



Basic apparel production

Level-I

Learning Guide-44

Unit of Competence: Sew garment parts

Module Title: Sewing garment parts

LG Code: IND BAP1 M13 LO 01-LG-44

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LO 1: Prepare garment parts



This learning guide is developed to provide you the necessary information regarding the following **content coverage** and topics:

- ❖ Receiving and checking work bundle.
- ❖ Assessing and checking quality items against specification
- ❖ Reporting and documenting any deviation or faults
- ❖ laying out garment parts or work pieces

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, **upon completion of this Learning Guide, you will be able to:**

- Receive and check work bundle, any follow-up action determine and perform
- Assesses, Check and Correct quality of receive component part against specifications to ensure items
- Report any deviation or faults and document
- Lay out garment parts or work piece in sequence.

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below
3. Read the information written in the information “Sheet 1, Sheet 2, Sheet 3 and Sheet 4”.
4. Accomplish the “Self-check 1, Self-check t 2, Self-check 3 and Self-check 4” in **page -7, 11, 13 and 19** respectively.
5. If you earned a satisfactory evaluation from the “Self-check”
6. Reference book ” in **page – 21** (if you are ready).



1.1. Receiving and checking work bundle.

Introduction:

- The term work bundling (garment cut piece bundling) is the process of disassembling and cut fabric piece and reassembling them in production lots grouped by garment units.
- The number of garment components should be bundling in the same ways to complete one full garment and receiving bundles during quality checking takes place.
- Before preparing garment parts, first you should receive, untie the bundle and inspect the work bundle whether all garment parts to a standard quality and labeled quantity are tied together or not.

The information of bundling activities are:

- Ticketing,
- Sorting,
- Numbering



- sizing
- Bundling

1.1.1 checking that work pieces match ticket information

Ticketing **it** is a process in which each cut piece of fabric is given a unique number so that the cut pieces of different sorts/shades do not get mixed and sewn together resulting in a defective/rejected garment to be identified.

Ticketing machines are available to carry out this process. After ticketing is done, pieces of each type like collar, band, cuff, back, front body etc. are bundled together and taken to subsequent operations.



Sorting: the process of collecting different cut parts of an item (e.g. blouse) of the same size, colour and batch.

Sizing: the process of making garment components should arranging in the form of garment sizing and categorized in the small, medium, large, extra large etc.

Bundling: This process is making in group together the number of layers of the cut panel for the purpose of better handling and WIP controlling in the line and received bundles by checking mechanism and it helps to ready for the next operation.

In manual handling systems garment components are tied together to form a bundle for the sewing lines.

Bundle size in Ethiopian factories varies from 20 to 100 garments, which increases the 'materials handling' at the needle point and the level of work-in-process (WIP), reducing the working space of the worker and increasing the throughout time of each bundle. Large bundles are a Disincentive and workers make mistakes by putting the wrong components together. Therefore in the garment sewing component preparation method should check and receive from the cutting work area.

During bundling garment components/ parts must be identified properly to ensure that the correct component parts are assembled together.

Experience has shown that smaller bundle sizes receiving in the cutting is used to:

- reduce worker fatigue,
- reduce the time it takes to produce one bundle,
- reduce worker errors, thereby improving quality,
- reduces the number of rejects in the production line and
- Reduces materials handling at the needle point.

The bundling size can be decided based on the requirement of the line, type of cut fabrics, number of work stations and total number of components in a garment helps to be sewn easily.



Bundling is carried out after the cut parts passed the required operations based on the style like printing & embroidery, fusing, quality audit & finally all the parts including some accessories are bundled together and delivered to sewing section.

1.1.2. **Checking that relevant previous operations:**

It's the process of checking bundling pieces or the relevant operation superposing the plies in the bundles should be such that there is (a) minimum or no creasing, and (b) minimum or no disarranging of the cut alignment.

Any deviation from these two principles increases the pick-up and positioning time for the sewing operation. If the bundle must be tied securely because of movement before the operator gets the bundle, care should be taken not to use cord or other ties which may mar the surfaces and edges of the cut plies.

Tier stack bins (or boxes) on castes are an excellent means for bundling and transporting cut sections without the necessity of bundle tying. This saves tying and untying time.

Before distributing the bundles to the sewing line, the following checks should be done:

- parts should be the same
- parts should be faced the same way (right or wrong side of fabric)
- Defects which are not noticed during fabric laying and cutting should be identified at this stage.

All bundles **MUST** be identified to include:

1. Model/ Style type or number
2. Size
3. Number of parts in the bundle
4. Serial number of the material
5. Production order number/ Customer
6. Bundles should be stored temporarily on a rack

Note that: Sometimes the bundle is identified by the work ticket which is attached to the bundle. Each operator removes the ticket stub for the operation they perform for payment purposes.



Cutting pieces and bundling should receive and checking quality.

The following format can be used as an example for the cut piece bundling and dispatching.

Example Transfer Report Form from Cutting to Sewing during bundling

S/N	Order #	Item	Style #	Customer	Color	Bundle #	Size with transfer Quantity						Transfer by	Received by
							S	M	L	XL	2XL	TTL		
1	shirt	1000	casual		black	5								
2	T-shirt	800	polo		Blue	2								

Prepared by.....Checked by.....Approved by.....

Sign. & date.....Sign. & date.....Sign. & date.....

1.5 The Importance of check bundles and received work pieces

When we using work bundling are necessary in any production improvement of work/activities since it;

- Reduce the miss matching of garment components.
- Helps to make garments easily without difficult ice
- Used to improve garment productions
- Helps to reduce fabric wastages etc.



Self-Check -1	Written Test
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Name: _____

Date: _____

Multiple choices

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. One of the following is the types of work bundling system (3 points)
A. Ticketing
B. Sorting
C. numbering
D. All of the above

➤ **Short Answer Questions**

1. Describe all work bundling systems and their important at least five points.(5 points)

Note: Satisfactory rating - 4 points

Unsatisfactory - below 4 points

You can ask your teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____



2.1 Assessing and checking quality items against specification

Introduction

Apparel & Garment Testing: Assess and checking the quality of our apparel's materials and workmanship, using a number of quality control checks and tests against quality specification, including:

- Color shading
- Colorfastness check (Rub test)
- Symmetry check
- Size fitting test
- Adhesive check (logos, printings, markings fastness)
- Fabric weight test (for knitted garments)
- Fasteners fatigue and zip quality test
- Waterproof test
- Down feather leakage testing
- Seam slippage test (for woven garments)
- Care labeling
- Needle damage check (for knitted garment)
- Barcode scanning test
- Burn test (for 100% cotton garment)
- Mold contamination prevention
- Metal contamination prevention
- Ventilation test



Effective quality checking and assessment method can be measures to prevent quality of garment infestation must be taken at every stage of production and shipping, including:

- During production:
 - Strict cleanliness control, including zero contact with garment pieces
 - Use of insect traps and insecticides
 - Proper storage at intermediate stages
 - Regular inspections
- After production:
 - Separation of production and storage areas
 - Temperature and humidity controls
- During container shipping and loading



- Pre-shipment treatment of containers
- Container cleanliness and humidity controls
- assessing and Checking quality of received component garments part against *specifications* to ensure item in the correct way.
- Especially we have to assess and check the following points of garment piece while cutting before sewing.

Correcting the item against specification (number of pieces) includes the following points.

- 1.2.1 Content can checking according to garment pieces
- 1.2.2 Color, it can be identifying garment pieces during fabric color type
- 1.2.3 Size and quantity of garment pieces should be corrected against specification
- 1.2.4 Stitch type and size for sewing pieces can be corrected as SPI information.

During cutting operation the following points has to be assessed and checked by the cutting supervisor.

- Garment pieces should be cut accurately to the pattern shape.
- Raw edges of garment pieces should not show fraying, fuzziness or snagging
- Ply edges should not fuse together.
- Size and placement of notches should be accurate.
- Cutting knife should be sharp enough for accurate and consistent cutting.
- Knife edges and cutting speed should be checked regularly.
- Cleanliness and safety should be ensured.

Generally when we assessing the fabric of garment pieces considering the two major separate things while cutting.

1. The quality of the fabric itself

2. How suitable the fabric is for that particular item

Assess and check quality of sewn pieces or items is also describes as follow :

- ☞ Sewn components are inspected, any faults identified and appropriate action taken
- ☞ Finished pieces are checked against quality standards
- ☞ Results of inspection of finished components are recorded
- ☞ Action taken to either reject or correct faulty components is recorded



Though the cutting supervisor assess and checks the above points, the bundler also rechecks and does at least the following activities.

- ✓ Inspect sample of cut fabrics to verify that work has been performed to specification and reject or return for rework/ change those not meeting requirements
- ✓ Report damaged or torn cut works to supervisor.
- ✓ Deposit condemned (predestined) cut works in appropriate container or storage.
- ✓ Complete documentation in accordance with workplace procedures.



Self-Check -2

Written Test

Name: _____

Date: _____

Multiple choices

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. One of the following is true about assessing and checking garment piece.(2 points each)

- A. Pattern pieces should be cut accurately and effectively.
- B. Raw edges of pattern pieces should not show fraying.
- C. Assessing and checking garment piece before sewing.
- D. All of the above.

➤ **Short Answer Questions**

2. Describe the two major separate things of garment pieces considering while cutting bundle.
(5 points)

Note: Satisfactory rating - 3 and 4 points

Unsatisfactory - below 3 points

You can ask your teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____



3.1 Reporting and documenting any deviation or faults

Introduction:

- ✓ Sewing pieces deviation or fault should be reported and documented before commencing sewing takes place then record and document all faults and actions taken to prevent same fault happen again.
- ✓ Inspect sewing components, rework or take appropriate action for any faults identified and record during inspection.
- ✓ Checking that work pieces match ticket information and relevant previous operations such as pressing and cutting all components have been successfully completed then prepare garment parts that need preparation one by one as fast as possible.
- ✓ Sewing specifications are documenting that contains detailed information about the sewn product and types of faults which happening during preparation .

Recording and documenting garment faults during the following system:

1. Four-Point System. Quality control and recording System
2. Ten-point system

The specification may contain and recorded in the following ways:

- ✓ Item (garment name), style number, size and quantity,
- ✓ Flat diagram of the item with information,
- ✓ Sewing thread color and count,
- ✓ Stitch type and SPI
- ✓ Attached trims like zipper type and size
- ✓ Top stitch widths at different area. Etc
- ✓ Number of cut piece and targets

Generally reporting and documenting any deviation or faults of preparing sew garment is the system of making the documents with number of cut pieces and sew parts proportionate during inspection system.



Self-Check -3

Written Test

Name: _____

Date: _____

Multiple choices

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Which one of the following is true about reporting and documenting any garment pieces deviation or faults?

. (2 points each)

- A. Recording and booking number of pieces.
- B. Identifying separating fabric fault.
- C. Reporting any information.
- D. All of the above.

Note: Satisfactory rating - 1 points

Unsatisfactory - below 1 point

You can ask your teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____



4.1 laying out garment parts or work pieces

Introduction

The word laying out garment parts or work pieces means the arrangement of all garment components or piece that can be prepared effectively to make easy sewing production and reducing fabric wastages.

Garment parts are parts of a specific garment like trouser, skirt, blouse which need preparation from the others; and laid out them in sequence as per your machine layout.

The following may be included as garment parts/ components should check and laying in each and every piece of complete garment before sewing.

- Blouse, Shirt, Coat, Jacket, Overcoat Sleeves, plackets, collars, stand, facings, pockets, yoke/ shoulder, pocket, flap etc.
- Skirt Front, back, waistband etc.
- Trouser/ Pant Pocket, waist band, patch, fly, and belt loop, etc

Types of laying components to make full garment and classifications are:

- sleeves – puff sleeve, tailored sleeve, cup sleeve and cuffs
- waistbands – straight or shaped
- collars – sports collar, shirt collars
- plackets_ flat, rolled(folded), over lapped
- facings – neck, armholes
- binds
- zips – dress, skirt, trouser, invisible
- buttons and buttonholes
- Pocket – cut away, patch, in seam, flap



4.2 Prepare laying garment components

The garment marker is produced by laying all of the pattern pieces out on the fabric. The pattern pieces should be placed so that their grain lines match the straight grain of the fabric. The width of the fabric and sizes of the pattern pieces will dictate how the pieces are laid.

Much of this process is handled by computers in industry, but it is still important to be familiar with the relationship between fabric and pattern alignment or laying pieces with same size and color



Small Scale vs. Large Scale Prints laying system:



Directional vs. Non-directional lying

Laying out garment pieces according to horizontal and vertical stripe alignments:

Lying of paper pattern and garment pieces helps one to plan the placement of the pattern pieces in a tentative manner.

- Lay large pieces first and then fit in the smaller ones
- It is very economical in laying the pattern and cutting. Even a small amount of material saved in a single layer will help to bring about a large saving of money as hundreds of layers of fabric will be laid and cut simultaneously.



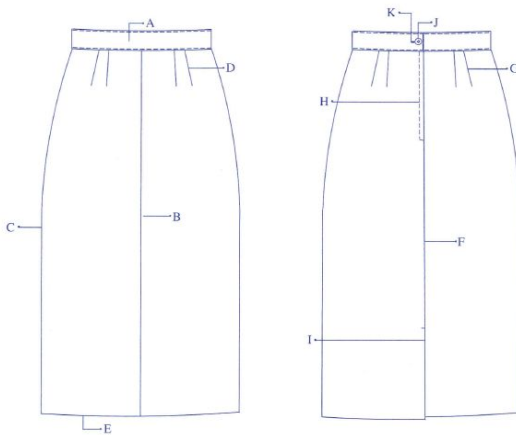
- When lying, the length of the garment should be parallel to the selvedge of the material. Be sure the pattern is placed in the correct grain. Fabrics drape and fall better on the lengthwise grain and also last longer.
- Parts that have to be placed on the fold should be exactly on the edge of the fold.
- All lying should be done on the wrong side of the material.
- When laying the paper pattern, consider the design of the fabric. Care should be taken to see that the design runs in the same direction throughout the garment. All checks and strips should match the seams both lengthwise and across.

THE SKIRT components and its laying out of the garments

- The skirt covers the lower part of the body in a tubular shape, from the waist down to the desired length.

Laying of skirt Components

- A. Waistband.
- B. Center front.
- C. Side seam.
- D. Front dart.
- E. Hemline.
- F. Center back.
- G. Back dart.
- H. Back zipper.
- I. Back slit or pleat.
- J. Button.
- K. Buttonhole.



Drawing 4.1



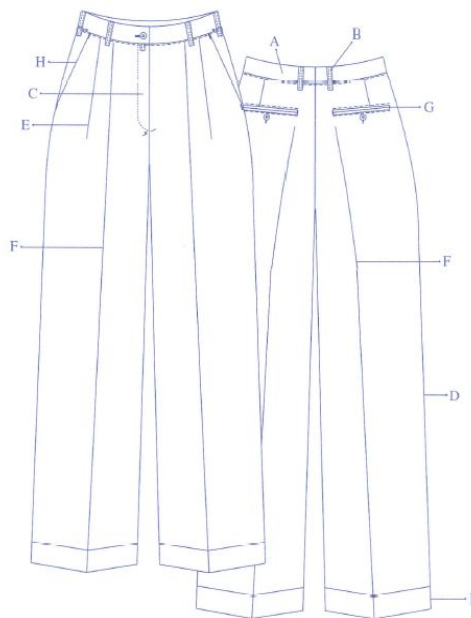
PANTS

Pants are garments worn on the lower torso. Unlike skirts, pants have tubes surrounding each leg.

Drawing Pants laying components

- A. Waistband.
- B. Belt loop.
- C. Pants fly.
- D. Side seam.
- E. Front pleats.
- F. Crease.
- G. Hip pocket.
- H. Front pocket.
- I. Bottom hem.

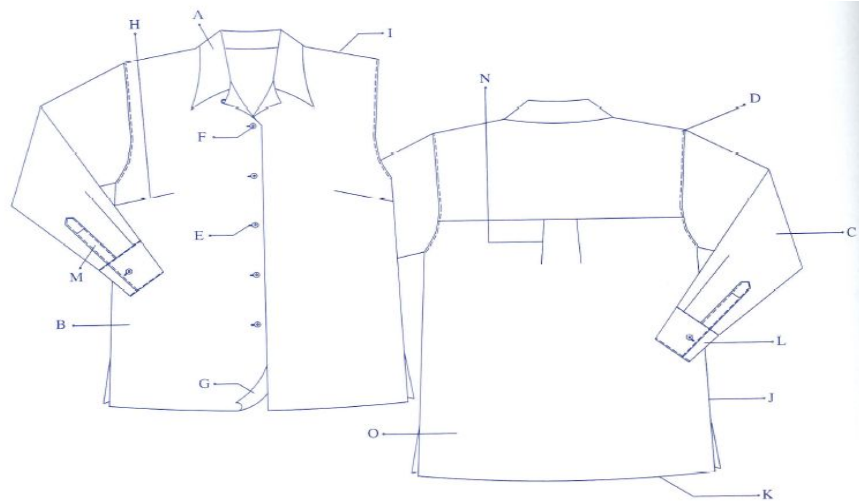
Drawing 5.1





Drawing Blouse laying components

- A. Collar.
- B. Front bodice.
- C. Sleeve.
- D. Armhole
- E. Button hole
- F. Button
- G. Facing
- H. Dart
- I. Shoulder seam
- J. Seam
- H. Hem
- L. cuff
- m. placket
- n. pleat
- o. back bodice



Drawing 10.1

- ✓ Generally laying out garment parts means preparing all garment pieces in order to make good quality garments from preparation to assembling process. That is the system of arrangements of every garment pieces or components with fitness in size dimension length and color type.
- ✓ Example to make garment shirts we should prepare the shirt components like: front and back body sleeve, collar, pocket, cuff, placket and buttons.



Self-Check -4	Written Test
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Name: _____

Date: _____

Multiple choices

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page

- 1) The first step in preparing garment parts is.....(2 point each)
- A. Faults are recorded & documented C. Sew garment parts
B. Bundle is received & checked D. Setting machines
E. All
- 2) Which one of the following can NOT be garment pieces?
- A. Belt loop C. Sleeve
B. Pocket D. Trouser
- 3) Which one of the following can NOT affect the productivity of a sewing operator?
- A. Machine speed C. Quality of bundle
B. Material handling of the operator D. None of the above

Note: Satisfactory rating - 3points

Unsatisfactory - below 3 point

You can ask your teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____



REFERENCE MATERIAL

1. <https://libraryguides.missouri.edu/c.php?g>
2. <https://www.wordreference.com/definition/lay>
3. <https://www.wordreference.com/definition/layout>