

# Replacement Thermo Fan for a Studebaker



This project started because I found a crack in one of the blades on my GT Hawk fan. As I had a heap of these Nissan thermo fans lying around it turned out to be very simple to adapt one to the Studebaker. These fans are very common, any Nissan vehicle with a "L" series engine will have one. (1980 to 1990 Skyline, 280ZX etc.)



The outer diameter is not quite as large as the Hawk fan but it cools better than the original. Nissan Patrol have the same thermo clutch with a larger fan if you must have a bigger one but it is not necessary. To adapt it requires a small bush to make a good fit on the snub nose of the Studebaker water pump.



The Studebaker fan has a spacer which makes the modification very easy.

Step one is to make a small spacer as shown below.

The bush is made to be a snug fit over the spigot on the original spacer. This means it will be a snug fit over the water pump nose.

It is also a snug/push fit into the Nissan thermo fan. See below





The next step is to sit the original spacer onto the Nissan fan with the bush in place, Rotate it so that the holes to be drilled are spaced equally between the existing holes. Drill down to center the first hole with a 11/32" drill. Drill only enough to start a pilot drill.



Next remove the spacer and drill thru the fan flange, first with a pilot drill 7/32" and then thru with a 5/16" drill. Now bolt it together to prevent rotation while drilling the others. Drill the remaining holes in a similar fashion.

"Finished"

Now install it on your Studebaker.



I cut short lengths of UNC thread from Grade 8.8 bolts to make studs. They were inserted into the water pump with Loctite bearing retainer. This made the assembly very easy. Note that the original spacer is not used. The thermo fan is bolted directly onto the water pump using the bush to centralize it. The blades end up being in the exact position in the shroud.

