

Royal Canadian Mounted Police Gendarmerie royale du Canada Doc. no: G.S. 1045-270 Date: 2017-03-02

# 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	Updated thread requirement
	Drawing 1 & 2	Fixed the top stitching on the braid
2012-09-21	Para. 4.1.3 & 4.1.8.2	Added requirement of "Certification of compliance"
	Para 4.1.9	Added elongation requirement of 125%
2016-07-04		Re-formatted specification
2017-03-02	Title	Title changed to Shorts, Bicycle.
	Para. 1.1	Stock number changed.
	Para. 4.3.11	Marking and cleaning paragraph modified.
	Scale of Measurements and Patterns	Lengthened inseam, modified scale of measurements and patterns.

# **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 shall govern.

It may be obtained from:

Royal Canadian Mounted Police Uniform & Equipment Program (440 Coventry Road, Warehouse Building) 1200 Vanier Parkway Ottawa, Ontario K1A 0R2

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

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

# SPECIFICATION SHORTS, BICYCLE

#### 1. **Definitions**

- 1.1 This specification shall 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. <u>Applicable Specifications</u>

- 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 RCMP, G.S.1045-83, Cloth, Tape, Polyester.
- 2.3 CAN/CGSB-4.131-93, Thread, Polyester, Polyester-Covered.
- 2.4 ISO, International Standards Organization; ISO 4915, "Stitch Types" and ISO 4916:1991, "Seam Types".
- 2.5 CAN/CGSB 86.1-2003, Care Labeling of Textiles.

#### 3. <u>General Requirements</u>

- 3.1 The article or material covered by this specification shall 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 shall be equivalent in all respects to the pattern and viewing sample.
- 3.2 **Design** This unisex style short shall have two slanted, front thigh pockets and two back hip pockets complete with slide fasteners for closure. There shall be a sewn-on and partially elasticized waistband constructed with 8 belt loops and a front fly slide fastener and buttoned waistband. The shorts bicycle shall be constructed using RCMP patterns and shall conform to the pattern, attached drawings, and viewing sample which are part of this specification.

## 4. Detail Requirements

## 4.1 <u>Components</u>

- 4.1.1 <u>Shell Material</u> The shell material is RCMP stock item number 9160-000, Cloth, Poly/Cotton, Drill, navy in colour and shall 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 shall be purchased from the RCMP.
- 4.1.3 **Seaming, Stitching, Buttonhole and Bar-Tack Thread** The thread shall be polyester wrap, polyester core, Tex 40, Class B of matching colour, meeting CAN/CGSB 4.131-93.
- 4.1.4 <u>**Buttons**</u> The buttons shall be four hole, 15 mm, plastic composition buttons of matching shade.
- 4.1.5 <u>Slide Fasteners Lengths</u> Referenced in inches.

Waist Sizes	Front Fly	Front Pockets	Back Pockets
26 - 46 Short	6½"	6"	6"
26 - 46 Regular	7"	6"	6"
26 - 46 Tall	71⁄2"	6"	6"

- 4.1.5.1 <u>Slide Fastener Front Fly</u> The slide fastener for the fly shall be a closed ended, brass slide fastener with Y type teeth and a 4.5 mm chain width. The slide fastener shall come complete with one bottom stop and a minimum of one top stop. There shall be a semi-locking slider with stainless steel locking pin, and brass pull tab. The tape shall be comprised of a polyester yarn and shall be black in colour. YKK YGC-459<sup>1</sup>/<sub>2</sub> is known to meet this requirement.
- 4.1.5.2 <u>Slide Fastener Front & Back Pockets</u> The slide fastener shall be a closed end, coil type slide fastener. It shall be navy in color to match shell material, YKK CFC 39YG ½ H6 \*E-BTM\*.
- 4.1.6 <u>Elastic Waistband & Special Belt Loop</u> The elastic used for the waistband and special belt loop shall be non-roll, pre-shrunk, with a knitted or woven construction. It shall be 5 cm (2") in width for the waistband and 2.5 cm (1") for the special belt loop. The elastic shall have elongation of 125%. The elastic used shall be equal in respect to the viewing sample for durability requirements.
- 4.1.7 **Interlining Waistband** The interlining shall be a fusible interlining,  $85 \text{ g/m}^2 \pm 10 \text{ g/m}^2$  in accordance with the viewing sample.

The fusible interlining shall be used in accordance with the fusible interlining supplier's recommendations for time, temperature and pressure. After fusing, the fused parts shall show no evidence of bubbling, colour change or bleed through.

4.2 <u>Size and Dimensions</u> – Shorts, Bicycle to this specification shall be supplied in the sizes specified by the RCMP and to the dimensions given in the scales of measurements and drawings forming part of this specification. The garment components shall be shaped, dimensioned and positioned in accordance with the pattern components and pattern requirements as outlined in "Appendix A" forming part of this specification.

#### 4.3 Construction

4.3.1 <u>Stitching & Seams</u> – Using the specified thread, there shall be not less than 3 and no more than 4 stitches per cm. All stitching shall be lock or lock chain stitch. The beginning and ending of all stitching shall be securely backstitched and tacked unless secured by other stitching. Where seaming, turning and stitching is required the edges shall be properly worked out before stitching. Side seams and inseams shall be constructed in accordance with a plain seam type #1.01.01 and serging type #6.01.01(edge finishing) of ISO 4916:1991.

- 4.3.2 <u>Stripes</u> The stripe specified in Para. 4.1.2 shall be applied centered, over top of the side seam and top stitched at 1.5 mm gauge. The stripe shall extend from the bottom edge of the waistband throughout the full length of the side seam and shall be turned under and stitched during the hemming process.
- 4.3.3 **Waistband** – The waistband shall have 8 belt loops, including the special size belt loop. It shall be constructed from shell material as specified in Para. 4.1.1, and shall be cut as per the pattern. The right and left portions of the front waistband shall be fully fused with interlining as specified in Para. 4.1.7 and shall be shaped and dimensioned as per the pattern. The rear portion of the waistband (only) shall be elasticized with elastic as specified in Para. 4.1.6 and shall be stitched through all layers as per the viewing sample. Care shall be taken to ensure that the elastic is evenly distributed on the back of the shorts. The waistband when finished shall be no less than 4.5 cm wide. There shall be seven belt loops, sewn and bar-tacked with no less than 18 cover stitches per tack securely to the waistband. They shall be placed as shown in the drawings and viewing sample. The right front of the waistband above the fly shall 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 shall be applied to the inside extension. The waistband when completed, shall conform in all respects to the patterns, drawings and viewing sample.
- 4.3.4 <u>Belt Loops</u> There shall be seven belt loops dimensioned as per the patterns and drawings. The placement of the belt loops shall be as per the drawings and viewing sample. The lower portion of the belt loops shall 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 shall be made from two plies of shell material as specified in Para. 4.1.1. A double layer of elastic specified in Para. 4.1.6 shall 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 shall be secured to the inside of the waistband and bar tacked with no less than 18 cover stitches per tack. The special belt loop shall have a buttonhole as shown in the drawings with the corresponding button sewn to the middle of the outside back of the shorts. The special belt loop shall conform in all respects to the patterns, drawings and viewing sample.

## 4.3.6 **Pockets**

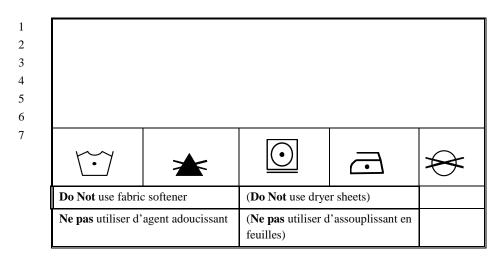
- 4.3.6.1 **Front Thigh Pockets** Two internal front thigh pockets created from the upper and lower front outseam and the Pocket Bag pattern pieces, shall be constructed from shell material as specified in Para. 4.1.1. The front pockets shall have a coil type slide fastener as specified in para 4.1.5.2 with lengths specified in Para. 4.1.5 applied centered to the opening. The slide fastener shall be applied so that when the pocket is closed the slider is closest to the center front. The completed front pockets shall be shaped and dimensioned as per the pattern, drawings and viewing sample.
- 4.3.6.2 **<u>Back Pockets</u>** The shorts shall have two internal, back pockets complete with slide fasteners as specified in Para. 4.1.5.2, with lengths as specified in Para. 4.1.5. The coil portion of the slide fastener shall be applied centered in the opening. The slide fastener shall be applied so that when the pocket is closed the slider is closest to the side seam. The pocket bags shall be constructed from shell material as specified in Para. 4.1.1 and shall be stitched and turned on all raw edges. Both ends of the pocket openings shall be bar tacked with no less than 18 cover stitches per tack as shown in the drawings. The completed back pockets shall be shaped and dimensioned as per the pattern, drawings and viewing sample.
- 4.3.7 **<u>Fly Opening</u>** The fly front shall 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, shall be bar tacked with no less than 18 cover stitches per tack to the fly facing. Care shall be taken to ensure that no shell material is caught during this operation. The completed fly opening shall conform in all respects to the patterns, drawings and viewing sample.
- 4.3.8 **Buttonholes** Buttonholes shall 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 shall fit a button as specified in 4.1.4. When "cut after" buttonholes are used, the cut shall be clean, close to the stitches so they are equal in appearance to the "cut first" buttonholes.
- 4.3.9 <u>Seams</u> All seams shall be sewn, serged and double top-stitched with a 1.5 mm and 6 mm gauge.
- 4.3.10 <u>Hem</u> The leg hem shall 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 shall conform in all respects to the patterns, drawings and viewing sample.

- 4.3.11 <u>Marking & Cleaning Instructions Label</u> Each pair of shorts shall have a durable label affixed to the back pocket bag. The marking and cleaning label shall be no less than 7.5 cm x 6.5 cm. The text shall be permanent inks of a contrasting colour and shall withstand the life of the garment with no apparent change in appearance. All text except for the RCMP stock number and size shall be in size 6 font. The RCMP stock number and size shall appear in size 8 font. The manufacturer's identification shall not appear anywhere on the garment except where indicated on the label. The label shall 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. 2001/11)
  - 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)
<b>Do Not</b> use fabric softener or chlorine bleach	<b>Ne pas</b> utiliser d'agent adoucissant ou d'agent de blanchiment
Tumble dry- low ( <b>Do Not</b> use dryer sheets)	Séchage par culbutage – à température basse ( <b>Ne pas</b> 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 shall 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 shall be sewn onto the back pocket bag. As illustrated below.

Name/Nom:		

<u>Note:</u> The manufacturer's identification shall not appear anywhere on the garment except on the garment label as indicated.

#### 5. **Quality Assurance Provisions**

5.1 <u>Responsibility for Inspection</u> – Unless otherwise stipulated in the contract, it is the prime 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 any independent, North American, ISO 9001 certified and ISO 17025 "Textile" certified testing facilities.

- 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 shall 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 shall 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 <u>Seat Circumference (total circumference)</u> When placed flat, fly facing up, the seat shall be measured across the width of the shorts at the distance specified in the drawing from the bottom of the waistband. The result shall be doubled to measure total circumference. (B).
- 6.3 **Inseam Length** The length shall be the distance measured from the crotch to the finished hem. (C).
- 6.4 **Outseam Length** The length shall 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 <u>Hem Circumference (total circumference)</u> When placed flat, the hem shall be measured across the width at the bottom of short. The result shall be doubled to measure total circumference. (G).

Scale of Measurements – Shorts, Bicycle									
SIZE DESIGNATION GARMENT MEASUREMENTS									
Rise	Size (Inches)	Waistband Circ. Stretched	Waistband Circ. Relaxed	Seat	Inseam	Outseam Excluding Waistband	Front Rise	Back Rise	Hem Circ.
<b>SHORT</b>	26 S	77.5	59.5	96	28	48	25.75	35	51.25
<u>RISE</u>	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	А	А	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 DESIGNATION GARMENT MEASUREMENTS									
Rise	Size (Inches)	Waistband Circ. Stretched	Waistband Circ. Relaxed	Seat	Inseam	Outseam Excluding Waistband	Front Rise	Back Rise	Hem Circ.
<b>REGULAR</b>	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	А	А	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 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 ATION	А	А	В	С	D	Е	F	G
TOLEF	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.

## **APPENDIX A**

#### Sealed Pattern Identifier

Pattern #:1045-270Title:Shorts, Bicycle

Paper Patterns - Paper patterns are available from the RCMP, Uniform and Equipment Program, Ottawa Ontario, under Pattern # G.S. 1045-270 Shorts, Bicycle. Firms requested to produce Precontract Award Samples will be provided with the base pattern only. The full set of patterns either in individual sizes or as a graded nest will be provided to the successful bidder after the contract is awarded.

The paper patterns include seam allowances, drill holes and/or placement templates. Contractors may make changes required to suit their production process, however, the design and grade shall 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

# APPENDIX A

# **Sealed Pattern Identifier**

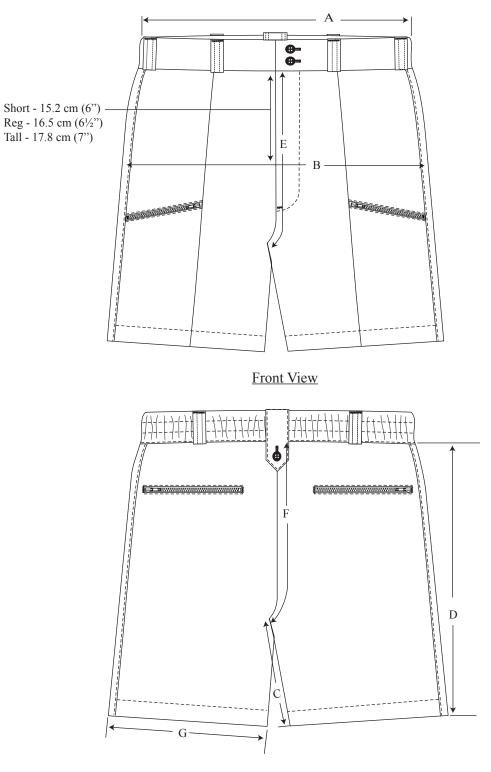
Pattern #: G.S. 1045-270 Title:

Shorts, Bicycle

Pattern Components	Nomenclature	Quantity to be cut	Material
<b># 1</b> of 13	Back	1 Paired	Shell Material
<b># 2</b> of 13	Inseam Front	1 Paired	Shell Material
<b># 3</b> of 13	Lower Front Outseam	1 Paired	Shell Material
<b># 4</b> of 13	Upper Front Outseam	1 Paired	Shell Material
<b># 5</b> of 13	Pocket Bag - Front	1 Paired	Shell Material
<b># 6</b> of 13	Waistband	1 Single	Shell Material (RSU)
<b># 7</b> of 13	Belt Loops	1 Single	Shell Material (RSU)
<b># 8</b> of 13	Fly Curtain	1 Paired	Shell Material
<b># 9</b> of 13	Fly Lining	1 Single	Shell Material (RSU)
<b>#10</b> of 13	Pocket Bag - Back	1 Paired	Shell Material
<b>#11</b> of 13	Special Belt Loop	1 Paired	Shell Material
<b>#12</b> of 13	Waistband Fusing - Right Front	1 Single	Fusing (RSU)
<b>#13</b> of 13	Waistband Fusing - Left Front	1 Single	Fusing (RSU)

#### Measurement Location





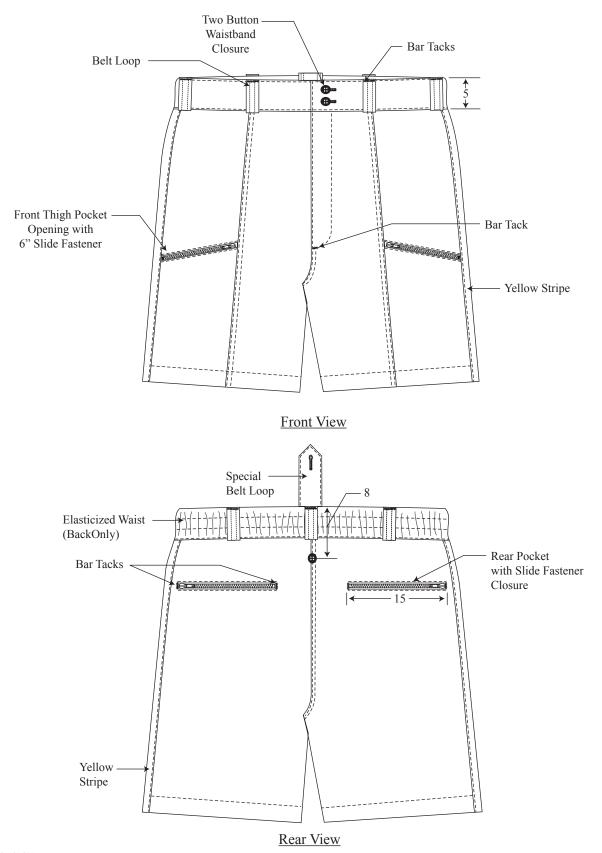
Rear View

#### NOT TO SCALE

All measurements are shown in centimeters, unless otherwise indicated.

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

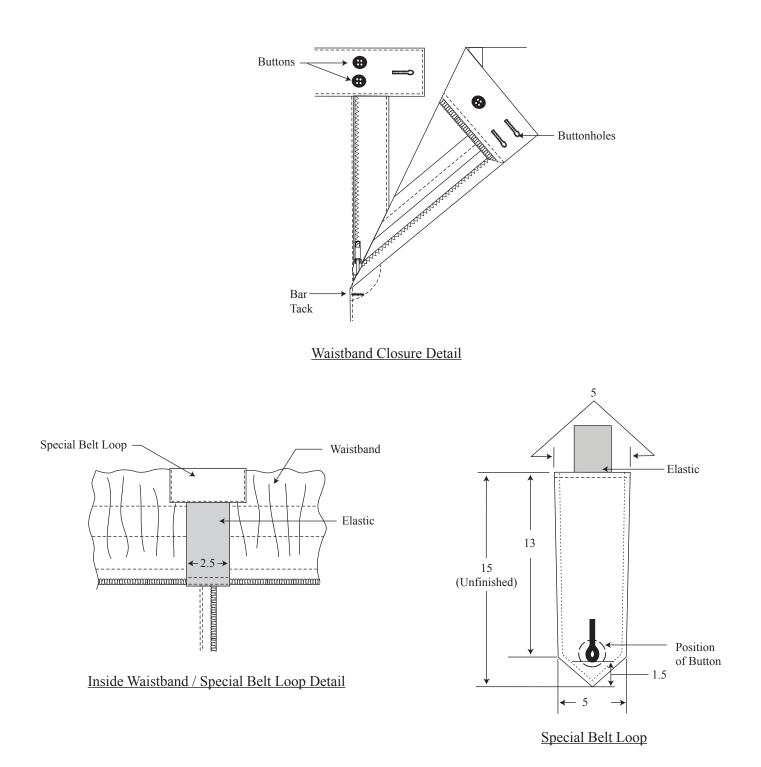




# NOT TO SCALE

All measurements are shown in centimeters, unless otherwise indicated.  $\pm 0.5$  cm tolerance acceptable unless otherwise indicated.





#### NOT TO SCALE All measurements are shown in centimeters, unless otherwise indicated.

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