

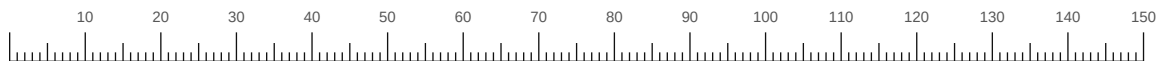
Wheel Bolt Pattern Measuring Template

Measure a bolt circle without a special tool, including the odd-numbered patterns where measuring across two holes does not work.

THIS SHEET ONLY WORKS PRINTED AT ACTUAL SIZE

A bolt circle measured off a sheet printed at 96% will be about four millimetres out, which is enough to buy the wrong wheel and not enough to notice on the page. Check the rule below with a steel rule before you use anything on this sheet.

PRINT CALIBRATION — CHECK BEFORE MEASURING



Lay a steel rule along this scale. The 150mm mark must fall at exactly 150mm. If it does not, reprint at 100% / "Actual size" with page scaling off — every measurement you take from a scaled sheet will be wrong.

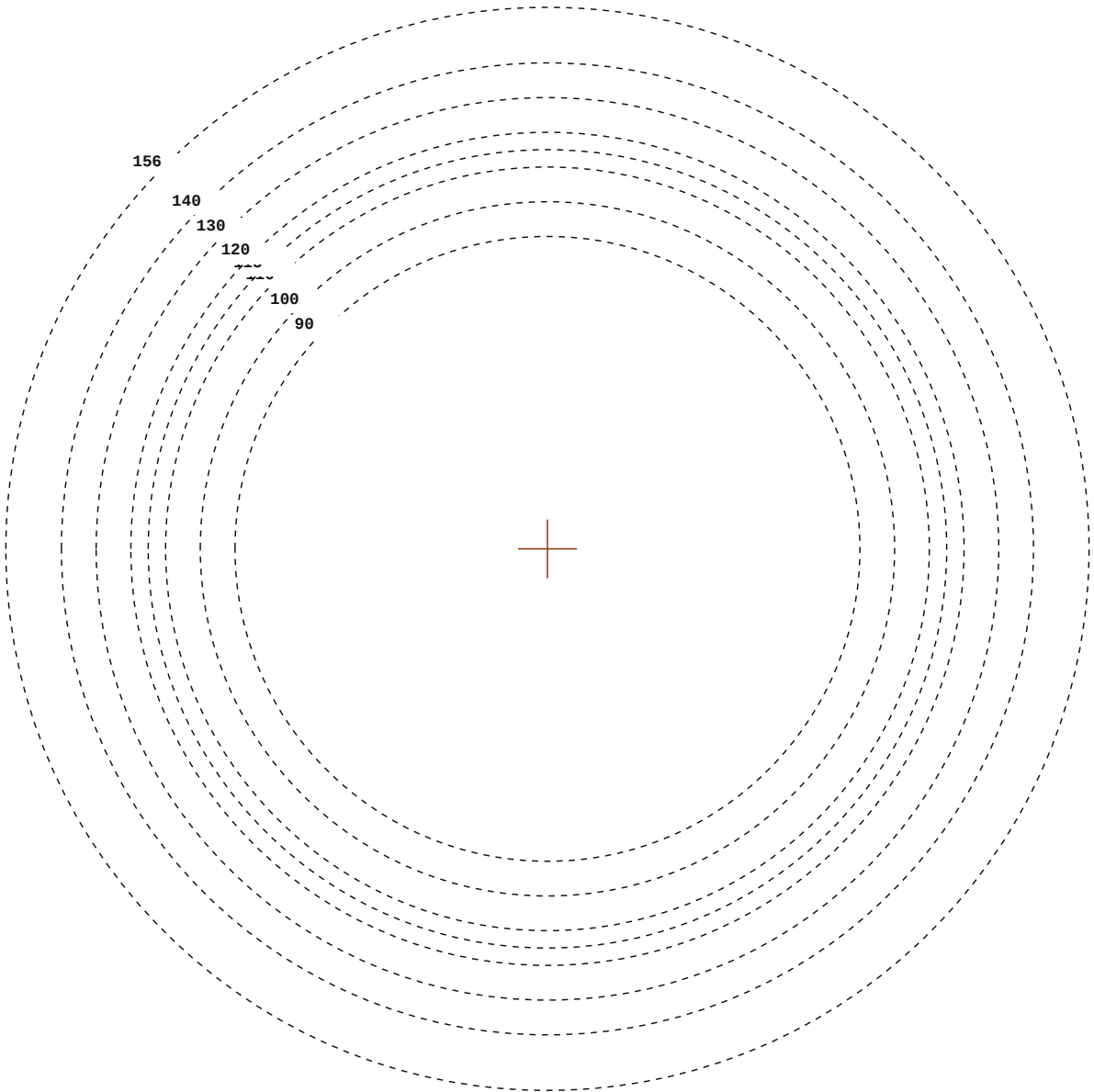
EVEN-NUMBERED PATTERNS — 4, 6, 8 STUDS

Measure from the centre of one stud hole straight across to the centre of the hole opposite. That distance is the bolt circle. Take the reading from hole centre to hole centre, not from edge to edge — measuring across the outside edges of the holes gives a figure that is one hole diameter too large.

ODD-NUMBERED PATTERNS — 3 AND 5 STUDS

There is no hole opposite, so measuring across is meaningless. Instead measure from the centre of one hole to the centre of the next hole around, then use the ring template below: lay the wheel face down, line the studs up with a ring, and read that ring's diameter. For a wheel off the machine, measuring from the centre of the hub bore out to one stud centre and doubling it gives the same answer.

TRUE-SIZE BOLT CIRCLE RINGS — LAY THE WHEEL FACE DOWN ON THIS



Lay the wheel face down with its centre bore over the cross. The ring the stud holes sit on is the bolt circle, in millimetres.

RECORD WHAT YOU MEASURED

NUMBER OF STUDS	BOLT CIRCLE DIAMETER	STUD THREAD SIZE
	mm	e.g. M10 × 1.25
CENTRE BORE DIAMETER	RIM WIDTH	RIM DIAMETER
mm	in	in
OFFSET IF MARKED	FRONT OR REAR	DATE MEASURED
mm		

OR TRACE THE HUB FACE HERE

Mark the centre bore and every stud centre, then measure the drawing

- ☐ Studs are all the same length and thread
- ☐ No stretched or elongated stud holes in the wheel
- ☐ Centre bore clears the hub spigot
- ☐ Taper of the nut seat matches the wheel
Conical, flat or spherical — they are not interchangeable

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