

AutoPlumb

AN Cooling System

How to Configure and mock up your AutoPlumb AN Cooling System. First watch the [Adapter installation](#), [-20AN hose assembly](#), and the [Mock up system](#) video on the AutoPlumb website.

In order to configure an upper and lower cooling system, you will need the following:

- 3x AutoPlumb Water Neck Adapters
 - 1x AutoPlumb Thermostat Housing 4x Hose Ends
 - 1x The Appropriate length of hose
 - Tools: AN Wrench, Vise Jaws, Hose Cutting Film.
Available on our website under [tools](#).
1. Using calibers or Micrometer measure the OD of the Water Necks you wish to adapt. Measure on the OD not on the raised bead.
 2. Refer to the Adapter page of the website for the available size listing. NOTE: A radiator water neck can be reduced in size up to approximately .040". Most water pumps .050" or more. Be your own judge on the method and how much you can safely reduce the OD. Adapters can be installed on Water Necks that are up to .015" under size.
 3. Choose from the listing the Adapters needed.
 4. From the [template page](#) download and print your chosen adapters. It's helpful to then trace them onto poster board for a stiffer template. Dimensional lines on the templates are for mock up reference only and may require trimming to accurately fit. Do not use the templates to determine the OD size to order. Measure your water necks with calipers or micrometer and choose from the size listing on the adapter web page.
 5. From the [template page](#) download and print a Straight, 45° or 90° swivel thermostat housing that suits your engine brand. Hose ends can be used directly to the straight thermostat housing if that better suits your application. If we do not have the housing for your brand engine you can use the AutoPlumb Water Neck adapter on your stock or current housing.
 6. From the [template page](#) download and print the hose ends you think will best suit your configuration. -20AN 550 series Full Flow hose ends are available in straight, 45° and 90° angles and are a top choice among customers. When additional angles are needed -20AN 100 series standard hose ends are available in straight, 30°, 45°, 60°, 90°, 120°, 150° and 180°. -16AN Full Flow hose ends are available in all angles straight thru 180°

How to choose the hose size best suited for your application:

With a properly sized water pump, radiator, fans, shroud and adequate air flow -16AN or -20AN hose will provide enough flow for cooling. Available space, appearance and cost are the determining factors. Use the mock up templates to determine which size best fits your application. Most prefer the looks of -20 for full size street machines. Our -16AN is well suited for import and smaller engine vehicles. Also -16AN is preferable for Drag Cars. It's your ride and your choice.

Tips:

1. Try to produce most of the bend needed in the routing with the hose end angles and not the hose.
2. The hose will bend. Refer to the hose radius templates.
3. Try to not create an S type of bend in the hose. Produce an outside radius in your routing when possible.
4. Temporarily install all components to determine hose length and clearances.
5. When determining the final length of hose place the hose over or under the hose ends. Placing it on the inside or outside radius will cause the hose to be too short or too long once cut.
6. Be aware that when connecting a hose between two points that the connection on one end must enter at an angle to facilitate the starting of the threads. Connecting between two points that are in a straight line with each other require a long enough length of hose that will flex/bend back far enough to start the threads of the second end. On a LS the entire hose assembly with the thermostat housing can be attached with the two thermostats to pump bolts.
7. Purchasing, configuring, and installing the upper part of the system first can be helpful in understanding how to go about the lower. The lower in many cases require working in much tighter spaces and the experience gained from the upper installation can be valuable.
8. Once you receive your parts carefully mock it up using your components. Take care not to damage your new parts. You can return any unused and undamaged items in the event something is not correct.

If any questions or issues arise during installation, please stop and give me a call. I will be happy to help.

Joe

405-823-7149