

Short Case Or Long Case? Measurement Sheet

One measurement and one count decide which drive belt, which wheel and which brake your engine takes. Take them before you shop, not after.

Two checks, five minutes, and the single most expensive guess on these machines stops being a guess.

CHECK ONE — COUNT THE CVT COVER BOLTS

The bolts around the outside of the transmission cover, on the left-hand side of the engine. Count every one, including any hidden behind the kickstart or the frame.

BOLTS COUNTED	ANY YOU COULD NOT REACH?	DATE CHECKED

CHECK TWO — MEASURE CRANK CENTRE TO AXLE CENTRE

This is the measurement that actually matters. Put a tape from the centre of the crankshaft — the middle of the variator nut behind the cover — to the centre of the rear axle. Centre to centre. Measuring to the edge of the case instead gives a number that no supplier and no other owner will recognise.

CRANK CENTRE TO AXLE CENTRE	SAME, IN MILLIMETRES	MEASURED OVER OR UNDER THE CASE?
in	mm	

The short-case and long-case split, as reported by the owner community. Measure yours rather than assuming from the badge.

WHAT TO CHECK	SHORT CASE	LONG CASE
Bolts around the CVT cover	8	10
Axle centre to case	about 9.5 in	about 11 in
Wheel usually fitted	10 in	12 in
Drive belt	Shorter	Longer

TREAT THIS AS A STRONG HINT, NOT A RULE

This split comes from the owner community rather than from a manufacturer document, and there are exceptions — nine-bolt cases have been reported. Output shaft length and final gearing also differ between the two, so a case measurement narrows the search but does not settle whether a specific part fits. Measure the machine, then check the part against the measurement.

WHAT YOUR ANSWER DECIDES

Each of these is sized by the distance between the crank and the axle, which is why the measurement is worth taking before you buy any of them.

PART	WHY CASE LENGTH DECIDES IT
Drive belt	The belt runs between the two pulleys. A longer case needs a longer belt, and a belt that is close but wrong will slip, squeal or throw itself off.
Rear wheel	The two case lengths are commonly paired with different wheel diameters, so a wheel from one will foul or sit wrong on the other.
Rear brake	Drum sizes differ between the two, so a shoe set from one case type will not seat in the other's drum.
Rear shock	The upper mount to axle distance changes with the case, so a shock of the wrong eye-to-eye length will alter the ride height or not fit at all.
Complete engine	Swapping an engine across case types puts the rear axle in a different place relative to the frame. That is a fabrication job, not a bolt-in.

WHERE THIS STOPS BEING RELIABLE

This is a community convention, not a manufacturer specification. Cases with nine bolts have been reported, sitting between the two descriptions. Output shaft length and final gearing also vary independently of case length. So treat your measurement as narrowing the search, never as proof that a specific part fits — check the part against the measurement before you buy it.

YOUR RECORD

MAKE AND MODEL

ENGINE FAMILY NUMBER

ENGINE CODE ON THE CRANKCASE

DISPLACEMENT

 CC

WHICH DOES IT LOOK LIKE?

DO THE TWO CHECKS AGREE?

Short, long, or something in between

IF THEY DISAGREE, WRITE DOWN EXACTLY WHAT YOU FOUND

THIS SHEET RECORDS, IT DOES NOT RECOMMEND

Nothing here tells you which part to buy. It tells you what you currently have, in the units a seller works in. Machines built to the same nominal specification were fitted with different components by different suppliers, sometimes inside one model year, so the only reliable reference is the item in your hand.

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