

Allison V-1710 Engine Assembly Instructions For 1/8th Scale Kits

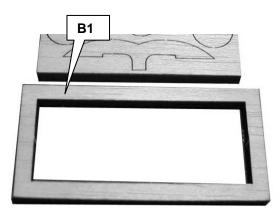


Assembled Engine

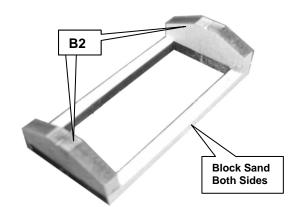
This kit has basic shapes to make an Allison V1710 engine used in early unlimited hydroplanes. Add more detail and customize as desired. All that is needed for a good looking engine is sanding, rounding-off a few parts, sealing, and paint.

Please review these instructions and review the full size parts drawing with the parts before beginning.

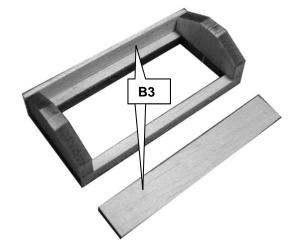
Part 1 - Engine Block Assembly NOTE: Refer to the full size parts sheet during assembly. If you have questions please e-mail: campbelldoug2004@yahoo.com



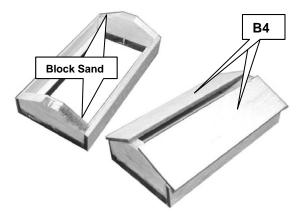
1. Carefully cut out Part **B1** from the inner parts. This is the engine block base.



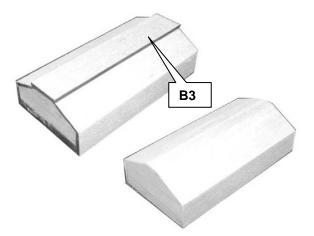
- Glue Parts B2 to B1 as shown. Make sure Parts B2 are perpendicular to B1.
- 3. Block sand the long edges to an even surface so the parts on the next step fit well.



4. Glue Parts **B3** to the edges as shown.



5. Block sand the top surfaces so they are even as shown in the left picture. Then glue Parts **B4** as shown.



6. Block sand so Parts **B4** are even to the assembly, then glue another Part **B3** as shown and block sand again.

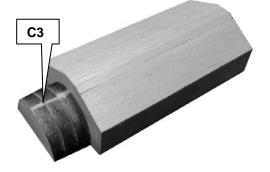
The engine block is complete.

2. Assemble (3) Parts **C2** together. Round-off and glue to the block assembly as shown.



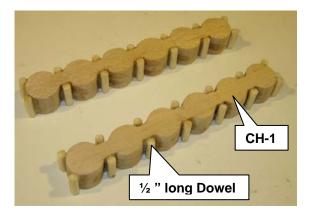
3. Glue parts C3 to each side of C2 assembly as shown.

Part 2 – Supercharger and Carburetor Support Assembly

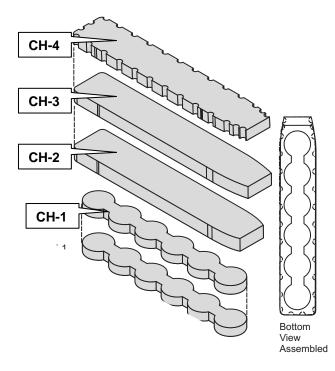


1. Glue (3) Parts **C1** to either end of the Engine Block Assembly. Round-off the front of the **C1** Parts.

Part 3 - Assembling the Cylinder Banks and Valve Cover

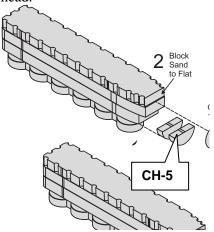


1. Glue 2 CH-1 Parts together. Repeat. Cut 1/2 inch lengths from the 3/16 dowel stock provided and glue to **CH-1** parts as shown.



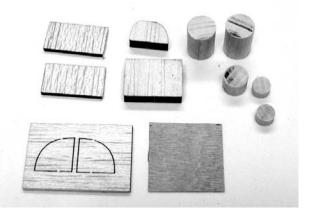
2. Assemble Parts in order CH-1(Already assembled with dowels), CH-2, CH-3, and CH-4.

- 3. Round off CH-4 (Valve Cover) as desired.
- 4. Repeat the assembly for the other cylinder head.

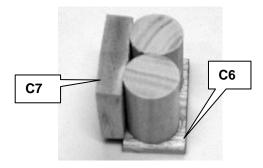


5. Glue part **CH-5** to each cylinder head assemblie as shown.

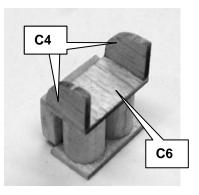
Part 4 – Carburetor Assembly



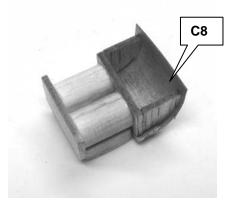
The carburetor assembly consists of parts C4, C5, C6, C7, 3 various size short dowels and 1/16 ply C8.



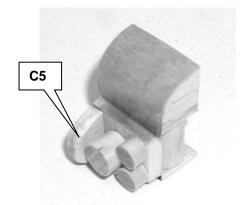
1. Assemble Parts C6, the 3/4 diameter dowels and Part C7 together as shown.



2. Assemble another Part C6 and Parts C4 as shown.

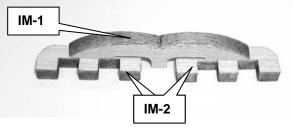


3. Wrap a **1/16th ply sheet C8** as shown over the assembly. Make sure the grain is parallel to the width for an easier fit on the curve. May have to steam bend before assembly.



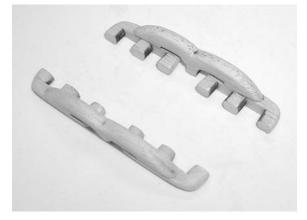
4. Assemble **C5** and different diameter dowel rods as shown.

Part 5 – Intake Manifold Assemblies



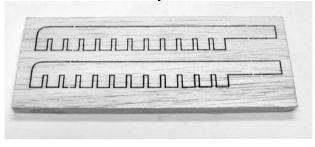
1. Glue Parts **IM-1** and Parts **IM-2** together as shown. Repeat to make 2 assemblies.



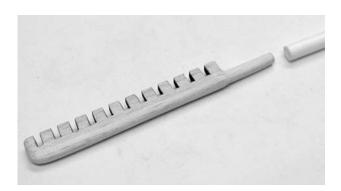


2. Round off each assembly as desired.

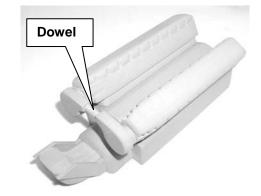
Part 6 - Exhaust Pipes



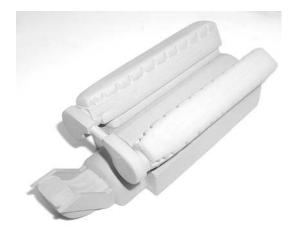
1. Carefully cutout parts E1.



2. Round off as desired. The exhaust pipe ends can be rounded-off to accept a tube.



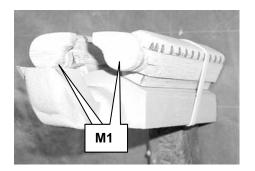
This is to help line up the dowel that fits between the Parts **M1** as shown.



2. When satisfied of your alignment, glue the Cylinder Heads to the Block as shown and fit the dowel rod between the magnetos.

Part 7 - Final Assembly

We suggest painting each assembly as desired before final assembly.



 Position or lightly tack glue the cylinder heads to the engine block and position Parts M1 to the front of the cylinder heads.



View from the back showing cylinder heads in place.

1. Glue the Carburetor, Intake Manifolds and Exhaust Pipes in place as shown in the following pictures.



