



Frequently Asked Questions

Question

Fit aftermarket alloy wheels to a C4 or C4P / C4GP and not have bad vibration as 65mph??

Answer

Please note that this also applies to fitting Full Size spare wheels to the C4 model range - For the New C4 or DS4 (B7) range post 2011 with an electric handbrake please read the alternate FAQ: [Click Here -](#)

If your looking for an alternative wheel to fit a full size spare then scroll down to the page end

There have been lots of forum posts on the Internet saying that you need a tyre supplier/vendor who has a 'centre-less' balancing machine to get things working properly on a C4

OK the first myth to destroy

- C4 alloys are not 'centre-less' - they have an internal 'spigot' diameter of **65.1mm** and are supposed to fit snugly on the wheel hubs

The **PCD is 108 X 4** for all models **except** the NEW (B78) C4 Picasso which uses a 5 bolt retaining system.

[In English](#) - the bolt hole centre distance from the centre of the hub is 108 mm with 4 bolt holes equally spaced on that diameter

Standard rim width on C4 Alloys is 17" X 6.5J and the maximum tyre width you can use on those is 215 X (C4owner had 215 X 45 X R17 fitted on his car.)

The correct 'Offset' is 25mm. ('Offset' explained: [- Click Here -](#))

Offset it is the distance in mm the wheel hub is from the centre of the width of the wheel.

Citro ën offset wheels on a C4 have an offset of 25mm where fords etc tend to have an off set between 35 & 45.

Therefore if you want to fit say ford fitment wheels with an offset of 35-45mm you will require spacers to bring the offset down to within 25mm. You also need to ensure that any spacers are 'concentric' and reduce the 'bore' to the correct size (read on for more info)

After-market wheels can go to 18" X 7J so you could go to 215 or even 225 X tyre width - C4 owners who have done this confirm that the tyres won't rub as long as the correct offset is maintained.



The Peugeot 207cc runs 17" X 7J alloys and is the same Offset and PCD as the C4.
There is also a tyre size differential calculator you can download here - [Click Here](#) -

Wheel nut Torques settings: 90nm/75lb/ft

Vibration Problems with your wheels?

1. The first thing to check is the internal diameter of the wheels - if they are over 65.1mm do they have a 'concentric reduction spigot' installed? (normally plastic) plus if the offset has changed and is adjusted using 'spacers' then are they using 'flat' or 'concentric' ones?

A flat spacer over 5mm should be avoided BTW as there will be little for the hub left for the wheel to sit on.

If over 65.1mm and **NO** you need one as the wheel is being held in place solely by the bolts so are not guaranteed to be holding the wheel 'true' to the hub circumference so will 'wobble at 65mph+' and which is dangerous as they are taking all the weight of the wheel and not the actual hub on the car. **The bolts are not designed to take all the load and with excessive vibration, could shear.**

2. They have a 'reducing spigot fitted. Is it the correct size? If yes is it sitting **BELOW** the internal hub face of the alloy?

If the wrong diameter you have the same issue as **1** - if the correct diameter but sitting 'proud' of the hub face then the wheels will not be sitting 'square' on the but so are not running true, so will again vibrate at 65mph+

3. [If all the above are correct then it's down to balancing of the wheel/tyre combo](#)

Just to confirm with a Citroën Resolfen Alloy - the areas indicated below form the bore that fits over the wheel hub (snugly) to centre the wheel and provide the unit strength

Finally just another image of a Concentric Spacer and Spigot Combination

If all the above is correct and your still getting vibration then it's time to take a look at the brakes on your car.



If judder or vibration happens in the very early life of the vehicle it should be taken back to the installing mechanic to check for brake disc (rotor) run out.

If rotor run out problems are not eliminated at the early onset of vibration or judder, they will become more permanent and worse and will eventually damage the rotor causing its replacement to be necessary to resolve the problem.

Judders and vibrations can also be caused by imbalance of the tyres, a seized brake calliper, or a poor surface condition on the brake disc (should be turned or replaced on pad installation in all cases).

The ways to eliminate judder are as follows. First of all check that the disc was installed and was running true with a dial gauge, which should be done by your local mechanic.

Vibration or judders at low speeds are always associated with rotor run out. Vibrations or judder at high speeds (70 - 100 mph) are what we call hot judder and are normally associated with over heating of the brake disc.

This is usually because of a low quality brake rotor casting (in which case the customer needs to be asked who's rotor he was using). This is only remedied by replacement of the rotor.

The other cause of vibration is known as disc thickness variation which is a condition generated when the rotor wears thick and thin due to incorrect installation of the rotor by the installing mechanic (in other words not running true from first installation).

Information from 'EBC Brakes Direct'

Phil wrote ...

Please be aware..... fitting full size spares underneath the back of the C4P and GP seriously reduces ground clearance.... as advised in the handbook.

We've just fitted one to a GP and were surprised just how much it protrudes and how visible it is from behind the car.

If you're going to insist on having a full size spare you need to be conscious at all times the reduced clearance. Personally after seeing the full size fitted, I'd be pretty much resigned to making do with a space saver as a back up.

Looking for a wheel to use as a full size spare:

Please Note: . A lower offset will place the wheel further out toward the side of the car, a higher offset places it nearer the middle of the car so aim to get a wheel with an offset as near to the original as possible.

C4 - PCD 4x108 Centre Bore 65.1 Wheel Alternatives



Maker	Model	Offset
Citroen	AX GTI (1991 - 1996)	20
Citroen	Berlingo (1996 - 2008)	18
Citroen	Berlingo (2008 -)	25
Citroen	BX (1989 - 1993)	25
Citroen	C2 (2003 - 2010)	24
Citroen	C3 (2002 - 2010)	28
Citroen	C3 (2010 -)	25
Citroen	C3 Picasso (2009 -)	18
Citroen	C3 Pluriel (2003 - 2010)	25
Citroen	C4 (2004 - 2011)	25
Citroen	C4 (2011 -)	25
Citroen	C4 (Picasso 2006 -)	25
Citroen	C4 (Grande Picasso 2006 -)	25
Citroen	C5 (2001 - 2008)	18
Citroen	DS3 (2010 -)	25
Citroen	DS4 (2011 -)	25
Citroen	Saxo (1996 - 2003)	24
Citroen	Xantia (1993 - 2001)	15
Citroen	Xsara (1997 - 2004)	18
Citroen	Xsara Picasso (2000 - 2006)	18
Citroen	ZX (1991 - 1997)	20
Peugeot	1007 (2005 -)	25
Peugeot	106 (4 gaats 1992 - 2005)	18
Peugeot	205 (1986 - 1996)	18
Peugeot	206 (1998 - 2009)	25
Peugeot	206+ (2009 -)	25
Peugeot	206CC (2001 - 2007)	25
Peugeot	207 (2006 -)	25
Peugeot	207CC (2007 -)	25
Peugeot	3008 (2009 -)	25
Peugeot	306 (1993 - 2001)	18
Peugeot	307 (2001 - 2009)	25
Peugeot	307CC (2003 - 2009)	25
Peugeot	308 (2007 -)	25
Peugeot	308CC (2007 -)	25
Peugeot	309 (1985 - 1993)	18
Peugeot	405 (1987 - 1995)	18
Peugeot	406 (1995 - 2004)	18
Peugeot	406 Coupe (1996 - 2005)	12
Peugeot	5008 (2009 -)	25
Peugeot	Partner (1996 - 2008)	18
Peugeot	Partner Origin (2008 -)	18
Peugeot	Partner Tepee (2008 -)	25



Saab	900 (1988 - 1993)	39
Saab	9000 (1985 - 1997)	33
Volvo	850 (1991 - 1993)	43

Details

Info 20 February 2009 by

C4 - DS4 Owners