

# Chainrings: explained

Up until quite recently chainrings were all standard sizes but Shimano, and now other manufacturers too, have started to produce non-standard chainrings to fit new style chainsets.

## Standard Chainrings

These will fit onto a crank with a 5 arm spider and are sized by the number of teeth they have and their PCD or BCD (Pitch or Bolt Circle Diameter). Generally this is 130mm for a standard 53/39 chainset and 110mm for a compact or mid-compact chainset. Most rings have this marked on them (see inset). SRAM and FSA for the most part still operate with standard rings and 5 arm spiders.

The big advantage of this type of set up is that it is very easy to buy chainrings cheaply and swap them in and out. Some SRAM chainsets, while standard at 110 or 130 BCD, do have a 'hidden bolt' (behind the crank arm), such chainsets will only accept SRAM specific chainrings with similar hidden bolt holes

Compact 5 arm spider  
with 110 BCD



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Non-standard 4 arm spider

## Non-standard Chainrings

Popularised by Shimano (e.g. Ultegra 6800, 105 5800 and Tiagra 4700), and now also used by Campagnolo, these fit onto a four arm spider as a rule and do not conform to a standard PCD or BCD. Buying different changings for this type of set up are generally more expensive and whilst at present there isn't as much choice on chainrings other manufacturers are now starting to produce aftermarket options; Stronglight and TA Chainrings being the current best options.

Cannondale have also started producing their own non-standard HollowGram chainset and presently this appears to be available only in 52/36 with no other options. Whilst a 36 front ring works well for Youth and is right on the edge of acceptable for T3's it does not work well for T2's. Using the 52 ring also works for Youth and T3 but would mean using a 16 up cassette to ensure enough gear choice. These are not at all common for 11speed but Miche do produce one