

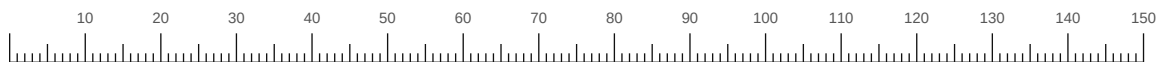
GY6 Engine Identification Chart

The measurements and observations that tell you which engine you have when the label is gone — recorded in the order a parts supplier will ask for them.

WHAT THIS SHEET IS AND IS NOT

This is a record sheet, not a specification table. It does not tell you what your engine should measure, because the honest answer is that the same nominal engine was built to several different specifications by several different factories over fifteen years. What it does is capture what YOUR engine measures, so you can compare that against a part before you buy it rather than after.

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.

1 • THE FOUR OBSERVATIONS THAT MATTER MOST

TWO STROKE OR FOUR STROKE

Is there a separate oil tank and does it smoke on start-up?

AIR COOLED OR LIQUID COOLED

Is there a radiator and coolant hoses?

CARBURETTOR OR FUEL INJECTED

Is there a throttle cable to a slide, or an injector and a fuel rail?

HORIZONTAL OR INCLINED CYLINDER

Does the barrel point forward or upward?

2 • CASE LENGTH

Scooter engines of the same displacement were built with different distances between the crankshaft centre and the rear axle. This is the single measurement most likely to make a CVT belt, a rear shock or a complete engine swap fit or not fit. Measure it rather than trusting a description.

CRANK CENTRE TO AXLE CENTRE

 mm

The defining case dimension

OVERALL CASE LENGTH

 mm

REAR SHOCK UPPER MOUNT TO AXLE

 mm

ENGINE MOUNT PIVOT TO AXLE CENTRE

 mm

3 • CYLINDER AND TOP END

CYLINDER BORE

 mm

Across the bore, if the head is off

CYLINDER BASE BOLT SPACING

 mm

NUMBER OF HEAD BOLTS / STUDS

GY6 ENGINE IDENTIFICATION CHART

SPARK PLUG THREAD SIZE

mm

Measure across the thread

SPARK PLUG REACH

mm

Threaded length

EXHAUST FLANGE STUD SPACING

mm

4 · CVT SIDE

CVT COVER BOLT COUNT

VARIATOR OUTER DIAMETER

mm

CLUTCH BELL INSIDE DIAMETER

mm

BELT WIDTH AS MEASURED

mm

BELT LENGTH MARKING ON BELT

ROLLER DIAMETER × WIDTH

mm

TRACE THE CVT COVER BOLT PATTERN HERE

5mm grid. Lay the cover on the page and mark each bolt hole centre.

5 · MARKINGS CAST OR STAMPED INTO THE CASES

Chinese crankcases usually carry cast marks, mould numbers and sometimes a factory logo that never appears in any catalogue. Copy them exactly, including anything that looks like a serial or a date. They are frequently the only surviving link to who made the engine.

MARKINGS, EXACTLY AS THEY APPEAR

GY6 ENGINE IDENTIFICATION CHART

SKETCH OR RUB ANY LOGO OR SYMBOL

A cast logo is worth more than a badge on the bodywork

6 · WHAT YOU CONCLUDED

ENGINE FAMILY NUMBER IF KNOWN	FACTORY IF KNOWN
DISPLACEMENT YOU BELIEVE IT IS	CONFIDENCE
CC	
	High / medium / low — and be honest

WHY YOU CONCLUDED THAT — THE EVIDENCE, NOT THE GUESS

MEASURE, DO NOT ASSUME

Two machines that look identical, carry the same badge and were sold in the same year can still take different parts. These vehicles are assembled from several component suppliers, and suppliers change — sometimes inside a single model year. Nothing on this sheet is a statement that a part will fit. It is a record of what you actually have, so that you can compare it against what you are about to buy.

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