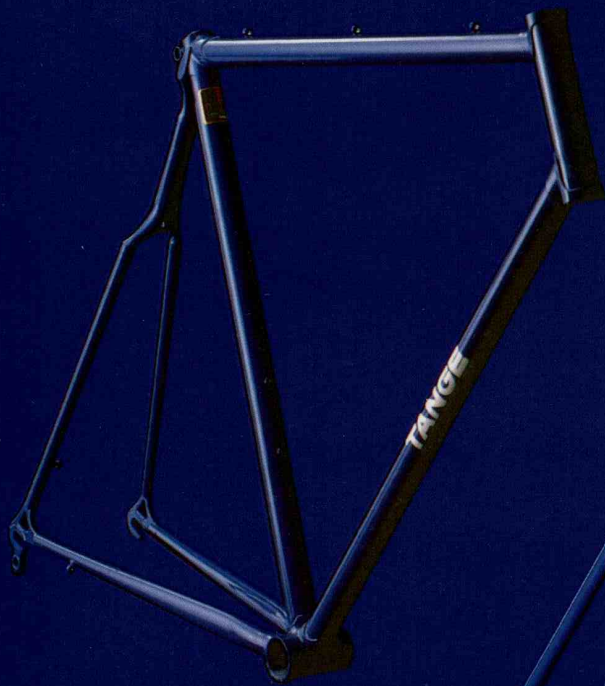


*Tange
Frame
Components
System*



TANGE



*Tange...
A Continuing Search
for Excellence*

The development and manufacture of quality bicycle frame tubing is a difficult technological challenge. The best tubing must answer the conflicting demands for light weight and high strength in relation to the specific application of the frame. With over 60 years of specialized experience in the development and manufacture of quality tubing, we at Tange are responding to this challenge. We're making a continuing effort to improving cycling performance through intensive research into tube shapes, new materials, unique composite construction techniques, and advanced manufacturing methods. Whether it's racing, all-terrain, sport, touring, or utility bicycles, you can be assured that Tange tubing and frame fittings provide the highest level of performance, quality, and value today. This is Tange—a company on a continuing search for excellence.



CONTENTS

TANGE Philosophy 1
 New Products 3
 Frame Tubing Set 9
 MTB Frame Tubing Set 11
 Frame Order System 13
 • Prestige Super Lite/Prestige 15
 • TANGE No. 1 ~ No. 5 16
 • Prestige MTB Concept/Prestige MTB/
 Cr-Mo MTB 17
 • Infinity/Infinity MTB 18
 • 900/1000/1000MTB/1200MTB 19
 Frame Tube Cut Work Illustration 20
 Seat & Chain Stay Work 21
 Wishbone Back Stay 22
 Lug Set 23
 End Set 24
 Cr-Mo Crown 25
 Crown/MTB Crown 26
 Front Fork Order System 27
 MTB Front Fork Order System 28
 Cr-Mo Front Fork Components 29
 Front Fork Components 31
 MTB Front Fork Components 33
 Frame Fitting 35

The New Performance Challenge

*Tange Composite Materials Technology Breaks the
Performance Barrier.*

Feel the Heat With Fusion Forks

The result of advanced Tange composite materials technology, the Fusion Fork offers a high-tech synthesis of light weight, high strength, and beautiful finish.

Chrome-moly stem, forged light alloy crown, heat-treated light alloy blades, and forged light alloy fork ends are joined together through a weldless high-tech bonding process offering great strength and durability. Precision finish at the joints results in smooth flowing lines that make the Fusion Fork the perfect choice for any quality frame.

Fusion is the light alloy high-performance fork that can take all the punishment real racing dishes out.

Composite Front Fork
FUSION II
For Racing

Materials	: Blade/Heat Treated Light Alloy Crown/Forged Light Alloy End/Forged Light Alloy Stem/Cr-Mo Steel
Offset	: 40mm, 45mm, 50mm
Blade Length	: 356mm (For 700/25C Tire)
Crown Race	: 27mm, 26.4mm
Inside Diameter	: 22.2mm
Brake Hole	: Recessed Hole (10.5/8.5/6.3)
Stem Length	: Any length for OEM use 250 x 70, 200 x 70 or 150 x 70 for replacement
Finish	: Raw or Bright Polished





Composite Front Fork
FUSION I
For Racing

- Materials** : Blade/Heat Treated Light Alloy
Crown/Forged Light Alloy
End/Forged Light Alloy
Stem/Cr-Mo Steel
- Offset** : 40mm, 45mm, 50mm
- Blade Length** : 356mm (For 700/25C Tire)
- Crown Race** : 27mm, 26.4mm
- Inside Diameter** : 22.2mm
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- Stem Length** : Any length for OEM use 250 × 70,
200 × 70 or 150 × 70 for replacement
- Finish** : Raw or Bright Polished

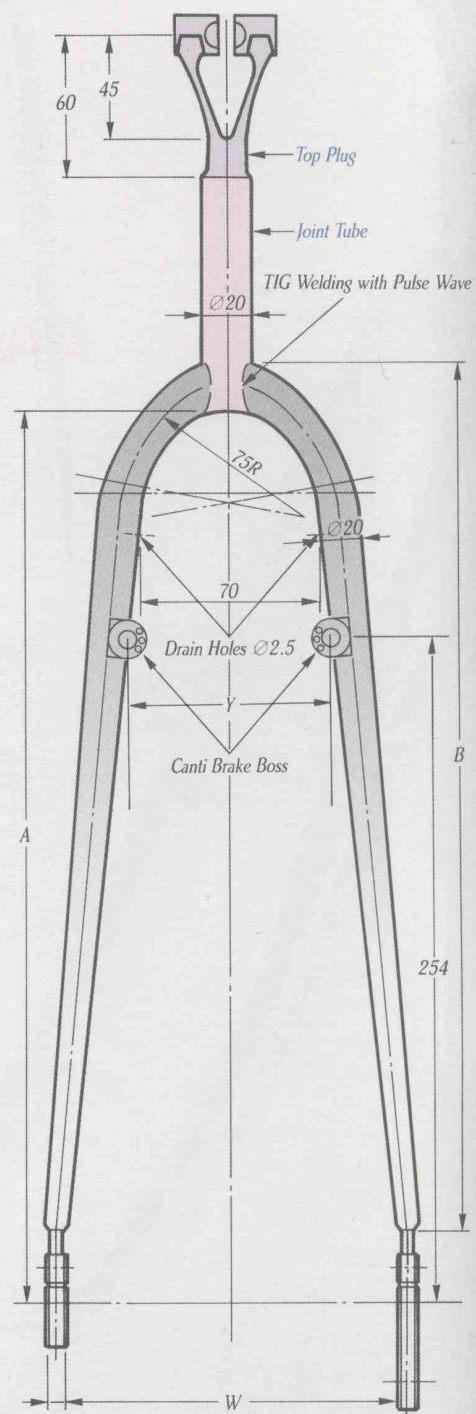


Supporting
New Approaches to
Frame Design



WISHBONE Back Stay
for MTB

- Top Plug : Cr-Mo Investment Cast with Seat Collar
- Joint Tube : Cr-Mo $\varnothing 20$ (1.0)
- Crown : Uni-Crown Type
- Seat Stay : Cr-Mo $\varnothing 20 \times 12$ (1.0)
- Chain Stay : Cr-Mo 22.2×13.0 (1.0 Even-Thick)
- End : Forged End





WISHBONE Back Stay for Racing

- Top Plug : Cr-Mo Investment Cast
- Joint Tube : Cr-Mo $\varnothing 17.3$ (0.8)
- Crown : Cr-Mo Investment Cast
- Seat Stay : Cr-Mo $\varnothing 14 \times \varnothing 11$ (0.8)
- Chain Stay : Cr-Mo 22.2×12.5 (0.8 Even-Thick)
- End : Forged End

Wishbone Back Stay Adds Quality, Performance, and Value to Road and ATB Frames.

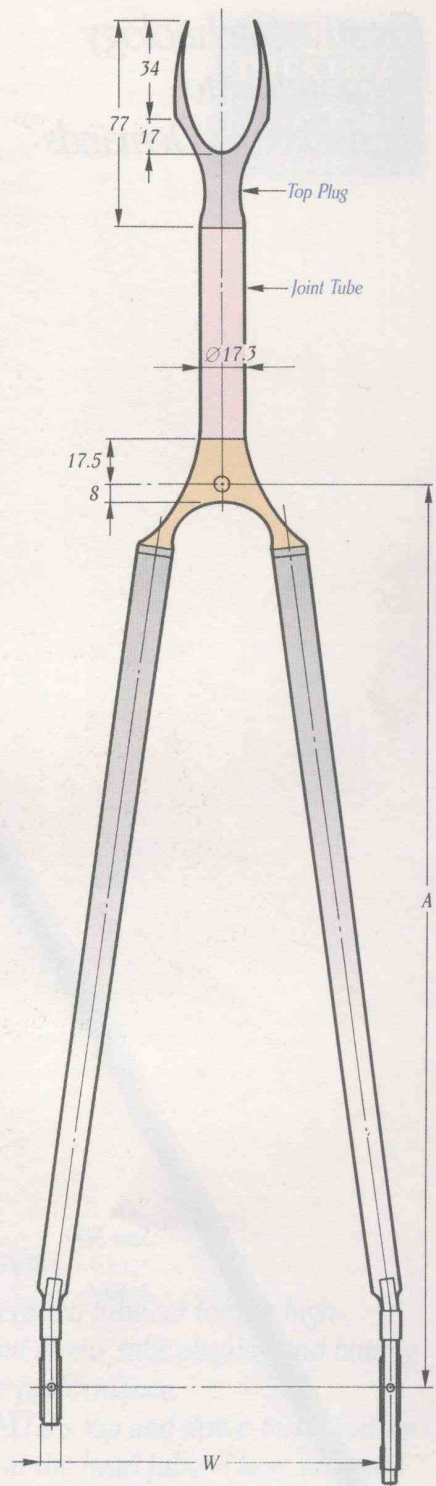
Tange technology is supporting the latest developments in frame design with new and innovative frame components like the wishbone back stay.

The Tange wishbone back stay utilizes a single tube, called a joint tube, placed between the seat stays and seat tube. An investment cast crown anchors the joint tube and seat stays while an investment cast plug anchors the joint tube to the seat tube.

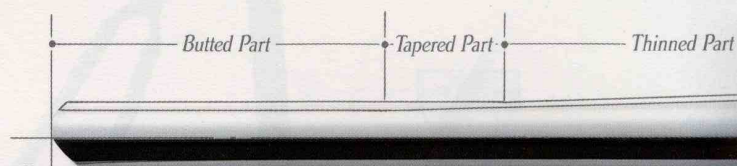
The wishbone back stay provides numerous advantages over the conventional seat stay layout. The frames's shock dampening ability is upgraded, the rear triangle becomes more rigid, and power transfer efficiency is improved. Furthermore, the use of a rear crown balances the front fork crown for a more pleasing frame appearance.

The off-road type wishbone back stay features a Unicrown design similar to Tange's Unicrown MTB front fork. It also incorporates a seat collar fitting on the plug to simplify and speed up assembly.

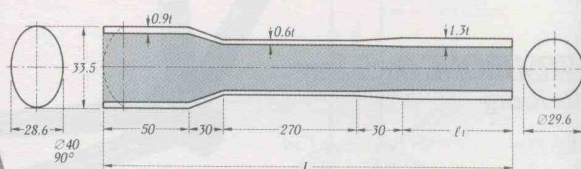
The Tange wishbone back stay adds to the performance, appearance, and value of both on- and off-road bicycles.



*Creative Technology
Responding to
Real Cycling Demands*



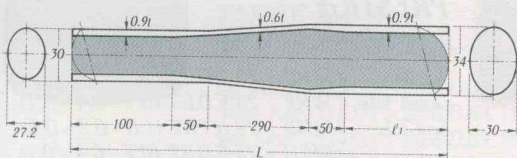
Seat Tube



The Prestige Concept seat tube uses an enlarged oval at the bottom bracket and a unique bulge-butted round end at the top tube end. Bulge butting is a new process that adds extra wall thickness to the outside tube diameter. (wall thickness: oval 0.9mm/center 0.6mm/bulge butt 1.3mm)

Seat Stay
 $\varnothing 15.0 \times \varnothing 19.1 \times \varnothing 11.0 (0.7t)$
 Available

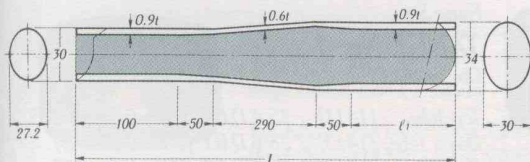
Top Tube



Prestige Concept uses an oval-shaped top tube featuring an enlarged outer diameter at the head tube end. The high-tech appearance is further enhanced by greater frame strength with minimum weight increase. (wall thickness: 0.9/0.6/0.9mm)



Down Tube



Prestige Concept down tube features the same configuration as the top tube. Its oval shape, with a larger outside diameter at the head tube end, improves frame strength and adds a distinctive new look. (wall thickness: 0.9/0.6/0.9mm)

Prestige Concept Tubes Advance ATB Performance.

Introducing Prestige Concept MTB—a new-generation tube set for the high-performance off-road bicycle. Prestige quality and a new tube shaping and butting Concept realize a breakthrough in off-road frame performance.

In addition to double butting, Prestige Concept MTB's top and down tubes feature oval construction with enlarged outer diameters at the head tube. These enlarged ovals offer greater resistance to shock loads and significantly increase frame strength.

The seat tube features an enlarged oval shape at the bottom which strengthens and stiffens the bottom bracket. The seat tube's round top end uses a unique new "bulge butt" in which the beefy 1.3mm wall thickness is added to the outside diameter of the tube for added strength.

Prestige Concept MTB's variable diameter tubing offers a higher level of performance and a distinctive new look for off-road bicycle frames. It's a reflection of Tange's continuing commitment to improving the off-road bicycle.

FRAME TUBING SET

- PRESTIGE ●TANGE No. 1 ~ No. 5
- INFINITY ●TANGE 900/1000



Frame Set
PRESTIGE SUPER LITE
High-Tech Treated Double Butted Tubes for Road Racing

- Top Tube (3415) : 25.4 D.B.T. (0.6~0.3~0.6)
Down Tube (3435) : 28.6 D.B.T. (0.6~0.3~0.6)
Seat Tube (3455) : 28.6 T.B.T. (0.7~0.4~0.6)
(3452) : 28.6 S.B.T. (0.9~0.6)
Head Tube (3400) : 31.8 P.G. (1.0)
Seat Stay (3500) : 14 P.G. (0.6)
(3501) : 15.9 P.G. (0.6)
Chain Stay (3550) : 22.2 Round (0.6 Even-thick)
(3551) : 22.2 Oval (0.6 Even-thick)*
Fork Stem (3700) : 25.4 Spiral (2.5 x 1.6)
(3705) : 25.4 Spiral (2.0 x 1.6)
Fork Blade (3605) : 24.0 Round (0.8 Even-thick)
(3606) : 24.0 Oval (0.8 Even-thick)

Weight: 1,870g.
*Chain Stay: Oval=CW-2



Frame Set
PRESTIGE
Seamless Double Butted Tube for Track/Road Racing

- Top Tube (3410) : 25.4 D.B.T. (0.7~0.4~0.7)
Down Tube (3430) : 28.6 D.B.T. (0.7~0.4~0.7)
Seat Tube (3450) : 28.6 T.B.T. (1.0~0.8~0.6)
(3451) : 28.6 D.B.T. (0.7~0.4~0.7)
(3452) : 28.6 S.B.T. (0.9~0.6)
Head Tube (3400) : 31.8 P.G. (1.0)
Seat Stay (3500) : 14 x 10 P.G. (0.6)
(3501) : 15.9 P.G. x 10 P.G. (0.6)
Chain Stay (3550) : 22.2 x 12.5 Round
(0.6 Even-thick)
(3551) : 22.2 x 12.5 Oval
(0.6 Even-thick)
Fork Stem (3700) : 25.4 Spiral (2.5 x 1.6)
Fork Blade (3600) : 23 Round (0.9 Even-thick)
(3601) : 23 Oval (0.9 Even-thick)
(3602) : 24 Round (0.9 Even-thick)
(3603) : 24 Oval (0.9 Even-thick)

Weight: 1,987g (Seat Tube T.B.T., Fork Blade 23mm)
Unit: mm



Frame Set
TANGE No. 1
Double Butted Tube for Track/Road Racing

- Top Tube (1411) : 25.4 D.B.T. (0.8~0.5~0.8)
Down Tube (1413) : 28.6 D.B.T. (0.8~0.5~0.8)
Seat Tube (1452) : 28.6 D.B.T. (0.9~0.6~0.9)
Head Tube (1401) : 31.8 P.G. (1.0)
Seat Stay (1501) : 14 x 11 (0.8)
(1502) : 14.5 P.G. x 11 (0.8)
(1503) : 15.9 x 11 (0.8)
Chain Stay (1551) : 22.2 x 12.5 Round
(0.8 Even-thick)
(1554) : 22.2 x 12.5 Oval
(0.8 Even-thick)
Fork Stem (1700) : 25.4 Spiral (2.5 x 1.6)
Fork Blade (1601) : 23 Oval (1.0 Even-thick)
(1602) : 23 Round (1.0 Even-thick)
(1605) : 24 Oval (1.0 Even-thick)
(1607) : 24 Round (1.0 Even-thick)

Weight: 2,220g



Frame Set
TANGE No. 2
Double Butted Tube for Track/Road Racing/Touring

- Top Tube (1412) : 25.4 D.B.T. (0.9~0.6~0.9)
Down Tube (1432) : 28.6 D.B.T. (0.9~0.6~0.9)
Seat Tube (1452) : 28.6 D.B.T. (0.9~0.6~0.9)
Head Tube (1401) : 31.8 P.G. (1.0)
Seat Stay (1501) : 14 x 11 (0.8)
(1502) : 14.5 P.G. x 11 (0.8)
(1503) : 15.9 x 11 (0.8)
Chain Stay (1551) : 22.2 x 12.5 Round
(0.8 Even-thick)
(1554) : 22.2 x 12.5 Oval
(0.8 Even-thick)
Fork Stem (1700) : 25.4 Spiral (2.5 x 1.6)
Fork Blade (1601) : 23 Oval (1.0 Even-thick)
(1602) : 23 Round (1.0 Even-thick)
(1605) : 24 Oval (1.0 Even-thick)
(1607) : 24 Round (1.0 Even-thick)

Weight: 2,290g



Frame Set

TANGE No. 3

Double Butted Tube for Touring/Heavy Duty Touring

- Top Tube (1413) : 25.4 D.B.T. (1.0~0.7~1.0)
- Down Tube (1433) : 28.6 D.B.T. (1.0~0.7~1.0)
- Seat Tube (1452) : 28.6 D.B.T. (0.9~0.6~0.9)
- Head Tube (1401) : 31.8 P.G. (1.0)
- Seat Stay (1501) : 14 × 11 (0.8)
- (1502) : 14.5 × 11 (0.8)
- (1503) : 15.9 × 11 (0.8)
- Chain Stay (1551) : 22.2 × 12.5 Round (0.8 Even-thick)
- (1554) : 22.2 × 12.5 Oval (0.8 Even-thick)
- Fork Stem (1700) : 25.4 Spiral (2.5 × 1.6)
- (1703) : 25.4 S.B.T. (2.7~1.6)
- Fork Blade (1601) : 23 Oval (1.0 Even-thick)
- (1602) : 23 Round (1.0 Even-thick)
- (1605) : 24 Oval (1.0 Even-thick)
- (1607) : 24 Round (1.0 Even-thick)

Weight: 2,360g



Frame Set

TANGE No. 4

Single Butted Tube for Touring

- Top Tube (1414) : 25.4 S.B.T. (0.9~0.7)
- Down Tube (1434) : 28.6 S.B.T. (0.9~0.7)
- Seat Tube (1453) : 28.6 S.B.T. (0.9~0.7)
- Head Tube (1401) : 31.8 P.G. (1.0)
- Seat Stay (1501) : 14 × 11 (0.8)
- Chain Stay (1551) : 22.2 × 12.5 Round (0.8 Even-thick)
- (1554) : 22.2 × 12.5 Oval (0.8 Even-thick)
- Fork Stem (1700) : 25.4 Spiral (2.5 × 1.6)
- (1703) : 25.4 S.B.T. (2.7~1.6)
- Fork Blade (1601) : 23 Oval (1.0 Even-thick)
- (1605) : 24 Oval (1.0 Even-thick)

Weight: 2,270g



Frame Set

TANGE No. 5

Plain Gauge Tube for Touring

- Top Tube (1415) : 25.4 P.G. (0.9)
- Down Tube (1435) : 28.6 P.G. (0.9)
- Seat Tube (1454) : 28.6 P.G. (0.9)
- Head Tube (1401) : 31.8 P.G. (1.0)
- Seat Stay (1501) : 14 × 11 (0.8)
- Chain Stay (1551) : 22.2 × 12.5 Round (0.8 Even-thick)
- (1554) : 22.2 × 12.5 Oval (0.8 Even-thick)
- Fork Stem (1700) : 25.4 Spiral (2.5 × 1.6)
- (1703) : 25.4 S.B.T. (2.7~1.6)
- Fork Blade (1601) : 23 Oval (1.0 Even-thick)
- (1605) : 24 Oval (1.0 Even-thick)

Weight: 2,460g



Frame Set

INFINITY

Double Butted Tube for Road

- Top Tube (8412) : 25.4 D.B.T. (0.9~0.6~0.9)
- Down Tube (8432) : 28.6 D.B.T. (0.9~0.6~0.9)
- Seat Tube (8452) : 28.6 D.B.T. (0.9~0.6~0.9)
- Head Tube (8400) : 31.8 P.G. (1.0)
- Seat Stay (9501) : 14 × 11 (0.8)
- (9503) : 15.9 P.G. × 11 (0.8)
- Chain Stay (9551) : 22.2 × 12.5 Round (0.8)
- (9554) : 22.2 × 12.5 Oval (0.8)
- Fork Stem (9700) : 25.4 S.B.T. (2.7~1.6)
- (9701) : 25.4 S.B.T. (2.7~2.1)
- Fork Blade (9601) : 23 Oval (1.0)
- (9602) : 23 Round (1.0)
- (9605) : 24 Oval (1.0)
- (9607) : 24 Round (1.0)

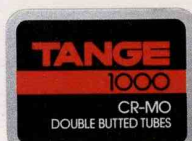


Frame Set

TANGE 900

Double Butted Tube for Road

- Top Tube (9412) : 25.4 D.B.T. (0.9~0.6~0.9)
- Down Tube (9432) : 28.6 D.B.T. (0.9~0.6~0.9)
- Seat Tube (9452) : 28.6 D.B.T. (0.9~0.6~0.9)
- Head Tube (9400) : 31.8 P.G. (1.0)
- Seat Stay (9501) : 14 × 11 (0.8)
- (9503) : 15.9 × 11 (0.8)
- Chain Stay (9551) : 22.2 × 12.5 Round (0.8)
- (9554) : 22.2 × 12.5 Oval (0.8)
- Fork Stem (9700) : 25.4 S.B.T. (2.7~1.6)
- (9701) : 25.4 S.B.T. (2.7~2.1)
- Fork Blade (9601) : 23 Oval (1.0)
- (9602) : 23 Round (1.0)
- (9605) : 24 Oval (1.0)
- (9607) : 24 Round (1.0)



Frame Set

TANGE 1000

Double Butted Tube for Road

- Top Tube (9413) : 25.4 D.B.T. (1.0~0.7~1.0)
- Down Tube (9433) : 28.6 D.B.T. (1.0~0.7~1.0)
- Seat Tube (9453) : 28.6 D.B.T. (1.0~0.7~1.0)
- Head Tube (9400) : 31.8 P.G. (1.0)
- Seat Stay (9501) : 14 × 11 (0.8)
- (9503) : 15.9 × 11 (0.8)
- Chain Stay (9551) : 22.2 × 12.5 Round (0.8)
- (9554) : 22.2 × 12.5 Oval (0.8)
- Fork Stem (9700) : 25.4 S.B.T. (2.7~1.6)
- (9701) : 25.4 S.B.T. (2.7~2.1)
- Fork Blade (9601) : 23 Oval (1.0)
- (9602) : 23 Round (1.0)
- (9605) : 24 Oval (1.0)
- (9607) : 24 Round (1.0)

Mountain Bike FRAME TUBING SET



Frame Set **PRESTIGE MTB** Cr-Mo Double Butted Tubes

Top Tube	(3432)	: 28.6 D.B.T. (0.9~0.6~0.9)
Down Tube	(3442)	: 31.8 D.B.T. (0.9~0.6~0.9)
Seat Tube	(3452)	: 28.6 S.B.T. (0.9~0.6)
	(3450)	: 28.6 T.B.T. (1.0~0.8~0.6)
Head Tube	(3406)	: 33.0 P.G. (1.5)
	(3400)	: 31.8 P.G. (1.0)
Seat Stay	(3501)	: 15.9 × 11.0 P.G. (0.8)
Chain Stay	(3551)	: 22.2 × 12.5 Oval (0.8 Even-thick)
Fork Stem	(3701)	: 25.4 S.B.T. (2.7~1.6)
Fork Blade	(3612)	: 25.4 × 13.0 Round (1.3 × 1.1 S.B.T.) for Uni-crown Type
	(3613)	: 28.6 × 14.5 Round (1.2~1.1 S.B.T.) for Uni-crown Type
	(3614)	: 27.0 × 18.0 Oval (1.2 Even-thick) for Uni-crown Type



Frame Set **Prestige MTB Concept** Tapered Double Butted Tubes for MTB

Top Tube	(4410)	: 34 × 30 ~ 30 × 27.2 Tapered D.B.T. (0.9~0.6~0.9)
Down Tube	(4430)	: 34 × 30 ~ 30 × 27.2 Tapered D.B.T. (0.9~0.6~0.9)
Seat Tube	(4450)	: 29.6 ~ 33.5 × 28.6 Bulge Butted Tube (1.3~0.6~0.9)
Head Tube	(3406)	: 33.0 P.G. (1.5)
	(3400)	: 31.8 P.G. (1.0)
Seat Stay	(4501)	: 15.0 × 19.1 × 11.0 P.G. (0.7)
Chain Stay	(3551)	: 22.2 (0.8 Even-thick)
Fork Stem	(3701)	: 25.4 S.B.T. (2.7~1.6)
Fork Blade	(3613)	: 28.6 × 14.5 Round (1.2~1.1 S.B.T.) for Uni-crown Type
	(3614)	: 27.0 × 18.0 Oval (1.2 Even-thick) for Uni-crown Type



Frame Set **TANGE MTB** Cr-Mo Double Butted Tubes

Top Tube	(1419)	: 28.6 D.B.T. (1.2~0.9~1.2)
	(1433)	: 28.6 D.B.T. (1.0~0.7~1.0)
Down Tube	(1482)	: 31.8 D.B.T. (1.2~0.9~1.2)
	(1484)	: 31.8 D.B.T. (1.0~0.7~1.0)
Seat Tube	(1459)	: 28.6 S.B.T. (1.2~0.9)
	(1455)	: 28.6 S.B.T. (1.0~0.7)
Head Tube	(1406)	: 33.0 P.G. (1.5)
	(1401)	: 31.8 P.G. (1.0)
Seat Stay	(1511)	: 15.9 × 11.0 (1.0) P.G.
Chain Stay	(1561)	: 22.2 × 12.5 Oval (1.0 Even-thick)
Fork Stem	(1702)	: 25.4 S.B.T. (2.7~1.6)
Fork Blade	(1612)	: 25.4 × 13.0 Round (1.4 × 1.1 S.B.T.) for Uni-crown Type



Frame Set **INFINITY MTB** Cr-Mo Tapered Double Butted Tubes

Top Tube	(8433)	: 28.6 D.B.T. (1.0~0.7~1.0)
Down Tube	(8442)	: 31.8 D.B.T. (1.0~0.7~1.0)
Seat Tube	(8455)	: 28.6 S.B.T. (1.0~0.7)
Head Tube	(1401)	: 31.8 P.G. (1.0)
Seat Stay	(9505)	: 15.9 × 11.0 P.G. (1.0)
Chain Stay	(9555)	: 22.2 × 13.0 P.G. (1.0)
Fork Stem	(1702)	: 25.4 S.B.T. (2.7~1.6)
Fork Blade	(9610)	: 25.4 × 13.0 Oval (1.2 Even-thick) for Crown Type
	(9612)	: 25.4 × 13.0 Round (1.4 × 1.1 S.B.T.) for Uni-crown Type



Frame Set
TANGE 1200 MTB
 Cr-Mo Double Butted Tubes

- Top Tube (9419) : 28.6 D.B.T. (1.2~0.9~1.2)
- Down Tube (9482) : 31.8 D.B.T. (1.2~0.9~1.2)
- (9486) : 34.9 T.B.T. (1.2~0.9~1.0)
- Seat Tube (9459) : 28.6 S.B.T. (1.2~0.9)
- Head Tube (1401) : 31.8 P.G. (1.0)
- Seat Stay (9505) : 15.9 x 11.0 P.G. (1.0)
- Chain Stay (9555) : 22.2 x 13.0 P.G. (1.0)
- Fork Stem (1702) : 25.4 S.B.T. (2.7~1.6)
- Fork Blade (9610) : 25.4 x 13.0 Oval
 (1.2 Even-thick)
 for Crown Type
- (9612) : 25.4 x 13.0 Round (1.4 x 1.1
 S.B.T.) for Uni-crown Type



Frame Set
TANGE 1200 Triple
 Cr-Mo Triple Butted Tubes

- Top Tube (9424) : 28.6 T.B.T. (1.2~0.9~1.0)
- Down Tube (9444) : 31.8 T.B.T. (1.2~0.9~1.0)
- (9446) : 34.9 T.B.T. (1.2~0.9~1.0)
- Seat Tube (9464) : 28.6 T.B.T. (1.2~0.9~1.0)
- (9465) : 28.6 S.B.T. (1.2~1.0)
- Head Tube (1401) : 31.8 P.G. (1.0)
- Seat Stay (9505) : 15.9 x 11.0 P.G. (1.0)
- Chain Stay (9555) : 22.2 x 13.0 P.G. (1.0)
- Fork Stem (1702) : 25.4 S.B.T. (2.7~1.6)
- Fork Blade (9610) : 25.4 x 13.0 Oval
 (1.2 Even-thick)
 for Crown Type
- (9612) : 25.4 x 13.0 Round (1.4 x 1.1
 S.B.T.) for Uni-crown Type



"Cr-Mo" Composition (SAE 4130)

C	Si	Mn	Mo	S	P	Cr
0.33%		0.6%		0.04% Max.		1.0% Max.
	0.35%		0.25%	0.035% Max.		



Frame Set
TANGE 1000 MTB
 Cr-Mo Double Butted Tubes

- Top Tube (9434) : 28.6 D.B.T. (1.0~0.7~1.0)
- Down Tube (9484) : 31.8 D.B.T. (1.0~0.7~1.0)
- (9486) : 34.9 T.B.T. (1.2~0.9~1.0)
- Seat Tube (9455) : 28.6 S.B.T. (1.0~0.7)
- Head Tube (1401) : 31.8 P.G. (1.0)
- Seat Stay (9505) : 15.9 x 11.0 P.G. (1.0)
- Chain Stay (9555) : 22.2 x 13.0 P.G. (1.0)
- Fork Stem (1702) : 25.4 S.B.T. (2.7~1.6)
- Fork Blade (9610) : 25.4 x 13.0 Oval
 (1.2 Even-thick)
 for Crown Type
- (9612) : 25.4 x 13.0 Round (1.4 x 1.1
 S.B.T.) for Uni-crown Type

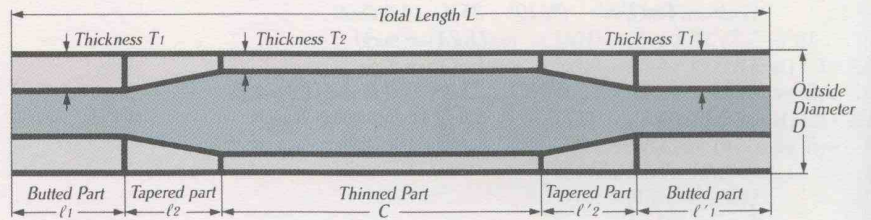
FRAME ORDER SYSTEM

- Road & MTB
- PRESTIGE ● TANGE No. 1 ~ No. 5
- TANGE 900/1000

D.B.T.

Double Butted Tube

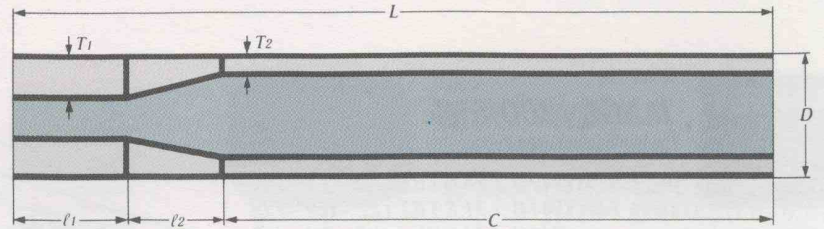
Top Tube,
Down Tube, Seat Tube



S.B.T.

Single Butted Tube

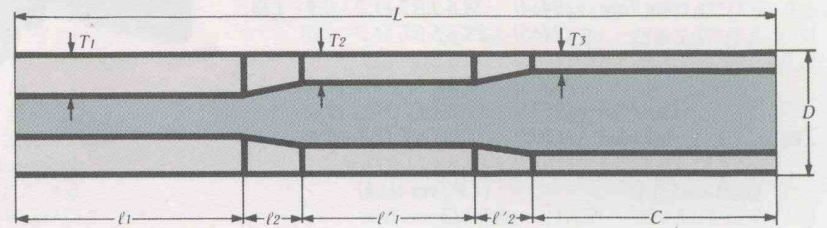
Top Tube,
Down Tube, Seat Tube



T.B.T.

Triple Butted Tube

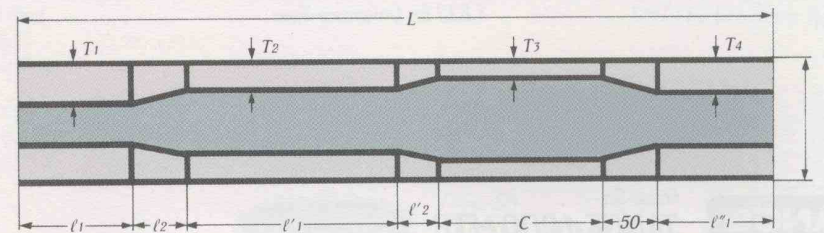
Seat Tube



Q.B.T.

Quatre Butted Tube

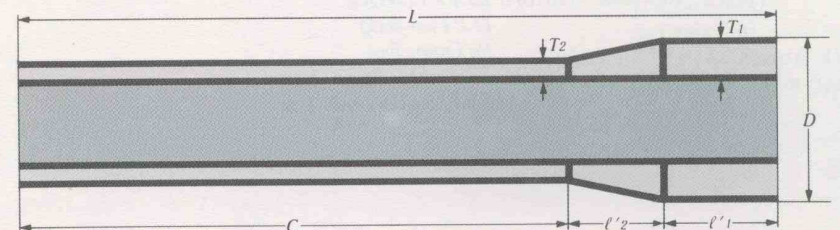
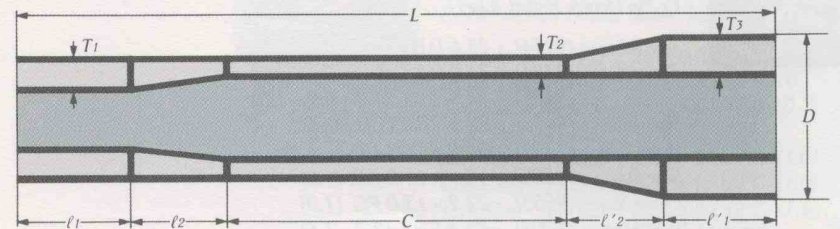
Seat Tube



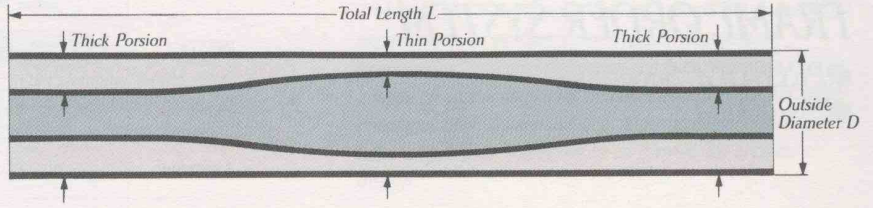
B.B.T.

Bulge Butted Tube

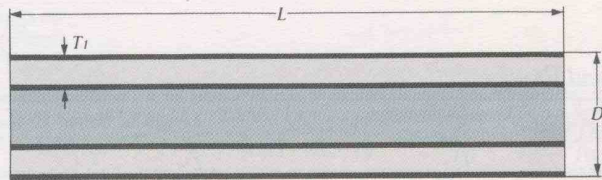
Seat Tube



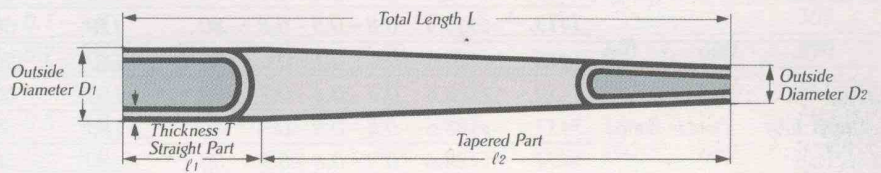
Infinity D.B.T.
 Tapered Double Butted Tube
 Top Tube,
 Down Tube, Seat Tube



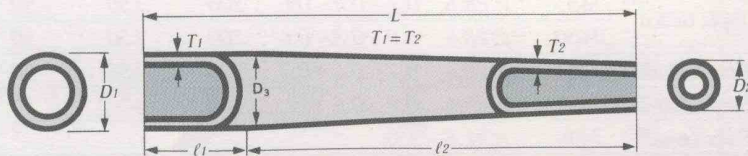
Head Tube



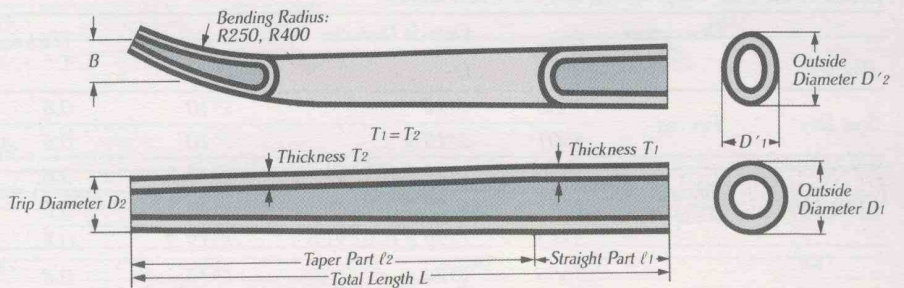
Seat Stay



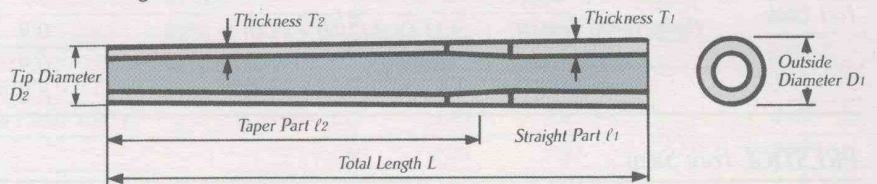
**Even-Thick Tube
 Chain Stay**



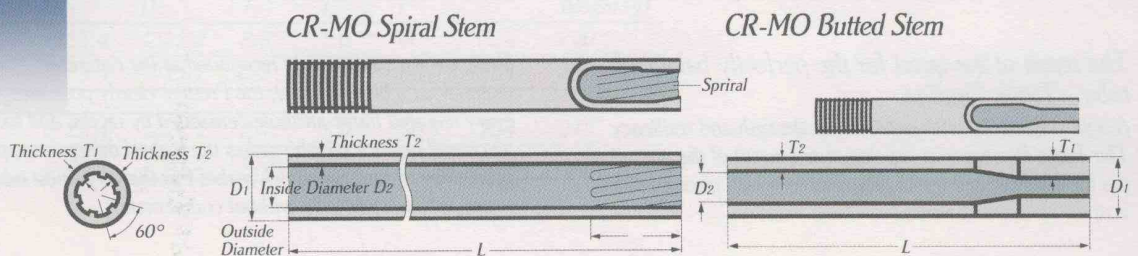
Fork Blade



Single Butted Tube for MTB Uni-crown Type



Fork Stem



FRAME ORDER SYSTEM

- PRESTIGE Super Lite
- PRESTIGE

	Tensile strength	Surface hardness	Elongation
PRESTIGE	123.5 kg/mm ²	354HV	10%
TANGE No. 2	91.1	315	10%
A company	73.5	315	10%
B company	85 - 95	315	10%

The higher tensile strength is, the stronger the tube. Too hard or too soft = poor processing. Elongation of about 9 or 10% is best.

PRESTIGE Super Lite and Prestige

Product	Description	Part No.	Outside Diameter D	Thickness T ₁ ~ T ₂ ~ T ₁ '	Length of Butted Part		Length of Tapered Part		Length of Thinned Part C	Total Length L	Weight (g)
					ℓ ₁	ℓ' ₁	ℓ ₂	ℓ' ₂			
Top Tube	Double Butted	3415	∅25.4	0.6 ~ 0.3 ~ 0.6	80	130	50	50	250	600	153
		3410	∅25.4	0.7 ~ 0.4 ~ 0.7	80	130	50	50	290	600	195
		3413	∅25.4	0.8 ~ 0.5 ~ 0.8	80	130	50	50	290	600	200
Down Tube	Double Butted	3435	∅28.6	0.6 ~ 0.3 ~ 0.6	80	180	50	50	290	650	205
		3430	∅28.6	0.7 ~ 0.4 ~ 0.7	80	180	50	50	290	650	245
		3433	∅28.6	0.8 ~ 0.5 ~ 0.8	80	180	50	50	290	650	254
		3434	∅28.6	0.9 ~ 0.6 ~ 0.9	80	180	50	50	290	650	290
		3436	∅28.6	1.0 ~ 0.7 ~ 1.0	80	180	50	50	290	650	327
		3455	∅28.6	0.7 ~ 0.4 ~ 0.6	200	150	50	50	200	650	250
Seat Tube	Triple Butted	3450	∅28.6	1.0 ~ 0.8 ~ 0.6	200	150	50	50	200	650	340
	Double Butted	3451	∅28.6	0.7 ~ 0.4 ~ 0.7	80	180	50	50	250	610	220
	Single Butted	3452	∅28.6	0.9 ~ 0.6	100	—	50	—	500	650	275
Head Tube	Plain Gauge	3400	∅31.8	1.0	—	—	—	—	200	152	

PRESTIGE Seat Stay, Chain Stay, & Fork Blade

Product	Description	Part No.	Outside Diameter		Thickness T	Straight Part ℓ ₁	Tapered Part ℓ ₂	Total Length L	Weight (g)
			D ₁	D ₂					
Seat Stay	Tapered	3500	∅14	∅10	0.6	280	320	600	232
		3501	∅15.9	∅10	0.6	280	320	600	265
Chain Stay	Tapered (Even-Thick)	3550	∅22.2 (CW-3)	∅12.5	0.6	120	300	420	250
		3551	∅22.2 (CW-2)	∅12.5	0.6	120	300	420	250
		3552	∅22.2 (CW-2)	∅12.5	0.8	120	300	420	250
		3605	∅24	∅13	0.8	140	280	420	340
Fork Blade	Tapered (Even-Thick)	3606	24 Oval (28.0 × 20.0)	∅13	0.8	140	280	420	340
		3600	∅23	∅13	0.9	120	300	420	360
		3601	23 Oval (29.0 × 17.0)	∅13	0.9	120	300	420	360
		3602	∅24	∅13	0.9	140	280	420	370
		3603	24 Oval (28.0 × 20.0)	∅13	0.9	140	280	420	370

PRESTIGE Fork Stem

	Part No.	D ₁	D ₂	T ₁	T ₂	ℓ	L	Weight (g)
Fork Stem	3705	∅25.4	∅22.2	2.0	1.6	60	254	235
	3700	∅25.4	∅22.2	2.5	1.6	60	254	240

The result of the quest for the perfectly balanced tube... Tange Prestige.

A lightweight tube with outstanding strength and resiliency. The Tange Prestige was developed as a result of the pursuit of the ideal lightweight frame tube, and in which great emphasis is upon an overall balance.

Using Cr-Mo steel, widely recognized as the optimum material for a bicycle frame, the Prestige clearly possesses every required frame attribute demanded by racers, and has an overall balance which reaches the highest dimensions, plus processing technology which makes this the very finest tube —one which is virtually without comparison.

●TANGE No. 1 ~ No. 5

“TANGES’s Cr-mo Frame Tubing” meets the demanding expectations of performance cyclists. Tange has produced a “handmade” seamless tube utilizing advanced technology and artisan care. You have a wide choice of butted tube options including the “Ditchex” tube which fixes the cable in its groove for a clean design.

“Cr-Mo” Butted Tube

Product	Description	Part No.	Outside Diameter D	Thickness T ₁ ~ T ₂ ~ T ₁ '	Length of Butted Part		Length of Tapered Part		Length of Thinned Part C	Length L	Weight (g)
					ℓ ₁	ℓ' ₁	ℓ ₂	ℓ' ₂			
Top Tube	Double Butted	1411	∅25.4	0.8 ~ 0.5 ~ 0.8							240
		1412		0.9 ~ 0.6 ~ 0.9	80	130	50	50	290	600	274
		1413		1.0 ~ 0.7 ~ 1.0							309
	Single	1412		0.9 ~ 0.7	100	—	50	—	450	600	270
	Plain (P.G.)	1415		0.9	—	—	—	—	—	600	327
Down Tube	Double Butted	1431	∅28.6	0.8 ~ 0.5 ~ 0.8							295
		1432		0.9 ~ 0.6 ~ 0.9	80	180	50	50	290	650	338
		1433		1.0 ~ 0.7 ~ 1.0							382
	Single	1434		0.9 ~ 0.7	100	—	50	—	500	650	319
	Plain (P.G.)	1435		0.9	—	—	—	—	—	650	397
Seat Tube	Double Butted	1451	∅28.6	0.8 ~ 0.5 ~ 0.8	80	180	50	50	250	610	278
		1452		0.9 ~ 0.6 ~ 0.9	80	180	50	50	250	610	322
		Single		1453	0.9 ~ 0.7	100	—	50	—	460	610
	Single	1455		1.0 ~ 0.7	100	—	50	—	460	610	324
	Plain (P.G.)	1454		0.9	—	—	—	—	—	610	373
Head Tube	Plain (P.G.)	1401	∅31.8	1.0	—	—	—	—	200	152	

“Cr-Mo” Seat Stay, Chain Stay & Fork Blade

Product	Description	Part No.	Outside Diameter		Thickness T	Straight Part ℓ ₁	Tapered Part ℓ ₂	Total Length L	Weight (g)
			D ₁	D ₂					
Seat Stay	Tapered	1501	∅14	∅11	0.8	240	360		300
		1502	∅14.5	∅11	0.8	280	320	600	315
		1503	∅15.9	∅11	0.8	280	320		340
Chain Stay	Tapered (Even-Thick)	1551	∅22.2	12.5	0.8	120	300	420	280
		1554	∅22.2 (CW-2)		0.8				280
Fork Blade	Tapered (Even-Thick)	1601	23 Oval (29.0 × 17.0)		1.0	120	300		390
		1605	24 Oval (28.0 × 20.0)		1.0	140	280	420	410
		1602	∅23	13	1.0	120	300		390
		1607	∅24		1.0	140	280		410

“Cr-Mo” Fork Stem

	Part No.	D ₁	D ₂	T ₁	T ₂	ℓ	L	Weight (g)
Fork Stem (Spiral)	1700	∅25.4	∅22.2	2.5	1.6	60	254	240
	1701	∅25.4	∅21.2	2.5	2.1	60	254	295
Fork Stem (S.B.T)	1703	∅25.4	∅22.2	2.7	1.6	50	254	272
	1704	∅25.4	∅21.2	2.7	2.1	50	254	322

FRAME ORDER SYSTEM

●PRESTIGE MTB CONCEPT ●PRESTIGE MTB ●TANGE CR-MO MTB

PRESTIGE MTB CONCEPT Tube

Product	Description	Part No.	Outside Diameter D	Thickness $T_1 \sim T_2 \sim T_1'$	Butted Part		Tapered Part		Thinned Part C	Total Length L	Weight (g)
					ℓ_1	ℓ'_1	ℓ_2	ℓ'_2			
Top Tube	D.B.T.	4410	34 × 30 ~ 30 × 27.2	0.9 ~ 0.6 ~ 0.9	110	100	50	50	290	600	311
Down Tube	D.B.T.	4430	34 × 30 ~ 30 × 27.2	0.9 ~ 0.6 ~ 0.9	160	100	50	50	290	650	342
Seat Tube	B.B.T.*	4450	29.6 ~ 33.5 × 28.6	1.3 ~ 0.6 × 0.9	125	135	30	50	270	610	314

Product	Description	Part No.	Outside Diameter			Thickness T	Straight Part ℓ_1	Tapered Part ℓ_2	Total Length L	Weight (g)
			D ₁	D ₂	D ₁ × D ₂					
Seat Stay	Tapered	4501	∅15.0	∅19.1	∅11.0	0.7	280	320	600	335
Chain Stay	Tapered	4551	∅22.2		∅13.0	0.8	140	300	440	446

*B.B.T.: Bulge Butted Tube See below about Head Tube, Fork Stem, and Fork Blade.

PRESTIGE Mountain Bike Tube

Product	Description	Part No.	Outside Diameter D	Thickness $T_1 \sim T_2 \sim T_1'$	Butted Part		Tapered Part		Thinned Part C	Total Length L	Weight (g)
					ℓ_1	ℓ'_1	ℓ_2	ℓ'_2			
Top Tube	D.B.T.	3432	28.6	0.9 ~ 0.6 ~ 0.9	80	130	50	50	290	600	260
		3433	28.6	1.0 ~ 0.7 ~ 1.0	80	130	50	50	290	600	293
Down Tube	D.B.T.	3442	31.8	0.9 ~ 0.6 ~ 0.9	100	160	50	50	290	650	324
		3444	31.8	1.0 ~ 0.7 ~ 1.0	100	160	50	50	290	650	365
	T.B.T.	3446	31.8	1.2 ~ 0.9 ~ 1.0	200	160	50	50	190	650	407
	Q.B.T.	3443	31.8	1.1 ~ 0.8 ~ 0.6 ~ 0.9	75	110	50	50	240	650	368
Seat Tube	S.B.T.	3452	28.6	0.9 ~ 0.6	100	—	50	—	460	610	274
	T.B.T.	3450		1.0 ~ 0.8 ~ 0.6	200	160	50	50	150	610	324
Head Tube	P.G.	3406	33.0	1.5	—	—	—	—	—	250	292
		3400	31.8	1.0	—	—	—	—	—	250	190
Fork Stem	S.B.T.	3706	25.4	2.7 × 1.6	60	—	25	—	195	280	281

Product	Description	Part No.	Outside Diameter			Thickness T	Straight Part ℓ_1	Tapered Part ℓ_2	Total Length L	Weight (g)
			D ₁	D ₂	D ₁ × D ₂					
Seat Stay	Tapered	3501	∅15.9	∅11.0	—	0.8	280	320	600	358
Chain Stay	Tapered	3551	∅22.2	∅13.0	—	0.8	140	300	440	446
		3610	∅25.4	∅13.0	29.8 × 19.8	1.2*	120	300	420	460
		■Tapered	3612	∅25.4	∅13.0	(Round)	1.3 ~ 1.1‡	130	300	430
Fork Blade	■Tapered	3613	∅28.6	∅14.5	(Round)	1.2 ~ 1.1‡	130	300	430	504
		3614	∅27.0	∅18.0	31.0 × 23.0	1.2‡	130	300	430	545

■ Uni-crown Shape * Even-thick Oval Tube for Crown Type ‡ Single Butted Tube (S.B.T.) for Uni-crown Type † Even-thick Tube for Uni-crown Type

TANGE CR-MO Mountain Bike Tube

Product	Description	Part No.	Outside Diameter D	Thickness $T_1 \sim T_2 \sim T_1'$	Butted Part		Tapered Part		Thinned Part C	Total Length L	Weight (g)
					ℓ_1	ℓ'_1	ℓ_2	ℓ'_2			
Top Tube	D.B.T.	1419	28.6	1.2 ~ 0.9 ~ 1.2	80	130	50	50	290	600	437
		1433		1.0 ~ 0.7 ~ 1.0	80	130	50	50	290	600	351
Down Tube	D.B.T.	1482	31.8	1.2 ~ 0.9 ~ 1.2	100	160	50	50	290	650	515
		1484		1.0 ~ 0.7 ~ 1.0	100	160	50	50	290	650	420
Seat Tube	S.B.T.	1459	28.6	1.2 ~ 0.9	260	—	50	—	300	610	436
		1455		1.0 ~ 0.7	100	—	50	—	460	610	324
Head Tube	P.G.	1406	33.0	1.5	—	—	—	—	—	250	292
		1401	31.8	1.0	—	—	—	—	—	250	190
Fork Stem	S.B.T.	1702	25.4	2.7 ~ 1.6	75	—	25	—	205	280	313
		1705	25.4	3.2 ~ 1.6	75	—	25	—	205	280	334

Product	Description	Part No.	Outside Diameter			Thickness T	Straight Part l_1	Tapered Part l_2	Total Length L	Weight (g)
			D ₁	D ₂	D ₁ × D ₁ '					
Seat Stay	Tapered	1511	∅15.9	∅11.0	—	1.0	280	320	600	425
Chain Stay	Tapered	1561	∅22.2	∅13.0	—	1.0	140	300	440	400
	Tapered	1610	∅25.4	∅14.5	29.8 × 19.8	1.2*	120	300	420	460
Fork Blade	■Tapered	1612	∅25.4	∅14.5	(Round)	1.4 ~ 1.1‡	120	300	430	524
	■Tapered	1613	∅28.6	∅14.5	(Round)	1.2‡	120	300	430	500
	■Tapered	1614	∅27.0	∅18.0	31.0 × 23.0	1.2‡	120	300	430	505

■ Uni-crown Shape * Even-thick Oval Tube for Crown Type ‡ Single Butted Tube (S.B.T.) for Uni-crown Type † Even-thick Tube for Uni-crown Type

● INFINITY
● INFINITY MTB

INFINITY Tapered Butted Tubing

Over smooth, level roads and tough, country roads varying road conditions subject each part of the frame to different shocks and stresses. Absorbing and distributing these shocks inevitably leads to longer bicycle life and

smooth riding. That's where the Infinity Tapered Butted Tubing comes in.

Computer designed to absorb and reflect road shocks and stresses throughout the thickness of the tube wall, the ideal tube construction is now ready to roll.

Infinity "Cr-Mo" Tapered Butted Tube

Product	Description	Part No.	Outside Diameter D	Thick Portion	Thin Portion	Length L	Weight (g)
Down Tube	8432	∅28.6	0.9	0.6	650	332	
Seat Tube	8452	∅28.6	0.9	0.6	610	318	
Head Tube (P.G.)		8400	∅31.8	1.0		200	152

Infinity "Cr-Mo" Seat Stay, Chain Stay & Fork Blade

Product	Description	Part No.	Outside Diameter		Thickness T	Straight Part l_1	Tapered Part l_2	Total Length L	Weight (g)
			D ₁	D ₂					
Seat Stay	Tapered	9501	∅14	∅11	0.8	240	360	600	300
		9503	∅15.9	∅11	0.8	280	320	600	340
Chain Stay	Tapered	9551	∅22.2	12.5	0.8	120	300	420	338
		9554	∅22.2 (CW-2)		0.8				420
Fork Blade	Tapered	9601	23 Oval (29.0 × 17.0)		1.0	120	300		413
		9605	24 Oval (28.0 × 20.0)		1.0	140	280	400	432
		9602	∅23		1.0	120	300		413
		9607	∅24		1.0	140	280		432

Infinity "Cr-Mo" Fork Stem

Product	Part No.	D ₁	D ₂	T ₁	T ₂	l ₁	l ₂	L	Weight (g)
9701	∅25.4	∅21.2	2.7	2.1	50	25	254	315	

Infinity Mountain Bike Tube

Product	Description	Part No.	Outside Diameter D	Thick Portion	Thin Portion	Length L	Weight (g)
Down Tube	D.B.T.	8442	∅31.8	1.0	0.7	650	415
Seat Tube	S.B.T.	8455	∅28.6	1.0	0.7	610	295
Head Tube	P.G.	8401	∅31.8	1.0		190	145

Product	Description	Part No.	Outside Diameter			Thickness T	Straight Part l_1	Tapered Part l_2	Total Length L	Weight (g)
			D ₁	D ₂	D ₁ × D ₁ '					
Seat Stay	Tapered	9505	∅15.9	∅11.0	—	1.0	280	320	600	425
Chain Stay	Tapered	9555	∅22.2	∅13.0	—	1.0	140	300	440	400
Fork Blade	Tapered	9610	∅25.4	∅14.5	29.8 × 19.8	1.2*	120	300	420	460
		9612	∅25.4	∅13.0	—	1.4 ~ 1.1	120	300	420	440

* Even-thick Oval Tube for Crown Type

FRAME ORDER SYSTEM ●900/1000 ●1000/1200 MTB

"Cr-Mo" Butted Tube

Standard composition Cr-Mo double butted tubing—TANGE 900, TANGE 1000
The TANGE 900 and TANGE 1000 are both seam-finished with the Cr-Mo
double butted tube (DBT) best suited to bicycle frames. And Cr-Mo DBT frames
are now at a price designed to match the needs of the widest range of users.

900/1000 "Cr-Mo" Butted Tube

Product	Description	Outside Diameter D	Part No.	Thickness T ₁ ~ T ₂ ~ T ₁	Length of Butted Part		Length of Tapered Part		Length of Thinned Part C	Total Length L	Weight (g)
					ℓ ₁	ℓ' ₁	ℓ ₂	ℓ' ₂			
TANGE 900 (D.B.T.)	Top Tube	9412	∅25.4	0.9~0.6~0.9	80	130	50	50	290	600	274
	Down Tube	9432	∅28.6	0.9~0.6~0.9	80	180	50	50	290	650	338
	Seat Tube	9452	∅28.6	0.9~0.6~0.9	80	180	50	50	250	610	322
(S.B.T.)	Seat Tube	9455	∅28.6	1.0~0.7	100	—	50	—	460	610	324
TANGE 1000 (D.B.T.)	Top Tube	9413	∅25.4	1.0~0.7~1.0	80	180	50	50	290	600	309
	Down Tube	9433	∅28.6	1.0~0.7~1.0	80	180	50	50	290	650	382
	Seat Tube	9453	∅28.6	1.0~0.7~1.0	80	180	50	50	250	610	302
Head Tube (P.G.)		9400	∅31.8	1.0	—	—	—	—	—	200	152
Triple Butted (T.B.T.)	Top Tube	9414	∅25.4	1.0~0.7~0.8	80	130	50	50	290	600	288
	Down Tube	9434	∅28.6	1.0~0.7~0.8	80	180	50	50	290	650	354

900/1000 "Cr-Mo" Seat Stay, Chain Stay & Fork Blade

Product	Description	Part No.	Outside Diameter		Thickness T	Straight Part ℓ ₁	Tapered Part ℓ ₂	Total Length L	Weight (g)
			D ₁	D ₂					
Seat Stay	Tapered	9501	∅14	∅11	0.8	240	360	600	300
		9503	∅15.9	∅11	0.8	280	320		340
Chain Stay	Tapered	9551	∅22.2	12.5	0.8	120	300	420	338
		9554	∅22.2 (CW-2)		0.8				338
Fork Blade	Tapered	9601	23 Oval (29.0 × 17.0)	13	1.0	120	300	400	413
		9605	24 Oval (28.0 × 20.0)		1.0	140	280		432
		9602	∅23		1.0	120	300		413
		9607	∅24		1.0	140	280		432

900/1000 "Cr-Mo" Fork Stem

Part No.	D ₁	D ₂	T ₁	T ₂	ℓ ₁	ℓ ₂	L	Weight (g)	
									Fork Stem
	9701	∅25.4	∅21.2	2.7	2.1	50	25	254	315

Over roll length and length of the butted section can be changed as specified.

1000/1200 "Cr-Mo" Double Butted Mountain Bike Tube

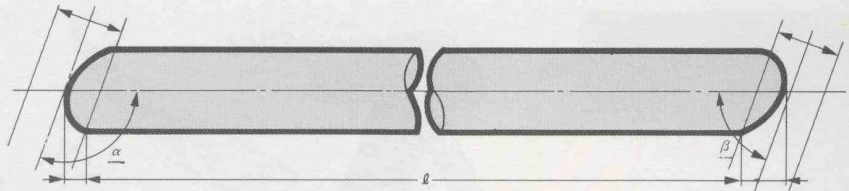
Product	Description	Part No.	Outside Diameter D	Thickness T ₁ ~ T ₂ ~ T ₁ '	Butted Part		Tapered Part		Thinned Part C	Total Length L	Weight (g)
					ℓ ₁	ℓ' ₁	ℓ ₂	ℓ' ₂			
Top Tube	D.B.T.	9419	28.6	1.2~0.9~1.2	80	170	50	50	250	600	437
		9434		1.0~0.7~1.0	80	130	50	50	290	600	351
Down Tube	D.B.T.	9482	31.8	1.2~0.9~1.2	100	160	50	50	290	650	515
		9484		1.0~0.7~1.0	100	160	50	50	290	650	420
		T.B.T.		9486	1.2~0.9~1.0	100	160	50	50	290	650
Seat Tube	S.B.T.	9459	28.6	1.2~0.9	260	—	50	—	300	610	436
		9455		1.0~0.7	100	—	50	—	460	610	324

1200 "Cr-Mo" Triple Butted Mountain Bike Tube

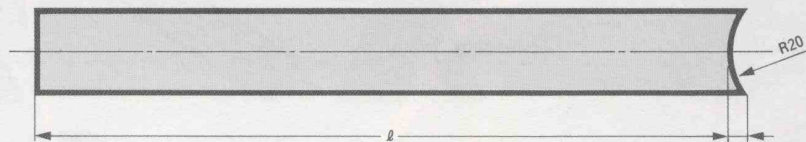
Product	Description	Part No.	Outside Diameter D	Thickness T ₁ ~ T ₂ ~ T ₁ '	Butted Part		Tapered Part		Thinned Part C	Total Length L	Weight (g)
					ℓ ₁	ℓ' ₁	ℓ ₂	ℓ' ₂			
Top Tube	T.B.T.	9424	28.6	1.2~0.9~1.0	80	170	50	50	250	600	341
Down Tube	T.B.T.	9444	31.8	1.2~0.9~1.0	80	180	50	50	290	650	416
		9446	34.9	1.2~0.9~1.0	80	180	50	50	290	650	458
Seat Tube	T.B.T.	9464	28.6	1.2~0.9~1.0	80	180	50	50	250	610	348
		S.B.T.		9465	1.2~1.0	260	—	50	—	300	610

FRAME TUBE CUT WORK ILLUSTRATION

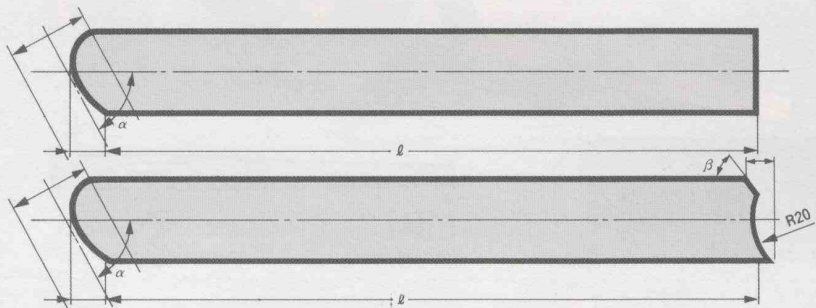
TOP TUBE



SEAT TUBE



DOWN TUBE



Brazing Cr-Mo Materials

1. When brazing, please use material with expansion strength of 60 km/mm^2 with a melting point of around 850°C . For flux, use either gas flux or paste flux No. 110. (PRESTIGE)

The melting point of the brazing material should be 650°C to 850°C . Use flux which is suitable to the brazing material used.

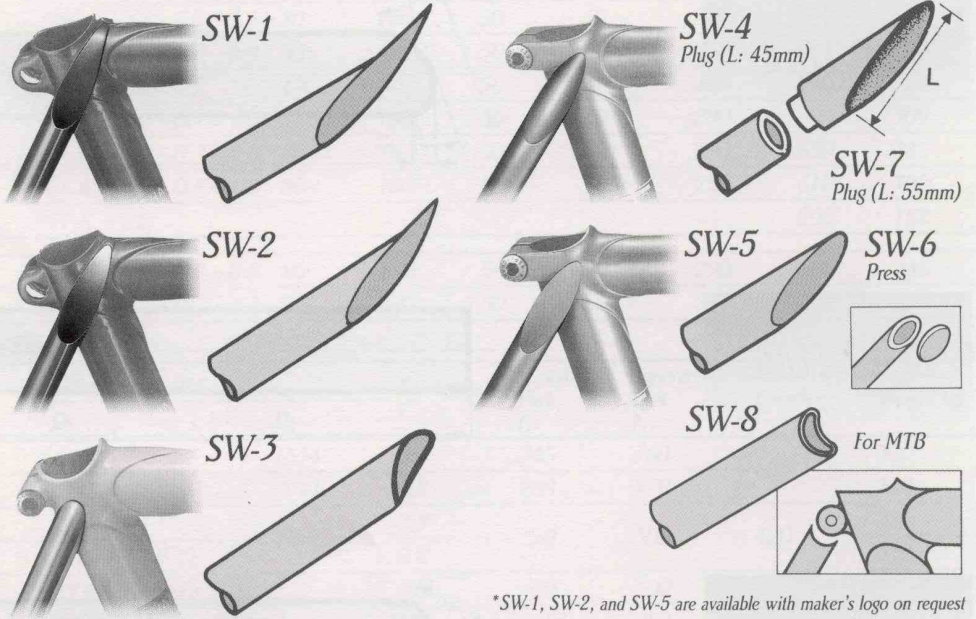
2. To ensure smooth brazing flow, it is important to clear away impurities from the parts to be brazed.
3. Before brazing, the tube and minor parts have to be thoroughly polished. For heating, concentrically apply small

amounts and soft braze as far as possible. Also, take care not to allow overheating.

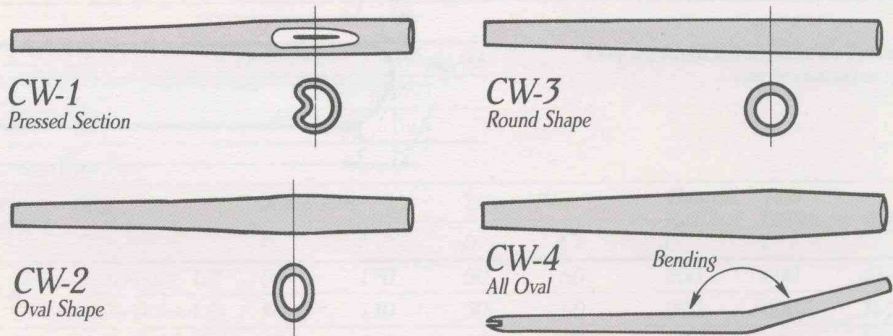
4. After brazing, cool as slowly as possible.
5. If brazed section appears to be brittle, heat again at $700^\circ\text{C} \sim 900^\circ\text{C}$ and cool slowly.
6. Take care in cutting the tube: TANGE mark is provided on the end (to be fixed to the Head Tube) of both the Top and Down Tube, and on the end (to be fixed to the B.B. Shell) of the Seat Tube.
Cut the tube on the opposite side of the TANGE MARK.
7. Take note of the butted section length (ℓ_1 and ℓ'_1) when cutting the tube. (See page 15 ~ 19)

SEAT & CHAIN STAY WORK

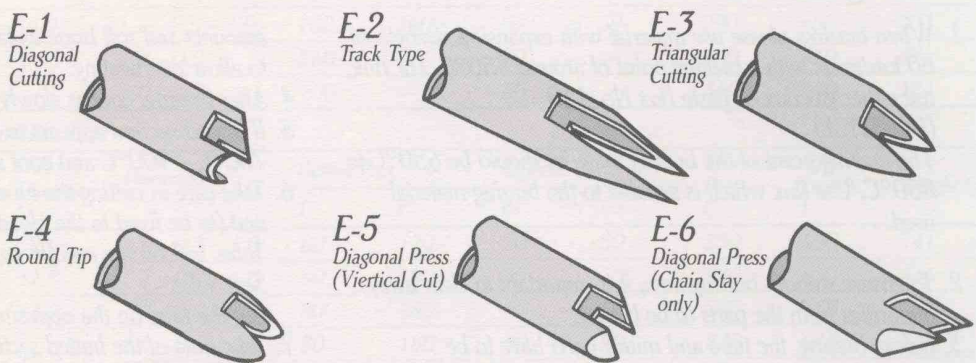
SEAT STAY



CHAIN STAY



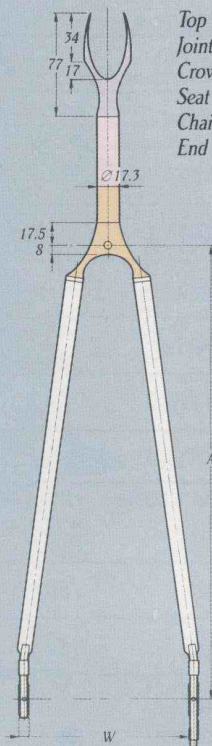
SEAT & CHAIN STAY TIP



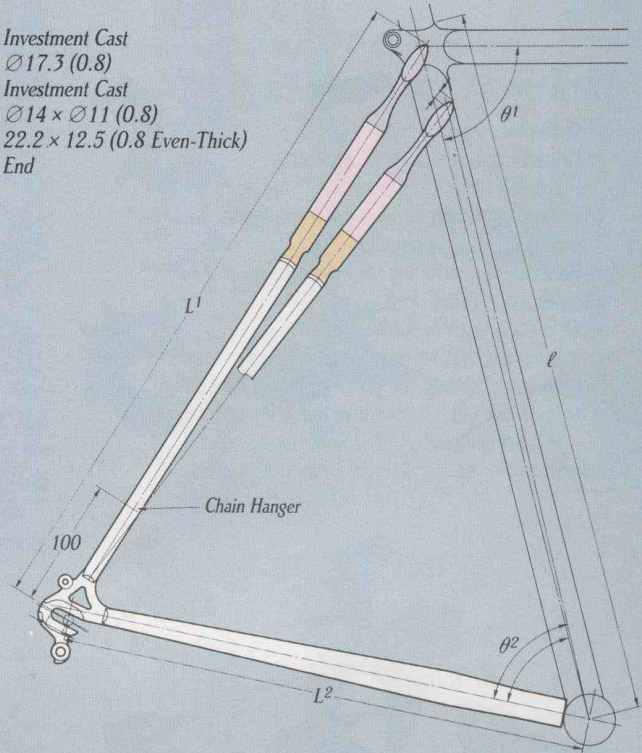
WISHBONE BACK STAY

●ROAD TYPE ●MTB TYPE

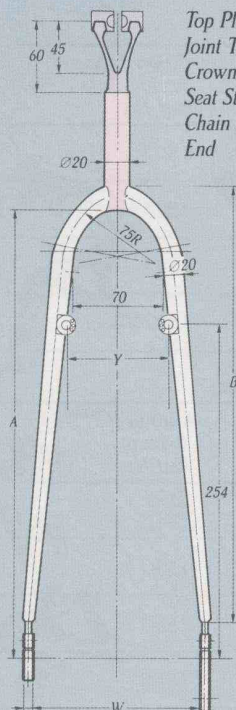
WISHBONE Back Stay for Racing



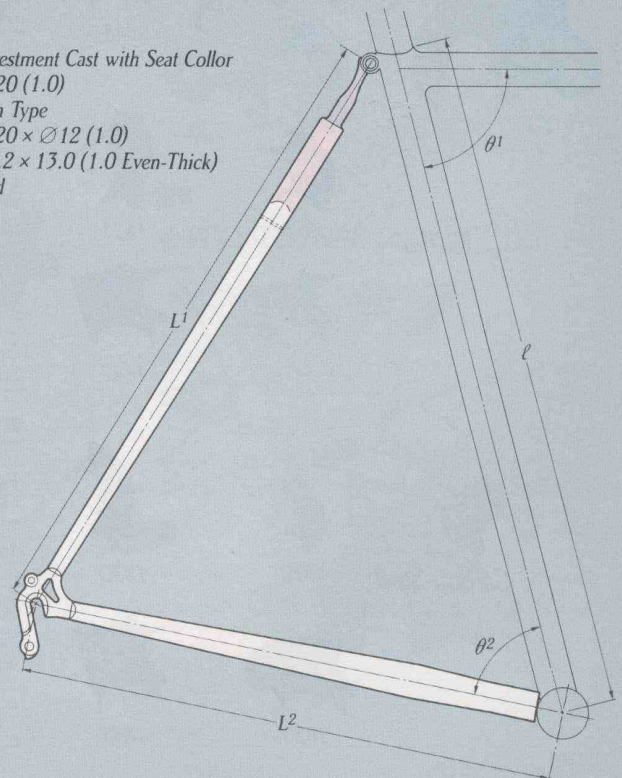
- Top Plug : Cr-Mo Investment Cast
- Joint Tube : Cr-Mo $\varnothing 17.3$ (0.8)
- Crown : Cr-Mo Investment Cast
- Seat Stay : Cr-Mo $\varnothing 14 \times \varnothing 11$ (0.8)
- Chain Stay : Cr-Mo 22.2×12.5 (0.8 Even-Thick)
- End : Forged End



WISHBONE Back Stay for MTB

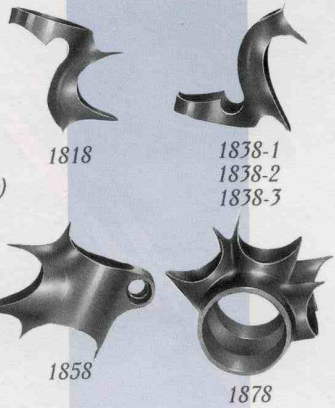


- Top Plug : Cr-Mo Investment Cast with Seat Collor
- Joint Tube : Cr-Mo $\varnothing 20$ (1.0)
- Crown : Uni-Crown Type
- Seat Stay : Cr-Mo $\varnothing 20 \times \varnothing 12$ (1.0)
- Chain Stay : Cr-Mo 22.2×13.0 (1.0 Even-Thick)
- End : Forged End



LUG SET

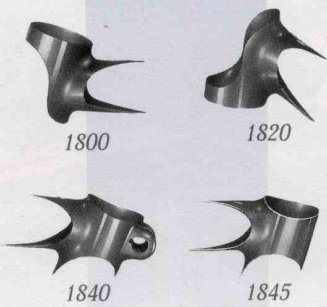
Cr-Mo
(Investment Cast)



■ "Cr-Mo" Lug Set

Product	Cr-Mo Investment Cast	Angle (mm)	Weight (g)
Top Head Lug	1818	$\varnothing 31.8 \times \varnothing 25.4$ 73°	13
Bottom Head Lug	1838-1	$\varnothing 31.8 \times \varnothing 28.6$ 59°	15
	1838-2	$\varnothing 31.8 \times \varnothing 28.6$ 58°	15
	1838-3	$\varnothing 31.8 \times \varnothing 28.6$ 60°30'	15
Seat Lug	1858	$\varnothing 25.4 \times \varnothing 28.6$ 74°	57
B.B. Shell	1878	$\varnothing 28.6 \times \varnothing 28.6 \times \varnothing 22.2$ 65° x 59°30'	156

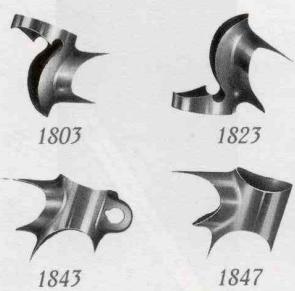
Hi-Ten



■ "Hi-Ten" Lug Set

Product	Hi-Ten 1.0mmt Steel Part No.	Hi-Ten 1.0mmt with hole \diamond Part No.	Angle (mm)	Weight (g)
Top Head Lug	1800	1801	$\varnothing 31.8 \times \varnothing 25.4$ 73°	17
Bottom Head Lug	1820	1821	$\varnothing 31.8 \times \varnothing 28.6$ 58°30'	22
Seat Lug	1840	1841	$\varnothing 25.4 \times \varnothing 28.6$ 73°	25
Lug-without Locking (ear)	1845	1851	$\varnothing 25.4 \times \varnothing 28.6$ 73°	19

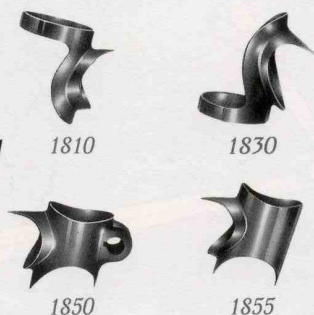
Hi-Ten



■ "Hi-Ten" Lug Set

Product	Hi-Ten 1.0mmt Steel Part No.	Angle (mm)	Weight (g)
Top Head Lug	1803	$\varnothing 31.8 \times \varnothing 25.4$ 73°	17
Bottom Head Lug	1823	$\varnothing 31.8 \times \varnothing 28.6$ 58°30'	22
Seat Lug	1843	$\varnothing 25.4 \times \varnothing 28.6$ 73°	25
Lug-without Locking (ear)	1847	$\varnothing 25.4 \times \varnothing 28.6$ 73°	19

Carbon-Steel
("Super")

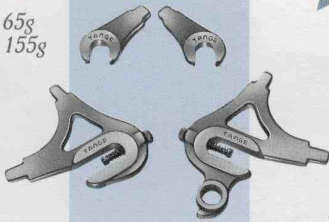


■ Carbon-Steel "Super"

Product	Carbon-steel 1.4mmt Part No.	Angle (mm)	Weight (g)
Top Head Lug	Super 1810	$\varnothing 31.8 \times \varnothing 25.4$ 73°	Super 20
Bottom Head Lug	1830	$\varnothing 31.8 \times \varnothing 28.6$ 58°30'	25
Seat Lug	1850	$\varnothing 25.4 \times \varnothing 28.6$ 73°	40
Lug-without Locking (ear)	1855	$\varnothing 25.4 \times \varnothing 28.6$ 73°	32

F & R END SET

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



► **FORK END**
TR (1215)



TL End (Forged)
No. 1212 Fork End. 63g
No. 1312 Rear End. 167g



TF (1210)
TF-5
(Top: 5mm)
TF-6
(Top: 6mm)



TF-R (1213)



TS End (Forged)
No. 1211 Fork End. 54g
No. 1311 Rear End. 155g



TL (1212)
TL-5
(Top: 5mm)
TL-6
(Top: 6mm)



MTL (1220)



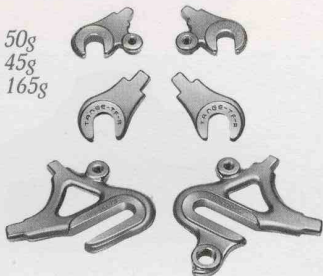
SFR End (Forged)
Straight Drop Out End.
No. 1206 Fork End. 70g
No. 1306 Rear End. 185g



MA



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



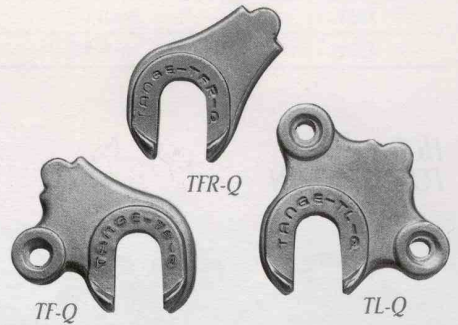
NA



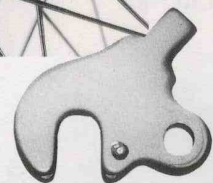
Keep Loose Wheels in the Fork Wheel Receiver Fork End

Wheel Receiver fork ends can prevent accidents by holding the hub in place in cases where the quick release lever becomes loose. Wheel Receivers do this by using raised ridges on each side of the axle slot that prevent the hub from dropping out, even with a loosened quick release lever. Wheel Receiver fork ends do not interfere with wheel removal. A turn of the quick release nut and the wheel can be quickly removed. Wheel Receiver fork ends also help cyclists to remember to properly tighten the front wheel's quick release shaft when mounting wheels. Wheel Receiver fork ends are also effective with nut-type hub axles.

► FORGED FORK END



► PRESSED FORK END



FORK CROWN

CR-MO FORK CROWN



C-14 (1180)



C-10 (1171)



NT (1173)



NR (1174)

Tange's Fork Crown, with its unique design and precision, upgrades the bicycle's appearance. Take the fork crown made from investment casting for instance; Tange has received positive feed-back from the users regarding its high-degree of strength, precision and dynamic design.

Hi-Ten FORK CROWN



CCL (1120)



AC-2 (1124)



AL-13 (1118)



AERO (1175)



ARII-OW



A-2

CR-MO MTB FORK CROWN



MT-2
Casting
For 2.125" Tire



MT-4
Casting
For 2.125" Tire



MT-5
Press
For 2.125" Tire

Mountain Bike
FRONT FORK
ORDER SYSTEM

FRONT FORK
ORDER SYSTEM



C-11 (1159)



C-2 (1152)



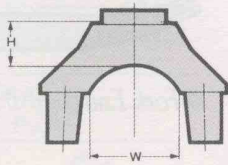
C-20 (1177)



C-22 (1179)



C-24 (1155)



Part No.	Model	Type	Internal Width (mm)	Blade Diameter (mm)	Height H (mm)	Weight (g)
1180	C-14	Investment Cast	49	23 Oval	20	126
1171	C-10	Investment Cast	38	24 Oval	17	135
1173	NT	Investment Cast	36	24 Round	16	125
1174	NR	Investment Cast	28	24 Oval	19	125
1159	C-11	Investment Cast	45	24 Oval	18	150
1152	C-2	Casting	47	23 Oval	17	195
1177	C-20	Investment Cast	34	24 Oval	18	155
1179	C-22	Investment Cast	37	24 Oval	16	190
1155	C-24	Casting	31	24 Aero	18	170



A-18



AS-13



E-O



MT-6



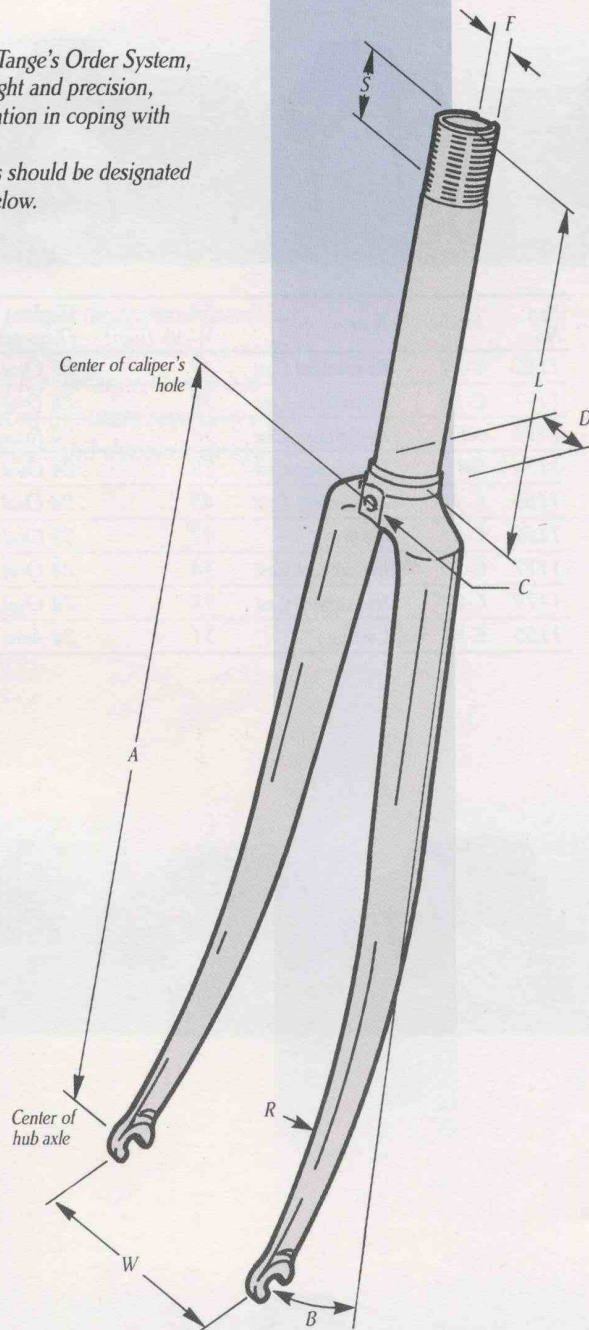
FS (1130)

FRONT FORK ORDER SYSTEM

FRONT FORK ORDER SYSTEM

Tange's Front Fork, has no equal. Tange's Order System, while achieving strength, light weight and precision, offers a variety of choice and variation in coping with every need.

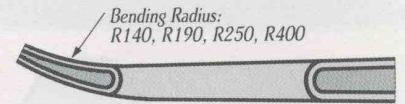
*For flawless fitting, specifications should be designated using dimensions in the figure below.



● **Fork Crown**
(See page 25, 26)

● **Fork Stem**
PRESTIGE or Cr-Mo Butted Spiral Stem

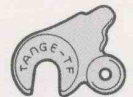
● **Fork Blade**
PRESTIGE Blade or Cr-Mo Blade: Round, Oval or Aerodynamic Design Available



● **Fork End (Forged)**



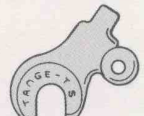
TR(1215)



TF(1210)



TF-R(1213)

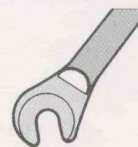


TS(1211)

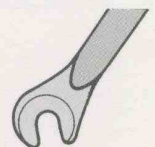


TL(1212)

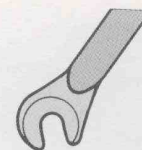
● **Tip End**



Diagonal Cutting



Triangular Cutting



Round Cutting

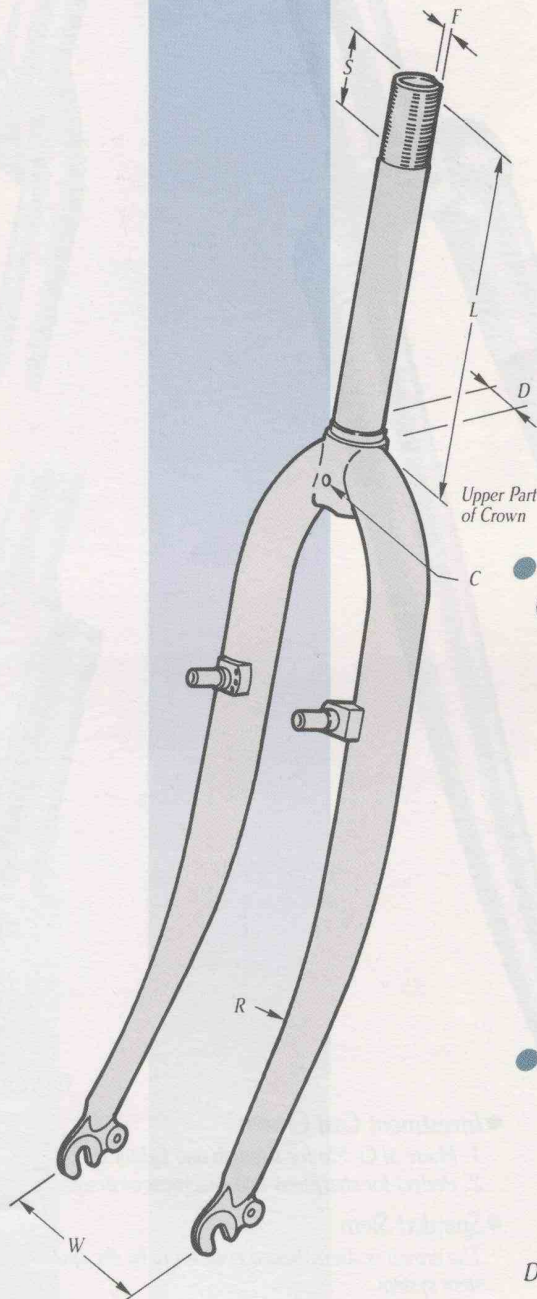
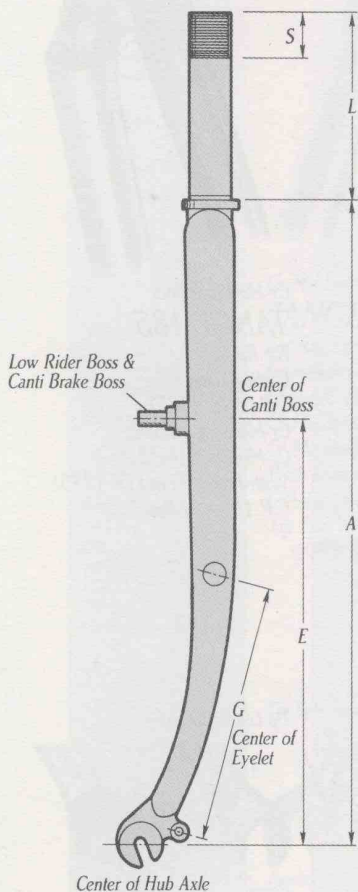
■ Your Specifications

NOTATION SPEC DESCRIPTION

NOTATION	SPEC DESCRIPTION
L	Stem Length
S	Screw Length
F	Ditch Width
A	Lower Length
B	Offset
R	Bending Radius
W	Width
C	Brake Hole Dia.
D	Ball Race Dia.

Mountain Bike FRONT FORK ORDER SYSTEM

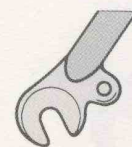
DESCRIPTION	SIZE
L Stem Length	
S Screw Length	
F Ditch Width	
A Lower Length	
B Offset	
R Bending Radius	
W Width	
C Brake Hole Dia.	
D Ball Race Dia.	
E Canti Boss Position	
G Low Rider Boss Position	



● Fork End (Forged)



● Tip End



CR-MO FRONT FORK COMPONENTS

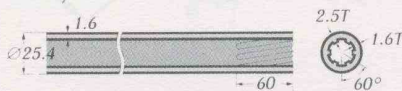


Cr-Mo Front Fork
TANGE 310 PRESTIGE
For Racing
Investment Cast
Crown C-20 (No. 1177)
Prestige Cr-Mo Spiraled Stem
Prestige Cr-Mo Blades (Ø24)
With Forged Ends (TR 1215)
C.P. Finish or Raw



- Investment Cast Crown
 1. Made of Cr-Mo for strength and lightness.
 2. Perfect for sharpness and exactness of design.

- Spiraled Stem
The crown is strengthened even more by the spiral stem system.



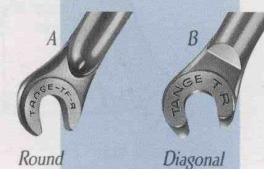
- Ø24 Oval Fork Blade
The larger diameter (Ø24 Oval) fork blades also contribute greatly to increased strength and rigidity.

Cr-Mo Front Fork
TANGE 135
For Racing
Investment Cast
Crown C-22 (No. 1179)
Cr-Mo Spiraled Stem
Cr-Mo Blades (Ø24)
With Forged Ends
(TF-R1213 or TF-1210)
C.P. Finish or Raw

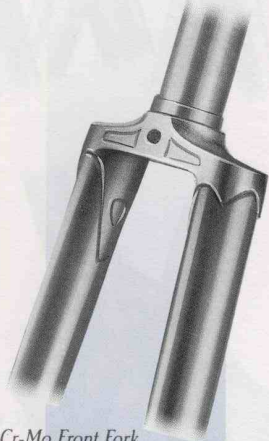


Cr-Mo Front Fork
TANGE 185
For Racing
Casting Crown
C-24 (No. 1185)
Cr-Mo Spiraled Stem
Cr-Mo Blades (Ø24)
With Forged Ends (TR 1215)
C.P. Finish or Raw

Tip End Variation

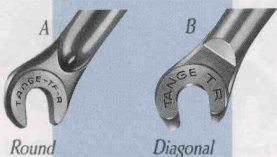


Cr-Mo Front Fork
TANGE 188 B
 For Racing
 Uni Crown Type
 Cr-Mo Butted Stem
 Cr-Mo Blades (Ø24)
 With Forged Ends (TR 1215)
 C.P. Finish or Raw
 Tip End Variation: Diagonal (B)



Cr-Mo Front Fork
TANGE 150 B
 For Racing
 Investment Cast
 Crown C-10 (No. 1171)
 Cr-Mo Spiraled Stem
 Cr-Mo Blades (Ø24)
 With Forged Ends (TR 1215)
 C.P. Finish or Raw
 Tip End Variation: Diagonal (B)

Tip End Variation



Cr-Mo Front Fork
TANGE 130 A or B
 For Racing
 Casting Iron Crown
 C-11 (No. 1159)
 Cr-Mo Spiraled Stem
 Cr-Mo Blades (Ø24)
 With Forged Ends (TF-R 1213
 or TF 1210)
 C.P. Finish or Raw
 Tip End Variation:
 Round (A) or Diagonal (B)



Cr-Mo Front Fork
TANGE 124 A or B
 For Racing
 Casting Iron Crown C-2 (No. 1152)
 Cr-Mo Spiraled Stem
 Cr-Mo Blades (Ø23)
 With Forged Ends (TF-R 1213
 or TF 1210)
 C.P. Finish or Raw
 Tip End Variation:
 Round (A) or Diagonal (B)

Tip End Variation



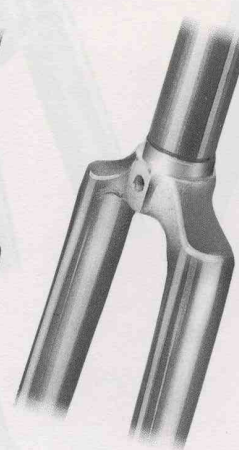
FRONT FORK COMPONENTS



TANGE 224
 For Racing
 Fork Crown: AC-2 (No. 1124)
 Hi-Tension Butted Stem
 Hi-Tension Blades
 With Forged Ends
 (TF-R 1213 or TF 1210)
 C.P. Finish or Raw



TANGE 230
 For Racing
 Fork Crown: CCL (No. 1120)
 Hi-Tension Butted Stem
 Hi-Tension Blades
 With Forged Ends
 (TF-R 1213 or TF 1210)
 C.P. Finish or Raw



TANGE 260
 For Racing
 Aerodynamic Design
 Casting Iron
 Crown AERO (No. 1175)
 Hi-Tension Butted Stem
 Hi-Tension Blades (Ø23)
 With Forged Ends
 (TF-R 1213 or TF 1210)
 C.P. Finish or Raw

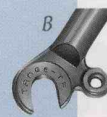


Available
TANGE 261:
 Hi-Tension
 Crown
 1122 Pressed

Get added value with Tange high tension steel forks. These reasonably priced forks offer the top balance of quality, cost, and performance. A large variety of fork types is available to cover an extensive range of full-size bicycle types.



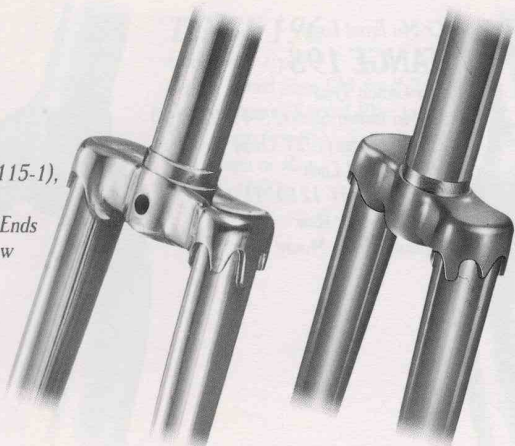
Round Cut



Diagonal Cut (Press)

TANGE 115

Light Weight
Fork Crown: A-18
Hi-Tension Butted Stem
Hi-Tension Blades
With Stamped Tip Ends (115-1),
MA Solid Ends (115-2),
or TF-R 1213, TF 1210 Ends
(115-3) C.P. Finish or Raw



Available
TANGE 120:
A-2 Fork Crown

TANGE 113

Light Weight
Fork Crown: AS-13
Hi-Tension Butted Stem
Hi-Tension Blades
With Stamped Tip Ends (113-1),
MA Solid Ends (113-2)
or TF-R 1213, TF 1210 Ends (113-3)
C.P. Finish or Raw



Front Fork TANGE 235

For Racing
Fork Crown: FS (No. 1130)
Hi-Tension Butted Stem
Hi-Tension Blades (Ø24)
With Forged Ends (TFR 1213,
TF 1210) or MA Solid Ends C.P.
Finish or Raw



TANGE 148

For City Sports
For 1.5" or 1.75" Tire
Fork Crown: MT-6
Hi-Tension Butted Stem
Hi-Tension Blades
With Stamped Tip End (148-1),
MA Solid Ends (148-2)
or TF-R 1213, TF 1210 Ends (148-3)
C.P. Finish or Raw



115-1
113-1
148-1
(Stamped Tip Ends)

115-2
113-2
148-2
(MA)

115-3
113-3
148-3
(TF)



235-1 (MA)



235-2 (TF)

Mountain Bike
FRONT FORK &
CROWN



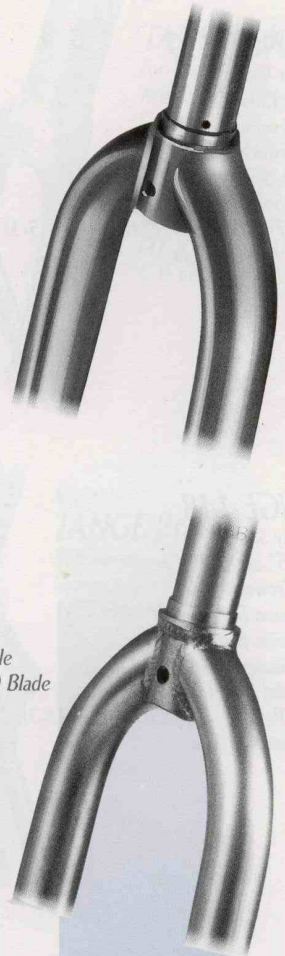
Cr-Mo Front Fork
TANGE 198
Uni Crown Type
Cr-Mo Butted Stem (25.4 × 2.7/1.6)
Cr-Mo Blades (∅27 Oval)
With Forged Ends
(TR 1215, TF 1210, TL 1212)
C.P. Finish or Raw
Option: Brake Mount Boss



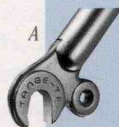
**TANGE
SWITCHBLADES**

Light Alloy Crown
Prestige Blade/Black C.P.
Finish/ Straight
Cr-Mo Stem
Forged End
Weight: 1000g.

Cr-Mo Front Fork
TANGE 199
Uni Crown Type
Cr-Mo Butted Stem
(25.4 × 2.7/1.6)
Cr-Mo Blades (∅27 Oval)
With Investment Cast Ends
C.P. Finish or Raw
Option: Brake Mount Boss



TANGE 194
Uni-Crown Type
Cr-Mo (25.4 × 1.4/1.1) Blade
or Prestige (25.4 × 1.3/1.1) Blade
Cr-Mo Butted Stem
(25.4 × 2.7/1.6)
With Investment Cast Ends
C.P. Finish or Raw
Weight: 950g.



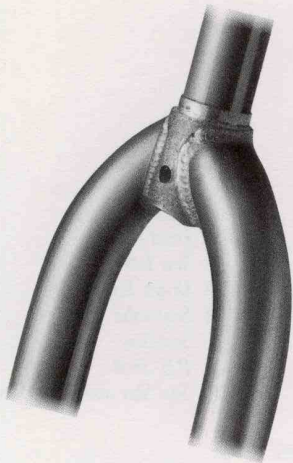
A
Round Cut



B
Diagonal Cut

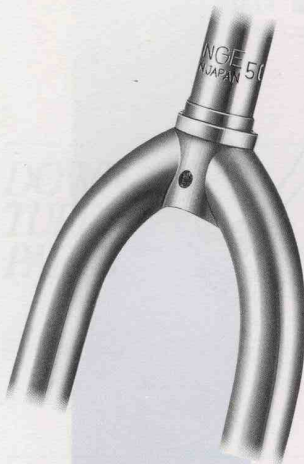


Investment Cast Ends



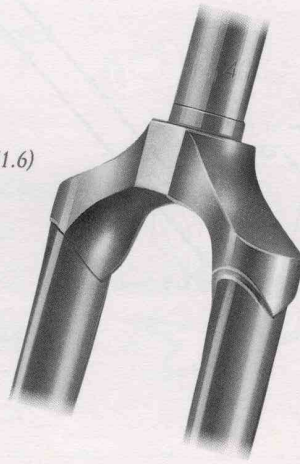
TANGE 196

Uni-Crown Type
 Cr-Mo Butted Stem (25.4 × 2.7/1.6)
 Cr-Mo Blade (28.6 × 1.2)
 With Forged Ends
 C.P. Finish or Raw
 Weight: 1000g.



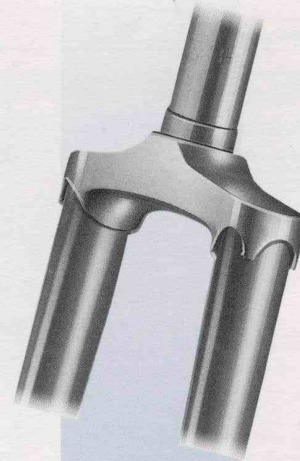
Cr-Mo Front Fork
TANGE 192

Uni Crown Type
 Cr-Mo Butted Stem (25.4 × 2.7/1.6)
 Cr-Mo Blades (25.4 × 1.4/1.1)
 With Forged Ends
 (TR 1215, TF 1210, TL 1212)
 C.P. Finish or Raw
 Option: Brake Mount Boss



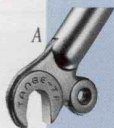
Cr-Mo Front Fork
TANGE 146

Fork Crown: MT-4
 Cr-Mo Butted Stem
 With Reinforcement
 Cr-Mo Blades
 With Forged Ends
 (TR 1215, TF 1210, TL 1212)
 C.P. Finish or Raw
 Option: Brake Mount Boss

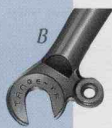


Mangalay Front Fork
TANGE 142

Fork Crown: MT-5
 Cr-Mo Butted Stem
 With Reinforcement
 Mangalay Blades
 With Forged Ends
 (TR 1215, TF 1210, TL 1212)
 C.P. Finish or Raw
 Option: Brake Mount Boss



Round Cut



Diagonal Cut



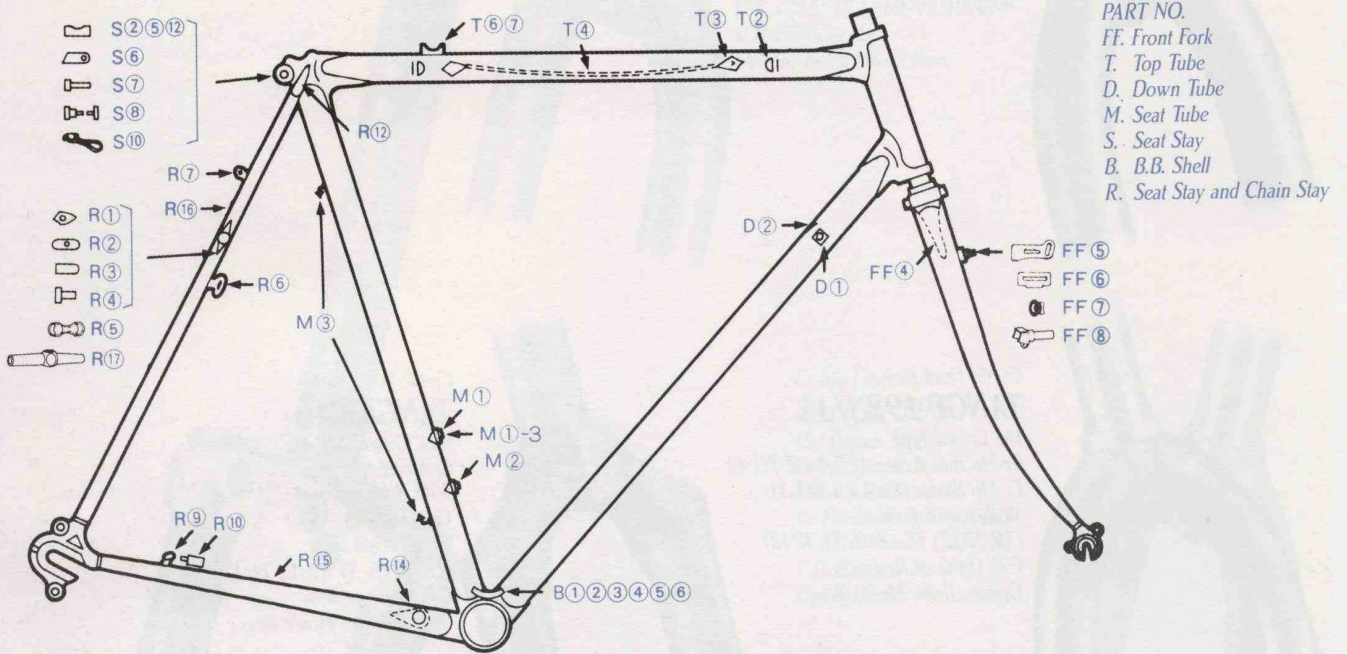
Round Cut



Diagonal Cut

FRAME FITTING

FRONT FORK & CROWN

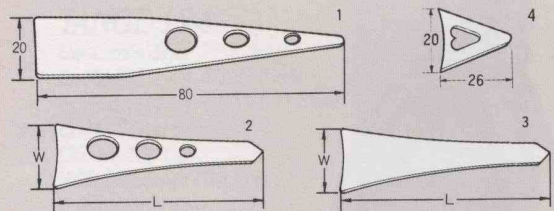


PART NO.
 FF. Front Fork
 T. Top Tube
 D. Down Tube
 M. Seat Tube
 S. Seat Stay
 B. B.B. Shell
 R. Seat Stay and Chain Stay

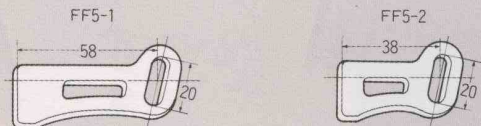
FRONT FORK PARTS

FF4 Fork Blade Reinforcement Plate Thickness 1mm

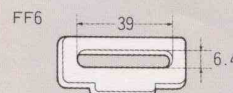
Type	Size W x L	Shape
FF 4 --1	20 x 80	(Large) W/Three Holes
2	19.5 x 55	(Small) W/Three Holes
3	19.5 x 55	(Small) W/0 Hole
4	20 x 26	(Small) W 0 Hole



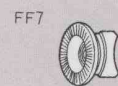
FF5 Dynamo Bracket



FF6 Dynamo Bracket

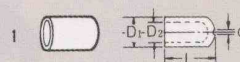


FF7 Dynamo Pedestal



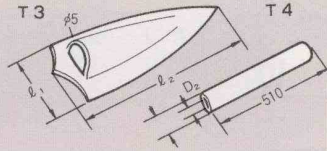
TOP TUBE PARTS

T2 Wire Stopper



Type	D ₁	D ₂	d	L
T2--1	8	6φ	2.4φ	10

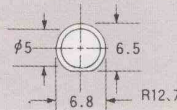
T3 Cover for



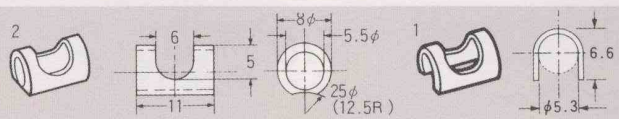
	l_1	l_2	Bending R
T3-1	15	45	14
T3-2	14	25	14
T3-4	12	34	12.7
D ₁ , L, t			
T4-1	4φ×510×0.8t×2.4t		
Inserting Tube for T3			

T4 Incorporated Brake Wire

T6 Outer Guide Machine Processed

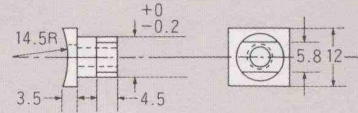
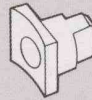


T7 Outer Guide Pressed

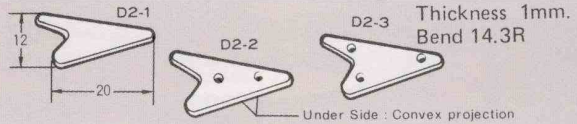


**DOWN
TUBE
PARTS**

D1 Shifting Lever Fittings

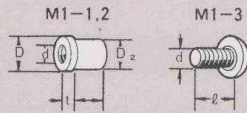


D2 Shifting Lever Stopper



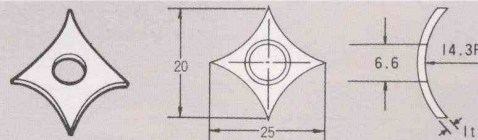
**SEAT
TUBE
PARTS**

M1 Bottle Fitting Nut

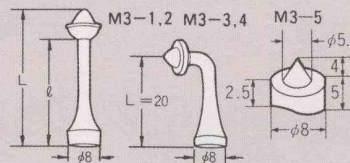


Type	D ₁	D ₂	d (screw)	t	ℓ
M1-1	10	7.8	6 P=1	2	8
2	9	6.5	5 P=0.8 ISO	1.5	6
3	Screw for M1-2		5 ISO		10

M2 Bottle Fitting Reinforcement



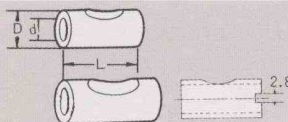
M3 Pump Peg



Type	L	ℓ
M-③-1	31	24
2	26	18
M-③-3	Pump peg-bent	
4	L=17	
M-③-1.2	Straight Type	
M-③-3.4	Bent Type	

**SEAT
PARTS**

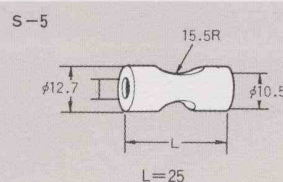
S2 Seat Collar



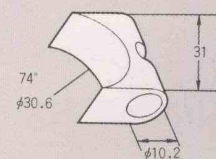
Type	D	d	L	Spotfacing R
S-②-4	12	8.2	26	14.3
S-②-5	12	8.2	23	14.3

Available : Sprit Type

S5 Seat Collar



Seat Collar (Investment Cast) S-6



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-2-4
S 8-2	19	for S-2-5
S 8-3		for Lost Wax Seat Lug (1858)

- With Stopper
- With TANGE mark

S10 Wire Hanger (C/P Finish)

S12 Seat Collar With Seat Pin (C/P Finish)

S13 Seat Plug (Investment Cast)

S14 Seat Stay Crown for Road Type (Investment Cast)

B.B. SHELL PARTS

B1 B4
B2 B5
B3 B6

Wire Lead Tube

Type	Uses
B ①	For rear.
B ②	For rear.
B ③	For front.
B ④	Wire Lead Tube (15mm)
B ⑤	Wire Lead Tube (25mm)
B ⑥	Wire Lead Tube for MTB (phi 3 x phi 5 x 20 L)

SEAT & CHAIN STAY PARTS

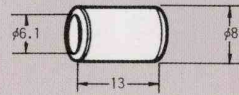
R1 Upper Bridge Reinforcement

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
4	17.6	17.6	9	8

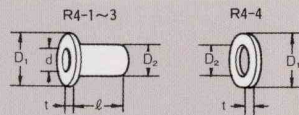
R2 Bridge (with Spot Facing)

Type	Difference between L ₁ and L ₂	d	Spot facing
R ②-1	less than 2.25	6.2φ	14φ, 16φ
2	less than 3.00	5.5φ	22.2φ
3	less than 2.25	8.0φ	14φ, 16φ

R3 Reinforcement Tube for Upper Bridge

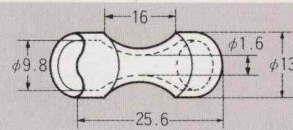


R4 Metal Fitting
(Ground for Brake to Fixed to Upper Bridge)

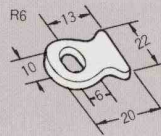


Type	D	D	d	t	l
R(4)-1	14	8.0	6.2	1.	13
2	14	8.0	6.2	1.6	15
4	14	8.1		1.5	

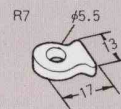
R5 Lower Bridge
(Investment Cast)



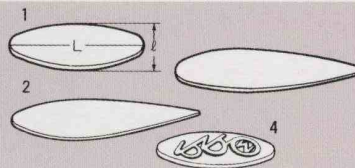
R6 Bracket



R7 Carrier Fixing Board



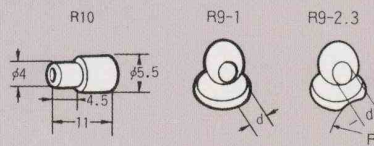
R9 Iron Wire Block Metal Boss



Type	L	t
R(9)-1	42	16
2	58	15.8
3	55	17.5
4	50 (W/Mark)	17.5

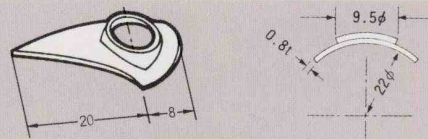
R10 Brass Outer Receptable
U/P Iron Outer Receptacle (R9-2 ~ 3)

R12 Seat Stay Cap
(Thickness 1.2mm)

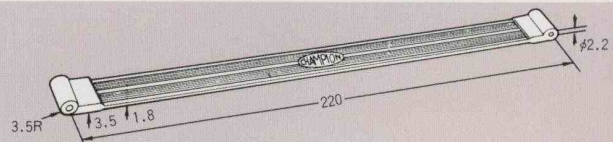


Type	d	R
R(9)-1	φ4.2	---
R(9)-2	φ4.2	φ14
R(9)-3	φ4.2	φ32

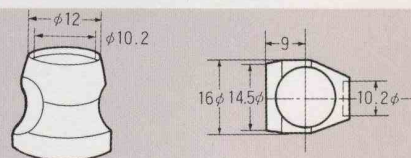
R14 Fitting Bridge Reinforcement



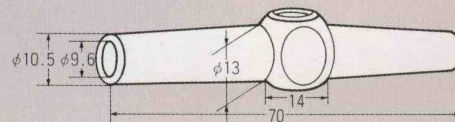
R15 Chain Stay Protector
Synthetic Rubber
Color: Black, Ivory or Brown



R16 Brake Mounting Axle



R17 Bridge
(Investment Cast)





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