



Basic apparel production

Level-I

Learning Guide-47

Unit of Competence: Sew garment parts

Module Title: Sewing garment parts

LG Code: IND BAP1 M13 LO 1 LG-47

TTLM Code: IND BAP1 M13 TLM 0919 V1

LO2: Assess quality of sewing pieces



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| Instruction Sheet | Learning Guide #47 |
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This learning guide is developed to provide you the necessary information regarding the following **content coverage** and topics:

- ✓ Identifying and inspecting Sewing components faults
- ✓ checking finished pieces against quality standards
- ✓ Recording the results of inspection of finished components
- ✓ Recording and action take to either reject or correct faulty components
- ✓ Recording Preventative action take to avoid recurrence of defective pieces.
- ✓ Completing Production records or packing slips
- ✓ Completing work documentation as required
- ✓ Directing and Complete work to next operation

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:**

- Inspecting and identifying sewing components of any faults appropriate action
- Checking and finishing pieces against quality standards
- Recording results of inspection of finished components
- Recording and action taken to either reject or correct faulty components
- Recording and preventative action taken to avoid recurrence of defective pieces.
- Completing production records or packing slips
- Completing work documentation as required
- Directing and completed work to next operation

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below 3 to 4.
3. Read the information written in the information “Sheet 1, Sheet 2, Sheet 3, Sheet 4, Sheet 5, Sheet 6, Sheet 7, and Sheet 8”
4. Accomplish the “Self-check 1, Self-check t 2, Self-check 3 Self-check 4, Self-check 5, Self-check 6 Self-check 7, and Self-check 8” in **page -7, 10, 11, 12, 14, 16, 17 and19** respectively.



1.1 Identifying and inspecting sewing components faults

- Identifying and inspecting sewing components faults in working garment pieces can be identifying and selecting the types of defect which is occur on the surface of sewing parts.
- Sewing machine operators should be checked in a regular basis for identifying, correcting and controlling of fabric faults and performing quality of products.
- Sewing section is the most important department of garments manufacturing factory. Maximum faults are arising here which hamper the total quality of apparel. There are mainly eight types of sewing faults seen in the sewing section of readymade garments factory which are explained in this article with their causes and remedies

Various types of sewing problem which are arise during sewing the garments are-

1. Skipped stitches that are improper successive biding of upper and lower thread.
2. Unbalance stitch.
3. Staggered stitch.
4. Variable stitch density.
5. Seam puckering.
6. Bobbin or lopper threads breakage.
7. Needle threads breakage.
8. Thread fusing when sewing machine stops

Identify any faults and Inspect sewn components means the technique of selecting and identification of sewing pieces defect type and determine its solution. Some sewing pieces faults identifications and inspections are:

- Miss alignment or miss matching of garment pieces
- Cutting or fusing defects occur on the surface of fabric
- Color variation or shade difference of fabric pieces
- Sewing preparation faults like sewing defect
- Stitching quality defect etc.

Sewing component defects are perhaps caused by errors arising in marking and cutting, as well as sewing operations in the sewing room, or a combination of these. Such as:

1. Finished components not correct to size or shape or not symmetrical
2. Finished garment not to size, arising from incorrect patterns, inaccurate marking or cutting, shrinking or stretching fabric, incorrect seam widths.
3. Parts, components, closures, and fixtures omitted, caused by bad work flow, and wrongly printed work tickets, parts omitted in cutting, careless operator.



4. Components or features wrongly positioned or misaligned arising from incorrect marking, or sewing not following the mark.(e.g. pockets, bar tacks, top stitching, button holes, buttons, hooks and bars, hooks and eyes, zips).

5. Interlining incorrectly positioned, twisted, too full, too tight, cockling.

6. Lining too full, too tight, showing below the bottom of the garment, twisted, incorrectly pleated and so on.

7. Garment parts cockling, pleated, twisted, showing bubbles and fullness; for example, collar in relation to the under collar or the neck, sleeve in relation to the armhole, pockets, tapes, zips, pads in relation to the shoulder.

8. Garment parts shaded owing to being mixed after cutting

1. Skipped stitches:

| SL No. | Causes | Remedies |
|--------|---|--|
| 01 | Failure of hook or lopper and needle to enter loop at correct time. | Examine the setting and timing between needle and hook or lopper. |
| 02 | Irregular thread tension on upper or lower loop. | The tension of thread should be adjusted. |
| 03 | Due to needle deflection. | Needle should be changed. |
| 04 | If needle thread loop size is too small. | Needle size and thread should be adjusted. |
| 05 | When flagging of fabrics is happened during sewing . | The pressure of pressure foot should be adjusted perfectly. |
| 06 | If sewing thread is unable to form loop. | Thread should be changed. |

2. Unbalance stitch:

| SL No. | Causes | Remedies |
|--------|---|--|
| 01 | Incorrect tension of sewing thread. | Setting of accurate tension to the thread. |
| 02 | Used incorrect thread path. | Using of accurate thread path. |
| 03 | Incorrect adjustment of needle thread path. | Using of right thread path. |
| 04 | Snagging of needle with bobbin case and positioning finger. | Bobbin case to be smooth and finger positioning to be set again. |



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|----|---------------------------------------|--|
| 05 | If sewing threads are not lubricated. | Better quality threads must be used here. |
|----|---------------------------------------|--|

3. Staggered stitch:

| SL No. | Causes | Remedies |
|--------|--|--|
| 01 | Due to needle deflection. | Needle size should be increased. |
| 02 | Due to wrong needle point. | Needle should be changed. |
| 03 | Incorrect adjustment of needle and thread size. | Needle size and thread size should be changed. |
| 04 | Due to defected motion of feed dog. | Feed dog motion should be adjusted. |
| 05 | If fabrics not controlled properly in the feed mechanism. | Accurate pressure of pressure foot should be adjusted. |

4. Variable stitch density:

| SL No. | Causes | Remedies |
|--------|---|--|
| 01 | Incorrect unwinding of thread form package during sewing . | The position of thread guide should be 2.5 times higher than the position of thread package . |
| 02 | Twisting of needle thread in the bottom of thread package. | Foam pad should use to the bottom of thread package. |
| 03 | Twisting of thread in thread guide. | Correct threading of sewing thread during sewing. |
| 04 | Excessive tension of thread. | Tension of thread should be less or use of higher strength threads. |
| 05 | Using of broken check spring. | Check spring should be changed. |
| 06 | Fraying of thread in the needle. | Finer threads should be used or to be used heavy needle. |
| 07 | Becoming more heated of sewing thread. | Needle lubricant and needle cooler should be used. |
| 08 | Becoming more heated of hook. | Lubricant should be available and test the distance between needle and hook. |
| 09 | Using of low quality sewing thread. | Sewing thread should be changed. |



5. Seam puckering:

| SL No. | Causes | Remedies |
|--------|--|--|
| 01 | Higher thread tension. | Bobbin tension should be kept as low as possible. |
| 02 | Improper thread balance. | Proper thread balance should be ensured between top and bottom thread. |
| 03 | Incorrect thread types . | Have to maintain tension guides properly. |

6. Bobbin or lopper threads breakage:

| SL No. | Causes | Remedies |
|--------|--|---|
| 01 | Incorrect winding of threads on to the bobbin. | Proper winding of threads on to the bobbin. |
| 02 | Excessive tension to the bobbin threads . | The tension should be adjusted to the bobbin threads. |
| 03 | If the edges bobbin case, lopper eye and so on are more sharpened. | The edges should be smooth. |
| 04 | Incorrect fitting of bobbin case. | Test the size and types of bobbin. |

7. Needle threads breakage:

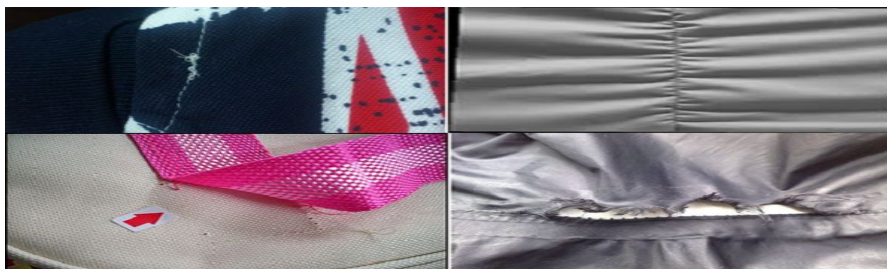
| SL No. | Causes | Remedies |
|--------|--|---|
| 01 | Incorrect winding of threads on to the bobbin. | Proper winding of threads on to the bobbin. |
| 02 | Excessive tension to the bobbin threads. | The tension should be adjusted to the bobbin threads. |
| 03 | If the edges bobbin case, lopper eye and so on are more sharpened. | The edges should be smooth. |
| 04 | Incorrect fitting of bobbin case. | Test the size and types of bobbin. |

8. Thread fusing when sewing machine stops:

| SL No. | Causes | Remedies |
|--------|--------|----------|
|--------|--------|----------|



| | | |
|----|---|--|
| 01 | Faulty sewing thread. | Should be used better quality thread. |
| 02 | Densely woven fabric which is poorly finished. | Should be improved fabric finishing . |
| 03 | Damaged needle after sewing thread breakage. | Should be changed the needle. |



Generally the above information's is identifying sewing fault types on the garment surface.

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| Self-check 1 | Question |
|--------------|----------|

NAME ----- Date-----/------

Choose the best answer

1. How to Identify any faults and Inspect sewn garment components(2 point each)

- A. Due to observation
- B. By inspection method
- C. re checking methods
- D. none
- E. All

2. One of the following is true about garment inspections

- A. Checking before doing
- B. Looking during work
- C. using materials and check defect
- D. all of the above

Note: Satisfactory rating - 2 points

Unsatisfactory - below 2 points

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

Answer Sheet Score = _____

Rating: _____



2.1 Checking finished pieces against quality standards

- When end customers or consumers purchase a garment they look for quality first. So, to have a satisfied customer, retailers must keep only quality product in their shops.
- According to the purchase agreement, buyer can penalize supplier for supplying them defective pieces. It might cost the factory lot of money and goodwill. So the manufacturers take care for garment quality at each stage of production.
- In maximum cases buyer inspects shipment at factory before accepting the finished garments. Whatever defects found in the final inspection, it is the cumulative figure of previous processes.
- So it is very important to rectify defective pieces at process where it occurred instead of in the finishing.
- The first pocket probably was only for utilitarian purposes, but in fashion, a pocket can give balance and interest to the design of the garment. The first fitting, check the pocket location. Pocket construction requires precision works, especially the “cut-in” or “set-in” types. The patch pocket however, is the most popular type. Each type of pocket requires its own unique method of application.

EXAMPLE LET AS TAKE TYPES OF POCKETS CHECKING SYSTEM

IN-SEAM POCKETS

Pockets which are set into seams are very popular and useful. Their ease in application lies in their location within a seam, which eliminated the need for topstitching.

They are frequently found in the front sections of princess-styled dresses and in the side seams of dresses, robes and slacks. Since in-seam pockets do not show from the outside of the garment, they may be added to a skirt or a dress without affecting the design of the garment.

They are not suitable for sheer fabrics or straight skirts where bulk will be noticeable. patch pockets One of the easiest pockets to construct and is applied as a separate piece to the right side of the garment. The top edge of the pocket may be finished either with a hem or a facing.

SET-IN POCKET



There are several types of set-in or cut-in pockets- the slot (or bound), the welt, the modified welt and the flap pocket to name a few. They add a touch of distinction to a tailored garment when constructed carefully.

They must be well-made or the corners will fray and the appearance of the garment will be ruined.

These types must be sewn with shorter stitches and with measured precision.

One advantage is that these pockets can be made of the smallest scraps.

Finishing department check points in finishing department consists against QS:

- Initial finishing inspection: checking done prior to pressing of the garment at finishing room is known as initial finishing.
- Final finishing Inspection: After pressing garments are again checked and passed for tagging and packing.

Internal final audit: After garments are packed up to certain quantity, quality control team, do audit of packed garments. This process is carried out to ensure that before handing over shipment to buyer QC

If the completed work is being checked at each process and defective pieces are corrected before handing to the next process than at the end of production there is very little chance to have a defective at final inspection stage.



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| Self-check 2 | Question |
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NAME ----- Date-----/-----

Choose the best answer

1. Checking finished garment pieces is important to-----?(3 points)
- A. Customer satisfaction
 - B. Cost reducing
 - C. A&B
 - D. Non

Note: Satisfactory rating - 2 points Unsatisfactory - below 2 points

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

Answer Sheet

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| Score = _____ |
| Rating: _____ |



3.1 Recording the results of inspection of finished components

Recording the results of inspection of finished components is the way taking of inspects final product quality and to be record how much pieces is ready to the operation correctly and how much is not correct by inspection methods.

Record the results of product inspection such as:

- Number of pieces checked with inspection passed
- Quality grade of the product
- Size specification of finished product
- Number of components or pieces color variation
- Shade variation of the completed pieces
- Quality performance of the product
- Recorded the stitching quality and sewing design
- Checking how to sew and alignment of pieces
- Inspecting final product a prance and surface quality



Notice that the thread looks much smaller on the seat seam as compared to the Yoke seam.



Generally we have to inspect and record the final product how to make in completed garment with enough quality assessment.

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| Self-check 3 | Question |
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NAME ----- Date-----/-----/-----

Choose the best answer

1. Record the result of product inspection finished product is. -----?(2 pt)

- | | |
|-------------------------------|----------------------------|
| A. Recording number of defect | C. Identify stitch quality |
| B. Check and assess quality | D. All |

Note: Satisfactory rating - 2 points

Unsatisfactory - below 2 points



4.1 Record action taken to either reject or correct faulty Components

Record and action taken to either reject or correct faulty components. It is the mechanism of taking action to garment faults to identify types of faults then recording how to going on the next stage during quality identification criteria.

- Recording the rejected garment pieces and selects the correct pieces which are able to pass towards the next stages.
- Selecting and recording how much pieces are correct to complete and how much is damage will happen during the production

Production process starts after receiving of fabrics and end after dispatching of packed garments. Generally export house put quality check points at the end of each process to ensure that only quality pieces move to the next process where as reject the damage pieces.

Self-check 4

Question

NAME ----- Date-----/-----

Choose the best answer

1. Record action taken to either reject or correct faulty components -----? (2 point each)
 - A. Recording number of quality identification
 - B. Record defect pieces
 - C. Record number of inspected pieces
 - D. All
 - E. none



5.1 Recording preventative, action taken and results of inspection:

Lot of people and machines are involved in producing a garment. There is an obvious chance of making few faulty garments in a batch due to faulty machine or human intervention. The defective pieces can be corrected by repairing or changing defective parts recording preventive action in the inspection system communicating the importance of quality each worker's role in achieving and maintaining right quality and expectations of worker performance during inspection process.

- Maintaining a clean and dry workplace, including storage rooms and shipping areas.
- Selecting and utilizing proper equipment for each cutting and assembly step.
- Providing the proper tools and training to each worker, and communicating management quality performance expectations.
- Planning and conducting an ongoing program of machine maintenance.
- Establishing agreed-upon quality standards with all fabric and finding suppliers before purchase, including procedures for rejecting/returning unacceptable goods.
- 100% inspection of all incoming fabrics to include, at a minimum:
 - ✓ Visual inspection by a trained inspector running every roll of fabric over a back-lit inspection frame to identify fabric defects such as holes, tears, stains, stop marks, and width variations, and to compare actual width and length to reported dimensions.
 - ✓ Color shade check, compared to agreed-upon (or buyer imposed) shade tolerances under a five-light box
- Rejection and return of all fabric not meeting agreed-upon quality standards
- 100% inspection of value added processes like panel printing, machine embroidery, hand embroidery etc. No defective panels or components should be sent to assembly. Defective component to be accepted after corrective measure.
- Cutting quality is the second most important area. Checking to be performed for the cut components such as matching cut panels with original pattern, shade variation, fabric related defects etc.
- Full inspection of work in process and finished garments to include adherence to size specifications and stitching related defects such as needle cutting, open seam, broken seam, jump stitch, variable gathering etc.
- Recording defects by garment production lot, source (fabric, cutting, or assembly), type, and operator



- Analysis of defect data to identify sources of quality problems

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|---------------------|-----------------|
| Self-check 5 | Question |
|---------------------|-----------------|

NAME ----- Date-----/-----

Choose the best answer

1. Which one of the following the elements of assessing quality of sewing garment pieces?(2 points each)
 - A. Record action taken to either reject or correct faulty components
 - B. Record preventive action
 - C. Recording preventative, action taken and results of inspection
 - D. All of the above

Note: Satisfactory rating -2 points

Unsatisfactory - below 2 points

Answer Sheet

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| Score = _____ |
| Rating: _____ |



6.1 Complete production records or packing slips.

- ✓ Part changing is not an intended process in garment manufacturing but this process is there because there are certain reasons where we can't control the cause of fabric damages in the garments completely.



packed pieces recorded

- ✓ However, where possible, we have to minimize short shipment and improve our sales. Part changing is generally done in finishing stages.
- ✓ Most of the fabric defects that are not acceptable in garments are removed during cutting and stitching processes. Still damaged part is found in the sewn garment due to heavy washing, dyeing or other reasons.
- ✓ Garment packing policies and procedures receive checked garments from the sewing section to pack products as per desired packing instruction of our valued customer.
- ✓ Hangers, hangtags price tickets are add to the garment in this section. Finishing in charge will monitor, control and implements the following policies and procedures
- ✓ Supervisor will receive the checked garments from the finishing input men as per the schedule and will distribute the work to employees under his supervision then recorded the pieces
- ✓ Completed product can be recorded by the receiver finally before packed garments.
- ✓ Check and record the amounts of products or number of pieces output with taking enough quality checking mechanism when receiving from the supervisor or the production area.
- ✓ Then make ready to packing in carton through recording the information of specification which can be describing each item identities. Finally deliver to the ordered customer or to the market.
 - ❖ Recording the complete garment products:
 - Finished section checker
 - Ironing system
 - Packing style
 - Price ticket and hanger type
 - Folding style
 - Stitching quality and seam type



- Input and output quantity etc

NB. Instead of rejecting the defective garment, only damaged part can be changed and converted it into a quality garment

| Self-check 6 | Question |
|--------------|----------|
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NAME ----- Date-----/-----

Choose the best answer

1. From the following one is not describe the finished product in the garment product?(2 point each)
A. Ironing system
B. Packing system
C. output and input item
D. Fabric roll

2. Which one is true about finished products information specification?
A. Ticketing
B. Labeling
C. wash and dry label
D. All

Note: Satisfactory rating - 2 points Unsatisfactory - below 2 points

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

Answer Sheet

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| Score = _____ |
| Rating: _____ |



8.1 Directing completing work pieces

Directing completing work pieces to the next operation means that the controlling process of sewing work activity to assign the operation of sewing garments in order to accomplish the tasks sequentially and effectively from starting to finished product.

- Example directing the work of operation process from cutting area to finishing area during the activity such as:
 - ✓ Cutting
 - ✓ Bundling
 - ✓ Sewing
 - ✓ Finishing
 - ✓ Delivery the product
- Directing the quality of finished garment to proceeds the next operation process like first checking quality of the product and pass to the next production system. In other ways when we check the quality products such as check quality of shirts components (sleeve, cuff, collar, placket, pocket, yoke and body).
- Check quality of skirts components such as front and back body, waist band, zipper and bottom hemming stitches.
- Trouser component checking mechanism like waist band, pocket, fly zipper, front and back panels.

Therefore, we have to direct those completed garment pieces towards the next operation after checking quality effectively.



| Self-check 8 | Question |
|--------------|----------|
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NAME ----- Date-----/-----

Choose the best answer

1. Directing garment work pieces to the next operation means that _____?(2 points each)
- A. Assessing quality and pass to the next operation
 - B. Leave 0% quality
 - C. Check quality and make rework then pass
 - D. A&C are the correct answer

Note: Satisfactory rating - 2 points

Unsatisfactory - below 2 points

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

Answer Sheet

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| Score = _____ |
| Rating: _____ |