

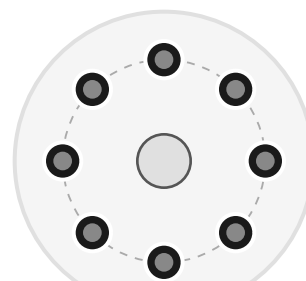
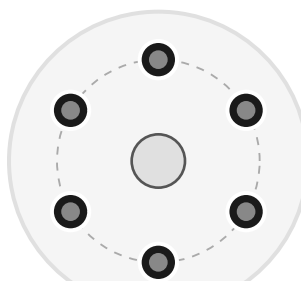
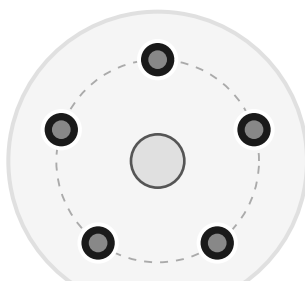
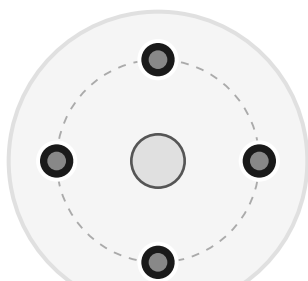
### WHAT IS A WHEEL BOLT PATTERN?

**Bolt Pattern = Number of Lugs × Bolt Circle Diameter (BCD)**

Written as: 5 x 114.3 → 5 lugs on a 114.3mm circle

Also shown in inches: 5 x 4.5" (same measurement, different unit)

#### Common Bolt Patterns:



### HOW TO MEASURE — STEP BY STEP

- STEP 1 Count your lug holes**  
 Look at your wheel and count the number of holes. Write it down — this is the first number in your bolt pattern.
- STEP 2 Identify your lug count type**  
 Even number of lugs (4, 6, 8)? Measure straight across. Odd-ish (5 lugs)? Use the special 5-lug method below.
- STEP 3 Measure the bolt circle**  
 Use a ruler in millimetres. Method depends on lug count — see the diagrams on Page 2.
- STEP 4 Write your bolt pattern**  
 Combine lug count + measurement: e.g. 5 lugs + 114.3mm = bolt pattern 5x114.3

### TOOLS YOU NEED

#### Ruler or tape measure

Must measure in millimetres (mm)

#### Pen and paper

Write down measurements as you go

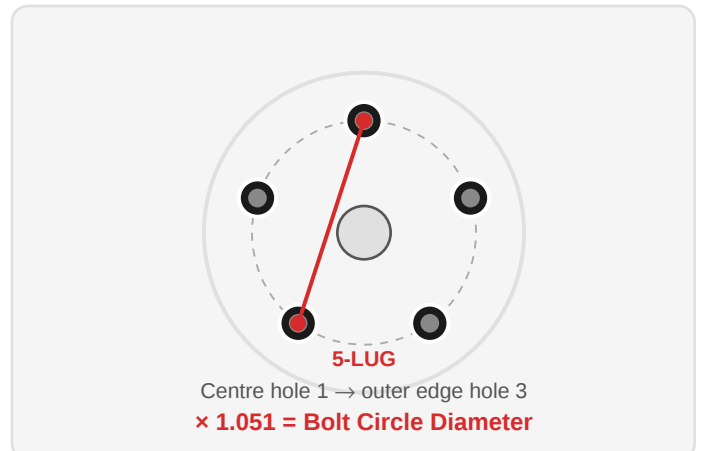
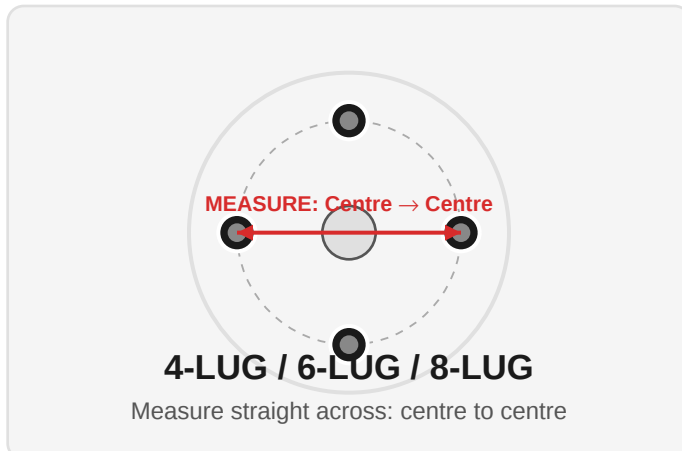
#### Calculator

Needed for 5-lug multiplication (×1.051)

#### Flashlight (optional)

Helpful if measuring in dim conditions

### MEASUREMENT DIAGRAMS BY LUG COUNT



### THE FORMULAS

#### 4 / 6 / 8 LUG

Measure centre → centre (directly opposite holes)

**Your measurement = BCD**

#### 5 LUG

Measure centre of hole 1 → outer edge of hole 3 (skip 1 hole)

**Measurement × 1.051 = BCD**

#### INCHES → MM

Multiply inches by 25.4

**Example: 4.5" × 25.4 = 114.3mm**

### WORKED EXAMPLE — 5-LUG MEASUREMENT

**Example: You measure 108.6mm from centre of hole 1 to outer edge of hole 3**

**Step 1:** Count lug holes → 5 lugs

**Step 2:** Measure centre of hole 1 to outer edge of hole 3 → 108.6mm

**Step 3:** Multiply: 108.6mm × 1.051 = 114.1mm

**Step 4:** Round to nearest standard: 114.3mm

**Result:** Your bolt pattern is **5x114.3** (also written as 5x4.5")

## BOLT PATTERN QUICK REFERENCE CHART

| BOLT PATTERN | INCHES  | COMMON VEHICLES                                                                          |
|--------------|---------|------------------------------------------------------------------------------------------|
| 4x100        | 4x3.94" | Honda Civic (pre-2012), VW Golf, Toyota Yaris, Hyundai Accent                            |
| 4x114.3      | 4x4.5"  | Older Nissan Sentra, Mitsubishi Eclipse, some Mazda                                      |
| 5x100        | 5x3.94" | Subaru Impreza/WRX (pre-2012), VW Golf/Jetta (older gen)                                 |
| 5x108        | 5x4.25" | Ford Focus/Fusion, Volvo S60/V70, Land Rover (older)                                     |
| 5x112        | 5x4.41" | Audi A3/A4/A6/Q5, VW Golf/Passat (current), Mercedes C/E Class                           |
| 5x114.3      | 5x4.5"  | <b>Toyota Camry/RAV4/Highlander, Honda Accord/CR-V, Nissan, Ford Mustang, Hyundai...</b> |
| 5x120        | 5x4.72" | BMW 3/5/7 Series, Chevrolet Camaro, Cadillac, Honda Odyssey                              |
| 5x127        | 5x5"    | Jeep Wrangler/Cherokee/Grand Cherokee, Chevrolet Traverse                                |
| 5x130        | 5x5.12" | Porsche 911, Cayenne, Panamera                                                           |
| 5x139.7      | 5x5.5"  | Dodge Ram 1500, older Chevrolet/GMC trucks, Mitsubishi Pajero                            |
| 6x114.3      | 6x4.5"  | Nissan Frontier, Pathfinder, Titan (select trims)                                        |
| 6x135        | 6x5.31" | Ford F-150 (2004+), Ford Expedition (2004+)                                              |
| 6x139.7      | 6x5.5"  | Toyota Tundra/4Runner/Tacoma, Chevrolet Silverado 1500, GMC Sierra 1500                  |
| 8x165.1      | 8x6.5"  | Ram 2500/3500, Ford F-250/F-350 (2005+)                                                  |
| 8x170        | 8x6.69" | Ford F-250/F-350 (2000–2004)                                                             |
| 8x180        | 8x7.09" | Chevrolet Silverado 2500/3500, GMC Sierra 2500/3500                                      |

★ Most common bolt pattern in North America

### INCHES ↔ MILLIMETRES CONVERSION TABLE

|                 |                 |                  |                  |
|-----------------|-----------------|------------------|------------------|
| 3.94" = 100mm   | 4.00" = 101.6mm | 4.25" = 107.95mm | 4.41" = 112mm    |
| 4.50" = 114.3mm | 4.53" = 115mm   | 4.72" = 120mm    | 4.75" = 120.65mm |
| 5.00" = 127mm   | 5.12" = 130mm   | 5.31" = 135mm    | 5.50" = 139.7mm  |
| 5.91" = 150mm   | 6.50" = 165.1mm | 6.69" = 170mm    | 7.09" = 180mm    |

### COMMON MISTAKES TO AVOID

#### Measuring in inches when the spec calls for millimetres

✓ Always use mm — multiply inches × 25.4 to convert

#### Assuming all 5-lug patterns are the same

✓ 5x100, 5x114.3, 5x120, 5x127 are all different — never assume

#### Mixing bolt patterns on the same vehicle

✓ Always run 4 matched wheels — mismatched patterns are dangerous

#### Confusing 5x5 (127mm) with 5x5.5 (139.7mm)

✓ These differ by 12.7mm — the wheels will not mount correctly

### NOT SURE ABOUT YOUR BOLT PATTERN?

Bring your vehicle into Good Tire Calgary — we'll identify your bolt pattern instantly and match you to wheels that fit perfectly. No guesswork, no returns.

**(403) 453-2008 | 2125 52 St SE Calgary | Open 7 Days | [goodtirecalgary.ca](http://goodtirecalgary.ca)**