

What Size Is It Really?

The speedometer, the sticker and the title can all be wrong. The crankcase is not. How to settle displacement from physical evidence.

RANK YOUR EVIDENCE BEFORE YOU WEIGH IT

Strongest first: the code stamped into the crankcase, then the engine family number on the emission label, then physical measurement, then the VIN, then the title, then the sticker, then the speedometer, then what the seller said. When two disagree, believe the one higher up this list.

START AT THE CRANKCASE

The two digits in the middle of the code are the bore in millimetres, not the displacement. A 39 means a 39mm bore, which with the stroke these engines use comes out just under 50cc. A 52 and a 57 are the 125 and the 150 respectively, sharing an architecture and differing mainly in bore.

The final letter and the displacement class it denotes

LETTER	CLASS	LETTER	CLASS
B	50 cc	G	100 cc
C	60 cc	H	110 cc
D	70 cc	I	125 cc
F	90 cc	J	150 cc

CODE AS STAMPED

BORE DIGITS

FINAL LETTER AND ITS CLASS

PHYSICAL CROSS-CHECKS, NO DISMANTLING

- ☐ Two stroke or four stroke
Is there a separate oil tank to fill, and does it smoke on start-up?
- ☐ Air cooled or liquid cooled
Is there a radiator and coolant hoses?
- ☐ Wheel diameter, front and rear
- ☐ CVT cover bolt count
- ☐ Crank centre to axle centre
The case-length measurement
- ☐ Spark plug thread size
- ☐ Carburettor bore

WHAT EACH DOCUMENT CLAIMS

SOURCE	WHAT IT SAYS	WHERE YOU FOUND IT	AGREES WITH THE CASE?

Rows worth filling: crankcase code, emission label, VIN, title or registration, dealer sticker, speedometer, seller's advert.

IF THEY DISAGREE

1. Photograph the crankcase stamping and the emission label if it survives. Those are your evidence.
2. Check you have not misread a Q as a 0 or a 1 as an I in the code.
3. Look the engine family number up, which ties the machine to a federal certificate rather than to a sticker.
4. If the title is wrong, take the photographs to whoever issued it rather than leaving it. A machine whose paperwork does not match itself becomes unsellable.
5. Do not correct a number on the machine to match a document. That is a different problem entirely.

YOUR CONCLUSION

DISPLACEMENT YOU BELIEVE IT IS

 cc

CONFIDENCE

High, medium or low — be honest

DATE

THE EVIDENCE YOU BASED THAT ON, NOT THE CONCLUSION

WHY RECORD THE CONFIDENCE

A note saying "probably a 150, based on 57 in the code, but the title says 125 and I could not find the emission label" is worth far more in six months than a note saying "150cc". The first one can be picked up and continued. The second one cannot be checked and might be wrong.

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