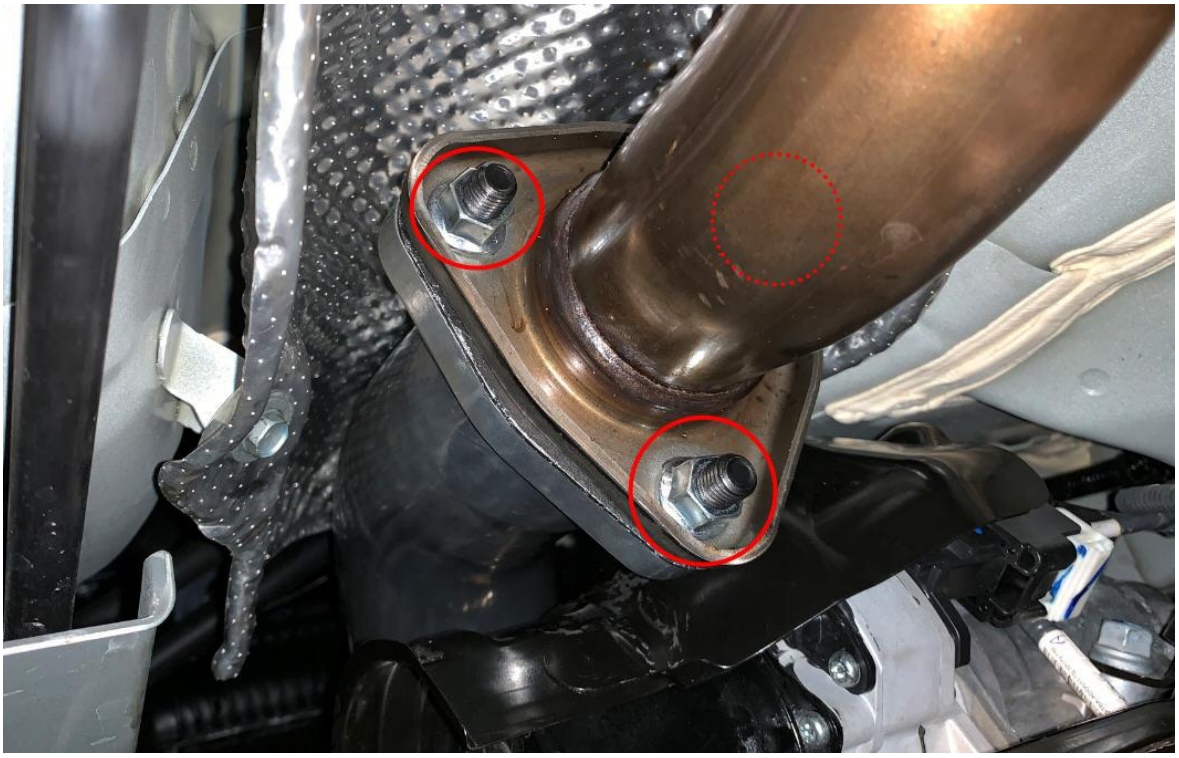


Step 6: Remove Current Front Pipe

- 6.1: Remove 3x nuts connecting the downpipe to the front pipe (Blue Circles) and the 3x nuts connecting the front pipe to the remaining exhaust pipe (Red Circles) with a 14 mm socket (Dashed circles indicate the hardware is hidden behind the exhaust pipe being

photographed.) A deep well socket is recommended due to the length of the stud protruding past the nut. It is recommended to have a breaker bar handy as the hardware can be difficult to initially break loose.





- 6.2: Slide the rear connection of the front pipe upward and forward until the studs are free from the main exhaust pipe.
- 6.3: Slide the front connection of the front pipe downwards until the flange is free from the studs secured into the downpipe.
- 6.4: Using a flathead screwdriver gently pry the rubber exhaust hanger off the stud welded into the chassis (Blue Circle.)

- 6.5: After all connections are removed the front pipe can be removed from the vehicle by gently rotating and pulling the pipe towards the front of the vehicle. Some adjustment of the pipe during this process is needed to maneuver the flange on the rear edge of the front pipe around the surrounding components. Having the vehicle raised as high as possible off the ground will ensure the maximum amount of room to adjust the pipe during removal.

Step 7: Install New Front Pipe

- 7.1: Ensure any previous gaskets are removed between exhaust components (having previously installed the RV6 Performance downpipe this vehicle had one gasket between the downpipe and OEM front pipe.) If needed, a razor blade or 0000 grade steel wool can be used to remove any stuck-on debris from the previous gasket.
- 7.2: Swap the rubber exhaust hanger from the OEM front pipe to the new pipe.
- 7.3: Insert new front pipe into vehicle in the reverse process used to remove the previously installed pipe.
- 7.4: Connect the rubber exhaust hanger to the stud welded into the chassis.
- 7.5: Assemble the new front pipe to the downpipe using 3x of the provided nuts, ensuring the correct new gasket is present between the components.
- 7.6: Assemble the new front pipe to the main exhaust using the supplied 3x internal hex head machine screws and 3x of the supplied nuts, ensuring the correct new gasket is

present between components. The machine screw should be inserted through the front pipe flange first with the nut on the rearward side of the joint.

- 7.7: Re-assemble all shields and guards in the reverse order of removal.

General Notes:

Torque specs have not been listed in this document as all hardware mentioned tends to be of small enough size to where "hand tight" should be sufficient. However, utilization of a calibrated torque wrench provides clear evidence that sufficient bolt pre-loads have been achieved. Note the table below for some general guidelines on bolt torques. The below table assumes torques measured through a torque wrench have a +/- 10% accuracy. All hardware removed in this guide appeared to be grade 8.8.

Grade 8.8 Hardware

Bolt Head Size (mm)	Bolt Thread Size	Dry Torque (Nm)
10	M6	9.8
12	M8	23.8
14	M10	47

- Anti-seize compound may be applied to any hardware to prevent the threads from becoming seized and aid with future disassembly. If chosen, take note that this lubricates the bolted joint and less torque is required to obtain the same bolt clamping force. The above dry torque values should be reduced by roughly 30% when utilizing anti-seize.
- When initially breaking hardware loose in a given joint exercise a smooth and steady application of torque to minimize hardware failure. Avoid sudden bursts of force applied to the socket wrench (IE no "jerky" motions.)
- When re-torqueing joints that utilize a pattern of bolts (3 or more) apply the torque evenly across all bolts. To ensure proper joint clamping it is not recommended to fully torque one connection then move on to the next, but rather to gradually torque all connections in an alternating pattern until full torque is achieved at each connection.
- The pop clips securing the bumper / under tray are fragile and often break during removal. It is advised to order several in advance to have in case of breakage. The Honda OEM part number for the pop clips is 91505-TM8-003.
- Front pipe weights:
  - Note, to make the comparison equal due to the welded in studs on the OEM front pipe the weight of the RV6 Performance pipe below includes the provided internal hex head machine screws.
  - OEM: 9 lbs, 14.5 oz

- RV6 Performance: 8 lbs, 6.5 oz

Front pipe tube ID:

- OEM: Roughly 2.2 inches

RV6 Performance: Roughly 2.7 inches

- Details for the product mentioned in this document can be found at:
  - https://www.rv6-p.com/rv6-front-pipe-for-17-civic-type-r-2-0t-fk8.html
- For reference, the instillation guide for the RV6 Performance Downpipe can be found at:
  - https://www.civicx.com/threads/rv6-performance-downpipe-instillation-guide.26535/