

Pattern Engineering Assessment of Styling and Fitting Issues in Men's Blazer Making

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ABSTRACT

Achieving appropriate styling and fitting in men's blazer making requires consideration of body size, shape, contours and pattern engineering. However, styling and fitting issues observed during blazer trials may be associated with different stages of the blazer-making process and require systematic technical assessment. This study aimed to identify styling and fitting issues in men's blazers across four segments: Made-to-Order/Bespoke (MTO/Bespoke), Custom Tailoring (CT), Made-to-Measure (MTM) and Ready-to-Wear (RTW), trace their probable originating processes, assess associated technical factors and establish appropriate remedial measures. An observational diagnostic approach was adopted based on visual trial assessments by expert fit technicians. Assessments for MTO/Bespoke, CT and MTM were conducted on live bodies, whereas RTW blazers were assessed primarily on dress forms. The observed issues were documented using industry-recognised terminology and consolidated into 20 distinct styling and fitting issues. Each issue was subsequently traced to its probable originating process within the nine-process blazer-making framework comprising Measuring, Materials, Drafting, Laying, Marking, Cutting, Sewing, Trial/Reviewing, and Re-sewing & Finishing. The associated technical factors and remedial measures were established through technical assessment of the observed garment manifestations. Process-level analysis indicated that Drafting (C3) was associated with all 20 identified issues, while other processes were identified as contributing processes where applicable. The study establishes a structured basis for relating observed styling and fitting manifestations to their probable process origins, technical factors and corrective requirements. The findings provide practical reference for pattern masters, coat makers, tailors and fit technicians in assessing and addressing styling and fitting issues in men's blazer making.

Keywords: Pattern Engineering; Blazer Making; Styling; Fitting; Technical Assessment

I. INTRODUCTION

Fit requires particular attention in individually tailored garments because variations in body dimensions, proportions and wearer preferences influence garment dimensions, ease and appearance. In traditional custom tailoring, fitting and pattern correction form an integral part of garment development, allowing adjustments to reflect individual wearer requirements and achieve satisfactory fit (Kim et al., 2019).

Fit is a key outcome attribute of apparel design and concerns the relationship between the three-dimensional human body and the garment. In structured men's suit jackets and blazers, achieving the desired fit and style requires consideration of body size, body shape, garment dimensions, ease and silhouette (Kang & Choi, 2004; Kim et al., 2019; Opoku et al., 2023). Previous studies have identified body measurements and garment areas such as the collar, lapel, shoulders, sleeves and jacket length as important considerations in achieving satisfactory fit in men's jackets (Opoku et al., 2023). Research on men's jackets has also reported body-fit and movement-related problems, demonstrating the need to accommodate both body characteristics and movement requirements in achieving satisfactory blazer fit (Boğday Saygılı & Çivitci, 2015).

Blazer style and fit are closely associated with pattern engineering, through which garment dimensions, proportions, component relationships and design features are established. Variations in body characteristics and body types have been reported to influence jacket fit, pattern development and sizing requirements (Kwon & Lee, 2023; Size Korea, 2021). Studies have further examined body-type-focused jacket development and fit, indicating that standardised specifications may not adequately accommodate differences in body characteristics (Shin & Suh, 2019; Shin & Suh, 2025). In addition, differences in jacket ease according to pattern-drafting methods and fit preferences across suit styles have been reported (Park & Lee, 2013; Kim & Suh, 2011). These findings indicate that pattern engineering is an important consideration in achieving appropriate style and fit in blazers.

In practical blazer making, styling and fitting issues are manifested through specific garment features and may be associated with pattern-engineering methods, techniques, principles and manipulation procedures, as well as with other processes involved in blazer making. Such manifestations include collar and back-neck irregularities, shoulder imbalance, chest and waist creasing, sleeve pitch and length discrepancies, back bunching and jacket-length irregularities, which can affect the overall fit, form and fall of the blazer. Although existing studies have addressed body variation, jacket fit, ease and pattern development, comparative documentation linking observed styling and fitting issues to their probable originating processes, associated technical factors and appropriate remedial measures across MTO/Bespoke, Custom Tailoring (CT), Made-to-Measure (MTM) and Ready-to-Wear (RTW) blazer-making systems remains limited. Therefore, the present study aims to identify styling and fitting issues in men's blazers across these four blazer-making systems, trace their probable originating processes, assess associated technical factors, and establish appropriate remedial measures

II. LITERATURE REVIEW

2.1 Blazer Fit and Styling

Fit represents the relationship between the three-dimensional human body and the garment and is influenced by several interrelated factors. In judging fit, these factors include the grain of the fabric, construction lines, garment set, balance and ease (Boorady, 2011). Achieving appropriate style and fit in structured suit jackets and blazers is further complicated by variations in body shape and size and the interaction of multiple garment

components. Previous research on men's jackets has examined fit in relation to body measurements, garment dimensions and movement requirements, with particular attention to areas such as the collar, shoulders, sleeves and jacket length (Kang & Choi, 2004; Boğday Saygılı & Çivitci, 2015; Opoku et al., 2023). These studies indicate that fit and styling are not determined by a single garment feature but by the relationship between the body and multiple garment components.

2.2 Pattern Engineering and Garment Fit

Pattern making involves the manipulation and shaping of a flat pattern to conform to the curves of the human body. It translates a design concept into individual garment components, which are subsequently cut and assembled to form the required garment. A pattern serves as a template for defining the intended styling and fitting characteristics of individual garment components before cutting and sewing (Nahar, Tabraz, & Sultana, 2017). Patternmaking further involves transforming a fashion design into its constituent flat pattern pieces and provides continuity between design interpretation and garment production. Pattern development may be undertaken through methods such as flat pattern making and draping, with computer-aided technologies also supporting pattern development and modification (Nahar, Tabraz, & Sultana, 2017; Dăboliņa et al., 2017).

2.3 Styling and Fitting Problems in Men's Jackets, Blazer and Coats

Studies of men's jackets have documented fitting problems associated with different garment areas and body characteristics. Reported considerations include collar and neckline relationships, shoulder and sleeve configuration, chest, waist and hip proportions, and jacket and sleeve length (Boğday Saygılı & Çivitci, 2015; Opoku et al., 2023). Research on mass-customised men's jackets has also identified fit and size discrepancies involving chest circumference, back width and sleeve length, demonstrating the importance of accurate body and garment dimensions in achieving satisfactory jacket fit (Sohn et al., 2020).

2.4 Pattern-Related Technical Factors

Pattern-related factors such as pattern dimensions, ease distribution, shaping and balance influence garment appearance and fit. Research on jacket development and pattern drafting has demonstrated the relevance of body shape, pattern dimensions and ease to garment fit (Kwon & Lee, 2023; Shin & Suh, 2019; Park & Lee, 2013). Practical tailoring guidance also relates specific fitting manifestations, such as lapel gaping, neckline irregularities, shoulder imbalance, upper-back length and sleeve wrinkles, to corresponding pattern adjustments (Closet Core Patterns, 2019). These factors provide a technical basis for relating observed styling and fitting manifestations to their probable pattern-related origin and appropriate remedial measure.

2.5 Research Gap

Existing studies have examined garment fit, body shape and size, pattern development, jacket dimensions and specific fitting problems in men's jackets and related garments. However, these studies generally address individual aspects of fit or particular technical problems rather than examining styling and fitting issues across different blazer-making systems. In particular, limited literature systematically compares MTO/Bespoke, Custom Tailoring (CT), Made-to-Measure (MTM) and Ready-to-Wear (RTW) with respect to the styling and fitting issues observed in finished blazers.

Further, limited practical literature establishes a systematic link between an observed styling or fitting issue, its probable originating blazer-making process, associated technical factor and corresponding remedial measure. The present study addresses this gap by examining styling and fitting issues across the four blazer-making systems and tracing each observed issue within a common nine-process framework: C1 Measuring, C2 Materials, C3 Drafting, C4 Laying, C5 Marking, C6 Cutting, C7 Sewing, C8 Trial/Reviewing and C9 Re-sewing & Finishing.

III. METHODOLOGY

3.1 Research Design

The study adopted an observational diagnostic approach based on the observation of expert fit technicians during visual trial assessments to identify and analyse practical styling and fitting issues encountered in men's blazer making across MTO/Bespoke, Custom Tailoring (CT), Made-to-Measure (MTM) and Ready-to-Wear (RTW) systems. For MTO/Bespoke, CT and MTM, the visual trial assessments were conducted on live bodies (customers/clients), whereas RTW blazers were primarily assessed on dress forms. Styling and fitting discrepancies identified during these assessments were observed and documented. The documented issues were subsequently consolidated and classified, and their probable originating processes, associated technical factors and appropriate remedial measures were established through technical assessment of the observed garment manifestations in relation to the nine-process blazer-making framework. The analysis considered the nine key blazer-making processes, namely C1–Measuring, C2–Materials, C3–Drafting, C4–Laying, C5–Marking, C6–Cutting, C7–Sewing, C8–Trial/Reviewing and C9–Re-sewing & Finishing

3.2 Identification of Styling and Fitting Issues

Styling and fitting issues were identified from the visual observations made during expert assessment of the blazer trials. The assessment focused on visible deviations from the required styling and fitting characteristics of the client. For each blazer-making segment, the issues observed during the assessment were recorded using industry-recognised terminology. The observations were then reviewed across the four segments to identify recurring and segment-specific styling and fitting issues. These observations resulted in a consolidated set of 20 distinct styling and fitting issues, which formed the basis for subsequent classification and process-level analysis

3.3 Consolidation of Styling and Fitting Issues

The observed issues were compared, consolidated and documented across the four blazer-making segments, with similar manifestations grouped under common industry-recognised terms. Where different terminology was used for similar manifestations, the term most appropriate to the observed garment condition was retained for consistency. The consolidated issues were documented according to the affected blazer area or component, including the neck and collar, shoulder, chest and front, stomach/belly and waist, hip and side, back and front body, sleeve, blazer length, and side/centre-back (CB) vent areas. This process resulted in a structured set of 20 distinct styling and fitting issues, which were subsequently used to trace their probable originating processes within the C1–C9 blazer-making process framework.

3.4 Tracing Styling and Fitting Issues to Probable Originating Processes

Each of the 20 styling and fitting issues was traced to its probable originating process within the C1–C9 blazer-making process framework. The issues were observed and assessed by expert fit technicians during visual trial assessments. Based on the observed manifestations, each issue was related to the relevant blazer-making process to establish its probable origin. Where an issue was associated with more than one process, the relevant processes were documented. The identified probable originating processes were then taken forward for technical assessment.

3.5 Technical Assessment of Styling and Fitting Issues

The technical factors associated with each styling and fitting issue were assessed based on the observed garment manifestation and probable originating process. The assessment considered relevant technical aspects of measurement, pattern drafting, materials, laying, marking, cutting, construction, trial-fitting and finishing, as applicable to each issue. The identified technical factors were documented for subsequent determination of the appropriate remedial measures.

3.6 Determination of Remedial Measures

Appropriate remedial measures were established for each styling and fitting issue based on the identified technical factors. The corrective measures were considered in relation to the technical requirements of the probable originating process and the nature of the observed garment manifestation. Where more than one process or technical factor was involved, the corresponding remedial measures were documented for each relevant factor

IV. RESULTS AND DISCUSSION

4.1 Consolidated Styling and Fitting Issues

The styling and fitting observations obtained during the visual trial assessments were consolidated across MTO/Bespoke, Custom Tailoring (CT), Made-to-Measure (MTM) and Ready-to-Wear (RTW) to establish the practical issues encountered in blazer fitting. The observations included issues related to the collar and neck, shoulders, chest and front, waist and side body, back, sleeves, jacket length and vents. Similar manifestations observed across the four blazer-making segments were grouped under common industry-recognised terminology, while differences specific to individual segments were retained. A total of 20 distinct styling and fitting issues were identified and organised according to their affected blazer area or component and observable manifestation. The consolidated issues and their occurrence across the four blazer-making systems are presented in Table 4.1.

The distribution of the identified issues varied across the four blazer-making systems. While several issues occurred across all four systems, others were observed only in specific segments, indicating differences in the manifestation of styling and fitting discrepancies among the systems. MTO/Bespoke showed the widest range of identified issues, whereas some issues were common to MTO/Bespoke, CT, MTM and RTW. This distribution provides a comparative basis for subsequently tracing the issues to their probable originating processes within the C1–C9 blazer-making framework.

Table 4.1. Consolidated Styling and Fitting Issues Observed in Men's Blazers

No.	Styling and Fitting Issue	Affected Area/Component	MTO	CT	MTM	RTW
1	Collar Gap	Collar/Neck	✓	✓	–	–
2	Collar Point Pulling	Collar	✓	✓	–	–
3	Collar Frame-Off	Collar	✓	✓	–	–
4	Upper Centre-Back Rippling	Upper Back	✓	✓	–	–
5	V-Zone Variation	Front/Lapel	✓	✓	✓	✓
6	Loose/Hanging Lapel (Gaping Lapel)	Lapel	✓	✓	✓	✓
7	Lapel Roll-Line Off	Lapel	✓	✓	✓	✓
8	Shoulder Imbalance (Asymmetric Shoulder)	Shoulder	✓	✓	✓	–
9	Forward/Outward Shoulder	Shoulder	✓	–	–	–
10	Shoulder Max	Shoulder	✓	✓	✓	✓
11	Knocked-Down Shoulder	Shoulder	✓	✓	–	–
12	Shoulder Divot	Shoulder/Armhole	✓	✓	✓	✓
13	Chest Gap	Chest/Front	✓	✓	✓	✓
14	X-Button Strain	Front/Buttoning	✓	✓	✓	✓
15	Centre-Back Vent Off	Centre-Back Vent	✓	✓	–	–
16	Walking Sleeve Off	Sleeve	✓	✓	✓	✓
17	Side Vent Open and Centre-Back Hiking	Side/CB Vent	✓	✓	–	–
18	Side Pulling	Side Body	✓	✓	✓	✓
19	Tight Arm	Sleeve/Armhole	✓	✓	✓	✓
20	Sleeve Pitch Off	Sleeve	✓	✓	✓	✓

Note: ✓ = observed/marked in the respective blazer-making segment; – = not observed/marked.

4.2 Probable Originating Processes

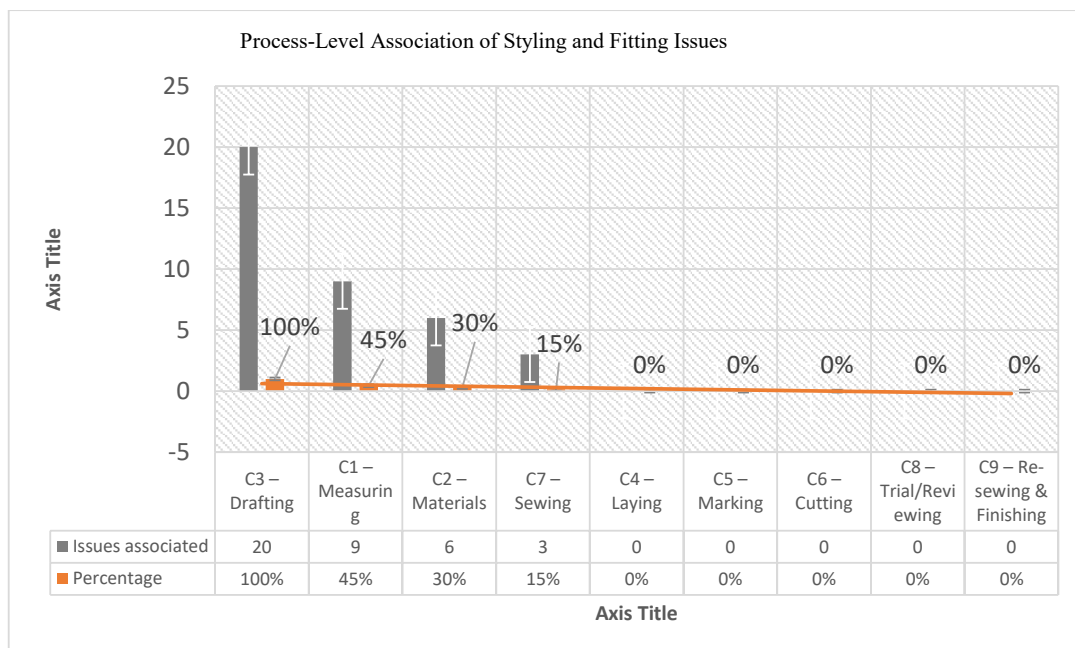
The visually observed styling and fitting issues were traced to their probable originating processes within the C1–C9 blazer-making framework, comprising C1 – Measuring, C2 – Materials, C3 – Drafting, C4 – Laying, C5 – Marking, C6 – Cutting, C7 – Sewing, C8 – Trial/Reviewing, and C9 – Re-sewing & Finishing. Each issue was related to the process or processes considered technically relevant to its observed manifestation. Where an issue involved more than one process, the relevant process associations were recorded. The tracing focused on the probable originating process rather than the stage of observation, with the resulting associations for the 20 identified issues presented in Table 4.2.

The process-level distribution of these associations is graphically represented in Figure 4.1, showing Drafting (C3) as the most frequently associated process, followed by Measuring (C1), Materials (C2), and Sewing (C7). The remaining processes were not associated with the identified issues based on the recorded observations. These findings establish the process-level basis for the subsequent technical assessment and remedial measures.

Table 4.2. Probable Originating Processes of the Identified Styling and Fitting Issues

No.	Styling and Fitting Issue	Probable Originating C-Process(es)
1	Collar Gap	C1 – Measuring; C3 – Drafting
2	Collar Point Pulling	C3 – Drafting
3	Collar Frame-Off	C3 – Drafting; C7 – Sewing
4	Upper Centre-Back Rippling	C3 – Drafting
5	V-Zone Variation	C3 – Drafting; C7 – Sewing
6	Loose/Hanging Lapel (Gaping Lapel)	C3 – Drafting
7	Lapel Roll-Line Off	C3 – Drafting; C2 – Materials; C7 – Sewing
8	Shoulder Imbalance (Asymmetric Shoulder)	C1 – Measuring; C3 – Drafting; C2 – Materials
9	Forward/Outward Shoulder	C3 – Drafting; C2 – Materials
10	Shoulder Max	C1 – Measuring; C3 – Drafting; C2 – Materials
11	Knocked-Down Shoulder	C3 – Drafting; C2 – Materials
12	Shoulder Divot	C1 – Measuring; C3 – Drafting; C2 – Materials
13	Chest Gap	C3 – Drafting
14	X-Button Strain	C3 – Drafting
15	Centre-Back Vent Off	C3 – Drafting; C1 – Measuring
16	Walking Sleeve Off	C3 – Drafting
17	Side Vent Open and Centre-Back Hiking	C3 – Drafting; C1 – Measuring
18	Side Pulling	C3 – Drafting; C1 – Measuring
19	Tight Arm	C3 – Drafting; C1 – Measuring
20	Sleeve Pitch Off	C3 – Drafting; C1 – Measuring

Figure 4.1. Process-Level Association of Styling and Fitting Issues.



The process-level distribution shows that Drafting (C3) was associated with all 20 identified styling and fitting issues (100%), followed by Measuring (C1) at 45%, Materials (C2) at 30%, and Sewing (C7) at 15%. No associations were recorded for C4, C5, C6, C8 or C9.

1. Collar Gap

Description

A visible gap was observed between the blazer collar and shirt collar, with the blazer collar pulling away from the neck when standing upright, as shown in Figure 1(a)

Technical Factor

- Excess Centre Back Length (CBL)
- Excess Back-Neck Width (BNW)
- Excessive slope and imbalanced back panel

-Remedial Measure

- Shorten Centre Back Length (CBL)
- Shorten Back Body Length (BBL)
- Reduce Shoulder Slope as shown in Fig. 1b.
- Retain back-neck drop
- Reduce back-neck width as shown in fig.1b

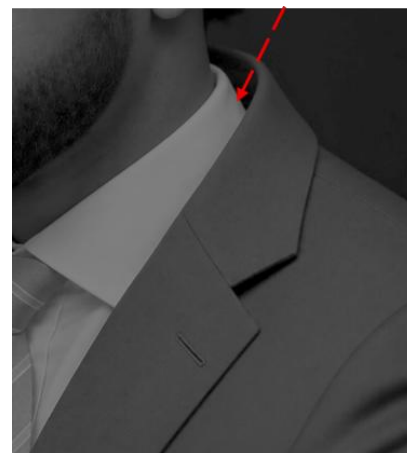
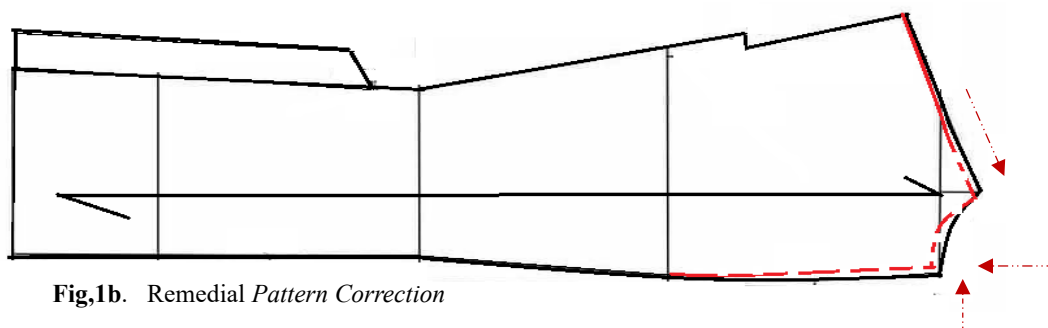


Fig.1a. Observed Collar Gap



Fig,1b. Remedial Pattern Correction

2. Collar Point Pulling

Description

The front tips of the blazer collar were observed to curl upward, twist, or pull tautly away from the blazer body instead of lying flat in their intended position, as shown in Figure 2(a).

Technical Factor

- Excessive gorge line depth.

Remedial Measure

- Shorten the gorge line depth by reducing the front neck drop.
- Reduce the notch depth, as shown in Fig. 2b.



Fig.2a. Observed Collar point Pulling

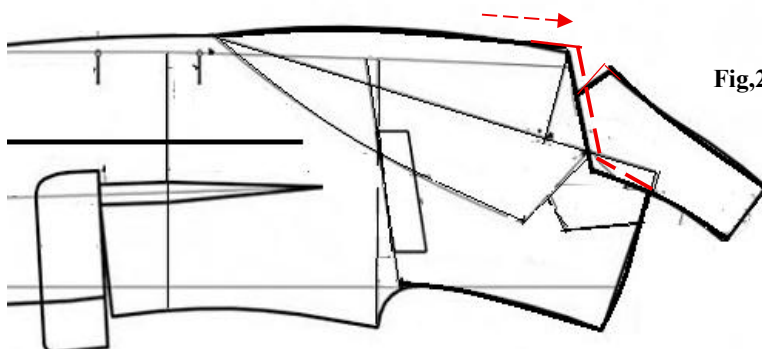


Fig. 2b. Remedial pattern correction.

3. Collar Frame-Off

Description

The outer edge of the collar pulls backward, causing an irregular fall and roll, as shown in Fig.3a.

Technical Factor

-Insufficient saturation of the collar leaf edge causes the collar to pull backward.

Remedial Measure

-Increase the collar leaf-edge saturation to provide sufficient length and allow the collar to fall and roll correctly, as shown in Fig. 3b.



Fig. 3a. Observed collar frame-off.

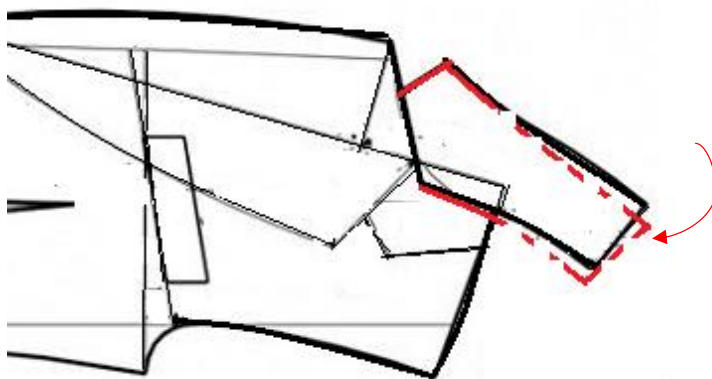


Fig. 3b. Remedial pattern correction.

4. Upper Centre-Back Rippling

Description

Ripples were observed across the upper centre back below the collar, radiating from the centre-back seam towards the shoulder-blade area, as shown in Figure 4(a).

Technical Factor

-Incorrect back balance due to excessive BBL and CBL.
 -Excessive suppression from the nape to the waist.

Remedial Measure

-Shorten the Centre-Back Length (CBL).
 -Shorten the Back Body Length (BBL).
 -Smooth the back-neck curve.
 -Release width across the back, as shown in Fig. 4b.



Fig. 4a. Observed upper centre-back rippling.

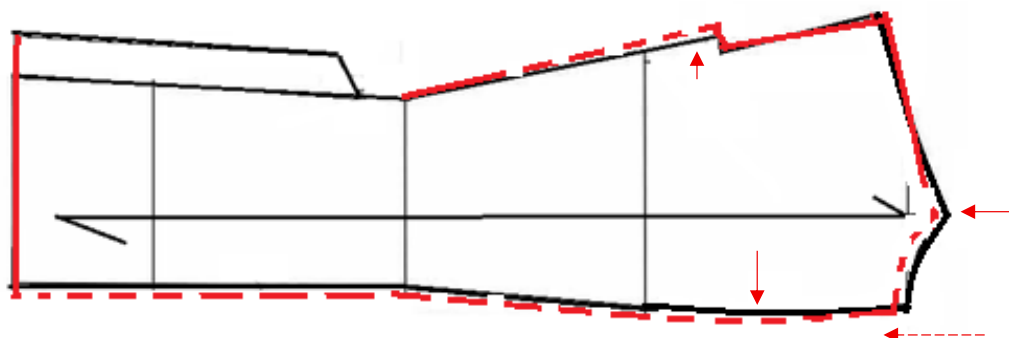


Fig. 4b. Remedial pattern correction.

5. V-Zone Variation

Description

A narrow and shallow V-zone causes the chest and lapel to hoop upward, as shown in Fig. 5a.

Technical Factor

- A higher buttoning point and inappropriate lapel configuration alter the V-zone and cause the chest and lapel to lift.

Remedial Measure

- Reduce the neck width.
- Gradually reshape the lapel leaf edge.
- Lower the button stance, as shown in Fig. 5b.



Fig. 5a. Observed V-zone variation

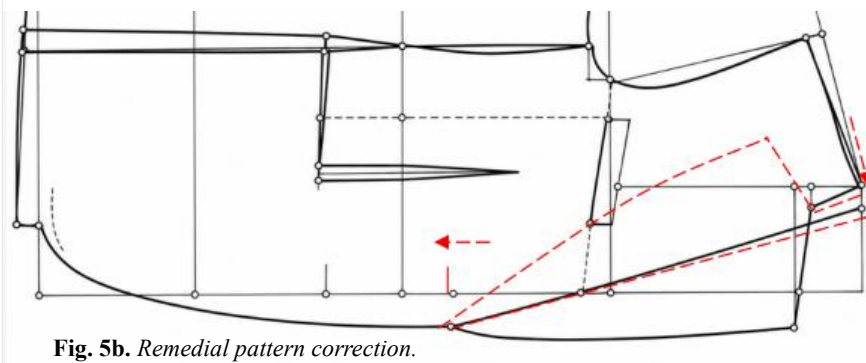


Fig. 5b. Remedial pattern correction.

6. Loose /Hanging Lapel (Gaping Lapel)

Description

The blazer lapels were observed to bow outward, pull away from the body, or buckle instead of lying cleanly and flat against the chest, as shown in Figure 6(a).

Technical Factor

-Imbalanced shoulder forward stance

Remedial Measure

-Decrease the shoulder slope at the front shoulder ridge and increase the shoulder slope at the back shoulder ridge to restore shoulder balance and allow the lapel to lie flat, as shown in Fig. 6b.



Fig. 6a. Observed loose lapel.

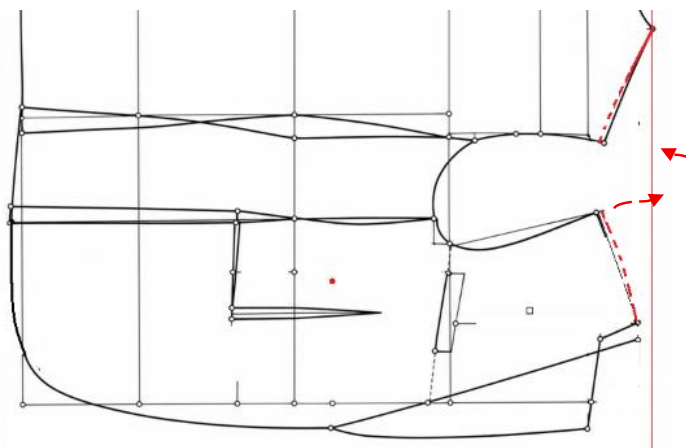


Fig.6b. Remedial Pattern Correction

7. Lapel roll-line off

Description

A major fitting defect where the lapel fails to lie flat and contour smoothly over the wearer's chest as shown in fig.7a. **Technical Factor**

-Narrowed neck width and closed lapel break line

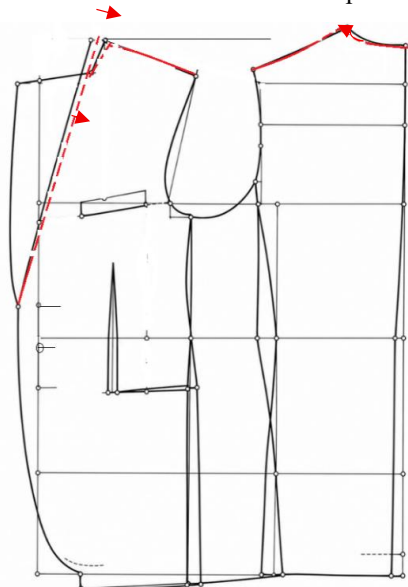


Fig.7b..Remedial Pattern Correction



Fig.7a. Lapel roll-line off

Remedial Measure

-Widen neck width & shift Lapel break line by retaining same break point and button stance as shown in Fig.7b and front facing should adjust accordingly.

8. Shoulder Imbalance (Asymmetric shoulder)

Description

Lapel pops outward instead of forming a soft, natural three-dimensional curve as shown in fig.7a.

Technical Factor

--Uneven or Asymmetrical Shoulders (Right shoulder sits lower than the left.)

Remedial Measure

- Lift the right shoulder line of front and back. (reduce shoulder slope)-customize the shoulder pad by increasing its height.as shown in Fig.7b and front facing should adjust accordingly.

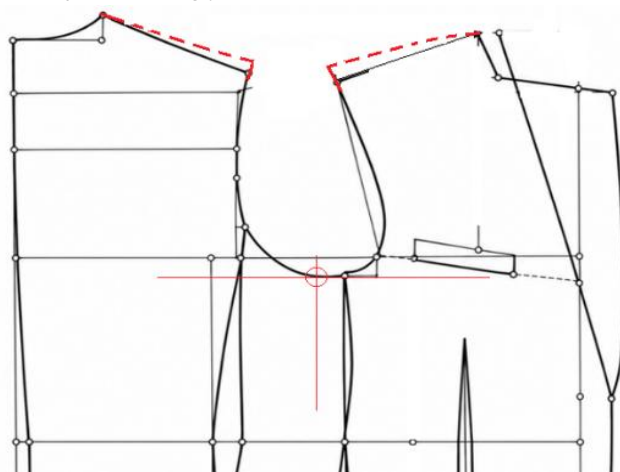


Fig.8b.Remedial Pattern Correction

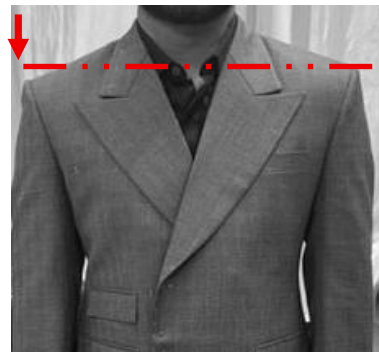
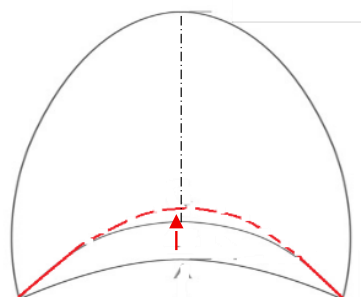


Fig.8a. Lapel roll-line off



9. Forward/Outward Shoulder

Description

Observed roping and drag lines appear across the forward shoulder, as shown in Fig. 9a

Technical Factor

-The front shoulder pulls backward due to shoulder imbalance.

Remedial Measure

- Adjust the shoulder stance backward.
- Remove the required amount from the front shoulder and add the equivalent amount to the back shoulder.
- Slightly reduce the across-front at the armhole pitch, as shown in Fig. 9b.

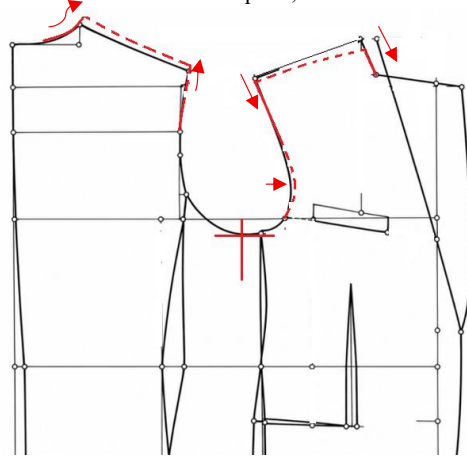


Fig. 9b. Remedial pattern correction.



Fig. 9a. Observed forward shoulder.

10. Shoulder Max

Description

The shoulder extends excessively outward, creating a broad or exaggerated shoulder line and affecting the natural shoulder balance as shown in Fig. 10a.

Technical Factor

-Across Shoulder length is beyond Shoulder ridge/point.

Remedial Measure

- Reduce the across-shoulder length while maintaining the shoulder slope, as shown in Fig. 10b.



Fig. 10a. Observed shoulder max.

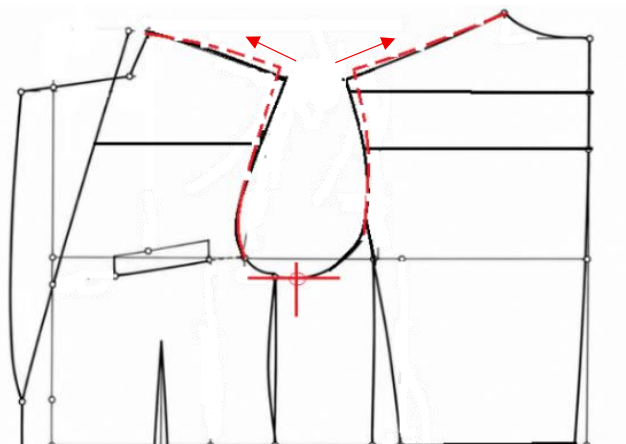


Fig. 10b. Remedial pattern correction.

11. Knocked-down shoulder.

Description

The shoulder line drops downward excessively from the neck towards the shoulder point, creating a sloping or collapsed shoulder appearance, as shown in Fig. 11a.

Technical Factor

-Excess fabric around shoulder and mound due to less shoulder slope and inadequate shoulder padding

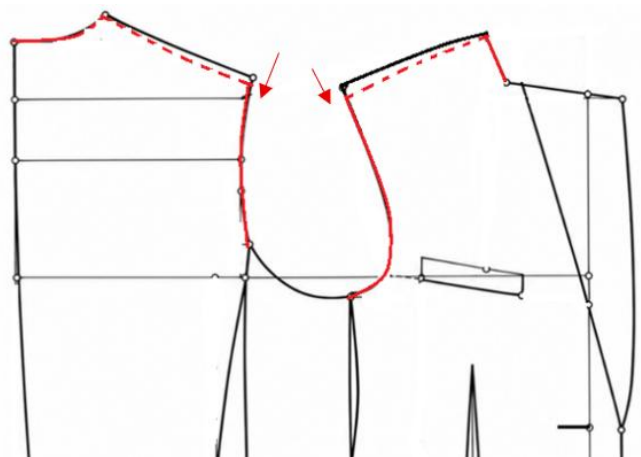


Fig. 11b. Remedial pattern correction.

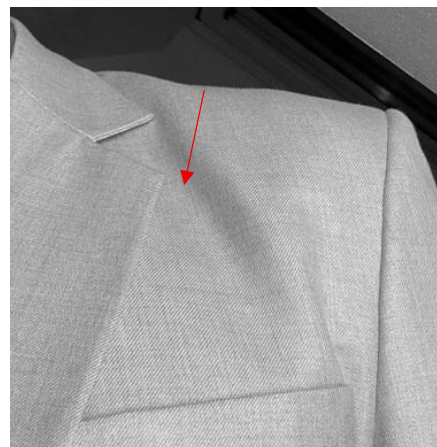


Fig. 11a. Observed knocked-down shoulder.

Remedial Measure

- Needed increase the shoulder slope at shoulder point and partially at HPS.
- Shoulder padding needs to be customized according to the slope, as shown in Fig. 11b.

12. Shoulder Divot

Description

A shoulder divot is an indentation formed around the upper portion of the sleeve-cap line, resulting in an uneven transition between the sleeve cap line and body armhole, as shown in Fig. 12a.

Technical Factor

- A mismatch between the sleeve-cap contour and body armhole, with excessive sleeve-cap height relative to armhole depth, creates an uneven sleeve-head transition

Remedial Measure

- Reshape the rear sleeve-cap line with slight cap ease and balanced notching to achieve a smooth transition between the sleeve and armhole, as shown in Fig. 12b.

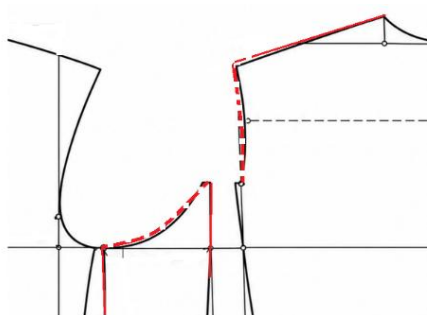


Fig. 12b. Remedial pattern correction.

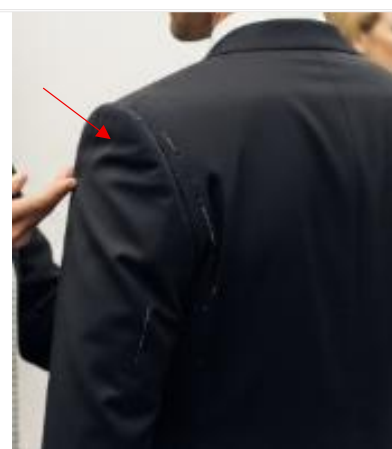
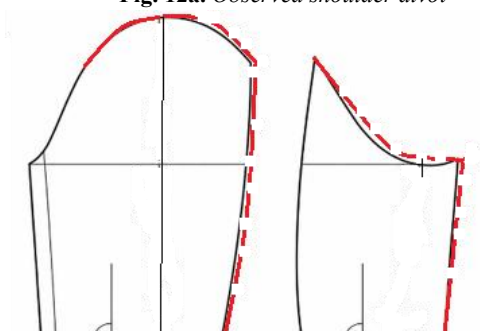


Fig. 12a. Observed shoulder divot



13. Chest Gap

Description

The lapels lift and push outward from the chest instead of lying smoothly against the body, creating a visible gap between the lapel and chest, as shown in Fig. 13a.

Technical Factor

- Insufficient front-panel ease at the chest and excessive waist suppression create outward pulling when buttoned, causing the lapels to open and produce a chest gap.

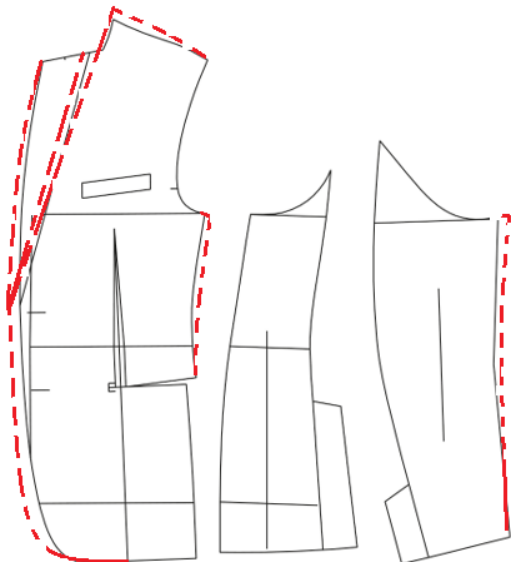


Fig. 13b. Remedial pattern correction.

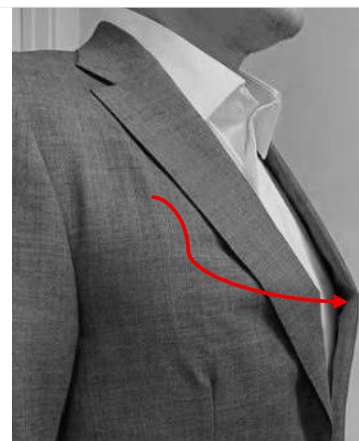


Fig. 13a. Observed chest gap

Remedial Measure

-Reshape the lapel leaf edge and introduce a small lapel dart to control excess along the roll line.
 Increase the chest and waist width along the front edge to relieve tension and allow the lapel to lie smoothly against the chest, as shown in Fig. 13b.

14. X-Button Strain

Description

An X-shaped pattern of deep diagonal tension wrinkles radiates outward from the button closure when the blazer is fastened, as shown in Fig. 14a.

Technical Factor

-Insufficient front-chest or waist-arc ease causes the fabric to pull at the CF button.

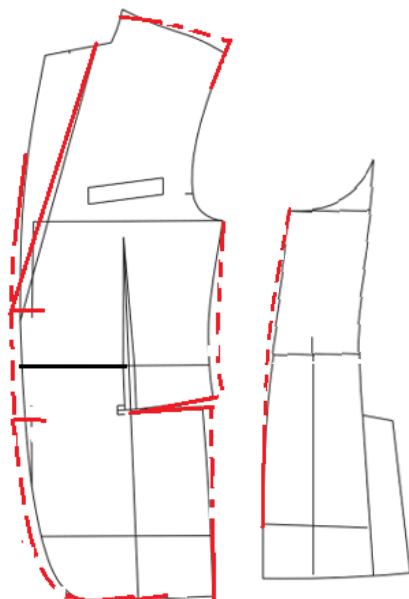


Fig. 14b. Corresponding pattern correction.



Fig. 14a. Observed X-button strain.

Remedial Measure

- Increase chest and waist-arc ease along the front edge, with partial adjustment at the side seams at par with side front panel shaping, as shown in Fig. 14b.

15. Centre-Back Vent Off

Description

The centre-back vent pulls apart and remains open at the bottom, even when the wearer stands upright, as shown in Fig. 15a.

Technical Factor

- Excessive suppression around the waist and hip creates tension along the centre-back vent and side back, forcing the vent to open.

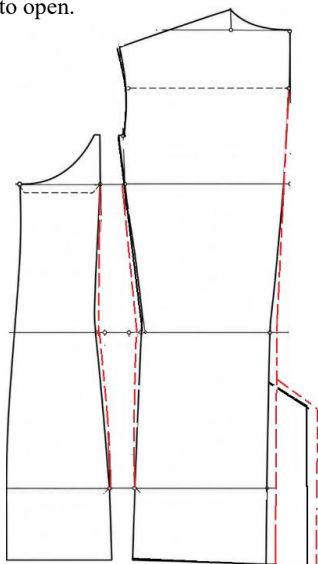


Fig. 15b. Corresponding pattern correction.



Fig. 15a. Observed centre-back vent opening.

Remedial Measure

-Reduce the waist suppression from below the chest through the waist and hip to the bottom hemline, with partial release at the side back, allowing the centre-back vent to hang and close smoothly, as shown in Fig. 15b.

16. Walking Sleeve Off

Description

The sleeve hangs straight at the side without natural forward movement, causing restricted sleeve motion and visible twisting, as shown in Fig. 16a.

Technical Factor

-Insufficient elbow articulation and inadequate forward swing at the elbow line cause the sleeve to remain too straight and restrict natural arm movement.

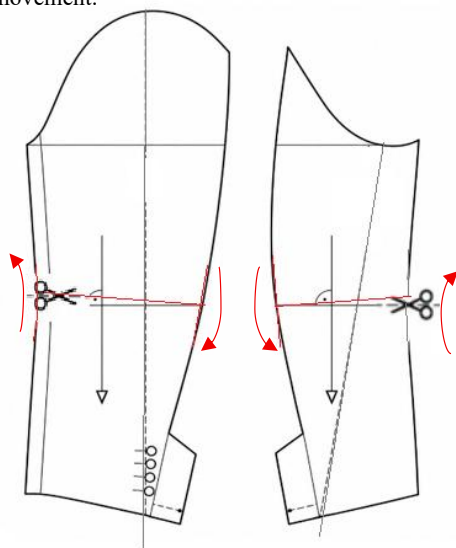


Fig. 16b. Corresponding pattern correction



Fig. 16a. Observed walking sleeve off

Remedial Measure

- Introduce controlled elbow articulation by shortening the forearm length relative to the rear sleeve length.
 -Use slash-and-close manipulation at the elbow line to redistribute sleeve volume and fine-tune the forward swing, as shown in Fig. 16b.

17. Side Vent Open and Centre-Back Hiking

Description

The centre-back length hikes upward from the HBL, causing the side vents to swing open and the jacket to ride up over the seat, as shown in Fig. 17a

Technical Factor

-Insufficient centre-back length associated with an erect posture causes upward displacement at the centre back.

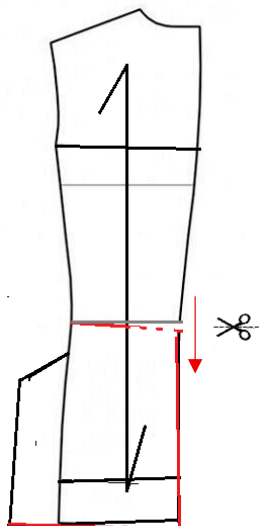


Fig. 17b. Corresponding pattern correction.



Fig. 17a. Observed centre-back hiking and side-vent opening.

Remedial Measure

- Lengthen the centre back through the waistline to provide sufficient back length and sweep, allowing the collar to reach the neck and the jacket hem to cover the seat, with the vents lying smoothly, as shown in Fig. 17b.

18. Side Pulling

Description

The side pulls inward, creating diagonal drag lines extending from the side towards the centre back, as shown in Fig. 18a.

Technical Factor

-Insufficient side-panel width at the back, particularly across the back chest, back waist and back hip arcs.

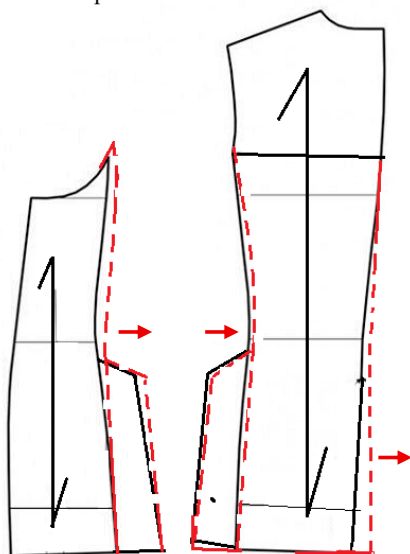


Fig. 18b. Corresponding pattern correction.



Fig. 18a. Observed side pulling.

Remedial Measure

- Release the required width at the side panel and remove an equivalent amount from the corresponding side of the back panel. Reduce the suppression from the back waist towards the bottom hemline to relieve stress and strain and restore a smooth back appearance, as shown in Fig. 18b.

19. Tight Arm

Description

Diagonal drag lines form around the upper arm and pull towards the underarm, as shown in Fig. 19a.

Technical Factor

-Insufficient bicep circumference causes tightness around the upper arm and restricts sleeve movement.

Remedial Measure

- Increase the bicep circumference by lowering the armhole depth and adjusting the sleeve-cap height to provide adequate upper-arm ease, as shown in Fig. 19b.



Fig. 19a. Observed tight arm

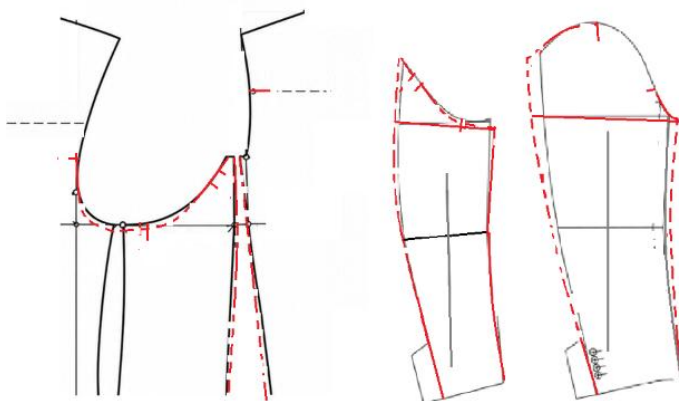


Fig. 19b. Corresponding pattern correction.

20. Sleeve Pitch Off

Description

Wrinkles bunch up or form diagonal drag lines (furrows) across the front or back of the upper arm, as shown in Fig. 20a.

Technical Factor

Misalignment of the sleeve pitch with the corresponding body armhole balance causes the sleeve to rotate and form diagonal drag lines.

Remedial Measure

Reshape the sleeve-cap line to align with the body armhole and adjust the sleeve pitch to achieve a balanced forward and backward swing of the sleeve, as shown in Fig. 20b



Fig. 20a. Observed sleeve pitch off.

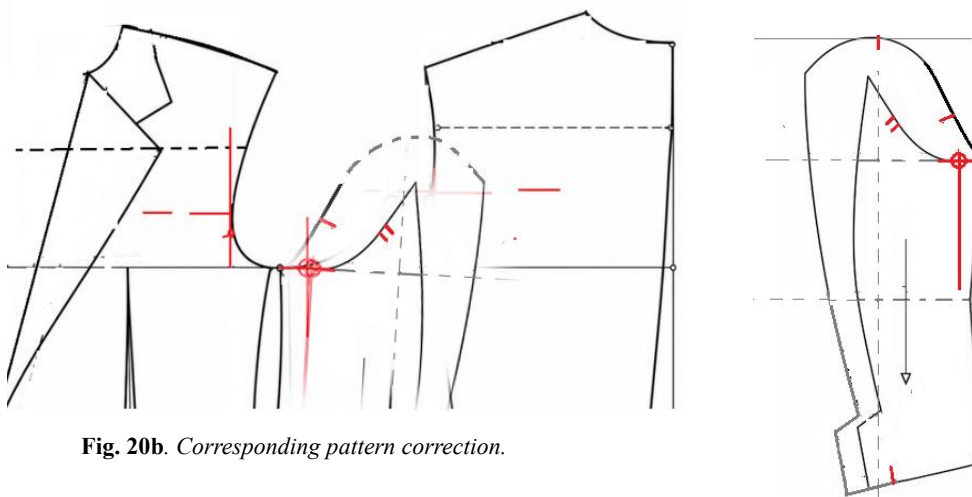


Fig. 20b. Corresponding pattern correction.

Overall Results and Discussion

The analysis of the 20 styling and fitting issues showed that Drafting (C3) was associated with all 20 issues, followed by Measuring (C1) with 9, Materials (C2) with 6, and Sewing (C7) with 3 issues. No associations were recorded for C4, C5, C6, C8 or C9. The findings indicate that pattern dimensions, shaping, proportions and component relationships were consistently relevant to the observed manifestations, with measuring, materials and sewing contributing to selected issues. Overall, the findings provide a structured basis for relating observed styling and fitting issues to their probable originating processes, associated technical factors and remedial measures, supporting subsequent pattern engineering improvement.

V. CONCLUSION

The study identified 20 distinct styling and fitting issues in men's blazers across MTO/Bespoke, CT, MTM and RTW blazer-making systems. Each issue was traced to its probable originating process within the nine-process blazer-making framework and assessed in relation to associated technical factors and remedial measures. Drafting (C3) was associated with all 20 identified issues, indicating its prominent relevance to the observed styling and fitting manifestations. The study provides a structured practical reference for relating observed garment issues to probable process origins and corresponding corrective measures, supporting pattern engineering improvement in blazer making.

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