

Royal Canadian Mounted Police Gendarmerie royale du Canada Doc. no: G.S. 1045-270 Date: 2020-01-21

Specification Shorts, Bicycle

This document has 20 pages including the drawings.

This document was created in English.

The document is available in English and French.

☑ English/Anglais Français/French

The photograph on this page is for reference only.



Issued on the authority of the Commissioner, Royal Canadian Mounted Police.

Modifications

Date	Para. No's	Modifications
2009-07-24		
2012-05-28	Para 4.1.3 Drawing 1 & 2	Updated thread requirement Fixed the top stitching on the braid
2012-09-21	Para. 4.1.3 & 4.1.8.2 Para 4.1.9	Added requirement of "Certification of compliance" Added elongation requirement of 125%
2016-07-04		Re-formatted specification
2017-03-02	Title Para. 1.1 Para. 4.3.11 Scale of Measurements and Patterns	Title changed to Shorts, Bicycle. Stock number changed. Marking and cleaning paragraph modified. Lengthened inseam, modified scale of measurements and patterns.
2020-01-21	Para. 2 Para. 4.1.1 Para. 4.1.3 Para. 4.1.5- 4.1.7 Para. 4.3.2 Para. 4.3.4 Appendix A Drawings	Paragraph re-formatted and updated. Shell material updated to new stock number. Thread information updated to US standard. Component paragraphs updated. Construction paragraph updated to specify twill direction of polyester tape. Added clarity for belt loop construction. Appendix modified. Drawings re-formatted.

RCMP VIEWING SAMPLE

A viewing sample, when available, will be supplied to the successful bidder.

This will be used for the guidance of the manufacturer in all factors not covered by this specification or referred to therein. Variation from the specification may appear in the sample in which case the specification must govern.

It may be obtained from:

Royal Canadian Mounted Police Uniform & Equipment Program (440 Coventry Road, Warehouse Building) 73 Leikin Drive Ottawa, Ontario K1A 0R2

It will be sent "prepaid" and is to be returned "prepaid".

The viewing sample must be returned to the RCMP in the same condition as received by the manufacturer. Lost or damaged viewing samples must be replaced by an identical item or the RCMP must be reimbursed for the cost of an acceptable replacement.

SPECIFICATION Shorts, Bicycle

1. **Definitions**

- 1.1 This specification must govern the manufacture and inspection of Shorts, Bicycle. The specific items covered under this specification with stock numbers is as follows:
 - i. 6315 – Shorts, Bicycle / Short cycliste;
 - i. 6316-000 – Shorts, Bicycle, Specials / Short cycliste, taille spéciale.
- 1.2 This specification, pattern, drawing, viewing sample or other information issued in connection therewith, may only be used for specific enquiries, solicitations, or orders placed on behalf of the Royal Canadian Mounted Police.
- 1.3 This specification supersedes all previous specifications for Shorts, Bicycle, and Shorts, Bicycle, Male and Female.
- 1.4 This specification has been translated into French from this original English language document.

2. **Applicable Specifications**

- 2.1 The following publications are applicable to this specification and to the issues in effect on the date of the solicitation, unless otherwise specified.
- 2.2 Canadian General Standards Board (CAN/CGSB);

86.1-2003 Care Labelling of Textiles

2.3 **General Services Administration – US Government**

Commercial Item Description

A-A-50199A Thread, Polyester Core, Cotton or Polyester-Covered

2.4 **International Standards Organization (ISO)**

4915:1991	Textiles – Stitch types
4916:1991	Textiles – Seam types

2.5 **Royal Canadian Mounted Police Specification (RCMP)**

G.S. 1045-083

Cloth, Tape, Polyester

3. **General Requirements**

- 3.1 The article or material covered by this specification must be free from material and manufacturing defects that may affect its appearance or serviceability. In all particulars not covered by this specification or contract documents, production must be equivalent in all respects to the pattern and viewing sample.
- 3.2 <u>Design</u> – This unisex style short must have two slanted, front thigh pockets and two back hip pockets complete with slide fasteners for closure. There must be a sewnon and partially elasticized waistband constructed with 8 belt loops and a front fly slide fastener and buttoned waistband. The shorts bicycle must be constructed using RCMP patterns and must conform to the pattern, attached drawings, and viewing sample.

Detail Requirements 4.

4.1 **Components**

- 4.1.1 Shell Material – The shell material is RCMP stock item number 9215-000, Cloth, Poly/Cotton, Ripstop, navy in colour and must be purchased from the RCMP.
- 4.1.2 <u>Stripes</u> – The stripes are RCMP stock item number 8551-100, polyester tape, yellow in colour and must be purchased from the RCMP.
- 4.1.3 Seaming, Stitching, Buttonhole and Bar-Tack Thread – The thread must be polyester wrap, polyester core, Tex 40, Type II of matching colour to the shell material, meeting U.S. government Commercial Item Description A-A-50199A.
- 4.1.4 **Buttons** – The buttons must be four hole, 15 mm, plastic composition buttons of matching shade.
- 4.1.5 **Slide Fasteners Lengths** – Referenced in inches.

Waist Sizes	Front Fly
26 – 46 Short	6½"
26 – 46 Regular	7"
26 – 46 Tall	71/2"

- 4.1.5.1 <u>Slide Fastener - Front Fly</u> – The slide fastener for the fly must be a closed ended, brass slide fastener with Y type teeth and a 4.5 mm chain width. The slide fastener must come complete with one bottom stop and a minimum of one top stop. There must be a semi-locking slider with stainless steel locking pin, and brass pull tab. The tape must be comprised of a polyester yarn and must be black in colour. YKK #53100 YGRC 459 GSN8 J ½ (only).
- 4.1.5.2 **Slide Fastener - Front & Back Pockets** – The slide fastener must be a closed end, coil type slide fastener, 6" in length for all sizes. It must be navy in color to match shell material, YKK #01023 - CFC 39 DSYG H3 1/2 *E-BTM* (only).
- 4.1.6 Elastic – Waistband & Special Belt Loop – The elastic must be heavy duty woven elastic, with a composition of at least 70% polyester blended with rubber and a medium finish. The elastic must be black in colour, with a stretch and recovery as per component viewing samples. It must be available in two widths: 5 cm (2") and 2.5 cm (1")
- 4.1.7 Interlining Fusible – The interlining must be woven, 100 % cotton fusible interlining with a mass of 85 g/m² \pm 5 g/m². It must be black in colour and must have polyamide dot coating sufficient in concentration for no delamination to occur after five home launderings. After fusing, the fused parts must show no evidence of bubbling, colour change or bleed through. Veratex style #201 L/S has been known to meet the requirements.
- 4.2 Size and Dimensions – The Shorts, Bicycle must be supplied in the sizes specified by the RCMP and to the dimensions given in the scales of measurements and drawings. The garment components must be shaped, dimensioned and positioned in accordance with the pattern components and pattern requirements as outlined in "Appendix A".

4.3 Construction

- 4.3.1 Stitching & Seams – Using the specified thread, there must be not less than 3 and no more than 4 stitches per cm. All stitching must be lock or lock chain stitch. The beginning and ending of all stitching must be securely backstitched and tacked unless secured by other stitching. Where seaming, turning and stitching is required the edges must be properly worked out before stitching. Side seams and inseams must be constructed in accordance with a plain seam type #1.01.01 and serging type #6.01.01(edge finishing) of ISO 4916:1991. Ball point needles must be used for stitching through elastic components.
- 4.3.2 Stripes – The stripe specified in Para. 4.1.2 must be applied centered, over top of the side seam and top stitched at 1.5 mm gauge using yellow thread to match the colour of the stripe. The stripe when applied to the shorts must be free of puckering and twisting. The stripe is a right hand twill weave. When the stripe is applied to the shorts, the twill line must go from top right to bottom left and must be applied so the twill is facing in the same direction on all pieces. The stripe must extend from the bottom edge of the waistband throughout the full length of the side seam and must be turned under and stitched during the hemming process.
- 4.3.3 Waistband – The waistband must have 8 belt loops, including the special size belt loop. It must be constructed from shell material as specified in Para. 4.1.1, and must be cut as per the pattern. The right and left portions of the front waistband must be fully fused with interlining as specified in Para. 4.1.7 and must be shaped and dimensioned as per the pattern. The rear portion of the waistband (only) must be elasticized with the 5 cm wide elastic as specified in Para. 4.1.6 and must be stitched through all layers as per the viewing sample. Care must be taken to ensure that the elastic is evenly distributed on the back of the shorts. The waistband when finished must be no less than 4.5 cm and no more than 5.5 cm wide. There must be seven belt loops, sewn and bar-tacked with no less than 18 cover stitches per tack securely to the waistband. They must be placed as shown in the drawings and viewing sample. The right front of the waistband above the fly must have two buttons as specified in Para. 4.1.4 with the corresponding buttonholes as specified in Para. 4.3.8 on the left front. An additional button and buttonhole must be applied to the inside extension. The waistband when completed, must conform in all respects to the patterns, drawings and viewing sample.
- 4.3.4 **Belt Loops** – There must be seven belt loops dimensioned as per the patterns and drawings. The belt loops must be 2 cm \pm 0.2 cm wide with a functional opening of no less than 5 cm and no more than 6 cm. The placement of the belt loops must be as per the drawings and viewing sample. The lower portion of the belt loops must be constructed as part of the waistband seam and folded upwards with the top of

the belt loop topstitched and bar tacked with no less than 18 cover stitches per tack as shown in the drawings and viewing sample.

4.3.5 **Special Belt Loop** – The special belt loop at the centre back must be made from two plies of shell material as specified in Para. 4.1.1. A double layer of 2.5 cm wide elastic specified in Para. 4.1.6 must be inserted into the unfinished end of loop between the two plies and secured by a row of double stitching. The free end of the elastic must be secured to the inside of the waistband and bar tacked with no less than 18 cover stitches per tack. The special belt loop must have a buttonhole as shown in drawing 3 with the corresponding button sewn to the middle of the outside back of the shorts as shown in drawing 2. The special belt loop must conform in all respects to the patterns, drawings and viewing sample.

4.3.6 **Pockets**

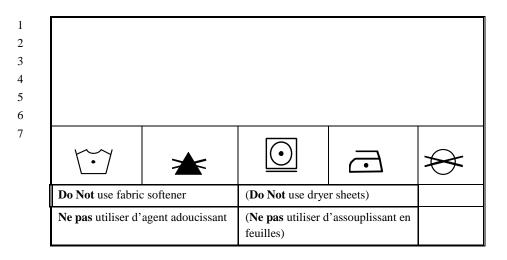
- 4.3.6.1 <u>Front Thigh Pockets</u> – Two internal front thigh pockets created from the upper and lower front outseam and the pocket bag pattern pieces, must be constructed from shell material as specified in Para. 4.1.1. The front pockets must have a coil type slide fastener as specified in para 4.1.5.2 6" in length applied centered to the opening. The slide fastener must be applied so that when the pocket is closed the slider is closest to the center front. The completed front pockets must be shaped and dimensioned as per the pattern, drawings and viewing sample.
- 4.3.6.2 **Back Pockets** – The shorts must have two internal, back pockets complete with slide fasteners as specified in Para. 4.1.5.2, 6" in length. The coil portion of the slide fastener must be applied centered in the opening. The slide fastener must be applied so that when the pocket is closed the slider is closest to the side seam. The pocket bags must be constructed from shell material as specified in Para. 4.1.1 and must be stitched and turned on all raw edges. Both ends of the pocket openings must be bar tacked with no less than 18 cover stitches per tack as shown in the drawings. The completed back pockets must be shaped and dimensioned as per the pattern, drawings and viewing sample.
- 4.3.7 Fly Opening – The fly front must be equipped with a slide fastener in accordance with Para. 4.1.5.1, with lengths as specified in Para. 4.1.5. The end of the fly curtain, extending below the bottom of the fly opening, must be bar tacked with no less than 18 cover stitches per tack to the fly facing. Care must be taken to ensure that no shell material is caught during this operation. The completed fly opening must conform in all respects to the patterns, drawing 3 and viewing sample.

- 4.3.8 **Buttonholes** – Buttonholes must be eyelet type, gimp reinforced, with a bar tacked or fish-tailed end and having a minimum of 28 stitches per inch or 11.2 stitches per centimetre. The buttonholes may be "cut first" or "cut after", and must fit a button as specified in 4.1.4. When "cut after" buttonholes are used, the cut must be clean, close to the stitches so they are equal in appearance to the "cut first" buttonholes.
- 4.3.9 **Seams** – All seams must be sewn, serged and double top-stitched with a 1.5 mm and 6 mm gauge.
- 4.3.10 **Hem** – The leg hem must be 2.5 cm finished with the raw edge folded under 1.5 cm and stitched down on the folded edged using a 3 mm gauge. The completed hem must conform in all respects to the patterns, drawings and viewing sample.
- 4.3.11 Marking & Cleaning Instructions Label – Each pair of shorts must have a durable label affixed to the back pocket bag. The marking and cleaning label must be no less than 7.5 cm x 6.5 cm. The text must be permanent inks of a contrasting colour and must withstand the life of the garment with no apparent change in appearance. All text except for the RCMP stock number and size must be in size 6 font. The RCMP stock number and size must appear in size 8 font. The manufacturer's identification must not appear anywhere on the garment except where indicated on the label. The label must contain the following information in English and French. Two options of labels are acceptable as per the tables below.
 - 1. Item name in English as written in Para. 1.1.
 - 2. Item name in French as written in Para. 1.1.
 - 3. RCMP stock number - reference contract documents. (Ex. 6315 000)
 - 4. Size and height group of the article, combining the size designation referenced in the English and French contract documents. (Ex. 34 T/L)
 - 5. Date of manufacture, in numeric format year/month (Ex. 2018/11)
 - 6. Your manufacturer identification (Company name or number).
 - 7. Care Instructions as per Option A or B.

Option A

Machine wash - cool (30°C)	Laver à la machine – à l'eau froide (30°C)
Do Not use fabric softener or chlorine bleach	Ne pas utiliser d'agent adoucissant ou d'agent de blanchiment
Tumble dry- low (Do Not use dryer sheets)	Séchage par culbutage – à température basse (Ne pas utiliser d'assouplissant en feuilles)
Steam iron - medium	Repassage à vapeur - à température moyenne
DO NOT DRY CLEAN.	NE PAS NETTOYER À SEC.

Option B



4.3.12 **<u>Identification Label</u>** - Each short must have a durable blank label 7.5 cm x 2 cm applied separately beside or below the marking and cleaning label. The labels used for the inscription of the wearer's name must be sewn onto the back pocket bag. As illustrated below.

Name/Nom:		

5. **Quality Assurance Provisions**

- 5.1 **Responsibility for Inspection** – Unless otherwise stipulated in the Contract, it is the Contractor's responsibility to satisfy the RCMP, Uniform and Equipment Program that the material and services being supplied conform to this specification. This may be accomplished by performing the tests specified in this specification or by demonstrating to the satisfaction of the RCMP, Uniform and Equipment Program that conformity to this specification of manufacturing processes is assured. The Contractor must use an independent commercial testing establishment.
- 5.2 The RCMP, Uniform and Equipment Program reserves the right to perform any inspection considered necessary to ensure the material and services conform to the specified requirements. For the purpose of inspection, a portion of each delivery not exceeding two percent or two out of any number delivered under 100 may be put to tests that could destroy the articles. If found to be inferior or not in accordance with this specification, all articles so destroyed must be replaced by others of proper quality and pattern at the expense of the Contractor. The entire delivery may also be rejected if it is found that articles previously rejected due to non-repairable defects are redelivered for inspection.
- 5.3 The Contractor will be promptly notified when any articles are not accepted and such articles will be returned at the contractor's risk and expense.

6. **Scale of Measurement Definitions and Location References**

(Refer to the Scale of Measurements and Drawing No. 1).

- 6.1 Waist Circumference (total circumference) – When the waistband is closed, the waist must be the total circumference from centre front to centre front at the centre of the waistband. To be measured at relaxed state and extended state. (A).
- 6.2 **Seat Circumference** (total circumference) – When placed flat, fly facing up, the seat must be measured across the width of the shorts at the distance specified in drawing 1 from the bottom of the waistband. The result must be doubled to measure total circumference. (B).
- 6.3 **Inseam Length** – The length must be the distance measured from the crotch to the finished hem. (C).
- 6.4 Outseam Length – The length must be the distance measured from the bottom of the waistband to the finished hem. (D).
- 6.5 Front Rise – The measurement from the crotch to the bottom of the front waistband along the seam. (E).
- 6.6 **Back Rise** – The measurement from the crotch to the bottom of the back waistband along the seam. (F).
- 6.7 Hem Circumference (total circumference) – When placed flat, the hem must be measured across the width at the bottom of short. The result must be doubled to measure total circumference. (G).

	Scale of Measurements – Shorts, Bicycle								
SIZE DES	SIGNATION GARMENT MEASUREMENTS								
Rise	Size (Inches)	Waistband Circ. Stretched	Waistband Circ. Relaxed	Seat	Inseam	Outseam Excluding Waistband	Front Rise	Back Rise	Hem Circ.
SHORT	26 S	77.5	59.5	96	28	48	25.75	35	51.25
RISE	28 S	82.5	65	101.5	28	48.5	25.75	35.25	52.25
	30 S	87.5	70	106.5	28	49	26	35.5	53.25
	32 S	92.5	75	111.5	28	49.5	26.25	35.75	54.5
	34 S	97.5	80	116.5	28	50	26.5	36	55.5
	36 S	103	85	121.5	28.25	50.5	26.75	36.25	56.5
	38 S	108	90	126.5	28.25	50.75	27	36.5	57.75
	40 S	113	95.5	132	28.25	51.25	27	36.75	58.75
	42 S	118	100.5	137	28.25	51.5	27.25	37	59.75
	44 S	123	105.5	142	28.5	52	27.5	37.25	60.75
	46 S	128	110.5	147	28.5	52.25	27.75	37.5	61.75
	48 S	133.5	115.5	152	28.5	52.75	28	37.75	62.75
	50 S	138.5	120.5	157	28.5	53.25	28.25	38	63.75
	JREMENT ATION	A	A	В	С	D	Е	F	G
TOLER	ANCES ±	1 cm	1 cm	1 cm	1 cm	1 cm	1 cm	1 cm	1 cm

NOTE: All measurements are in centimetres unless otherwise indicated. Shrinkage of the poly/cotton shell material has been factored into the inseam and out seam lengths.

	Scale of Measurements - Shorts, Bicycle								
SIZE DES	SIZE DESIGNATION GARMENT MEASUREMENTS								
Rise	Size (Inches)	Waistband Circ. Stretched	Waistband Circ. Relaxed	Seat	Inseam	Outseam Excluding Waistband	Front Rise	Back Rise	Hem Circ.
REGULAR	26 R	77.5	59.5	96	30	52	27.25	36.5	51.25
<u>RISE</u>	28 R	82.5	65	101.5	30	52.5	27.5	36.75	52.25
	30 R	87.5	70	106.5	30	53	27.75	37	53.25
	32 R	92.5	75	111.5	30	53.5	28	37.25	54.5
	34 R	97.5	80	116.5	30	54	28.25	37.5	55.5
	36 R	103	85	121.5	30.25	54.5	28.25	37.75	56.5
	38 R	108	90	126.5	30.25	54.75	28.5	38	57.75
	40 R	113	95.5	132	30.25	55.25	28.75	38.5	58.75
	42 R	118	100.5	137	30.25	55.5	29	38.75	59.75
	44 R	123	105.5	142	30.5	56	29.25	39	60.75
	46 R	128	110.5	147	30.5	56.25	29.5	39.25	61.75
	48 R	133.5	115.5	152	30.5	56.75	29.75	39.5	62.75
	50 R	138.5	120.5	157	30.5	57.25	30	39.75	63.75
	REMENT ATION	A	A	В	С	D	Е	F	G
TOLER.	ANCES ±	1 cm	1 cm	1 cm	1 cm	1 cm	1 cm	1 cm	1 cm

NOTE: All measurements are in centimetres unless otherwise indicated. Shrinkage of the poly/cotton shell material has been factored into the inseam and out seam lengths.

			Scale	of Measure	ments – Shor	ts, Bicycle			
SIZE DES	SIZE DESIGNATION GARMENT MEASUREMENTS								
Rise	Size (Inches)	Waistband Circ. Stretched	Waistband Circ. Relaxed	Seat	Inseam	Outseam Excluding Waistband	Front Rise	Back Rise	Hem Circ.
TALL	26 T	77.5	59.5	96	32	56	29	38.25	51.25
<u>RISE</u>	28 T	82.5	65	101.5	32	56.5	29.25	38.5	52.25
	30 T	87.5	70	106.5	32	57	29.5	38.75	53.25
	32 T	92.5	75	111.5	32	57.5	29.75	39	54.5
	34 T	97.5	80	116.5	32	58	30	39.25	55.5
	36 T	103	85	121.5	32.25	58.5	30	39.5	56.5
	38 T	108	90	126.5	32.25	58.75	30.25	39.75	57.75
	40 T	113	95.5	132	32.25	59.25	30.5	40	58.75
	42 T	118	100.5	137	32.25	59.5	30.75	40.25	59.75
	44 T	123	105.5	142	32.5	60	31	40.75	60.75
	46 T	128	110.5	147	32.5	60.25	31.25	41	61.75
	48 T	133.5	115.5	152	32.5	60.75	31.5	41.25	62.75
	50 T	138.5	120.5	157	32.5	61.25	31.75	44.5	63.75
	JREMENT CATION	A	A	В	С	D	Е	F	G
TOLER	RANCES ±	1 cm	1 cm	1 cm	1 cm	1 cm	1 cm	1 cm	1 cm

NOTE: All measurements are in centimetres unless otherwise indicated. Shrinkage of the poly/cotton shell material has been factored into the inseam and out seam lengths.

APPENDIX A

Sealed Pattern Identifier

Pattern Title: Shorts, Bicycle

Patterns - Patterns are available from the RCMP, Uniform and Equipment Program. Firms requested to produce Pre-Award Samples will be provided with the base pattern only. The full set of patterns in individual sizes will be provided to the successful bidder after the contract is awarded. The bidder will receive the files electronically in a .DXF format unless paper is requested.

The patterns include seam allowances, drill holes and/or placement templates. All pieces must be cut in the direction indicated on the grain line of the pattern pieces. Manufacturers are required to make changes to the pattern, if necessary, in order to meet the scale of measurements and/or to suit the production process, however, the design and grade must not be affected or changed. Shrinkage of the poly/cotton shell material has been factored into the inseam and outseam lengths in the scale of measurements.

All shell parts must be cut in the direction indicated on the grain line of the pattern pieces.

All patterns are the property of the RCMP and must be returned upon completion of the contract.

Pattern Pieces - This design has 13 pattern components.

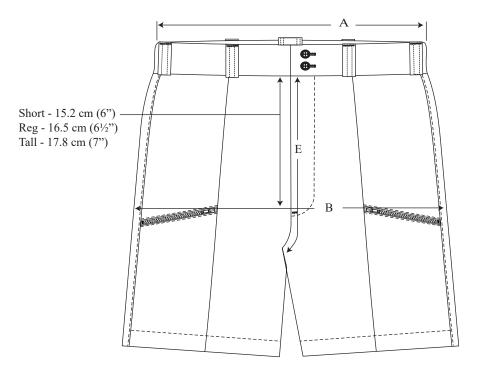
Legend: Shell Material Interlining (Fusing)	= Para. 4.1.1 = Para. 4.1.7
Cut 1 Single	= Cut 1
Cut 1 Paired	= Cut 2
(RSU)	= Right Side Up

Pattern Components	Nomenclature	Quantity to be cut	Material
# 1 of 13	Back	1 Paired	Shell Material
# 2 of 13	Inseam Front	1 Paired	Shell Material
# 3 of 13	Lower Front Outseam	1 Paired	Shell Material

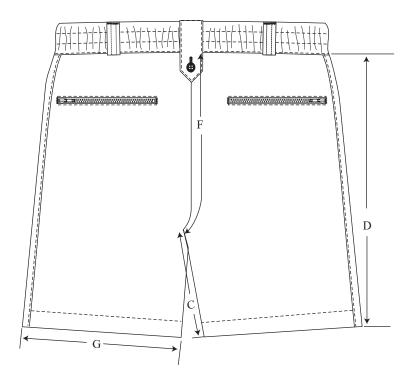
Pattern Components	Nomenclature	Quantity to be cut	Material
# 4 of 13	Upper Front Outseam	1 Paired	Shell Material
# 5 of 13	Pocket Bag - Front	1 Paired	Shell Material
# 6 of 13	Waistband	1 Single	Shell Material (RSU)
# 7 of 13	Belt Loops	1 Single	Shell Material (RSU)
# 8 of 13	Fly Curtain	1 Paired	Shell Material
# 9 of 13	Fly Lining	1 Single	Shell Material (RSU)
#10 of 13	Pocket Bag - Back	1 Paired	Shell Material
#11 of 13	Special Belt Loop	1 Paired	Shell Material
#12 of 13	Waistband Fusing - Right Front	1 Single	Fusing (RSU)
#13 of 13	Waistband Fusing - Left Front	1 Single	Fusing (RSU)

Drawing 1

Shorts, Bicycle Measurement Location



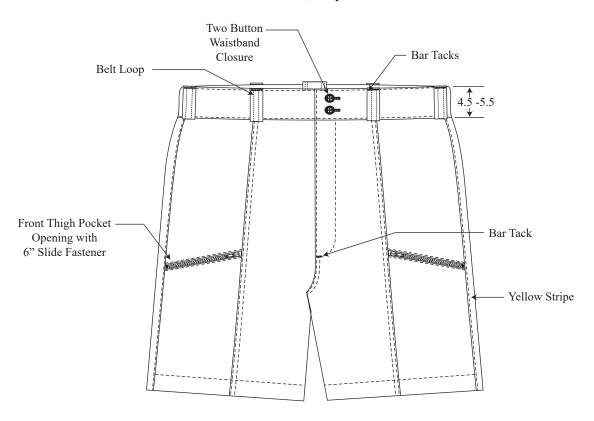
Front View



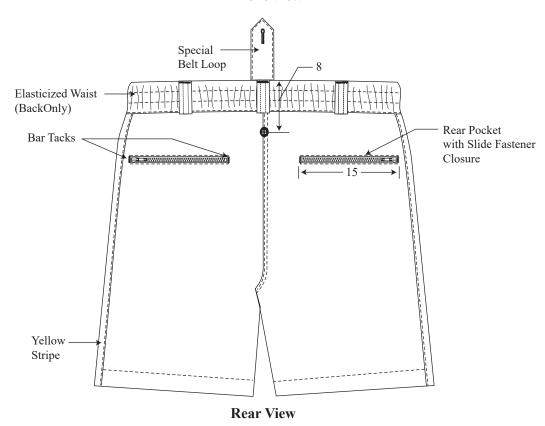
Rear View

Drawing 2

Shorts, Bicycle



Front View



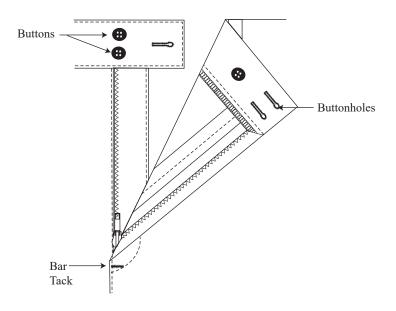
NOT TO SCALE

All measurements are shown in centimeters.

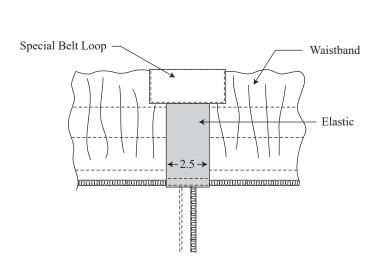
 $\pm\,0.5$ cm tolerance acceptable unless otherwise indicated.

Drawing 3

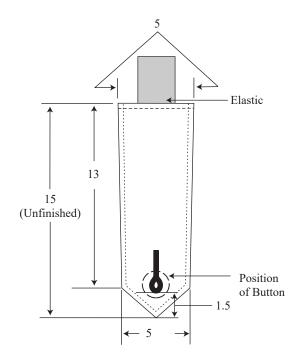
Shorts, Bicycle



Waistband Closure Detail



Inside Waistband / Special Belt Loop Detail



Special Belt Loop