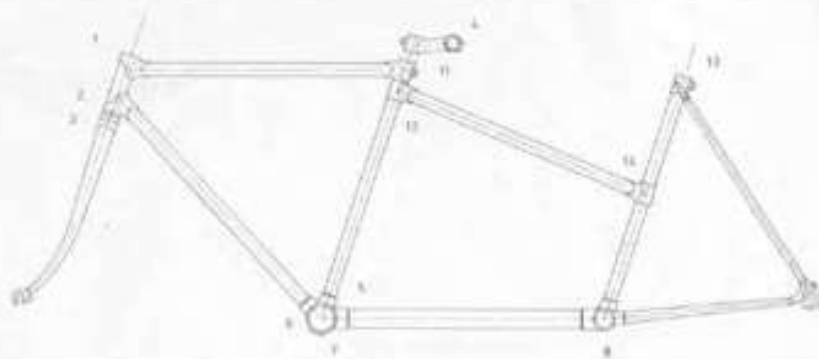

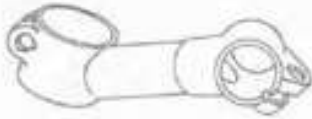





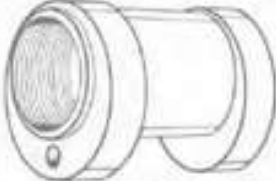




TANDEM – GENTS/LADY'S

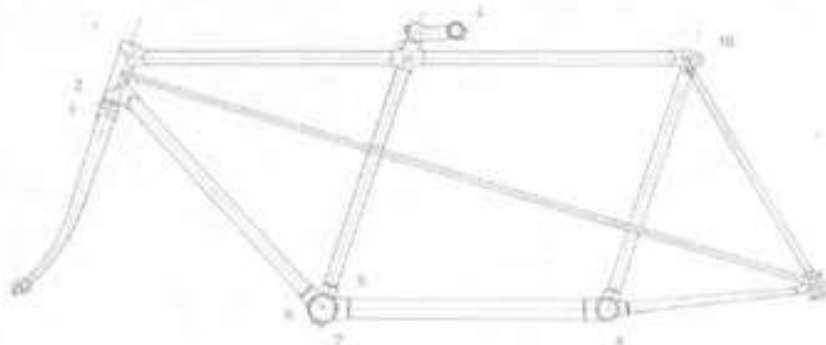
HADEN


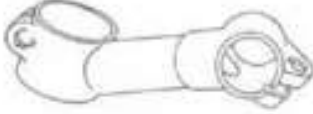
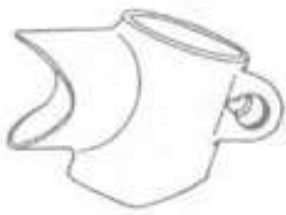
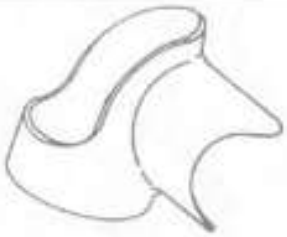





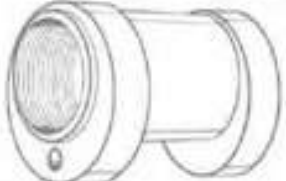




<p>1</p>  <p>TANDEM FRONT GENTS TOP LUG 1-250" x 1-000" x 72° GTN72E</p>	<p>4</p>  <p>TANDEM REAR HANDLEBAR STEM (Chrome Plated) 1-070" x 1-000" TRZ17S or 1-000" x 0-938" TR217T</p>	<p>13</p>  <p>REAR LADIES SEAT LUG 1-125" LS1</p>										
<p>2</p>  <p>TANDEM FRONT BOTTOM LUG 1-250" x 1-125" x 61° BN61E</p>	<p>11 MIDDLE GENTS SEAT LUG 1-125" x 1-000" x 72° GS72E</p>  <p>12 LOOP LUG 1-125" x 1-000" x 65° L851</p> 	<p>14</p>  <p>LOOP LUG 1-125" x 1-000" x 85° L851 (Identical to item 12)</p>										
<p>3</p>  <p>TANDEM FORK CROWN For 1-000" column and oval blades 32 mm x 18 mm MCN3218T</p>	<p>5</p>  <p>TANDEM FRONT BOTTOM BRACKET 61° x 72° 1-125" x 1-125" x 1-500" TBS6172</p>	<p>8</p>  <p>TANDEM REAR BOTTOM BRACKET 108° x 63 1/2° 68 mm wide, "V" Back, 1-500" x 1-125" x 0-875" Threaded 1-370" x 24 TPI BSC RH/LH TBS10863</p>										
<p>Note Items 1, 2 and 11 are standard frame lugs from our extensive range. Refer to our catalogue for other styles and angles available.</p>	<p>6</p>  <p>ADJUSTABLE ALLOY ECCENTRIC ES2 1-370" x 24 TPI BSC Thread RH/LH</p> <p>7 CLAMPING PIN M6 x 25 mm U/H SB3</p>  	<p>The components illustrated here are to suit the following frame tube diameters:</p> <table border="0"> <tbody> <tr> <td>Head Tube</td> <td>1-2"</td> </tr> <tr> <td>Top Tubes</td> <td>1-000"</td> </tr> <tr> <td>Down Tube</td> <td>1-125"</td> </tr> <tr> <td>Seat Tubes</td> <td>1-125"</td> </tr> <tr> <td>Back Brackets Joining Tube</td> <td>1-500"</td> </tr> </tbody> </table>	Head Tube	1-2"	Top Tubes	1-000"	Down Tube	1-125"	Seat Tubes	1-125"	Back Brackets Joining Tube	1-500"
Head Tube	1-2"											
Top Tubes	1-000"											
Down Tube	1-125"											
Seat Tubes	1-125"											
Back Brackets Joining Tube	1-500"											

TANDEM – DOUBLE GENTS

HADEN



<p>1</p>  <p>TANDEM FRONT GENTS TOP LUG 1-250" x 1-000" x 72° GTN72E</p>	<p>4</p>  <p>TANDEM REAR HANDLEBAR STEM (Chrome Plated) 1-070" x 1-000" TRZ17S or 1-000" x 0-938" TRZ17T</p>	<p>10</p>  <p>TANDEM REAR GENTS SEAT LUG 1-125" x 1-000" x 72° GS72E</p>										
<p>2</p>  <p>TANDEM FRONT BOTTOM LUG 1-250" x 1-125" x 61° BN61E</p>	<p>9 TANDEM DG FRONT SEAT LUG 1-125" x 1-000" x 72° Ear Threaded M6 DGFS72</p>  <p>15 CLAMPING PIN M6 x 25 mm U/H SB3</p> 	<p>8</p>  <p>TANDEM REAR BOTTOM BRACKET 108° x 63 1/2° 68 mm wide, 'V' Back. 1-500" x 1-125" x 0-875" Threaded 1-370" x 24 TPI BSC RH/LH TBS10863</p>										
<p>3</p>  <p>TANDEM FORK CROWN For 1-000" column and oval blades. 32 mm x 18 mm MCN3218T</p>	<p>5</p>  <p>TANDEM FRONT BOTTOM BRACKET 61° x 72° 1-125" x 1-125" x 1-500" TBS6172</p>											
<p>Note Items 1, 2 and 10 are standard frame lugs from our extensive range. Refer to our catalogue for other styles and angles available.</p>	<p>6</p>  <p>ADJUSTABLE ALLOY ECCENTRIC ES2 1-370" x 24 TPI BSC Thread RH/LH</p> <p>7 CLAMPING PIN M6 x 25 mm U/H SB3 (Identical to item 15)</p>  	<p>The components illustrated here are to suit the following frame tube diameters:</p> <table border="0"> <tbody> <tr> <td>Head Tube</td> <td>1-250"</td> </tr> <tr> <td>Top Tubes</td> <td>1-000"</td> </tr> <tr> <td>Down Tube</td> <td>1-125"</td> </tr> <tr> <td>Seat Tubes</td> <td>1-125"</td> </tr> <tr> <td>Back Brackets Joining Tube</td> <td>1-500"</td> </tr> </tbody> </table>	Head Tube	1-250"	Top Tubes	1-000"	Down Tube	1-125"	Seat Tubes	1-125"	Back Brackets Joining Tube	1-500"
Head Tube	1-250"											
Top Tubes	1-000"											
Down Tube	1-125"											
Seat Tubes	1-125"											
Back Brackets Joining Tube	1-500"											

HADEN FRAME LUGS



TOP HEAD
LUG 73°

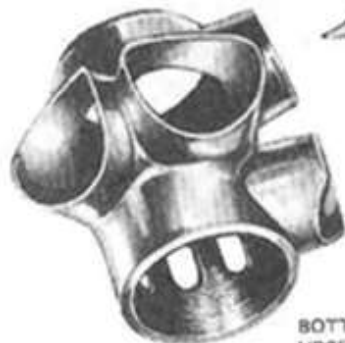


BOTTOM HEAD LUG 59°

Royal Sovereign



SEAT LUG 73°



BOTTOM BRACKET
VBS5964

Special design features.
Extruded pipes
Thin Walls

Components illustrated above are available to the following Specifications

ROYAL SOVEREIGN SET RS1 FOR STANDARD ENGLISH SIZE TUBES.	LUG ANGLES 73°/59°/73°.	BOTTOM BRACKET 59° x 64°
ROYAL SOVEREIGN SET RS2 FOR FRENCH METRIC SIZE TUBES.	LUG ANGLES 73°/59°/73°.	BOTTOM BRACKET 59° x 64°

each set consists of one of each of the items illustrated (4 items per set)

Bottom Brackets can be supplied with or without weight saving slots (see page 5) — please specify on order

Bottom Brackets can be supplied with different angles to the above (see page 5) — please specify on order



TOP HEAD
LUG 73°

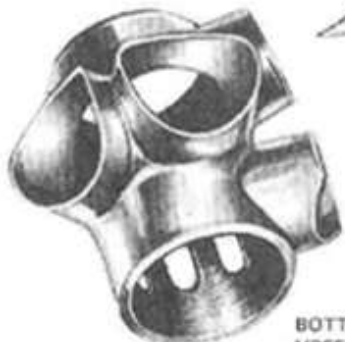


BOTTOM HEAD LUG 59°

Royal Sovereign



EARLESS
SEAT
LUG 73°



BOTTOM BRACKET
VBS5064

Special Design Features
Extruded pipes
Thin Walls
Seat lug without ears

SEE PAGE 8
FOR SEAT BOLTS
AND HOLDERS

Components illustrated above are available to the following Specifications

ROYAL SOVEREIGN SET RS3 FOR STANDARD ENGLISH SIZE TUBES.	LUG ANGLES 73°/59°/73°.	BOTTOM BRACKET 59° x 64°
ROYAL SOVEREIGN SET RS4 FOR FRENCH METRIC SIZE TUBES.	LUG ANGLES 73°/59°/73°.	BOTTOM BRACKET 59° x 64°

Note — each set consists of one of each of the items illustrated (4 items per set)

Bottom Brackets can be supplied with or without weight saving slots (see page 5) — please specify on order

Bottom Brackets can be supplied with different angles to the above (see page 5) — please specify on order

HADEN FRAME LUGS



TOP HEAD LUG

SPECIALIST



SEAT LUG



BOTTOM HEAD LUG



BOTTOM BRACKET

Special design features,
triangular cut outs in
side of body.

Components illustrated above are available to the following Specifications

SPECIALIST SET S5 FOR STANDARD ENGLISH SIZE TUBES.

LUG ANGLES $73^{\circ}/59^{\circ}/73^{\circ}$.

BOTTOM BRACKET $59^{\circ} \times 64^{\circ}$

SPECIALIST SET S6 FOR STANDARD ENGLISH SIZE TUBES.

LUG ANGLES $72^{\circ}/60^{\circ}/72^{\circ}$.

BOTTOM BRACKET $60^{\circ} \times 64^{\circ}$

Note — each set consists of one of each of the items illustrated (4 items per set)

Bottom Brackets can be supplied with or without weight saving slots (see page 5) — please specify on order
Bottom Brackets can be supplied with different angles to the above (see page 5) — please specify on order



TOP HEAD LUG

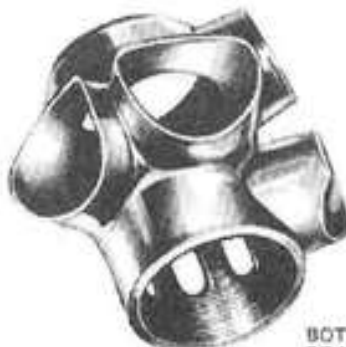
OLYMPIC 2



SEAT LUG



BOTTOM HEAD LUG



BOTTOM BRACKET

Special design features,
Clean simple design
Short pipes

Components illustrated above are available to the following Specifications

OLYMPIC 2 SET L7 FOR STANDARD ENGLISH SIZE TUBES.

LUG ANGLES $73^{\circ}/59^{\circ}/73^{\circ}$.

BOTTOM BRACKET $59^{\circ} \times 64^{\circ}$

OLYMPIC 2 SET L8 FOR STANDARD ENGLISH SIZE TUBES.

LUG ANGLES $72^{\circ}/60^{\circ}/72^{\circ}$.

BOTTOM BRACKET $60^{\circ} \times 64^{\circ}$

Note — each set consists of one of each of the items illustrated (4 items per set)

Bottom Brackets can be supplied with or without weight saving slots (see page 5) — please specify on order
Bottom Brackets can be supplied with different angles to the above (see page 5) — please specify on order

Westley Street, Birmingham B9 4ES, England.

Haden . . . The First Choice

For 113 years we have been Britain's leading cycle frame component manufacturer offering a superb range of lugs for every type of bicycle.

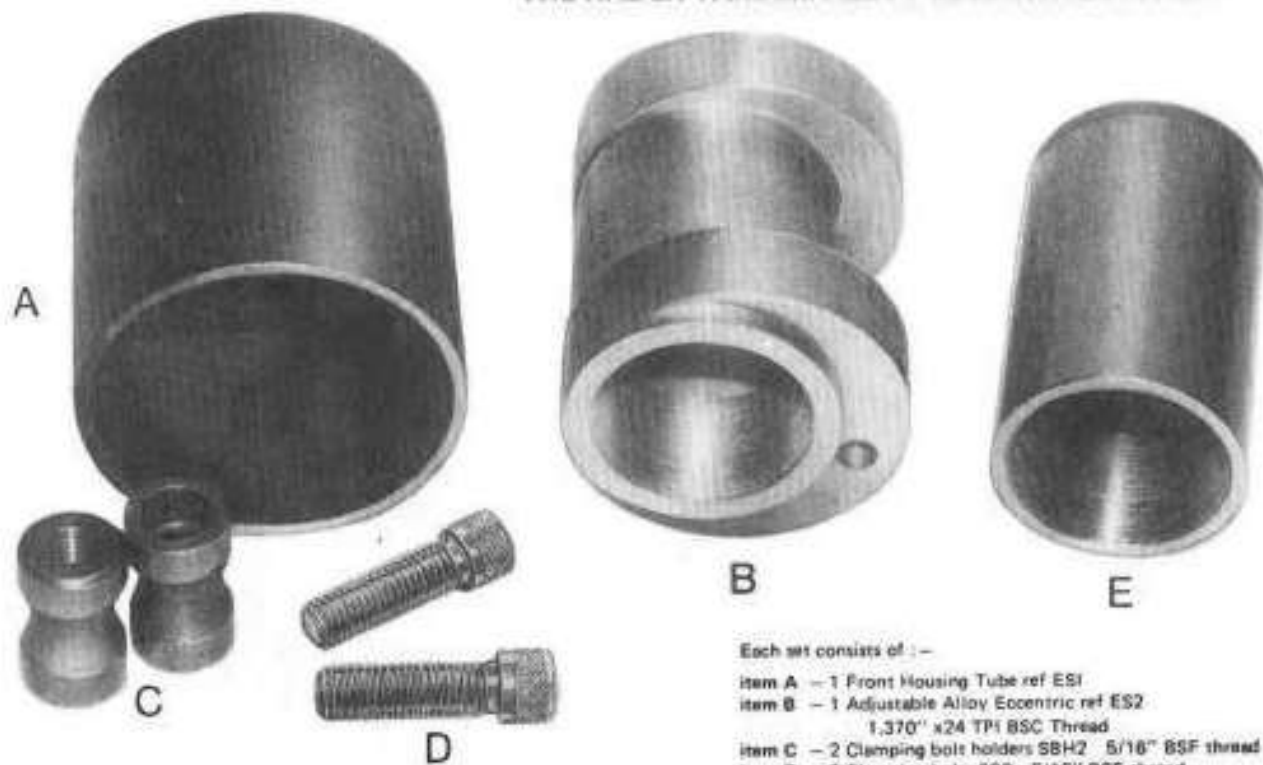
Our components have proved so successful - combining as they do superb value and excellent quality with fashionable design - that this year we're going even further with a specially selected range of new components for the specialist frame builder.

In this, our new Racing Lug catalogue, you will find an excellent choice - plain or intricate lug design, plain or cut out bottom brackets, and investment cast fork crowns to suit standard or Italian oval - No wonder that more and more specialist frame builders throughout the World are demanding Haden components.

The value is unbeatable - design, quality and service direct from the manufacturer - and we can promise you even more - new ideas and further new designs next year and every year thereafter - as part of our continuing policy of product development.

We are really enthusiastic at the idea that you are thinking of using our lugs and we promise that every attention will be given to your order.

THE HADEN TANDEM ALLOY ECCENTRIC SYSTEM



parts can be ordered separately or in sets.

Each set consists of :-

- item A - 1 Front Housing Tube ref ES1
- item B - 1 Adjustable Alloy Eccentric ref ES2
1.370" x 24 TPI BSC Thread
- item C - 2 Clamping bolt holders SBH2 5/16" BSF thread
- item D - 2 Clamping bolts SB2 5/16" BSF thread
- item E - 1 Bottom Bracket Tube HM1 1.370" x 24 TPI
BSC thread

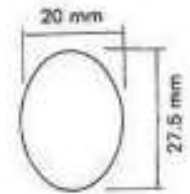
HADEN FORK CROWNS

EUROPA 275/20

This crown is a precision made component accurately machined from a high Quality Steel Investment casting.

This crown has been specially designed for use with Reynolds New Continental oval section blades.

It is also suitable for use with similar size blades made by other manufacturers.

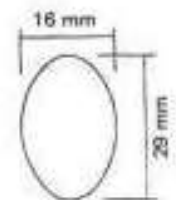


EUROPA 29/16

This crown is a precision made component accurately machined from a high Quality Steel Investment casting.

This crown has been specially designed for use with Reynolds Continental oval section blades.

It is also suitable for use with similar size blades made by other manufacturers.

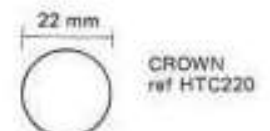


TRACK

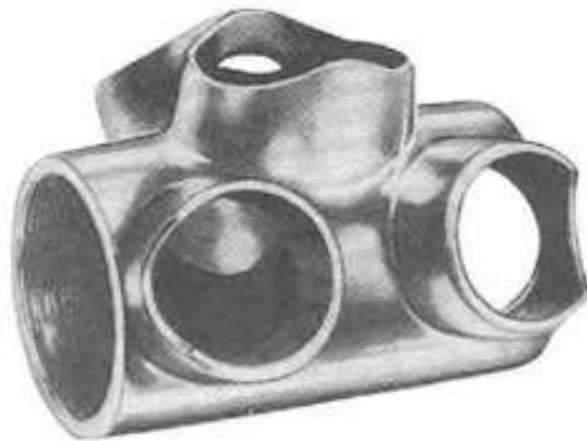
This crown is a precision made component accurately machined from a whiteheart malleable steel casting.

This crown has been specially designed for use with Reynolds 22 mm Track fork blades.

It is also suitable for use with similar size blades made by other manufacturers.

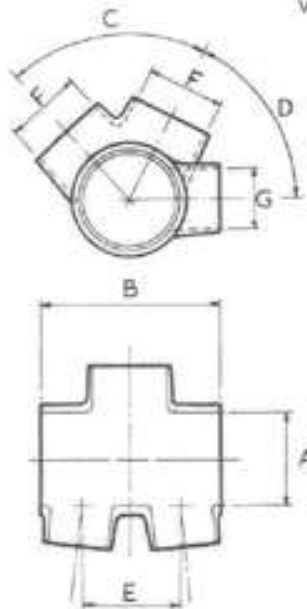


HADEN STEEL BOTTOM BRACKETS



HADEN SPORTS BOTTOM BRACKET
V. Pattern (for straight stays)

If required brackets can be supplied with three weight saving slots cut in the underside.

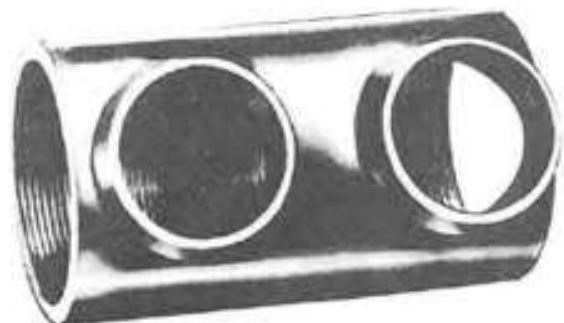


Catalogue Reference	Thread for Cup A	Width B	Angle C	Angle D	E	F	G
VB56064	1.370" x 24 TPI	68	59°	64°	38	28.6	22.2
VB56061	1.370" x 24 TPI	68	60°	61°	38	28.6	22.2
VB56063	1.370" x 24 TPI	68	60°	63°	38	28.6	22.2
VB56064	1.370" x 24 TPI	68	60°	64°	38	28.6	22.2
VB56162	1.370" x 24 TPI	68	61°	62°	38	28.6	22.2
VB56163	1.370" x 24 TPI	68	61°	63°	38	28.6	22.2
VB56164	1.370" x 24 TPI	68	61°	64°	38	28.6	22.2
VB56363	1.370" x 24 TPI	68	63°	63°	38	28.6	22.2
HM1	1.370" x 24 TPI	68	-	-	-	-	-
HM2	1.370" x 24 TPI	68	-	-	38	-	22.2

Where Required Bottom Brackets Can Be Supplied To Suit French Metric Size Tubes.



Type HM1 for welded frames
1.370" x 24 TPI BSC Thread
68mm wide 3 mm wall thickness.



Type HM2 for welded frame
1.370 x 24 TPI BSC Thread
68mm wide.
Chainstay pipes 22.2mm I/D
38mm between centres.

V. Pattern (for straight stays)

HADEN FRAME FITTINGS

EXTENSION TANG

ref ET1
Pressed Steel
80 mm long.



SEAT BOLT HOLDERS



Holder
SBH 1
Pressed type for
ribbed clip bolt



Bolt SB2 5/16 BSF



Holder
SBH 2
5/16 BSF thread



Bolt SB3 6 mm



Holder
SBH 3
6 mm thread



Allen Key AK2 for 5/16 BSF
Allen Key AK3 for 6 mm thread

SEAT STAY COMPONENTS

Seat Stay top plate SSC1



Bridge re-inforcing
diamond
SSC2



SSC3, Bridge tube 1/2" o/d x 3" long



Bridge Centre Boss
SSC4

FORK ENDS



Sports
- Front
Pressed
HFE12

Sports-Rear
Pressed and embossed
HFE13

CABLE GUIDES



Braze on
type for
top tube
CG1

Braze on
LH type
for Bottom
Bracket
fixing
(Front
changer)
CG2



Braze on
RH type
for Bottom
Bracket
fixing
(Rear
changer)
CG3