TANGE FRAME SYSTEM



Tange TANGE

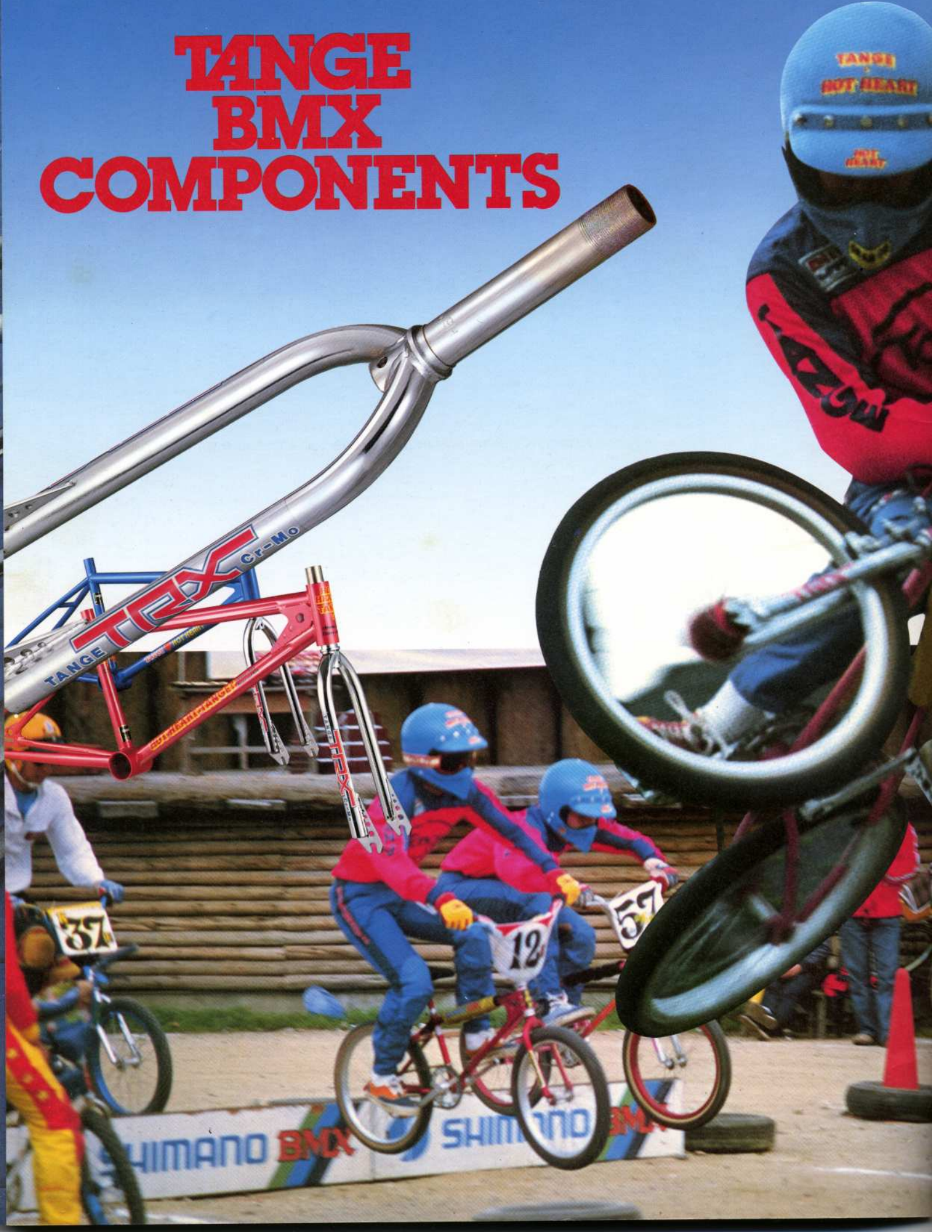
TANGE FRAME SYSTEM

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Tange's "Champion" butted tubing is renowned throughout the bicycle racing world. It is no secret that racers can win or lose a race by as little as a fraction of a second. Lightness and precision manufacturing can make all the difference in giving the racer an advantage in speed. And as the bicycle frame constitutes the largest and heaviest part of the bicycle, it is the section viewed most critically by racers for weight saving. And this is where Tange's specialized knowledge is most effective. By employing the highest techniques gained over almost 60 years of experience, Tange's tubing is without equal. Precision made and light but at the same time strong where it matters, "Champion" tubing gives racers exactly what they demand.

TANGE BMX COMPONENTS

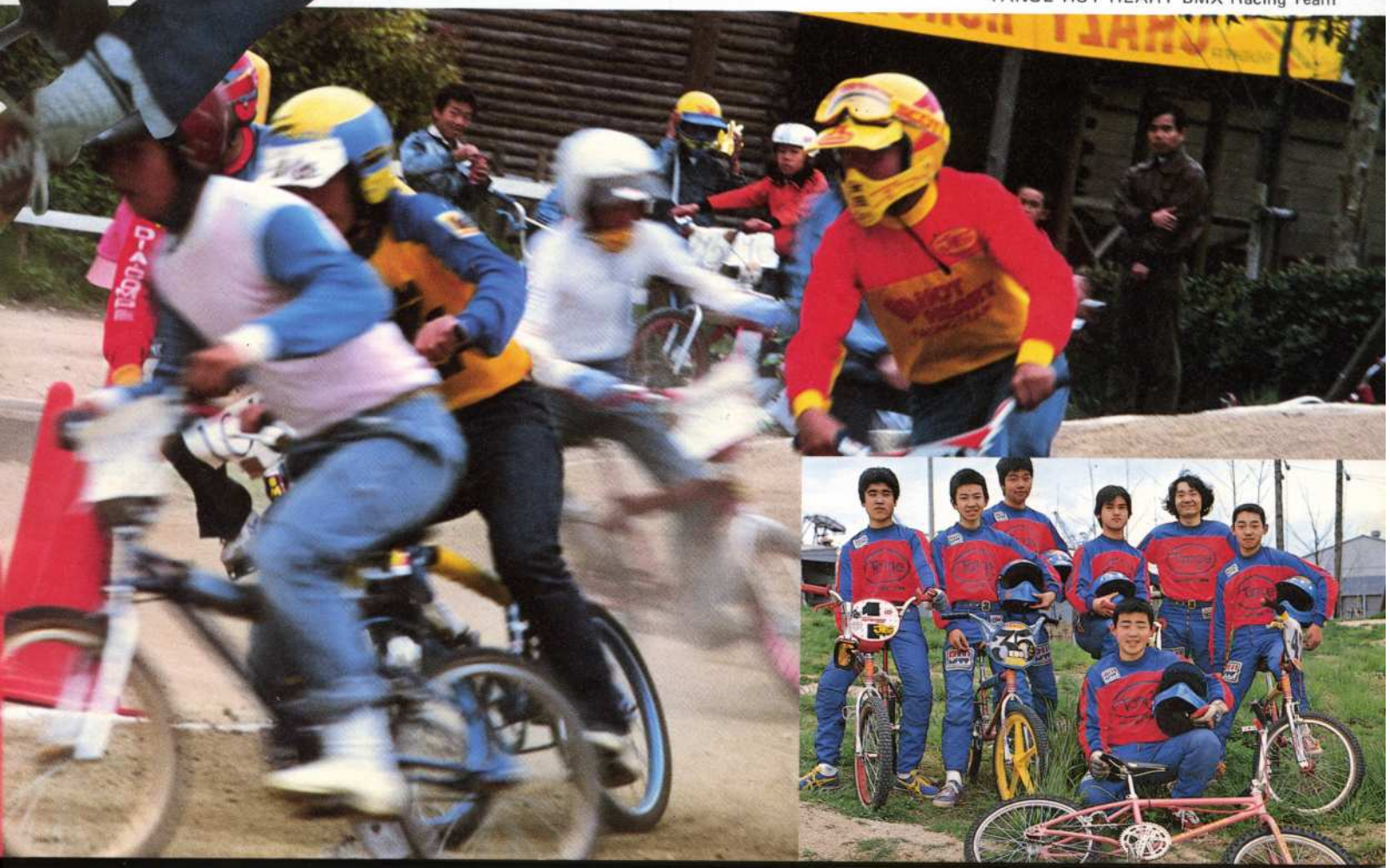






BMX racing requires a special type of bicycle frame. The frame must be strong enough to endure endless thrashings. And light enough to handle well for outdistancing the opposition when racing.
With these requirements in mind, Tange created a new frame tubing especially for BMX. The first of its kind. The spectacular success of this tubing has given rise to unprecedented demand from BMX bicycle manufacturers.
In addition, Tange also developed the TRX front tubing. All those familiar with the top BMX bicycles will know that this is a constant favorite. The spiral interior design, for lightness and strength, and the oval tubing, for lightness, and aerodynamic efficiency are some of the reasons why Tange's TRX front tubing takes some beating.
When specifying your BMX bicycle, make sure Tange tubing is at the top of your list.

TANGE HOT HEART BMX Racing Team



60 Years of Experience

Is Responsible for TANGE's World Renowned Products

Frame tubing and front forks are just some of the products manufactured by the largest supplier of this field in Japan. Tange's commitment to research and development and strict quality control is responsible for the excellence inherent in each product. Tange experts personally supervise each stage of production within the corporation's own premises. No part goes outside until manufacturing is completed. This means quality is of the highest order and explains why bicycle manufacturers throughout the world have come to rely on Tange workmanship.

Tange also makes a point of keeping abreast of the latest trends so that consumer demand is always anticipated. When combined with Tange's own technology and metallurgical experience, going back 60 years, the end result is one of unsurpassed quality and precision. An example of Tange's high technology and customer consideration is the unique process whereby all tubing heat treatment is carried out in unoxidizing furnaces. This enables Tange to give added strength, critical precision and a smoother surface to make the frame builder's work much easier. As testimony to the reputation enjoyed by Tange, these products are exported to bicycle makers all over the world.





Unoxidized furnace treatment for added strength and precision.


SPECIAL VIVALO
VIVALO
CHAMPION

CHAMPION FRAME SET

CHAMPION FRAME SYSTEM

Product			1 Fork Stem	2 Fork Blade	3 Head Tube	4 Top Tube	5 Down Tube	6 Seat Tube	7 Seat Sta
Parts			1	2	1	1	1	1	2
Cr-Mo	CHAMPION AERO		No. 1706	No. 1606	No. 1406	No. 1416	No. 1436	No. 1456	No. 1506
	CHAMPION Pro 0.6 ~ 0.3t	Double Butted (D-BT)	No. 1700	No. 1600	No. 1401	No. 1410	No. 1430	No. 1450 No. 1451	No. 1500
	CHAMPION No. 1 0.8 ~ 0.5t	Double Butted (D-BT)	No. 1700	No. 1601	No. 1401	No. 1411	No. 1431	No. 1452	No. 1501
	CHAMPION No. 2 0.9 ~ 0.6t	Double Butted (D-BT)	No. 1700	No. 1601	No. 1401	No. 1412	No. 1432	No. 1452	No. 1501
	CHAMPION No. 3 1.0 ~ 0.7t	Double Butted (D-BT)	No. 1700	No. 1601	No. 1401	No. 1413	No. 1433	No. 1452	No. 1501
	CHAMPION No. 4 0.9 ~ 0.7t	Single Butted (S-BT)	No. 1700	No. 1601	No. 1401	No. 1414	No. 1434	No. 1453	No. 1501
	CHAMPION No. 5 0.9t	Plain Gauge (P.G)	No. 1700	No. 1601	No. 1401	No. 1415	No. 1435	No. 1454	No. 1501
Hi-Tension (H.T)	No. 101 1.2 ~ 0.9t	Double Butted (D-BT)	No. 1720	No. 1620 No. 1621	No. 1470	No. 1420	No. 1440	No. 1460	No. 1520
	No. 102 1.2 ~ 0.9t	Single Butted (S-BT)	No. 1720	No. 1620 No. 1621	No. 1470	No. 1421	No. 1441	No. 1461	No. 1520

TANGE BMX FRAME SYSTEM









No.	1	2	3	4	5	6	7	8	9	10	11	
Product	Head Tube	Top Tube	Down Tube	Seat Tube	Seat Stay	Chain Stay	Bridge	Bottom Bracket	Rear Fork End	Gasket Reinforcement Plate	Front Fork	Use
Parts	1	1	1	1	2	2	1	1	2	1		
Cr-Mo Double Butted Oval Tube	36.6 x 2.0	28.6 x 1.0/0.8 Oval D.B.T	28.6 x 1.0/0.8 Oval D.B.T	25.4 x 1.3 P.G	15.9 x 1.0 Oval P.G	22.2 x 0.8 Oval P.G	15.9 x 1.0 P.G	57 x 51.5	3.2t	2.8t Double Gasket	TANGE TRX	Racing
Cr-Mo Double Butted Tube	36.6 x 2.0	28.6 x 1.2/0.9 D.B.T	28.6 x 1.2/0.9 D.B.T	25.4 x 1.3 P.G	15.9 x 1.0 P.G	15.9 x 1.0 P.G	15.9 x 1.0 P.G	57 x 51.5	3.2t	2.8t Double Gasket	TANGE TX-SUPER	Racing
Cr-Mo P.G. Tube	36.6 x 2.0	25.4 x 1.2	25.4 x 1.2	25.4 x 1.3	15.9 x 1.0	15.9 x 1.0	15.9 x 1.0	57 x 51.5	3.2t	2.8t Single	TANGE TX-500W	Racing & Leisure
Mangaloy Tube	36.6 x 2.0	25.4 x 1.3	25.4 x 1.3	25.4 x 1.3	15.9 x 1.3	15.9 x 1.3	15.9 x 1.3	57 x 51.5	3.2t	2.8t Single	TANGE TX-1200W TANGE TX-1200	Racing & Leisure

















8 Chain Stay	Seat Weight 23" x 27"	9 Head Lug	10 Seat Lug	11 B.B. Shell	12 Fork Crown	13 End	Use
2	11	2	1	1	1	6	
No. 1556		–	–	–	AERO No. 1175 AERO No. 1176	No. 1216 No. 1316	
No. 1550	1,600g	No. 1800 No. 1820	No. 1840 No. 1841	No. 1869	For Road C10 No. 1171 C12 No. 1172 NR No. 1174 C1 No. 1151 C2 No. 1152 For Track CTR No. 1154 NT No. 1173	SFP No. 1121 (Front) No. 1311 (Rear) TR No. 1215 (Front) No. 1315 (Rear) SF No. 1206 (Front) No. 1305 (Rear) TL No. 1212 (Front) No. 1308 (Rear) SFR No. 1206 No. 1306	Road Racing
No. 1551	1,960g	No. 1801 No. 1821	No. 1845 No. 1846				Track Racing Road Racing
No. 1551	2,050g		No. 1843 No. 1847				Track Racing Road Racing Touring
No. 1551	2,130g	No. 1803 No. 1823	No. 1849				Heavy Duty Touring Touring
No. 1551	2,050g	No. 1802 No. 1822	No. 1842				Road Racing Touring
No. 1551	2,230g						Road Racing Touring
No. 1560	2,710g	No. 1810 No. 1830	No. 1850 No. 1855		AL-2 No. 1117 AL-7 No. 1118 CCL No. 1120	TF No. 1210 (Front) No. 1213 (Front) No. 1308 (Rear)	Road Racing Touring
No. 1560	2,630g						Road Racing Touring

CR-MO COMPOSITION (SAE 4130)

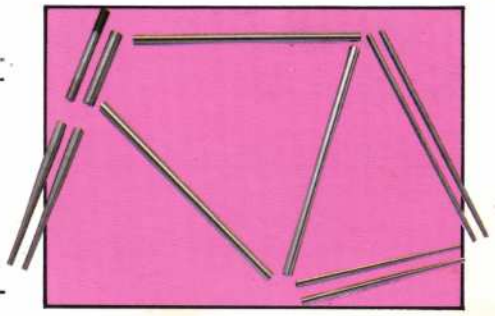
C	S_1	Mn	Mo	S	P	Cr
0.33%	0.35%	0.85%	0.25%	0.03% Max	0.03% Max	1.2%

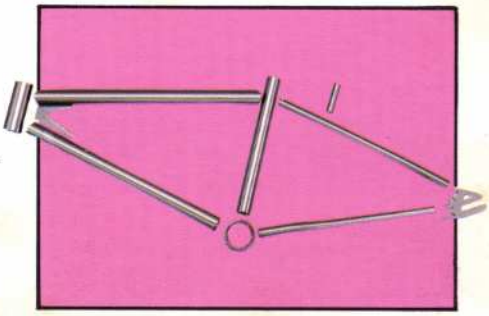
MANGALOY COMPOSITION

C	Si	Mn	P	S	Cu	Ti
0.12 Max.	0.15~0.35	0.90 Max.	0.06 Max.	0.035 Max.	0.25~4.50	0.15 Max.

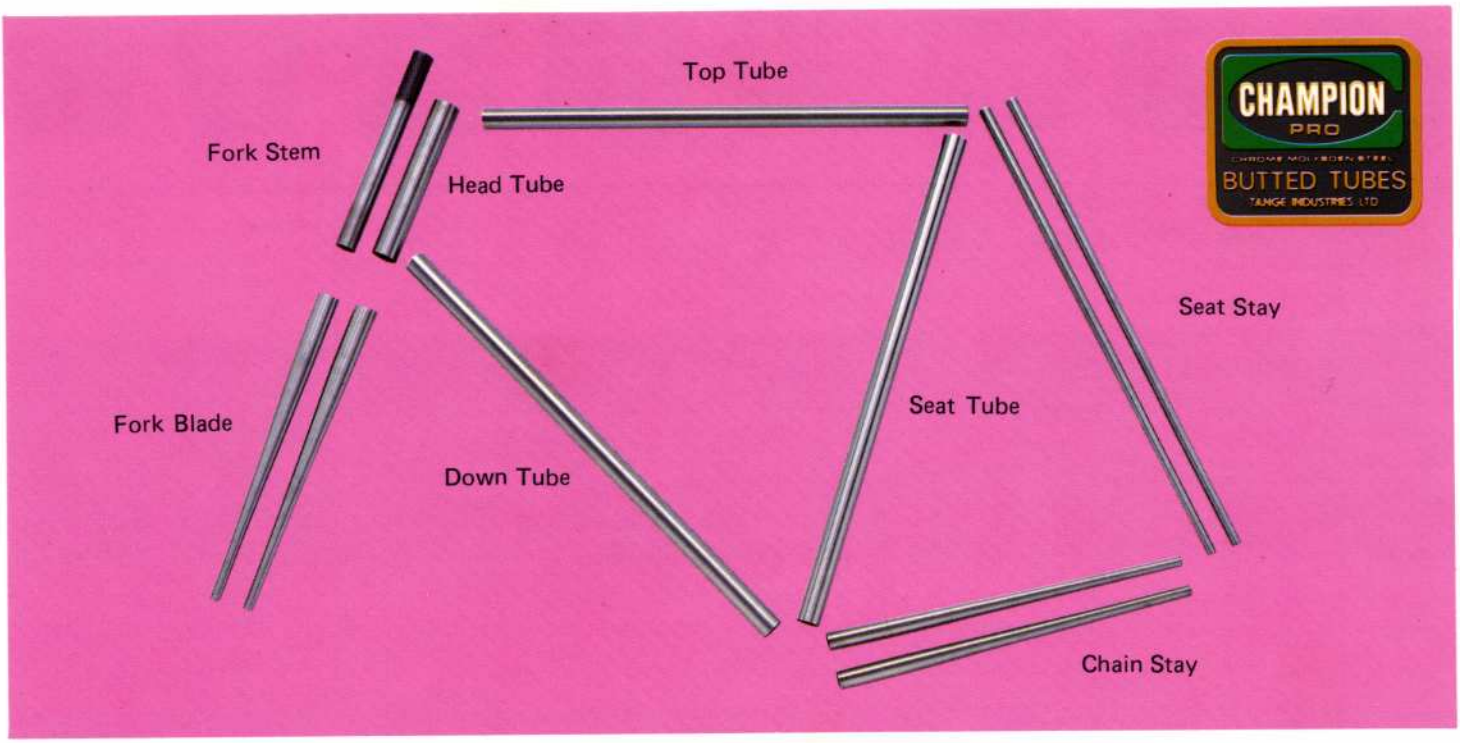
HI-TENSION COMPOSITION

C	Si	Mn	P	S	Cu	Ti
0.09%	0.23%	0.67%	0.06 Max.	0.02% Max.	0.29%	0.04%





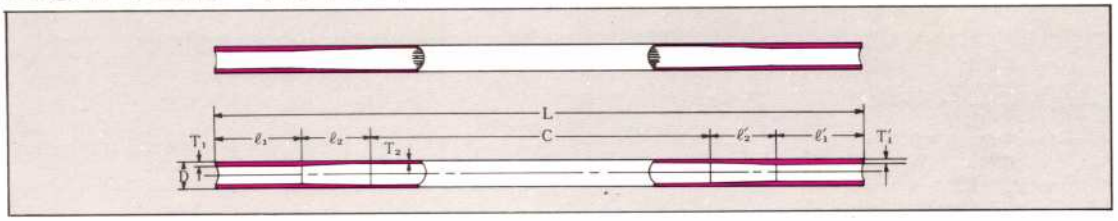
"CR-MO" FRAME ORDER SYSTEM



"Cr-Mo" Butted Tube

Note: All dimensions in this catalogue are mentioned by "mm".

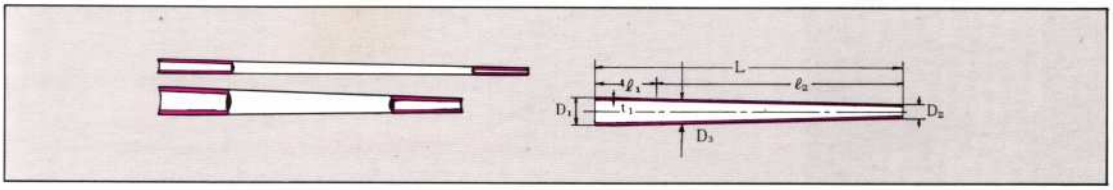
BUTTED TUBE



Product	Description	Outside dia. D	Part No.	Thickness $T_1 \sim T_2 \sim T'_1$	Length of butted part ℓ_2	Length of butted part ℓ'_1	Length of tapered part ℓ_2	Length of tapered part ℓ'_2	Length of thinned part C	Length L	Weight
Top Tube	Double Butted	25.4φ	1410	0.6~0.3~0.5	80	120	50	50	250	550	160g
			1411	0.8~0.5~0.8							240g
			1412	0.9~0.6~0.9	80	130	50	50	290	600	274g
			1413	1.0~0.7~1.0							309g
	Single Butted		1414	0.9~0.7	90	—	50	—		600	270g
	Plain Gauge (P.G)		1415	0.9	—						542g/m
Down Tube	Double Butted	28.6φ	1430	0.6~0.3~0.6	80	120	50	50	250	550	180g
			1431	0.8~0.5~0.8							295g
			1432	0.9~0.6~0.9	80	180	50	50	290	650	340g
			1433	1.0~0.7~1.0							380g
			1136	1.2~0.9~1.2							
	Single Butted		1434	0.9~0.7	90	—	50	—		615	315g
	Plain Gauge (P.G)		1435	0.9	—						613g/m
Seat Tube	Double Butted	28.6φ	1450	0.6~0.3~0.6	80	120	50	50	250	550	180g
			1451	0.8~0.5~0.8	80	170	50	50	250	550	180g
			1452	0.9~0.6~0.9	80	180	50	50	250	610	300g
	Single Butted		1453	0.9~0.7	90	—	50	—		610	312g
	Plain Gauge (P.G)		1454	0.9	—						613g/m
Head Tube	Plain Gauge (P.G)	31.8φ	1401	1.0	—					200	152g

"Cr-Mo" Seat & Chain Stay

SEAT STAY & CHAIN STAY



Product	Part No.	Thickness		Outside Diameter		Straight Part ℓ_1	Tapered Part ℓ_2	Total Length L	Weight (pair)
		For "PRO"	For No. 1-2	D1	D2				
Seat Stay	1500	0.6		14φ	11φ	280	320	600	240g
	1501		0.8		10φ	240	360		310g
Chain Stay	1550	0.6		22.2φ	12.5φ	70	340	420	220g
	1551		0.8						300g

• Seat Stay "Cr-Mo" Special Spec Product

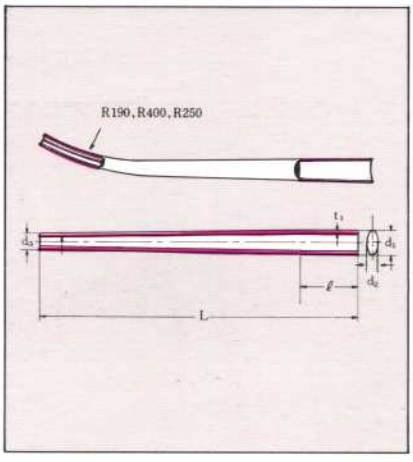
Part No.	Outside diameter		Thickness t_1	Straight part ℓ_1	Tapered part ℓ_2	Total Length L	Weight (pair)
	D1	D2					
1502	14.5φ	11φ	0.8	280	320	600	325g
1503	15.9φ						355g

• Chain Stay "Cr-Mo" Special Spec Product

Part No.	Thickness	Outside Diameter			Straight part	Tapered part	Total Length	Weight (pair)
	t	D1	D2	D3	ℓ_1	ℓ_2	L	
1552	0.8	22.2φ	12.5φ	24φ	22	110	420	300g
1553	0.8	22.2φ	12.5φ	30x19	22	110	420	310g
1554	0.8	22.2φ	12.5φ	27x16	80	105	420	300g

"Cr-Mo" Fork Blade

FORK BLADE



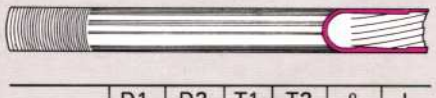
Part No.	Use	Thickness (even thickness) t_1	Outside diameter $d_1 \times d_2$	d_3	Straight Part ℓ	Total Length L	Weight (pair)
1600	For "PRO"	0.9	28.6 x16.4	12.7φ	100	420	300g
1601	No. 1–3	1.0					390g
Bent		For Champion For No. 1-3	"PRO"		No. 1610 No. 1611		

• "Cr-Mo" Special Spec Product

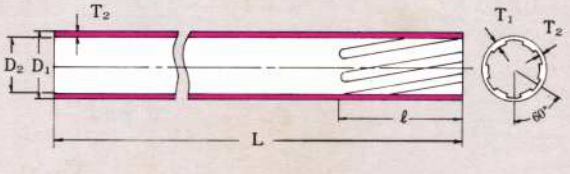
Oval shape			Thickness (even thickness)	Round shaped		Regular size			Weight (pair)
Part No.	Size	Section $d_1 \times d_2$	t_1 t_2	Part No.	Size D1	Tip dia meter D2	Straight part ℓ	Total Length L	
1600	23		0.9	1603	23φ				300g
1601	23	28.7x16.4	1.0	1602	23φ	12.7φ	100	420	390g
1605	24	27.4x20.6	1.0	1608	24φ				390g

"Cr-Mo" Fork Stem

SPIRAL FORK STEM



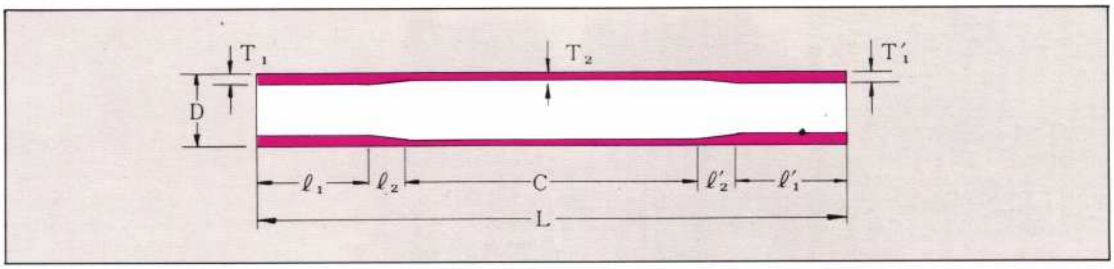
	D1	D2	T1	T2	ℓ	l
No. 1700	25.4φ	22.2φ	2.5	1.6	60	254
No. 1701	25.4φ	21.2φ	2.5	2.1	60	254



"HIGH-TENSION" FRAME TUBE

"Hi-Ten" Frame Tube

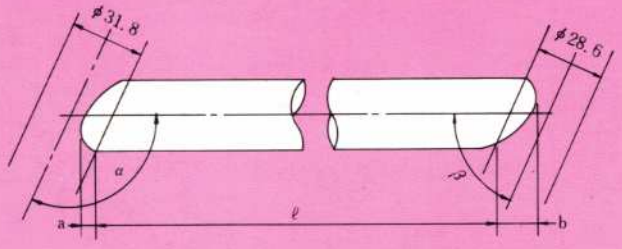
FRAME TUBE



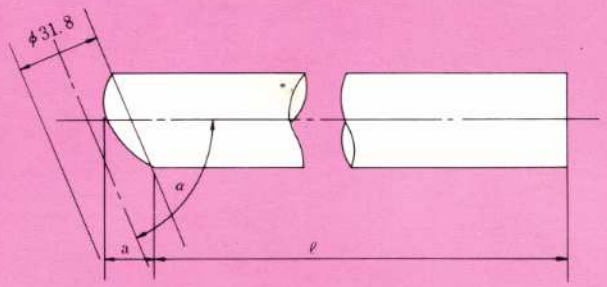
Product	Description	Outside Diameter D	Part No.	Thickness $T_1 \sim T_2 \sim T'_1$	Butted Part Length ℓ_1	Butted Part Length ℓ'_1	Tapered Part Length ℓ_2	Tapered Part Length ℓ'_2	Length of Thinned Part C	Total Length L	Weight
Top Tube	Double	25.4φ	1420	1.2~0.9~1.2	75	125	40	40	280	560	345g
	Single		1421	1.2~0.9	90	—	40	–	—		325g
Down Tube	Double	28.6φ	1440	1.2~0.9~1.2	75	115	40	40	330	600	420g
	Single		1441	1.2~0.9	90	—	40	–	—	600	395g
Seat Tube	Double	28.6φ	1460	1.2~0.9~1.2	75	115	40	40	280	600	420g
	Single		1461	1.2~0.9	90	—	40	–	—		395g
Head Tube	Plain Gauge (P.G)	31.8φ	1470	1.2	–	—	–	–	—	150	135g

Frame Tube Cut Away Illustration

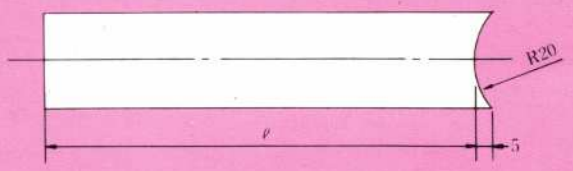
Top Tube



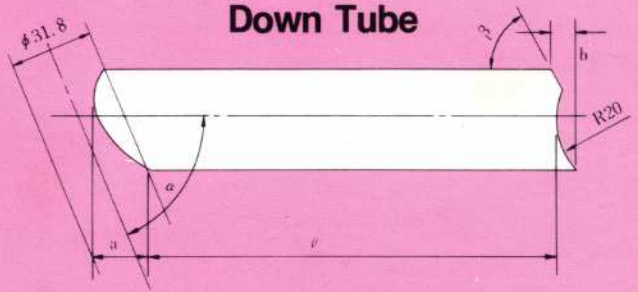
Down Tube



Seat Tube

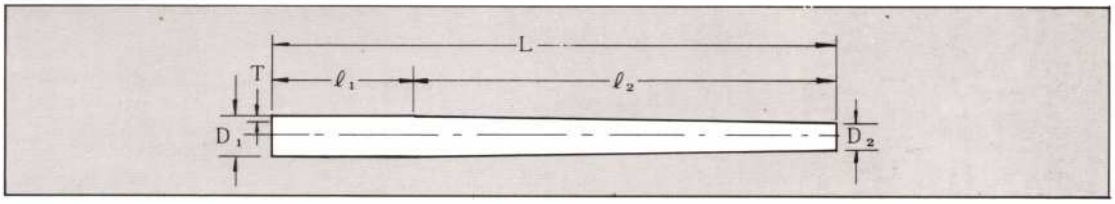


Down Tube



"Hi-Ten" Tapered Tube

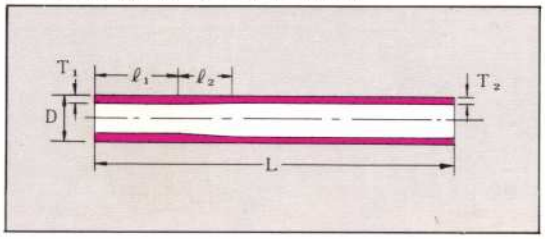
TAPERED TUBE



Product	Part No.	Thickness T	Outside Diameter D_1	Outside Diameter D_2	Straight Part ℓ_1	Tapered Part ℓ_2	Total Length L	Weight
Seat Stay	1520	1.0	14φ	11φ	280	320	600	348g
Chain Stay	1560	1.0	22.2φ	12.5φ	80	340	420	390g
Fork Blade	1620	1.2	Oval. 28.7x16.4	13φ	80	320	400	520g
	1621	1.2	23φ	13φ				520g

"Hi-Ten" Fork Stem

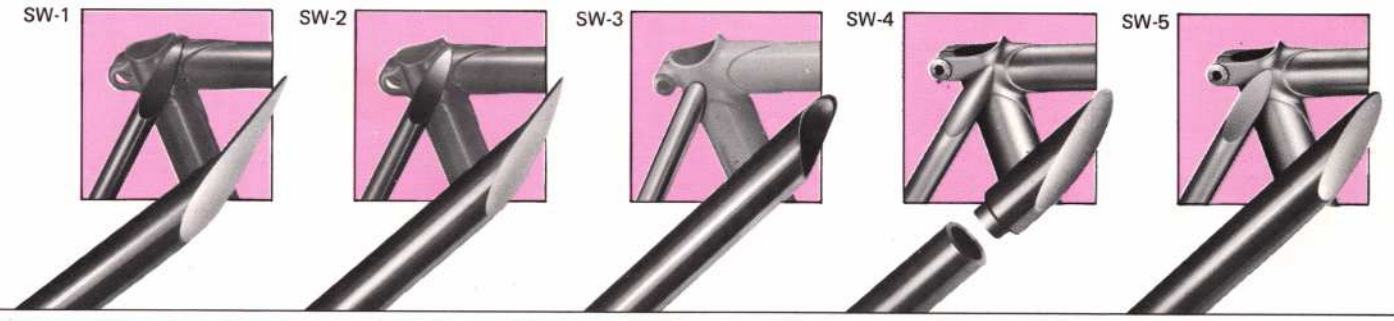
FORK STEM



Outside Diameter D	Inside Diameter	Thickness T_1	Thickness T_2	Butted Part ℓ_1	Tapered Part ℓ_2	Total Length L	Weight
25.4φ	22.2φ	2.7	1.6	50	25	254	260g
25.4φ	21.2φ	2.7	2.1	50	25	254	315g

Seat Stay & Chain Stay Set

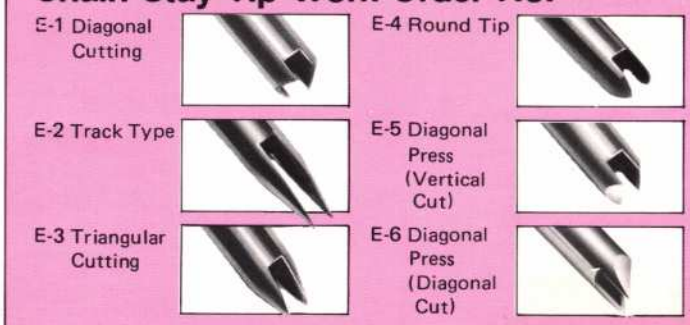
Seat Stay Work Order No.



Chain Stay Work Order No.



Chain Stay Tip Work Order No.



FRONT FORK SYSTEM

"Cr-Mo" Champion Front Fork

The "Cr-Mo" Front Fork System (chromium molybdenum steel) is especially suitable for racing and superior quality bicycle models. Consisting of 5 independent parts, the chromium molybdenum steel front fork can be made-to-order. By specifying which individual parts are required, Tange will braze and supply your "Cr-Mo" Front Fork complete.

"CR-MO" FRONT FORK SYSTEM

Fork Stem Cr-Mo Butted Spiral Stem (2.5t) or Hi-Tension Butted Stem (2.7t)

Fork Crown



C-10 1171 | C-12 1172 | C-1 1151 | C-2 1152 | CTR 1154 | AERO 1175 | AERO 1176

Fork Blade Cr-Mo Blade (1.0t) Round, Oval or Aerodynamic Design Available

Fork End



SF 1206 | TF 1210 | TF-R 1213 | TL 1212

Tip End



Round Tip | Diagonal Cutting | Triangular Cutting

"Hi-Ten" Front Fork

The "Hi-Ten" Front Fork is an excellent product suitable for all types of bicycle.

"HI-TENSION" FRONT FORK SYSTEM

Fork Stem Hi-Tension Butted Stem (2.7t)

Fork Crown



CCL 1120 | AL-13 1118 | ARII-2W | ARII-OW | A-2 | D-9

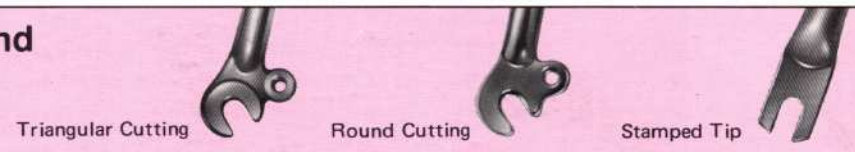
Fork Blade Hi-Tension Blade (1.2t) Round or Oval Available

Fork End



TF 1210 | TFR 1213 | TL 1212 | MA | NA

Tip End



Triangular Cutting | Round Cutting | Stamped Tip

FRONT FORK COMPONENTS

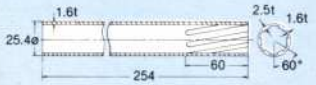
"CR-MO" CHAMPION FRONT FORK

Cr-Mo Front Fork
TANGE 150-B

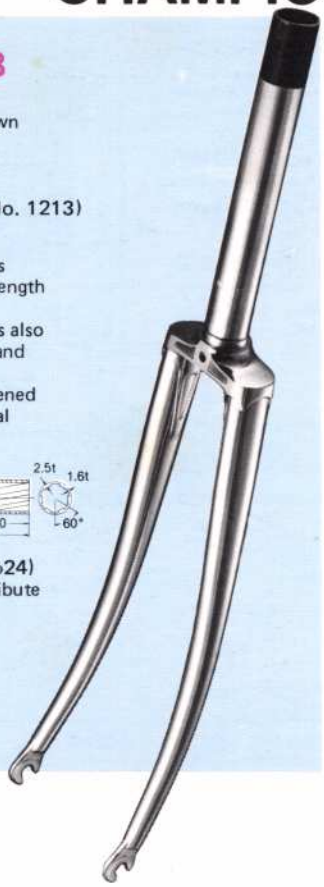
For Racing
Cr-Mo Micro Fusion Crown
(No. 1171)
Cr-Mo Spiraled Stem
Cr-Mo Blades (ϕ24)
With Forged Cut Ends (No. 1213)

Micro Fusion Crown

1. Micro Fusion Crown is made of Cr-Mo for strength and lightness.
2. Micro Fusion Crown is also perfect for sharpness and exactness of design.
3. The crown is strengthened even more by the spiral stem system.



4. The larger diameter (ϕ24) fork blades also contribute greatly to increased strength.



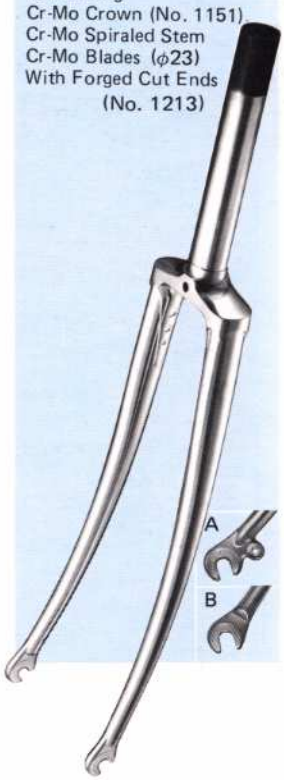
Cr-Mo Front Fork
TANGE 124

For Racing
Cr-Mo Crown (No. 1152)
Cr-Mo Spiraled Stem
Cr-Mo Blades (ϕ23)
With Forged Cut Ends (No. 1213)



Cr-Mo Front Fork
TANGE 130

For Racing
Cr-Mo Crown (No. 1151)
Cr-Mo Spiraled Stem
Cr-Mo Blades (ϕ23)
With Forged Cut Ends (No. 1213)



Cr-Mo Front Fork
TANGE 160

For Racing
Aerodynamic Design
Cr-Mo Micro Fusion Crown (No. 1176)
Cr-Mo Spiraled Stem
Cr-Mo Blades (ϕ24)
With Forged Cut Ends (No. 1216)



No. 1175
Cr-Mo Micro Fusion Crown
AERO

"HI-TENSION" FRONT FORK

Hi-Ten Front Fork
TANGE 115-2

Light Weight
Fork Crown: A-18
Hi-Tension Butted Stem
Hi-Tension Blades.
With Solid Ends. (MA)



Available
TANGE 120
Fork Crown



Hi-Ten Front Fork
TANGE 230

For Racing
Fork Crown: CCL (No. 1120)
Hi-Tension Butted Stem
Hi-Tension Blades.
With Solid Ends. (TF No. 1210)



Hi-Ten Front Fork
TANGE 116

For Hi-Riser
Fork Crown: A-18
Hi-Tension Butted Stem
Hi-Tension Blades.



Hi-Ten Front Fork
TANGE 122

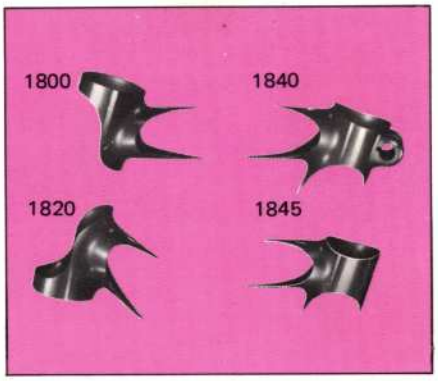
Standard
Fork Crown D-9
Hi-Tension Butted Stem
Hi-Tension Blades.



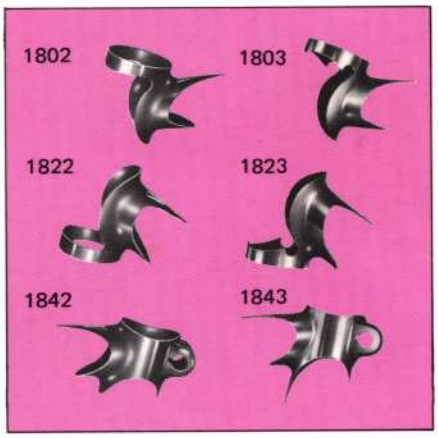
LUG

TANGE Champion Lug Set

CHAMPION LUG SET



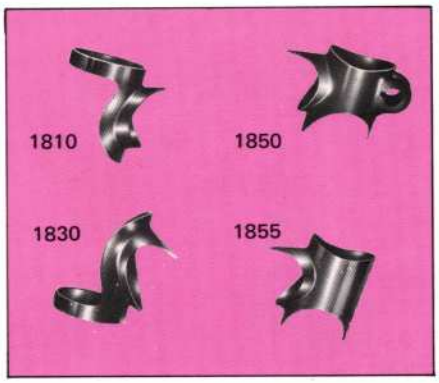
Product	High-Tension 1.0mm t Steel Part No.	High-Tension 1.0mm t with hole ◇ Part No.	Angle (mm)	Weight (g)
Top Head Lug	1800	1801	31.8φx25.4φ 73°	17g
Bottom Head Lug	1820	1821	31.8φx28.6φ 58° 30′	22g
Seat Lug	1840	1841	25.4φx28.6φ 73°	25g
Lug-without Locking (ear)	1845	1851	25.4φx28.6φ 73°	19g



Product	High-tension 1.2mm t Steel Part No.	High-tension 1.0mm t Steel Part No.	Angle (mm)	Weight (g)
Top Head Lug	1802	1803	31.8φx25.4φ 73°	1.2t(21)g 1.0t(17)g
Bottom Head Lug	1822	1823	31.8φx28.6φ 58° 30′	1.2t(27)g 1.0t(22)g
Seat Lug	1842	1843	25.4φx28.6φ 73°	1.2t(30)g 1.0t(25)g
Lug-without Locking(ear)	1848	1847	25.4φx28.6φ 73°	1.2t(23)g 1.0t(19)g

High-Tension Lug Steel Composition

	C	Si	Mn	P	S	Cu	Cr	Ni	Tension
COR-TEN O	0.12 or less	0.25 ~0.75	0.20 ~0.50	0.07 ~0.15	0.035 or less	0.25 ~0.55	0.30 ~1.25	0.65 or less	kg/mm² 46 or more

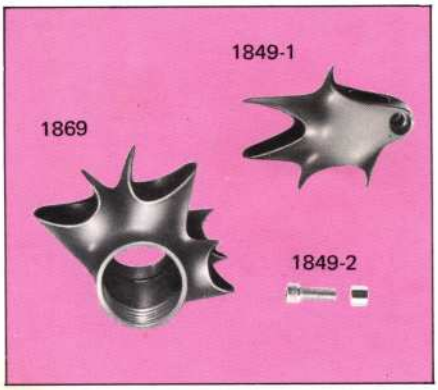


Super Champion Lug

Product	Carbon-steel 1.4mmt Part No.	Angle	Weight (g)
Top Head Lug	1810	31.8φ x 25.4φ 73°	20 g
Bottom Head Lug	1830	31.8φx28.6φ 58° 30′	25 g
Seat Lug	1850	25.4φx28.6φ 73°	40 g
Lug-without Locking (ear)	1855	25.4φx28.6φ 73°	32 g

TANGE Casting Iron Lug

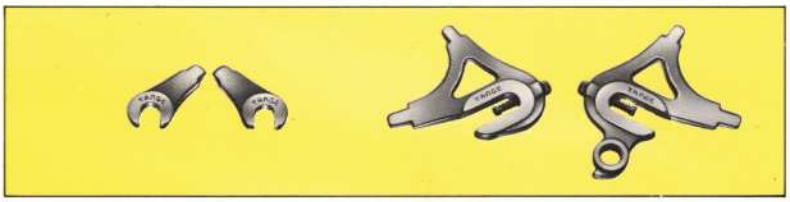
CASTING IRON LUG



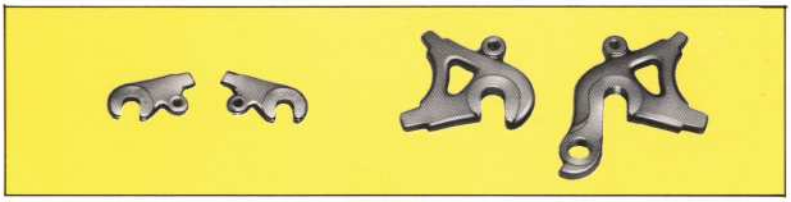
Product	Part No.	Angle (mm)		Weight (mm)
Seat Lug	1849- 1	25.4φx28.6φ	73°	90g
Seat Pin	1849- 2	6φx18	10φx8	
Bottom Bracket Shell	1869	28.6φx28.6φ x22.2φ	58° 30′ x64° 68	175g

FRONT & REAR END SET

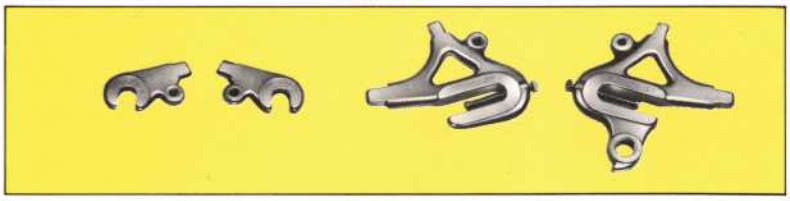
TANGE
Front & Rear End Set



TR end (forged).
No. 1215 Fork End. 65g
No. 1315 Rear End. 155g



SFR end (forged)
Straight Drop Out End.
No. 1206 Fork End. 70g
No. 1306 Rear End. 185g



SF end (forged).
No. 1206 Fork End. 85g
No. 1305 Rear End. 175g

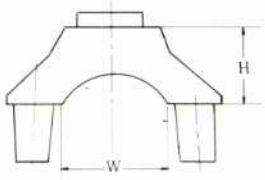


TF end (forged).
No. 1210 Fork End. 50g
No. 1213 Fork End. 45g
No. 1308 Rear End. 165g

CHAMPION FORK CROWN

TANGE
Champion Fork Crown



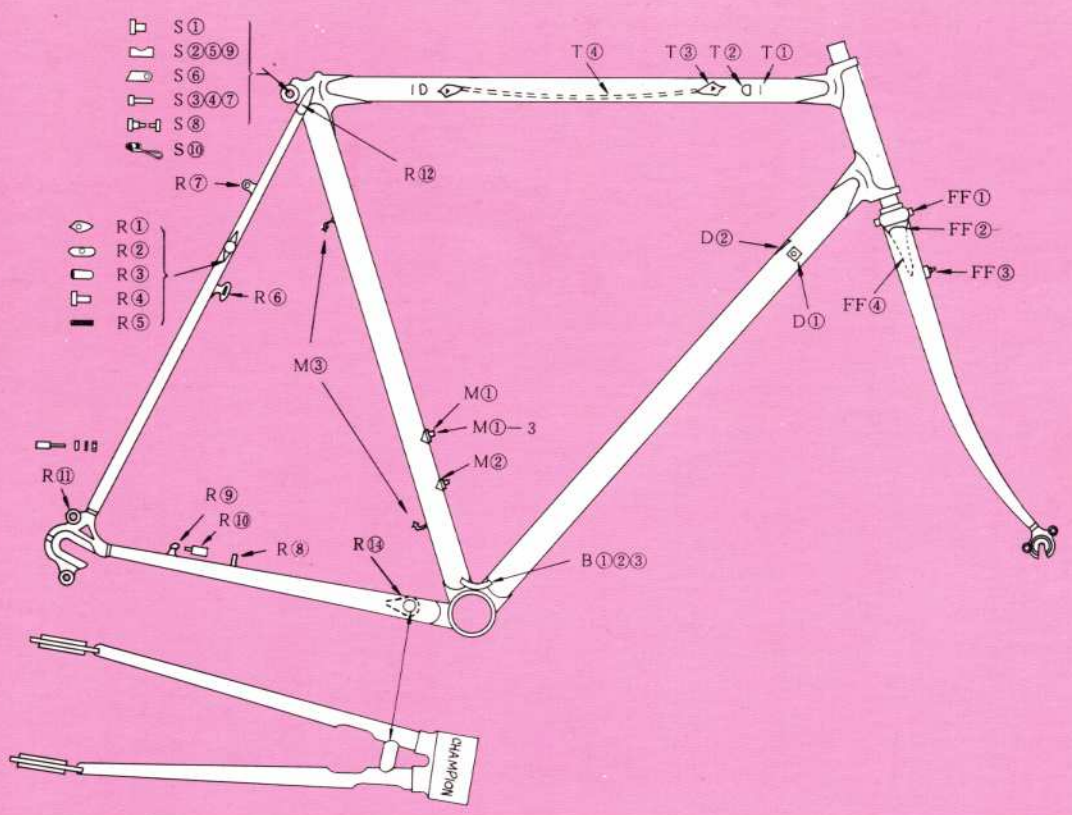


Part No.	Symbol	Material	Internal Width W (mm)	Blade Diameter (mm)	Height (mm)	Weight
1171	C-10	Micro Fusion	38	24 Oval	17	185 g
1172	C-12	Micro Fusion	39	24 Oval	15.5	140 g
1154	CTR	Casting Iron	43.5	23 Round	17	155 g
1173	NT	Micro Fusion	36	24 Round	16	125 g
1174	NR	Micro Fusion	38	24 Oval	19	125 g
1175	AERO	Micro Fusion	42	23 AERO	16	210 g
1176	AERO	Micro Fusion	42	23 AERO	20	210 g
1151	C-1	Casting Iron	45	23 Oval	18	150 g
1152	C-2	Casting Iron	47	23 Oval	17	195 g
1117	AL-2	Press	45	23 Oval	23	130 g
1118	AL-13	Press	45	23 Oval	23	130 g
1120	CCL	Press	45	23 Oval	21	120 g

CHAMPION FRAME FITTING

PART NO.

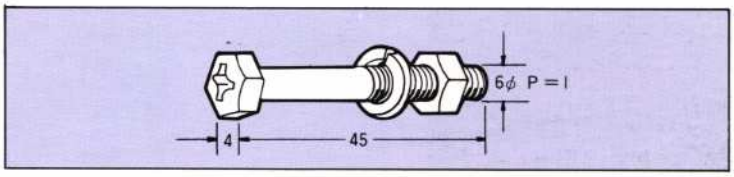
FF. Front Fork
T. Top Tube
D. Down Tube
M. Seat Tube
S. Seat Stay
B. B.B. Shell
R. Seat Stay and Chain Stay



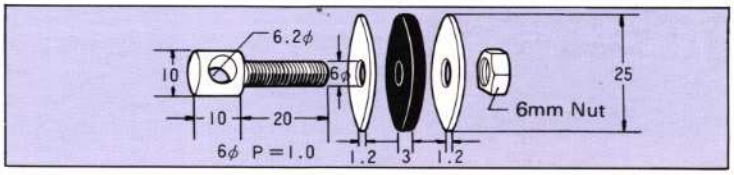
TANGE
Front Fork Parts

FRONT FORK PARTS

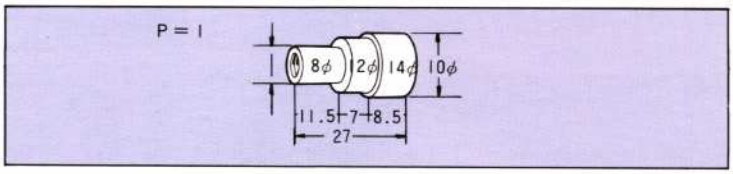
FF1 Bolt for Caliper Brake



FF2 Hanger Fittings for Mud Guard

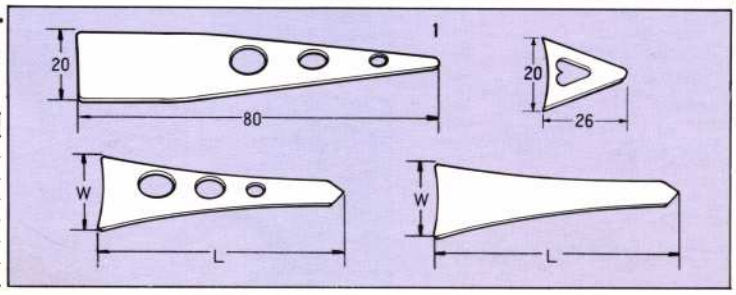


FF3 Canti Brake Fittings



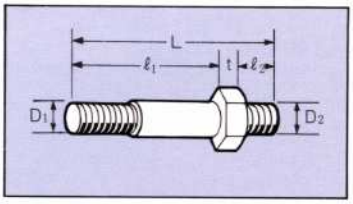
FF4 Fork Blade Reinforcement Plate

Thickness 1 m/m



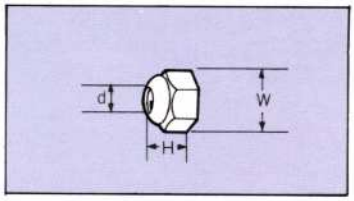
Type	Size W×L	Shape
FF 4 —1	20 x 80	(Large) W/Three Holes
2	22 x 59	(Small) W/Three Holes
3	22 x 59	(Small) W/O Hole
4	19.5 x 55	(Small) W/Three Holes
5	19.5 x 55	(Small) W/O Hole
6	21 x 56	(Small) W/Three Holes
7	21 x 56	(Small) W/O Hole

FF5 Front Carrier Fixing Bolt



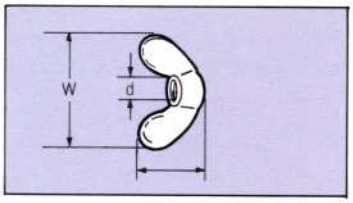
Type	L	ℓ_1	ℓ_2	t	D_1	D_2
FF-5 -1	39	27	7	4	6	6
2	25	13	8	4	6	5
3	24	11	10	4	6	6

FF6 Round Headed Nut



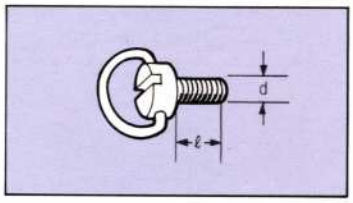
Type	H	d	W
FF- 6 -1	8	5	10
2	8	6	10

FF7 Wing Nut



Type	H	d	W
FF- 7 -1	10	5	20
2	12	6	25

FF8 Ring Fitted Screw

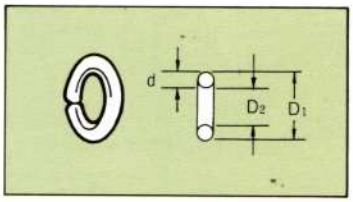


Type	d	ℓ
FF- 8 -1	5	11
2	6	12

TANGE Top Tube Parts

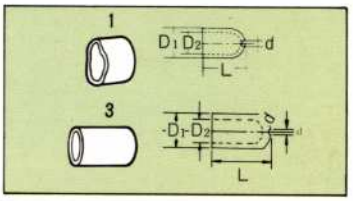
TOP TUBE PARTS

T1 Guide Ring for Wire



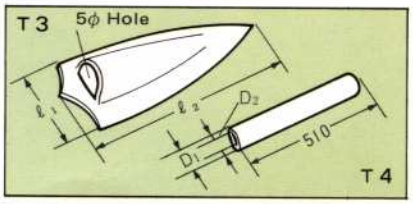
Type	D_1	D_2	d
T 1 -1	11φ	7φ	2.5φ

T2 Wire Stopper



Type	D_1	D_2	d	L
T 2 -1	9	7φ	2.5φ	7
2	8	6φ		

T3 Cover for Incorporated T4 Brake Wire

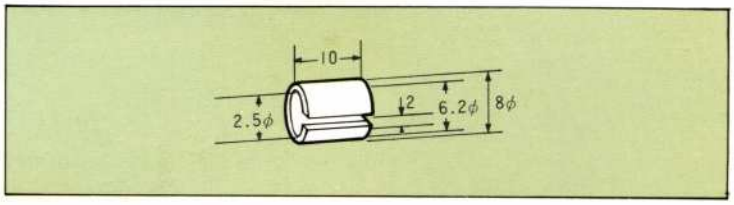


	ℓ_1	ℓ_2	Bending R
T 3 -1	15	46	14
T 3 -2	14	25	14

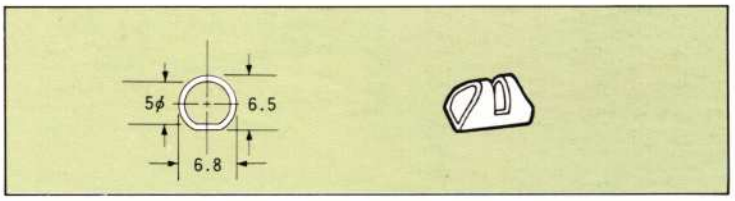
	D_1	L	t	D_2
T 4 -1	4φ	x 510	x 0.8t	x 2.4φ

Inserting Tube for T3

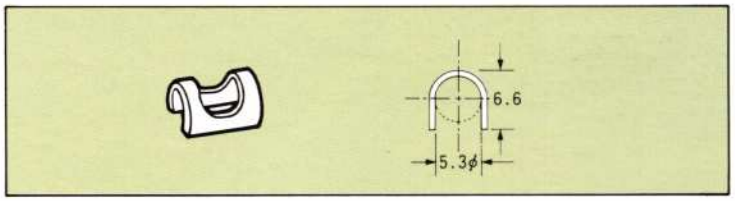
T5 Split Outer (Metal Bearing)



T6 **Outer Guide Machine Processed**



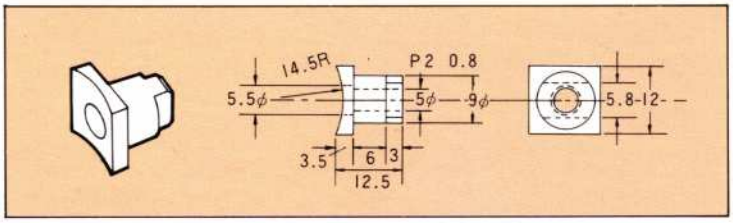
T7 **Outer Guide Pressed**



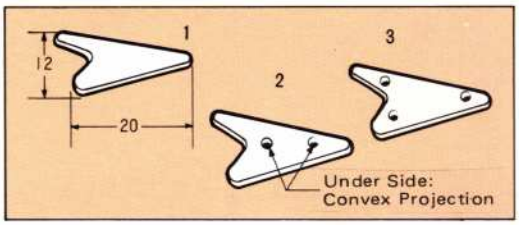
TANGE Down Tube Parts

DOWN TUBE PARTS

D1 **Shifting Lever Fittings**



D2 **Shifting Lever Stopper**

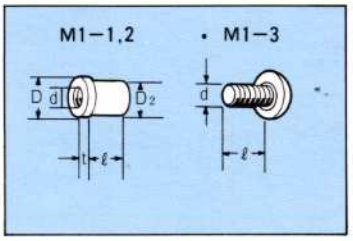


Thickness 1mm.
Bend 14.3R

TANGE Seat Tube Parts

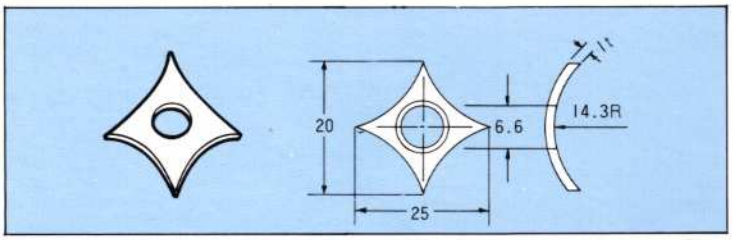
SEAT TUBE PARTS

M1 **Bottle Fitting Nut** (Natural Color)

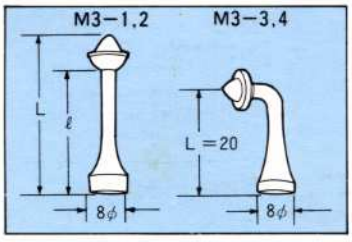


Type	D_1	D_2	d (Screw)	t	ℓ
M 1 -1	10	7.8	6 P=1	2	8
2	9	6.5	5 P=0.8 180	1.5	6
3	Screw for M -2 C/P		5 180		10

M2 **Bottle Fitting Reinforcement**



M3 **Pump Peg** (Natural Color)



Type	L	ℓ
M- 3 -1	30	22
2	26	18

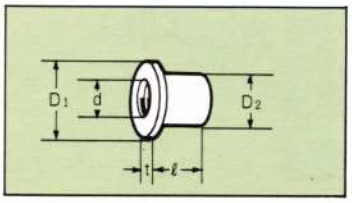
M- 3 -3 Pump peg-bent
4 L=17

M-3-1·2 Straight Type
M-3-3·4 Bent Type

TANGE Seat Parts

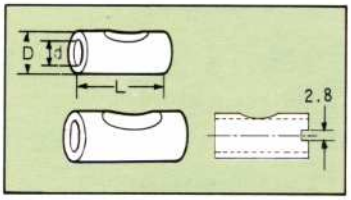
SEAT PARTS

S1 Seat Inserting Collar (C/P Finish)



Type	D_1	D_2	d	t	ℓ
S 1 -1	12	8	6	1.5	8
2		Self Color			

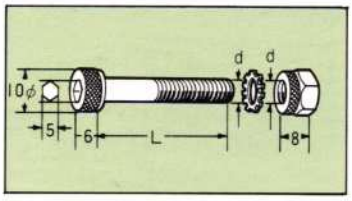
S2 Seat Collar (Natural Color)



Type	D	d	L	Spot-facing R
S-2-1	11	6.5	22	14.3
2	12	7.5	24	14.3
3	14	8.5	26	14.3

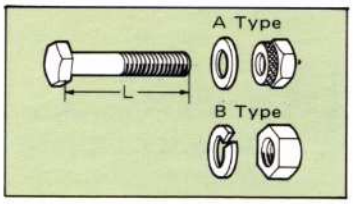
S-2-3 Special specification (Split).

S3 Seat Pin With Allen Key Bolt



Type	d	L
S-3-1	6 P=1	35
2	6	40
3	6	45

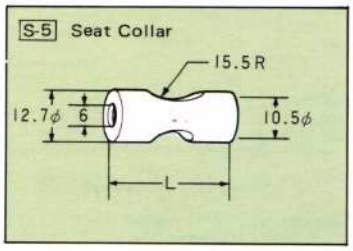
S4 Seat Pin With Washer & Nut (C.P Finish)

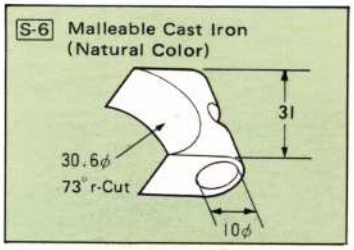


Type	d	L	Nut washer.
S 4-1	6	32, 35, 38	A or B
2	7	32, 35, 40, 43, 48	

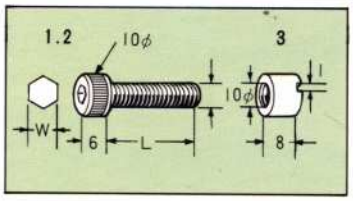
S5 Seat Collar (S 5–1 L = 25 S 5–2 L = 31)

S6 Malleable Cast Iron (Natural Color)



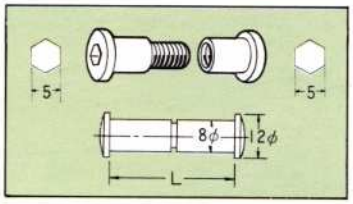


S7 Cap Bolt "Cr-Mo" Steel (C/P Finish)



Type	d	L	W
S 7 -1	6	10,12,14,16,20,25, 30,35,40,50	5
2	5	8,10,12,14,16,20, 25,30	4
3	6	Nut	

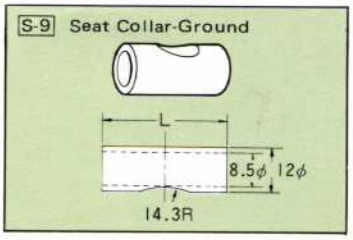
S8 Allen Key Seat Tweezers Bolt (C/P Finish)



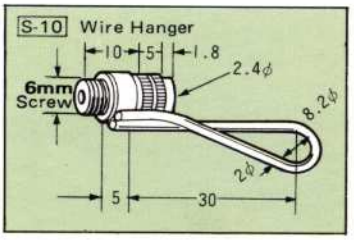
Type	L	Application
S 8 -1	22	For S-9-1
2	19	For S-9-2

S9 Seat Collar (Natural Color) (For S8)

Type	L
S-9-1	26
2	23



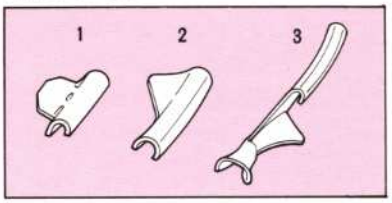
S10 Wire Hanger



TANGE
B.B. Shell Parts

B.B. SHELL PARTS

B1 **B2** **B3** Wire Lead Tube
(Natural Color)

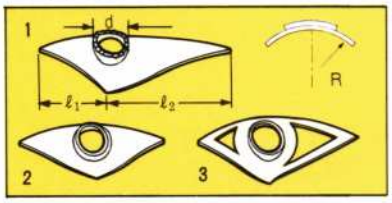


Type	Uses
B 1	For rear.
B 2	For rear.
B 3	For front.

TANGE
Chain Stay Parts

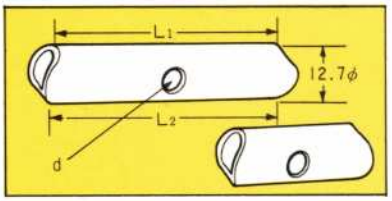
CHAIN STAY PARTS

R1 Upper Bridge Reinforcement
(Natural Color)



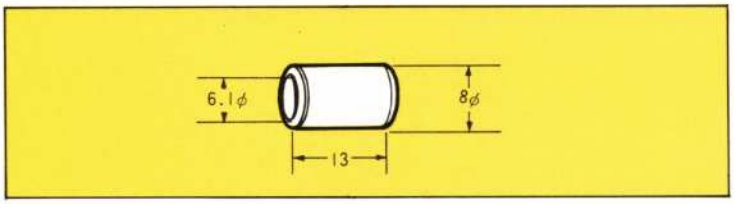
Type	ℓ_1	ℓ_2	d	R
R 1 -1	18	29	8	6.5
2	17.6	17.6	9	7
3	16	23	9.4	7.9

R2 Bridge (with Spot Facing)
(Natural Color)

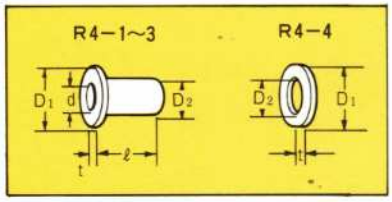


Type	Difference between L_1 and L_2	d	Spot facing.
R 2 -1	Less than 4.	6.2φ	14.5φ, 16φ
2	Less than 4.	5.5φ	22.2φ
3	Less than 4.	8 -	14.5φ, 16φ

R3 Reinforcement Tube for Upper Bridge
(Natural Color)

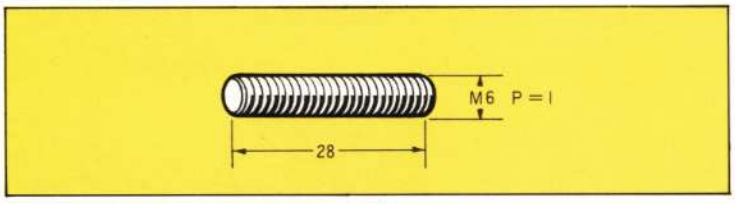


R4 Metal Fitting Seat
(Ground for Brake to be Fixed to Upper Bridge)



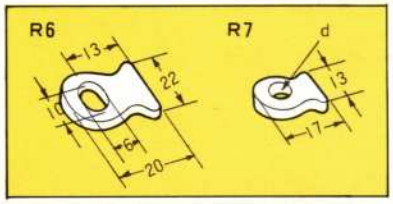
Type	D_1	D_2	d	t	ℓ
R 4 -1	14	8.0	6.2	1.6	13
2	14	8.0	6.2	1.6	15
3	14	8.0	6.2	1.6	18
4	14	8.1	—	1.5	—

R5 Bolt



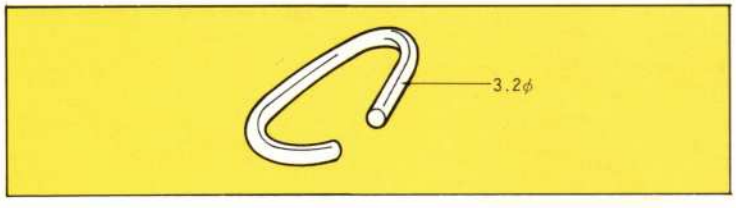
R6 Bracket
(Natural Color)

R7 Carrier Fixing Board



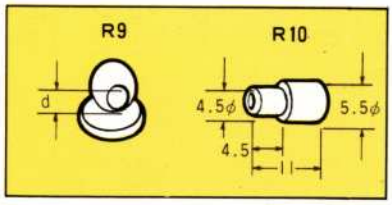
R-7 -1 d=5.5φ
2 d=6M P=1

R8 Chainguard
(Natural Color)



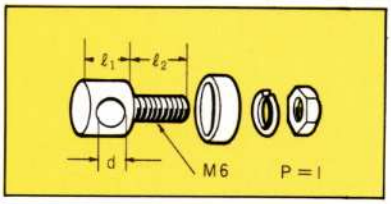
R9 Iron Wire Block Metal Boss

R10 Brass Outer Receptacle U/P



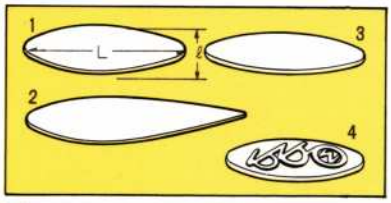
Type	d
R 9 -1	4.1φ
2	5M JIS
3	5M ISO

R11 Brass Brake Tightening Bolt and Ring N/P



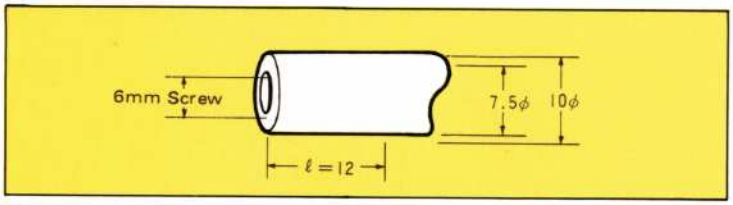
Type	d	ℓ_1	ℓ_2
R 11-1	5.3	9	12
2	4.2	7	12

R12 Chain Stay Cap
Thickness 1m/m

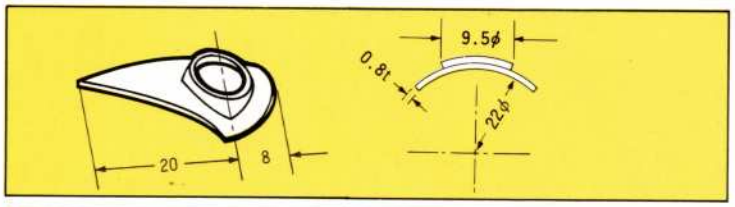


Type	L	ℓ
R 12-1	42	16
2	58	15.8
3	43	17
4	W/Mark	

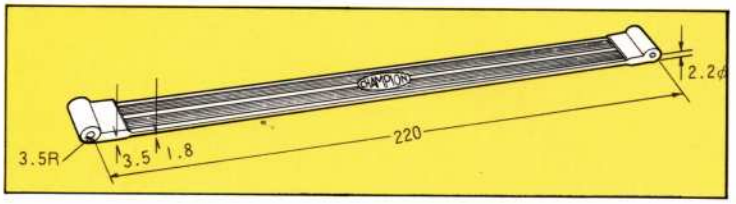
R13 Rear Carrier Fixing Bar



R14 Fitting Bridge Reinforcement



R15 Chain Stay Protector
Synthetic Rubber
Color: Black, Ivory or Brown



Brazing Cr-Mo Materials

1. When brazing, please use material with expansion strength of 60kg/mm² at a low melting point. The melting point of brazing material is around 850°C. For flux, use either gas flux or paste flux No. 110.
2. To ensure smooth brazing flow, it is important to clear away impurities from the parts to be brazed.
3. Before braxing, the tube and minor parts have to be thoroughly polished. For heating, concentrically apply small amounts and soft braze as far as possible. Also, take care not to allow over heating.
4. After brazing, cool as slowly as possible.
5. If brazed section appears to be brittle, heat again at 650° ~ 700°C and cool slowly.
6. Where to cut the TUBE. TOP TUBE: Cut the blue varnished side (to be fixed to the seat tube). DOWN TUBE: Cut the blue varnished side (to be fixed to the B.B. Shell).
   SEAT TUBE: Cut the blue varnished side (to be fixed to the Seat Lug).
7. Take note of the butted section length (ℓ_1 and ℓ'_1) when cutting the tube.

MOTOCROSS COMPONENTS

TANGE
BMX
Front Fork

FRONT FORK

Cr-Mo Front Fork
TRX
For Racing.
Cr-Mo Spiraled Stem.
Cr-Mo Oval Blades.
With Specially Shaped Ends.
Color: Blue, Red, Gold or C.P. Finish.
Weight: 1 lb. 7 oz. (652g)

Cr-Mo Front Fork
TX-500W
For Racing
Cr-Mo Butted Stem & Blades.
With Specially Shaped Ends.
Color: Blue, Red, Gold or C.P. Finish.

Hi-Tension Front Fork
TX-1200W
For Racing & Leisure.
H.T. Butted Stem & Specially Strengthened Hi-Tension Steel Blades.
With Specially Shaped Ends.
Color: Blue, Red, Gold or C.P. Finish.

Hi-Tension Front Fork
TX-1200
For Racing & Leisure.
H.T. Butted Stem & Specially Strengthened Hi-Tension Steel Blades.
Color: Blue, Red, Gold or C.P. Finish.



Features of The TRX Front Fork

Reinforced spiral ribbing to strengthen critical stress areas of the stem.

A first ever in BMX, the spiral stem of the front fork is stronger and lighter than ever before. A unique spiral ribbing system is responsible for these special properties so necessary in BMX racing.

Oval, chrome moly steel blades.
According to data based on dynamics, Tange has graded each fork blade for strength and lightness. This means those areas in need of extra strength are thicker. And areas which are not subject to stress are thinner for extra lightness.

Spiral Stem
Reinforced spiral ribbing to strengthen critical stress areas of the stem.



Oval Tube
Oval, chrome moly steel blades.

TANGE
BMX
Accessories

BMX ACCESSARY PARTS

BMX SEAT POST

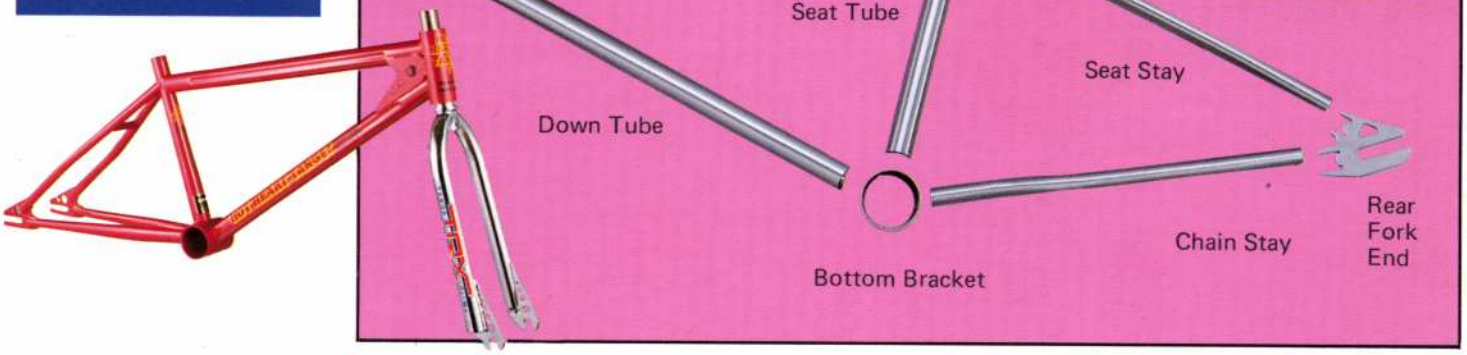
Possessing three times the strength of conventional alloy products, Tange's seat post is both more durable and lighter. This component was made exclusively for BMX racing.

Weight: 210g.
Material: Cr-Mo
Color: C.P. Finish
Length: 270mm



TANGE
BMX
Frame Tube

"CR-MO" CHAMPION FRAME TUBE



BMX FRAME SET

Frame Set
Cr-Mo Oval Double Butted Tube
Top Tube: 28.6 x 1.0/0.8 x Oval D.B.T
Down Tube: 28.6 x 1.0/0.8 x Oval D.B.T
Seat Tube: 25.4 x 1.3 P.G
Head Tube: 36.6 x 2.0
Seat Stay: 15.9 x 1.0 Oval P.G
Chain Stay: 22.2 x 0.8 Oval P.G

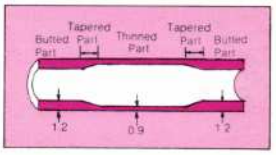
Frame Set
Cr-Mo Double Butted Tube
Top Tube: 28.6 x 1.2/0.9 x D.B.T.
Down Tube: 28.6 x 1.2/0.9 x D.B.T
Seat Tube: 25.4 x 1.3 P.G
Head Tube: 36.6 x 2.0
Seat Stay: 15.9 x 1.0 P.G
Chain Stay: 15.9 x 1.0 P.G

Frame Set
Cr-Mo P.G. Tube
Top Tube: 25.4 x 1.2
Down Tube: 25.4 x 1.2
Seat Tube: 25.4 x 1.3
Head Tube: 36.6 x 2.0
Seat Stay: 15.9 x 1.0
Chain Stay: 15.9 x 1.0

Frame Set
Mangaloy Tube
Manganese Alloy Tubing
Top Tube: 25.4 x 1.3
Down Tube: 25.4 x 1.3
Seat Tube: 25.4 x 1.3
Head Tube: 36.6 x 2.0
Seat Stay: 15.9 x 1.3
Chain Stay: 15.9 x 1.3

Cr-Mo Double Butted Tubing

The double butted ends of Tange's tubing give strength to the points most subject to stress and tension along with improved welding. And the central section of the tube has been thinned for the necessary flexibility in coping with the demands of BMX racing. This perfect balance, used for the first time ever in BMX racing, can only be found in Tange's Double Butted Tubing.



COMPOSITION

C	Si	Mn	Mo	S	P	Cr
0.33%	0.35%	0.85%	0.25%	0.03% Max.	0.03% Max.	1.2%

Cr-Mo Oval Tubing

Tange created a unique, new seamlen oval tubing which greatly reduces air resistance for aerodynamic efficiency, while at the same time increasing strength. This mean the butted sections' thickness could be reduced for extra lightness. In addition, a special ridge along the tube center provides extra strength and durability for the toughest racing conditions. The only tubing developed especially for BMX racing – Tange's Cr-Mo Oval Tubing.

Mangaloy Tubing

A futuristic material for bicycle frames has appeared in the shape of Tange's Mangaloy Tubing. Almost as strong as Cr-Mo, Mangaloy is far superior to work with in welding and for manufacturing processes. This revolutionary material will be in great demand for bicycle frames throughout the BMX industry.

COMPOSITION

C	Si	Mn	P	S	Cu	Ti
0.12 Max.	0.15~0.35	0.90 Max.	0.06 Max.	0.035 Max.	0.25~4.50	0.15 Max.

EXPORT PACKING CHART

Material	Product	Size of Part No.	Contents	Net Weight (kgs)	Gross Weight (kgs)	Measurement (ft)
	Champion Frame Tube 11-Piece (Set in Packing Case)		20 Small Boxes	38	43	3.7
Cr-Mo	Butted Frame Tubes	Dia x Length mm 25.4 x 600 25.4 x 600 28.6 x 650 28.6 x 650	100 pcs 100 pcs	101 28 112 31	118 30 131 33	5.5 1.7 6.7 2.3
	Head Tubes	No. 1401	250 pcs	38	40	2
	Seat Stays Chain Stays	No. 1501 No. 1551	100 pcs	31 30	33 32	2.0
	Fork Blade	No. 1601 ~ 5	100 sets	39	41	2.0
	Fork Stem	No. 1701	100 pcs	23	25	0.7
Hi-Ten	Butted Frame Tube	No. 1420 No. 1421 No. 1440 No. 1441 No. 1460 No. 1461	100 pcs 100 100 100 100 100	35 33 42 40 42 40	37 35 44 42 44 42	1.7 1.7 2.1 2.1 2.1 2.1
	Head Tube	No. 1470	100	14	15	0.7
	Seat Stay Chain Stay	No. 1521 No. 1561	100 sets	35 39	37 41	2.0 2.0
	Fork Blade	No. 1622 ~ 3	50 sets	26	28	1.0
	Fork Stem	No. 1720 No. 1721	100 pcs 100	27 31	29 33	1.0
	Fork Ends	No. 1206 No. 1212	500 sets	43 30	45 32	1.5 1.2
		No. 1210	500	25	27	1.0
	Rear Ends	No. 1305 No. 1308	200 sets	35 33	37 35	1.5
Cr-Mo	Front Forks	No. 130 No. 124 No. 150 No. No.	10 Small Boxes	10	14	2.0
Hi-Ten		No. 115 ~ 1 No. 115 ~ 2 No. 115 ~ 3 No. 230 No. 116 No. 122	25 pcs 25 pcs. 25 pcs 25 pcs 25 pcs 25 pcs	22 22 22 22 18 25	25 25 25 25 21 28	2.5 2.5 2.5 2.5 2.0 2.5
	Lug 3-pce Sets	No. 1800 ~ 3 No. 1820 ~ 3 No. 1840 ~ 3	200 sets	40	43	2.4
	Bracket Shell	No. 1869	100 pcs	21		2.9
	Casting Iron Set Lug	No. 1849–1 ~ 2	200 pcs	18	20	3.0
	Casting Iron Fork Crown	No. 1151 No. 1152 No. 1154	150 pcs	26	28	1.5
	Pressed Fork Crown	No. 1117 No. 1118 No. 1120	150 pcs	20	22	1.0
		No. 1171 No. 1174 No. 1172 No. 1175 No. 1173 No. 1176	150 pcs	28	30	1.5
	Frame Tube BMX Cr-Mo & Hi-Ten	Cr-Mo D Tube Cr-Mo P.G Tube Mangaloy Tube	10 set (12 pcs ea) 10 set (12 pcs ea) 10 set (12 pcs ea)	20 20 22	24 24 26	2.5 2.5 2.5
	Front Fork BMX	TRX TX-500 W TX-1200 W TX-1200	25 25 25 25	17 19 20 20	20 22 23 23	2.0 2.0 2.0 2.0



Tange TANGE

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