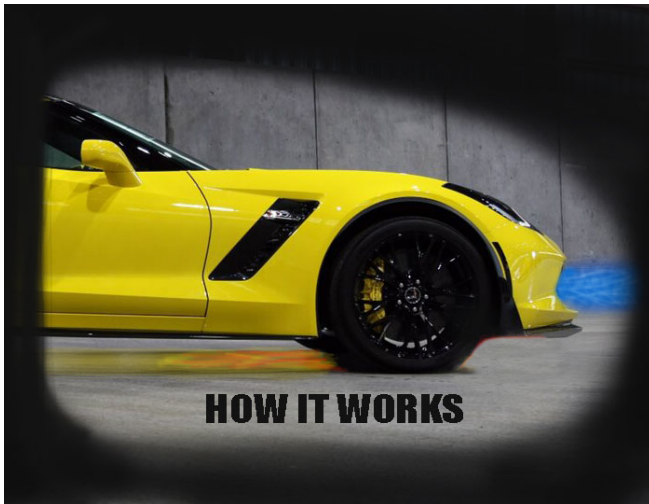




## C7 Corvette (32-TC) Combination cooler

DeWitts new combination cooler is custom designed to fit under the front fascia and mount in the same area as the automatic transmission cooler. By trimming a small portion of the radiator shroud we are able to fit a taller unit in this location and use the original mounting hardware. This package features two independent heat exchangers for cooling two of three possible fluids.



The key to this concept is to add additional cooling performance and exhaust that heat under the car. The use of highly efficient heat exchangers, baffles, and vents make this kit the solution to fluid temperature faults.

The kit is easy to install, and it does not require any external body changes or fascia removal. Factory style quick connect fittings make plumbing a snap and high-pressure oil hoses feature o'ring seals and thermal insulation wrapping.

DeWitts new combination cooler is available in three (3) different configurations and the following instructions vary based on the kit you purchased and your vehicle options. The available configurations options are as follows:

(TO) Transmission/Oil: This kit is designed for automatic transmission (A8) models. The existing transmission cooler will be removed and replaced with the dual cooler unit. One section will be used for the transmission and the other will be used for engine oil cooling. The factory oil cooler located near the oil filter will be removed and replaced with an adapter with a built-in thermostat.

(TC) Transmission/Coolant: This kit is like the above kit except the factory oil cooler will remain in place. The second section of this combination cooler will have 5/8" beaded hose connections for tapping into the coolant from the oil cooler return.

(OC) Oil/Coolant: This kit is for manual transmission optioned cars that do not need a transmission cooler. Unlike the above two kits that use an existing mounting, the cooler is used as a template to mark and drill the mounting holes.



## 32-TC INSTRUCTIONS

1. Disconnect the battery.
2. Remove coolant fill cap.
3. Raise vehicle on lift.
4. Remove lower underbody air deflectors. (See figure 1 & 2 for options)
5. Open radiator petcock and drain radiator.
6. Remove C-clips on transmission cooler lines and disconnect hoses. Automatic (A8) models only. See figure 3. Plug lines to limit fluid loss and leakage.
7. Remove (4) four 10mm transmission cooler screws and remove cooler. A8 models only. Drain cooler into clean container for reuse.
8. Using a hacksaw blade or similar tool, cut plastic shroud as shown in Figure 5 through Figure 10. See Figure 6 for suggested tools.
9. Manual transmission models only, use cooler as a template and mark mounting hole location. Drill (4) four 3/8" mounting holes and attached mounting brackets.
10. Install aluminum baffle (Figure 11) and secure with the supplied self-tapping screws or pop-rivets as shown in Figure 12.
11. Install self adhesive foam seal to baffle.
12. Pre-fill the new transmission cooler section with the correct model ATF. (Note) Be sure to check your year and model for the correct fluid. This system will require an additional 10 ounces of fluid, more if fluid is spilled or lost. Plug ports.
13. Locate new cooler into opening. Be sure to slip front tab onto plastic edge.
14. Use existing (A8 models) bolts to mount combination cooler in place.
15. Remove two (2) hose clamps. (Figure 13)
16. Re-route hoses as shown in Figure 14. Factory hose can be re-used if desired.
17. Connect supplied hose to remaining metal ends and secure with supplied clamps.
18. Refill coolant as necessary.
19. Reinstall radiator cap.
20. Connect battery cable.
21. Run engine briefly and check for leaks.
22. Modify air deflector (Figure 15) and re-install.
23. Install aero separator if applicable

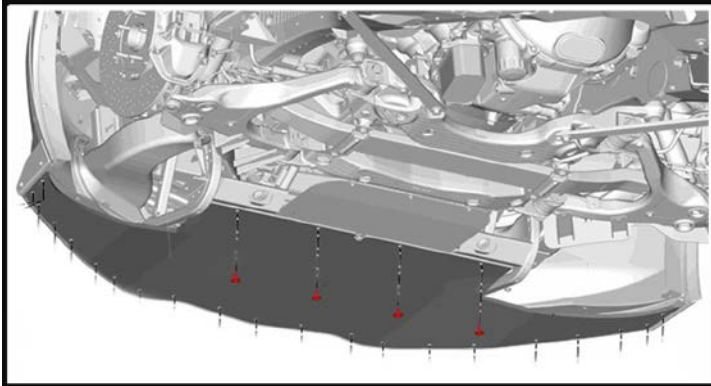


Figure 1 Stage 2/3 Separator deflector

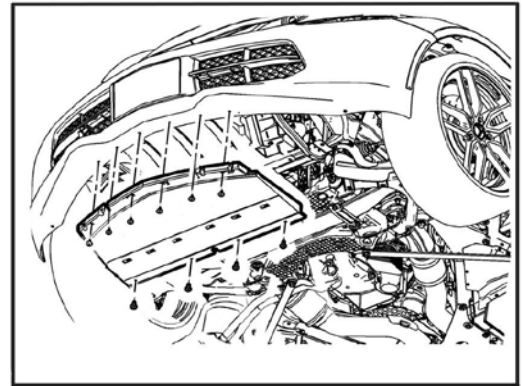


Figure 2 Underbody deflector

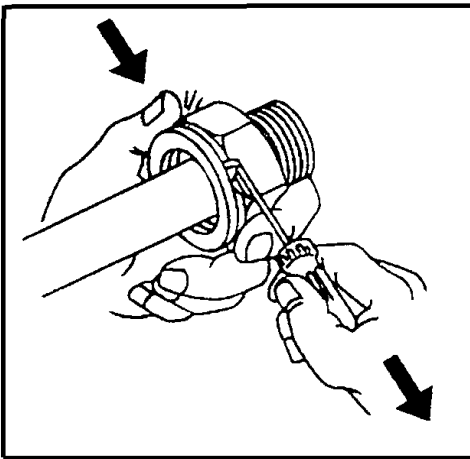


Figure 3 OE Quick connect fittings

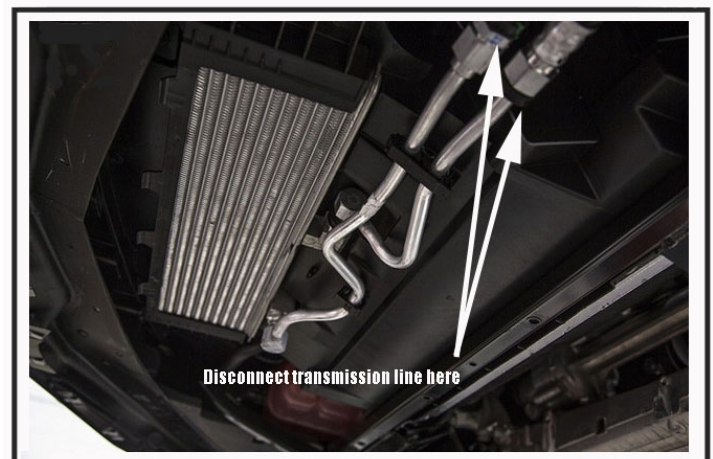


Figure 4 OE Automatic transmission cooler

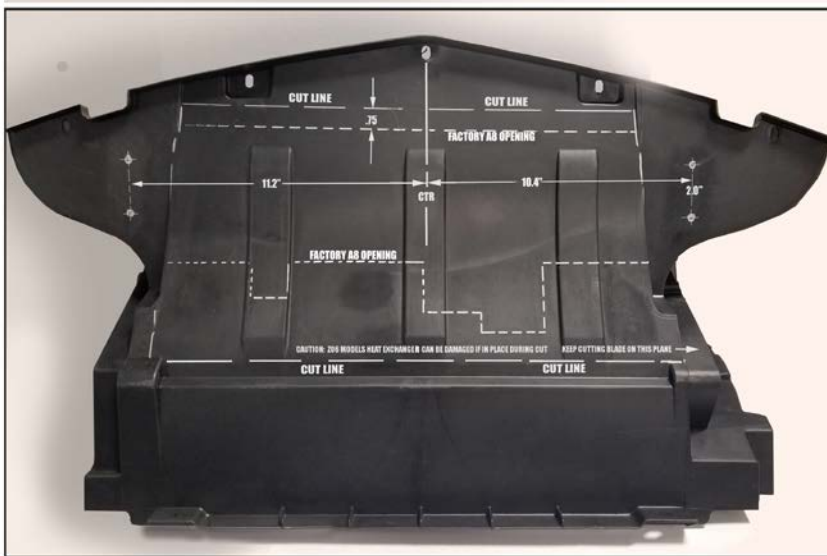


Figure 5 Main Radiator Duct



Figure 6 Tools

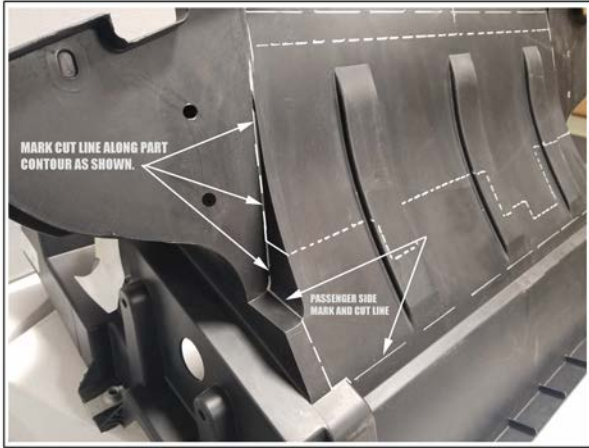


Figure 7 Passenger side

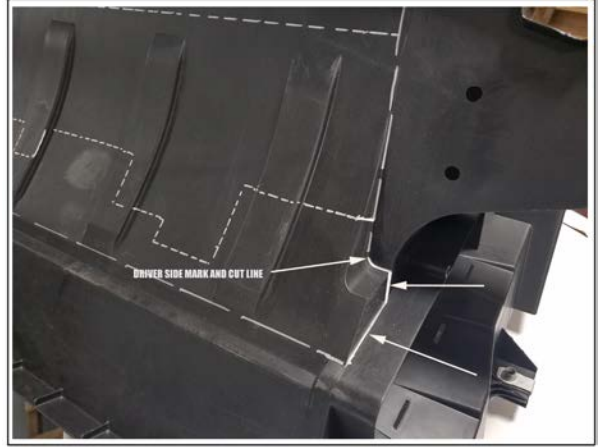


Figure 8 Driver side

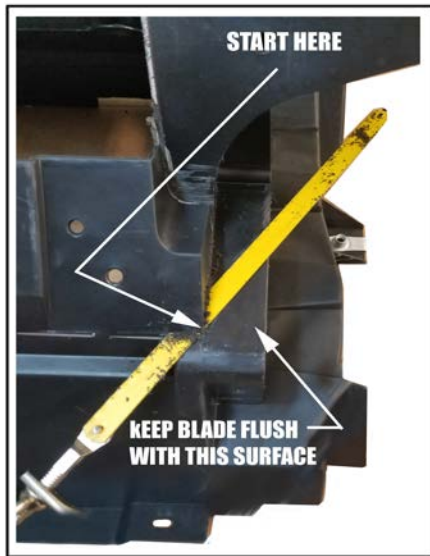


Figure 9 Cutting Instructions

CAUTION: Z06 models with supercharger use extra care so the cutting blade does not damage the heat exchanger. Keep the cutting blade parallel with the heat exchanger at all times and limit the amount of blade on inside edge.



Figure 10

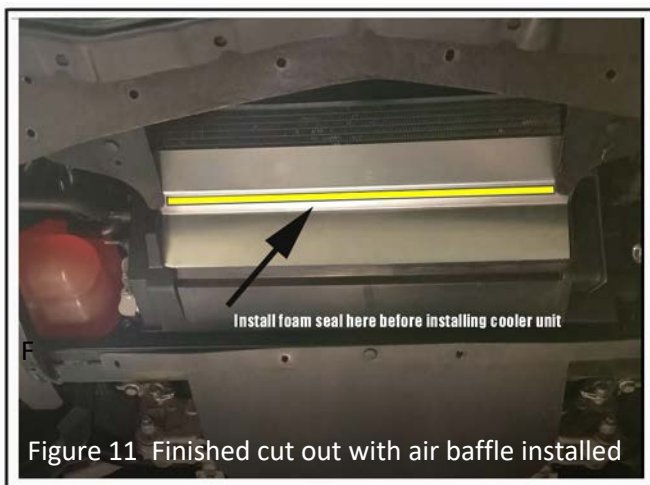


Figure 11 Finished cut out with air baffle installed



Figure 12 Fastener



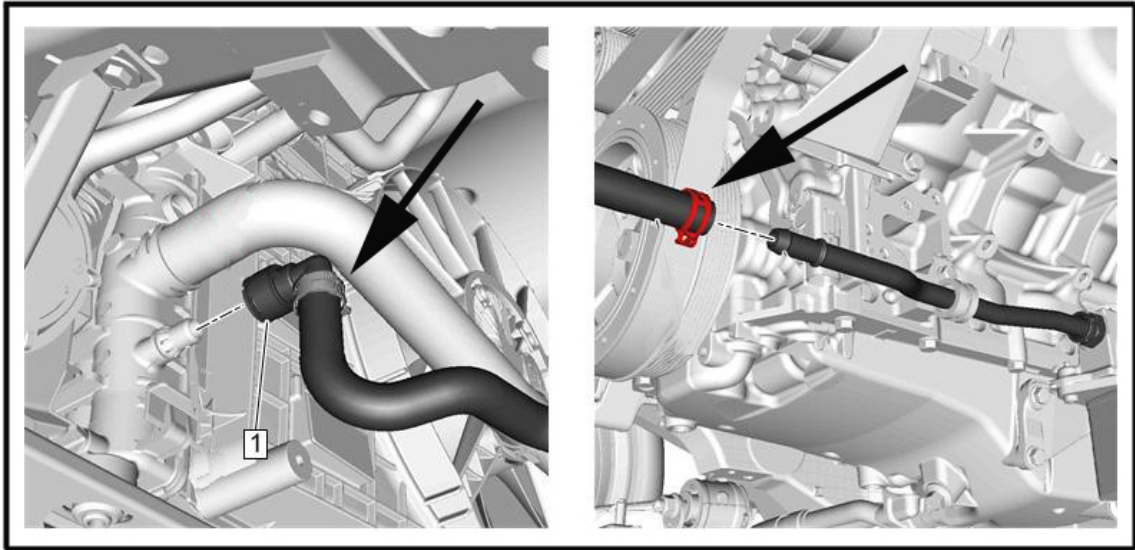


Figure 13 Oil cooler coolant return hose

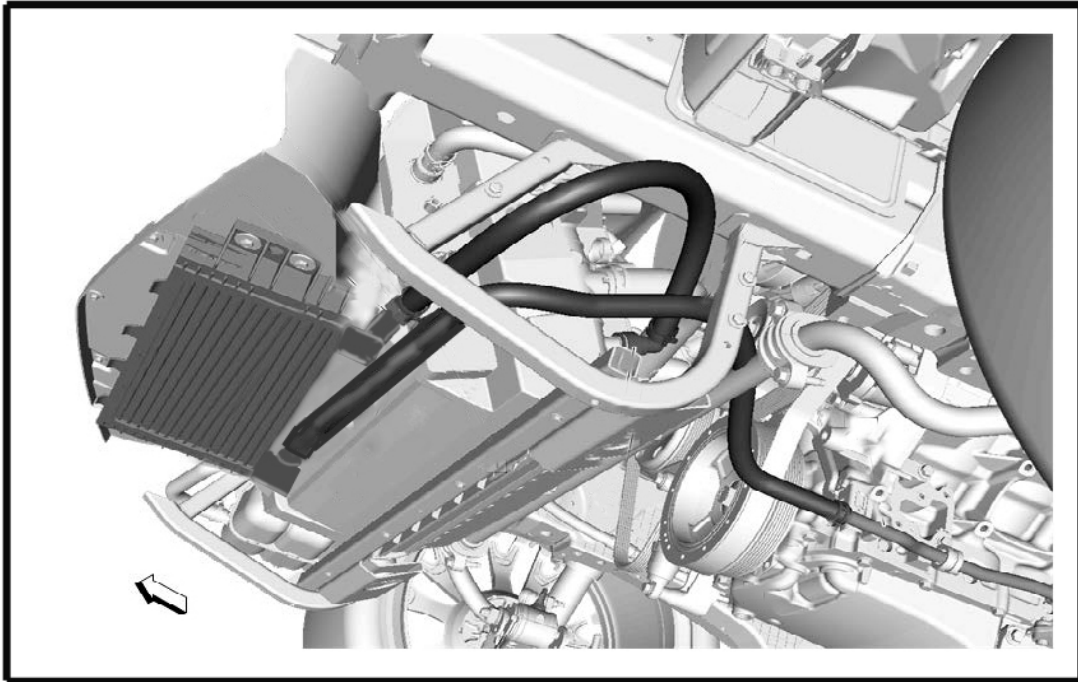


Figure 14 New hose routing



Figure 15 Air deflector modification. Remove the four (4) inner most ribs as shown



Figure 16 Underbody Air deflector

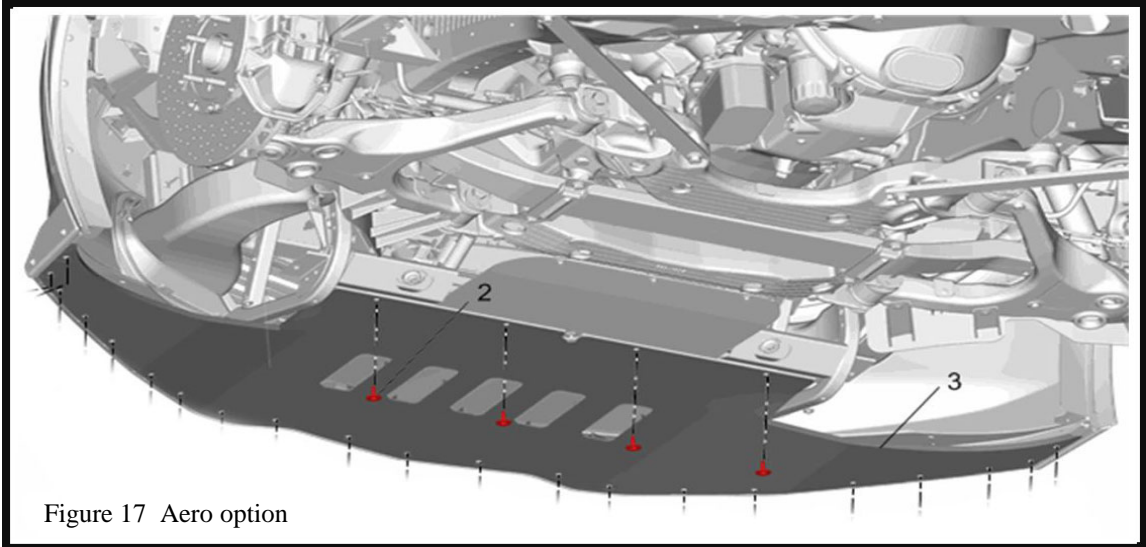


Figure 17 Aero option