

From SAM 26: Bob Angel Editor

## o & R Tuning Tip #19. Multiple Mounting Schemes

By Bob Angel

Were you ever frustrated when an Ohlsson 23 wouldn't fit in a ship where another Ohlsson 23 had been mounted? There are 6 different factory mounting schemes or dimensions for them that I know of. And I've bought a couple of after market add-on beam mounts that raise the total to 8.

In those days, Ohlsson probably never thought any modeler would own more than one of his engines. The more likely scenario was that two or more young lads, or even a whole club might be swapping one engine between several ships.

The mounting problem isn't limited to the 23 size Ohlssons, but to keep the discussion simple we'll stick to just the 23's. The early 23's had beam mounts with slotted (open ended) lug holes. So you could be a little sloppy with the fore and aft dimension as long as you drilled the mount holes to the correct 1 1/2" *width*. But to reduce the chances of breaking the lug ears, you'd still better put the mounting holes as close together fore and aft as they can be fitted.

Fortunately for flying purposes, there seem to be fewer of those early slot-lug engines left; and with their smaller teardrop exhaust and more restricted internal bypasses, you'd probably want to use a newer model for flying anyway.

In 1947, the larger round exhaust ports were introduced, but the beam mounts were eliminated, leaving just provision for radial mounting. This was a tough assignment, because you still had an intake tube and things projecting back behind the plane of the mounting surface. So they brought out a stamped steel adaptor to again allow beam mounting. But the dimensions of the holes didn't fit those of the earlier slot lugs.

An oddity I'd always noticed about those adaptors was that their front end was raised, so that the mounts weren't level with the crank center line. This seemed strange, because the rest of the mount was made with great precision, with nicely rounded corners and edges. For example, the fore and aft spacing of the 6 case bolt ears had to be within a couple of thousandths, or those bolts couldn't have tightened down the case front snugly enough for a seal. No doubt the free fliers recognized the purpose of the misaligned mount, but as a ukie flier, it escaped me. Years later a light bulb appeared over my head, and I said "AHA"! The out of alignment mounts were purposefully designed to give a few degrees of down thrust.

There are currently more of the lugless engines in collections than there are beam adaptors, so at least a couple of enterprising individuals produced and sold some more adaptors. The examples I have both used different hole spacing than each other different from all other Ohlssons. The 1948 "23" models brought back the integral beam mounts, but the hole spacing was once more different than previous models, and even the slot lug models wouldn't interchange.

Then there were the factory made tank mounts that bolted on via the 3 case bolts. These could be radially mounted easier (flush rear surface) or beam mounted, but either way, they again used unique mounting hole dimensions. RLA