

# Engine Compartment Tips

While some builders will candidly admit that their tight cowlings create unexpected problems, they are somewhat less willing to admit that they are completely satisfied with their engine installations. Here are a few examples of what bugs them the most.

A builder experiences what he believes to be an occasional fuel system vapor problem . . . but only on hot days. A scary experience.

A surprising number of builders are perturbed because blisters and charred areas are appearing in the cowling finish . . . obviously, where the exhaust stacks pass too close to the cowling.

Another commonly experienced difficulty is the prevalence of cracked and broken exhaust stacks, particularly at welded joints and adjacent to heat shrouds and muffler clamps. This is a more frequent occurrence than you would expect. Often these failures occur in a new installation after only a few hours of operation.

And, still another complaint. Most builders, in time, become quite annoyed with the amount of oil coating the belly of the airplane after each flight. Blame that on an overly abundant oily mist passing through the engine breather line.

Then there are more serious ailments. Overheated magnetos and the alternator may be suffering from heat prostration . . . without any early symptoms. These vexations seem to plague some builders and not others.

Engine compartment problems and annoyances of this type are more prevalent in homebuilts today than they were in the past when simple installations for the old 65 hp Continentals and the small Lycomings were the rule rather than the exception.

Today our engines are more powerful and the installations more complex, making it increasingly difficult to fit everything into the confines of tightly con-

