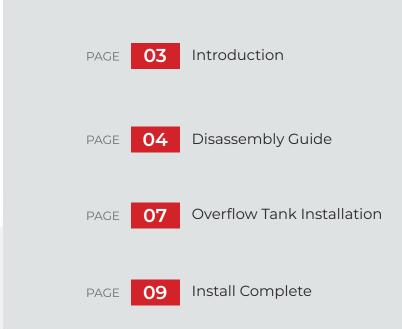


# RED ALPHA COOLANT EXPANSION TANK

Our Q60 and Q50 VR30 Red Alpha Expansion Tank increases the Red Alpha Heat Exchanger coolant capacity by an astounding 70% and the radiator coolant capacity by 28%! Our expansion tank is a super simple bolt-on upgrade engineered to enhance the overall efficiency of your vehicle's cooling system. The more fluid that is active in the system the easier it is to keep your ultra hot running 3.0L twin turbo ice cold. And you being an enthusiast, know that the cooler the intake charge is the more power you can make.

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### Introduction

The goal of Alpha Performance is to provide the highest quality, best performing products available. By utilizing research and development, and rigorous testing programs Alpha Performance will never compromise the quality or performance of our products. In addition, Alpha Performance will only provide the finest customer service offering only parts and advice that are in the best interests of the customer. Alpha Performance was built on a foundation of integrity. This is who we are; this is what you can count on.

A vehicle modified by the use of performance parts may not meet the legal requirements for use on public roads. Federal and state laws prohibit the removal, modification, or rendering inoperative of any part or element of design affecting emissions or safety on motor vehicles used for transporting persons or property on public streets or highways. Use or installation of performance parts may adversely affect the drivability and reliability of your vehicle, and may also affect or eliminate your insurance coverage, factory warranty, and/or new OEM part warranty. Performance parts are sold as-is without any warranty of any type. There is no warranty stated or implied due to the stresses placed on your vehicle by performance parts and our inability to monitor their use, tuning, or modification.

These instructions are provided as a guide only as there are many variables that cannot be accounted for concerning your particular vehicle, including but not limited to model year differences, model differences, the presence of non-OEM parts, and modifications that may already be or were previously installed. A basic knowledge of automotive parts and systems is helpful but a better understanding of the parts and systems on your particular vehicle may be required.

If you have any questions or issues at any time during the installation of your Alpha Performance product(s) please call us for technical assistance. The Alpha Performance tech line can be reached during business hours at 847-709-0530 for Alpha Performance products only.





#### Dissasembly

Caution: Make sure vehicle has cooled down before removing the radiator caps. Slowly remove the cap to relieve any built up pressure in the system. The cooling system may be hot and under pressure!

**01.** Remove the front core cover / air duct from the car.





**Note:** You will not completely need to drain the system. It is recommended to have hose pitch pliers in order to do it. If not, some draining will be necessary.

**02.** Relieve the pressure on both the radiator and intercooler expansion tanks. Reinstall the caps. Use a hose pinch tool on the small top bleeder hose and remove the clamp. Remove the hose and pull the hose off to the side.







**03.** Remove the two 10mm nuts holding the radiator expansion tank down and pull it over to the side. Use another hose pinch tool on the lower hose connected to the bottom of the expansion tank. There will still be coolant in the tank so be mindful when moving it around.





**04.** Remove the clamp and carefully slide the hose off. Do so as you till the expansion tank backwards to avoid coolant loss. There will be some coolant spill, just use clean water to rinse the excess coolant down and it will dry on its own. Save the coolant in the expansion tank and it can be reused.







**05.** Remove the two 10mm nuts from the smaller coolant expansion tank. Then remove the two 10mm bolts holding the black mounting bracket in place and remove the bracket.





**06.** With the bracket removed and the expansion tank loose, it will be easier to remove clamp and hose from the expansion tank. Drain the coolant from the tank. You can do so by drawing it out the top or by draining from the OEM drain under the right front bumper area.

**Note:** Be careful not the drain too much coolant from the OEM intercooler system drain. If too much is drained out, the entire system will need to be drained to properly bleed it using an air lift system. Watch the reservoir and only drain until all the coolant is gone from the tank. It will not take much.









**07.** The OEM clamp on the smaller intercooler tank can be difficult to work with. If you have access to specialize hose clamp tools, you can reuse it. If not, a standard #10 hose clamp has been provided to help with installation. Remove the OEM clamp and install the #10 hose clamp facing the direction shown.





**08.** Set the new Red Alpha Coolant Expansion Tank in place and connect the smaller radiator side hose first. Once connected, set the coolant expansion tank in place and align the larger intercooler hose. Once in place, reinstall the OEM clamp or tighten the supplied #10 clamp. Use an extension and 5/16" socket to access the #10 clamp from the passenger side air box area.







**09.** Reuse the two 10mm bolts removed with the black OEM expansion tank bracket and bolt the Red Alpha Expansion Tank into place. Reattach the small top bleeder hose.





**10.** Reinstall the cowl cover / air duct and fill the coolant expansion tanks. Fill both tanks half way up. The tank measures 4" from the bottom of the tank to the bottom of the filler neck. Use a stick and measure out 2" from the end. Use this as a gauge to measure the fluid level. Run the car for a minutes and recheck the fluid level. Drive the vehicle for a full drive cycle and let cool completely. Recheck again once at ambient temperature, adjust as necessary.

#### 11. Enjoy!!



