

The Fallacy of Cheap RC Engines - They Ain't So Cheap

Steve C. - Experiences from a Seasoned Pro

There are a lot of guys coming over to gas from glow and unfortunately they have been sucked into the price war of engines. They end up buying what is cheap. The chinese know that there are so many guys out there that buy on price so they give them a price. What is missing is quality.

So you have newbies flying engines that underperform, don't run reliably, shoddily built. This will continue to happen until people wake up to the fact you get what you pay for...

Here are some reasons WHY they can be sold cheap.....

1. The cylinders are rejected as top quality and are resold as seconds or thirds and used here.
2. The aluminum used in the crankcase is substandard. Some will barely hold a bolt in place.
3. The bearings are crap OR they are replaced with bushings
4. The cranks are not hardened or manufactured from soft metal. Your first prop hit or nose over (even a "gentle" one) can bend the crank to the point it will not fly or will shake the crap out of your airframe.
5. Cylinders are not properly honed or treated.
6. Piston rings are second run ones and very hard.
7. Machining is done on the fly.... "If in doubt ship it out" syndrome here.
8. Shoddy assembly practices. Yes it is very possible to assemble them incorrectly.
9. Ignition systems are poor quality (high source of interference issues though).
10. They don't have to maintain a spare parts inventory, because they are selling for today and they will change their names tomorrow.
11. They know that most guys will not send the engines back to source because of the cost.

There are at least another dozen technical aspects to consider but I am hoping you get the drift. Yeah... There are stories of guys who have had cheap engines running for years and years... Good for them... they are exceptions and are not the normal.

You also have guys who aren't newbies doing the same thing.

A statement was made that if a clone is given the right fuel and care and treated with respect... it will last..... You are soooooo wrong.... Most of the cheapies don't last a long time because of shoddy materials, and construction and assembly. Why do you think that they are so cheap? The only way to treat them right is to put them on your shelf and they will last almost as long as the tried and true ones which are run constantly.

In regards to the ubercheap engines, if a guy is aware of what they are getting into and are prepared to gain or lose either way, then go for it. The asians love this fact... They always win..... P.T. Barnum's words are sacred there...."there is a sucker born every minute".

But wait!!!! There is more....

There is another reason it is a "pot luck" of results on the cheaper engines being offered direct from China on e-bay.

These engines are the remnants of batches made for overseas - a manufacturer may make say 200 of one model and when the overseas distributors have been supplied with whatever they get supplied with, the e-bay sellers get the rest to clear. Some of them will be decent engines, the others won't be - (not unlike what the overseas distributors received in fact). However - generally the overseas distributors will get the better ones of the bad bunch and the worst of the remnants will end up with the e-bay sellers (but there will be the odd few that are ok). Some of the engines sold by the asian e-bay sellers may even have the subsequent serial numbers of engines sold to overseas distributors.

Even though the factories say they don't let their local buyers sell overseas - the fact is that they really don't care where they sell to - as long as the factory gets their payment. This way, they get to sell 100% of their product, they make profit and the factory rarely (if ever) directly honors a warranty claim anyway - That cost is usually borne by the distributor himself or the warranty cost is borne the customer himself if he has bought from overseas and doesn't wish to send it back for warranty due to cost effective reasons - this further maximizes the factory's profit.

Even the best of the overseas distributors will be able to tell you (if they are being honest) of engines they have received with major problems - such as con rods being ground down with a pencil grinder to clear the crank throws, Piston circlips missing, piston rings missing, Cylinders with cracked flanges, leaking crankcases, poor timing, missing reed petals etc etc - what sets the good from the bad apart is how vigilant the distributors are for their own in house QC BEFORE the engine gets to the customer. (and yes, I have seen all of those issues and more with engines received direct from the factory to myself - luckily they never made it to the customer)

For the "\$100 weed eater engines" - these are usually made in MUCH higher QTY's than RC engines (many 1000's per month instead of a couple to a few hundred per month) and are often made by much better factories than the RC engine manufacturers (For example - Echo chainsaws - I bet there is only a very small percentage of those delivered as garbage. I have no personal experience with the brand but they seem to be well spoken of as a conversion engine). They also don't usually come with an electronic ignition, prop hub adapter (made in small qty's) and a few other small innovations. YES a handy person can easily make and / or fit those things and will have a good experience but if they get bought off the shelf, they soon add up to closer to the cost of a "purpose built" RC engine.

So - in summary

YES - there is most certainly a risk of getting a decent engine from the "asian e-bay clearing houses", or asian internet hobby store. I think this is done simply to cause confusion

YES - a complete decent garden engine can be bought and converted quite cheaply. But once you add on the extra's, the costs do add up.