



Technical Specification for
CEREMONIAL BELTS, SLINGS & POUCHES
WITH GOLD/SILVER LACE/EMBROIDERY

Royal Navy

Defence Clothing

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MINISTRY OF DEFENCE



PREFACE

TABLE 1 – PRODUCT LIST

Item Name		CEREMONIAL BELTS, SLINGS & POUCHES WITH GOLD/SILVER LACE/EMBROIDERY ARMY & ROYAL NAVY	
Development File No.			
Product Support File No.			
NATO Stock No.	User	Description	Pattern No.
8465-99-130-6111	RN Flag Rank	BELT WAIST SWORD DRESS 35-38	D00623B TG
8465-99-130-6112	RN Flag Rank	BELT WAIST SWORD DRESS 37-40	D00623B TG
8465-99-130-6113	RN Flag Rank	BELT WAIST SWORD DRESS 39-42	D00623B TG
8465-99-130-6114	RN Flag Rank	BELT WAIST SWORD DRESS 41-44	D00623B TG

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TABLE 2 – ISSUE RECORD

Issue No.	Comments	Issue Date
1	This new specification includes rationalisation of measurements, technical information and Patterns.	18 August 2010

PART 1

1. THE PRODUCT

- a. Use of the Product. Various belts, slings and pouches, worn on ceremonial duty. The items are all embellished with gold and/or silver lace or embroidery. Figure 1 shows waist belt.

FIGURE 1



TABLE 3 – RELATED SPECIFICATIONS AND DOCUMENTS

Specification/Document	Detail
BS EN ISO 105 Part B02 Part X12 Part E01	Textiles. Tests for colour fastness Colour fastness to artificial light: Xenon arc fading lamp test Colour fastness to rubbing Colour fastness to water
BS EN ISO 11640	Leather. Tests for colour fastness
BS EN 12590	Textiles industrial sewing threads made wholly or partly from synthetic fibres.
BS 2780	Glossary of leather terms.
BS 3870 Parts 1 and 2	Seams and stitching
BS 7318	Specification for industrial sewing threads made from linen (flax) or cotton.
DEF STAN 81-89	Paper, Tissue, Wrapping
UK/SC/3933	Braid, cord, lace and embroidery, metal, gold braid, cord, lace and embroidery, metal, silver
UK/SC/5126	Insignia, Buttons, Pins, Plates and Titles Manufactured from Gilding Metal, Brass and Nickel Silver

2. PATTERNS

- a. Master Patterns. The DC holds a Master Pattern for this product. Potential contractors may view the pattern on site by arrangement with the DC Commercial Department.
- b. Standard Patterns. A Standard Pattern may be obtained from the DC Technical Information Office and may be used to provide the criteria for all materials, components and manufacturing features not fully defined in this specification.

PART 2

3. PRODUCT DESIGN

a. Product Description.

TABLE 4 – PRODUCT COMPONENTS

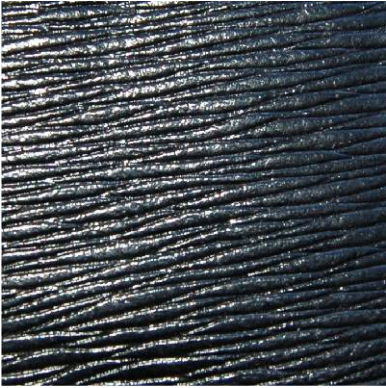
4.1 Leather	<ul style="list-style-type: none">• Terms used are defined in BS 2780• All leather is to be free from flaws and other defects• The data sheets define the leather thicknesses.• The contractor is responsible for using such types or thicknesses of leather as will produce an item to match the standard patterns• Leather dye to comply with the colour fastness requirements test in Table 6b• Morocco leather is to be of the long grain type (see figure 2) finished with French leather varnish <p style="text-align: center;"><u>Figure 2</u></p> 
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TABLE 4 – PRODUCT COMPONENTS (CONTINUED)

<p>4.2 Yarns and Wires 2% Gold</p>	<ul style="list-style-type: none"> • Table 5 details which patterns contain 2% gold yarns or wires to conform to specification UK/SC/3933: • The contractor is responsible for using such counts or thicknesses of yarns or wires respectively as will produce an item to match the standard patterns • Table 5 defines the yarns used in each item together with the yarn count. Yarn count is defined in the metric system (nm) i.e. the number of kilometres of yarn per kilogram • Table 5 defines the wires used in each item together with the thickness. Thickness is defined in microns. 1 micron = 0.001 millimetres
<p>4.3 Coloured Yarns</p>	<ul style="list-style-type: none"> • All coloured yarns used in the manufacture of these items are to be of equal quality to those used in the standard pattern, and meet the test requirements of: Table 6a colour fastness
<p>4.4 Embellishments and fittings</p>	<ul style="list-style-type: none"> • Gilding metal embellishments and fittings are to conform to UK/SC/5126
<p>4.5 Sewing thread</p>	<ul style="list-style-type: none"> • All hand sewing threads is are be 18s count linen, 3 cord to BS 7318 or an approved alternative (sewing threads for leather items may be treated with beeswax) • All machine sewing threads are to be polyester and cotton, continuous filament polyester core, cotton sheath. The shade is to match that of the relevant standard pattern. To comply with BS EN 12590 or an approved alternative
<p>4.6 Adhesive</p>	<ul style="list-style-type: none"> • All adhesives used are to be natural rubber based or an approved alternative
<p>4.7 Other components</p>	<ul style="list-style-type: none"> • Other components not specified above must be as in the Standard Patterns or an alternative approved by DC with similar performance characteristics

TABLE 5 – PRODUCT CONSTRUCTION

<p>5.1 Design and assembly of belts etc.</p>	<ul style="list-style-type: none"> • The design, assembly, textures and shades of all items are to be strictly in accordance with that of the guiding standard pattern, except those caused through the effects of natural wear and tear and ageing • Lace is to be applied to the items with the direction of the design correctly orientated. In all cases the standard patterns are To Guide for the direction of the lace design
<p>5.2 Seams and Stitching</p>	<ul style="list-style-type: none"> • To comply with BS 3870 machine stitching is to be stitch type 301 with at least six but no more than eight stitches per 2cm and to be correctly tensioned • All sewing is to be free from pucker • All items are to be free from all ends of thread
<p>5.3 Embellishments and fittings</p>	<ul style="list-style-type: none"> • As detailed in the Data sheets • Eyelets are to fasten with closed turnover rings. Sharp edges or points are unacceptable
<p>5.4 Measurements</p>	<ul style="list-style-type: none"> • All measurements specified in the data sheets are in millimetres unless otherwise stated - See data sheets • Table 8 denotes dimensional tolerances to be adhered to
<p>5.5 Packaging</p>	<ul style="list-style-type: none"> • All items manufactured with metal wires and yarns are to be first wrapped in acid free tissue paper (as per DEF STAN 81-89) before being packed in suitably sealed clear polythene bags, and labelled as per section 4 • All other items are to be individually packed in suitably sealed clear polythene bag, and labelled as per section 4 • Individually packed items are to be boxed and delivered as detailed in the requirements of the contract

TABLE 5 – PRODUCT CONSTRUCTION (CONTINUED)

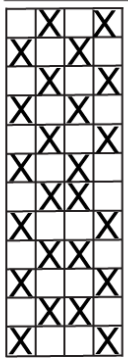
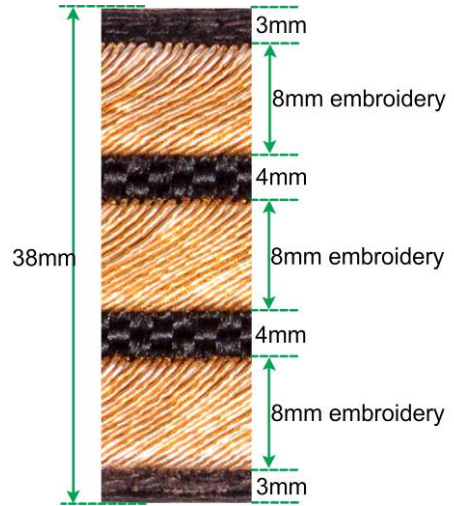
5.6 Webbing and Lace	<u>RN Black with Gold embroidery 38mm wide (1.5 inch)</u> <u>3 Gold Stripes</u>		
	<ul style="list-style-type: none"> Warp – cotton 3/60nm black 		
	<u>Warp Details</u>	<u>Selvedge Ends</u>	<u>Ground Ends</u>
	Black cotton	32	136
	<ul style="list-style-type: none"> Weft – Viscose Rayon 30nm black 38 picks per 10mm (needle woven – double picks) Embroidery - 2% gold passing thread, between 17 and 21 stitches per 20mm Gold material and yarns comply with the requirements of specification UK/SC/3933 		
	Lace Weave	Lace Dimensions	
<p>Structure</p>  <p>X Denotes lift</p>			

TABLE 5 – PRODUCT CONSTRUCTION (CONTINUED)

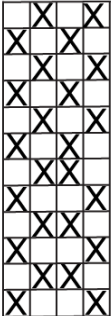
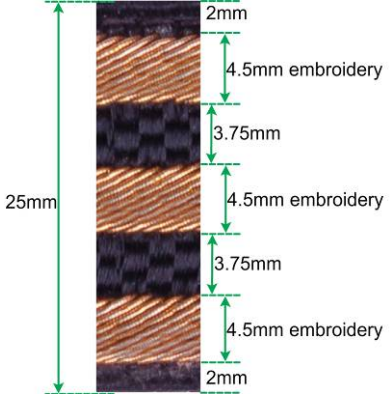
5.7 Webbing and Lace	<u>RN Black with Gold embroidery 25mm wide (1 inch)</u> <u>3 Gold Stripes</u>		
	<ul style="list-style-type: none"> Warp – cotton 3/60nm black 		
	<u>Warp Details</u>	<u>Selvedge Ends</u>	<u>Ground Ends</u>
	Black cotton	16	116
	<ul style="list-style-type: none"> Weft – Viscose Rayon 30nm black 38 picks per 10mm (needle woven – double picks) Embroidery - 2% gold passing thread, between 17 and 21 stitches per 20mm Gold material and yarns comply with the requirements of specification UK/SC/3933 		
	Lace Weave	Lace Weave	
<p>Structure</p>  <p>X Denotes lift</p>			

TABLE 5 – PRODUCT CONSTRUCTION (CONTINUED)

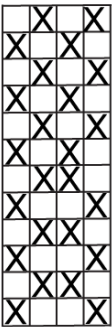
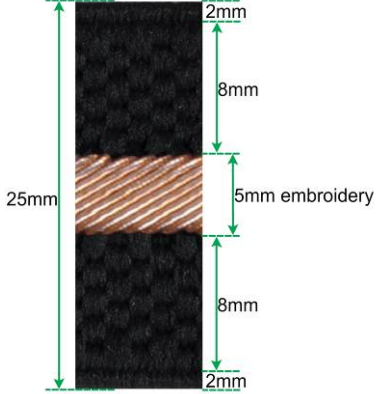
5.8 Webbing and Lace	<u>RN Black with Gold embroidery 25mm wide (1 inch)</u> <u>1 Gold Stripe</u>		
	<ul style="list-style-type: none"> Warp – cotton 3/60nm black 		
	<u>Warp Details</u>	<u>Selvedge Ends</u>	<u>Ground Ends</u>
	Black cotton	16	116
	<ul style="list-style-type: none"> Weft – Viscose Rayon 30nm black 38 picks per 10mm (needle woven – double picks) Embroidery - 2% gold passing thread, between 17 and 21 stitches per 20mm Gold material and yarns comply with the requirements of specification UK/SC/3933 		
	Lace Weave	Lace Dimensions	
<p style="text-align: center;">Structure</p>  <p style="text-align: center;">X Denotes lift</p>			

TABLE 6 – COLOUR FASTNESS REQUIREMENTS

Minimum ratings unless otherwise stated in the tender or contract

a. Colour fastness for textiles

METHOD OF TEST – BS EN ISO 105					
	BO2	X12		EO1	
	LIGHT (XENON)	RUBBING		WATER	
	Reference Rating	Dry Rubbing	Wet Staining	Colour Change	Colour Staining
Threads & Yarns	4-5	-	-	4-5	4-5
Finished Items	-	4	3	4-5	4-5

b. Colour fastness for leather

METHOD OF TEST			
BS EN ISO 11640			
Dry 500 Cycles		Damp Felt Pad 20 Cycles	
Grain Surface	Pad (Staining)	Grain Surface	Pad (Staining)
4-5	3-4	4-5	3-4

4. PACKAGING AND LABELLING REQUIREMENTS

- a. Each NSN is to be sealed in a clear polyurethane bag with a pressure sensitive self adhesive label affixed detailing the Item Description, NSN, Contract Number, size (where applicable), Quantity, Denomination and year of manufacture.
- b. Additional labelling for belts - Where design permits a belt is to have a printed vinyl sewn-in label securely attached into a seam such that it will not be visible when the item is in worn. Labels are to clearly show: Item Description, NSN, Contract Number, Size (where applicable) and year of manufacture.
- c. Additionally, all packaging requirements quoted in the terms & conditions of the contract are to be adhered to.
- d. Items should always be packaged in a way to prevent damage during transit and storage.
- e. Multiple quantities of the same individually packaged NSNs may be shipped in the same box. Mixed NSN multiple packaging is not permitted.
- f. Multiple packaging label - Each outer package is to be clearly labelled with the Item Description, NSN, Contract Number, Quantity, Denomination and year of manufacture

TABLE 7 – SPECIMEN LABELLING

Outer packaging label

Item Description NSN Contract Number Size (where applicable) Quantity Denomination Year of Manufacture
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Sewn-in labels

Item Description NSN Contract Number Size (where applicable) Year of Manufacture
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TABLE 8 – DIMENSIONAL TOLERANCES

The following tolerances apply unless otherwise specified within the data sheets

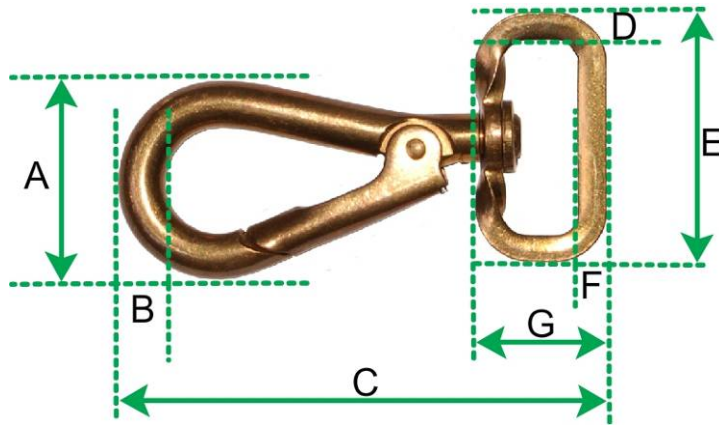
Where items are to be fitted together the plus and minus tolerances may need to be adjusted to allow for correct fitting

In millimetres (unless otherwise stated)				
From	To	+/- tolerance for leather	+/- tolerance for textiles	+/- tolerance for metal ware
0.001	9	5%	5%	2%
10	49	1	1	0.5
50	149	2	2	1
150	299	2	5	2
300	599	5	10	
600	899	5	15	
900	999	5	20	
1000	1499	5	25	
1500	2000	5	30	

FIGURE 3

Swivel Fastener Dimensions

(See data sheets for material and finish)



Measure	millimetres	Tolerance (+/-mm)
A	23	1
B	5.5	0.5
C	55	2
D	3.25	0.5
E	28	1
F	3.25	0.5
G	14.5	1

PART 3

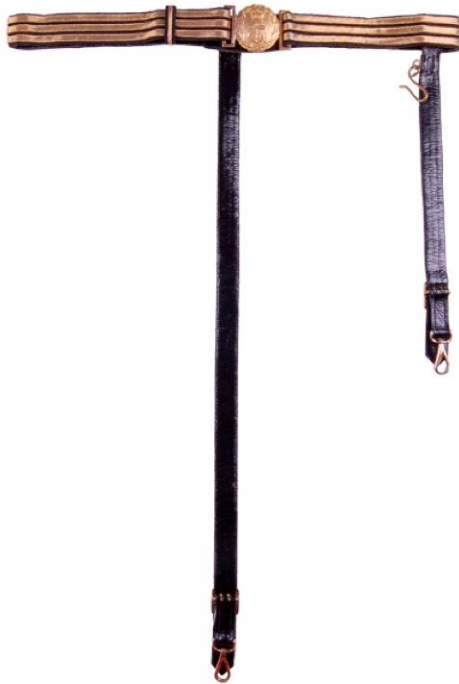
5. DATA SHEETS

- a. The following section contains data sheets listing bill of materials, manufacturing information, dimensions and images for each belt, sling etc. NSN listed in table 1.
- b. Relevant Standard Patterns are to be used to govern shade, all shades depicted on data sheets are for guidance only.
- c. Any pattern suffixed with TG is a pattern To Guide for manufacture of a range of similar design.

NSN	8465-99-130-6111 to 6114
Pattern No.	D00623B TG
Description	Waist Belt RN Sword Dress Flag Rank 8465-99-130-6112 shown for measurement details

DETAIL

Belt front view



Belt rear view



Belt outer

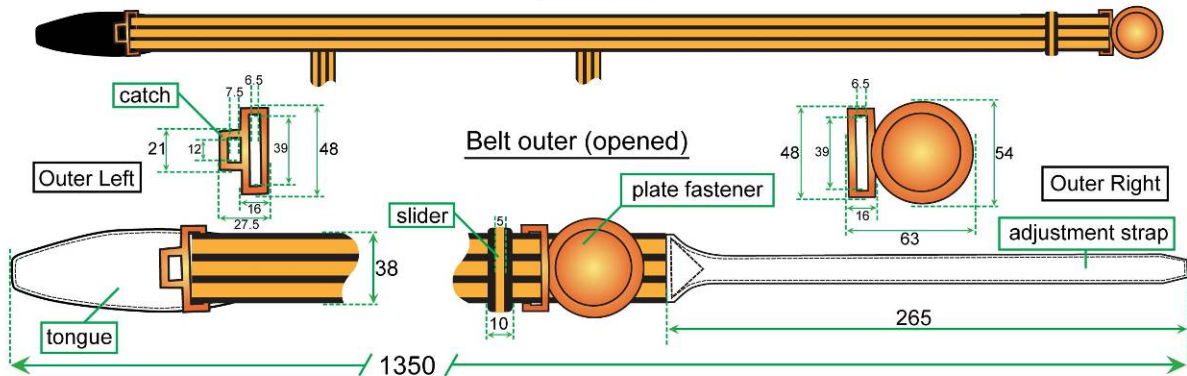


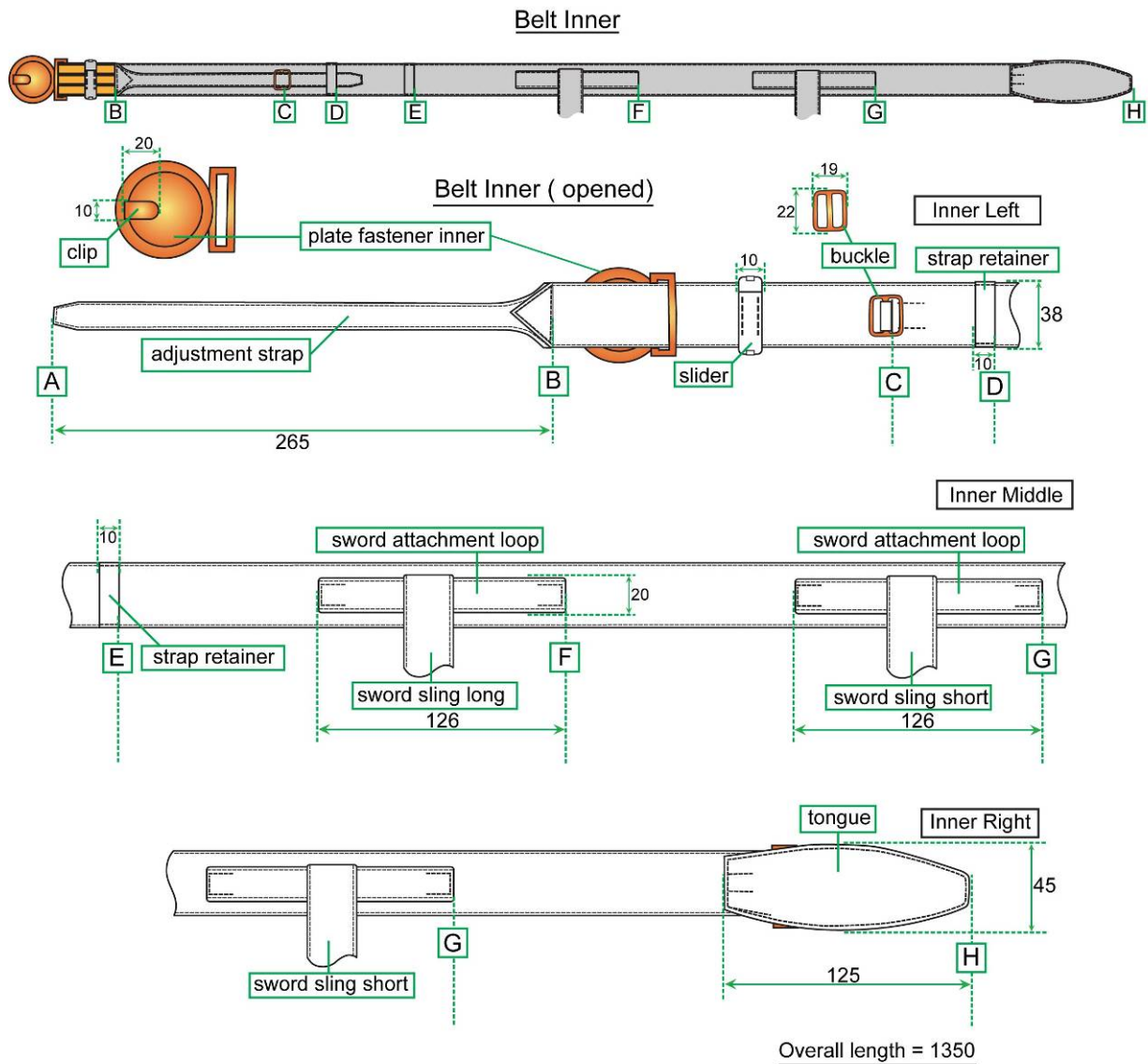
Plate fastener detail



All measurements are in mm. Refer to Table 8 for tolerances

CONTINUATION OF 8465-99-130-6111 to 6114

BELT DETAIL 8465-99-130-6113 shown



All measurements are in mm. Refer to Table 8 for tolerances

GARMENT SIZING – Waist belt

Size	NSN 8465- 99- 130-	Waist range inches	A – B (mm)	B – H (mm)	C – H (mm)	D – H (mm)	E – H (mm)	F – H (mm)	G – H (mm)
1	6111	35-38	265	1030	820	780	680	440	180
2	6112	37-40	265	1085	885	835	740	500	250
3	6113	39-42	265	1140	950	890	800	560	320
4	6114	41-44	265	1195	1015	945	860	620	490

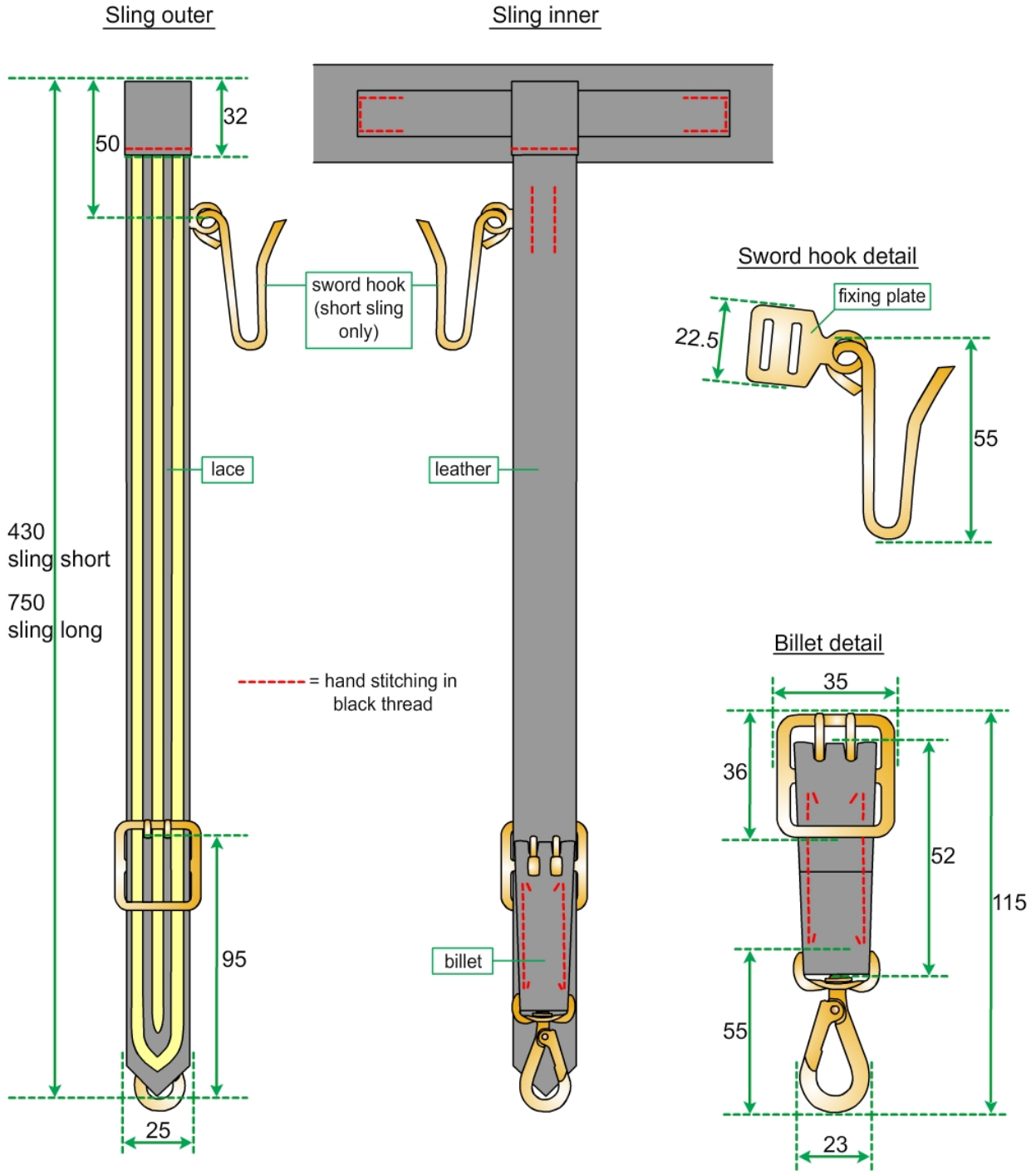
CONTINUATION OF 8465-99-130-6111 to 6114 - BELT	
BILL OF MATERIALS - BELT	
Leather	<ul style="list-style-type: none"> • Belt - Black long grained morocco leather 1.4 +/-0.1mm in thickness the shade to be as the standard pattern • Belt loops - Black long grained morocco leather 0.9 +/-0.1mm in thickness the shade to be as the standard pattern
Webbing belt	<ul style="list-style-type: none"> • RN Black with Gold embroidery 38mm wide (1.5 inch) 3 Gold stripes • Refer to Table 5.25
Webbing slider	<ul style="list-style-type: none"> • RN black with gold embroidery 25mm wide (1 inch) 1 gold stripe • Refer to Table 5.27
Belt and slider embroidery	<ul style="list-style-type: none"> • 2% gold passing thread conforming to UK/SC 3933
Metal ware	<ul style="list-style-type: none"> • Plate fastener with hook – Gilding metal – bright gilt plated • Catch – Gilding metal – bright gilt plated • Inner buckles – Self coloured brass
CONSTRUCTION INFORMATION	
Webbing belt embroidery	<ul style="list-style-type: none"> • 3 bands of embroidery 8mm wide, over formers of light card, are to be worked onto the webbing using angled stitches as the standard pattern • The embroidery is to have 19 +/- 1stitches per 20mm and is to be firm, and with a flat and regular appearance as per the standard pattern
Webbing slider embroidery	<ul style="list-style-type: none"> • A band of embroidery 5mm wide, over a former of light card, is to be worked centrally onto the webbing using angled stitches as the standard pattern • The embroidery is to have 19 +/- 1stitches per 20mm and is to be firm, and with a flat and regular appearance as per the standard pattern • The length of the embroidery is to be as the standard pattern depending on the belt size
Slider construction	<ul style="list-style-type: none"> • Webbing 25mm wide with edges folded back and overlapped, fixed with adhesive and machine stitched to finish 10mm wide • The ends are turned back and secured with hand stitching. The loop is to be sufficient to hold two thicknesses of the belt

CONTINUATION OF 8465-99-130-6111 to 6114 - BELT	
Belt construction	<ul style="list-style-type: none"> • Belt – black morocco 1.4 +/-0.1mm thick, finishing 38mm wide, shaped into a point at one end, the other end to be square • One buckle slit, 18mm long is to be inserted in the leather centrally at point C on the line diagram. A buckle, without prong, inserted through a loop of 2 ply 1.4 – 1.5mm thick black morocco 16mm wide is inserted through the slit at point C and the loop secured to the belt by hand stitching • Sword attachment loops – two loops of 0.9 +/-0.1mm thick, black morocco with the sides turned in and the raw edges abutted and affixed with adhesive are to finish 20mm wide and 126mm long. The loops are to be attached centrally on the inner of the belt by hand stitching as the standard pattern • Loops for retaining the adjustment strap – two loops of 0.9 +/- 0.1mm thick, black morocco with the sides turned in and the raw edges abutted and affixed with adhesive are to finish 12mm wide and 38mm long. The loops are securely hand stitched to the leather side of the belt at points D and E on the line diagram • A length of black webbing 38mm wide with 3 embroidered gold stripes is affixed to the morocco with adhesive and secured at the edges with machine stitching. The embroidery is to terminate 28mm from the square end and 23mm from the pointed end • Adjustment strap – formed of 2 ply, 1.4 +/-0.1mm thick, black morocco, 265mm long, shaped and machine stitched at the edges as on the standard pattern. The strap is secured to the point of the belt by a triangle of hand stitching as the standard pattern • Tongue – formed of 2 ply, 1.4 +/-0.1mm thick, black morocco, 127mm long, the tongue is to be shaped, edge tooled and machine stitched as the standard pattern • The square end is turned back 20mm enclosing the catch. The belt inturn and tongue are to be securely sewn together by four rows of hand stitching as per the standard pattern
Metal ware	<ul style="list-style-type: none"> • Plate fastener – Detailed with crown and anchor surrounded by a laurel wreath
Item Labelling	<ul style="list-style-type: none"> • See Table 7 – sewn-in vinyl label required

CONTINUATION OF 8465-99-130-6111 to 6114

SWORD SLINGS

Sword slings (short sling shown)



All measurements are in mm. Refer to Table 8 for tolerances

CONTINUATION OF 8465-99-130-6111 to 6114	
BILL OF MATERIALS - SWORD SLINGS SHORT AND LONG	
Leather	<ul style="list-style-type: none"> Black long grained morocco leather 0.9 +/-0.1mm in thickness the shade to be as the standard pattern
Webbing sling	<ul style="list-style-type: none"> RN black with gold embroidery, 25mm wide (1 inch) 3 gold stripes Refer to Table 5.26
Sling embroidery	<ul style="list-style-type: none"> 2% gold passing thread conforming to UK/SC 3933
Metal ware	<ul style="list-style-type: none"> Sword hook – Gilding metal wire, bright gilt plated Billet buckle two prongs pointed – Gilding metal, bright gilt plated Swivel fastener – Gilding metal bright gilt plated, with spring loaded hook closure, dimensions as per Figure 3
CONSTRUCTION INFORMATION	
Webbing sling embroidery	<ul style="list-style-type: none"> 3 bands of embroidery 8mm wide, over formers of light card, are to be worked onto the webbing using angled stitches as the standard pattern The embroidery is to have 19 +/- 1stitches per 20mm and is to be firm, and with a flat and regular appearance as per the standard pattern
Sling construction	<ul style="list-style-type: none"> Slings, short and long – black morocco 0.9 +/-0.1mm thick, finishing 25mm wide, shaped into a point at one end and square at the other The short sling finishes 430mm long from the folded top to the point. The long sling finishes 750mm long Short sling only -A fixing plate holding the sword hook is inserted between the leather and the webbing, positioned as the standard pattern and secured with 2 rows of hand stitching into the leather section of the sling Black embroidered webbing 25mm wide is attached to the leather, and machine sewn on all sides. The embroidery to terminate in a shaped point at the pointed end, and square, short of the square end as the standard pattern The slings are passed around the attachment loops on the belt, turned back and secured with hand stitching as the standard pattern A pair of 2mm diameter holes for the billet prongs are inserted through the sling 9mm apart 95 mm from the pointed end within the black sections of the sling

CONTINUATION OF 8465-99-130-6111 to 6114 - SWORD SLING SHORT		
CONSTRUCTION INFORMATION		
Billet construction	<ul style="list-style-type: none"> • Billet – A loop of black morocco 0.9 +/-0.1mm thick, with the sides turned in and the raw edges abutted and affixed with adhesive is to finish 20mm wide, the finished length is to be 52mm • Two crew punches for the buckle prongs are to be inserted into the leather, the centres 9mm apart • The loop is to hold a sprung fastener attached to one end, and a two pronged buckle at the other • The ends of the billets are to be attached to the hook and the buckle, with the ends overlapped by 10mm and securely hand sewn as per the standard pattern 	
SIZING – Sword slings excluding billets		
	Sling length in mm	Sling length in inches
Sling short	430	17
Sling long	750	29.5
The measures correspond to the line diagrams		