

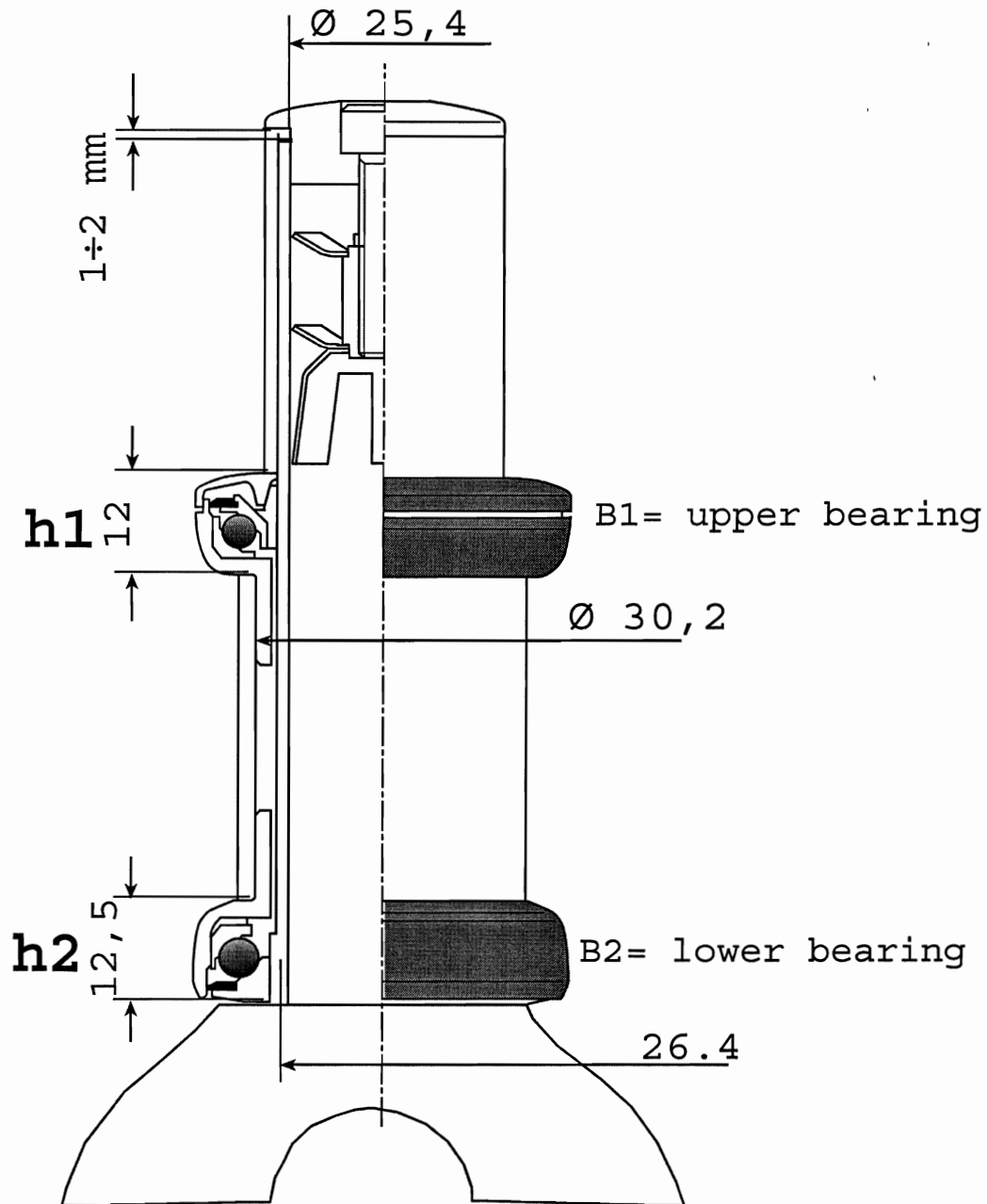
Campagnolo®

2003

**TECHNICAL
SPECIFICATIONS**

THREADLESS HEADSETS

RECORD, CHORUS

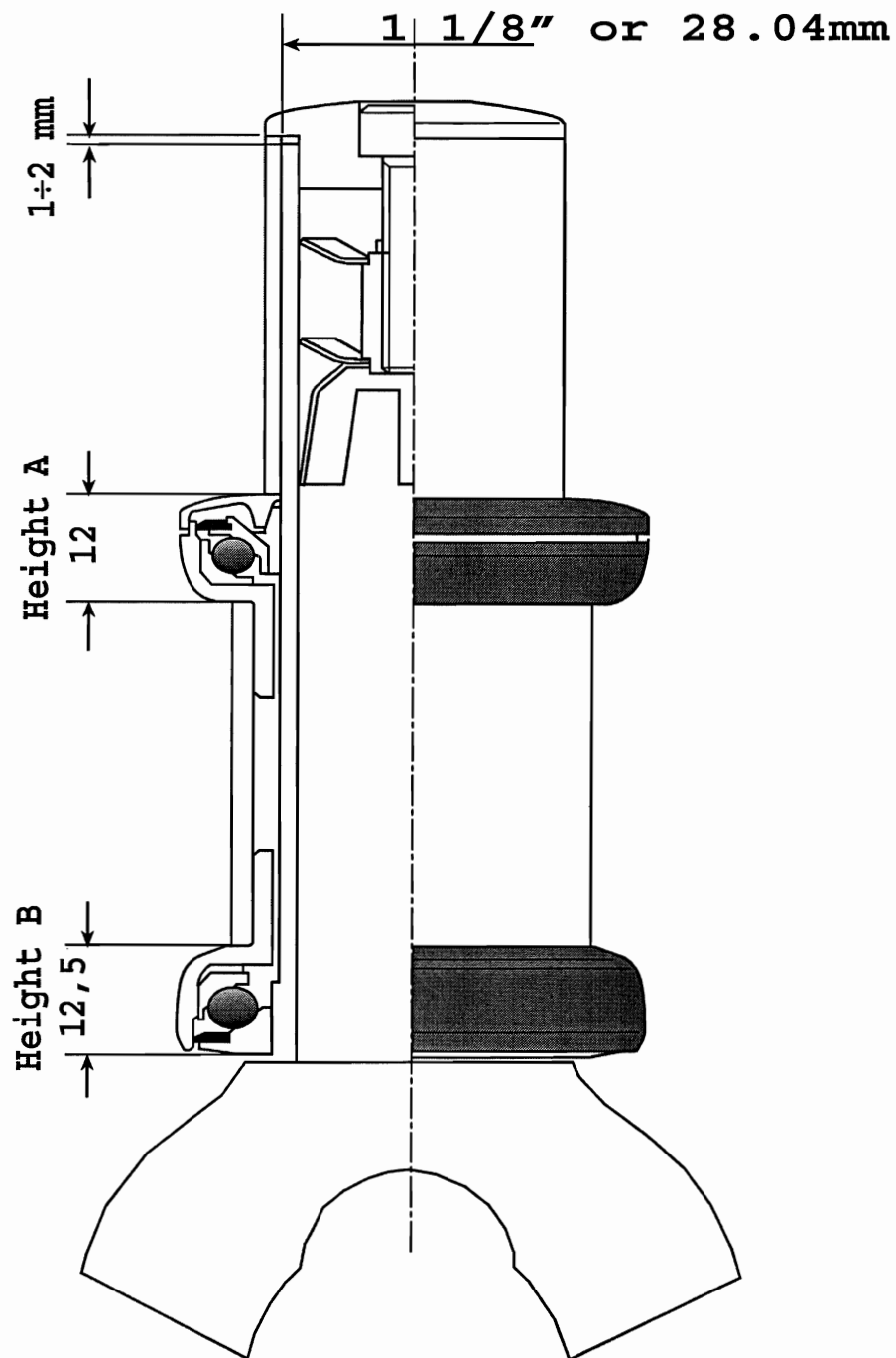


2003 Headsets (threadless)

model	weight	B1	B2	h1	h2	h1+h2
RECORD	110 g.	5/32"!	3/16"!	12mm	12.5 mm	24.5 mm
CHORUS	111 g.	5/32"!	3/16"!	12mm	12.5 mm	24.5 mm

!install smaller bearings (5/32") on top, and larger bearings on bottom!!

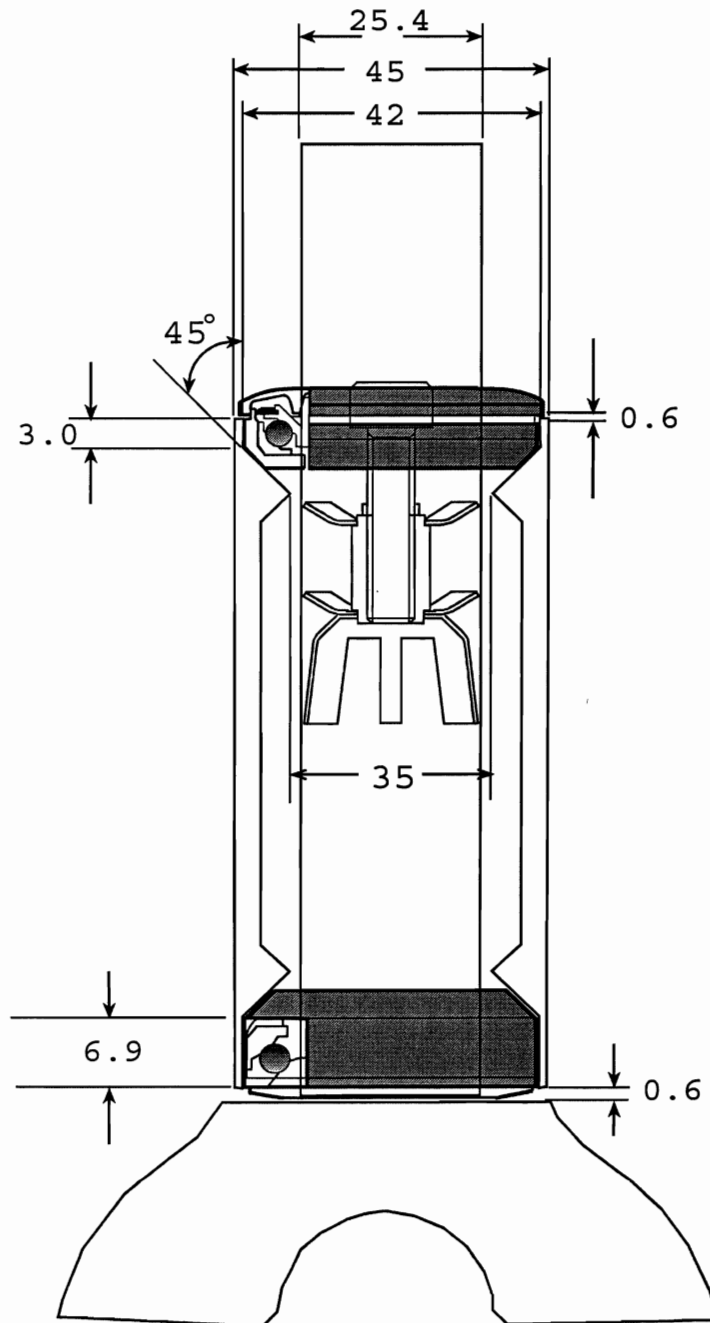
THREADLESS HEADSETS (Oversize)



2003 Oversize Threadless Headset				
model	weight	height A	height B	total
RECORD	110 g.	12.0 mm	12.5 mm	24.5 mm

HIDDENSET

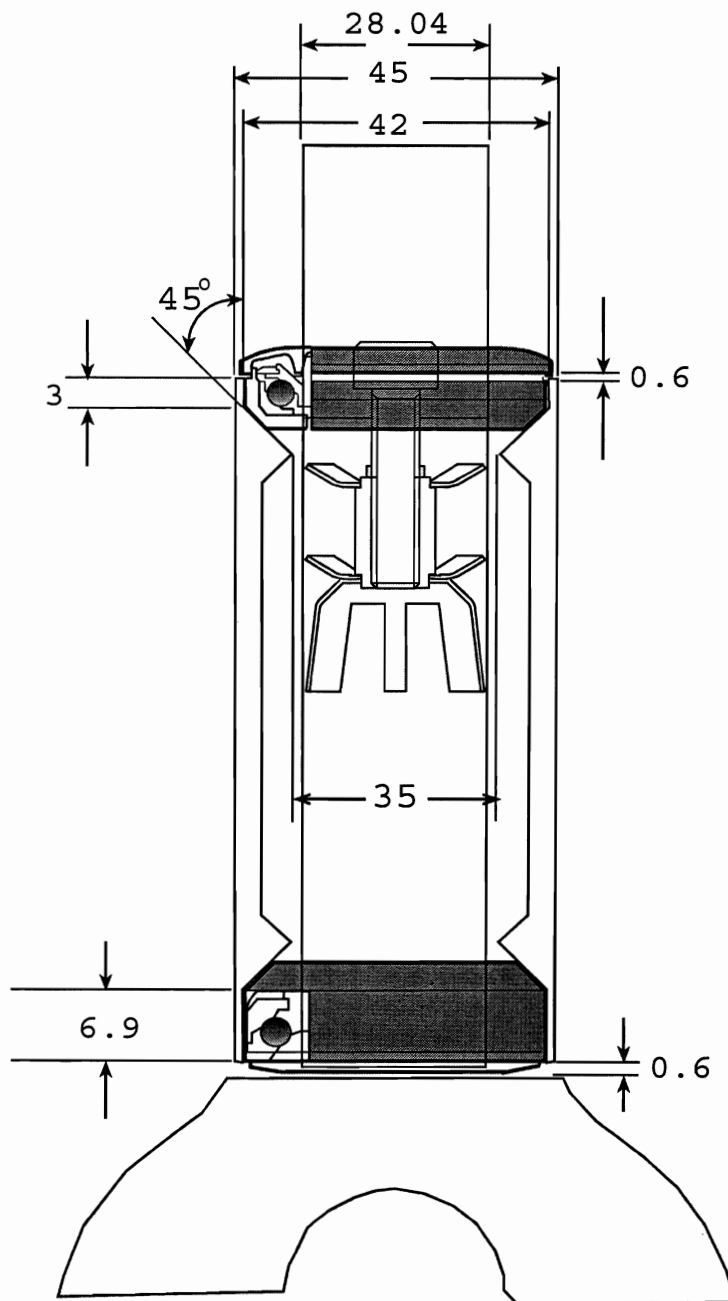
(1")



2003 Hiddenset (1")

model	weight	# of bearings	bearing size	stack height
RECORD	75 g.	22	5/32"	6 mm.

HIDDENSET 1 1/8"



2003 HIDDENSET (1 1/8")

model	weight	# of bearings	bearing size	stack height
RECORD	75 g.	28	1/8"	6 mm.
CHORUS	82 g.	28	1/8"	6 mm.

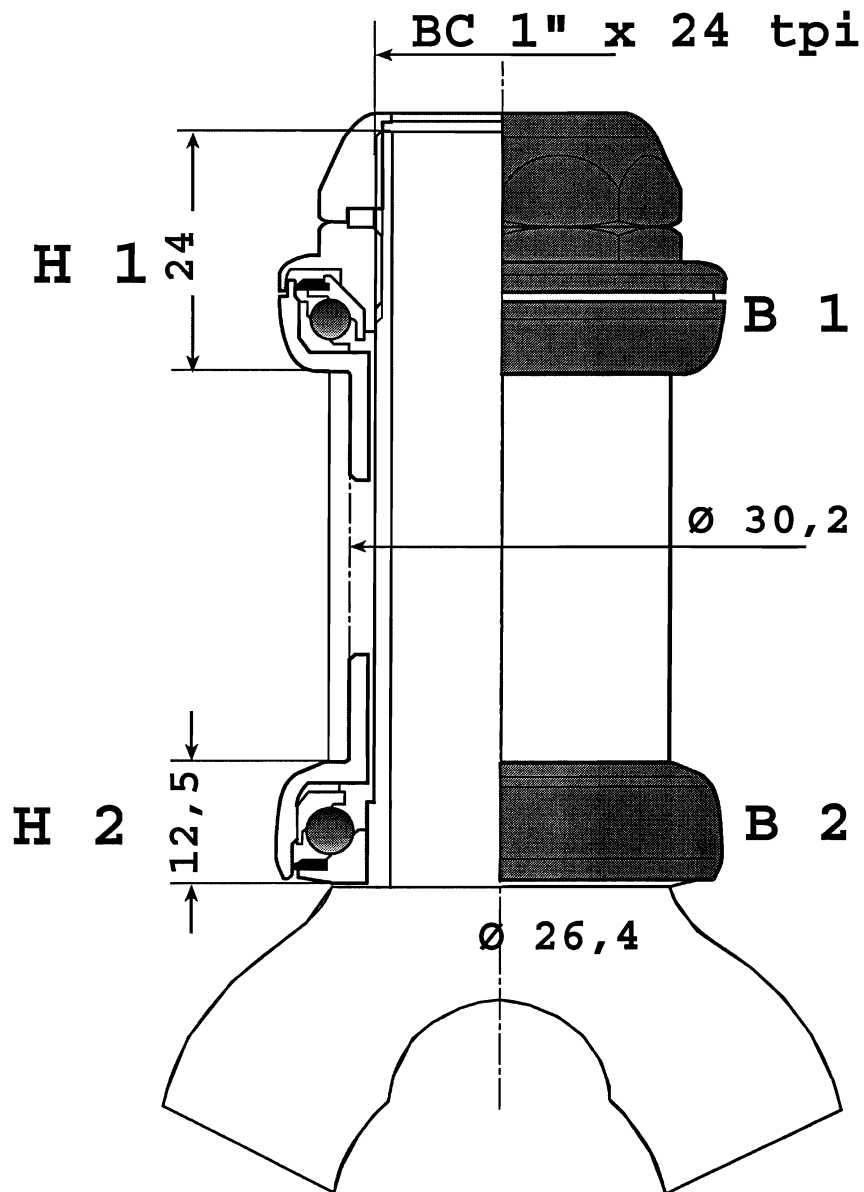
Technical drawing of a mechanical assembly, likely a mold or die, showing dimensions in millimeters. The drawing includes a top view and a side view. Key dimensions are:

- Top view dimensions: 28.04 (width), 45 (width), 42 (width), 10.6 (height), 0.6 (height), 3 (height), 45° (angle), 35 (width), 6.9 (height), 0.6 (height).
- Side view dimensions: 0.6 (height).



HEADSETS (Threaded)

RECORD, CHORUS



2003 Threaded Stack Heights

model	weight	B 1	B 2	H 1	H 2	H 1 + H 2
RECORD	104 g.	5/32"	3/16"	24mm	12.5 mm	36.5 mm
CHORUS	106 g.	5/32"	3/16"	24mm	12.5 mm	36.5 mm

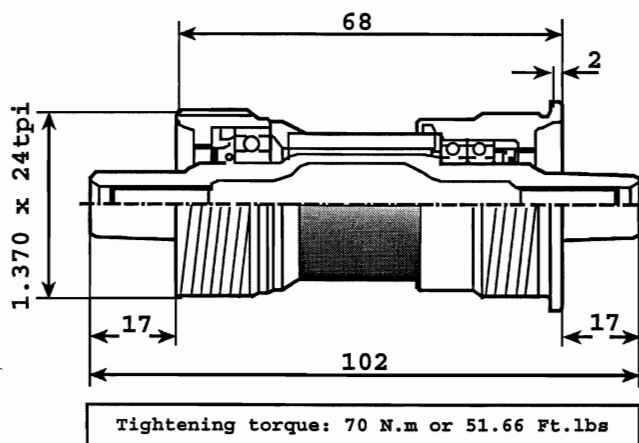
BOTTOM BRACKETS

RECORD, CHORUS

RECORD

BSC. threading

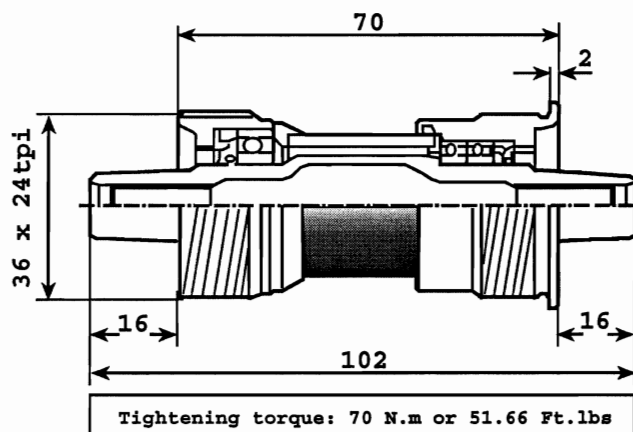
item code	weight	spindle length
BB99-RE02BC	190g	102mm



RECORD

Ita. threading

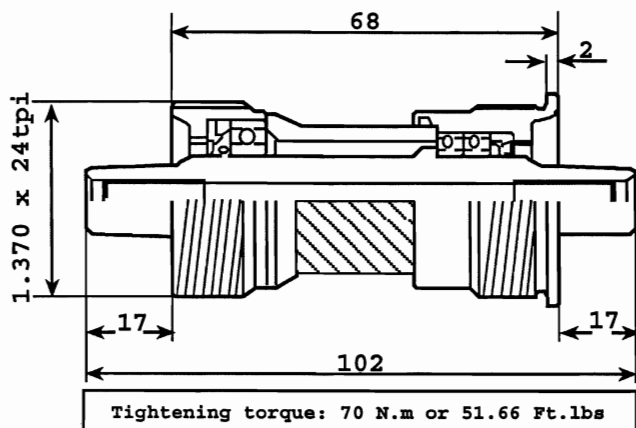
item code	weight	spindle length
BB99-RE02IT	190g	102mm



CHORUS

BSC. threading

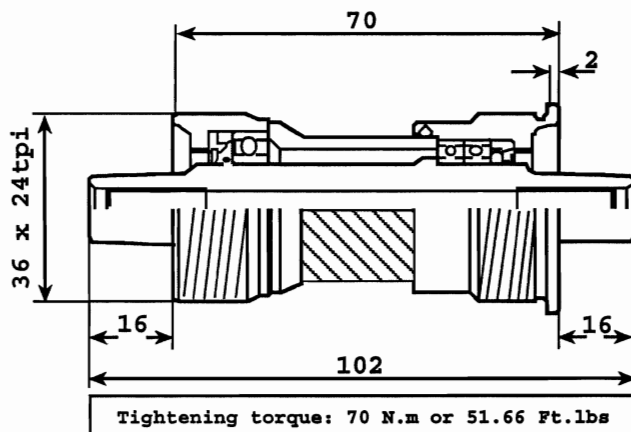
item code	weight	spindle length
BB99-CH02BC	220g	102mm



CHORUS

Ita. threading

item code	weight	spindle length
BB99-CH02IT	220g	102mm



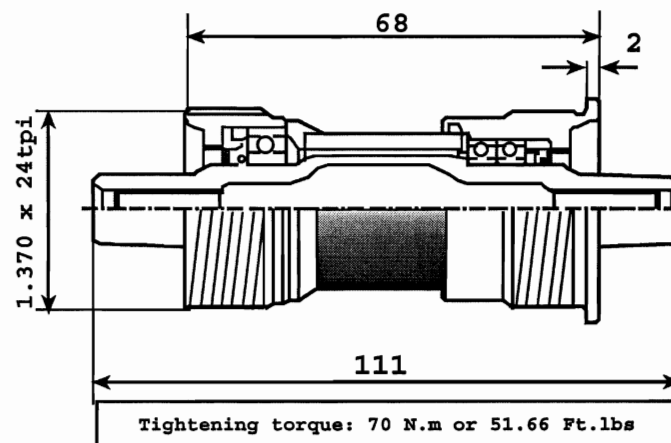
BOTTOM BRACKETS

RECORD / CHORUS TRIPLE

RECORD / CHORUS Triple

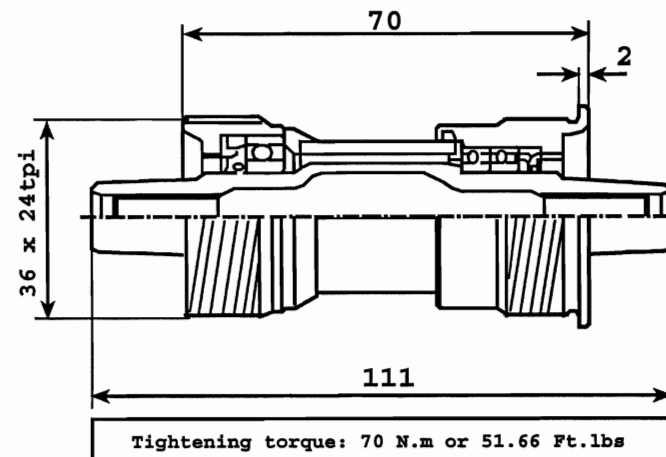
BSC. threading

model	weight	spindle length
RECORD	198g.	111mm
CHORUS	223g.	111mm



ITA. threading

model	weight	spindle length
RECORD	198g.	111mm
CHORUS	223g.	111mm

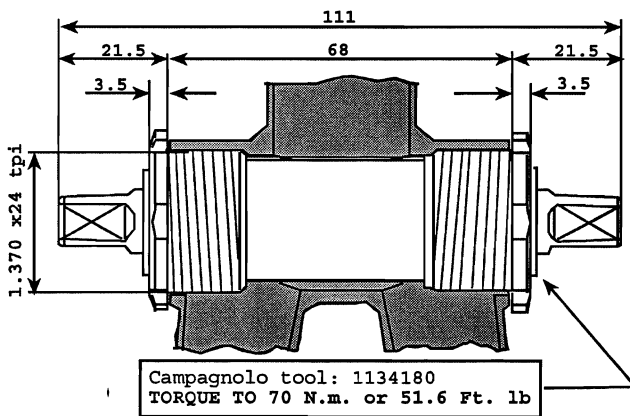


BOTTOM BRACKETS

CENTAUR & CENTAUR TRIPLE

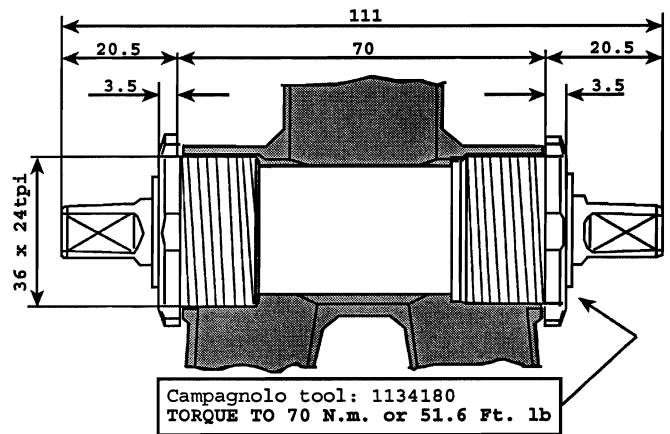
CENTAUR AC-H & AC-S BSC. thread

item code	weight	spindle length
BB00-AH11BC	288g.	111mm
BB00-AS11BC	299g.	111mm



CENTAUR AC-H & AC-S ITA. Threading

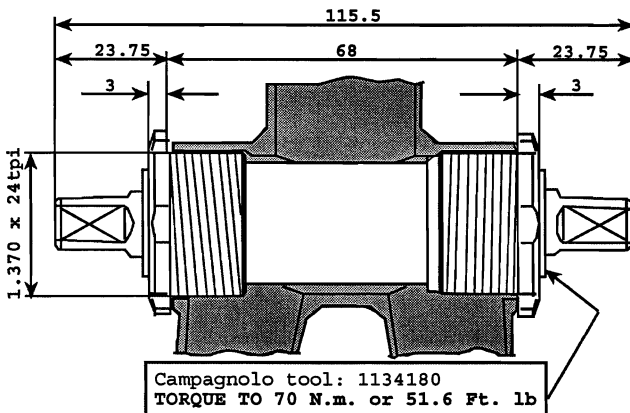
item code	weight	spindle length
BB00-AH11IT	288g.	111 mm
BB00-AS11IT	299g.	111 mm



CENTAUR Triple

AC-H BSC. thread

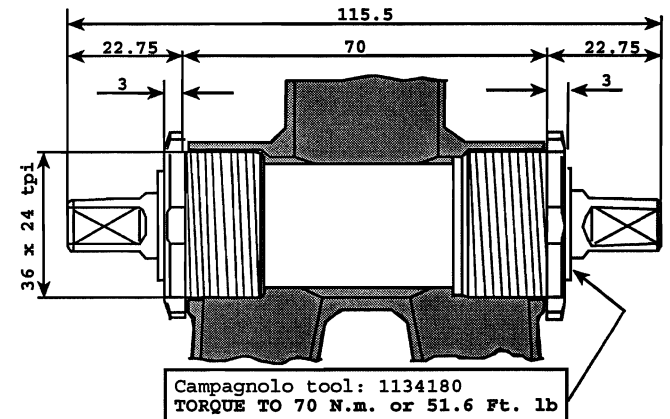
item code	weight	spindle length
BB00-AH15BC	288g.	115,5mm



CENTAUR Triple

AC-H ITA. Threading

item code	weight	spindle length
BB00-AH15IT	288g.	115,5mm



BOTTOM BRACKETS

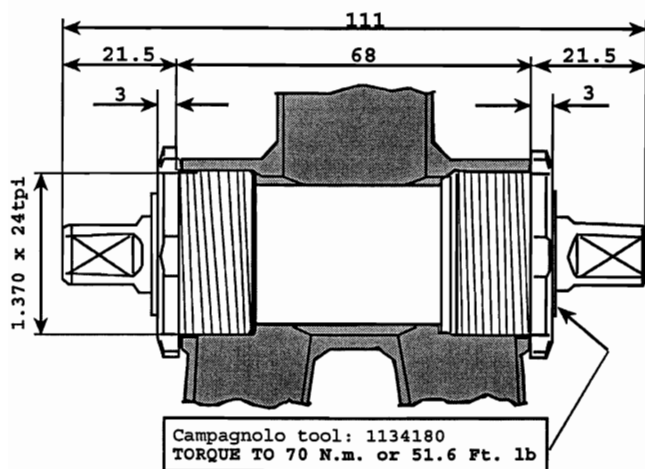
Veloce & Mirage

Veloce Triple & Mirage Triple

VELOCE MIRAGE

AC-S & SC-S BSC. threading

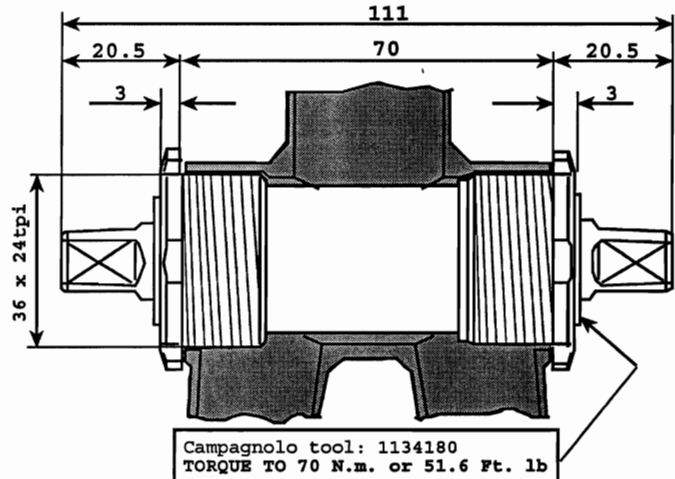
item code	weight	spindle length
BB00-AS11BC	299g	111 mm
BB02-SS11BC	358g	111 mm



VELOCE MIRAGE

AC-S & SC-S ITA. Threading

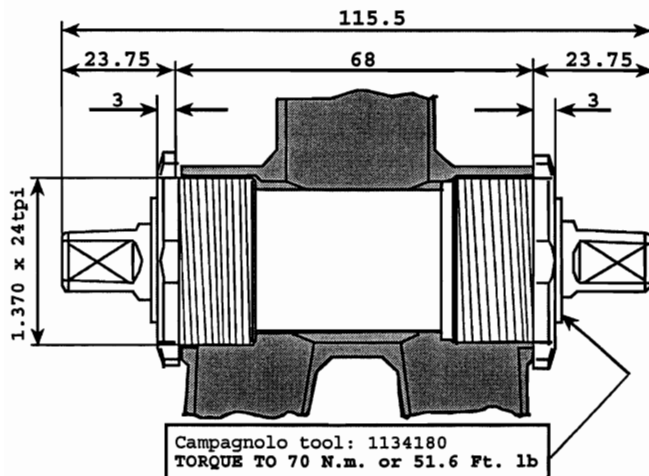
item code	weight	spindle length
BB00-AS11IT	299g	111 mm
BB02-SS11IT	358g	111 mm



VELOCE Triple MIRAGE Triple

SC-S BSC. threading

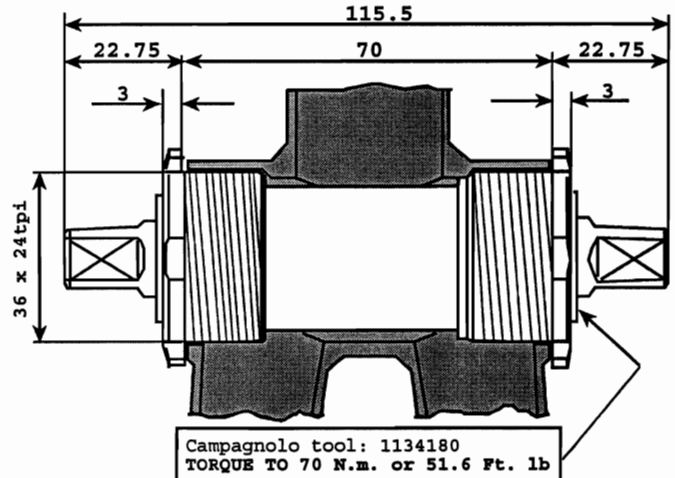
item code	weight	spindle length
BB02-SS15BC	358g	115,5mm



VELOCE Triple MIRAGE Triple

SC-S ITA. Threading

item code	weight	spindle length
BB02-SS15IT	358g	115,5mm



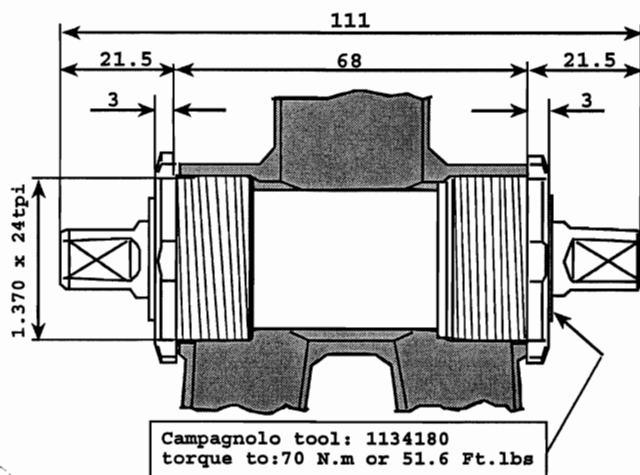
BOTTOM BRACKETS

XENON

XENON

BSC. threading

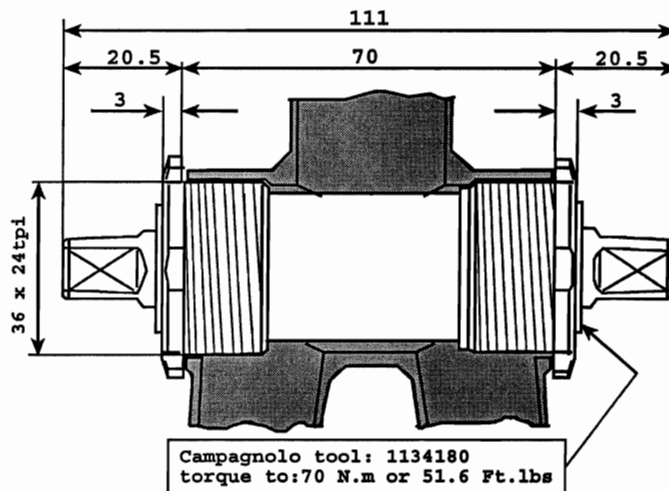
item code	weight	spindle length
BB02-SS11BC	358g.	111 mm.



XENON

ITA. Threading

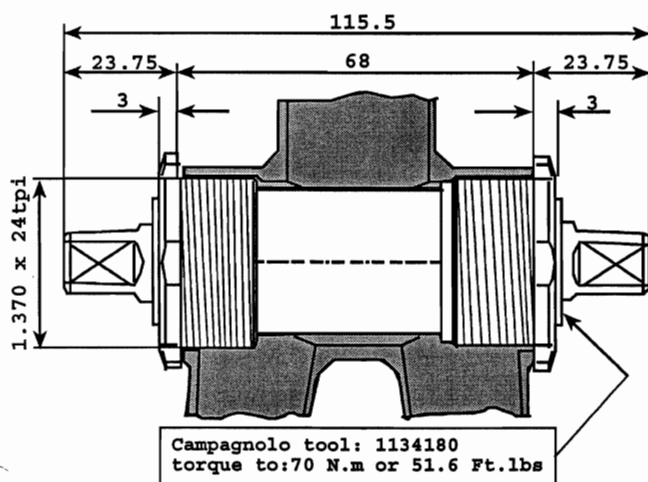
item code	weight	spindle length
BB02-SS11IT	358g.	111 mm.



XENON Triple

BSC. threading

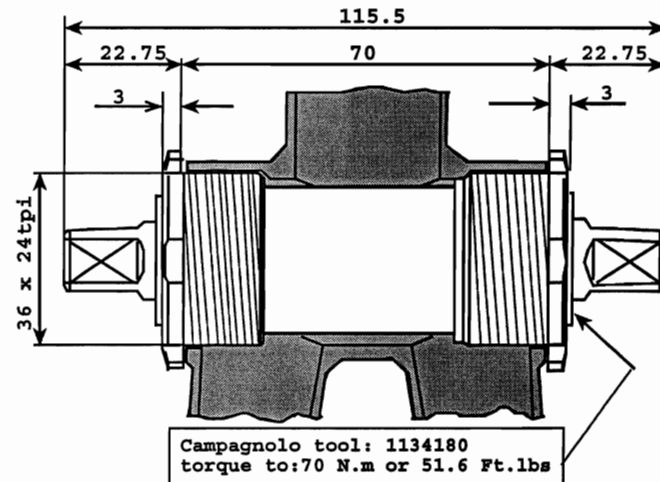
item code	weight	spindle length
BB02-SS15BC	358g.	115.5 mm.



XENON Triple

ITA. Threading

item code	weight	spindle length
BB02-SS15IT	358g.	115.5 mm.



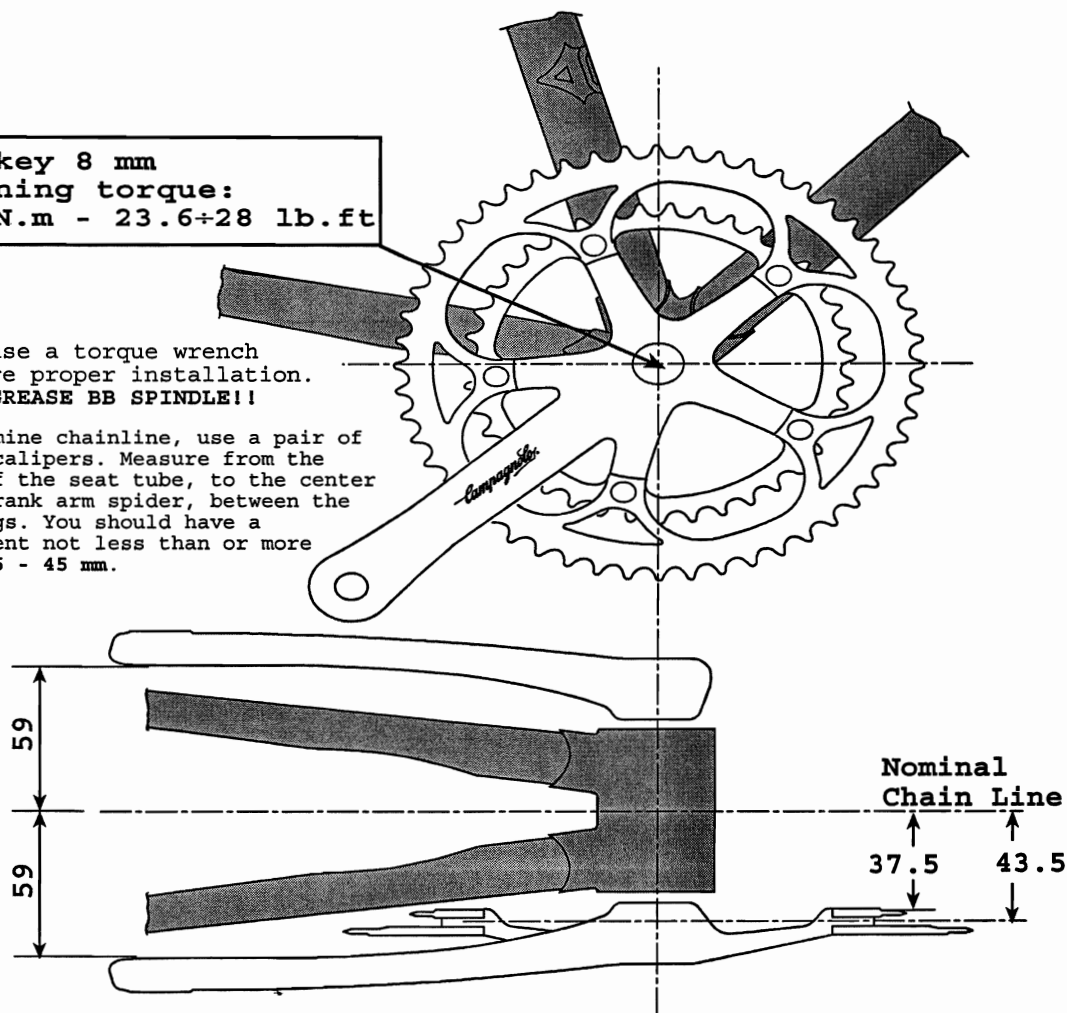
CRANKSETS

Double Chainrings

Allen key 8 mm
Tightening torque:
32÷38 N.m - 23.6÷28 lb.ft

Always use a torque wrench
to ensure proper installation.
DO NOT GREASE BB SPINDLE!!

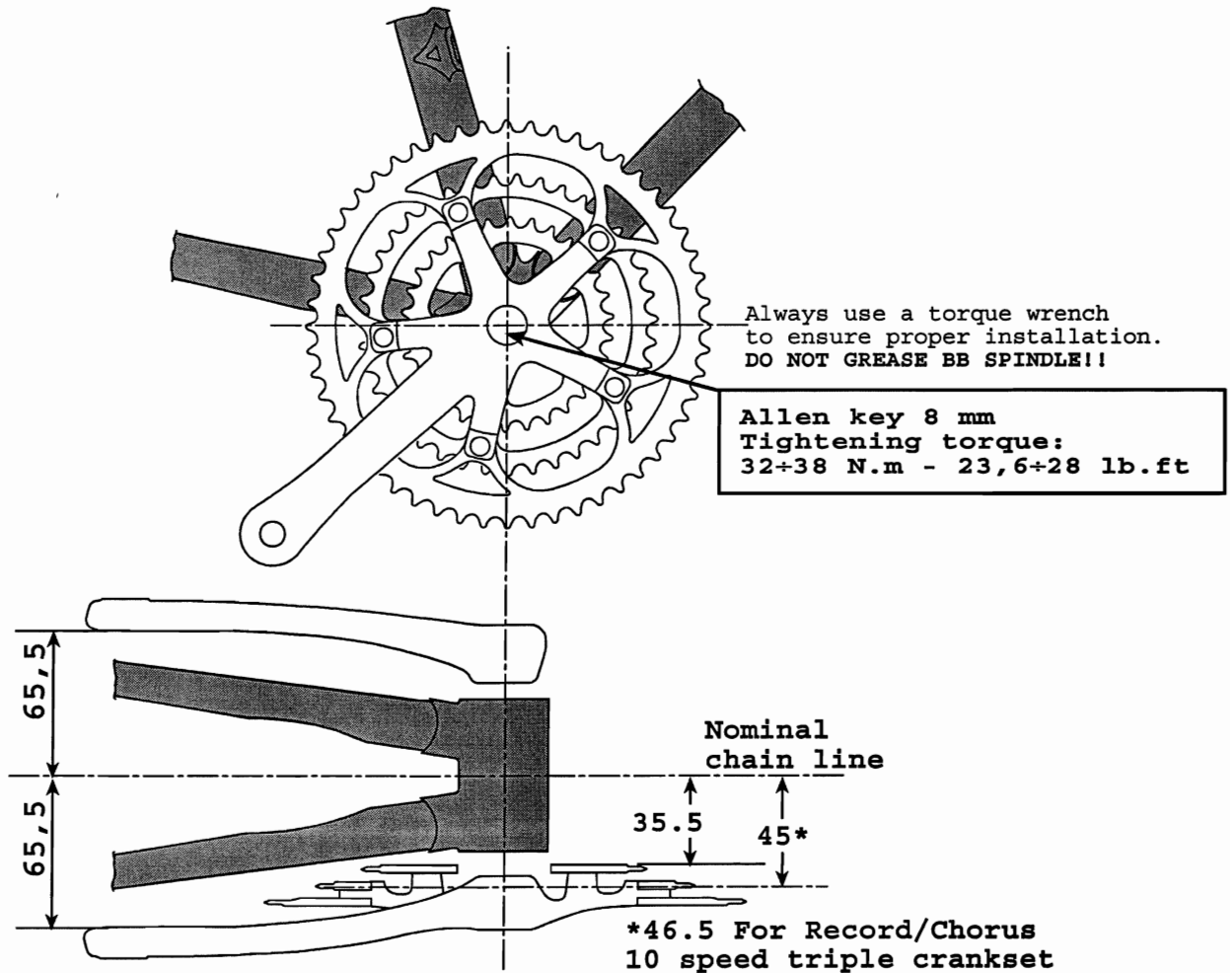
To determine chainline, use a pair of
precise calipers. Measure from the
center of the seat tube, to the center
of the crank arm spider, between the
chainrings. You should have a
measurement not less than or more
than 43.5 - 45 mm.



2003 CRANKSETS

model	length avail.	weight	BB spindle
RECORD 10s C	170, 172.5, 175, 177.5, 180	500g	102 mm
RECORD 9/10s	170, 172.5, 175, 177.5, 180	632g	102 mm
CHORUS 9/10s	170, 172.5, 175	667g	102 mm
CENTAUR 9/10s	170, 172.5, 175	646g	111 mm
VELOCE 9s	170, 172.5, 175	659g	111 mm
MIRAGE 9s	170, 172.5, 175	713g	111 mm
XENON 9s	170, 175	793g	111 mm

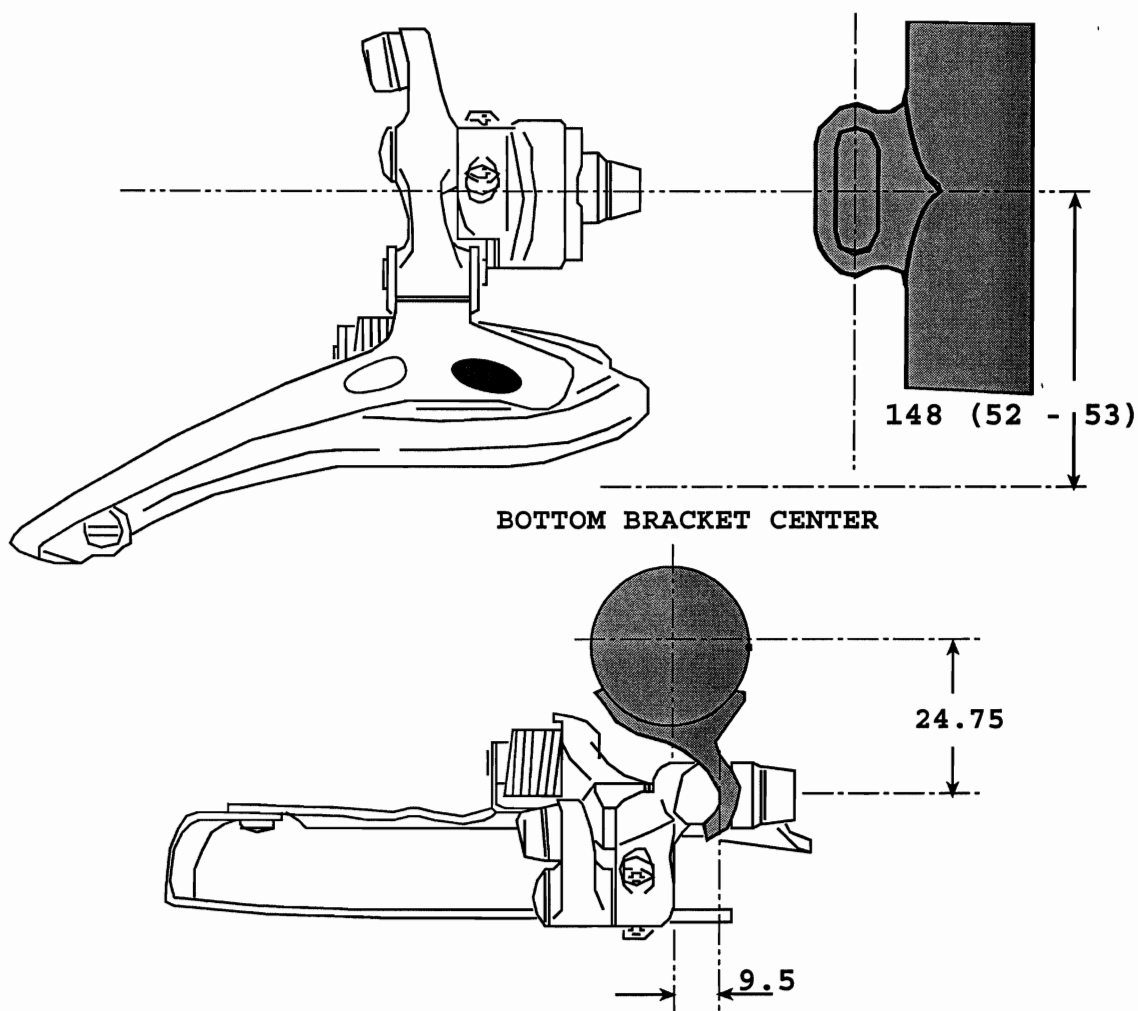
TRIPLE CRANKSETS



2003 TRIPLE CRANKSETS

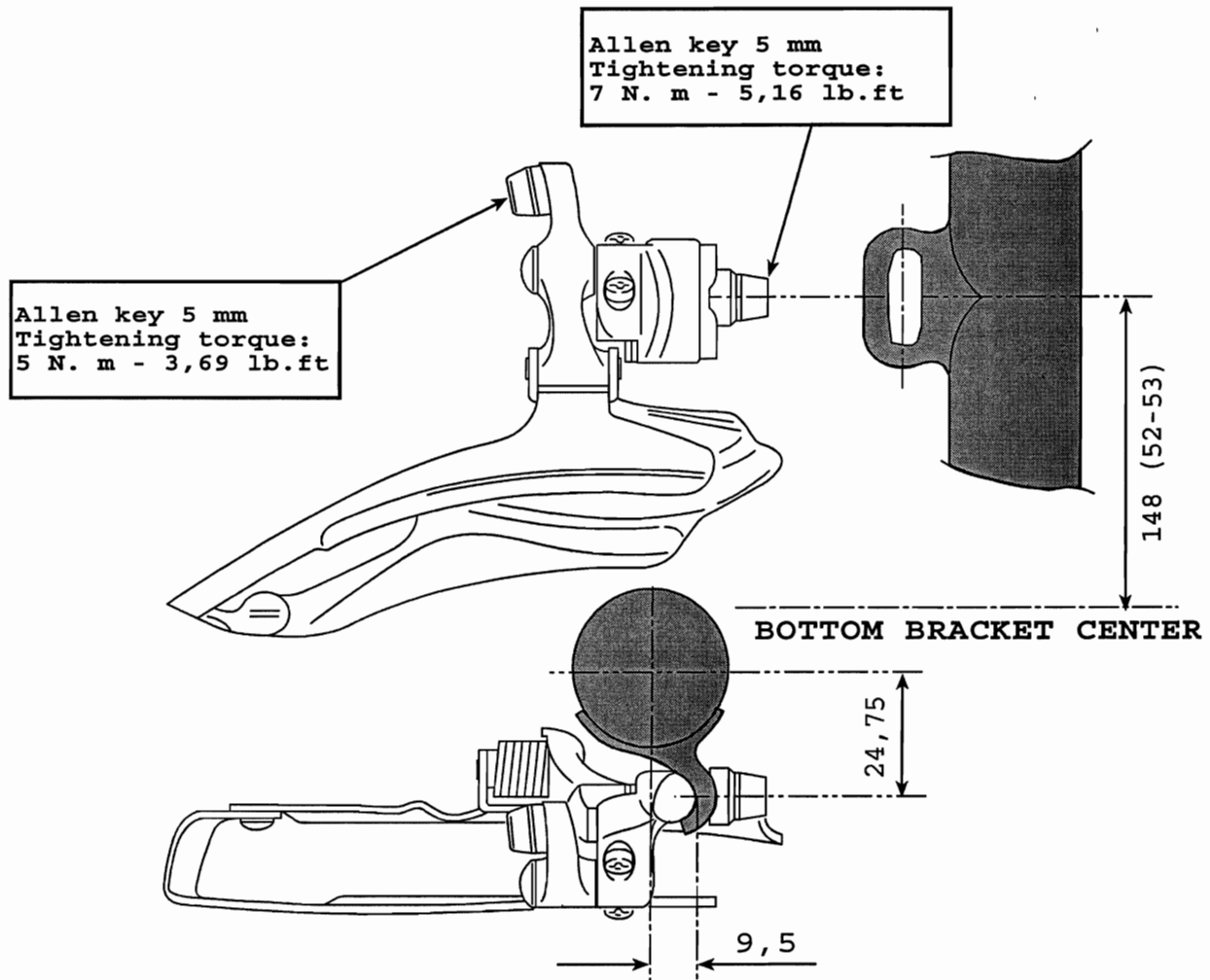
model	lengths available	weight	spindle
RECORD Triple 10	170, 172.5, 175 mm.	715g	111mm
RACING T	170, 175 mm.	735g	111mm
CENTAUR Triple 10	170, 175 mm.	730g	111mm
CENTAUR Triple 9	170, 175 mm.	735g	115mm
VELOCE Triple	170, 175 mm.	731g	115mm
MIRAGE Triple	170, 175 mm.	769g	115mm
XENON Triple	170, 175 mm.	953g	115mm

Braze on Front Derailleurs 9 & 10 Speed double



2003 FRONT DERAILLEURS (Braze On)				
model	item code	weight	capacity	max. ring
RECORD 9/10s	FD00-RE2S10	91g	15 teeth	54t
CHORUS 9/10s	FD00-CH2S10	89g	15 teeth	54t
CENTAUR 9/10s	FD02-CE2S	93g	15 teeth	54t
VELOCE 9s	FD01-VL2S	93g	15 teeth	54t
MIRAGE 9s	FD01-MI2S	103g	15 teeth	54t
XENON 9s	FD02-XE2S	103g	15 teeth	54t

Braze on Front Derailleurs (for triple)

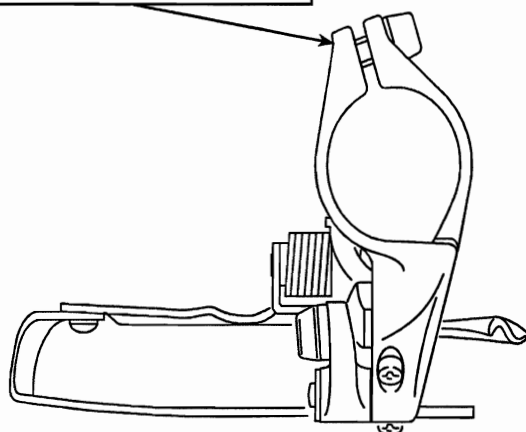


2003 Triple Front Derailleurs (braze on)

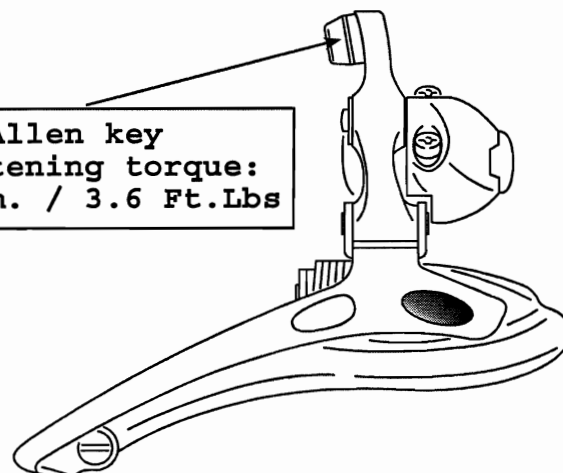
model	item code	weight	capacity	max. chainring
RECORD Triple 10	FD02-RE3S10	106g	23 teeth	53t
CENTAUR Triple 10	FD03-CE3S10	107g	22 teeth	52t
RACING T 9	FD00-RA3S	107g	23 teeth	53t
CENTAUR Triple 9	FD02-CE3S	107g	22 teeth	52t
VELOCE Triple 9	FD02-CE3S	107g	22 teeth	52t
MIRAGE Triple 9	FD01-MI3S	118g	22 teeth	52t
XENON Triple 9	FD02-XE3S	118g	22 teeth	52t

Clamp on Front Derailleurs (for double chainrings) 9 & 10s

5mm Allen key
Tightening torque:
3.5 N.m. / 2.5 Ft.Lbs



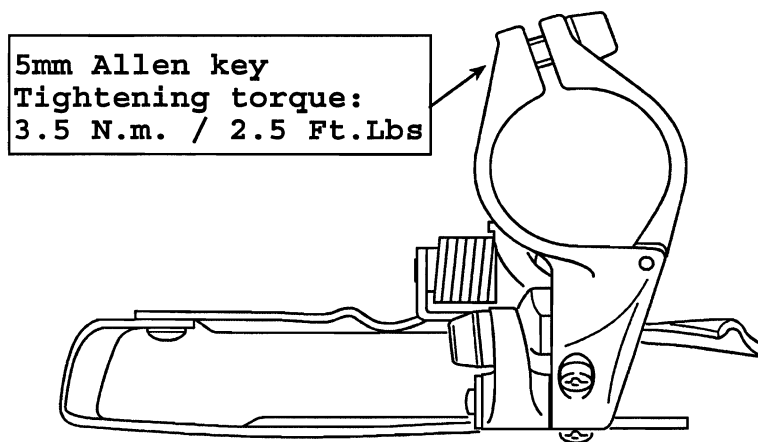
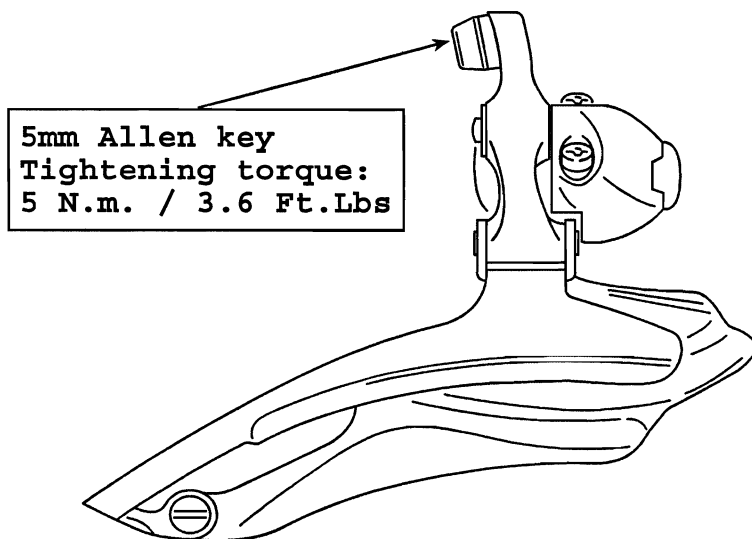
5mm Allen key
Tightening torque:
5 N.m. / 3.6 Ft.Lbs



2003 FRONT DERAILLEURS (clamp-on)

model	diam. available	weight	capacity	max. ring
RECORD 9/10S	28.6, 32, 35mm	104g	15t	54t
CHORUS 9/10S	32, 35mm	102g	15t	54t
CENTAUR 9/10S	28.6, 32, 35mm	106g	15t	54t
VELOCE 9S	28.6, 32mm	108g	15t	54t
MIRAGE 9S	28.6, 32mm	116g	15t	54t
XENON 9S	32mm	116g	15t	54t

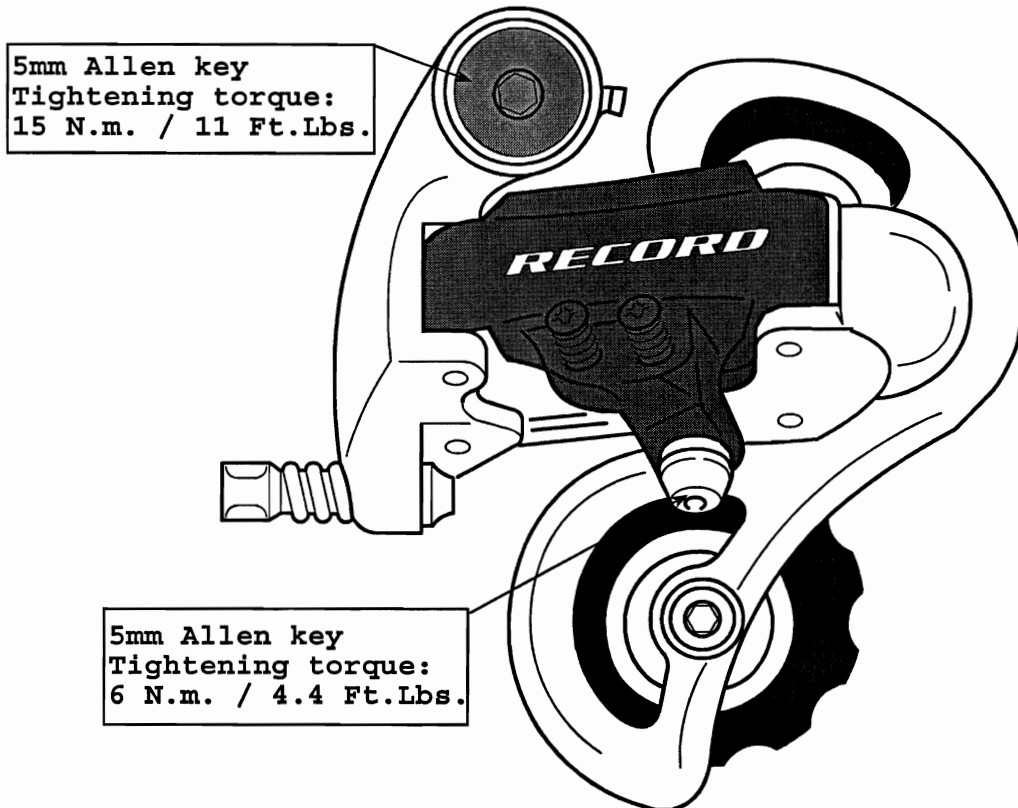
Clamp on Front Derailleurs (for triple chainrings)



2003 TRIPLE FRONT DERAILLEURS				
model	diam. available	weight	cap.	max.ring
RECORD Triple 10	32, 35mm	113g	23t	53t
CENTAUR Triple 10	28.6, 32mm	114g	22t	52t
RACING T 9	28.6, 32, 35mm	114g	23t	53t
CENTAUR Triple 9	28.6, 32mm	114g	22t	52t
MIRAGE Triple 9	28.6, 32mm	133g	22t	52t
XENON Triple 9	32mm	133g	22t	52t

REAR DERAILLEURS

9 & 10s Double



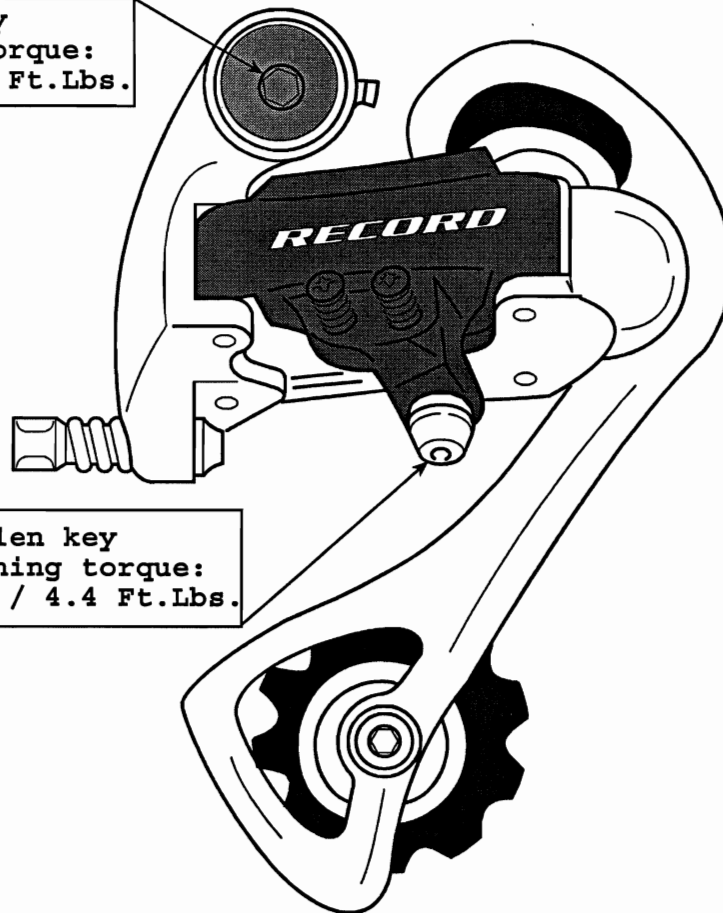
2003 REAR DERAILLEURS

model	weight	max chainring diff.	min.cog	max.cog	capacity
RECORD 10	187g.	53t - 39t = 14	11t.	26t.	27t.
RECORD 10 MED	193g.	53t - 30t = 23	12t.	29t.	36t.
RECORD 9	190g.	53t - 39t = 14	11t.	26t.	27t.
CHORUS 10	209g.	53t - 39t = 14	11t.	26t.	27t.
CHORUS 10 MED	215g.	53t - 30t = 23	12t.	29t.	36t.
CHORUS 9	211g.	53t - 39t = 14	11t.	26t.	27t.
CENTAUR 10	223g.	53t - 39t = 14	11t.	29t.	30t.
CENTAUR 9	223g.	53t - 39t = 14	11t.	29t.	30t.
VELOCE 9	250g.	53t - 39t = 14	11t.	29t.	30t.
MIRAGE 9	269g.	53t - 39t = 14	11t.	29t.	30t.
XENON 9	232g.	53t - 39t = 14	11t.	29t.	30t.

TRIPLE REAR DERAILLEURS

5mm Allen key
Tightening torque:
15 N.m. / 11 Ft.Lbs.

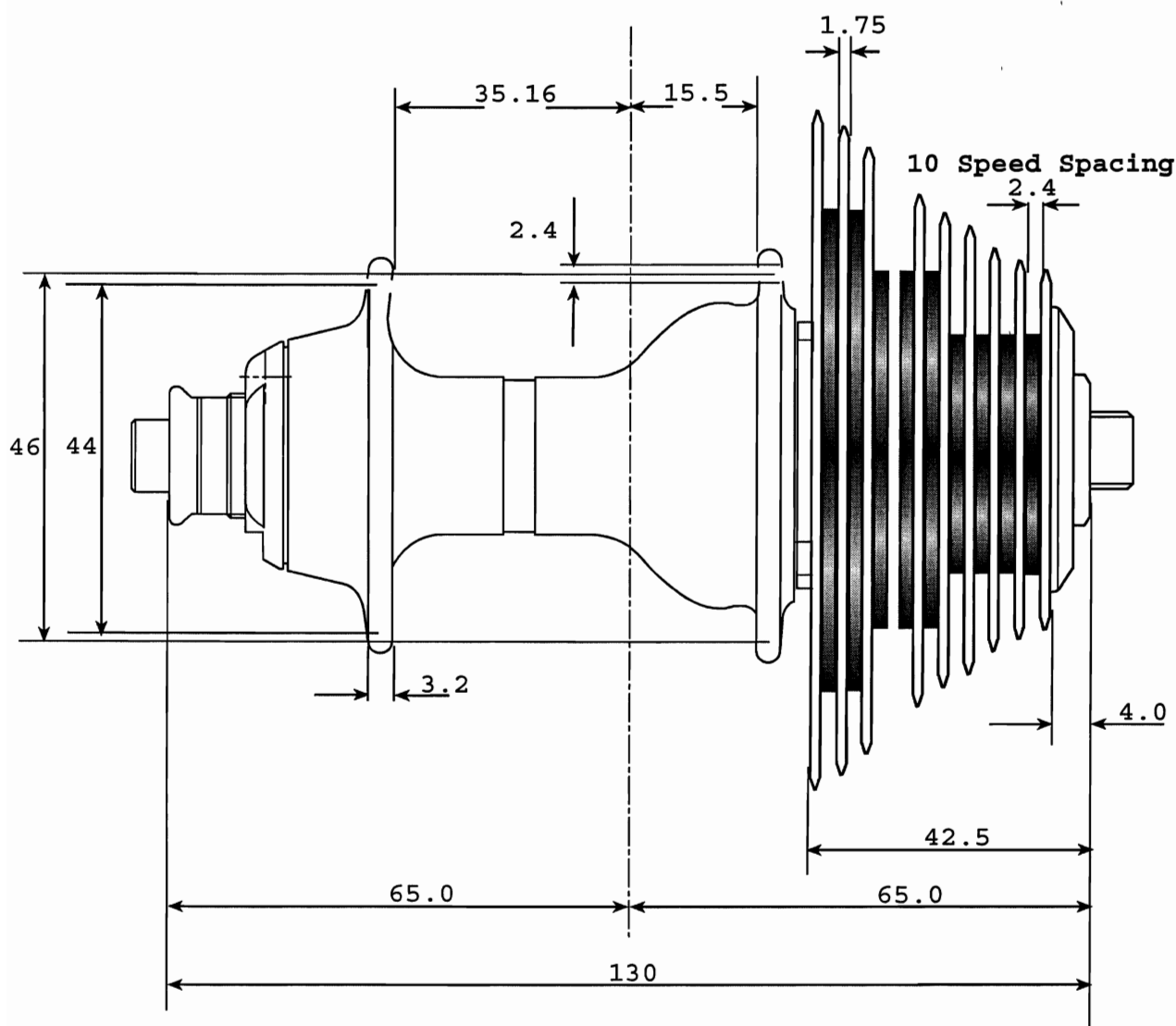
5mm Allen key
Tightening torque:
6 N.m. / 4.4 Ft.Lbs.



2003 TRIPLE REAR DERAILLEURS

model	item code	weight	capacity	max cog
RECORD Triple 10 Med	RD00-RE210L	193g.	36 t	29 t
RECORD Triple 10 Long*	RD00-RE210LL	205g.	39 t	29 t
CHORUS Triple 10 Med	RD00-CH210L	215g.	36 t	29 t
CHORUS Triple 10 Long*	RD00-CH210LL	225g.	39 t	29 t
CENTAUR Triple 10 Med	RD03-CE310	229g.	37 t	29 t
CENTAUR Triple 10 Long*	RD03-CE310L	241g.	40 t	29 t
RACING T 9	RD00-RA309	214g.	35 t	28 t
CENTAUR Triple 9	RD02-CE309	229g.	37 t	29 t
VELOCE Triple 9	RD02-VL309	255g.	37 t	29 t
MIRAGE Triple 9	RD02-MI309	274g.	37 t	29 t
XENON Triple 9	RD02-XE309	237g.	37 t	29 t

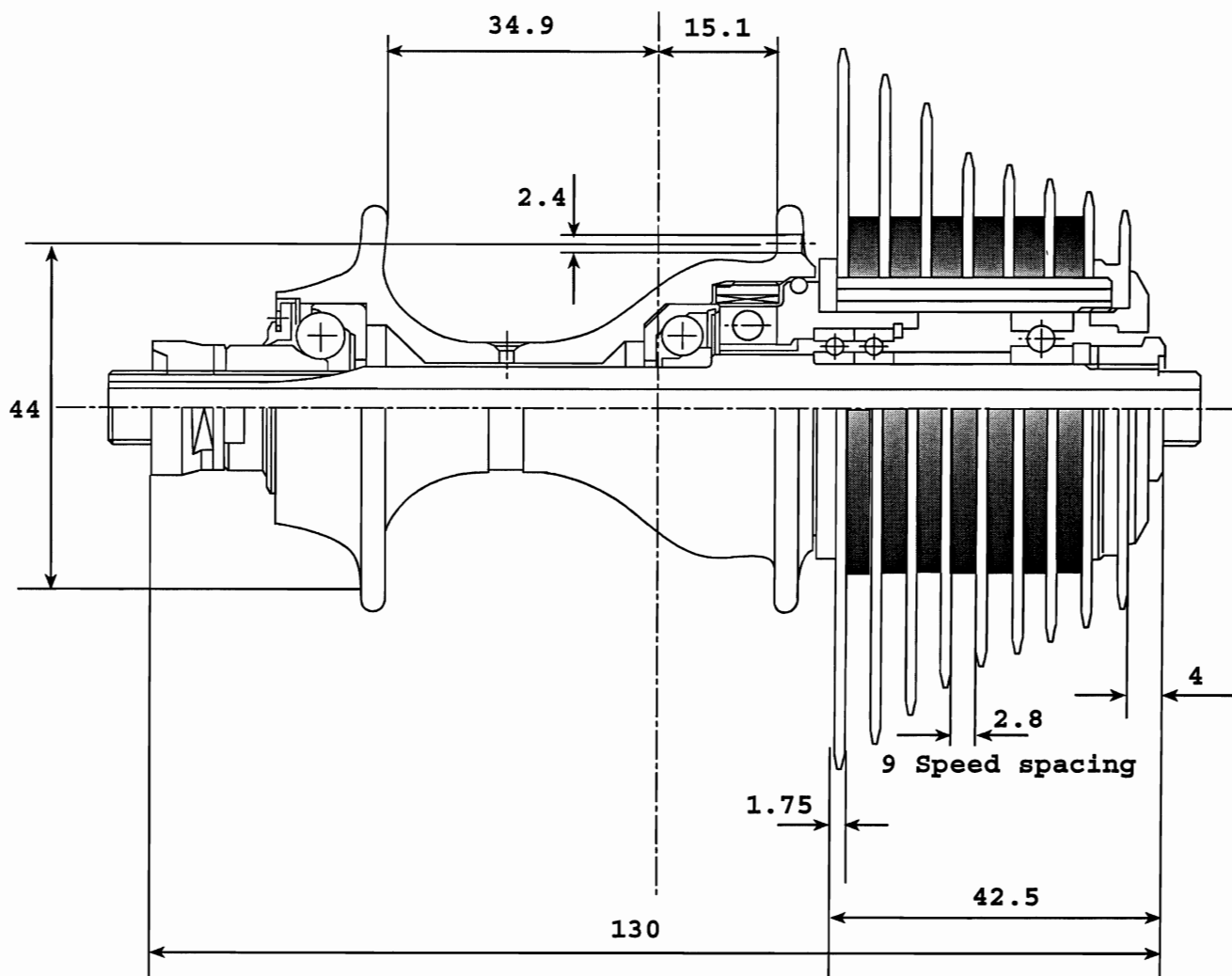
Rear Hubs 9 / 10s (oversize)



2003 Rear Hubs 9/10s (oversize)		
model	drilling avail.	weight
RECORD 9/10S	28, 32, 36 holes	316g.*
CHORUS 9/10S	32, 36 holes	326g.*
CENTAUR 9/10S	32, 36 holes	332g.*

*WEIGHTS INCLUDE QUICK RELEASE

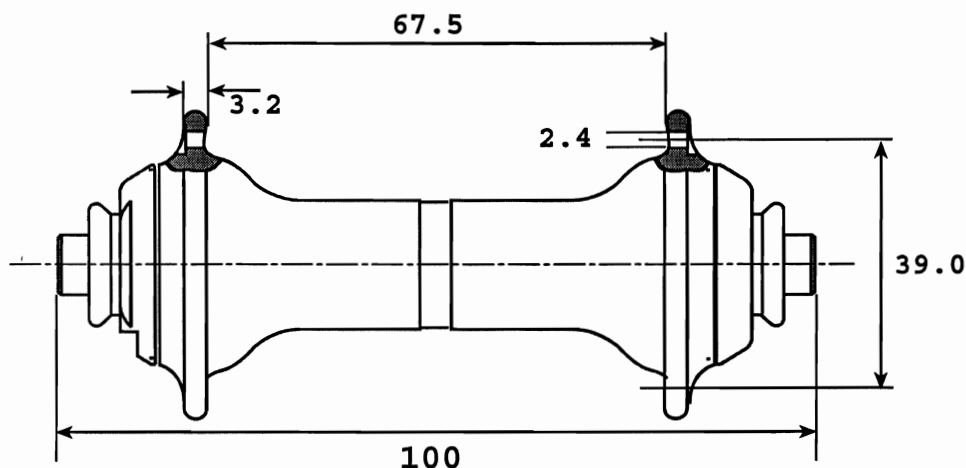
REAR HUBS 9 SPEED (standard)



2003 Rear Hubs 9 Speed		
model	drilling avail.	weight
VELOCE 9s	32, 36 holes	458g.*
MIRAGE 9s	32, 36 holes	447g.*

*WEIGHTS INCLUDE QUICK RELEASE

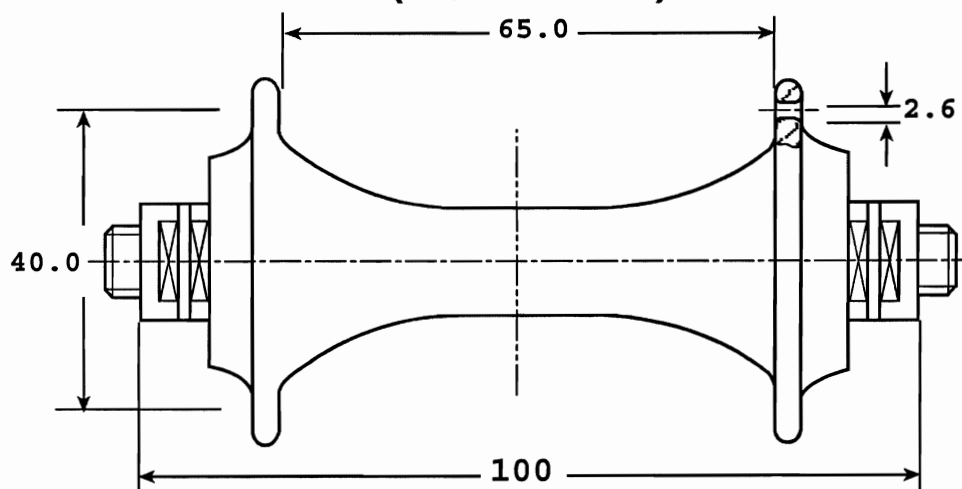
FRONT HUBS (oversize)



2003 FRONT HUBS OS		
model	drill avail.	weight
RECORD	28, 32, 36	181 g.*
CHORUS	32, 36	180 g.*
CENTAUR	32, 36	186 g.*

*All weights include quick release

FRONT HUBS (standard)

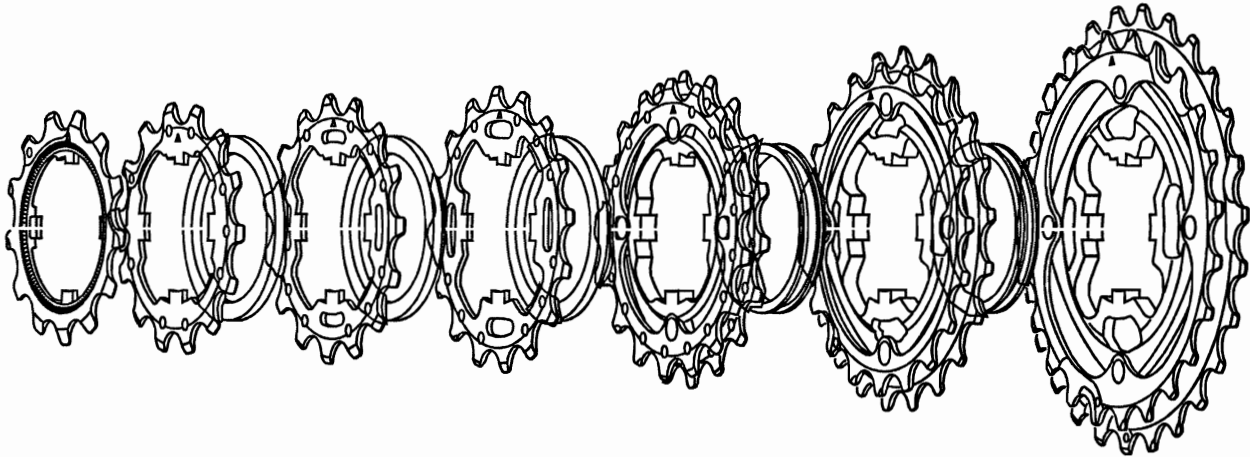


2003 FRONT HUBS (Standard)		
model	drill avail.	weight
VELOCE	32, 36	241 g.*
MIRAGE	32, 36	226 g.*
XENON	32, 36	226 g.*

*All weights include quick release

CASSETTES

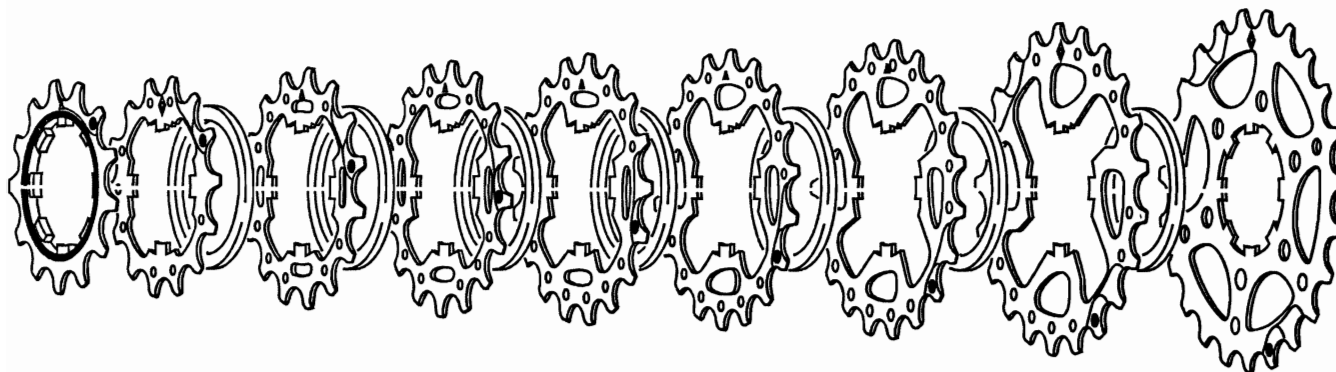
10 SPEED ULTRA DRIVE



2003 10 Speed ULTRA DRIVE Cassettes							
model	material	range available					
		11-19	11-21	11-23	12-25	13-26	13-29
RECORD	Steel / Ti	No	Yes	Yes	Yes	Yes	Yes
RECORD Ti	Titanium	No	No	Yes	Yes	Yes	No
CHORUS	All Steel	No	No	Yes	Yes	Yes	Yes
CENTAUR	All Steel	No	No	Yes	Yes	Yes	Yes
GHIBLI	Steel / Ti	Yes	Yes	No	No	No	No

CASSETTES

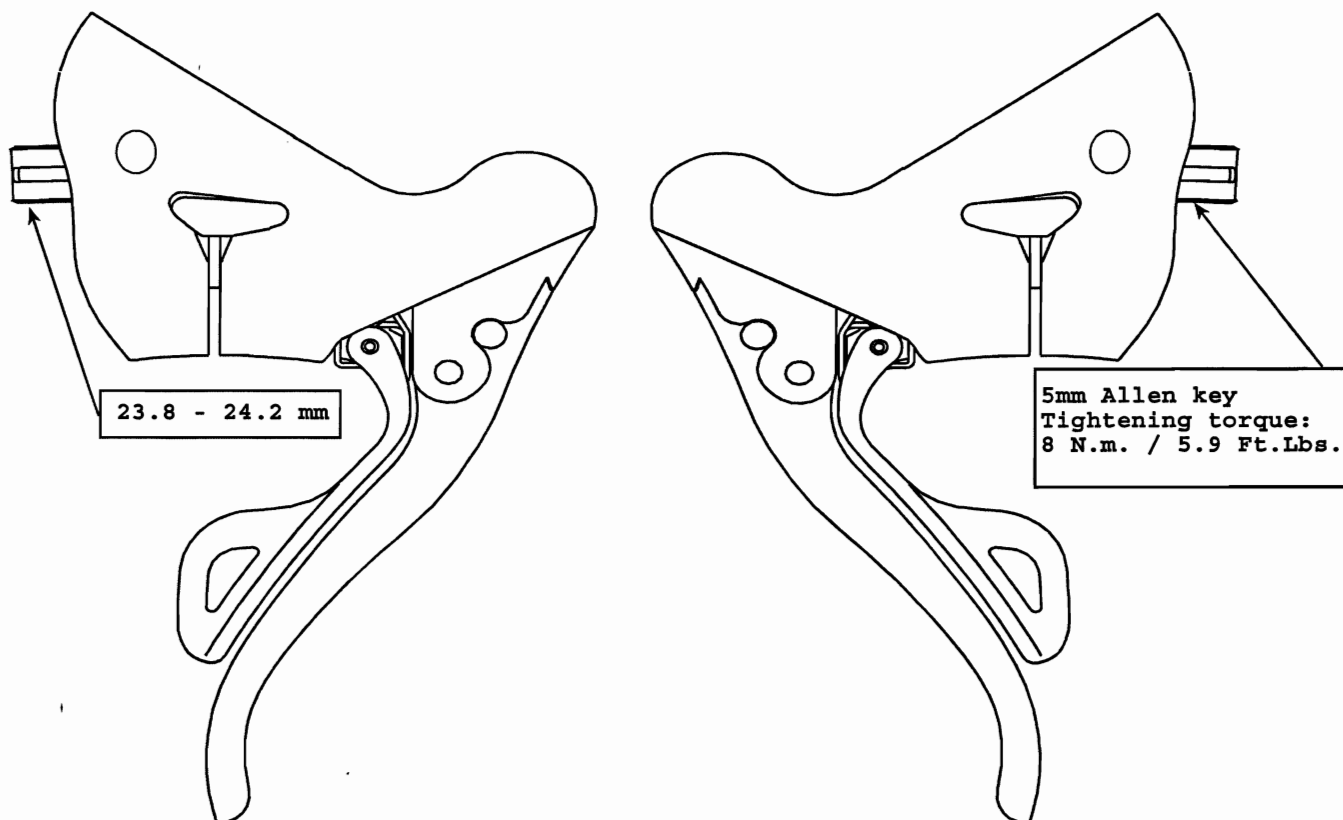
9 Speed ULTRADRIVE



2003 9 Speed ULTRA DRIVE CASSETTES					
RANGE AVAILABLE					
Group	12-23	13-23	13-26	13-28	14-28
RECORD	NO	NO	NO	NO	NO
CHORUS	NO	NO	NO	NO	NO
CENTAUR	NO	NO	NO	NO	NO
VELOCE	YES	YES	YES	YES	YES
MIRAGE	YES	YES	YES	NO	NO
XENON	YES	YES	YES	NO	NO

ERGOPOWER CONTROLS

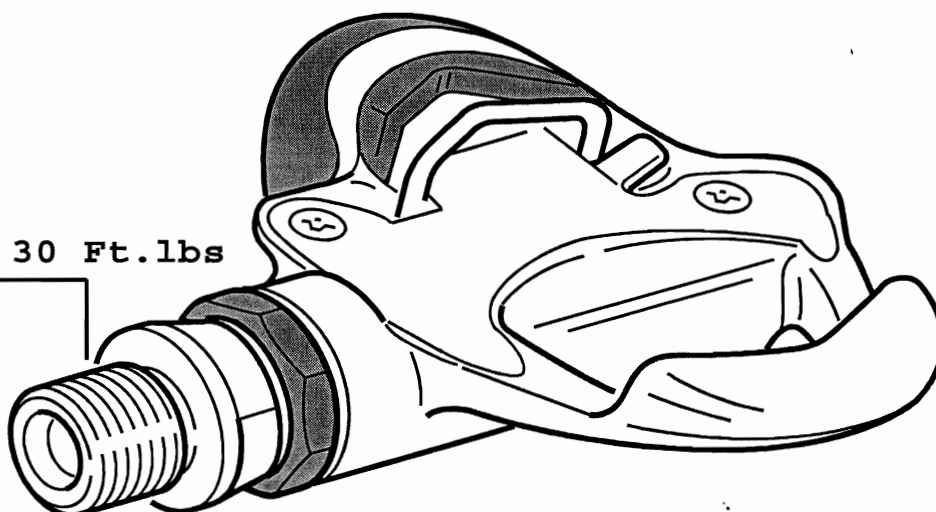
9 / 10 Speed



2003 ERGOPOWER CONTROLS				
model	item code	# of gears	body material	weight
RECORD 10S	EP00-RE10	10-speed	Composite	342 g*
RECORD 9S	EP01-RE09	9-speed	Composite	342 g*
CHORUS 10S	EP00-CH10	10-speed	Composite	365 g*
CHORUS 9S	EP01-CH09	9-speed	Composite	365 g*
CENTAUR 10S	EP02-CE10	10-speed	Composite	399 g*
CENTAUR 9S	EP02-CE09	9-speed	Composite	399 g*
VELOCE 9S	EP01-VL09	9-speed	Composite	402 g*
MIRAGE 9S	EP01-MI09	9-speed	Composite	406 g*
XENON 9S	EP02-XE09	9-speed	Composite	357 g*

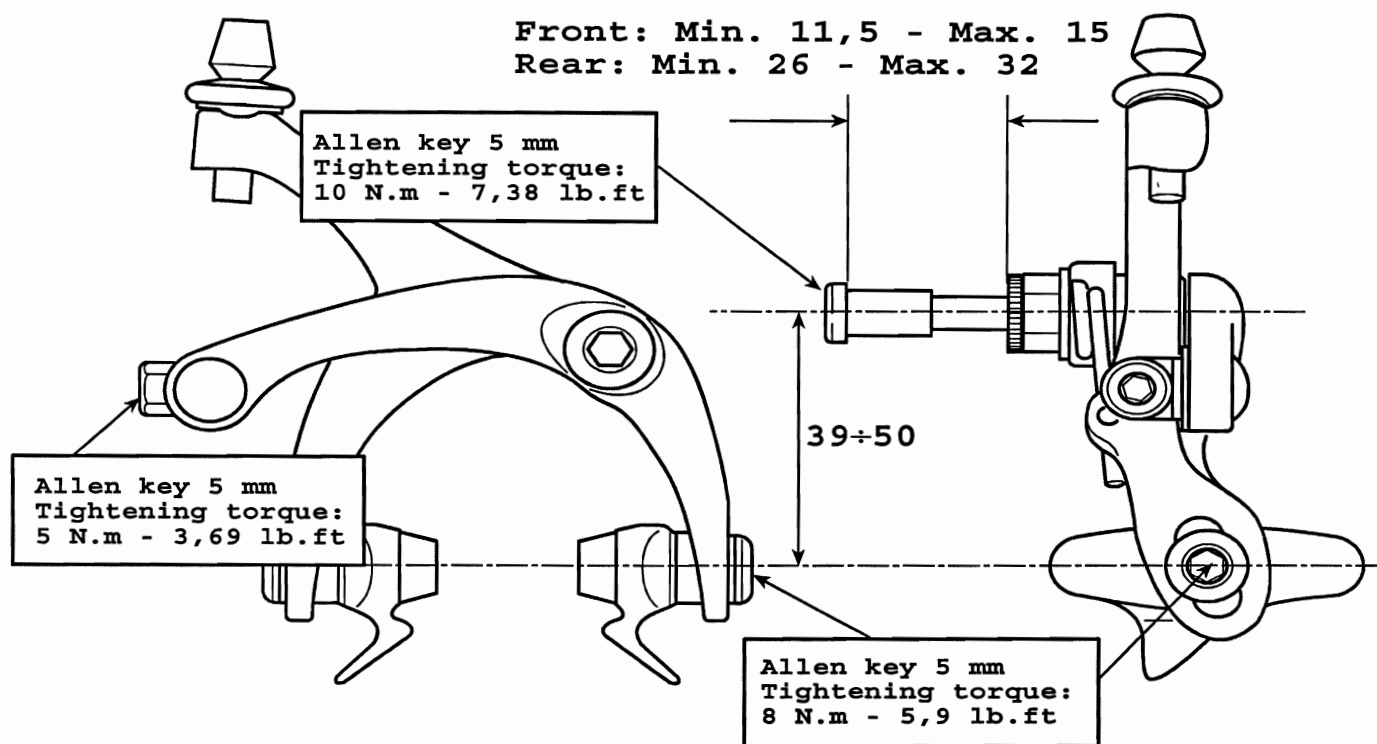
PRO-FIT PLUS

torque to
40 Nm. or 30 Ft.lbs



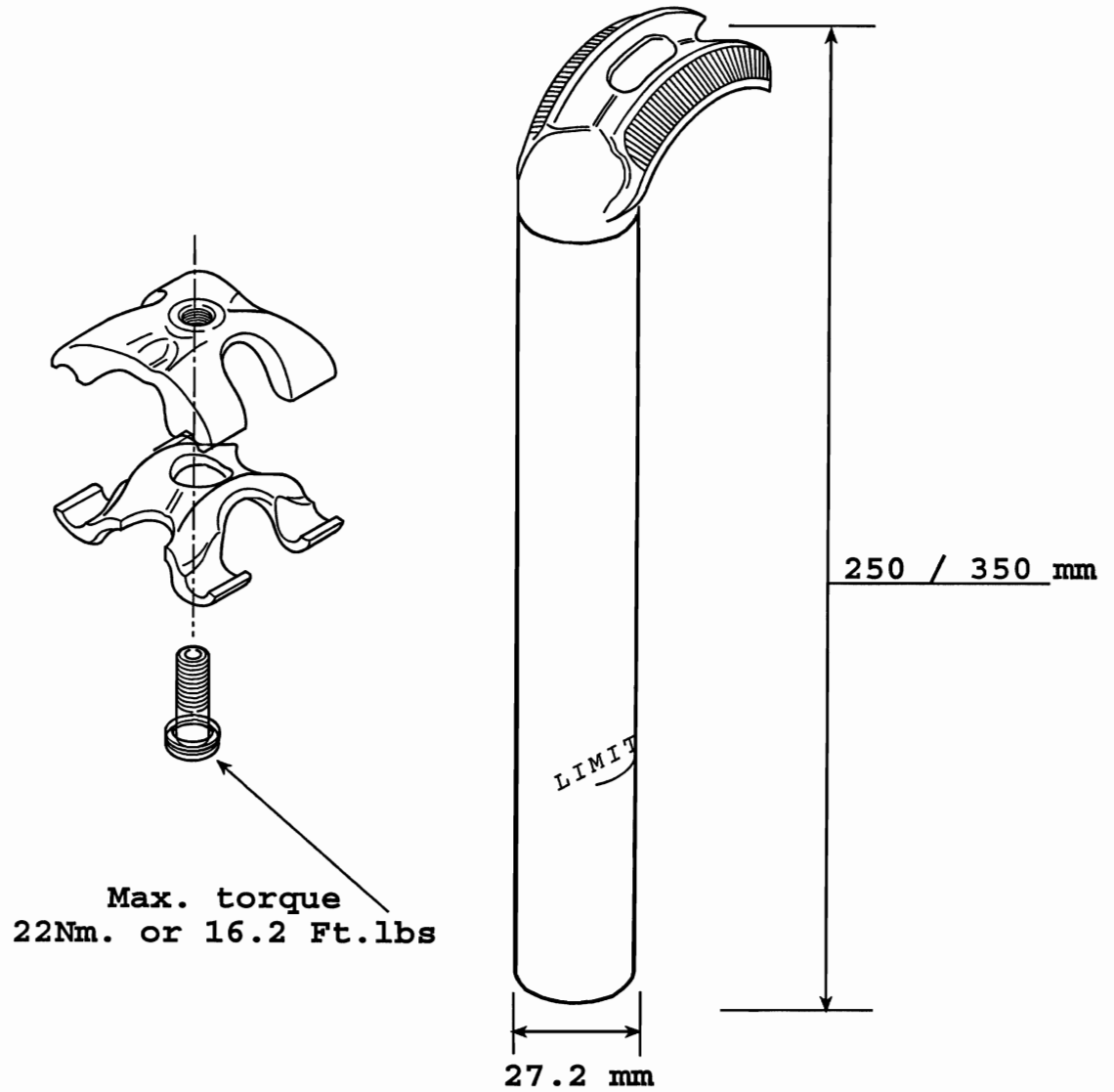
2003 PRO-FIT PLUS PEDAL SYSTEM			
model	item code	weight	spindle material
RECORD	PD01-RE	266 g.	Titanium
CHORUS	PD01-CH	325 g.	Steel
CENTAUR	PD01-DA	325 g.	Steel

BRAKE CALIPERS



2003 BRAKE CALIPERS		
model	item code	weight
RECORD	BR01-RED	308 g.
CHORUS	BR01-CHD	340 g.
CENTAUR	BR02-CE	376 g.
VELOCE	BR01-VL	368 g.
MIRAGE	BR01-MI	380 g.
XENON	BR02-XE	380 g.

SEAT POST



2003 SEAT POST

model	code	length	diameter	material	weight
RECORD	SP00-RE272C	250mm	27.2mm	Carbon	180 g.
RECORD	SP01-RE272CL	350mm	27.2mm	Carbon	190 g.
RECORD	SP02-RE324C	250mm	32.4mm	Carbon	208 g.
CHORUS	SP01-CH272T	250mm	27.2mm	Titanium	195 g.
CENTAUR	SP02-CE272	250mm	27.2mm	Steel	230 g.

Service Center

After-sales service is extremely important to Campagnolo and we continue to improve our worldwide network of Service Centers that offer warranty and after-warranty technical assistance. Of course, many maintenance tasks can be performed by qualified mechanics, which is why distribution of spare parts is just as important for service quality.

The most popular spare parts are sold in sealed blister packs to ensure they are original, which is imperative for best performance, and to promote brand awareness at point-of-sale. This year Campagnolo is restructuring its in-house organization to ensure the entire distribution system is faster and more efficient. The benefits will soon be evident, with dramatically faster delivery times for spare parts all over the world.

CANADA

CYCLES MARINONI INC.

1067, Levis - LACHENAIE - QUEBEC J6W 4L2
Tel. +1-450-4717133
Fax +1-450-4719887

GREAT WESTERN BICYCLE CO. LTD.

233 West Broadway - VANCOUVER , BC V5Y 1P5
Tel. +1-604-8722424
Fax +1-604-8720226

UNITED STATES

CAMPAGNOLO USA INC.

2105-L Camino Vida Roble - CARLSBAD -CA 92009
Tel. +1-760-9310106
Fax +1-760-9310991

OCHSNER INT. INC.

246 E. Marquardt Drive - WHEELING
IL. 60090-6430
Tel. +1-847-4658200
Fax +1-847-4658282

PERFORMANCE CYCLE PRODUCTS

22 South 6th Avenue - MOUNT VERNON - NY 10550
Tel. +1914-6991668 - Fax +1-914-6991875

QUALITY BIC. PRODUCTS

6400 W. 105th Street - BLOOMINGTON,
MN 55438-2554
Tel. +1-952-9419391
Fax +1-952-9419799

This catalog is produced by Campagnolo USA for the US and Canada. If you reside in any other location, contact Campagnolo SRL. All information from Campagnolo SRL overrides information printed in this catalog.

LIMITED WARRANTY

1. OBJECT

Campagnolo S.r.l., Via della Chimica 4, 36100 Vicenza, Italy (hereinafter "Campagnolo"), guarantees its products to be free from defects in materials or workmanship within the terms and conditions of this Limited Warranty. A product found by Campagnolo to be defective will be repaired or replaced, at the option of Campagnolo, free of charge, within thirty (30) days after receipt of the product by an authorized Campagnolo Service Center.

Please note that in addition to this policy you may have specific legal rights granted by your national or state laws regarding warranties of consumer products.

2. NOT COVERED

This warranty does not cover products which reached the end of their normal life span, does not cover damage resulting from accidents, alteration, neglect, misuse or abuse, lack of reasonable or proper maintenance, corrosion, improper assembly, repairs improperly performed or replacement parts improperly installed, use of replacement parts or accessories not conforming to Campagnolo's specifications, use of component parts not manufactured or supplied by Campagnolo, modifications not recommended or approved in writing by Campagnolo, normal wear and deterioration occasioned by the use of the product, activities such as acrobatics, competitive use or commercial use. This warranty also does not cover cosmetic imperfections in the surface, finish, or appearance of the product which were apparent or discoverable at the time of purchase of the product or damage occurring during shipment or transport of the product. This warranty also does not cover tools, lubricants, brake pads, and other consumables or any expenses related to the transportation of the product to or from an authorized Campagnolo Service Center, labor costs to remove the product from the bicycle, or compensation for inconvenience or loss of use while the product is being repaired or replaced.

3. PURCHASER

This warranty is made only with the original purchaser of the product and does not extend to any third parties. The rights of the Purchaser under this warranty may not be assigned.

4. TERM

The term of this warranty shall commence on the date of retail purchase and shall continue for a period of two (2) or three (3) years, depending on the product (see the applicable term in the product's package).

5. ENTIRE AGREEMENT

This warranty supersedes any and all oral, express or written warranties, statements or undertakings that may previously have been made, and contains the entire Agreement of the parties with respect to the warranty of the product. Any and all warranties not contained in this Agreement are specifically excluded.

6. DAMAGES

Except as expressly provided by this warranty, Campagnolo SHALL NOT BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES ASSOCIATED WITH THE USE OF THE PRODUCT OR A CLAIM UNDER THIS AGREEMENT, WHETHER THE CLAIM IS BASED ON CONTRACT, TORT OR OTHERWISE. The foregoing statements of warranty are exclusive and in lieu of all other remedies. Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation or exclusion may not apply to you.

7. DISCLAIMER

ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND ALL IMPLIED WARRANTIES ARISING FROM A COURSE OF DEALING, USAGE OF TRADE, BY STATUTE OR OTHERWISE, IS HEREBY STRICTLY LIMITED TO THE TERM OF THIS WRITTEN WARRANTY. This agreement shall be the sole and exclusive remedy available to the Purchaser with respect to the purchase. In the event of any alleged breach of any warranty or any legal action brought by the purchaser based on alleged negligence or other tortious conduct by Campagnolo, the Purchaser's sole and exclusive remedy will be repair or replacement of defective materials as stated above. No dealer and no other agent or employee of Campagnolo is authorized to modify, extend or enlarge this warranty. The performance of any warranty service under this Agreement is not an admission or agreement that the design or manufacture of a product is defective.

8. PROCEDURE

In the event of a defect covered by this warranty, the purchaser should contact an authorized Campagnolo Service Center (authorized Service Centers are listed in the catalogs and on the web-site) or : Campagnolo S.r.l., Service Center, Via Della Chimica 4, 36100 Vicenza, Italy, Telephone: +39-0-444-225604/5; Fax: +39-0-444-225400.

To be honored, claims must be submitted within the two or three years warranty period (according to the product) and within eight (8) days of discovery of the defect. The determination whether the defect is covered by this warranty is within the sole discretion of Campagnolo.

Campagnolo reserves the right to discontinue products and to change specifications for existing products at any time without notice and shall not be obligated to incorporate new features into products previously sold, even if those products are returned under a warranty claim. Campagnolo may replace defective parts with similar parts of similar quality in the event that identical parts are unavailable. The purchaser must obtain advance authorization in writing before returning any product to a Campagnolo Service Center for warranty inspection. A return authorization number will be issued and must conspicuously appear on the outside of the product's packaging. The issuance of an authorization number does not constitute acceptance of the claim, which will be evaluated by the Service Center upon its inspection of the product.

The product should be cleaned and securely packed to prevent damage during shipment and must be accompanied by a letter specifying or including the following items of information:

- a) dated receipt or other proof of date of retail purchase;
- b) a copy of the warranty;
- c) Campagnolo part number;
- d) detailed description of the problem experienced with the product, including a chronology of efforts made to correct the problem;
- e) identification of the components used in conjunction with the product;
- f) estimate of product usage: (i.e. accumulated mileage or time in service);
- g) your name, address, and written authorization to ship the repaired product back to you freight collect ("C.O.D.").

9. APPLICABLE LAW

Any disputes arising out of this Agreement or the use of this product will be governed by the laws of the country of Italy and will be decided by the Courts of Vicenza, Italy.

10. WARNING

Always install, repair and use your product in strict compliance with the product's instructions, which are also available as a downloadable file  the web site.

