

**OIL COOLER DUCT
INSTALLATION NOTES**

1. The photos in this document show the preferred method of installing any of the three different (0 deg., 45 deg., 90 deg.) style oil cooler air inlet duct kits made by Airflow Systems.
2. Every aircraft is slightly different so this document serves a generic guide to installation. In every case the goal is to provide the maximum air pressure, evenly distributed, over the face of the oil cooler with minimal drag.
3. Each kit comes with the air duct made from composites to shapes verified by computerized flow analysis (see Fig. 1 and 2) and flow bench testing. If there is a flow diverter in your duct it is there for a reason, please do not remove it.

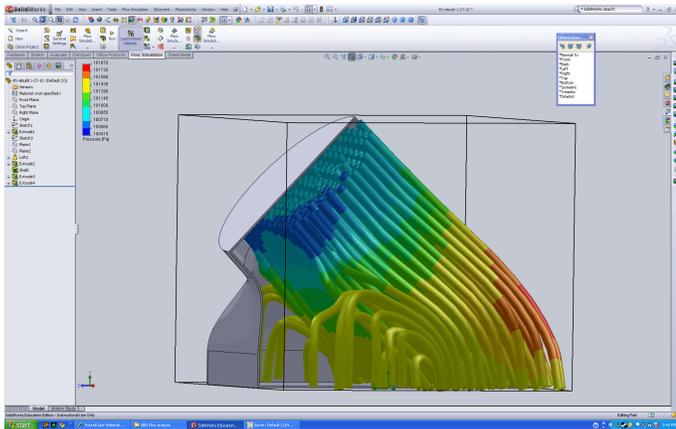


Figure 1. Flow without Deflector

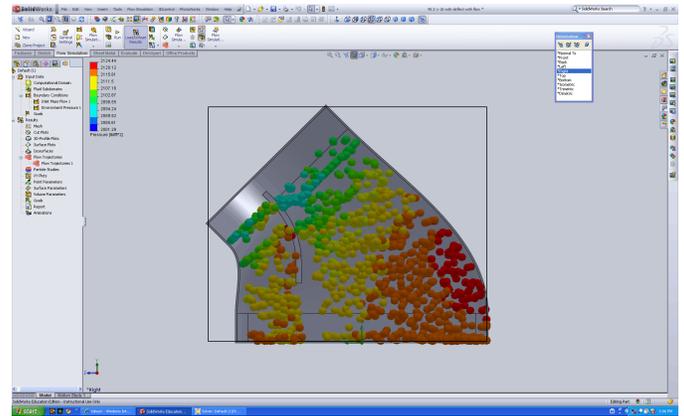


Figure 2. Flow with Deflector



Figure 3. Duct brackets installed. Bolts and compression tubes shown are supplied with Airflow Systems oil cooler installation bracket kit, Part# ASHX-030-45 or -90

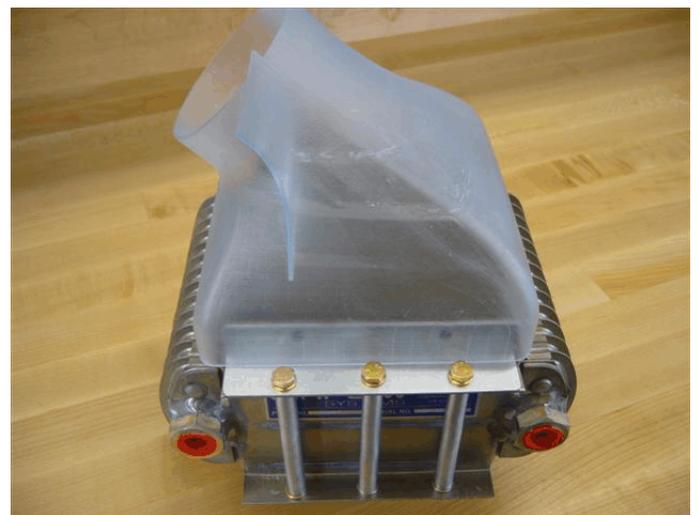


Figure 4. Duct positioned over brackets for trial fit. Make sure both bracket flanges are inside the duct. Clear duct used for illustration.

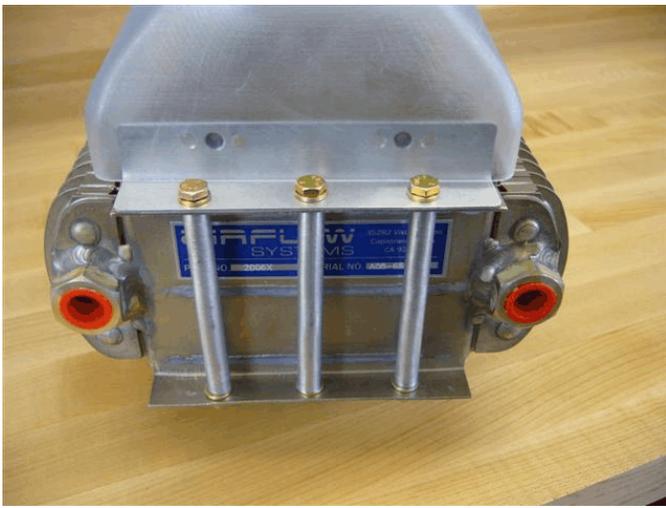


Figure 5. With duct in position, mark position of first two mounting holes. Temporarily install two of the supplied AN-3 bolts and drill two opposite mounting holes.

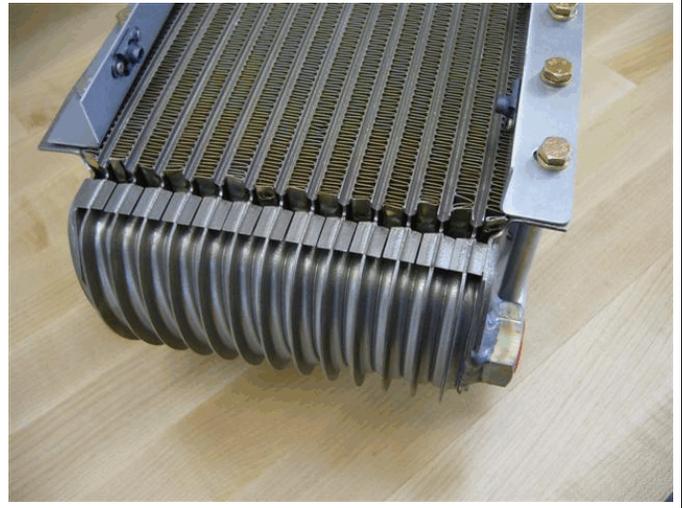


Figure 6. Remove duct and locate side of cooler as shown. Leave mounting brackets installed.

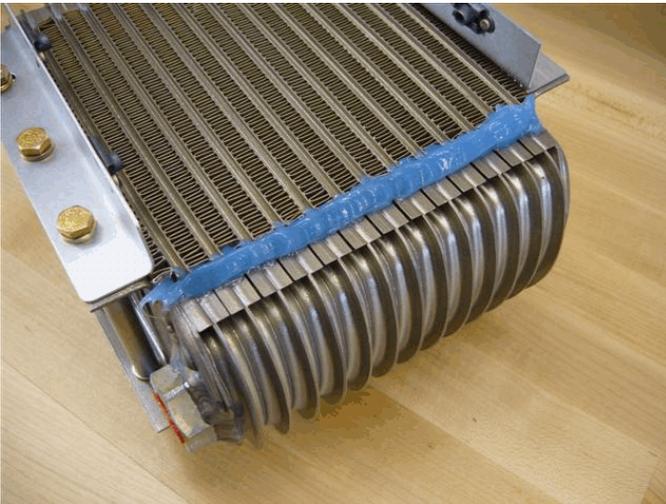


Figure 7. Fill the gap between the fin group and the end tanks with high temp RTV to form a gasket that will seal the bottom of the duct and the air gap completely.

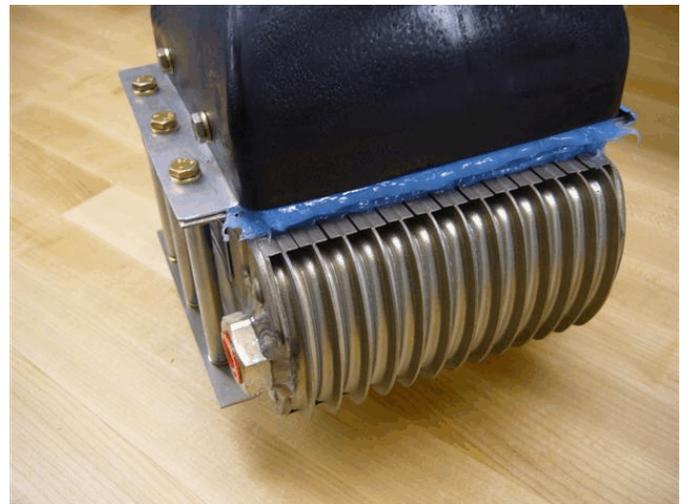


Figure 8. We recommend letting the RTV cure prior to final installation of the duct to avoid disassembly problems in the future.



Figure 9. With RTV cured the duct may be attached to mounting brackets. Visually check for air gaps and fill with RTV.

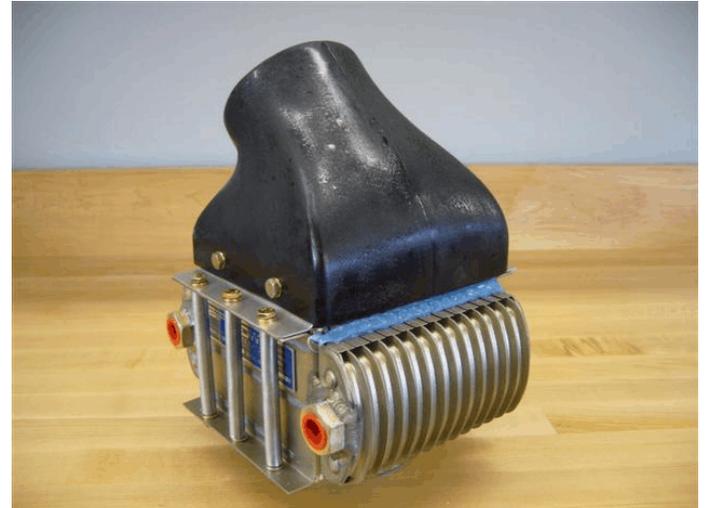


Figure 10. The oil cooler and air duct are now ready for installation on your aircraft.