# Radiation Air Box Installation Instructions



A detailed Step by step process including photos to make installation a snap!





### Just a few things **BEFORE YOU START**

#### **Notes:**

Radiators have many different sizes and core dimensions. We designed this air box to be versatile enough to adapt to the radiator sizes most commonly used in racing. The Radiator Framework is designed to be mounted on radiator core flange. It can also be fitted to the outer tanks with minor alterations. We recommend using Five Star brand 3/16" rivets where fasteners are required. Through aero testing and expert advice, we found no correlation with air flow/downforce gains on the inside of short track radiator ducting. There are gains with this duct. Having a flat base/bottom, it will act as a pan for added aero. Individual replacement parts are in stock and can be purchased.

#### List of Individual Components:

- · Radiator framework (2 pieces)
- Nose Air Inlet
- Lower Base
- Top Left Piece
- Top Right Piece
- Inspection Plate

#### **Recommended Tools & Fasteners:**

- Jig Saw w/coarse blade (e.g. 9 tooth blade)
- Tin snips
- 3/16" Rivets & Backup Washers
- 2" width masking tape
- Tape Measure
- Drill with 3/16" bit
- Pencil/marker (silver or white)
- 3/16" Clecos
- 4 Vice Grip style clamps









### STEP 1: Installation of the RADIATOR FRAMEWORK

- **1.A:** Framework is angled right to accommodate radiator offset.
- **1.B:** The framework height is non-adjustable but the width is oversized and will need to be measured and cut to fit.
- **1.C:** After both pieces of the framework are cut to fit, they need to be attached to each other at both ends. Drill 2 holes on top and bottom of the frame and rivet together.
- **1.D:** Drill mounting holes from frame to radiator flanges on top and bottom. Two to four locations are recommended on both top & bottom. Fasteners recommended are either rivets or nut & bolt.



### STEP 2: Installation of the **NOSE AIR INLET**

- **2.A:** Slide nose air inlet over return flange on the nose's radiator air opening.
- **2.B:** Clamp securely in place.
- **2.6:** Drill rivet holes through nose and air inlet. This piece can be riveted through the front of the nose or on the inner return flange. Hole spacing can be roughly 5".

## STEP 3: Installation of the **LOWER BASE**

**3.A:** The Lower Base comes oversized. When mounted it can be trimmed to fit the shape of the box or can be left oversized to act as under-nose air panning (see your rules on underpanning).

**3.B:** Make sure nose front overhang does not exceed 46".

**3.C:** Make sure strengthening ribs on base piece face up.

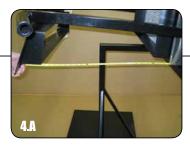
**3.D:** Set base length by measuring from the nose air inlet extension to the radiator frame. Trim front and back sides of base to fit and clamp in place. (Notching may be required around radiator mounts.)

**3.E:** Drill & temporarily cleco base to nose air inlet and radiator frame. (Rivet into place when entire duct is fitted together).



















## STEP 4: Installation of the **TOP LEFT PIECE**

**4.A:** Take same measurement as in step 3.D to set the bottom length of the Top Left Piece.

**4.B:** Measure from the same point on the air inlet to the top corner of the radiator frame.

4.C: Fit & trim front portion of the Top Left Piece to nose air inlet. Drill and cleco into place.

**4.D:** The Top Left Piece is extra long when placed up to the radiator. Trim & fit to radiator frame, keep cut line close to radiator. Notch return flanges on top to fit along radiator frame and nose air inlet.

**4.E:** Drill & temporarily cleco to base, nose air inlet and radiator frame. (Rivet into place when entire duct is fitted together).



#### STEP 6: Installation of the **INSPECTION PLATE**

**6.A:** Place aluminum inspection plate in place in the mounting recess on the top left piece

**6.B:** Drill & rivet the four corners of the plate to the top piece. (Some may prefer to use 4 Dzus fasteners insead of rivets for repeated easy removal.)

PLEASE FEEL FREE TO CONTACT US **DURING OUR BUSINESS HOURS OF** M-F 7AM-5PM, CST WITH ANY INSTALLATION QUESTIONS YOU MAY HAVE. OUR SALES/TECH STAFF **WILL BE GLAD TO HELP YOU!** 262-877-2171

#### STEP 5: Installation of the TOP RIGHT PIECE

**5.A:** Take same measurement as in step 3.D (this time on the right side). This is to set the bottom length of the Top Right Piece.

**5.B:** Measure from the same point on the air inlet to the top corner of the radiator frame.

**5.C:** Use caution when matching the Top Left Piece with Top Right Piece. Make sure the top radius on each side aligns.

**5.D:** Fit & trim front portion of the Top Right Piece to Nose Air Inlet. Drill and cleco together.

**5.E:** Fit & trim rear portion of the Top Right Piece to radiator frame. Drill & cleco together.

**5.F:** Remove top right piece.

**5.G:** Apply 2" masking tape to Top Left Piece along bottom edge of radius on the mounting

**5.H:** Place Top Right Piece back in place and cover existing tape line with another strip, overlapping the top right piece. Make sure the tape lines match up exactly as this will be the reference line for the finish cut.

**5.1:** Remove Top Right Piece with tape applied to it. Cut along tape line. When cut, the top right piece should lie perfectly into mounting recess on top left piece.

**5.J:** Drill & temporarily cleco to Base, Nose Air Inlet and Radiator frame (Rivet into place when entire duct is fitted together).

