

Exhaust Flange And Stud Spacing Gauge

Stud spacing and port bore decide whether an exhaust bolts on. Measure both against a true-size grid before ordering.

LET IT COOL

An exhaust holds heat long after the engine feels cool, and the studs and nuts are the hottest part of it. Work on a cold machine.

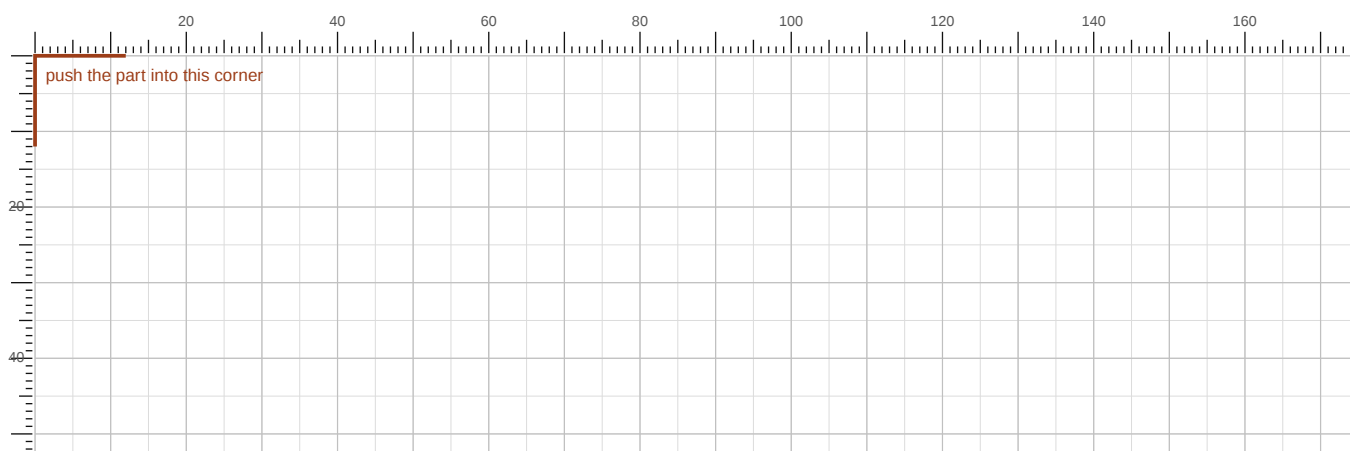
PRINT CALIBRATION — CHECK BEFORE MEASURING



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.

THE MEASURING GRID

LAY THE FLANGE OR GASKET ON THIS — SCALES IN MILLIMETRES



For stud spacing, line one stud hole up with the corner and read where the other falls. For port bore, centre the opening on the grid and read across its widest point.

WHAT TO RECORD

STUD SPACING, CENTRE TO CENTRE

mm

NUMBER OF STUDS

STUD THREAD SIZE

e.g. M6 or M8

PORT BORE

mm

GASKET OUTSIDE DIAMETER

mm

GASKET THICKNESS

mm

AN EXHAUST HAS TO FIT AT BOTH ENDS

The flange is the half everybody measures. The rear mounting bracket is the half that makes people return exhausts. Measure from the head to the mounting point and note how the bracket is shaped, because an exhaust that bolts to the head and misses the frame mount by an inch is no use.

FLANGE TO REAR MOUNT

 mm

REAR MOUNT BOLT SIZE

REAR MOUNT BOLT SPACING

 mm

BRACKET ON THE EXHAUST OR THE FRAME?

OXYGEN SENSOR BOSS PRESENT?

HEAT SHIELD FITTED?

SKETCH THE FLANGE AND THE REAR BRACKET

Mark the stud centres and the mounting hole positions

A JOINT THAT BLOWS

- ☐ Gasket is new, not the crushed one that came off
- ☐ Flange face flat and not distorted from previous overtightening
- ☐ Studs straight and their threads intact
- ☐ Nuts are the correct type and both present
- ☐ Rear mount is taking the weight, not the flange
- ☐ Nothing is holding the exhaust under tension into its mounts

OVERTIGHTENING WILL NOT CURE A BLOW

The studs thread into an alloy head. Pulling harder on a joint that is blowing strips them out, and repairing that is a far bigger job than the leak was. If it still blows with a new gasket and correct torque, the flange face is distorted or the rear mount is pulling the joint apart. Fix the cause.

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