



AOS Kit – FL5 Civic Type-R

Installation Manual



Author: M. Deckard
Release Date: 2025/07/17
Approvals: E. Hazen

Document Revisions

Rev	Date	Author	Description
01	2025/07/17	M. Deckard	Issued for Release

AOS Kit, FL5 Civic Type-R – Install Manual

Contents

Introduction.....	3
Overview	3
Difficulty	3
Time Required	3
Recommended Tools	3
Kit Components.....	4
AOS Kit Installation	4
Coolant Add-on Kit	10
Resume AOS Installation	18

AOS Kit, FL5 Civic Type-R – Install Manual

Introduction

Overview: Detailed instructions on installing the Verus Engineering Air Oil Separator kit for the FL5 Civic Type-R.

Difficulty: Moderate

Time Required: 2-4 Hours

Recommended Tools:

- Ratchet (3/8in & 1/4in Drive)
- 7/32" / 5.5mm Socket
- 10mm Socket
- Short 1/4in Extension
- 4mm Allen Wrench / Long 4mm Allen Socket
- Flathead Screwdriver
- Phillips Head Screwdriver
- Utility Knife
- Scissors / Hose Cutter
- Side cuts
- Needle Nose Pliers
- Tape Measure
- Hose Clamp pliers



AOS Kit, FL5 Civic Type-R – Install Manual

Kit Components:

- (1) Air Oil Separator
- (1) AOS Bracket
- (70) Inches 1/2" Rubber Hose
- (6) Inches 3/8" Rubber Hose
- Hardware Bag
 - (5) M6x1.0 BHCS x 16mm Long, Stainless
 - (5) M6 x 12mm OD Washer, Stainless
 - (6) Zip Tie
 - (2) 1/2" to 3/8" Nylon Reducer
 - (1) 5/16" to 5/16" Barbed Adapter
 - (2) Hose Clamp, 9-16mm
- Coolant Add-on Kit (Optional) A0622A
 - (1) Coolant Plate
 - (1) Buna-N O-Ring
 - (2) Banjo Bolt
 - (4) Banjo Washer
 - (2) 5/16" Banjo Barb Fitting
 - (48) Inches of coolant hose
 - (4) M6x1.0 BHCS x 16mm Long, Stainless
 - (4) M6 x 12mm OD Washer, Stainless
 - (4) Hose Clamp, 9-16mm
 - (4) Zip Tie
 - (1) 5/16" to 5/16" Barbed Adapter

**AOS Kit Installation**

1. Verus Engineering is not responsible for damage to you or your vehicle by following this manual and/or installing Verus Engineering products. Please seek professional service/guidance if you are uncomfortable/incapable of installing this in a safe manner. Contact us at support@verus-engineering.com if you have any questions/concerns.

AOS Kit, FL5 Civic Type-R – Install Manual

2. Begin by opening your vehicle's hood. The hood release is located by the dead pedal on the Driver's side floor board. **Note: It will be helpful to have the hood in service position as shown below.**



3. Once the hood is opened, take off the engine cover by removing the (5) 10mm bolts.



4. You should be able to see your valve cover as shown below.



AOS Kit, FL5 Civic Type-R – Install Manual

5. We now need to move to the passenger side firewall, just above the ABS pump. Trim back the firewall cover to reveal an M6 threaded hole.

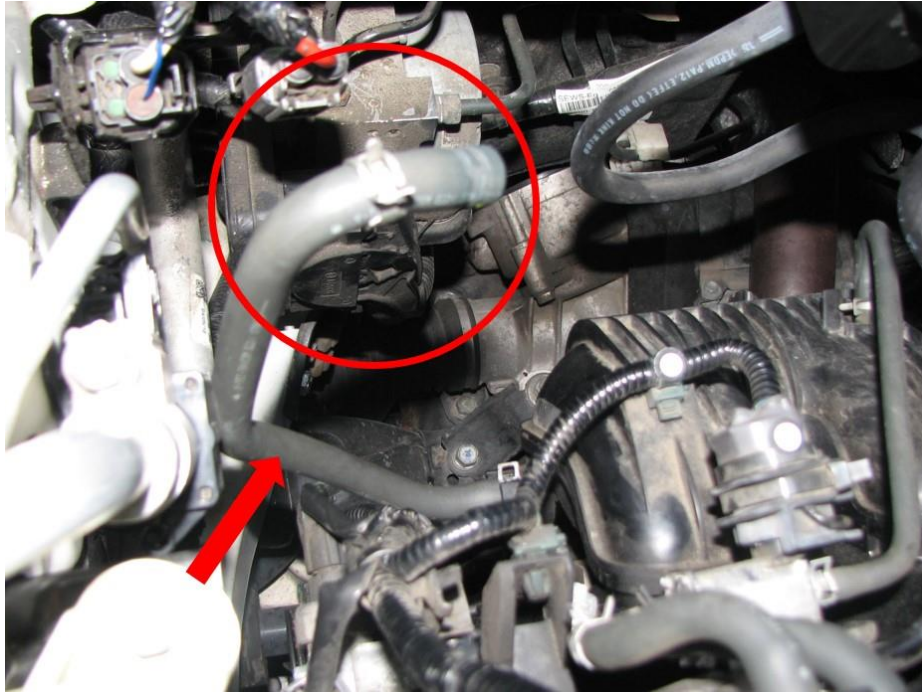


6. In the same area, we need to change the position of the PCV hose outlined in the image below.

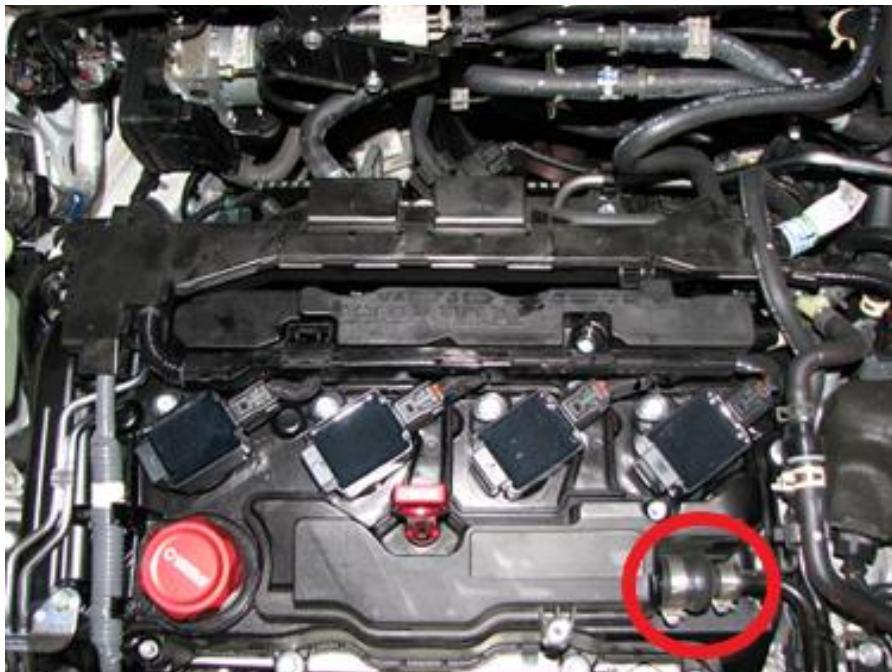


AOS Kit, FL5 Civic Type-R – Install Manual

7. Disconnect this hose, flip the hose ends, and reinstall to the intake manifold and secure using the same clamp. **Note: The 90-degree end of this hose will be the connection to the AOS.**



8. The next place we need to work is on the driver's side of the valve cover by cylinder 4.



AOS Kit, FL5 Civic Type-R – Install Manual

9. There are (4) clamps to be removed here. The first (2) clamps are a one-time use clamp (circled in red) that can be removed by spinning the head of it with needle nose pliers or cutting a slot in the head of it and using a flat blade screwdriver to loosen it. **Note: It is NOT necessary to remove the clamp circled in yellow.**



10. Remove the metal pipe from these connections. You should be looking at something similar to the image below. **Note: Again, it is NOT necessary to remove the clamp circled in yellow.**



AOS Kit, FL5 Civic Type-R – Install Manual

11. Next, install a 1/2" to 3/8" nylon reducer fitting on the intake coupler and tighten it down with a provided hose clamp.



12. It is now necessary to rotate the intake coupler. The coupler should be rotated about 1/2" towards the engine as shown below.



13. Connect 30" of hose to this reducer and route it as shown below. **Note: This routing is just a recommendation. You are able to run the hose however you see fit.**

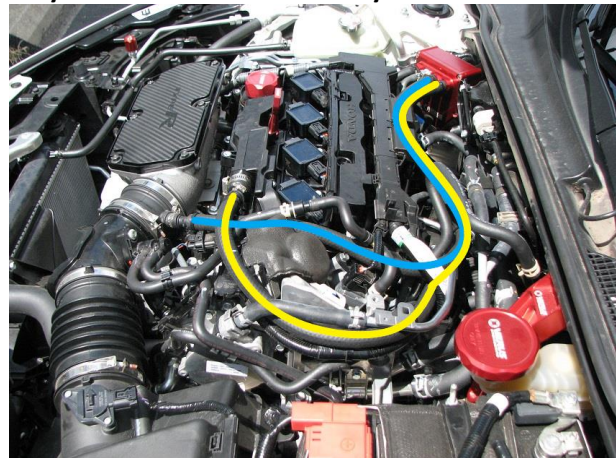
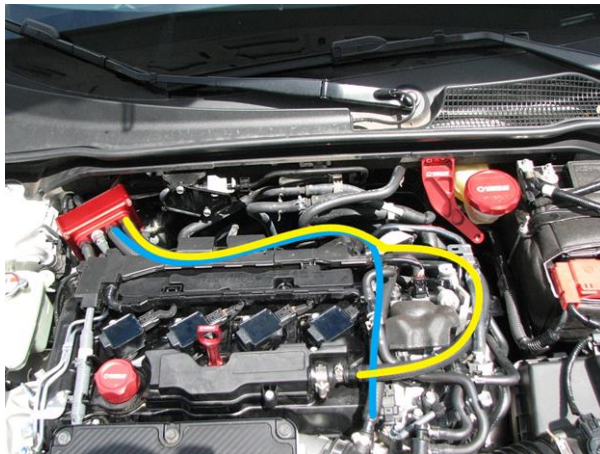


AOS Kit, FL5 Civic Type-R – Install Manual

14. Now we connect the other 1/2" to 3/8" nylon reducer to the valve cover as shown below.



15. We now connect 37" of hose to this reducer and route it as shown below. **Note: This routing is also a recommendation. You may route this hose however you see fit.**



16. With the longest hoses routed, we can now prepare the AOS to be installed. **Note: If you are not installing the coolant add-on kit, skip to Step 34.**

Coolant Add-on Kit

17. Install the O-ring onto the coolant plate as shown below.

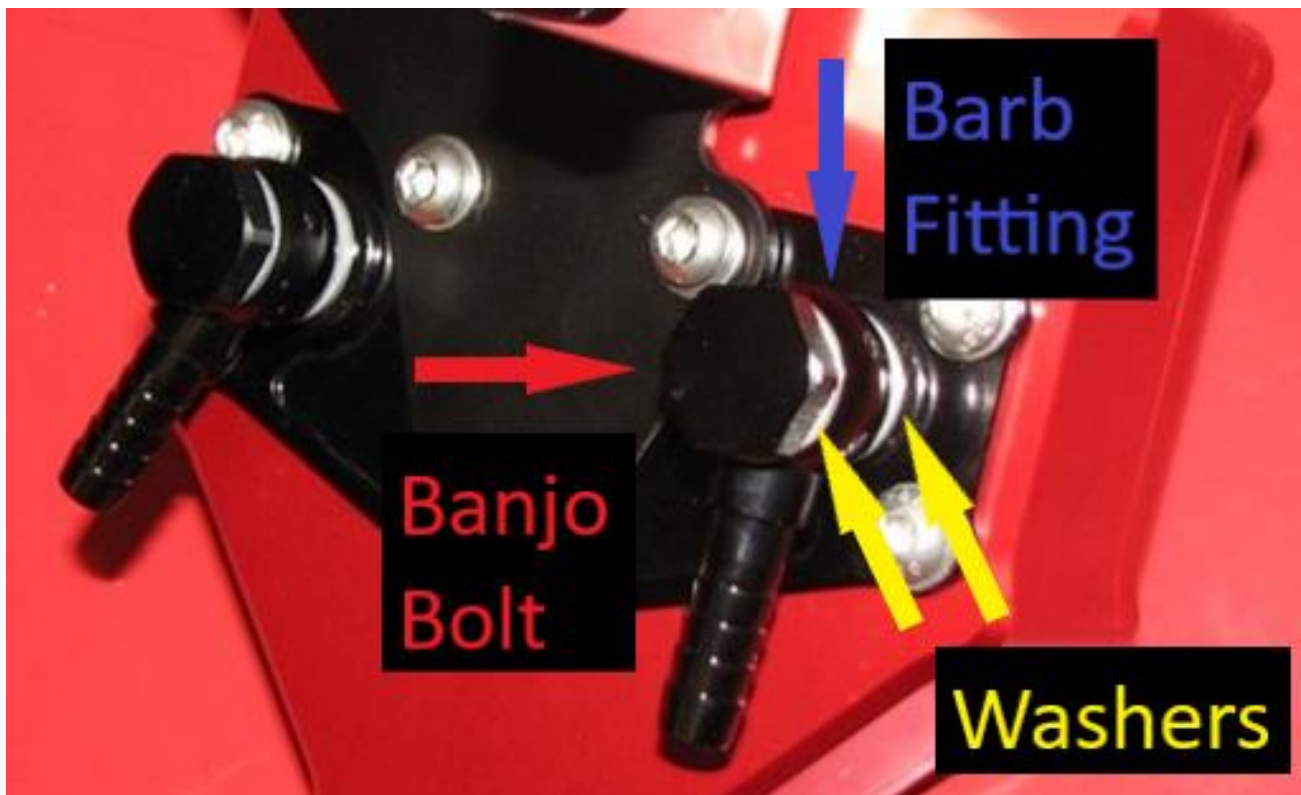


AOS Kit, FL5 Civic Type-R – Install Manual

18. Use (4) M6 BHCS with washers to install the coolant plate to the back of the AOS. **Note:**
The coolant plate gets installed **BEFORE** the mounting bracket.



19. Attach the mounting bracket using (3) M6 BHCS and washers once coolant plate and O-ring sits flat.
20. Loosely install the banjo barb fittings and banjo bolts with washers into the coolant plate.



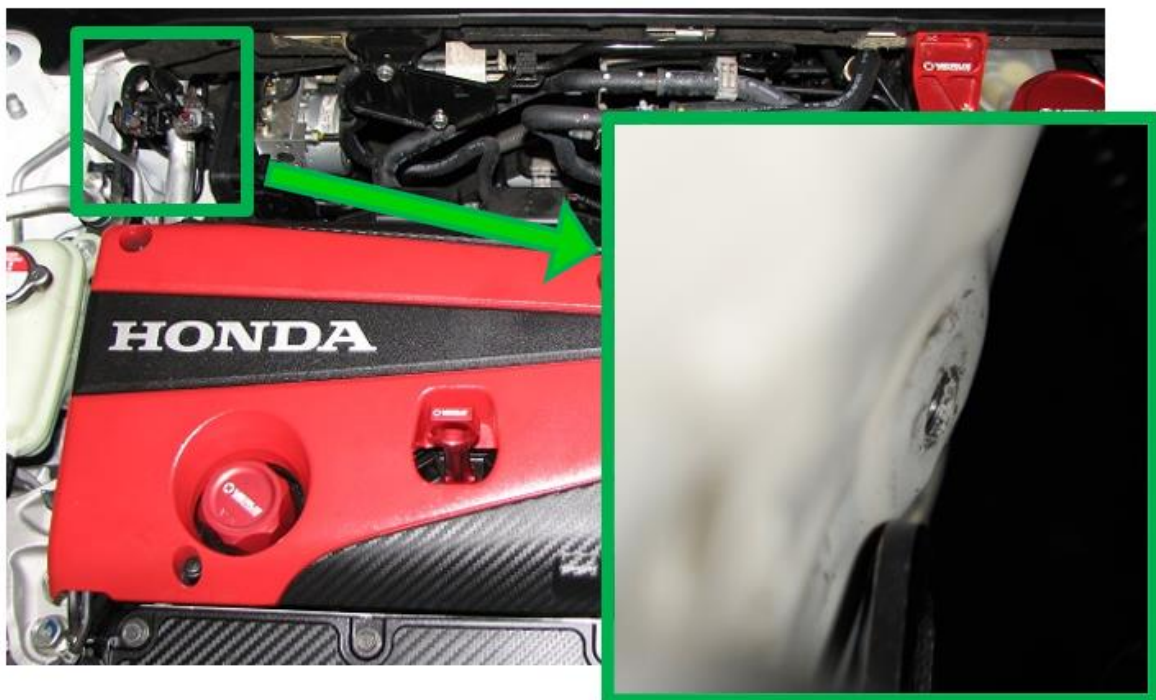
21. Attach 15" of hose to the outer/passenger hose and 33" to the inner/driver hose. Tighten hoses to banjo barb fittings with hose clamps.

AOS Kit, FL5 Civic Type-R – Install Manual

22. Clock banjo barb fittings as shown below and tighten down banjo bolts.

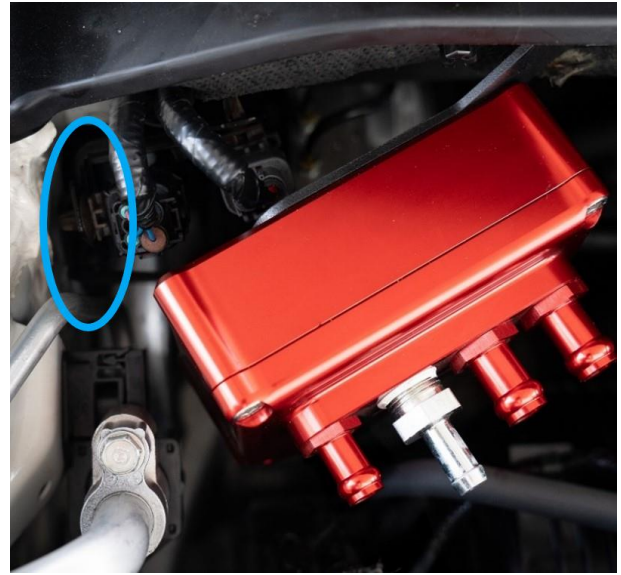


23. We need to remove the electrical connector mounting bracket bolt found on the passenger side strut tower next. This can be done with a 10mm socket and small extension.



AOS Kit, FL5 Civic Type-R – Install Manual

24. Next, mount the prepared AOS to the car using (2) M6 BHCS and washers.



25. With the AOS mounted, we will return to the metal PCV pipe we connected earlier and pinch off the coolant lines.



AOS Kit, FL5 Civic Type-R – Install Manual

26. Remove the rear coolant hose by disengaging the clamp shown below.

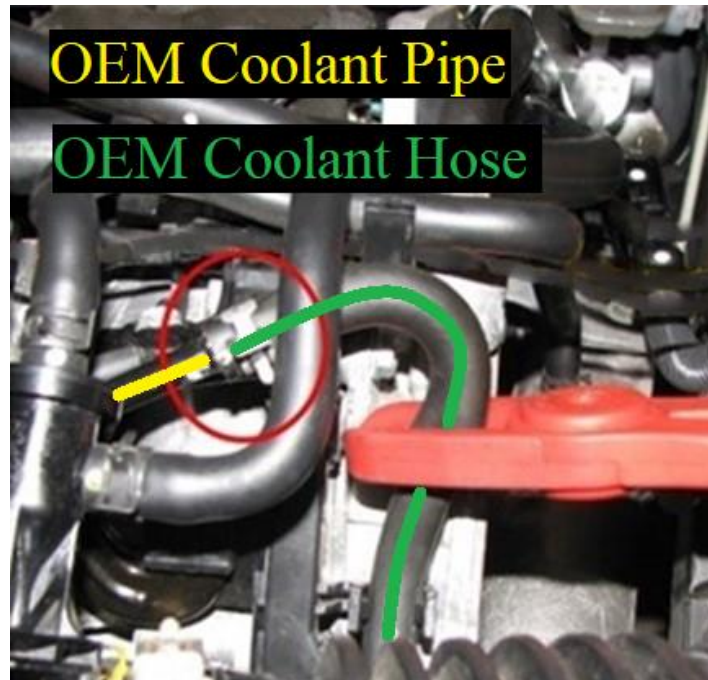


27. Connect a 5/16" barb connector in the end of this hose.
28. Route the OEM hose along the backside of the engine and connect it to the 15" section of hose on the AOS and tighten it with the provided hose clamps.

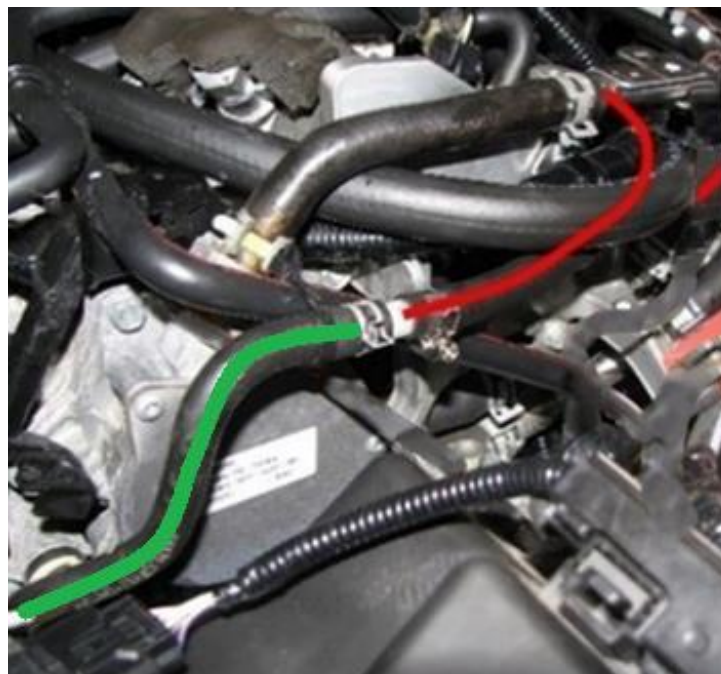


AOS Kit, FL5 Civic Type-R – Install Manual

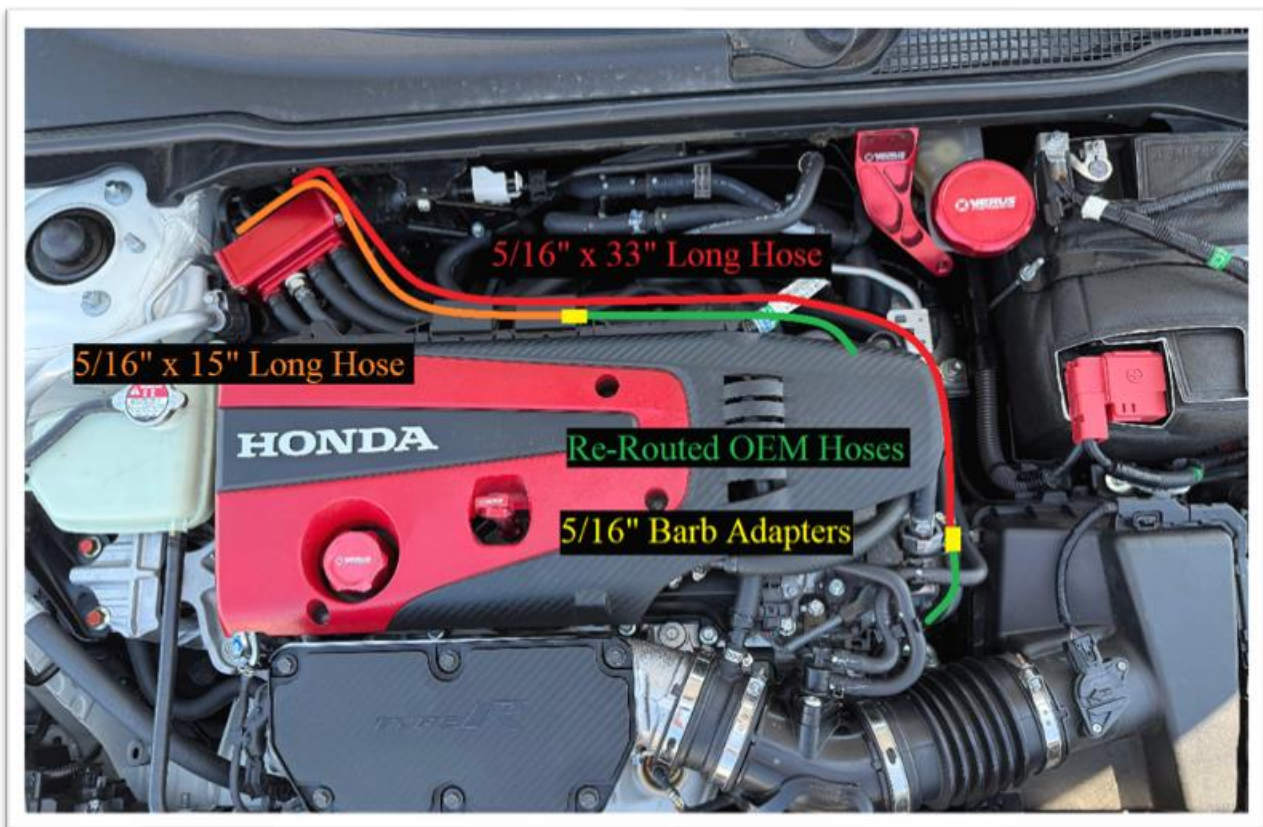
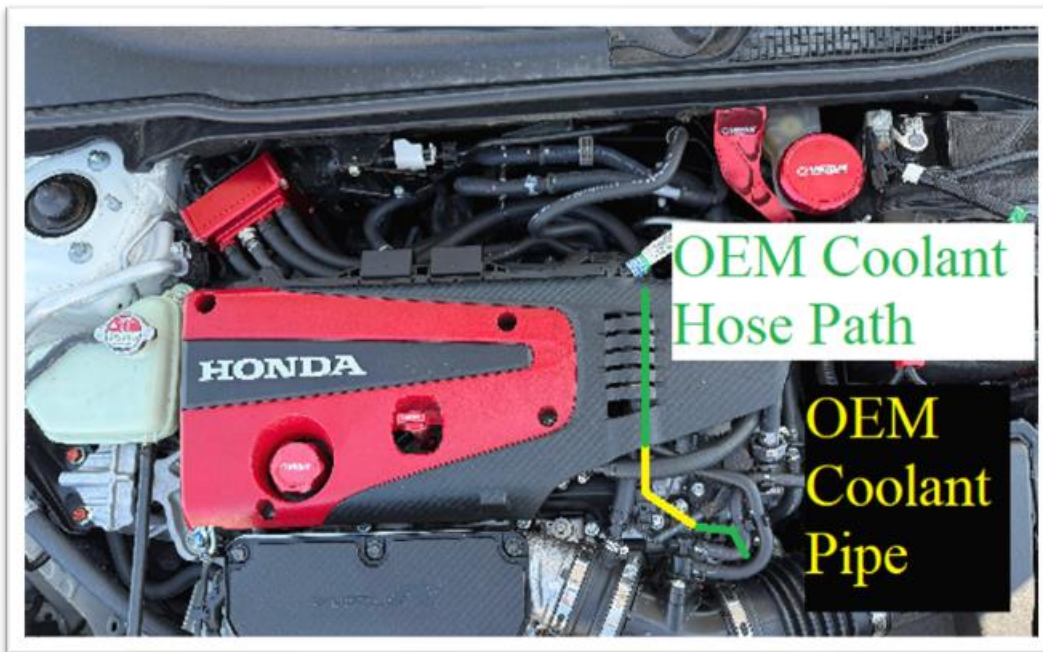
- 29.** Remove the front coolant hose by disengaging the clamp shown below and remove the OEM metal pipe.



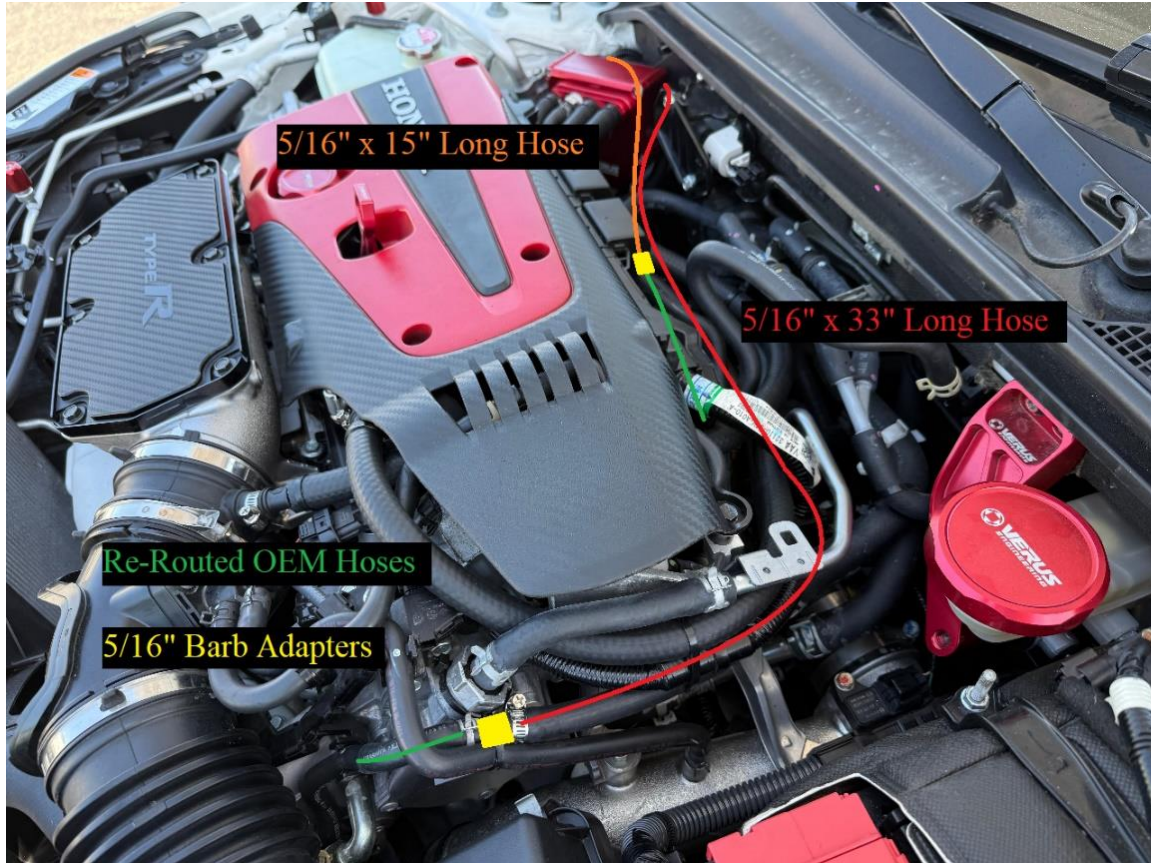
- 30.** Connect a 5/16" connector to the end of this hose.
- 31.** Route this hose between the engine and vehicle battery and connect it with a hose clamp to the 33" section of coolant hose on the AOS.



AOS Kit, FL5 Civic Type-R – Install Manual



AOS Kit, FL5 Civic Type-R – Install Manual

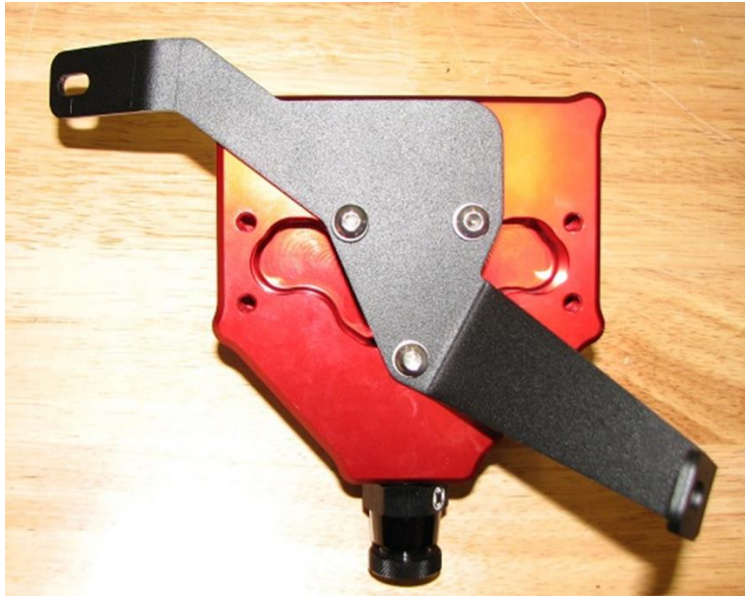


32. Ensure that coolant hoses are routed to avoid sharp edges and fasten them with provided zip ties.
33. Congratulations on installing your AOS Coolant Add-on! Please email us at support@verus-engineering.com with any concerns, comments, or feedback. **Note: At this time skip to Step 42 to finalize AOS installation and hose routing.**

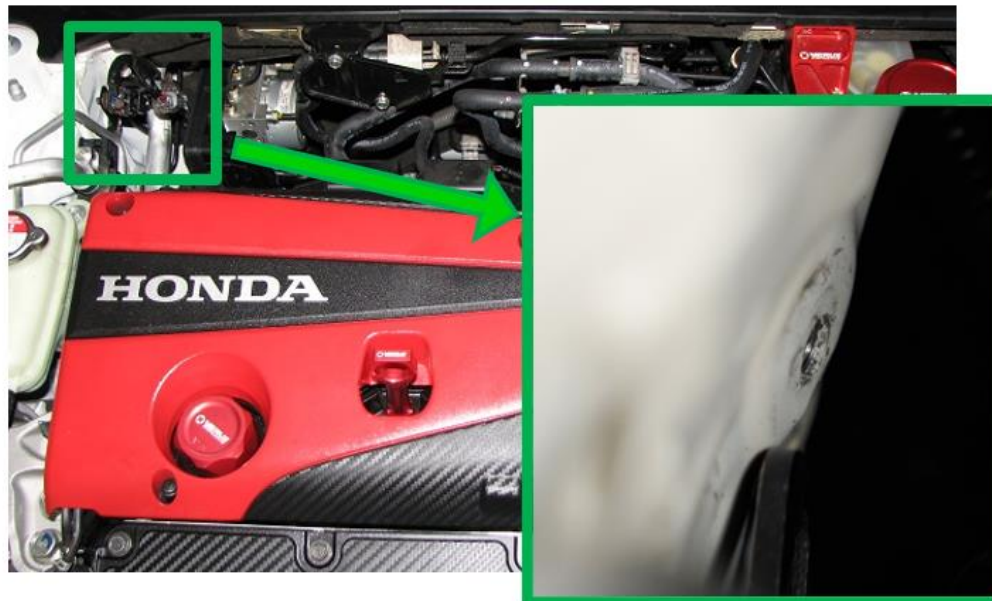
AOS Kit, FL5 Civic Type-R – Install Manual

Resume AOS Installation

34. Mount the bracket to the AOS using (3) M6 BHCS and washers.



35. We need to remove the electrical connector mounting bracket bolt found on the passenger side strut tower next. This can be done with a 10mm socket and small extension.

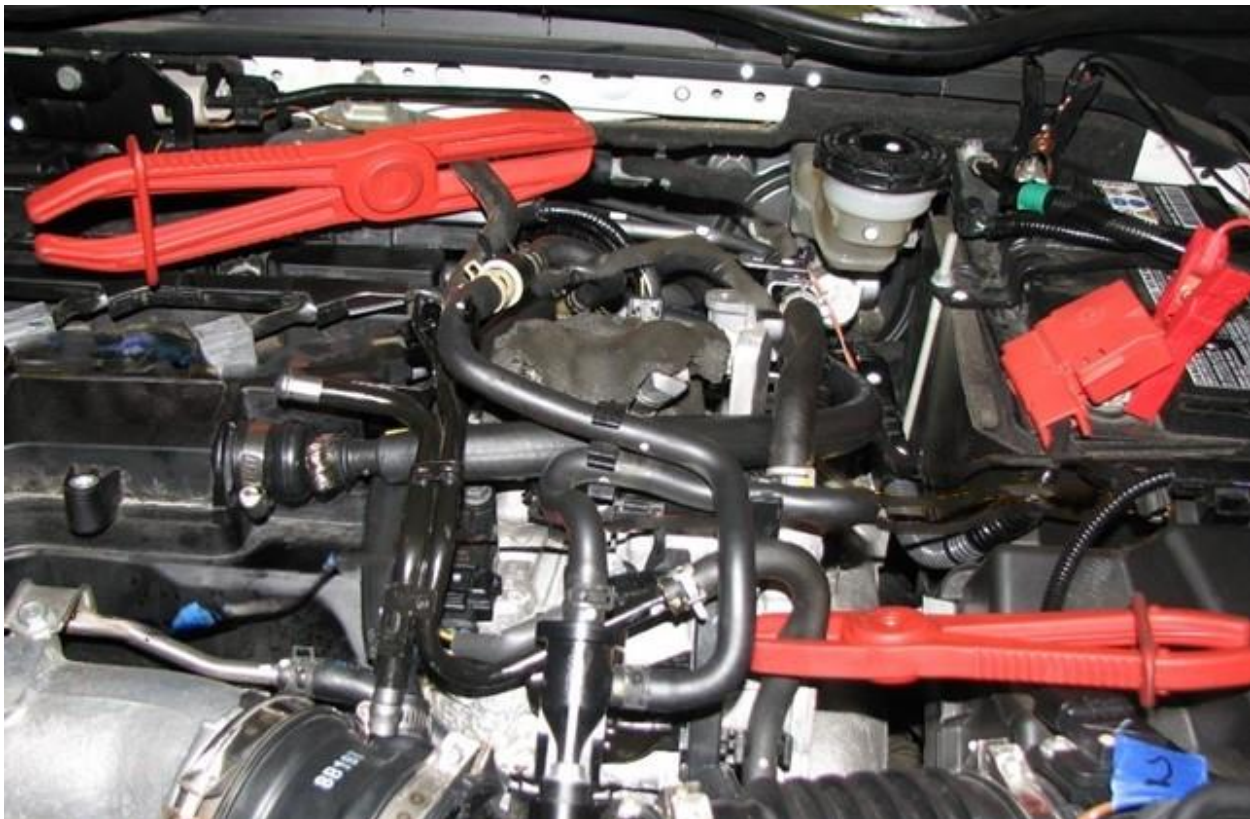


AOS Kit, FL5 Civic Type-R – Install Manual

36. Next, mount the prepared AOS to the car using (2) M6 BHCS and washers.

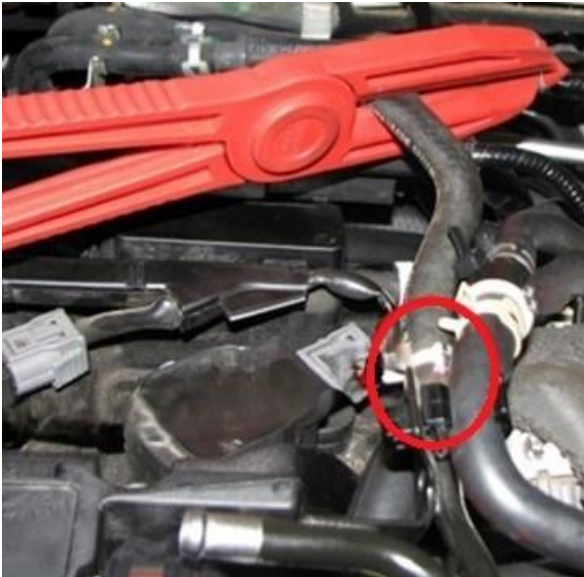


37. With the AOS mounted, we will return to the metal PCV pipe we connected earlier and pinch off the coolant lines.



AOS Kit, FL5 Civic Type-R – Install Manual

38. Remove both hoses and fully remove the OEM metal pipe.

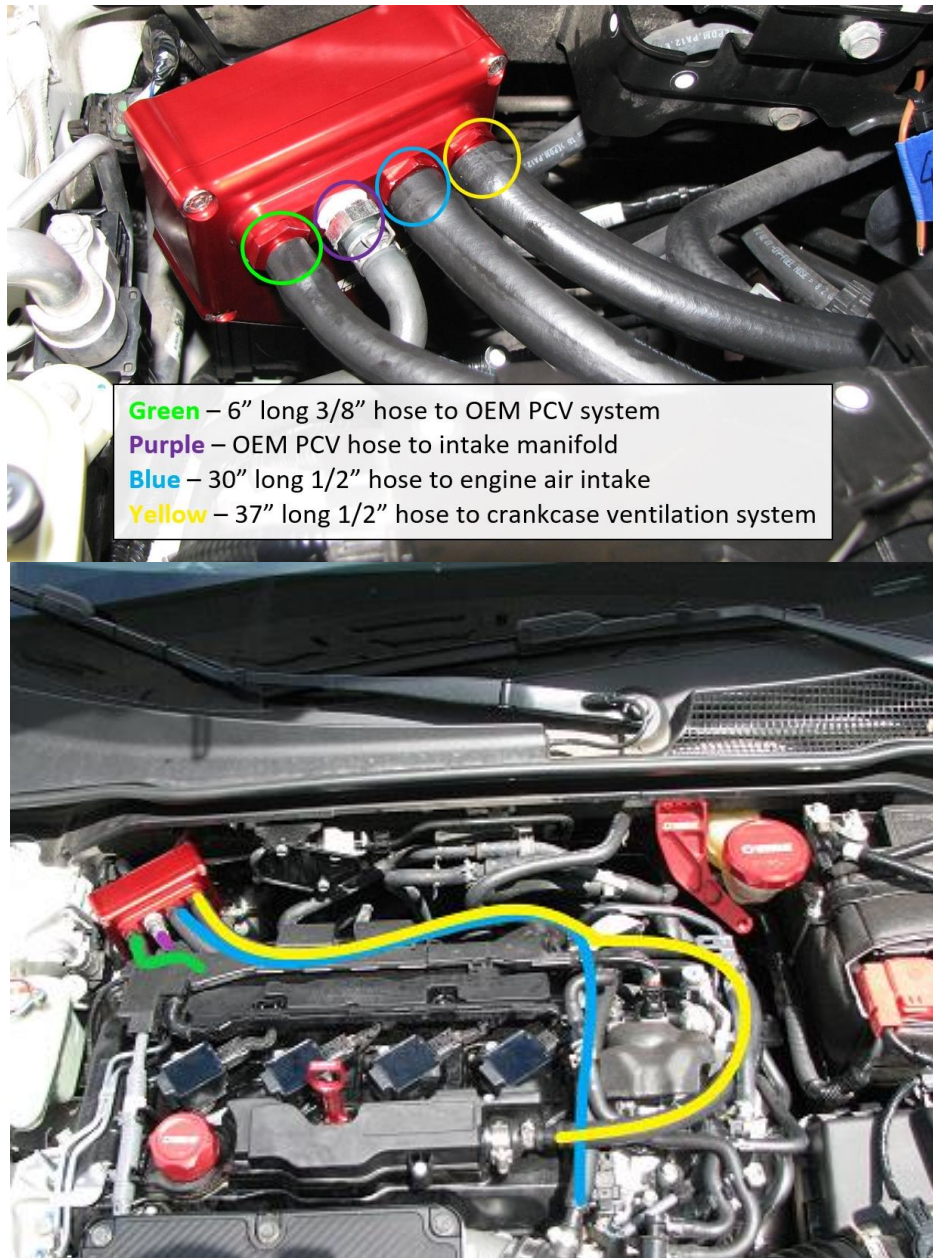


39. Route the coolant hoses over the engine (as shown below) and connect them together using a 5/16" barb connector and (2) hose clamps.

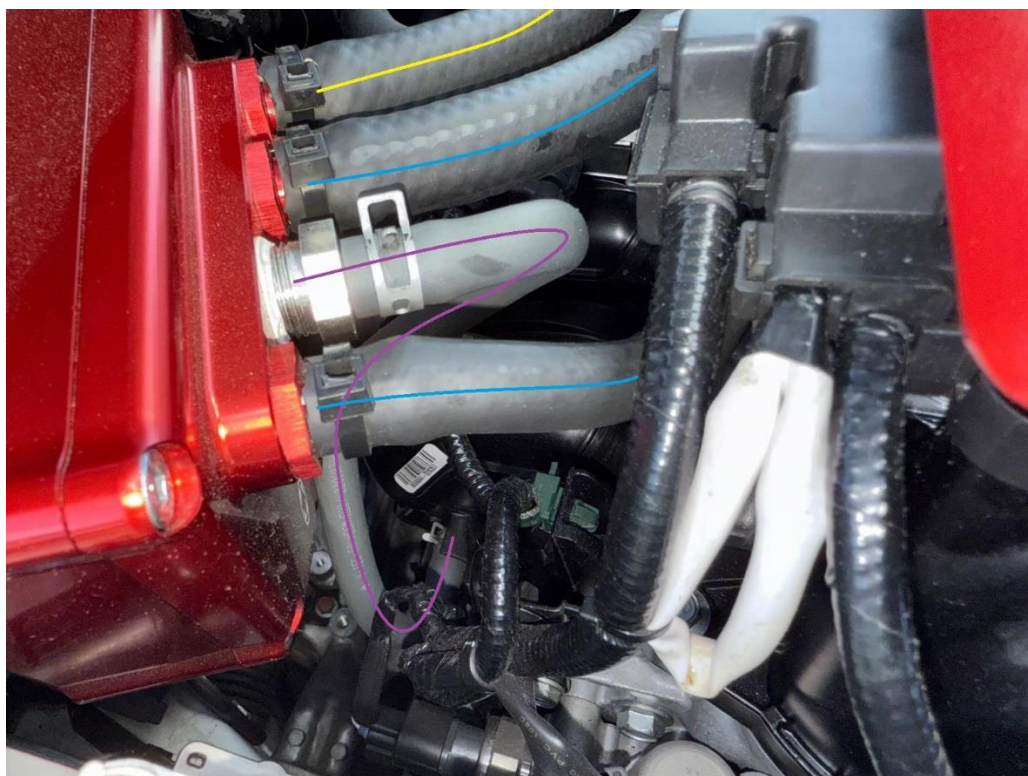
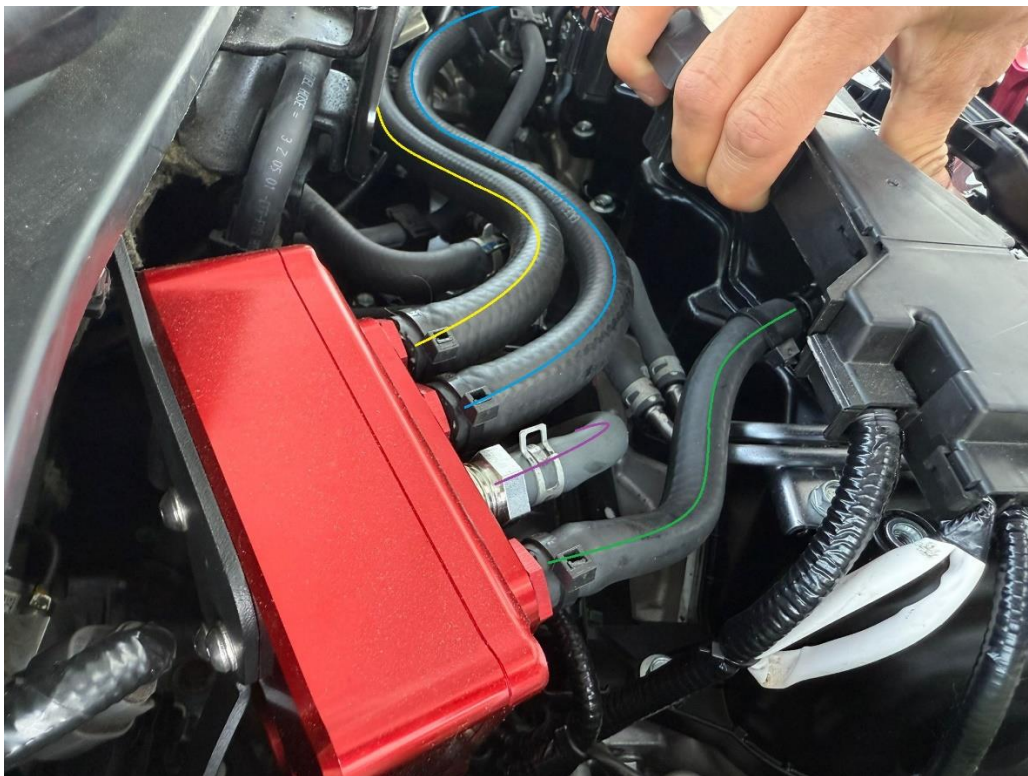


AOS Kit, FL5 Civic Type-R – Install Manual

40. We can now return to the AOS and connect all of our hoses.
41. Cut a 6" section of hose and connect it between the front AOS port and the valve cover.
Note: This will connect to the valve cover using the port we left open in Step 7.
42. All AOS hoses can be connected using the provided zip ties to secure the ends at this time.
Refer to the images below for routing. **Note: Coolant connections require hose clamps while AOS connections only require zip ties to secure hose ends.**



AOS Kit, FL5 Civic Type-R – Install Manual



43. Congratulations on installing your new AOS kit! Please email us at support@verus-engineering.com with any concerns, comments, or feedback.