

March 8, 2022

Version 2

## 2003–08 Pilot Rear Subframe Body Mount Rust Repair (Customer-Pay Repair)

Supersedes 21-019, dated December 2021, to revise the information highlighted in **yellow**.

### AFFECTED VEHICLES

Year	Model	Trim	VIN Range
2003–08	Pilot	ALL	ALL

### REVISION SUMMARY

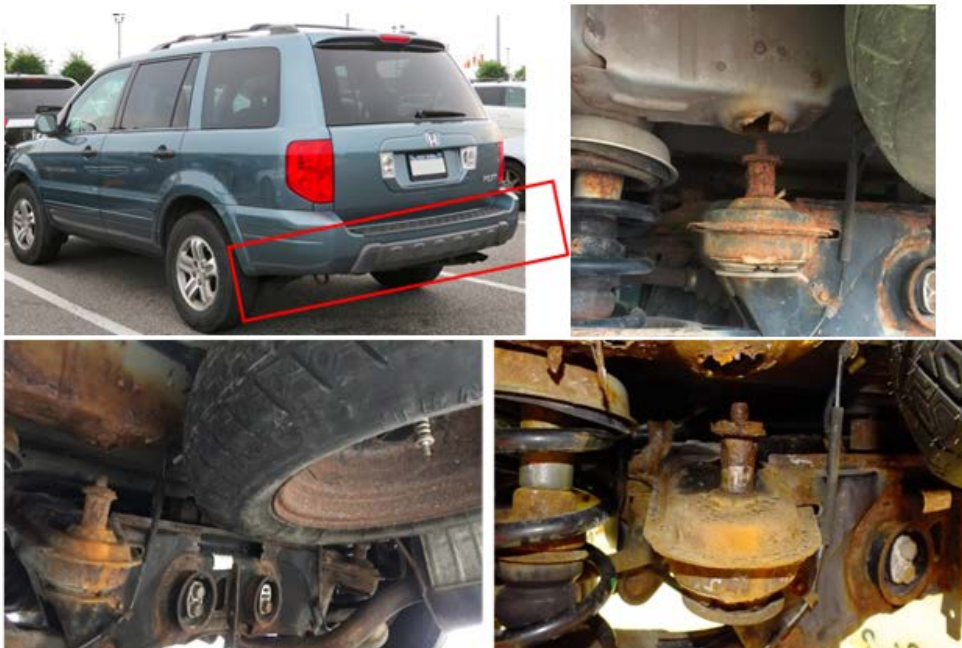
Under BACKGROUND, information was updated.

### BACKGROUND

Corrosion of the frame rail that supports the rear subframe may occur on some vehicles that are commonly driven in harsh environments. The subframe mounts may pull away from the body of the vehicle (see images below), but extensive testing has concluded that vehicle stability will be maintained. As an alternative to a complete frame replacement, a frame repair kit has been developed.

A punch test must be done to determine if a vehicle with this corrosion can be repaired with the frame repair kit. Not all affected vehicles will be repairable with the frame repair kit.

**NOTE:** This repair is not covered by the vehicle warranty. Do not file a warranty claim for this repair. The customer is responsible for any and all costs related to this repair.



**CUSTOMER INFORMATION:** The information in this bulletin is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely maintain your vehicle. These procedures should not be attempted by “do-it-yourselfers,” and you should not assume this bulletin applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Honda automobile dealer.

## CORRECTIVE ACTION

Install cast frame inserts to replace the damaged frame rail that supports the rear subframe.

## PARTS INFORMATION

Part Name	Part Number	Quantity
Installation Kit	06730-S9V-315	1

## REQUIRED MATERIALS

Part Name	Part Number
Cable Ties	Commercially Available
Body Cavity Wax – Noxudol N700 Aerosol 500ml	Commercially Available
Masking Tape	Commercially Available
3M Body / Seam Sealer or Würth Euro Seal Gel Clear	3M #08310, 08308, 08302, 08405 Würth #08920104
3M Undercoating or Rust-Oleum Rubberized Undercoating	3M #08881 Würth #248657

## TOOL INFORMATION

Tool Name	Tool Number
Frame Casting Jig	07AAG-S9VA100 This tool must be purchased by the dealer through a parts order.
Frame Inspection	07AAJ-SJCA100 This tool will have been shipped to dealers in the "rust belt" states free of charge. The rest of the dealers will have to get it through a parts order.
RotoBroach Tool	BLR11201SO
Drill	Commercially Available
1/8" Drill Bit	Commercially Available
Angle Grinder with cutoff wheel	Commercially Available

If you have any questions, contact the Special Tools Hotline at (800) 346-6327.

## ESTIMATED LABOR TIME

This is a customer-pay repair and should not be filed as warranty. All ancillary parts damaged during this repair will be the responsibility of the vehicle owner with additional costs.

Repair	Estimated Labor Time
Install two cast frame rail inserts.	5.2 hr.

## INSPECTION PROCEDURE

1. Lift the vehicle.

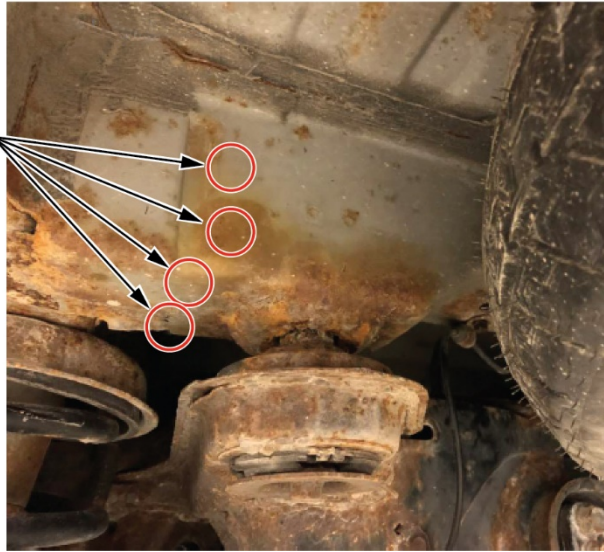
Note: If the vehicles body lift points are damaged due to corrosion, lift the vehicle by using the inner frame rail. Extend the lift arms as far forward and back to maintain stability of the vehicle.

2. Perform a punch test using the frame inspection tool at the locations shown in the photos below for the frame areas that are to be repaired.

- Place tip of the frame inspection tool against frame where the test is to be performed. Slide the weight to end of the tool and with moderate force slide the weight towards the punch location until it stops.
- Strike each point twice. If the punch does not pierce the frame at any point, continue to REPAIR PROCEDURE (MUST PASS ALL 6 LOCATIONS).
- If the punch pierces the frame (even if only one point), the vehicle cannot be repaired using this method. Consult a Honda Profirst Certified Body Shop for repair options.

**LEFT SIDE**

**PUNCH LOCATIONS**

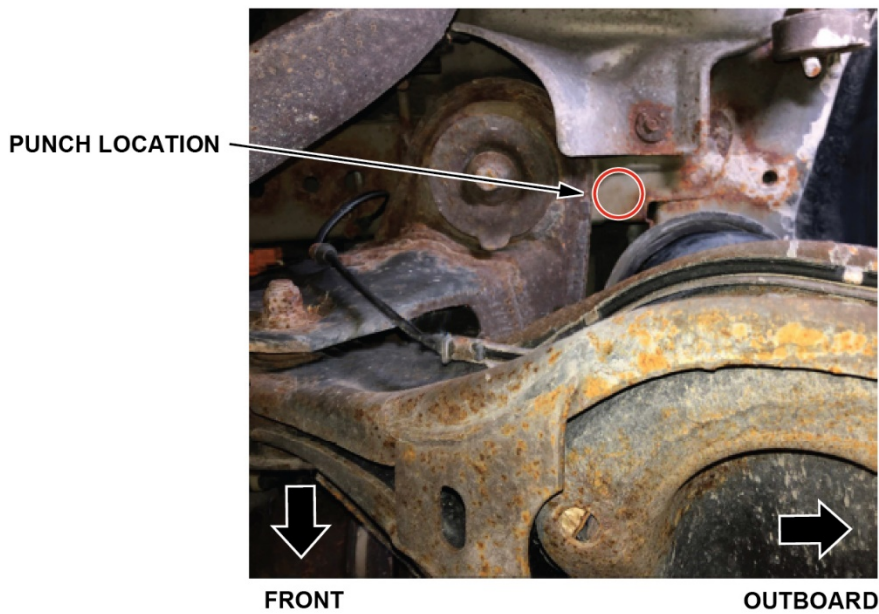


**RIGHT SIDE**

**PUNCH LOCATION**



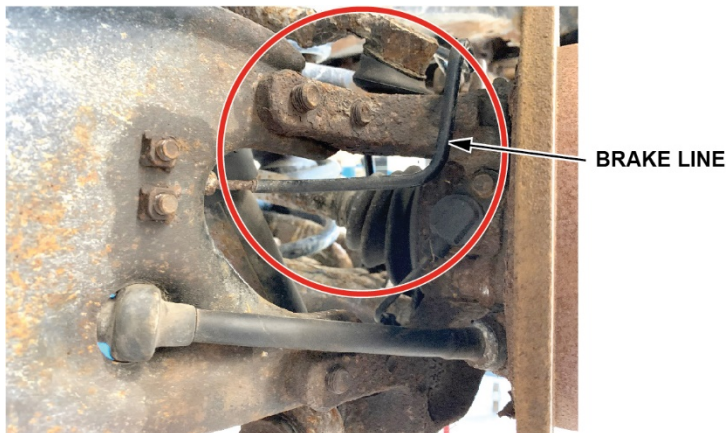
## RIGHT SIDE



## REPAIR PROCEDURE

1. Remove the exhaust pipe and muffler, muffler heat shield, brake caliper/lines, rear shocks, rear subframe, and any other components surrounding the repair area. Before attempting to remove the subframe and to prevent the vehicle from tipping forward and becoming unstable, remove the rear lower control arms and coil springs. Refer to the service information.

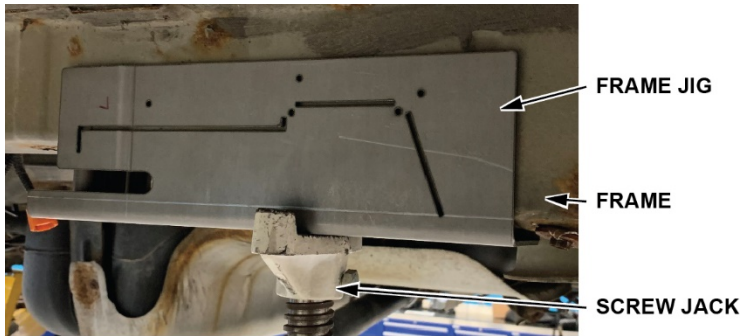
NOTE: Do not disconnect the brake lines. Remove the caliper, caliper bracket, and brake line brackets from the control arm assembly. Guide the brake components through the hole in the trailing arm, as shown below, and hang them out of the way using zip/cable ties. Attempting to remove brake lines could damage them and require replacement.





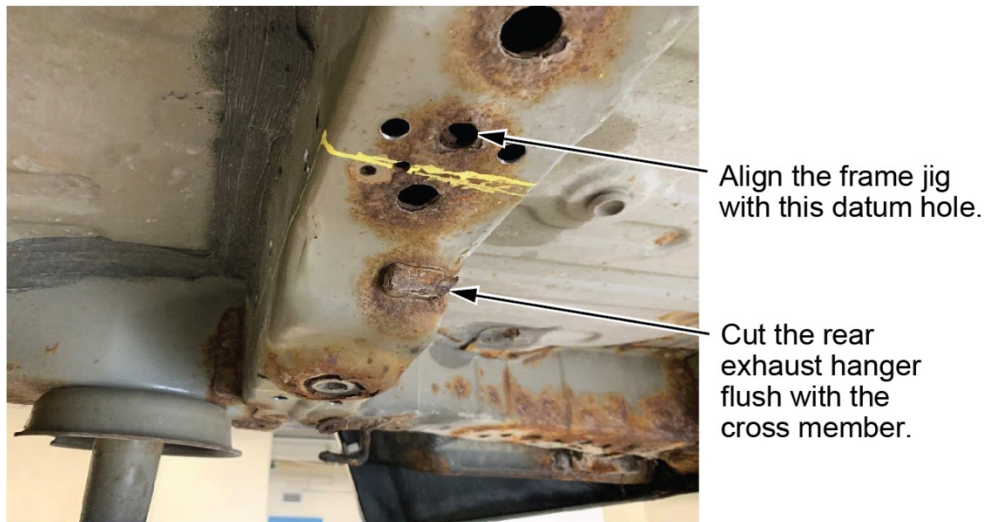
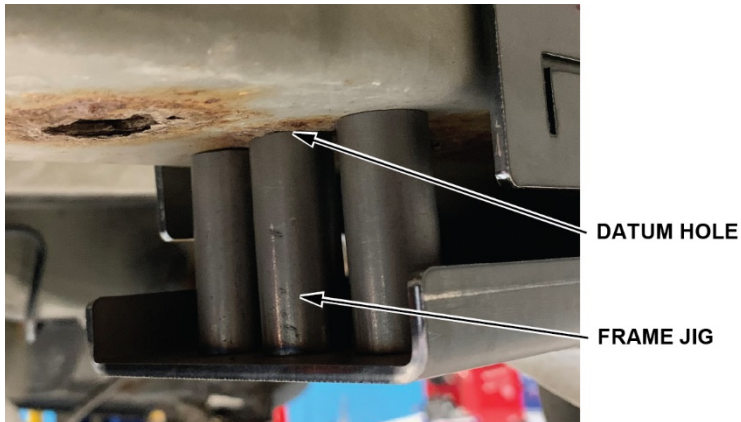
2. Fit the frame jig around the repair area. Use a screw jack to hold the frame jig against the frame.

NOTE: The frame jig works for both driver's and passenger's side of the vehicle (Passenger side shown).



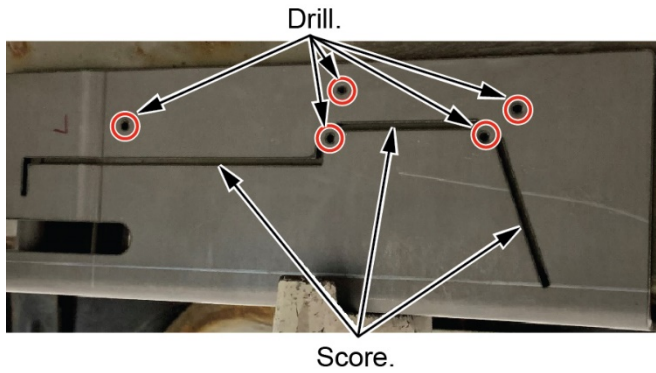
NOTE:

- Make sure the center frame jig fits into the frame datum hole as shown.
- The passenger's side repair will require cutting off the exhaust hanger to fit the frame jig.

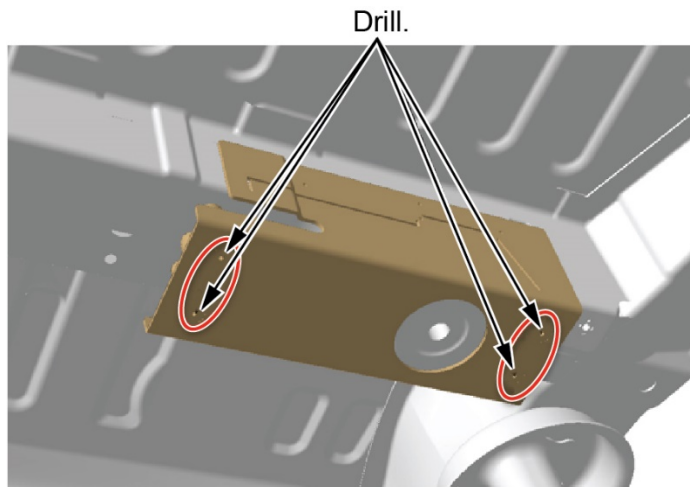


3. Drill out the five holes per side using 1/8" drill bit, then score the cut lines using a sharp tool.

NOTE: There are five holes on the front and back side of the jig that need to be drilled.

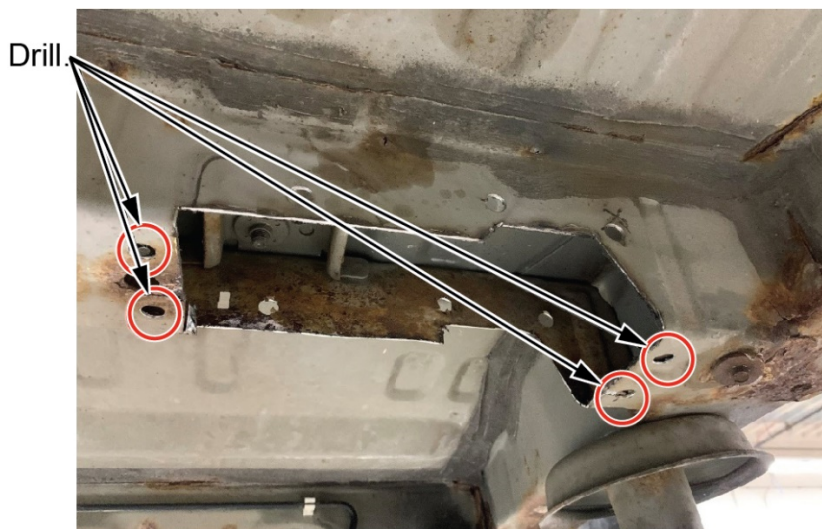


4. Drill the four mounting holes on the bottom side of frame rail using a 1/8" drill bit.



5. Remove the frame jig, then drill out all 1/8" holes using a 14 mm RotoBroach tool (P/N BLR11201SO).
6. Cut the frame along the scored cut lines using a cutoff wheel being careful not to cut into the frame insert mounting holes.

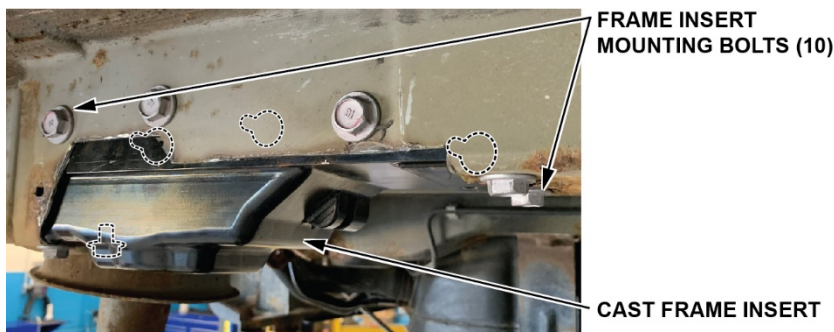
NOTE: Use a straight edge along the bottom side of the cross member to connect the front and back lines.



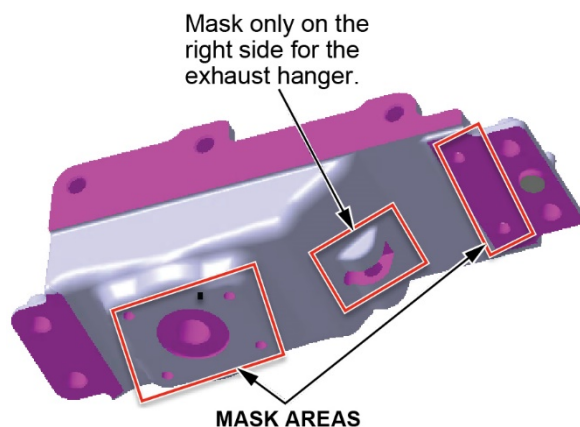
7. Using a brush and compressed air, clean the inside of the frame rail of loose rust, dirt, and metal shavings.



8. Install the cast frame insert and hand-tighten the frame insert mounting bolts in order, 2 inside the bottom, 2 outside the bottom, and the remaining 6 (total 10). When all 10 bolts have been set, torque the bolts to **38 N.m (28 lb-ft)**.



9. Now, masking off the frame insert in the area shown.



10. Apply body/seam sealer to the cut edge of the frame.





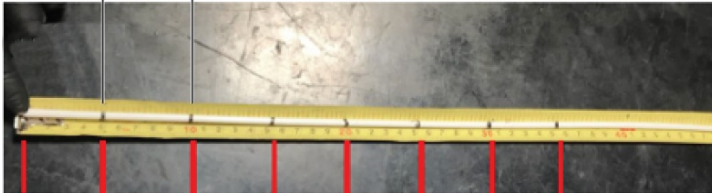
11. Spread sealant to cover the edges and fill the gap between the frame and insert as shown below.



12. Apply cavity wax to the inside of both left and right sides of the crossmember.

NOTE: Mark the cavity wax nozzle every two inches from the end making seven marks for a total of 14 inches. Insert the straw all the way into the cavity to the last marking on the nozzle. Begin spraying at this mark, after five seconds, slide the straw out to the next marking and begin spraying. Repeat until you reach the last marking on the straw.

2" apart.



NOZZLE

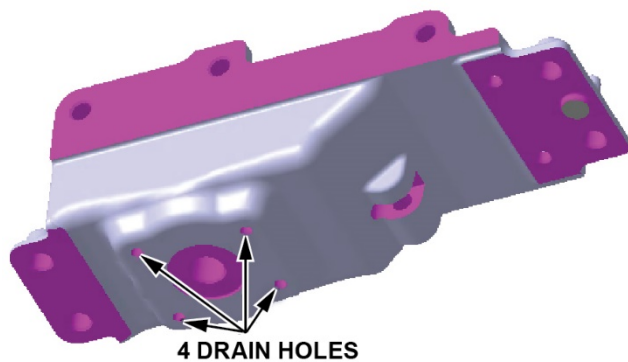
FRAME EDGE



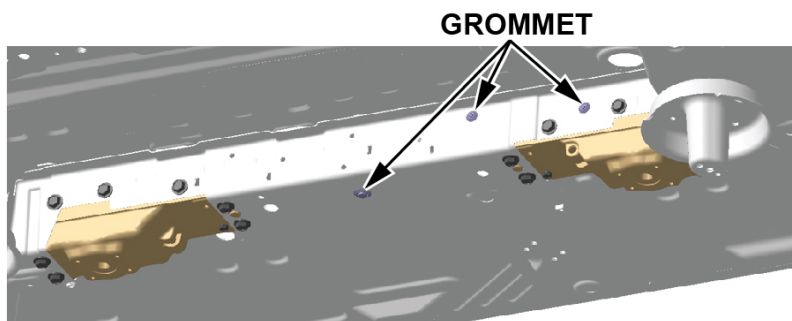
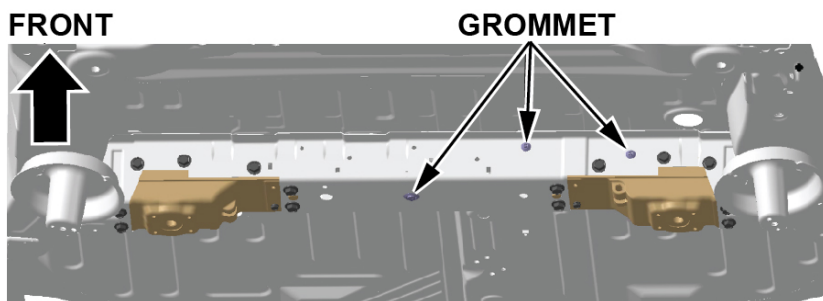
13. Apply the under-body coating to the frame edges.



14. Remove the masking tape and clear the four drain holes in the frame insert of wax.



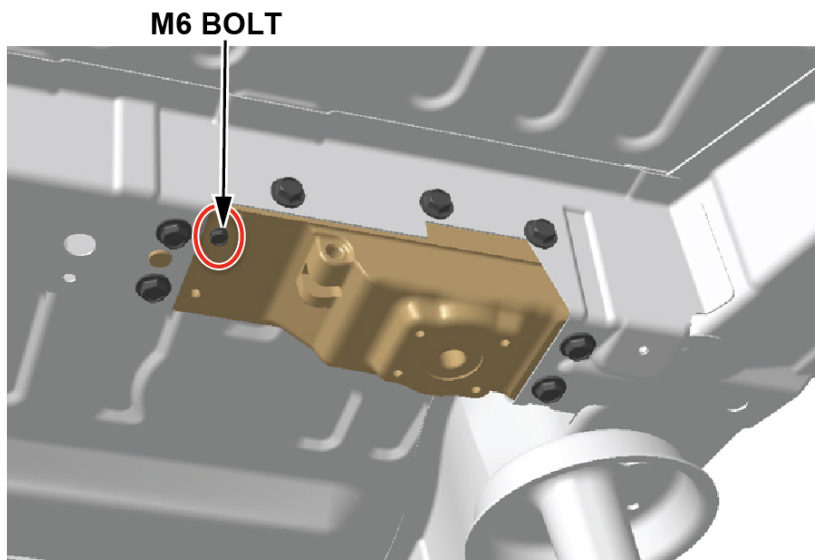
15. Install the five supplied grommets into the frame.



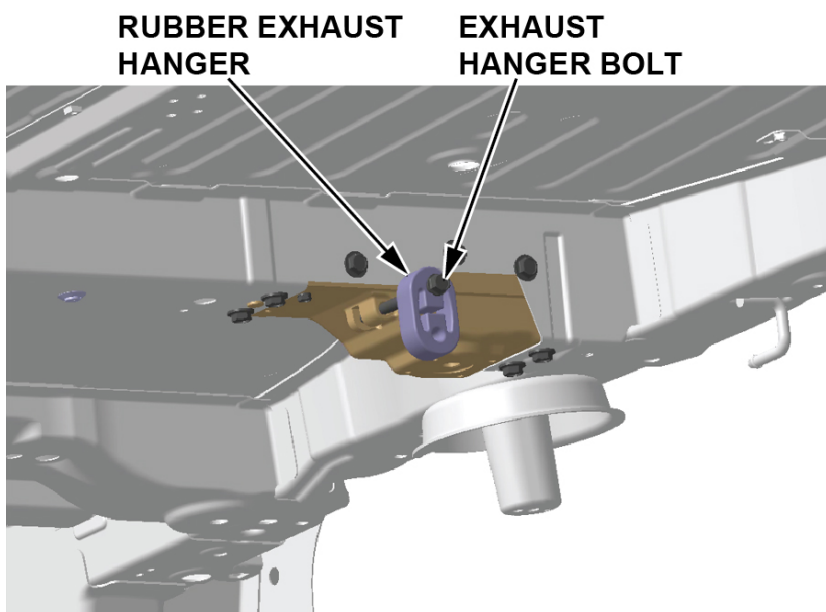
16. Install the remaining removed parts in the reverse order of removal.

17. Install an M6 bolt to plug the unused hole where the ABS wire goes as shown (there are two M6 holes in the casting, but only one is used per side due to the left and right differences of the ABS harness).

NOTE: Passenger's side shown.



18. On the passenger's side casting, install the bolt thru the rubber exhaust hanger into casting and torque to **38 N.m (28 lb-ft)**.



19. Do a four-wheel alignment.

END