



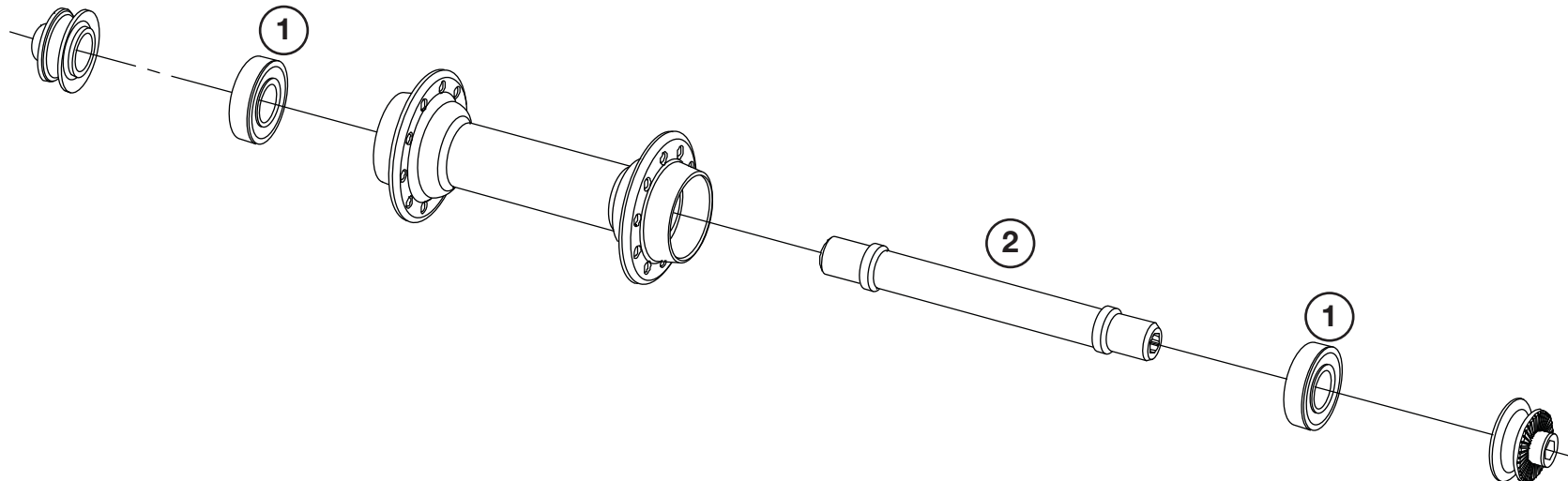
4ZA WHEELS: SPOKE CHART

**FORZA**

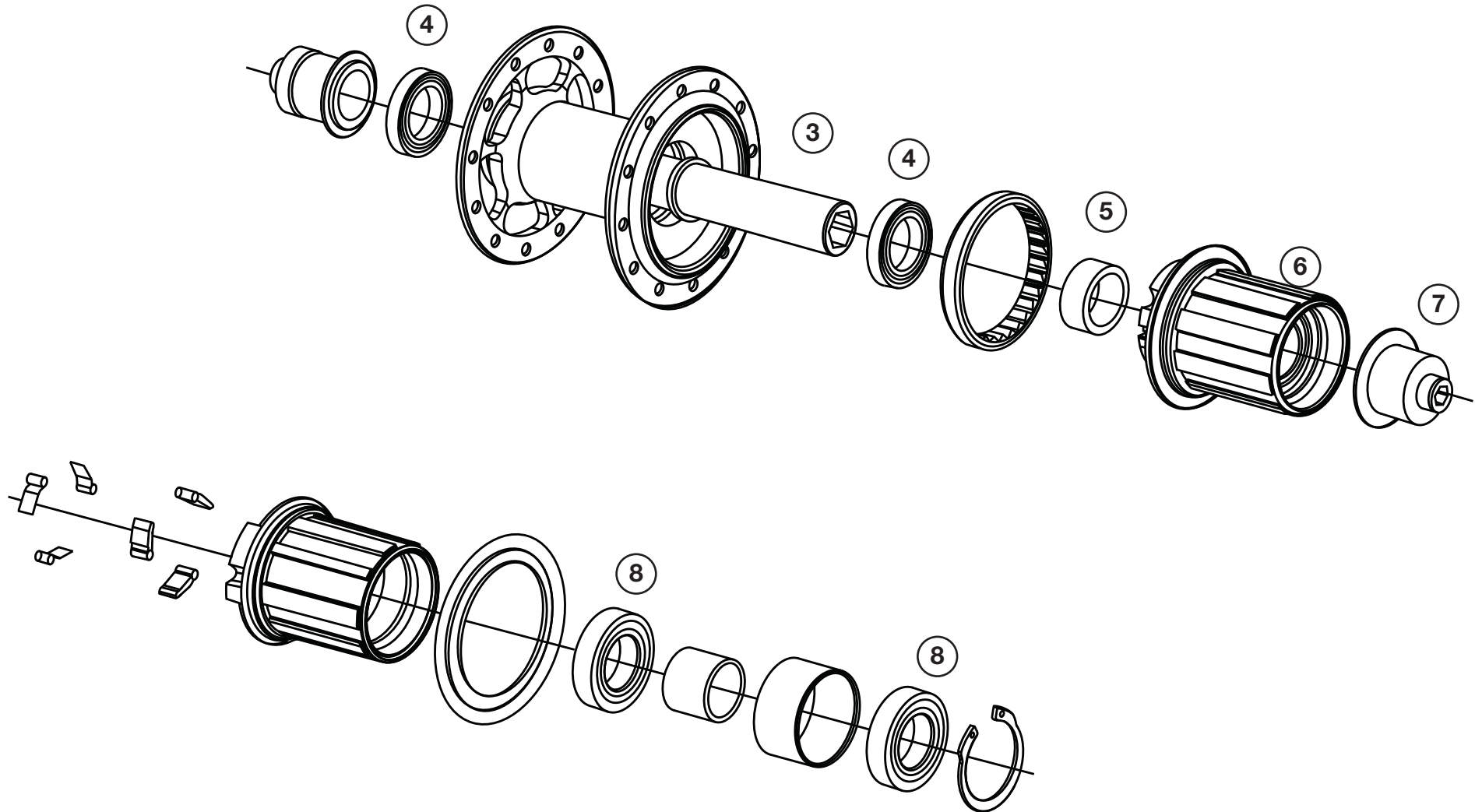
**4ZA Cirrus Pro** Tubular T50/T100

	<b>SHIMANO/SRAM 10/11s</b>	<b>CAMPAGNOLO 11s</b>
<b>Front hub</b>	HUBCHO4ZA001 (4ZA CirPro Hub Fr-20H)	
<b>Front axle</b>	WHPAXL4ZA003	
<b>Bearing front hub</b>	WHPHUB4ZA006 (4ZA hub bearing n°6900)	
<b>Rear hub</b>	HUBCHO4ZA006 (4ZA CirPro Hub 7DB Rr-24H/Shim/Sram10s)	HUBCHO4ZA007(4ZA CirPro Hub 7DB Rr-24H/Cam11s)
<b>Rear axle</b>	WHPAXL4ZA004	
<b>Freehub</b>	WHPHUBCHO001 (4ZA 7DB Cassette Body Shi/Sram10s) or WHPHUBCHO009 (4ZA 7DB Cassette Body Shi/Sram <b>11s</b> )	WHPHUBCHO002 (4ZA 7DB Cassette Body Cam11s)
<b>Freehub endcap</b>	WHPHUB4ZA012 (4ZA End Cap Cir/CiP Hub Shim)	WHPHUB4ZA020 (4ZA End Cap Cir/CiP Hub Camp11)
<b>Freehub spacer</b>	WHPSPC4ZA004 (4ZA freehub spacer 8,5mm: Cirrus Pro+ Shi/ Sra11s)	WHPSPC4ZA001 (4ZA freehub spacer 2,5mm: Cirrus Pro+ Cam11s)
<b>Bearing rear hub</b>	WHPHUB4ZA005 x2 (4ZA hub bearing n°6802) WHPHUB4ZA007 x2 (4ZA hub bearing n°6902)	WHPHUB4ZA005 x4 (4ZA hub bearing n°6802)

<b>ITEM</b>	<b>N°</b>
<b>Bearing</b> (WHPHUB4ZA006 4ZA hub bearing n°6900)	1
<b>Axle Cirrus Pro front hub</b> (WHPAXL4ZA003)	2



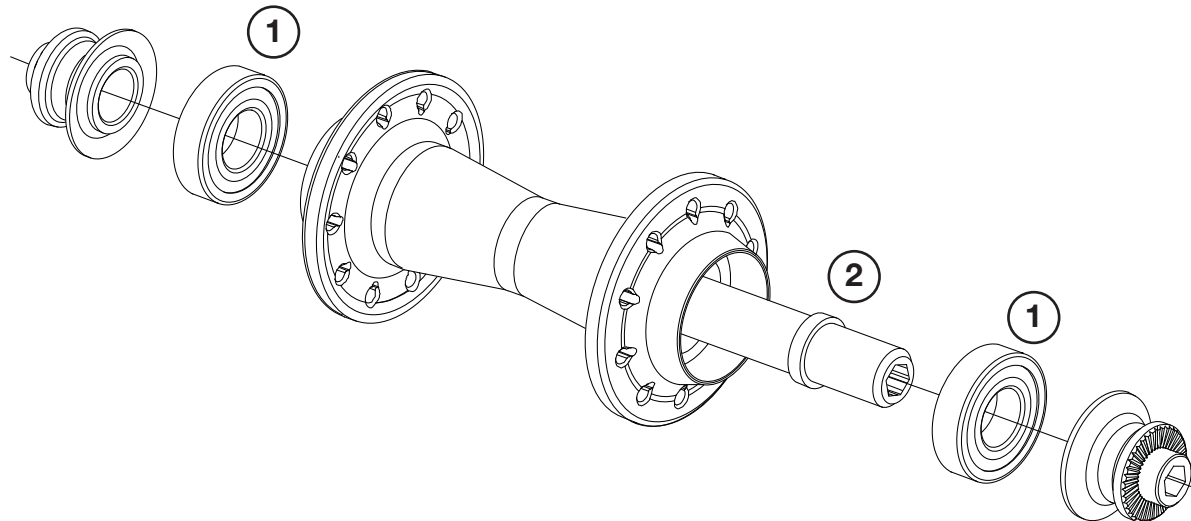
ITEM	N°
<b>Axle rear hub Cirrus Pro</b> (WHPAXL4ZA004)	3
<b>Freehub body</b> (WHPHUBCHO001/ WHPHUBCHO009 / WHPHUBCHO002)	6
<b>End cap freehub body</b> (WHPHUB4ZA012 / WHPHUB4ZA020)	7
<b>Spacer</b> (WHPSPC4ZA004 / WHPSPC4ZA001)	5
<b>Bearing in hub shell</b> (WHPHUB4ZA005 4ZA hub bearing n°6802)	4
<b>Bearing for freehub</b> (Shimano = WHPHUB4ZA007 / Campagnolo =WHPHUB4ZA005)	8



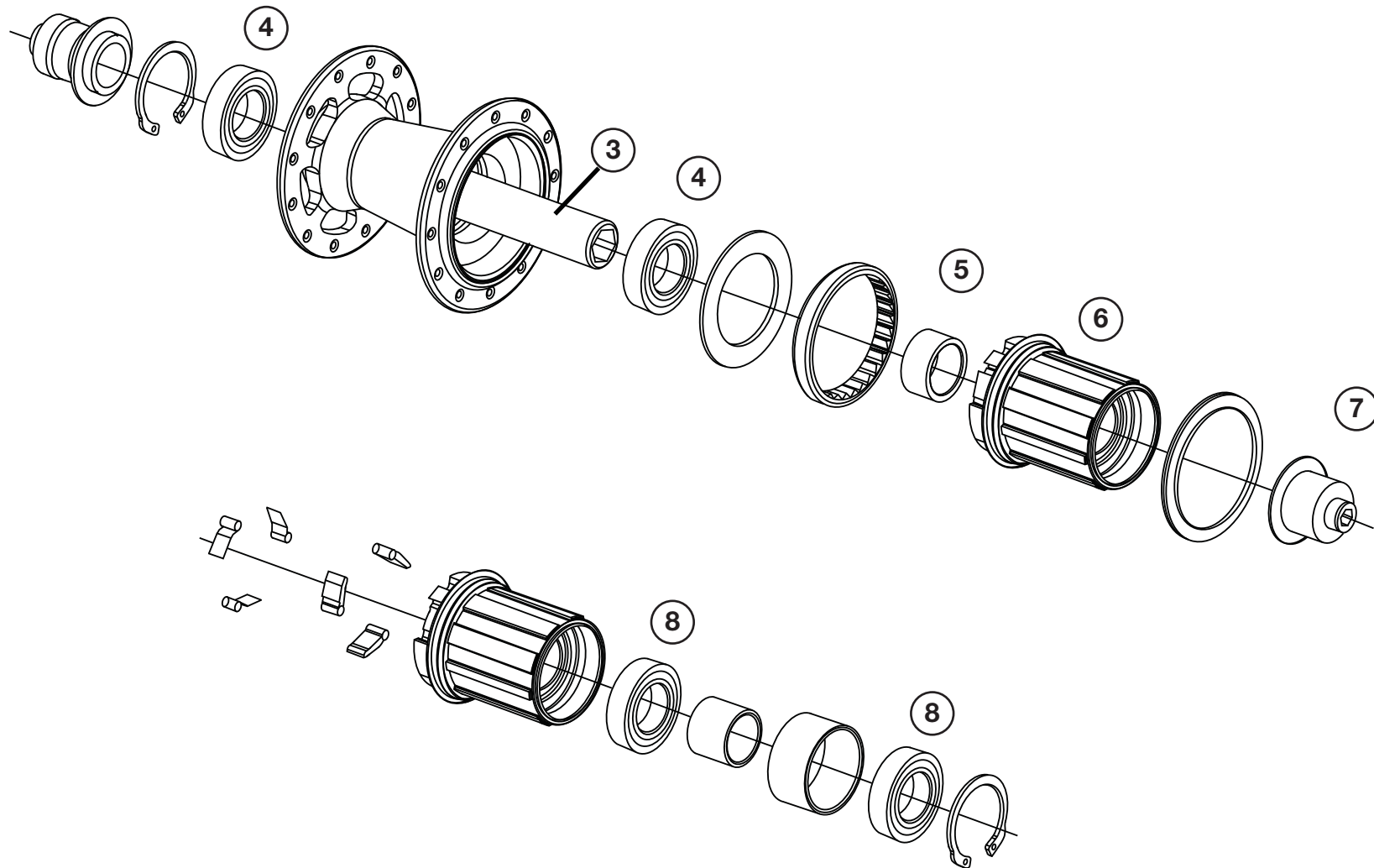
**4ZA Cirrus** Clincher / Tubular

	<b>SHIMANO/SRAM 10/11s</b>	<b>CAMPAGNOLO 11s</b>
<b>Front hub</b>	HUBCHO4ZA008 (4ZA Cirrus front hub - 20H)	
<b>Front axle</b>	WHPAXL4ZA005	
<b>Bearing front hub</b>	WHPHUB4ZA006 (4ZA hub bearing n°6900)	
<b>Rear hub</b>	HUBCHO4ZA009 (4ZA Cirrus rear hub - 24H - Shi/Sra10s)	HUBCHO4ZA010(4ZA Cirrus rear hub - 24H - Cam11s)
<b>Rear Axle</b>	WHPAXL4ZA007	
<b>Freehub</b>	WHPHUBCHO001 (4ZA 7DB Cassette Body Shi/Sram10s) or WHPHUBCHO009 (4ZA 7DB Cassette Body Shi/Sram <b>11s</b> )	WHPHUBCHO002 (4ZA 7DB Cassette Body Cam11s) + WHPHUB4ZA020 (4ZA End Cap Cir/CiP Hub Camp11)
<b>Freehub endcap</b>	WHPHUB4ZA012 (4ZA End Cap Cir/CiP Hub Shim)	WHPHUB4ZA020 (4ZA End Cap Cir/CiP Hub Camp11)
<b>Freehub spacer</b>	WHPSPC4ZA002 (4ZA freehub spacer 10mm: Cirrus + Shi/Sra 10 o r11s)	WHPSPC4ZA003 (4ZA freehub spacer 4,2mm: Cirrus + Cam11s)
<b>Bearing rear hub</b>	WHPHUB4ZA007 x4 (4ZA hub bearing n°6902)	WHPHUB4ZA005 x2 (4ZA hub bearing n°6802) WHPHUB4ZA007 x2 (4ZA hub bearing n°6902)

<b>ITEM</b>	<b>N°</b>
<b>Bearing</b> (WHPHUB4ZA006 4ZA hub bearing n°6900)	1
<b>Axle Cirrus front hub</b> (WHPAXL4ZA005)	2



ITEM	N°
<b>Axle Cirrus rear hub</b> (WHPAXL4ZA006)	3
<b>Freehub body</b> (WHPHUBCHO001/ WHPHUBCHO009 / WHPHUBCHO002)	6
<b>End cap freehub body</b> (WHPHUB4ZA012 / WHPHUB4ZA020)	7
<b>Spacer</b> (WHPSPC4ZA002 / WHPSPC4ZA003)	5
<b>Bearing in hub shell</b> (WHPHUB4ZA007 4ZA hub bearing n°6902)	4
<b>Bearing for freehub</b> (Shimano = WHPHUB4ZA007 / Campagnolo WHPHUB4ZA005)	8



**4ZA Stratos** Clincher

	<b>SHIMANO/SRAM 10s</b>	<b>CAMPAGNOLO 10s</b>
<b>Front hub</b>		
<b>Bearing front hub</b>	WHPHUB4ZA016 (4ZA hub bearing n°609-2RS) x2	
<b>Rear hub</b>		
<b>Freehub</b>	WHPHUB4ZA010 (4ZA Freehub body for Stratos wheelset - Shi/Sra10s - 3pw)	WHPHUBCHO011 (4ZA Freehub body for Stratos wheelset - Cam10s - 3pw)
<b>Freehub endcap</b>		
<b>Freehub spacer</b>		
<b>Bearing rear hub</b>	WHPHUB4ZA018 x2 (4ZA hub bearing n°6001-2RS) WHPHUB4ZA017 x2 (4ZA hub bearing n°6901-2RS)	



**Cirrus** Clincher

	Item	QTY/wheel
<b>Front wheel</b>	SPOAER4ZA001 (4ZA Cirrus CL spoke front wheel 277mm)	20
<b>Rear wheel drive side</b>	SPOAER4ZA003 (4ZA Cirrus CL spoke rear wheel 282mm)	12
<b>Rear wheels non-drive side</b>	SPOAER4ZA002 (4ZA Cirrus CL spoke rear wheel 278mm)	12
<b>Nipple</b>	NIPRCE4ZA001 (4ZA Cirrus spoke nipple Black)	20/24

Front wheel: radial lacing  
Rear wheel: 2 cross laced drive and non-drive side,

**Cirrus** Tubular

	Item	QTY/wheel
<b>Front wheel</b>	SPOSTEMAC030 (Spoke 279mm, PG Steel, BLA)	24
<b>Rear wheel drive side</b>	SPOSTEMAC016 (Spoke 274mm, PG Steel, BLA)	16
<b>Rear wheels non-drive side</b>	SPOSTEMAC022 (Spoke 277mm, PG Steel, BLA)	16
<b>Nipple</b>	NIPSTAMAC003 (Brass nipple Black)	24/32

Front wheel: radial lacing  
Rear wheel: 2 cross laced drive and non-drive side,

**Stratos** Clincher

	Item	QTY/wheel
<b>Front wheel</b>	SPOSTEMAC002 (Spoke 284mm, PG Steel, BLA)	24
<b>Rear wheel drive side</b>	SPOSTEMAC017 (Spoke 288mm, PG Steel, BLA)	12
<b>Rear wheels non-drive side</b>	SPOSTEMAC023 (Spoke 278mm, PG Steel, BLA)	12
<b>Nipple</b>	NIPSTAMAC003 (Brass nipple 14mm Black)	24/24

Front wheel: radial lacing  
Rear wheel: 2 cross laced drive side, radial laced non-drive side

**4ZA Cirrus PRO T50/100 + Cirrus Clincher / Tubular**



**WHPHUBCHO001**  
(4ZA 7DB Cassette  
Body Shi/Sram 10s)



**WHPHUBCHO009**  
(4ZA 7DB Cassette  
Body Shi/Sram **11s**)



**WHPHUBCHO002**  
(4ZA 7DB Cassette  
Body Cam11s)



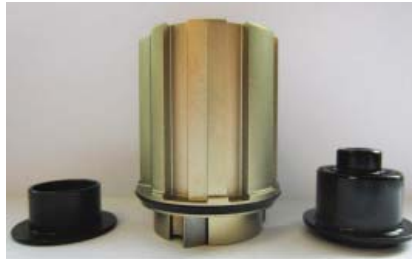
**4ZA freehub spacer:**  
WHPSPC4ZA001(2,5mm), WHPSPC4ZA002(10mm),  
WHPSPC4ZA003(4.2mm), WHPSPC4ZA004(8,5mm)

**4ZA Cirrus PRO AC58**



**WHPHUBCHO011**  
(4ZA AC58 Cassette Body Shi/Sram **11s**)  
**WHPHUBCHO012**  
(4ZA AC58 Cassette Body Shi/Sram 10s)

**4ZA Cirrus PRO AC58**



**WHPHUBCHO010**  
(4ZA AC58 Cassette Body Cam11s)

**4ZA cassette spacer**

Spacer required to assemble a 10sp Shimano cassette on a 11sp freehub.  
Slide the spacer over the freehub prior to assembling the cassette.  
WHPSPC4ZA005 (4ZA HG11s-10s ConversionSpacer)



### 4ZA Cirrus PRO Disc



**WHPHUBFFW002**

(4ZA Freehub body for Cirrus Pro disc wheel- Shi/Sra10s - 3pawl)



**WHPHUBFFW001**

(4ZA Freehub body for Cirrus Pro disc wheel- Cam11s - 3pawl)

### Stratos 7DB



**WHPHUB4ZA010**

(4ZA Freehub body for Stratos 7DB wheelset - Shi/Sra10s - 3pwl )



**WHPHUB4ZA011**

(4ZA Freehub body for Stratos 7DB wheelset - Cam10s - 3pwl )

### Stratos (first generation)



**WHPHUB4ZA001**

(4ZA Freehub body for old Stratos wheelset - Shi/Sra10s)



**WHPHUB4ZA002**

(4ZA Freehub body for old Stratos wheelset - Cam10s)

### !Important!

First generation Stratos wheels CANNOT be converted from Shimano to Campagnolo by exchanging the freehub.

**Cirrus Pro** T50

	Item	QTY/wheel
<b>Front wheel</b>	SPOCXRSAP066 (Spoke 258mm CX-Ray Aero BLA)	20
<b>Rear wheel drive side</b>	SPOCXRSAP065 (Spoke 260mm CX-Ray Aero BLA)	12
<b>Rear wheels non-drive side</b>	SPOCXRSAP067 (Spoke 246mm CX-Ray Aero BLA)	12
<b>Nipple</b>	NIPRCESAP006 (SAPIM Polyax nipple 16mm)	20/24

Front wheel: radial lacing  
Rear wheel: 2 cross laced drive side, radial laced non-drive side

**Cirrus Pro** T100

	Item	QTY
<b>Front wheel</b>	SPOCXRSAP061 (Spoke 210mm CX-Ray Aero BLA)	20
<b>Rear wheel drive side</b>	SPOCXRSAP061 (Spoke 210mm CX-Ray Aero BLA)	12
<b>Rear wheels non-drive side</b>	SPOCXRSAP062 (Spoke 196mm CX-Ray Aero BLA)	12
<b>Nipple</b>	NIPRCESAP006 (SAPIM Polyax nipple 16mm)	20/24

Front wheel: radial lacing  
Rear wheel: 2 cross laced drive side, radial laced non-drive side

**Cirrus Pro** T50 track (round spoke)

	Item	QTY
<b>Front wheel</b>	SPOSPRSAP001 (Spoke 252mm, Sapim Race, BLA)	28
<b>Rear wheel (non) drive side</b>	SPOROU4ZA029 (Spoke 262mm, Sapim Race, BLA)	28
<b>Nipple</b>	NIPRCESAP006 (SAPIM Polyax nipple 16mm)	28/28

Front wheel: radial lacing  
Rear wheel: 2 cross laced drive and non-drive side,

**Cirrus Pro** AC58

	Item	QTY/wheel
<b>Front wheel</b>	SPOAER4ZA004 (4ZA AC58 aero spoke front wheel 245mm)	20
<b>Rear wheel drive side</b>	SPOAER4ZA005 (4ZA AC58 aero spoke rear wheel 255mm)	12
<b>Rear wheels non-drive side</b>	SPOAER4ZA006 (4ZA AC58 aero spoke rear wheel 253mm)	12
<b>Nipple</b>	NIPRCESAP006 (SAPIM Polyax nipple 16mm)	20/24

Front wheel: radial lacing  
Rear wheel: 2 cross laced drive and non-drive side,

**Cirrus** Clincher

	Item	QTY/wheel
<b>Front wheel</b>	SPOAER4ZA001 (Cirrus Aero Spoke 277mm BLA)	20
<b>Rear wheel drive side</b>	SPOAER4ZA003 (Cirrus Aero Spoke 282mm BLA)	12
<b>Rear wheels non-drive side</b>	SPOAER4ZA002 (Cirrus Aero Spoke 278mm BLA)	12
<b>Nipple</b>	NIPRCE4ZA001(4ZA Cirrus spoke nipple)	20/24

Front wheel: radial lacing  
Rear wheel: 2 cross laced drive and non-drive side,

**Cirrus** Tubular

	Item	QTY/wheel
<b>Front wheel</b>	SPOSTEMAC030 (St. Steel Spoke 279mm BLA)	24
<b>Rear wheel drive side</b>	SPOSTEMAC016 (St. Steel Spoke 274mm BLA)	16
<b>Rear wheels non-drive side</b>	SPOSTEMAC022 (St. Steel Spoke 277mm BLA)	16
<b>Nipple</b>	NIPRCE4ZA001(4ZA Cirrus spoke nipple)	24/32

Front wheel: radial lacing  
Rear wheel: 2 cross laced drive and non-drive side,

**Stratos** Clincher

	Item	QTY/wheel
<b>Front wheel</b>	SPOSTEMAC002 (St. Steel Spoke 284mm BLA)	24
<b>Rear wheel drive side</b>	SPOSTEMAC017 (St. Steel Spoke 288mm BLA)	12
<b>Rear wheel non - drive side</b>	SPOSTEMAC023 (St. Steel Spoke 287mm BLA)	12
<b>Nipple</b>	NIPSTAMAC003 (14mm Brass spoke nipple BLA)	24/24

Front wheel: radial lacing  
Rear wheel: 2 cross laced drive side, radial laced non-drive side

**4ZA Wheels: Spoke chart**  
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