

Published torque figures for these machines conflict. This records what you set, and where the figure came from, so the next person is not guessing.

Published values for these machines are scattered, disagree between sources, and are sometimes lifted from a different engine altogether. A printed figure would be tightened to. Use the figure from your own manual, or from the supplier who sold you the part, and record which you used — that is what makes the next job easier rather than a repeat of this one.

[illegible]

A torque figure assumes a thread condition. The same setting on an oiled thread produces substantially more clamping force than on a dry one, because less of the torque is lost to friction — which is how fasteners get overtightened while the wrench says they are correct. Record which you did.

THE ONES WORTH BEING CAREFUL WITH

On these machines specifically, these are where getting it wrong costs most

FASTENER	WHY IT MATTERS
Cylinder head nuts or bolts	Uneven or excessive tightening distorts an alloy head and pulls studs out of the case
Spark plug	The thread is in alloy and shallow. Overtightening strips it; undertightening lets combustion past
Variator and clutch nuts	Come loose and the transmission destroys itself. Need real torque, not feel
Axle nuts	The wheel's only retention. Also the one owners most often leave to feel
Exhaust flange nuts	Studs thread into alloy. Pulling harder to cure a blow strips them
Brake caliper and disc bolts	Self-evident, and frequently disturbed during other work
Engine mount pivot	Carries the whole engine's weight and every road shock through it

WHAT MATTERS REGARDLESS OF THE NUMBER

- ☐ Threads clean and undamaged before assembly
- ☐ Correct sequence on any joint with more than two fasteners
Criss-cross, from the centre out, never round in a circle
- ☐ Tightened in two or three stages rather than straight to final
- ☐ New washers or crush washers where the original was designed to deform
- ☐ Thread locker used only where the original had it
- ☐ Torque wrench wound back to its lowest setting before storage
- ☐ Anything that felt wrong noted rather than ignored

A FASTENER YOU HAVE TIGHTENED THREE TIMES

It is not a fastener that needs tightening again. It is a stripped thread, a missing washer, a cracked mount, or a part being loaded in a way it was never designed for. Recurrence is the diagnosis — chase the cause rather than the symptom.

NOTES

Need to work out what you actually own?

The Scooter Parts Registry is a free public record of the Chinese factories behind US-market scooters, ATVs and go-karts — brand, engine family, VIN prefix, factory and related machines. No account, no email.

thescooterparts.com/identify