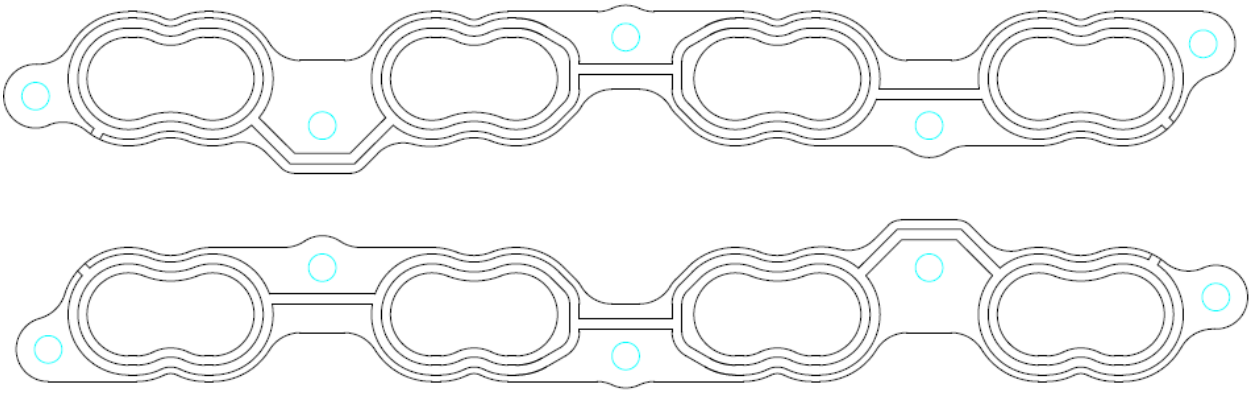
Anderson Engineering Solutions LLC

Installation Instructions

Please read instructions thoroughly before starting installation!

3UR-FE Intake Manifold Runner

(2007 to 2021 Toyota Tundra)



Thank you for buying an AES Product!

Initial Note: Installation is required after engine has been turned off and cooled. Allow for the engine to cool to a safe temperature that can be touched by hand before beginning.

Warning: Caution must be taken while working with hand tools. Install cautiously and handle all tools with care.

Required Tools for Installation

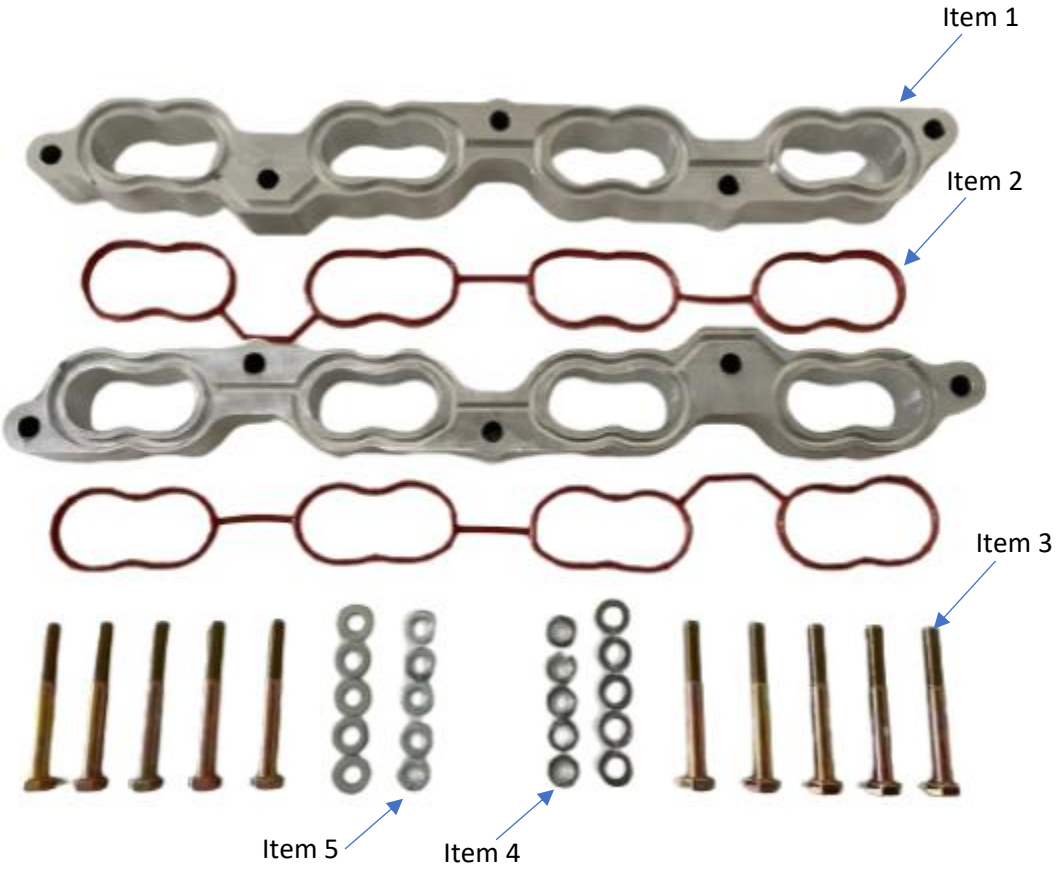
- Flat head screwdriver
- Philips's head screwdriver
- Zip ties (provided)
- Cutters
- Vise grip pliers
- Scissors
- Ratcheting Wrench (3/8 in. drive)
- 4 inches to 10 inches - 3/8" drive extensions
- Metric Socket (compatible 3/8" drive
    - 5mm
    - 10mm
    - 12mm
    - 13mm

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Intake Manifold Runner kits contains the following:

- Item 1: Two (2) Intake Manifold Runner
- Item 2: One (1) Intake Manifold Gasket set
- Item 3: Ten (10) 8m x 1.25 Bolts (65mm long)
- Item 4: Ten (10) Locking Washers
- Item 5: Ten (10) Flat washers
- Item 6: One (1) 1/2” Hose extension (not shown in photo)



Hardware (Gasket) Installation:

Begin by remove contents from the package and press the provided gasket into the groove indicated on the Manifold runner. Verify the gasket is fully depressed into the manifold groove along the entire length. Example photos referenced in Figure 1 to 3 below:

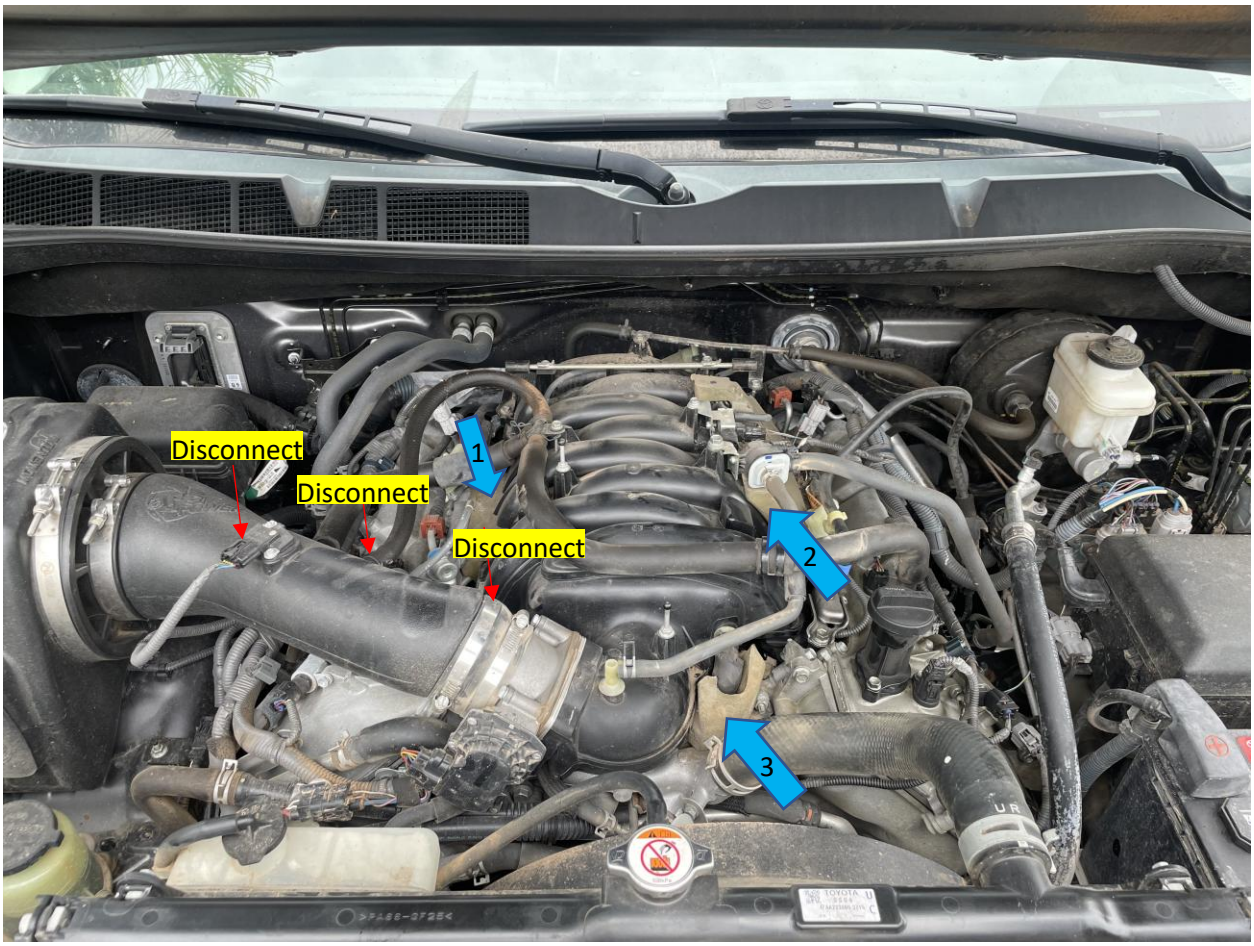
Disconnecting Intake Plenum

1. Please start by removing the positive terminal on the battery and safely positioning to ensure arcing does not occur.

(Warning: Pre-caution must be taken while working with the battery as a shock hazard is present. Hand tools rated for electrical resists is highly recommended during Step 1)

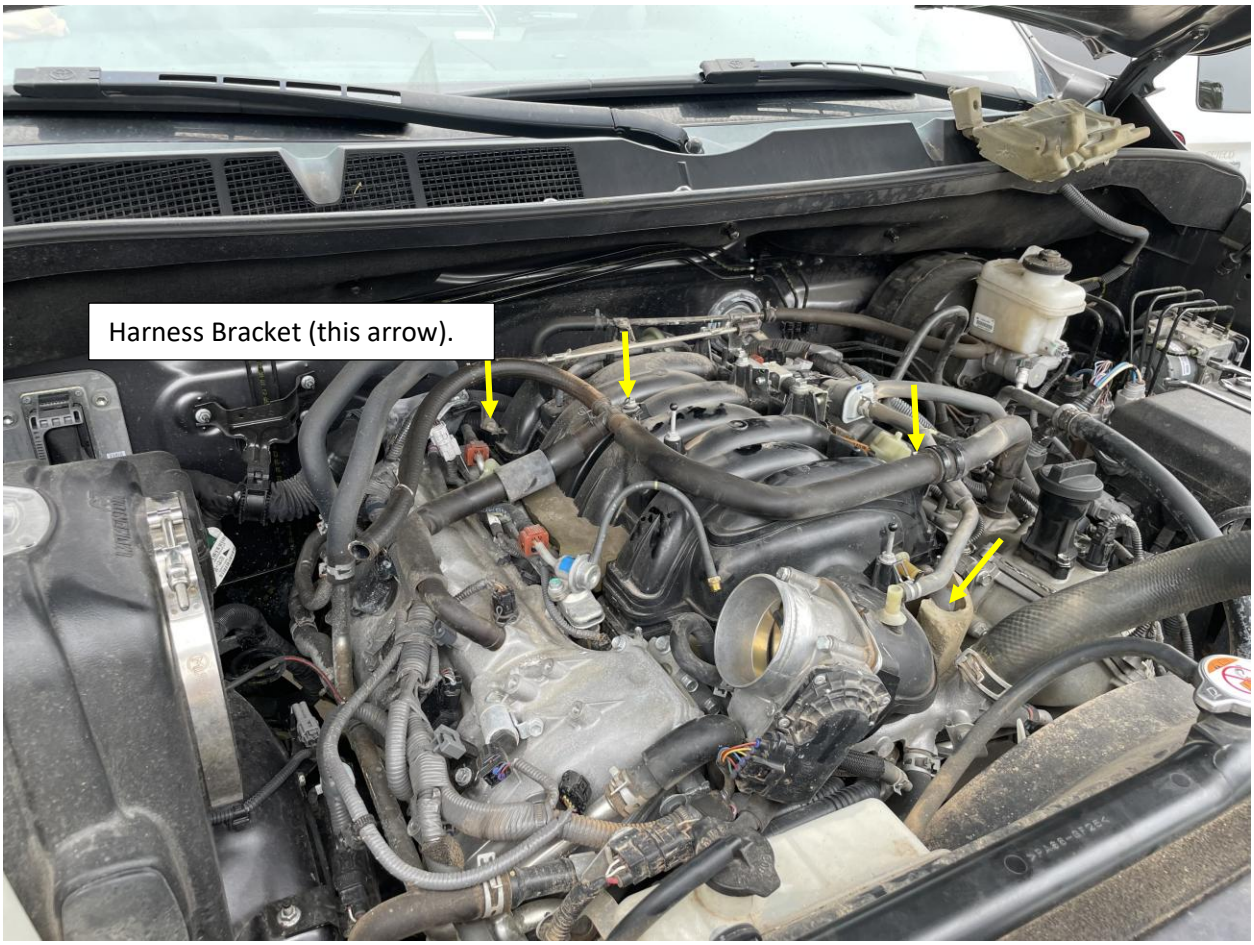
2. Remove the flexible intake hose on the passenger side for the engine bay by Disconnecting the MAF

sensor, the throttle body hose clamps, and vent hose.



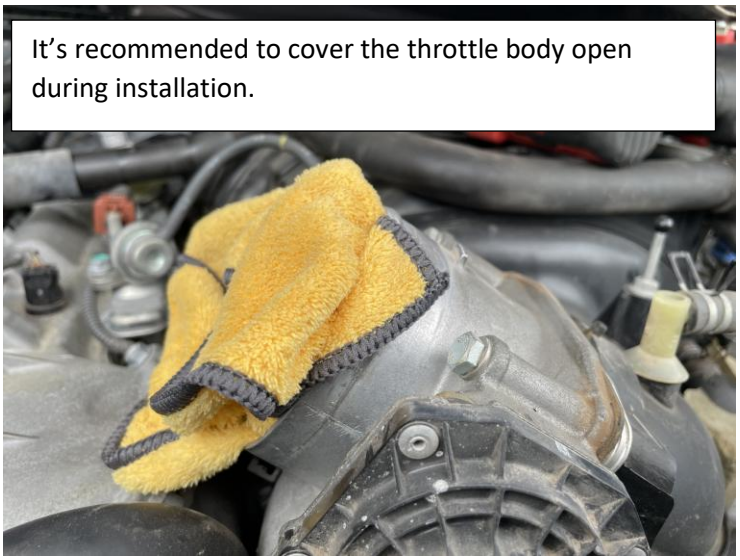
NOTE: There are 3 Foam inserts surrounding the intake manifold as shown with blue arrow, 

Remove them temporarily.



3. Disconnect the surround brackets and hoses as show above.

4. Disconnect all plastic clips as indicated as needed. This includes clips holding the wiring harness and air pressure sensor wires. This will allow for intake manifold to free move after unbolting.

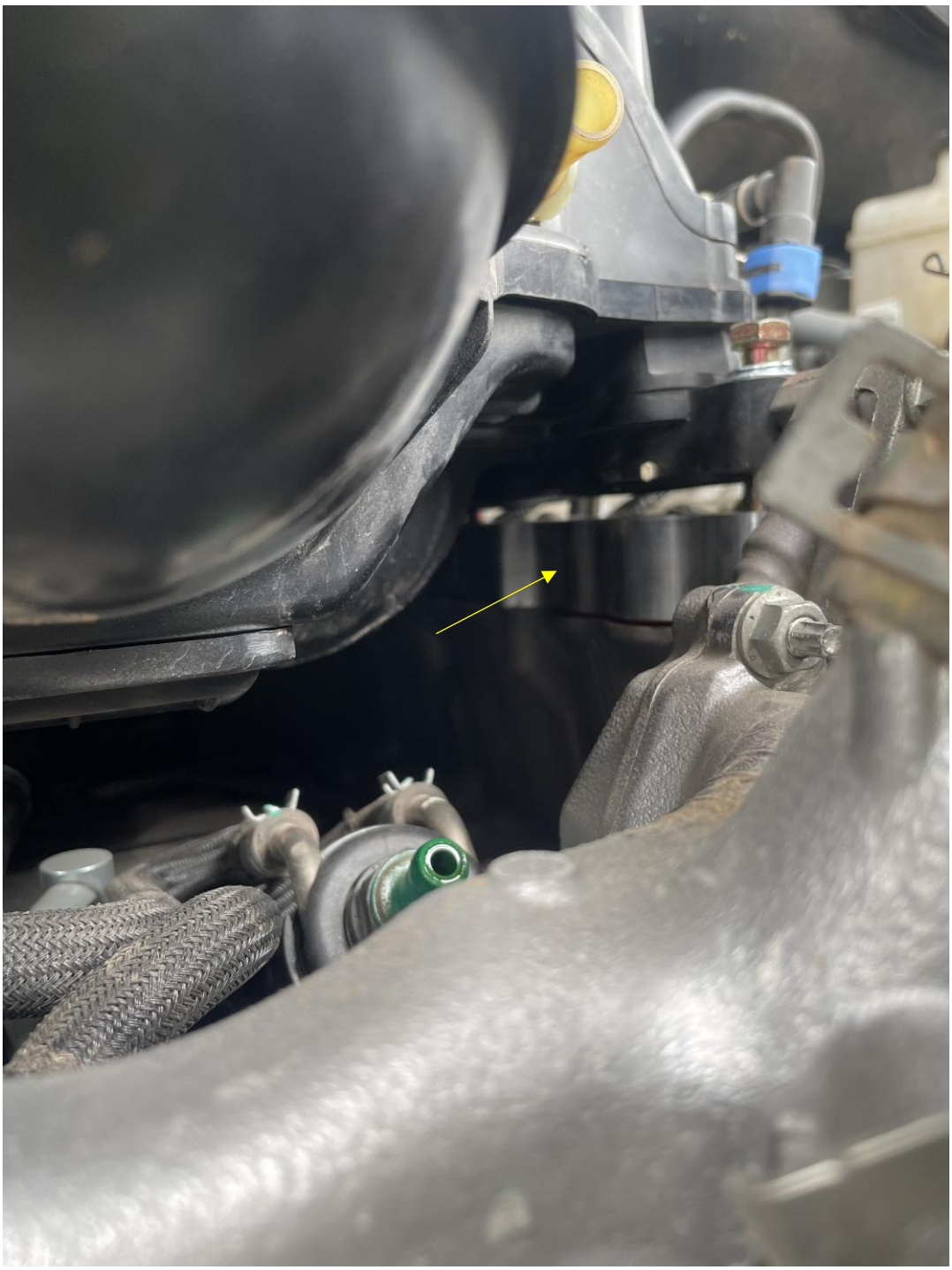




5. Remove the 10 total bolt holding the intake manifold using a 12 mm Socket Disconnect all plastic clips as indicated as needed. This includes clips holding the wiring harness and air pressure sensor wires. This will allow for intake manifold to free move after unbolting.

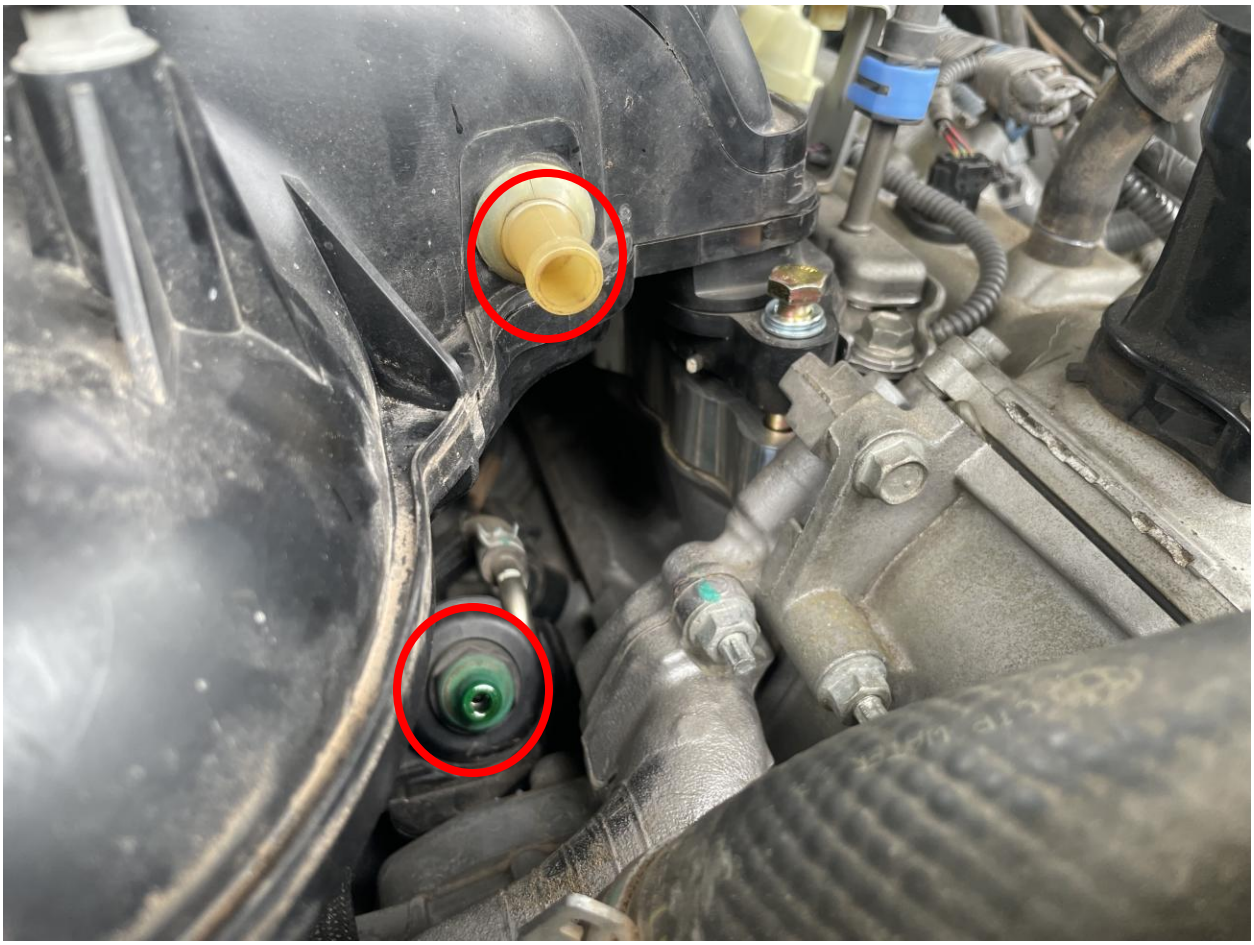
Please note this view is one photo of the 5 bolts located on the passenger side of the vehicle.





6. After upper intake manifold is free to move, position each spacer in between each of the upper and lower intake manifold and using the provided bolts align all bolt hole. Torque everything to 13-15 ft.lbs or until the lock washer is flattened.

Pro Tip: Start with the center hole on each side.



8. Using the provide 1/2” Hose, Connect the ventilation from the Green Connection to the upper manifold as shown in the photo. The Hose will require a Hose Clamp to be installed and tightened in the green connection.

9. Once spacers and hose is installed, complete the installation but connecting everything back in reverse!

Fitment verification

After all is complete, connect the battery and start the truck. If installed incorrectly double check these few items below to help trouble shoot any issues.

This list has been compiled from customer interaction regarding the most common issues:

Symptom:	Correction
Code P0410 or P0411 found	Ensure 7/32 hose from the air injection is connected to air plenum. *This correlating to air injection system on exhaust.*
Rough Idle	Verify all vacuum ports at attached to the corresponding hoses. Please read through document to ensure all is covered. Also verify that both OEM gaskets (original and new) are oriented in the correct direct to ensure proper seal.
Manifold Not Aligning	If having trouble aligning the manifold with the 5 bolt holes, Start at the center position and work outwards. Manifold spacer positioning is held to a tight tolerance and engine casting variations can cause trouble.

Warranty Information

Service as It Should Be

In today's online shopping market, we believe that honesty is the best policy. That's why we designed the most generous, fair and transparent store policy for our customers. Read the following sections to find out more about our warranty information. Please don't hesitate to contact us if you have any questions!

- All manufactured products sold by Anderson Engineering Solutions LLC have a 120 day limited warranty from the date of sale.
  - This warranty does not cover minor defects as a result of naturally occurring elements and shipping damages including, but not limited to oxidation or corrosion, paint flakes, and burrs or high metal.

- This limited warranty applies to all products and requires an inspection by Anderson Engineering Solutions LLC at its Franklin, OH location to verify if a product defect exists in either the material or workmanship if claim arises.

  For all remaining warranty information. Please visit our "Store Policies", webpage at AESinnovate.com.

  Technical assistance phone number: 937-823-5541