

PERRIN

Oil Cooler for 10th Gen Honda Civic Type-R

2020-03-05

PHP-OIL-100

Thank you for purchasing this PERRIN product for your car! Installation of this product should only be performed by persons experienced with installation of aftermarket performance parts and proper operation of high performance vehicles. If vehicle needs to be raised off the ground for installation, the installer must use proper jacks, jack-stands and/or a professional vehicle hoist for safety of the installer and to protect property. If the vehicle is lifted improperly, serious injury or death may occur! Please read through all instructions before performing any portion of installation. If you have any questions, please contact our tech department prior to starting installation. We can be reached in any of the following methods:

Email Tech@PERRINperformance.com

Instant Chat off the main page of www.PERRINperformance.com

Or simply call our tech team at 503-693-1702

GENERAL MODIFICATION NOTE

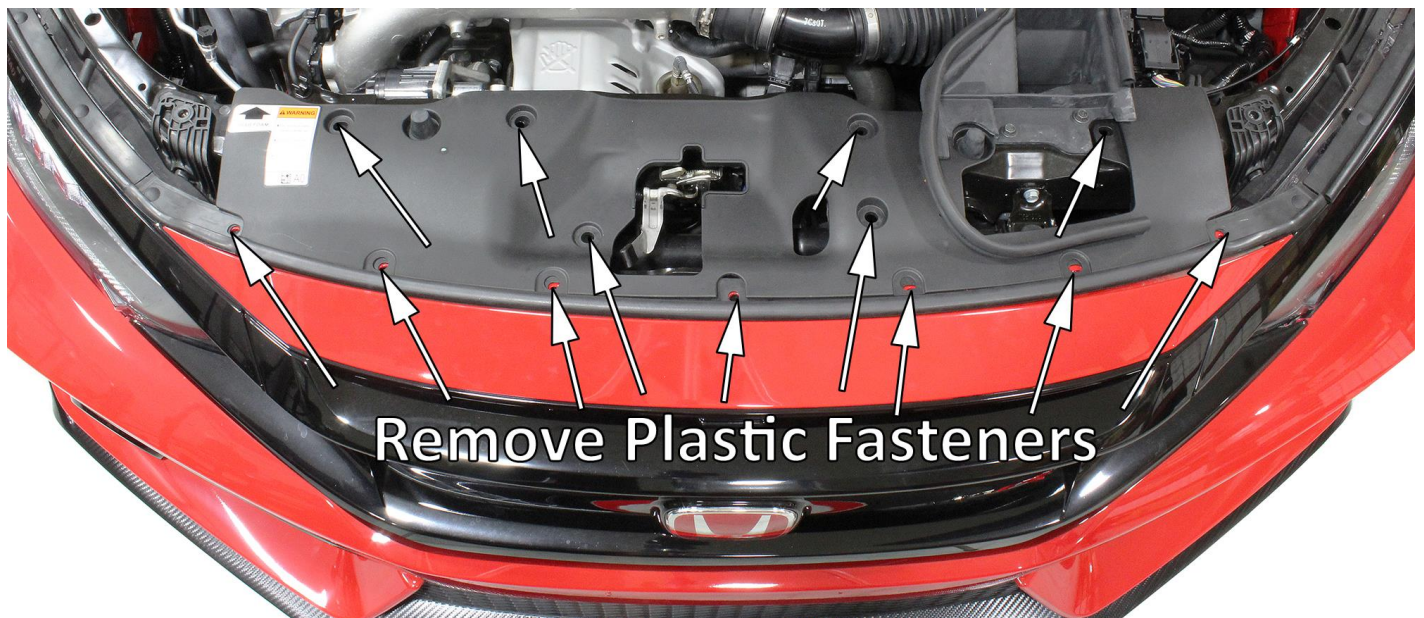
Modifications to any vehicle can change the handling and performance. As with any vehicle extreme care must be used to prevent loss of control or roll-over during sharp turns or abrupt maneuvers. Always wear seat belts, and drive safely, recognizing that reduced speeds and specialized driving techniques may be required. Failure to drive a vehicle safely may result in serious injury or death. Do not drive a vehicle unless you are familiar with its unique handling characteristics and are confident of your ability to maintain control under all driving conditions. Some modifications (and combinations of modifications) are not recommended and may not be permitted in your state or country. Consult the owner's manual, service manual, instructions accompanying these products, and local laws before purchasing and installing these modifications. You are responsible for the legality and safety of the vehicle you modify using these components.

SPECIAL NOTES:

- This kit adds roughly 1qt more oil to the system and some oil is lost during removal of the oil filter. Make sure you have at least 1 quart of oil on hand after installation is complete.

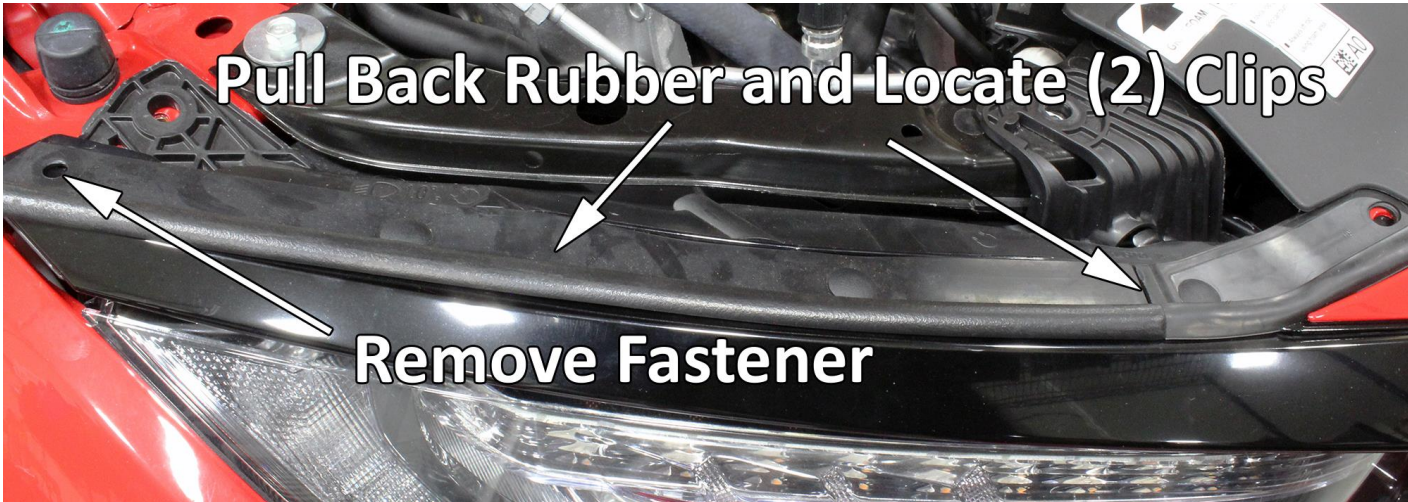
Parts Included with the PERRIN Oil Cooler:

- (1) PERRIN Oil Cooler
- (1) Left Side Oil Line
- (1) Right Side Oil Line
- (2) Oil Cooler Brackets
- (4) M6x25 SS Socket Cap Screws
- (4) M8x16 SS Button Head Screws
- (5) M6 Rivet Nuts
- (1) Rivet Nut Tool
- (1) M6 SS Fender Washer
- (2) M6x20 Hex Bolt
- (1) Oil Filter
- (3') Edge Trim
- (10) Zip Ties

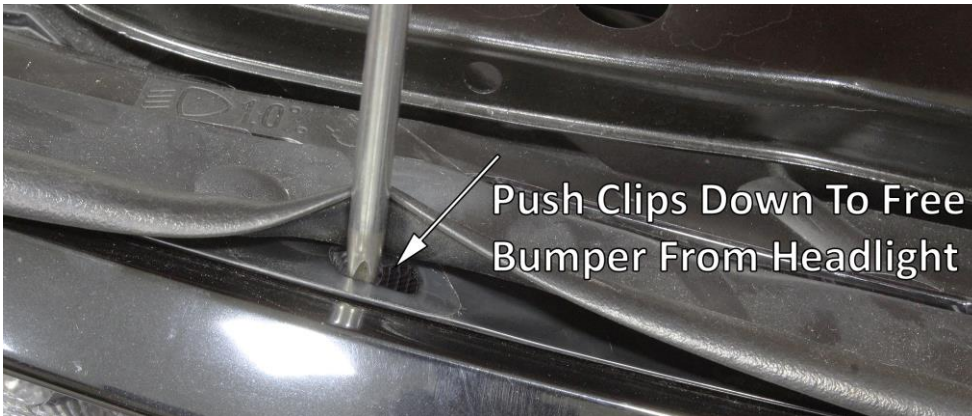


Intercooler Installation Instructions:

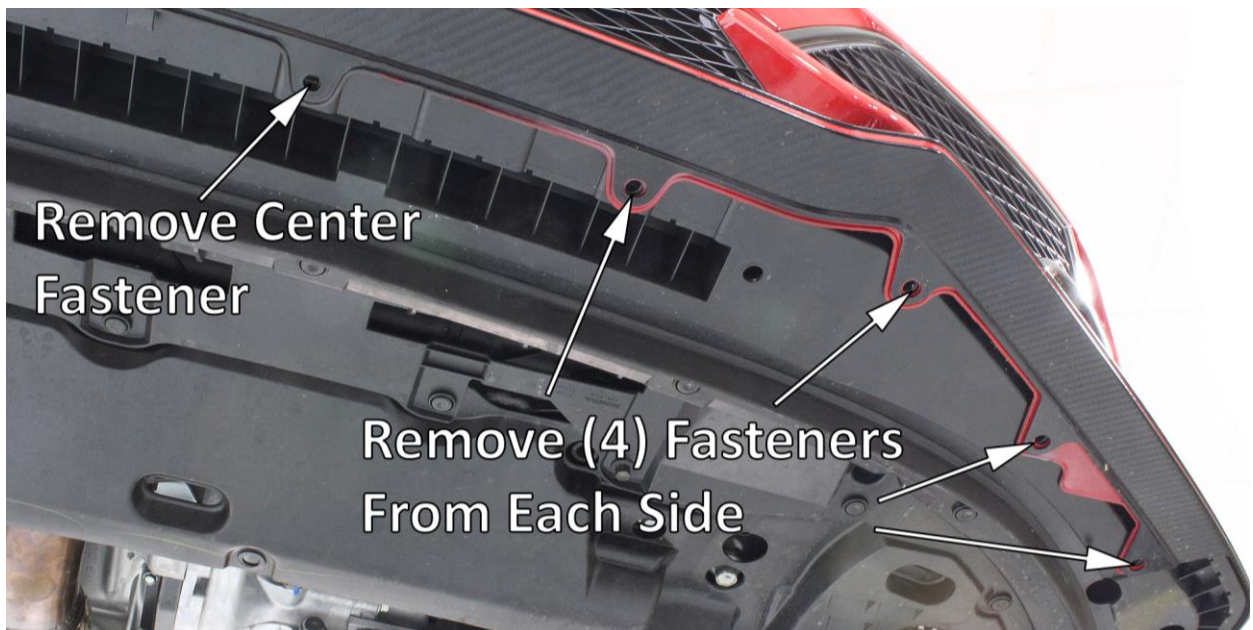
1. Wait for car to completely cool off before starting installation.
2. Open hood, locate and remove (13) plastic fasteners as shown above. **NOTE: Some of the fasteners are not required to remove bumper, but will aid during re-installation.**



3. On each headlight, remove (1) fastener as shown and locate (2) clips under rubber trim. Pull forward on plastic trim and push down on clips to free trim from head light.



4. Under car, locate and remove (9) plastic fasteners **NOTE: Picture only shows (5) fasteners, (1) located in the center and (4) on each side.**



5. In each wheel well, locate and remove (3) screws as shown.
6. Pull bumper straight out from under each of the side marker lights as shown.

Remove (3) Screws
From Each Side.

Pull Bumper Straight
Out from Under Side
Marker Light



7. Starting on one side, pull bumper toward the front of the car just enough to unplug fog light from harness. Move to other side and repeat, then set bumper off to side. **NOTE: It helps to have two people during this step.**

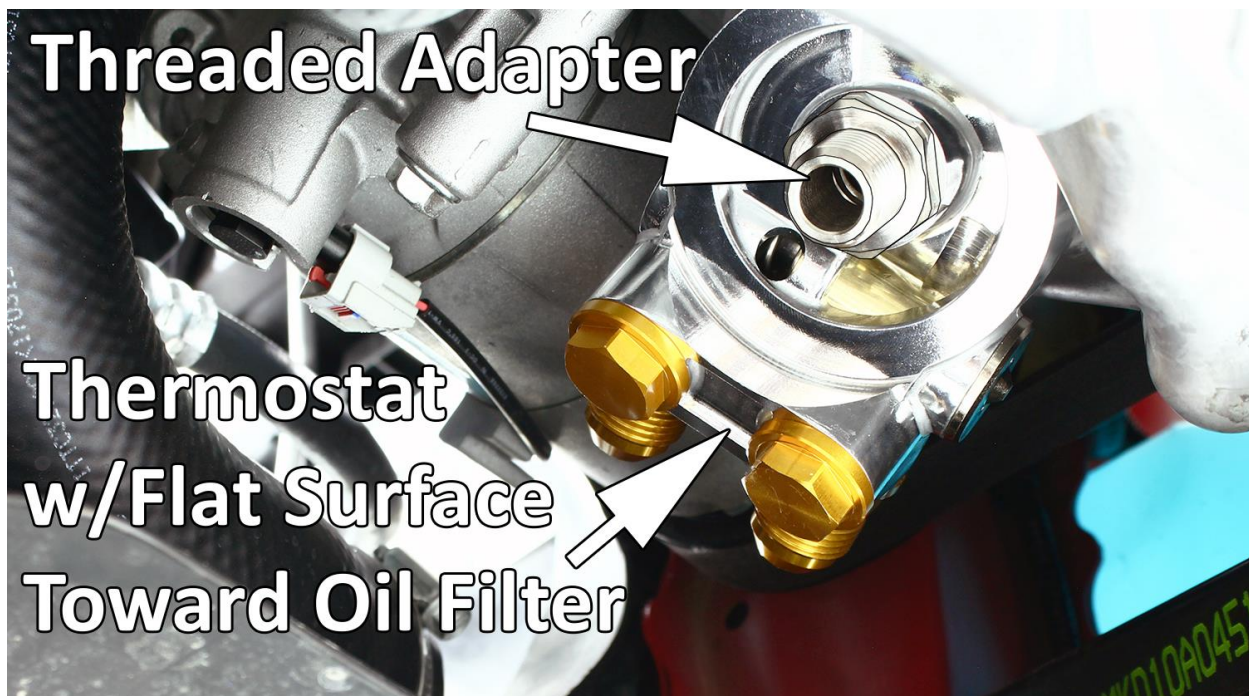


Ambient Air Temp
Sensor Shown With
Flattened Tab

8. Locate ambient air temp sensor mounted to back of bumper beam. Remove plastic fastener and pull sensor out of hole. Using pliers, bend down small tab so it is flat with bracket. Reinstall sensor back into hole and secure with plastic fastener, but point sensor down toward the bottom of the car. This is done to add clearance for the oil cooler hoses once oil cooler is mounted.



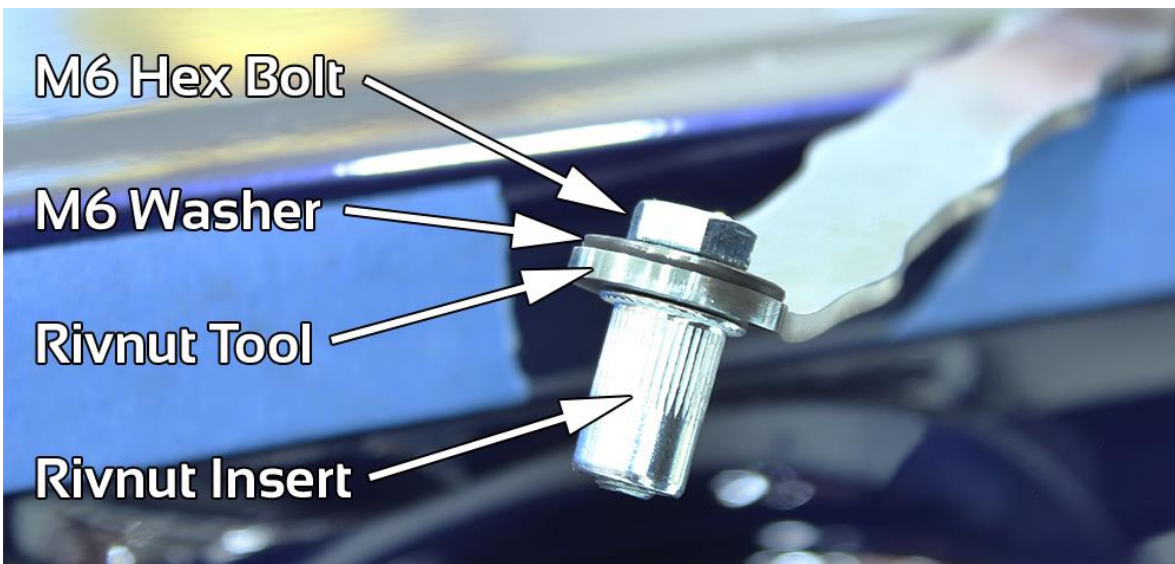
9. Locate and remove fasteners holding splash guard to chassis, then remove splash guard from car.
10. Remove oil filter from car and be prepared to catch oil that comes out during the initial removal and for the duration of the install. **NOTE: Letting the oil drip for 20 minutes is recommended so you are not dealing with a constant drip during the next few steps.**



11. While oil is dripping from oil filter area, install supplied thermostat as shown, making sure that the large O-ring is placed toward the block and the flat surface will be facing the oil filter. Install supplied threaded adapter through thermostat and onto threaded spud coming from engine. Only screw onto threaded spud a couple of turns to hold in place.
12. Use supplied M8x16 Button head screws to mount brackets to bottom of oil cooler as shown in pictures below. Center the brackets on core as best as possible, then tighten bolts.
13. Apply a small amount of oil to the male threads on oil cooler hoses. This is done to aid installation of them into the core.
14. Install longer hose into left side of core and shorter hose into right side of core. Fully tighten making sure that o-ring is not damaged on the way in. **NOTE: Take extreme care in threading into cooler to ensure you do not cross thread the fitting.**
15. Using a tape measure, locate the center of the bumper beam and make a mark as shown below. This mark is used to ensure oil cooler core does not protrude past this line during the next few steps and that a future additional oil cooler could be installed. The center of the beam can be found a few ways, but measure from one side to the other and dividing the number by two. Cross check the measurement by measuring from the opposite side. Also the center plastic fastener on the plastic engine cover removed in the first step can be used to locate the center of the bumper.
16. Set oil cooler with brackets installed onto bumper beam. Push assembly toward the rear of the car until it stops on the back of the beam, then move it to the left side of the car until it is roughly .500" away from the centerline of the beam.
17. Using a pencil or sharpie, reach through any one of the (4) holes and mark the location on the bumper beam. Set assembly aside. **NOTE: Do this step as accurate as possible as this will affect how the oil cooler fits to the bumper beam. And yes, you are only doing this to one of the (4) holes. The remaining (3) holes will be done in later steps.**

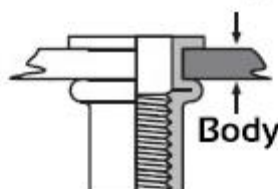


18. Verify you are roughly 3.00" away from the center line of the bumper beam, then drill your first 1/8" hole (or any small size close to this) using the most accurate center of the mark on your bumper beam. Move to the 25/64" drill bit and drill to final size.



19. Install (1) M6 fender washer onto M6x20 hex bolt, apply grease to threads and under head of bolt, install bolt through supplied tool, and install supplied M6 Rivet nut (with flange side facing tool). See picture above.
20. Install rivet nut fully into hole on bumper beam.
 - a. While holding tool and rivet nut tightly against the bumper beam, slowly tighten M6 bolt. **NOTE: You will feel some force on the wrench for the first couple of turns, then it will get much easier.**
 - b. Continue to tighten M6 bolt (while holding the tool steady) until the turning force becomes much harder, and/or stops. **NOTE: During this stage, the rivet nut is compressing and biting into the wing from the inside.**
 - c. Once the bolt/rivet nut have hit this stopping point, remove screw, washer, and tool and check that flange of rivet nut is sitting flush with the bumper beam.

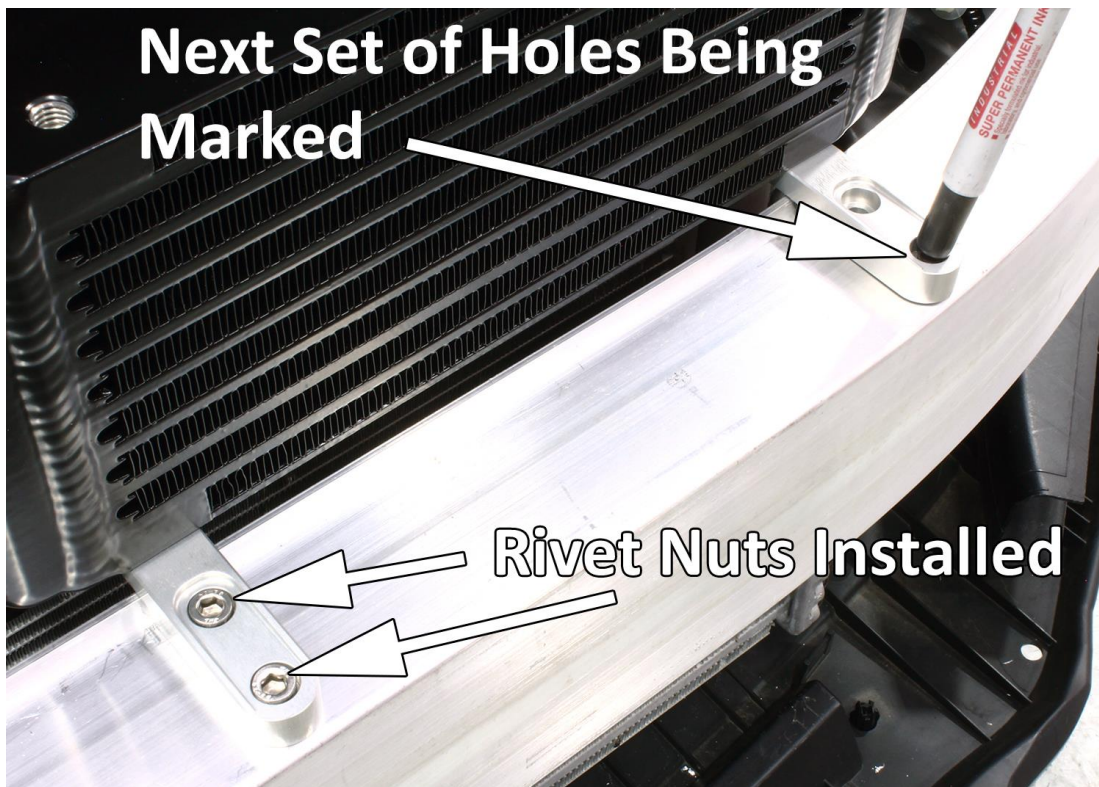
Rivet Nut Shown Compressed



Visual Representation Of When Tool Stops During Installation



21. Mount oil cooler to bumper beam using supplied M6x25 bolt and rivet nut installed into bumper beam.
22. Align oil cooler to bumper beam again, and using a pencil or sharpie, reach through any of the remaining holes in the brackets and mark the location on the bumper beam.
23. Follow the same above steps and install another rivet nut into the marked location. Repeat these same steps for the two remaining holes. **NOTE: If holes do not all line up during any of the above steps, loosen the (4) M8 bolts holding the brackets to the bottom of the oil cooler, reinstall M6x25 bolts and tighten brackets to the bumper beam. Use an M6 hex wrench and tighten oil cooler bolts from the bottom, then fully tighten into bumper beam. Once aligned, proceed with next steps.**





24. Locate area right side of car where large rubber air diverter is mounted to chassis and bumper beam. Determine if Option 1 or 2 is best for you.
- Option 1**-Remove rubber trim/diverter from car. This will require cutting a small portion away to allow part to be removed around AC pressure line, removing (4) plastic fasteners and maneuvering it around the bumper beam to remove.
 - Option 2**-Trim small area away just large enough to allow oil lines to pass through. This will require some trial and error with cutting out an area, running the hoses through it, and doing further trimming to ensure the hoses do not rub on trim.

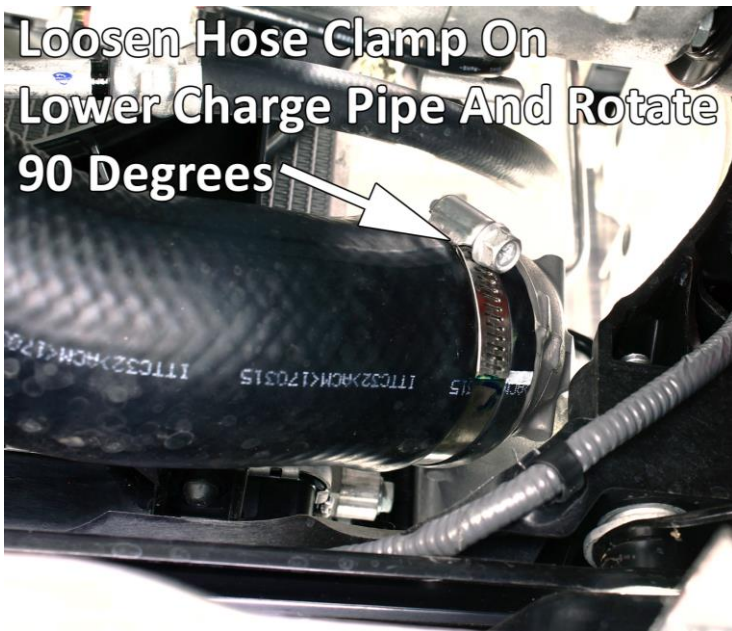


25. Using pictures above and below, route hoses through opening and toward thermostat.

Hoses Shown Routed Toward Thermostat



26. Locate hose clamp on lower charge pipe and loosen until it is free to spin. Rotate 90 degrees to add additional clearance for hoses. **NOTE: This is an important step as failure to add additional clearance can result in failure of hose and loss of oil.**



Loosen Hose Clamp On Lower Charge Pipe And Rotate 90 Degrees



Tighten Hose Clamp Using Wrench As Shown

27. Apply a small amount of oil to both male and female threads on thermostat and hoses.
28. Make sure hoses are routed in the smoothest way toward the thermostat and install each hose to their corresponding fitting but do not fully tighten.
- It does not matter which side connects to which hose, just that the routing is as smooth a line as possible.
 - In order to line up fittings, it will be necessary to rotate fittings in the hoses. This can be done with twisting the fitting while holding the hoses (this can be done at the oil cooler side as well).
 - Take extreme care to line up fittings together during this step or you may cross thread them and cause damage to both sides of fitting.
29. Simply hand tighten the threaded adapter in the center of the thermostat using a 27mm socket. During the next few steps, some adjustment will be necessary to the rotation of the adapter.



30. With oil lines and thermostat loose, start to tighten the fitting and thermostat to car while making sure that hoses and fittings are routed so they are not touching parts of the car. Before final tightening of the threaded adapter, rotating hoses and fittings will be needed until there is clearance around the hoses where they pass through the opening as shown below. Take note of these things below.
- The AC lines can be bent out of the way. Just make sure to bend them gently. There are three of them that get close to the hoses.
 - Take note of all non-movable things that come close to the hoses.
 - Use zip ties to secure hoses together to ensure they are pulled away from parts of the chassis and other items.



Rubber Trim/Diverter Shown Removed

- Fully tighten threaded adapter into thermostat and tighten to roughly 50ft-lbs. You will find it wants to spin a little as you tighten and make sure that it ends up aiming the fittings and hoses to the desired position that provides the most clearance for hoses.
- Install supplied oil filter hand tight.
- Before installing bumper and adding more oil, start car and let it run for at least 10 seconds, then shut it off. Check all connections to make sure there are no oil leaks. Start car again and let it run when you continue to look for leaks. If no leaks are found after roughly 1 minute of running, shut off and add the necessary oil that is required to show "full" on the dip stick. See service manual if you are unsure how to determine if it is full.
- Verify one last time that hoses have good clearance around all parts of the car. Using supplied rubber trim,
- Re-install the splash guard and bumper to the car in the opposite way it was removed. **NOTE: Take note that bumper fits under black plastic radiator cover and under the splash guard. Make sure to plug in fog lights while bumper is halfway installed.**

Questions, Comments and Suggestions Contact: Tech@PERRIN.com

Visit Our Website for Instant Chat Options at www.PERRIN.com

Call Our Tech Team at 503-693-1702