Latest Notes on QJ-11 Q-500 engine

Thank you for buying a Jett. We hope it performs up to your expectations.

This engine may or may not have been run. I run them from time to time as a quality check. Treat is as a new, unrun engine that needs breaking in.

Set up: Standard TDC is .154-.160 (all in inches)**. Standard head clearance is .007-.012. This is usually .002-.004 of head shims. Nelson LS shims fit a Jett too. A Stock head is .150 deep. Expect this engine to be tight-tighter than you have seen.

Break in: Since this engine is tight you can expect that break in must be done more carefully than usual. There is a higher load on the rod and before it seats and wears in properly there is a great danger of ruining your engine if you do not follow these simple rules. Use your standard flying prop, cut about 1-1.5" (25-40mm) from full diameter. This will allow the engine to run at full rpm while rich. In this case, if the engine will not turn 20000 when obviously rich, then cut the prop more. Run the engine at 18000 for 5 minutes, 19000 for 5 minutes, and 20000 for 5 minutes. Never peak the engine hard during this process, but it is acceptable to "zoom" the engine up and down occasionally.

After Bench Break in: You may now test the engine on a flying prop. The sweet spot for this engine is 19500 to 20000 peak rpm. If you use too big a prop, the engine will tend to overheat on the ground and fall off. We have never achieved top speed with bigger props. If you are using zero nitro, adjust the prop size accordingly.

Notell This engine is not a Nelson. Do not assume that it will behave like a Nelson. The peak rpm will be less on the ground, but usually higher in the air. The main difference in these tw6 engines is the muffler and internal design. The Nelsons run harder off the line, but the Jetts unload to higher rpms after about one lap. Oddly, even with the shorter pipe, you will find the engine easier to set than the Nelson.

First flight: Use a new plug. Use a prop that peaks at 20000 or above on a hot engine. Start the engine rich, about 1 turn from peak. Lean the engine in slowly until you find the peak at 20000. As soon as it nears peak open up the needle and let the engine drop down to 18000. The engine should be rich in the air. It might even die rich, so be prepared. The object is to get the engine broken in and find the needle setting before you get it too lean and burn it up!! You only get one chance to not burn one up, so don't set it lean on the first flight. Sneak up on the setting a few hundred at a time until you get a hard run without blowing plugs. Our usual launch rpm is about 800 down from peak.

Always mount your engine sideways and use a bubbless tank. If the engine centerline is high (top of the fuse is flat from the wing to the mount) then make sure the tank is as high as possible. If the bottom of the fuse is flat and the top curved downward, then mount the tank in the center of the fuse. We recommend the Jett CG tank for the latter, giving you more space to mount the tank high. If the engine tends to "beep" or stall at the end of the tank, then raise the tank.

On nitro, the prop of choice is the 8.8 x 8.75 and the 8.8 x 9. You must test each prop. We find that there is about 4-600 variation in the props from batch to batch. We, of course like the higher rpm ones.

** 25.4mm /inch e.g., .150" = .150 x 25.4 = 3.8lmm