

The diagram shows two stages of a wing skin repair. In the top stage, a patch is being aligned with the wing skin. Labels include: "1.5\" or 3\" Hose" pointing to a hose used for adhesive application, "Hose Clamp" pointing to a clamp on the hose, "1/8\" Rivets" pointing to the rivets securing the patch, and "Outside Surface Skin" pointing to the main wing skin. In the bottom stage, the patch is fully secured. A label "Apply Adhesive To Flange Prior To Riveting" points to the adhesive application step. The "Outside Surface Skin" label is also present.

PI15, PI20, and PI30 NACA Inlets Assembly/Installation instructions

The PI15, PI20 AND PI30 NACA inlet kits allow the quick and easy assembly and installation of an efficient NACA inlet scoop. The best method of obtaining inlet air into your aircraft is with a NACA inlet kit. Follow these step by step instructions for assembly and installation.

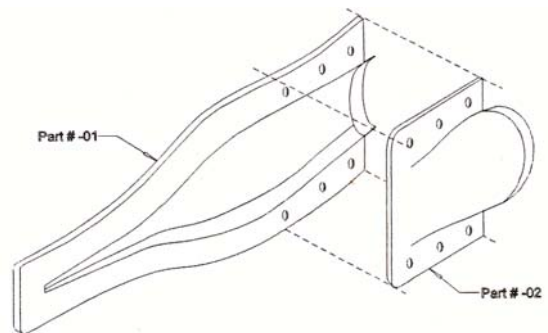
Kit Contents:

<u>Quantity</u>	<u>Item</u>	<u>Part Number</u>
1 each	Assembly/Installation Instructions	160900-01
1 each	Inlet Main Body	160915-01 or 160920-01 or 160930-01
1 each	Inlet Outlet Body	160915-02 160900-02
1 each	"Cut-out" Templates	or 160900-03

Assembly Instructions:

- 1.0 Locate the -01 and -02 components. Trial fit the two parts making sure the round outlet face is flush.
De-burr and trim as necessary.

Caution: Care should be exercised when working with fiberglass/epoxy components. epoxy resin and sanding dust can cause an allergic reaction. When epoxing components they must be clean and free of oils and residues.

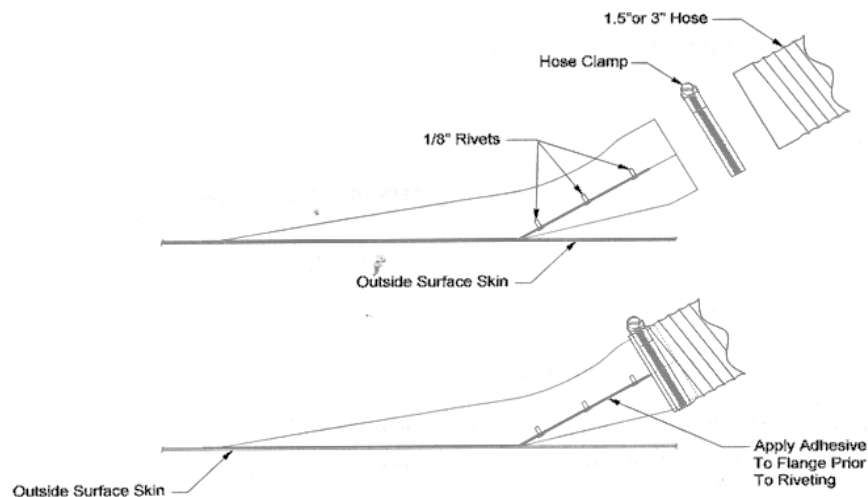


- 2.0 Lightly sand the mating surfaces of the two components with #150 grit or finer sandpaper.
- 3.0 Clamp the two components together and check to insure the outlet face is flush. When the Inlet Assembly is installed the outlet will have a hose attached to it. Therefore, the flange must be cut back from the outlet face. Mark the two flanges 1 1/4 inches from the end. Cut away the two flanges. Smooth and round the edges where the cuts were made.
- 4.0 Pilot drill six holes for 160920 and 160930 or four holes for 160915 to accept 1/8 inch "pop" rivets (not supplied). These rivets should be located at least 1 inch apart and centered on the flange. Final drill holes to size.



- 7.0 Lightly sand the mating surfaces with #150 or finer sandpaper.
- 8.0 Clean the mating surfaces with epoxy thinner, lacquer thinner, or MEK.
- 9.0 Mix a small amount of epoxy (not supplied) and coat both mating surfaces of the components.
- 10.0 Install the inlet with “pop” rivets. The installation is now complete. Allow epoxy to cure for 24 hours.

- 5.0 Separate the parts and de-burr the rivet holes. Final inspect the components and clean the mating surfaces with epoxy thinner, lacquer thinner, or Methyl ethyl Ketone (MEK).
- 6.0 Mix a small quantity of epoxy (not supplied) and coat both mating surfaces of the components. Mate the two components and install the rivets. Allow Inlet to cure for 24 hours.



- 1.0 Locate area for the installation of the NACA Inlet.
Note: Insure that when installation is complete there is sufficient room around the outlet to allow the attachment of a hose and clamps.
- 2.0 Mark a centerline where the inlet is to be installed (see "Cut-out" Template Part #160900-02 or -03).
- 3.0 Cut out "Cut-out" Template. Locate the template on centerline. Mark cut-out on surface.
- 4.0 Cut inlet area as marked. De-burr and trial fit inlet. Trim as required.
- 5.0 Hold inlet in proper position and pilot drill a rivet hole. Note that seven rivets 160920 and 160930 or sex rivets for 160915 should be planned (not supplied). Minimum separation should be 1.5 inches for 160920 and 160930 and 1 inch for 160915. Install a Cleco in the pilot hole. Locate and pilot drill additional holes.
- 6.0 Final drill all 1/8 inches rivet holes. Remove Inlet and de-burr holes.



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PI20 NACA INLET TEMPLATE

