

Installation instructions for Supplemental RV-10 Engine Baffle Kit

Read through Van's engine baffle kit instructions completely prior to using these modification instructions. Before starting this modification, build Van's baffle according to their instructions until you reach the trimming and bending of the forward CB-1010A & CB-1002A air ramps.

Note: Installation of the Show Planes (SP) cowling must be completed prior to finishing the engine baffle installation.

Read complete instructions prior to starting this modification.

Trim off the forward portion of the CB-1010A air ramp at the forward edge of the CB-1010B stiffener per Fig 1.

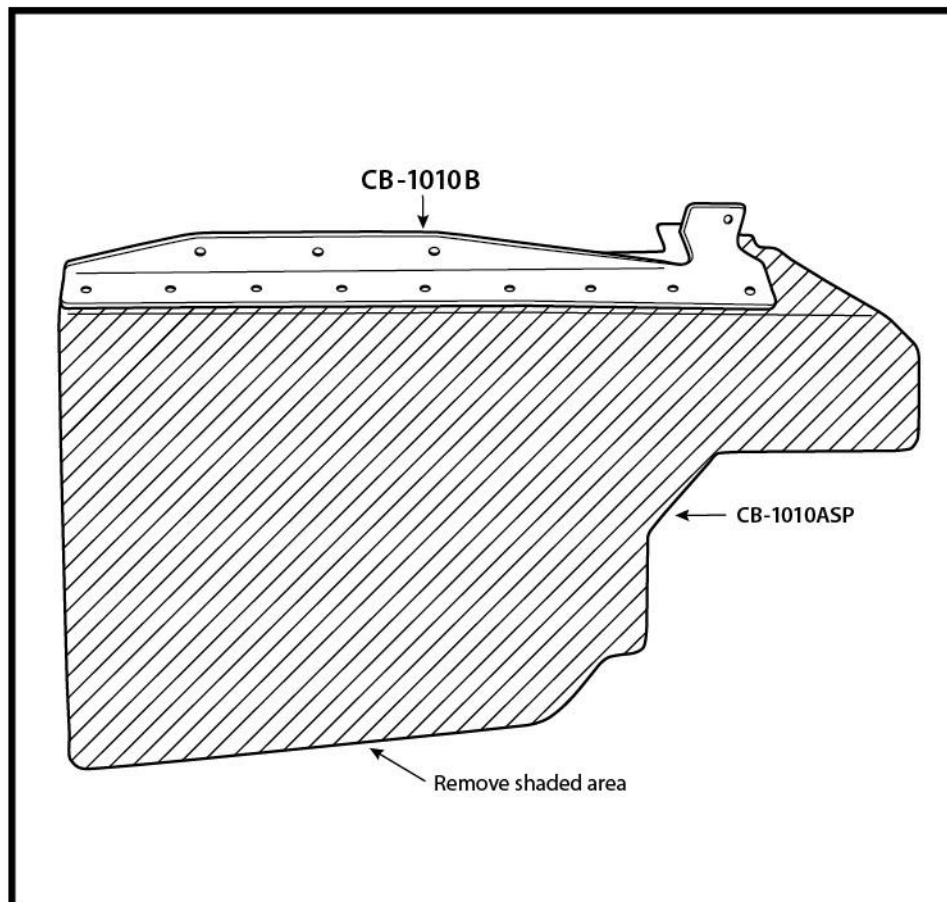


Fig 1

Trim off the forward portion of the CB-1002A air ramp at the forward edge of the CB-1002B stiffener per Fig 2.

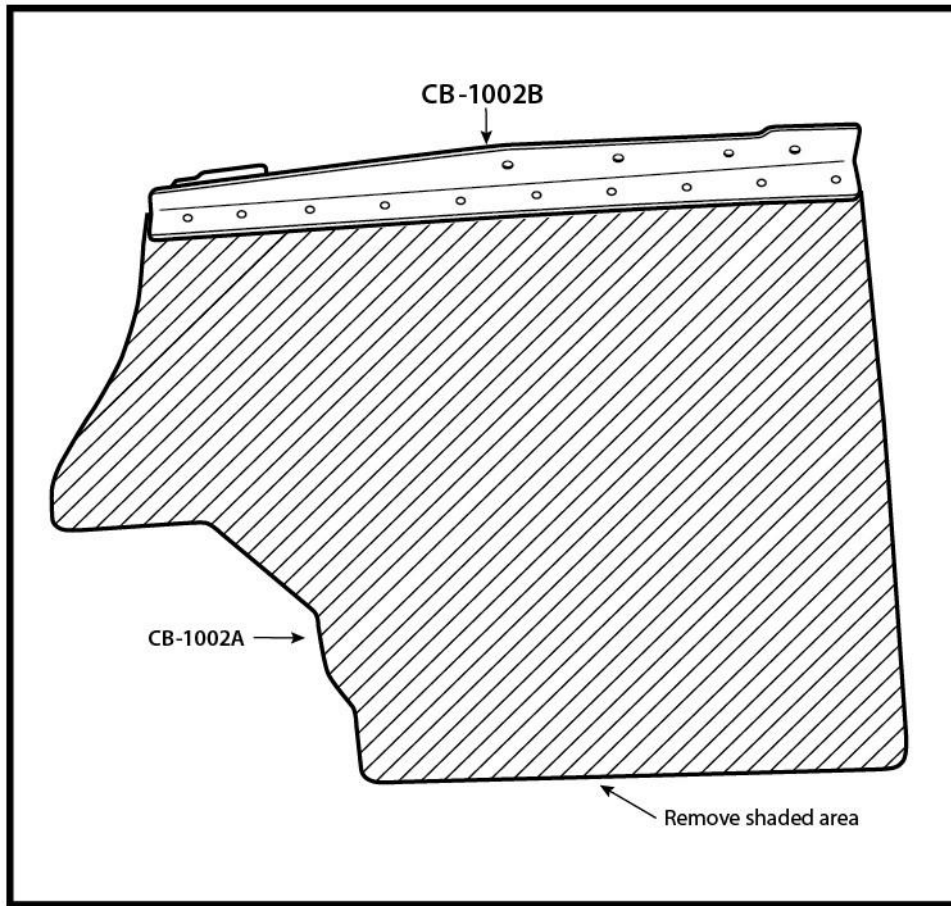


Fig 2

Trim off the forward portion of the CB-1010D support basket per Fig 3.

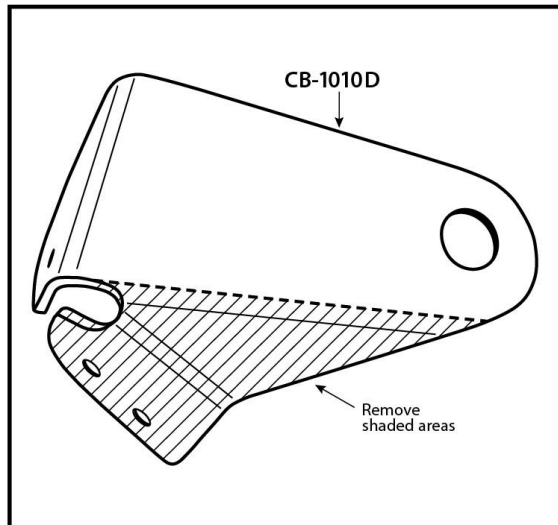


Fig 3

With the lower portion of the SP cowling installed, trim the forward end of the CB-1009A & CB-1003A cylinder baffles just short enough to fit on the engine without contacting the cowl.

After the CB-1009A and CB 1003A have been trimmed to fit within the lower cowling, bend each baffle 5 degrees outward at the pre-punched notches shown in Fig 5&6. Install the CB-1009A and CB-1003A baffles; they should now sit just outboard of the cowling air intake openings per Fig 4.

Use a straight edge at the lower to upper cowl split line identified by the beginning of the joggle on the lower cowling. Then make a reference mark on the cylinder baffle and at the aft edge of the cowling inlet per Fig 4. Repeat this process for the opposite baffle; this will be used to locate the fwd air ramp location.

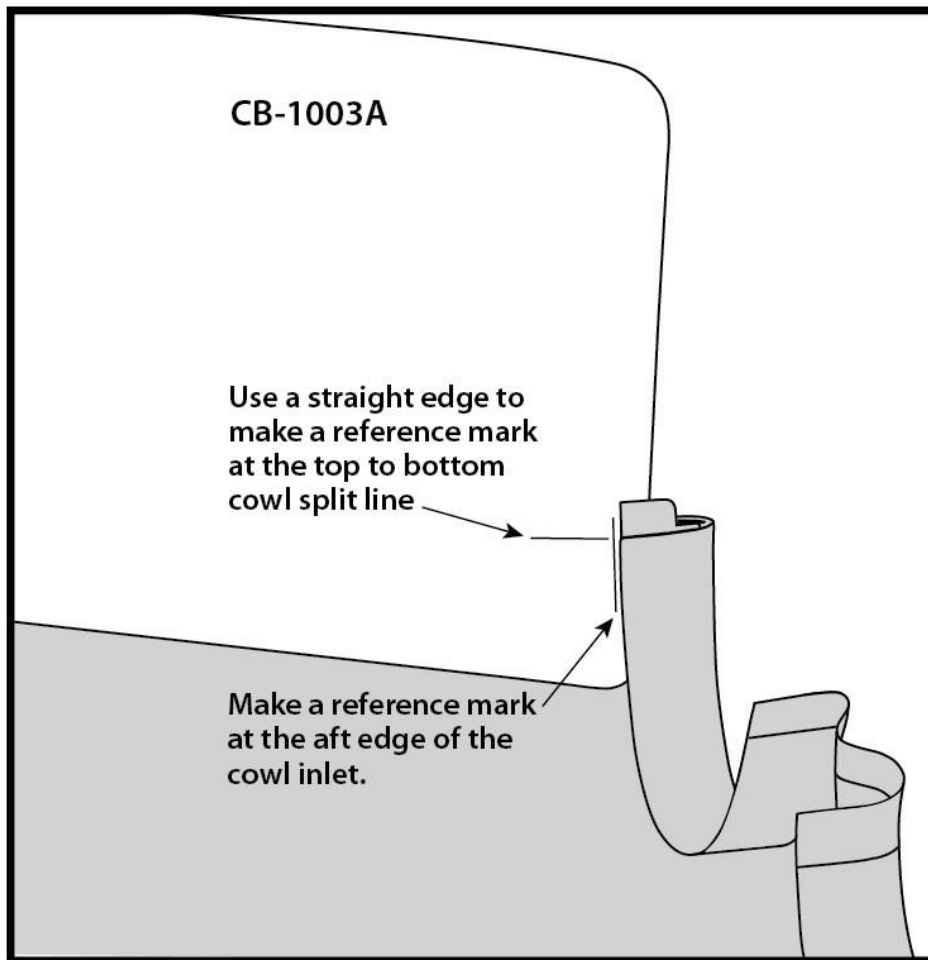


Fig 4

Cut and bend the CB1009A cylinder baffle per Fig 5 using the reference marks made.

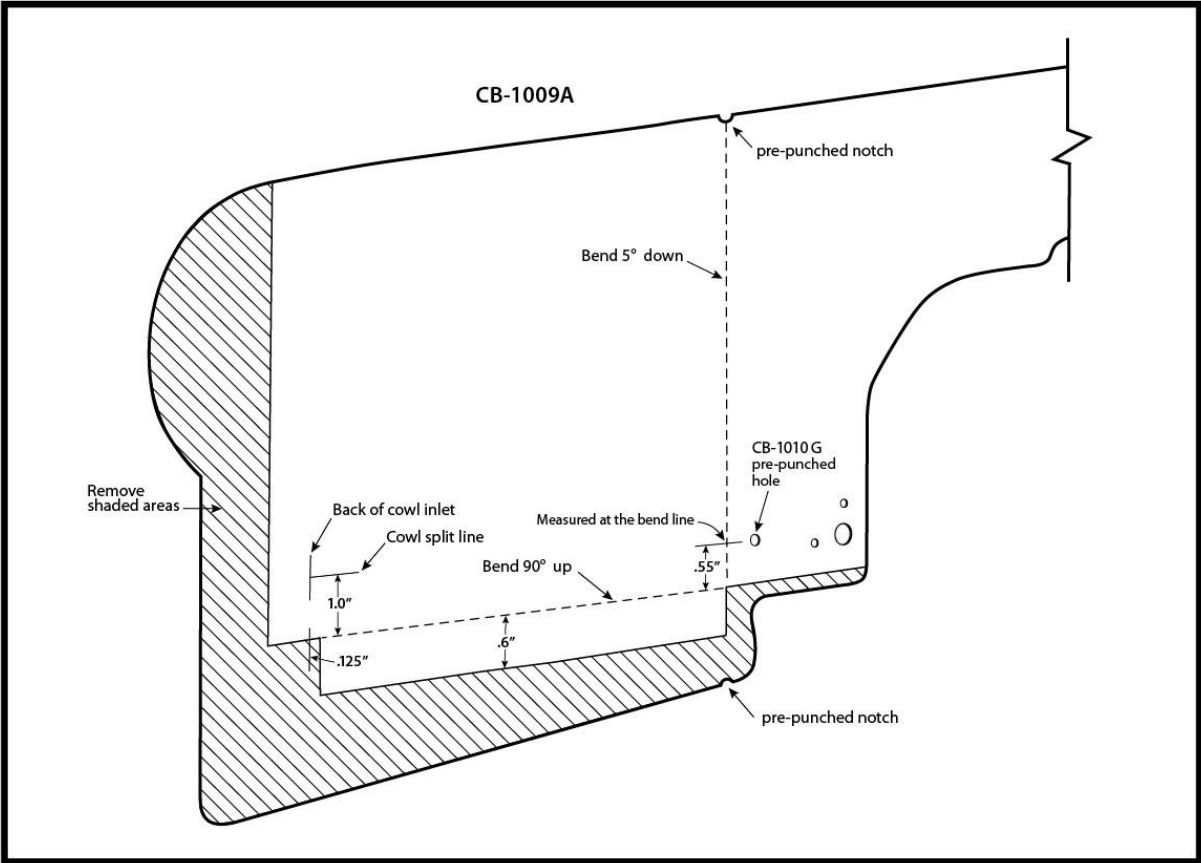


FIG 5

Cut and bend the CB-1003A cylinder baffle per Fig 6 using the reference marks made.

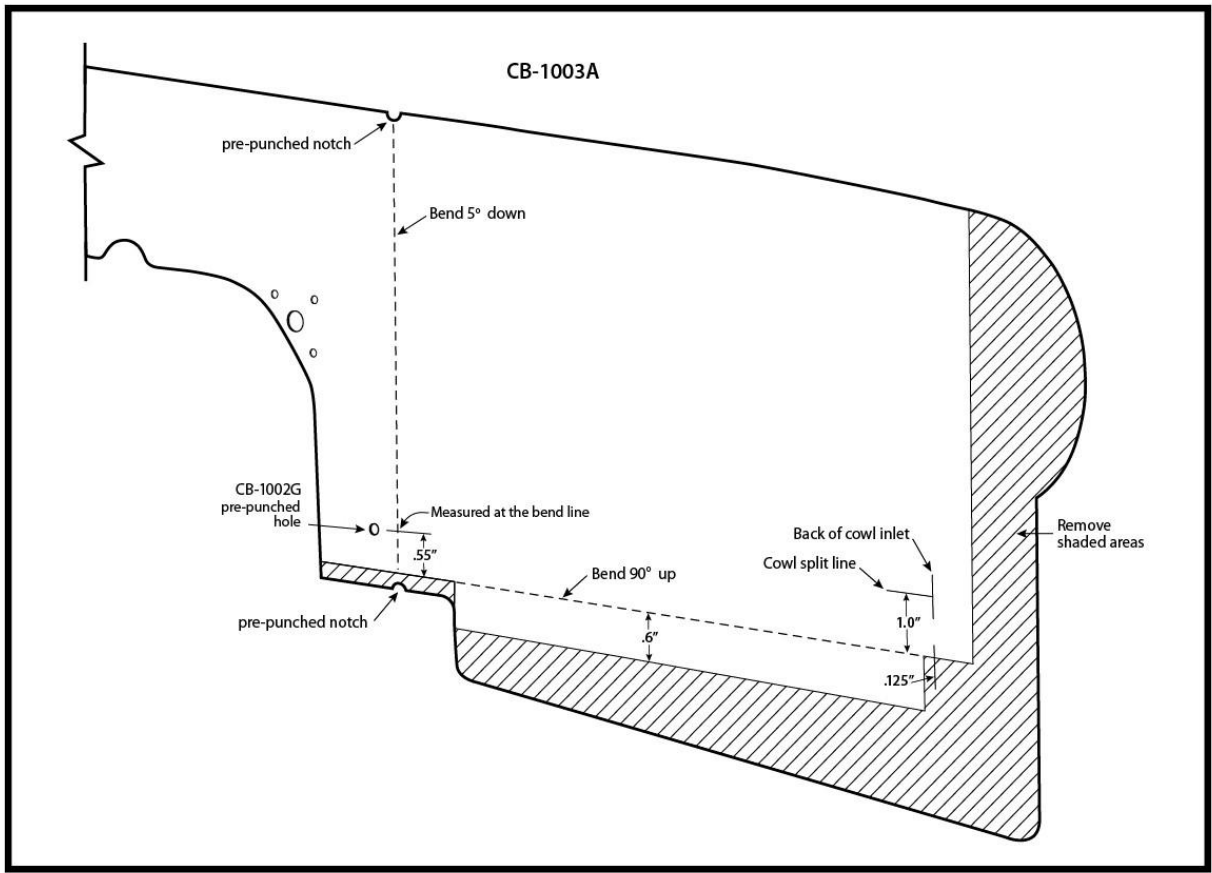


FIG 6

When modifications to the CB-1009A and CB-1003A are complete, re-install them on the engine.

Cleco the new CB-1010ASP baffle ramp in between the CB-1010A and the CB-1010B stiffener then match drill #30 rivet locations. Install the assembly on the engine using the modified CB-1010D support bracket and the CB-1010G clip per Fig 7. Trim the fwd edge of the CB-1010ASP as needed to clear the backside of cowling inlet. Clamp and drill #40 rivet holes in the CB-1009A cylinder baffle using the prepunched holes in the baffle ramp.

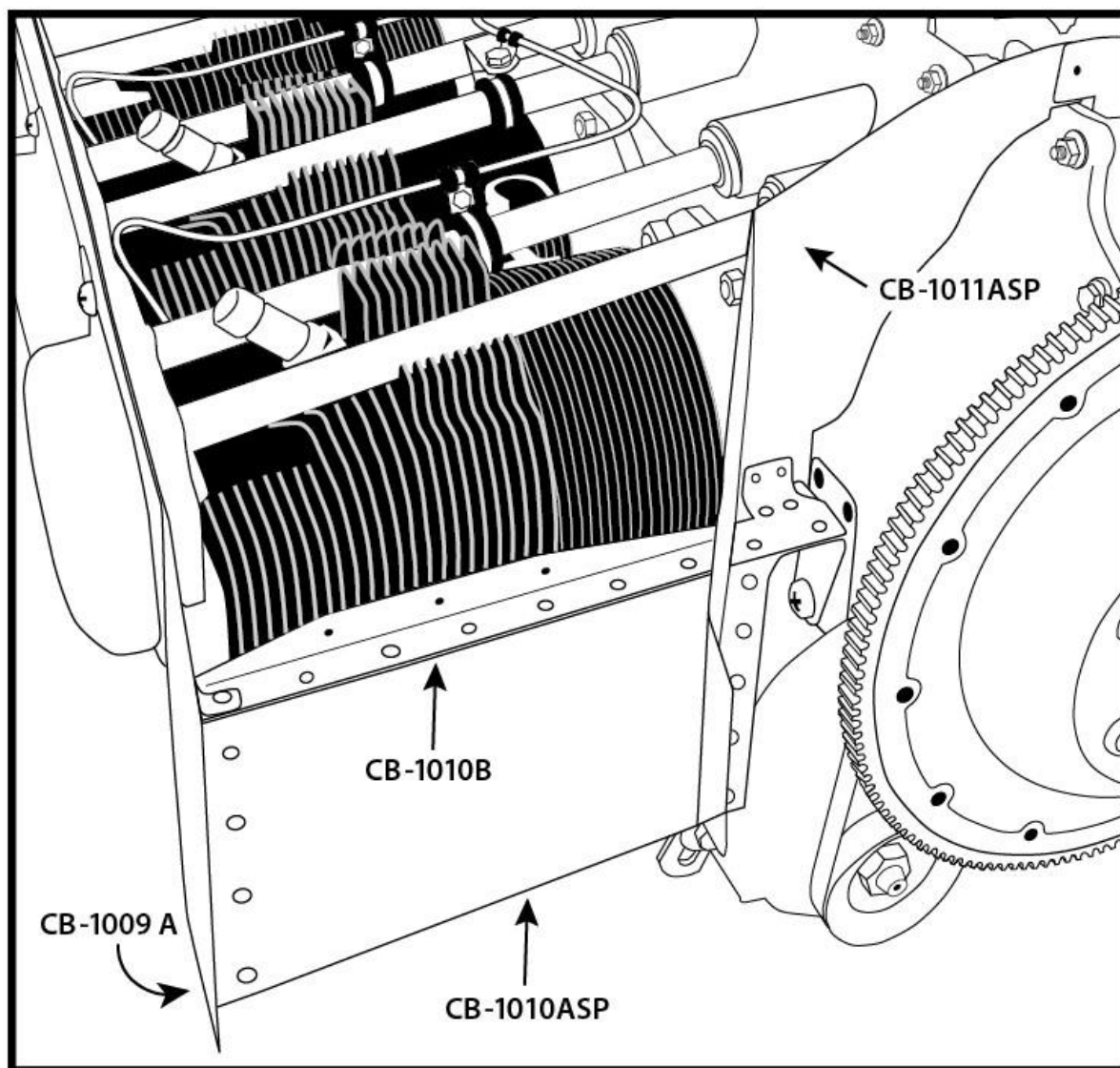


FIG 7

Cleco the new CB-1002ASP baffle ramp in between the CB-1002A and the CB-1002B stiffener, then match drill #30 rivet locations. Install the assembly on the engine using the CB-1002D support bracket and the CB-1002G clip per Fig 8. Trim the fwd edge of the CB-1002ASP as needed to clear the backside of cowling inlet. Clamp and drill #40 rivet holes in the CB-1003A cylinder baffle using the prepunched holes in the baffle ramp.

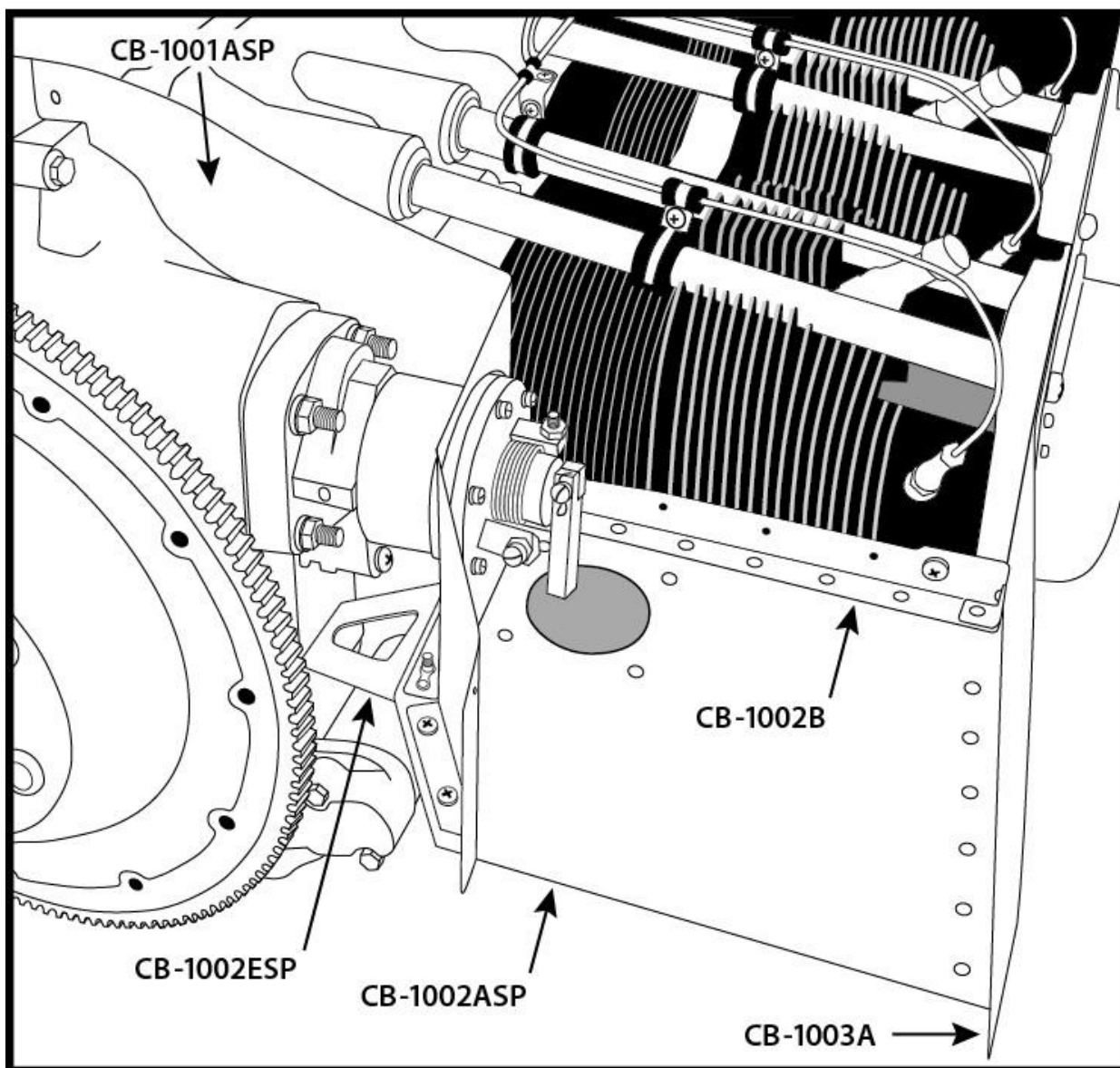


FIG 8

Clamp the new CB-1011ASP front baffle to the CB-1010ASP ramp and final drill #40 holes common to both per Fig 7.

Cleco the new CB-1001ASP front baffle to the CB-1002ASP ramp. Trim baffle as needed around prop governor for clearance per Fig 8. Install the CB-1002ESP support bracket per Fig 9. Match drill the two #19 nutplate holes in the CB-1001ASP front baffle and CB-1002ASP ramp baffle. Final drill the two fwd #19 nutplate holes using the CB-1001ASP front baffle into the CB-1002ASP ramp. Final drill the two #19 nutplate holes from the bottom using the CB-1002ESP bracket into the CB-1002ASP ramp and CB-1001ASP front baffle.

Remove both the left and right front baffles. Using a nutplate jig drill the #40 nutplate attach holes for the two aft and two fwd nutplates in the CB-1002ASP baffle ramp. Drill #40 nutplate attach holes for the two nut plates in the CB-1001ASP front baffle that attaches the CB-1002ESP support bracket per Fig 9.

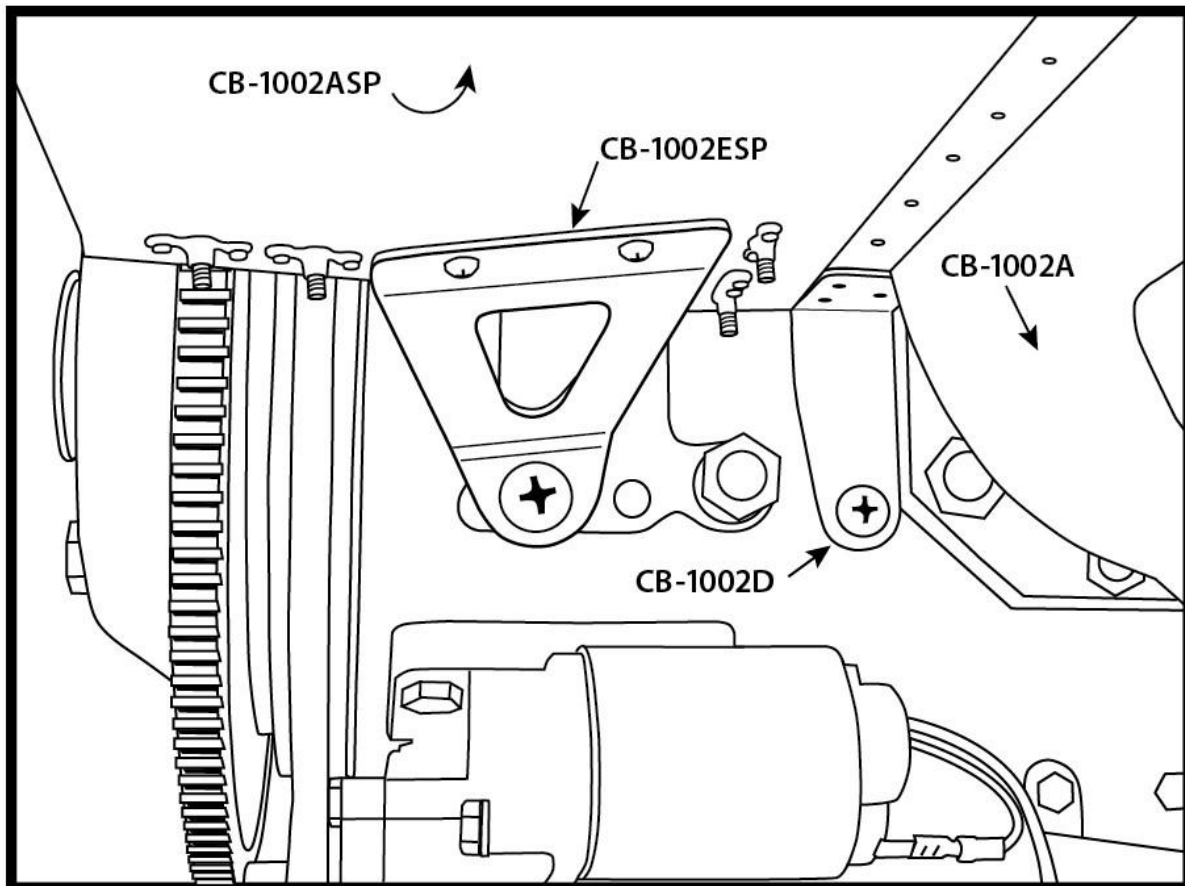


FIG 9

Before final assembly of the engine baffles, you will have better access to complete the SP engine air intake system with the baffles at this stage. Temporarily installing and removing the CB-1010ASP and CB-1002ASP baffle ramps will help with the positioning and installation of the left and right air intake plenums. After the air intake system is complete, remove the remaining engine baffles and deburr them for final assembly.

Assemble engine baffles per Van's instruction, except as noted:

You will need to use longer #30 rivets at baffle ramp to baffle stiffener location. Install 8/32 nutplates on the CB-1002ASP baffle ramp and CB-1001ASP front baffle.

EB-01 Baffle Kit packing list

1 – CB-1010ASP Baffle ramp

1 – CB-1002ASP Baffle ramp

1 – CB-1001ASP Front baffle

1 – CB-1011ASP Front baffle

1 – CB-1002ASP Support bracket