

# KOHL'S - SWEATERS SUPPORT TRAINING

*Global Technical Design*  
*Updated 06-25-18*

**KOHL'S**

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# Part 1: General Information

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# Tension Process-Counter Samples

- Kohl's Tech:
  - Kohl's tech provides target tension in Stitches per Inch and Courses per Inch.
  - Target tension is based on previous PR sample or a swatch.
  - Target tension should be used as a guideline for development.
- Vendor:
  - Vendor notes tension of counter sample SPI & CPI on sample tag.
  - Vendor notes counter sample measurements on sample tag.
  - Vendor notes weight of counter sample on sample tag.
- Design:
  - Design comments on counter sample tension. If tension is not approved, new counter sample should be sent.
  - Counter sample must have correct tension to be cost finalized and fit.
- Kohl's Tech
  - Kohl's tech updates target tension to match the approved tension of the counter sample.
  - This becomes the new target tension for the style.
  - Kohl's tech notes counter sample weight on POM page for reference.

A002-SW-CP	SWEATER CPI-DEV ONLY			Grading			0		
				Spec Meas					
A002-SW-SP	SWEATER SPI-DEV ONLY			Grading			0		
				Spec Meas					
A002-SW-W	SWEATER WEIGHT(DEV ONLY) CK ALIGN			Grading			0		
				Spec Meas					

# Tension Process-Adopted Styles

- Fit Samples:
  - Fit sample tension should match counter sample tension.
  - CTD and Kohl's TD count the tension of the fit samples and enter SPI and CPI on Fit Evaluation page.
  - CTD and Kohl's TD note if tension and hand feel are acceptable in fit comments.
  - If tension and/or hand feel is not acceptable sample may be rejected.
  - Vendor notes sample weight on sample tag.
  - Kohl's TD enters sample weight into on Fit Evaluation page.
  - Sample weight should be checked against previous samples and contracted weight.  
Spec revisions should be taken into account when comparing weights.

# Counting Tension: Stitch Count & Weight

- **Stitch Count:**

- 7-14gg:

- Count in 2"x2" square, then average back to stitches per inch.
    - Tolerance 1 SPI/CPI

- 1-5gg :

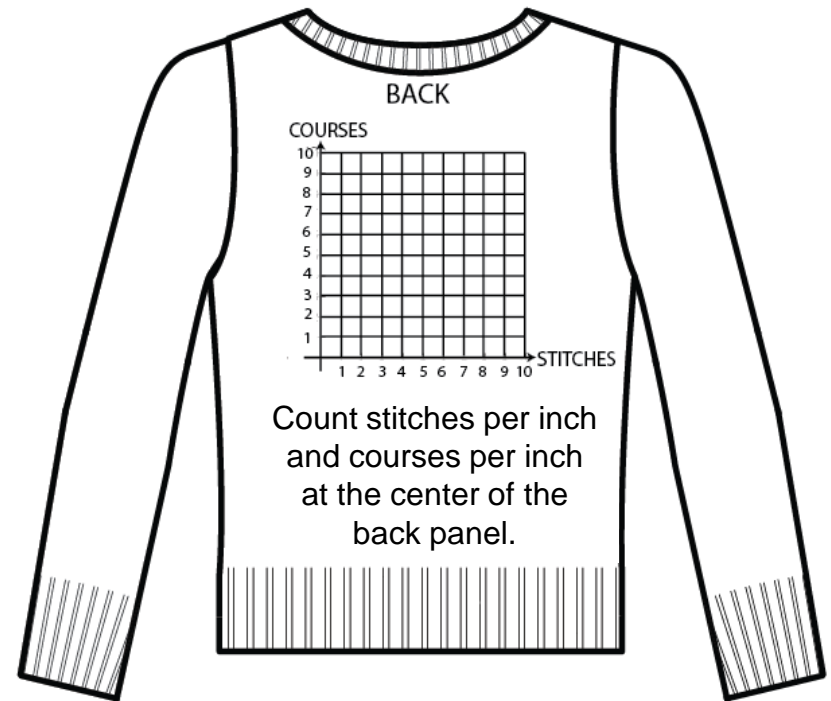
- Count in 4"x4" square, then average back to stitches per inch.
    - Tolerance ½ SPI/CPI

- Styles with patterning:

- May use repeat width and height, or width of specific number of repeats.

- **Weight:**

- All samples should be weighed on a sweater scale in lbs/dz, and sample weight noted on the tag.



If front and back panels are different, tension should be counted separately for each panel.

# Tension Affects Fit

- If a sample is on spec but looks different on the form than expected, the tension should be evaluated:
  - Compare the new sample to the previous sample on the form. Does the fabric drape the same way?
  - Compare samples against reference marks on the form. Do they match?
  - Compare stitch count of the new sample to the target. Is it within tolerance?
  - Check the weight of the new sample and the previous sample. Is it what was expected? Take any spec revisions into account when comparing weights.
- Sample may be rejected due to incorrect tension:
  - Tension can change the appearance on body. Tighter tension will appear stiffer and smaller. Looser tension will appear looser and larger. Samples that do not have the correct tension may be rejected.
  - Hand feel and wash often affect the tension. Samples that do not have the correct hand feel/wash may be rejected.
- Vendor should call out any differences between sample yarn and bulk yarn that may affect tension and/or hand feel so Kohl's knows what may be causing any variance.

✓ CORRECT TENSION AND HAND FEEL = OK TO FIT

✗ INCORRECT TENSION AND/OR HAND FEEL = REJECT

# Sweater Sample Tag

- A. Fill in yarn information. Fill in target weight and sample weight in lbs/dz.
- B. Call out Additional Information:
  - If a different number of ends is used in the trim.
  - Anywhere DTM nylon has been added.
  - Construction details that vary from the original tech pack.
  - Any critical POM's that are out of tolerance.
- C. Fill in measurements on back of tag.
- D. Fill in SPI & CPI, and indicate if hand feel & wash are correct.

Tag can be found on K-Link

<b>KOHL'S Sweaters</b>		Critical Points of Measure (to be filled out only if information is not provided in Tradestone)		
		Spec:	Sample:	Over/Under
Date: 9/25/14	Season/Year: FA'15	HPS Length:	25	24 -1
Sample Request #:		Neck Width:	8	7 3/4 - 1/4
<b>Attention: Designer</b>		Front Neck Drop:	4 1/2	4 3/4 1/4
<input checked="" type="checkbox"/> Counter Sample: Round #		Across Shoulder:	14 1/2	14 - 1/2
<input type="checkbox"/> Mock up/Reference	<input type="checkbox"/> R&D Sample	Chest:	19	18 1/2 - 1/2
<input type="checkbox"/> Advertising Sample	<input type="checkbox"/> Color Run Sample	Waist:	18	17 1/2 - 1/2
<input type="checkbox"/> Fit Sample:		Sweep:	20	19 1/2 - 1/2
<input type="checkbox"/> 1st <input type="checkbox"/> 2nd <input type="checkbox"/> 3rd <input type="checkbox"/> PP (pre-production)	<input type="checkbox"/> T.O.P	Armhole:	8	7 3/4 - 1/4
<input type="checkbox"/> Other:		Sleeve length:	24 1/2	24 - 1/2
Style #: XXXXXXXX	Brand: Sonoma	Upperarm:	6 1/4	6 - 1/4
Description: LS Roll Tab Henley		Sleeve Opening:	3 1/2	3 1/2
Sample Size: M		Other:		
Yarn Size/Content: 2/28nm 100% Cotton				
Ends: 1	Gauge: 12gg	Stitches per Inch: 16 Spi		
Target Weight: 6 1/8 lbs/dz	Sample Weight: 6 1/4 lbs/dz	Courses per Inch: 20 Cpi		
Vendor: XXXXX		Handfeel/Wash Correct	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
Cost: \$\$\$	\$FC \$ELC	Comments:		
T&A		Measured by/Date:		
Approve Color lab dips Due Date:			Actual	Available
Approve Bulk Fabric Due Date:		Fabric Quality:	<input type="checkbox"/>	<input type="checkbox"/>
Fit Approval Date:		Fabric Color:	<input type="checkbox"/>	<input type="checkbox"/>
Cut Date:		Trim Quality:	<input type="checkbox"/>	<input type="checkbox"/>
PP Approve Deadline:		Trim Color:	<input type="checkbox"/>	<input type="checkbox"/>
X-Factory Date:		Measured in PDM	Y <input type="checkbox"/> N <input type="checkbox"/>	
Country Of Production:		SENDER NAME/OFFICE: Name & LF Office Location		
Factory Name:		Ph/Email:		
Care Instructions:		Kohl's Corporate Office	New York Office	
<input type="checkbox"/> Dry Clean <input type="checkbox"/> Machine Wash <input type="checkbox"/> Other: _____		N56 W17000 Ridgewood Dr.	1400 Broadway 19th& 20 Fir	
Additional Information:		Menomonee Falls, WI 53051	New York, NY 10018	
Neck trim has 2 ends.		(262) 703-7000	(212)302-5145	
Cuff and bottom trim are 1x1 flatback rib instead of 1x1 rib		**Please tack sample tag to garment at CB neck to outside for tops and wearer's left outseam at waistband for bottoms for Counter Sample. Fit samples on W. Lt. side.		
Body length -1"				



# Blocking & Relaxing

- Samples should be relaxed for 24 hours after blocking, and should be fully dry before measuring and bagging.
  - Samples must be knit to spec, not blocked to spec.
- Visually check samples for quality of finishing.
  - Samples should not have shiny pressing marks and should not be hard pressed.



# Working with Measurement Differences

- To be used when discrepancies occur between Kohl's tech and CTD measurements:
  - Knit sample to the larger side of tolerance. Do not rely on blocking to spec.
  - Vendor to place sample in air conditioned room. Relax sample for 24 hours on a drying rack that allows circulation.
  - Re-measure sample.
  - If sample is under spec, knitting scheme should be adjusted and new sample should be made.
  - Vendor should not rely on re-blocking the same sample to meet spec.
  - Vendors should send fit samples in polybags.
  - If sample is under spec when received by Kohl's TD, vendor should calculate amount of relaxation based on Kohl's measurements, and add to the knitting scheme.

# Pattern Grading Approval

- As soon as a style is fit approved, vendor should submit front and back photos of size run samples for pattern grading approval to designer with tech designer on copy.
- Stripes must match at side seams and armhole. If stripes cannot be matched for entire armhole, stripes should be matched from mid armhole down.
- Stripe grading information will be indicated in the tech pack on a style by style basis. Please discuss with Kohl's TD & Design.

Match stripes at armhole as far up as possible. Stripes must match from mid armhole level down.

Front and back panel stripes must match at side seams



# How to Layout & Measure

- Measure on a flat, smooth surface.
- How to Layout:
  - Pick up sweater at armhole, and shake out the sample.
  - Lay flat on the table and smooth.
  - Pat several times to completely relax.
  - Sample should be moved as little as possible once laid out.
- Measuring:
  - High point shoulder is the intersection of the fold at the natural shoulder and the neck trim seam. If neck trim has a tubular base, high point shoulder is at the outer tubular seam.
  - If trim is linked on, link line should be included when measuring trim height.
  - If style does not have neck trim, measure from fold at natural shoulder and neck edge.
  - When measuring the armhole, sleeve should be raised so the saddle at the base of armhole is flat.
- How To Measure video and How To Measure manual are available on Kohl's Connections.





# Points of Measure-Rib/Stitch Count

- Rib Set/Stitch count should be requested by vendor if it is difficult to maintain specified measurements even when following correct knitting scheme.
- Examples: Ribs, tape yarns.

A000	RIB SET COUNTS @ CHEST			Grading			0			
				Spec Meas			44			
A000	RIB SET COUNTS @ WAIST			Grading			0			
				Spec Meas			40			
A000	RIB SET COUNTS @ SWEEP			Grading			0			
				Spec Meas			44			
A000	RIB SET COUNTS @ MUSCLE			Grading			0			
				Spec Meas			32			
A000	RIB SET COUNTS @ SLV OPENING			Grading			0			
				Spec Meas			22			

# onePLM Points of Measure Heavy Gauge (Ladies & Juniors)

- Applies to 1-5gg sweaters.
- Heavy gauge sweaters use SW points of measure in onePLM.
- SW points of measure have adjusted grading and extended tolerance.
- Only points of measure that need different grading or tolerance will have SW designation. All other points of measure will follow the standard POM's.

<input type="checkbox"/>	110	<input type="checkbox"/>	S			A253	XFRT/BK PLCMT #1 FM HPS	0	0
<input type="checkbox"/>	120	<input type="checkbox"/>				A254SW	ACROSS FRONT-SWEATERS	-1/2	1/2
<input type="checkbox"/>	130	<input type="checkbox"/>				A255SW	ACROSS BACK-SWEATERS	-1/2	1/2
<input type="checkbox"/>	140	<input type="checkbox"/>				A260H SW	CHEST 1" BLW AH RLXD-1/2 MEAS SWE	-3/4	3/4
<input type="checkbox"/>	150	<input type="checkbox"/>				A272HPS	WAIST PLCMT FM HPS	0	0

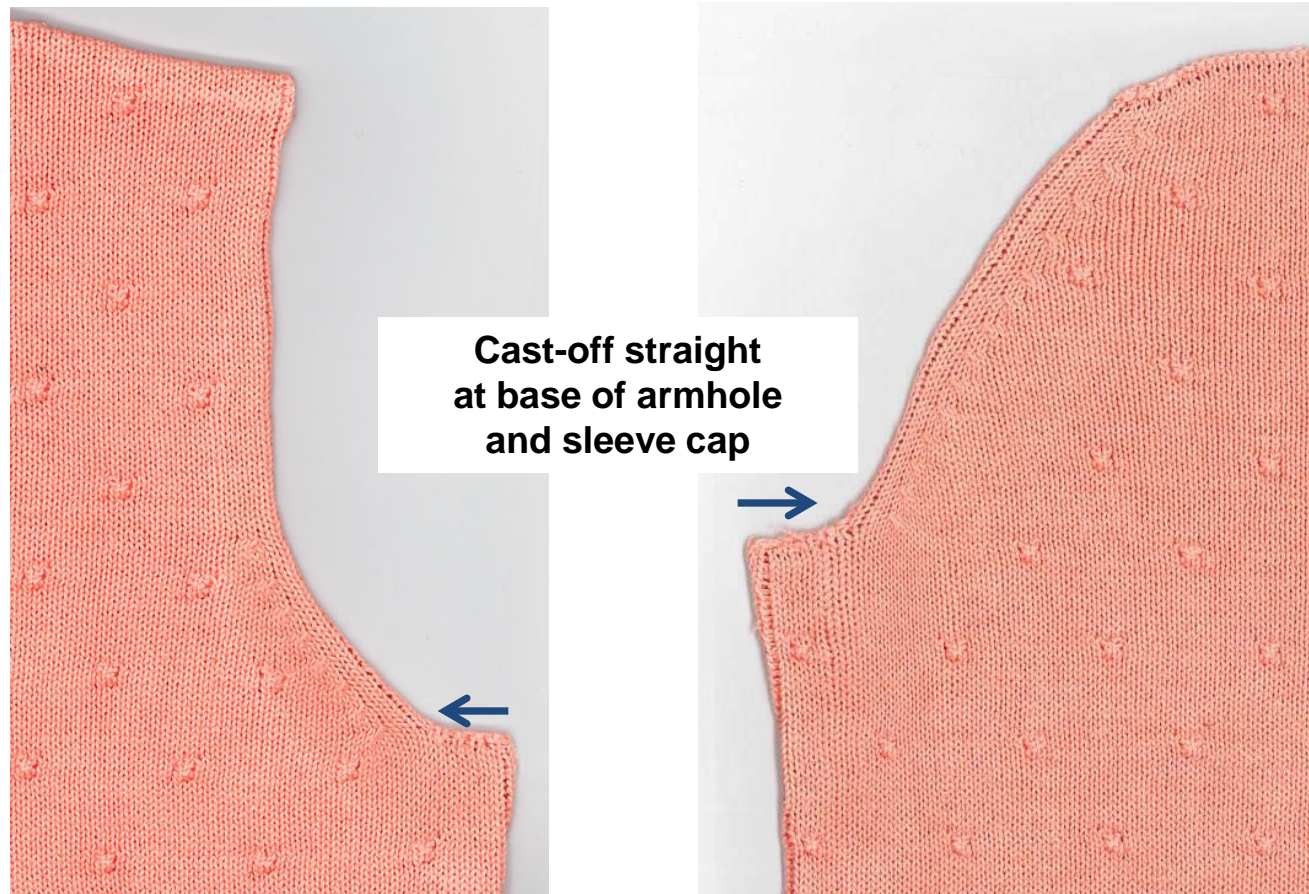
# Repeat Styles

- It is expected that repeat styles can be fit approved quickly, CTD should ensure:
  - Production knitting scheme is sent from production factory to the sample room making the new counter sample to ensure continuity.
  - Counter sample reflects the final tension, construction, and spec of the previous style, unless otherwise indicated in the tech pack.
  - Counter sample matches fit approved/PR sample from previous style.



# Armhole & Sleeve Cap Shape

- Base of armhole and sleeve cap should be cast off straight to create saddle for optimum fit and comfort.

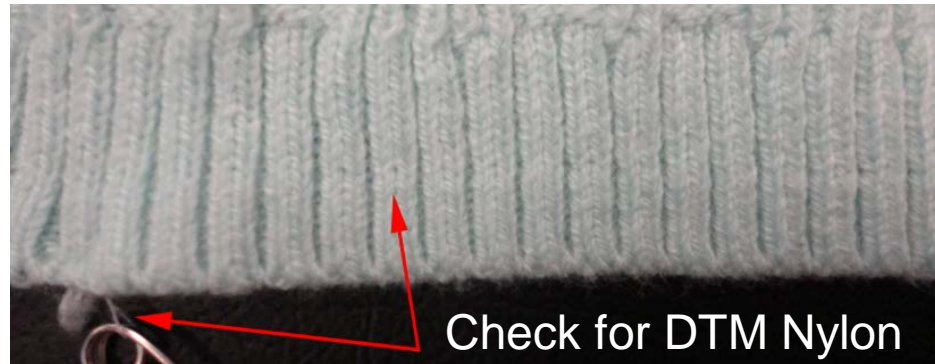




# Construction Best Practices

- Start Edges / Cast-on

- Start edges should be neat and should not be wavy. Add DTM Nylon to start edges for specified height.



- Linking Seams

- Seams should be linked unless otherwise noted in Technical Specification Package.
- Seam joins should be neat and stable with no large gaps or “holes” that may look like a defect.
- Linking should be smooth and seams should be flexible and able to lightly stretch.
- All yarn ends should be neatly and securely concealed in seam allowance, and should not be visible.

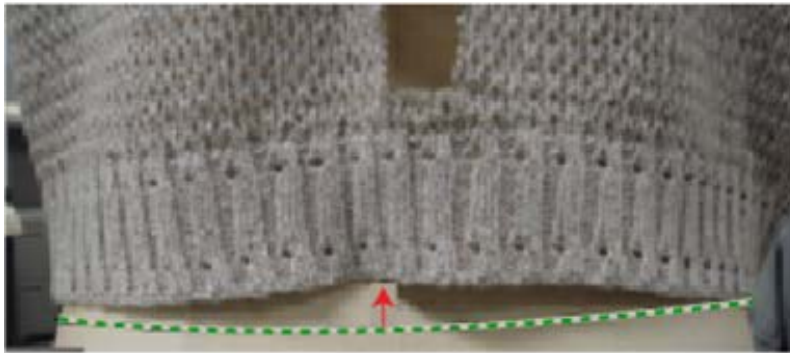
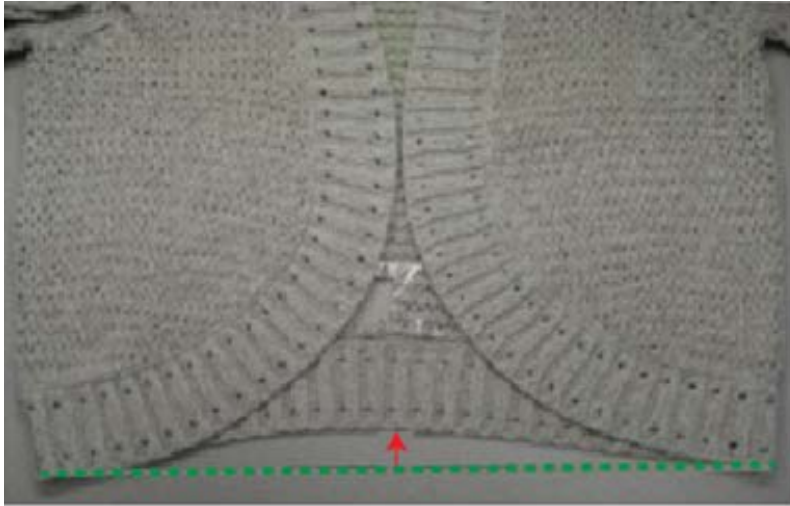
# Part 2: Fit & Balance

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# FIT & BALANCE

**NOT ACCEPTABLE:** Garment is hiking at CB on the flat and on the body.



**ACCEPTABLE SOLUTION:** Add length to back panel as needed to level sweep.

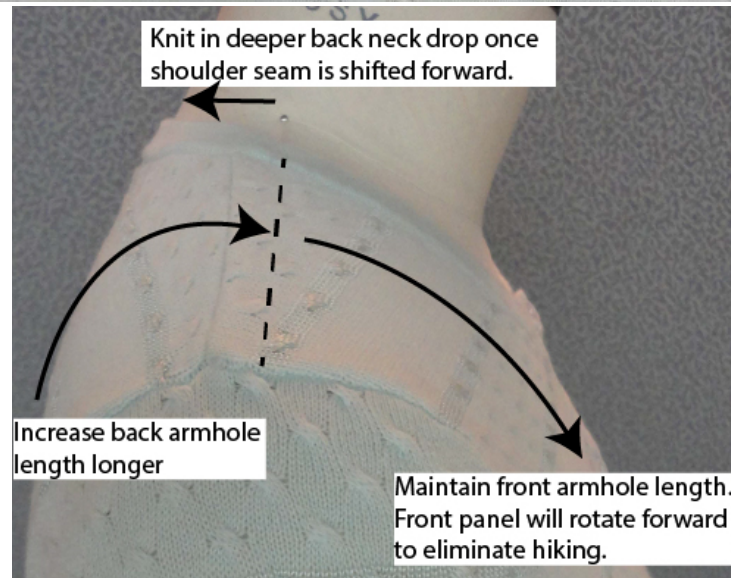
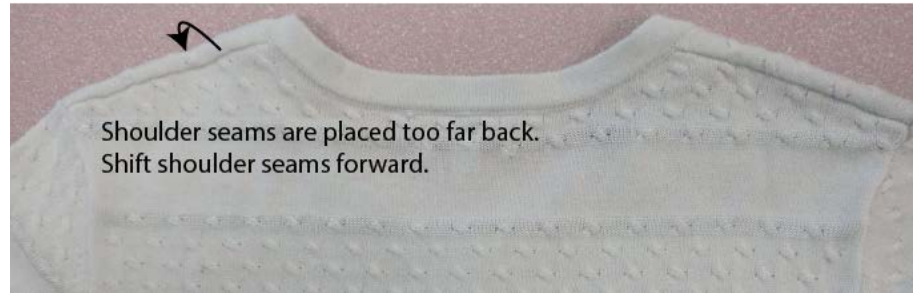


**NOT ACCEPTABLE:**

Shoulder seams are too far back. Front panel is hiking and has drag lines.



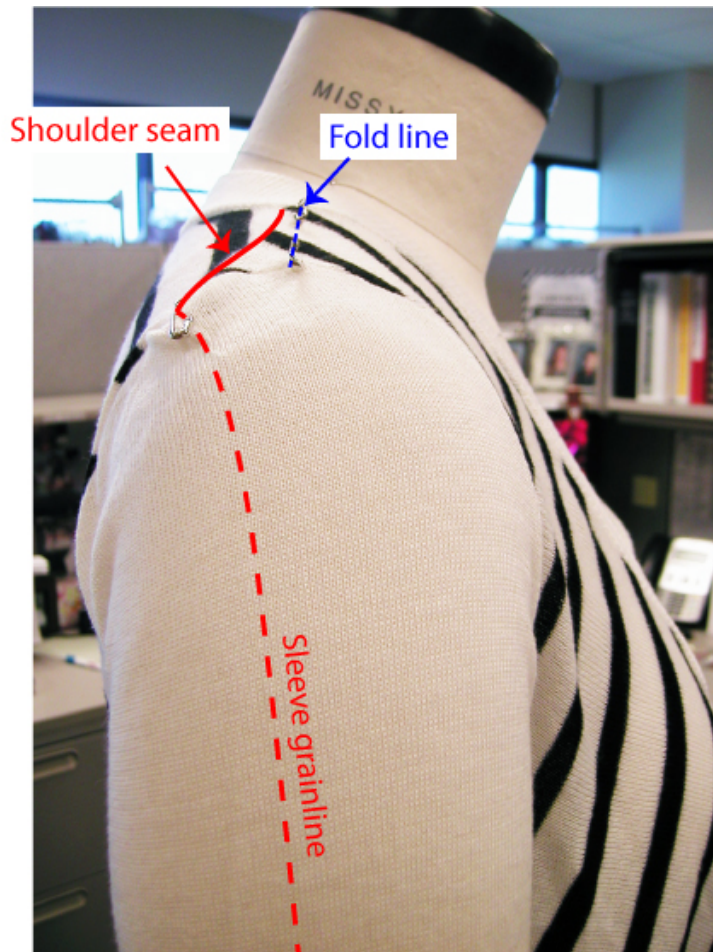
**ACCEPTABLE SOLUTION:** Shift shoulder seams forward to rebalance.



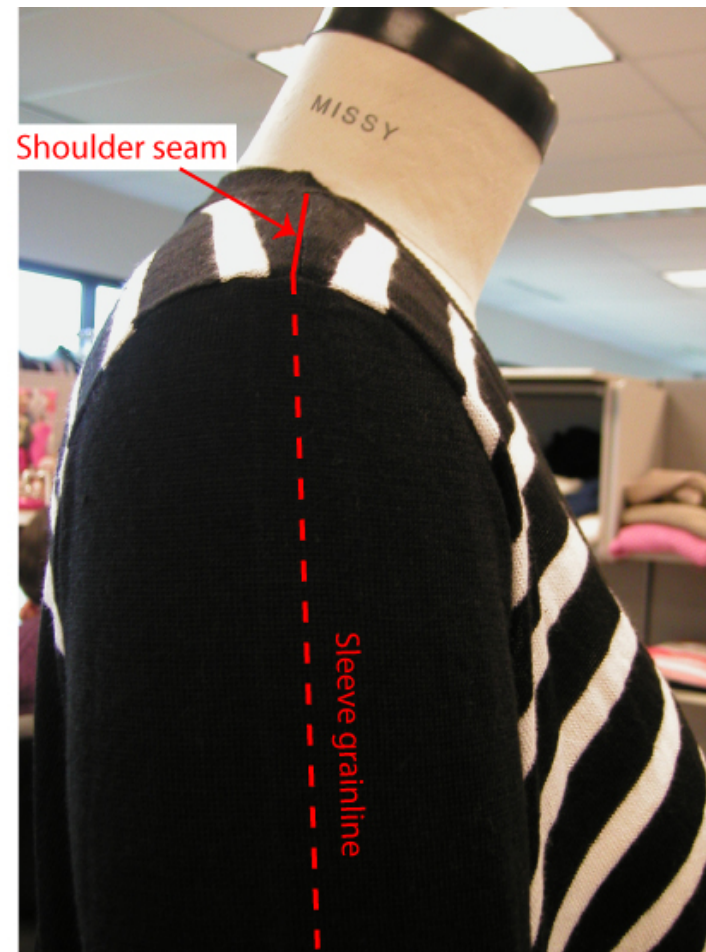


# FIT & BALANCE

**NOT ACCEPTABLE:** Sleeve is not centered on arm. Shoulder seam is too far back.

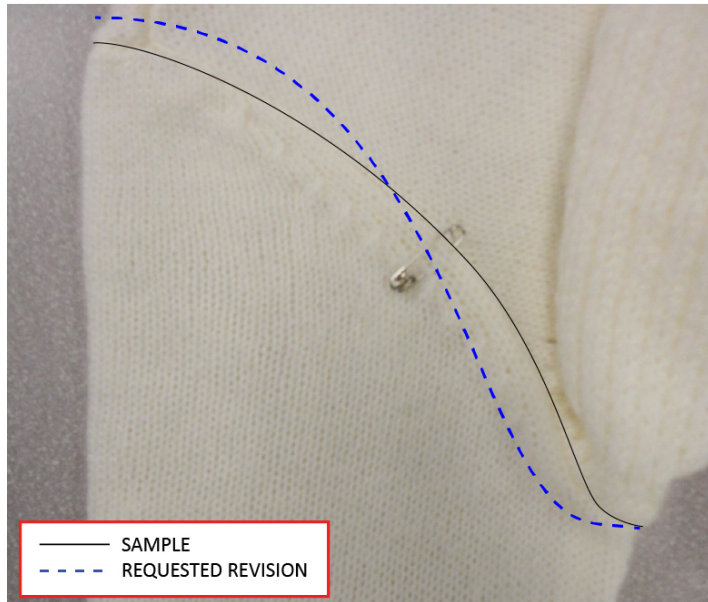


**ACCEPTABLE:** Sleeve is centered on the armhole and shoulder seam is aligned with the form.



# FIT & BALANCE

**NOT ACCEPTABLE:** Sleeve cap is too wide.



**ACCEPTABLE SOLUTION:** Increase saddle at base of cap to reduce cap width.





# FIT & BALANCE

**NOT ACCEPTABLE:** Sleeve cap is too wide and does not have enough saddle.

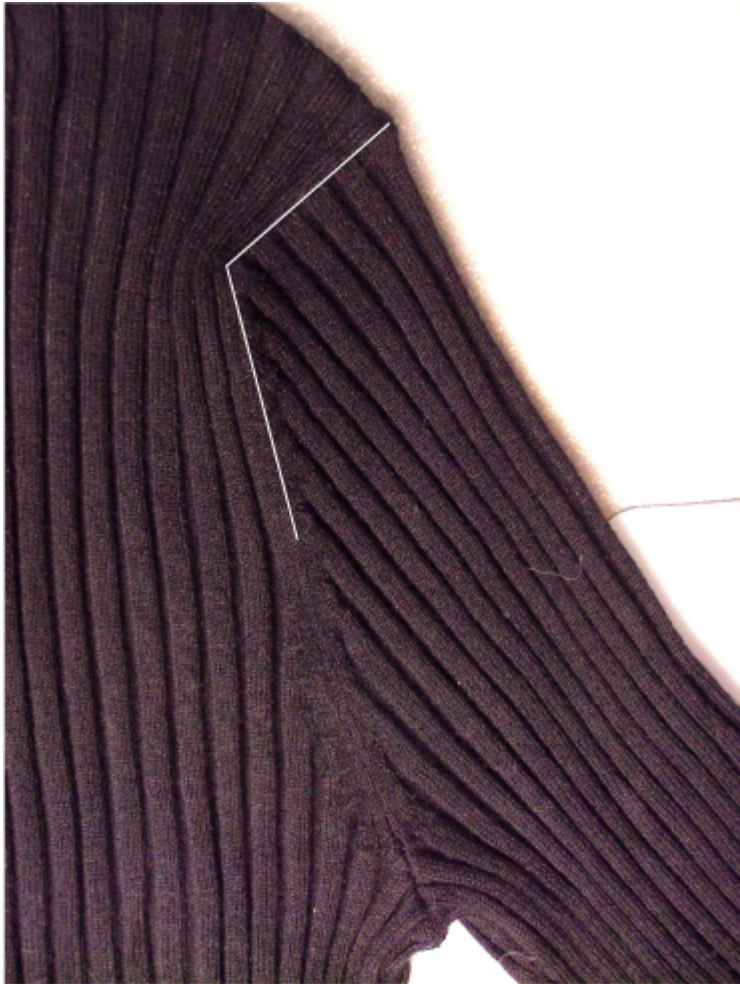


**ACCEPTABLE:** Sleeve cap has correct shape.

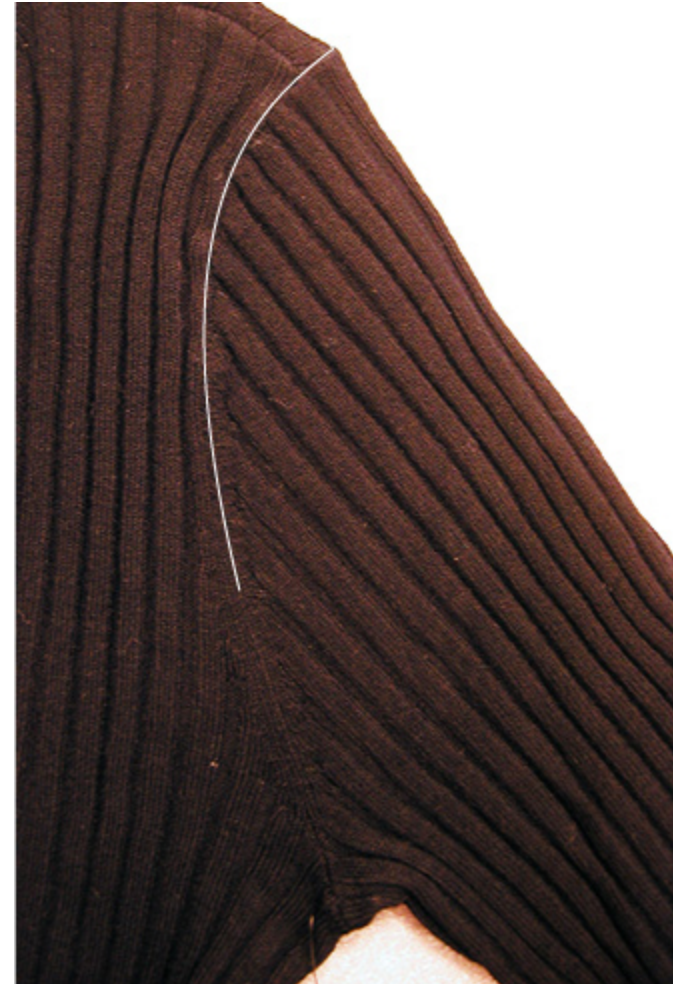


# FIT & BALANCE

**NOT ACCEPTABLE:** Sleeve cap shape is too straight and pointy.



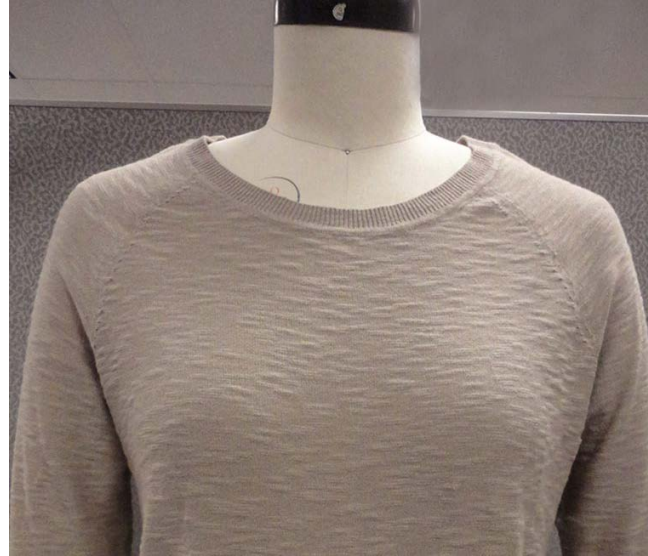
**ACCEPTABLE:** Top of cap has a gradual, rounded shape.





# FIT & BALANCE

**NOT ACCEPTABLE:** Sleeve cap is too narrow and scooped out, causing pulling at shoulders.



Too much shoulder slope on brown sample

**ACCEPTABLE:** Sleeve cap width is fuller, and garment has ease at wearer's shoulders.



Shoulder slope is reduced on red sample when cap width is increased



# FIT & BALANCE

**NOT ACCEPTABLE:** Sample does not have straight cast off at base of armhole and sleeve. This causes sweater to be flat and creates drag lines on body.

**ACCEPTABLE SOLUTION:** Add straight cast off to create saddle and allow garment to wrap under wearer's arm, eliminating drag lines. *Reference Fit Best Practices on page 16 for armhole and sleeve cap saddle.*



No saddle



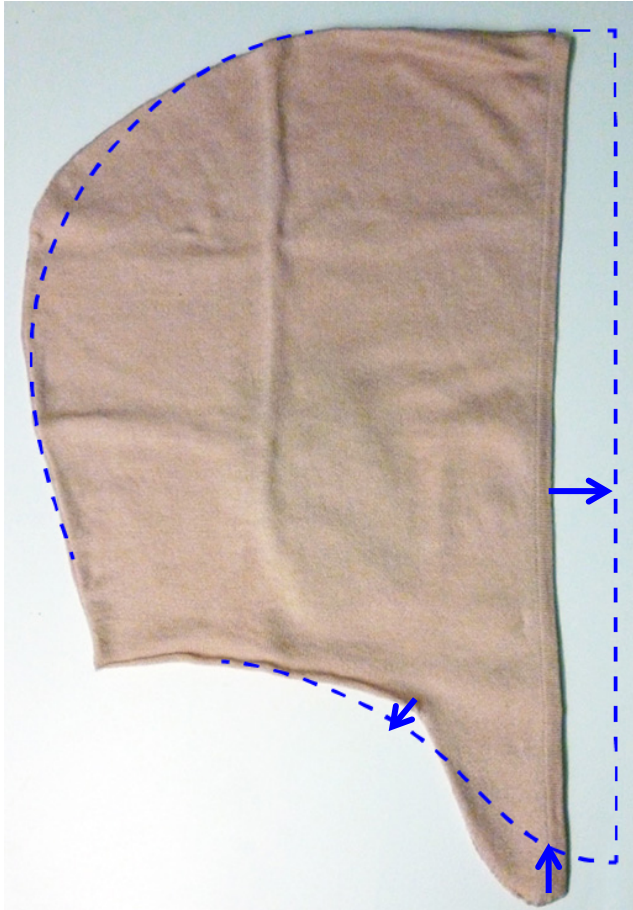
Straight cast-off added at bottom of armhole



Straight cast-off added at bottom of sleeve cap

# FIT & BALANCE

**NOT ACCEPTABLE** The curve shape at back of hood is too pointy. Hood height from top edge to HPS is too short compared to the hood opening height, resulting in narrow hood width.



**ACCEPTABLE:** The curve shape at back of hood is improved. The neck curve has been filled to increase hood height from top edge to HPS and hood width is increased by reducing hood opening.





# FIT & BALANCE

**NOT ACCEPTABLE** – There is too much shaping at the Side Seams, creating excess fullness.



**ACCEPTABLE** – Side Seams have been reshaped to eliminate excess fullness



# Part 3: Construction & Workmanship

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# WORKMANSHIP & CONSTRUCTION

**NOT ACCEPTABLE:** Garment was blocked to spec and relaxed/shrunk in transit.

CTD Photo

KTD Photo



← Same →  
Sample



**ACCEPTABLE SOLUTION:** Garments should be knit to the larger side of tolerance to account for relaxation, and should not rely on blocking to spec.

**NOT ACCEPTABLE:** Sleeve is hard pressed and creased.





# WORKMANSHIP & CONSTRUCTION

**NOT ACCEPTABLE:** Shoulder seam peaking on drop shoulder style.



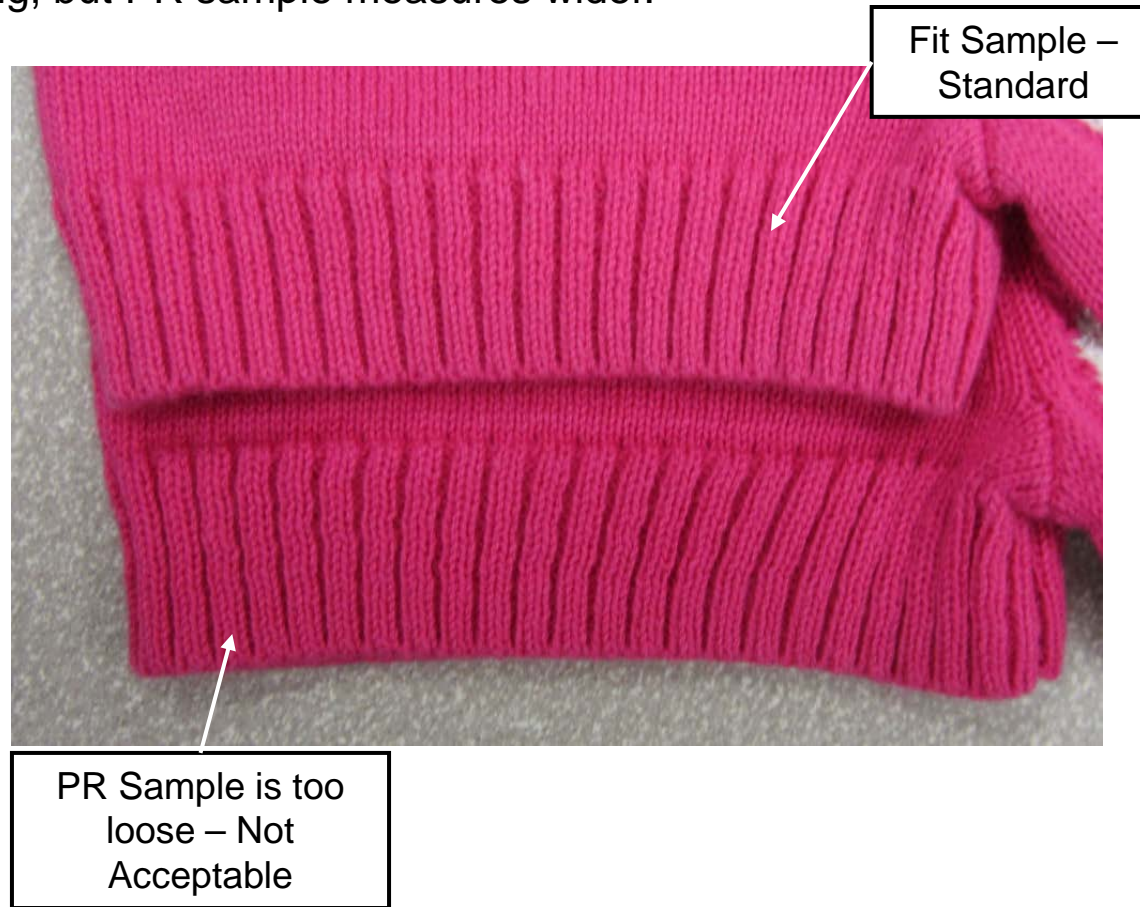
**ACCEPTABLE SOLUTION:** Angle out armhole from chest to shoulder, loosen linking tension, remove shoulder tape.





# WORKMANSHIP & CONSTRUCTION

**NOT ACCEPTABLE:** Rib tension is too loose. Same number of ribs at cuff opening, but PR sample measures wider.



**ACCEPTABLE:** Tighten rib tension. Maintain consistent tension between approved fit sample and PR sample.

**NOT ACCEPTABLE:** Back neck tape is too short.



**ACCEPTABLE:** Back neck tape should extend past raglan seams for better hanger appeal. Must measure to spec if given.

# WORKMANSHIP & CONSTRUCTION

**NOT ACCEPTABLE:** Linking is not secure and easily comes undone.



**ACCEPTABLE:** Securely knot linking yarn and conceal ends.





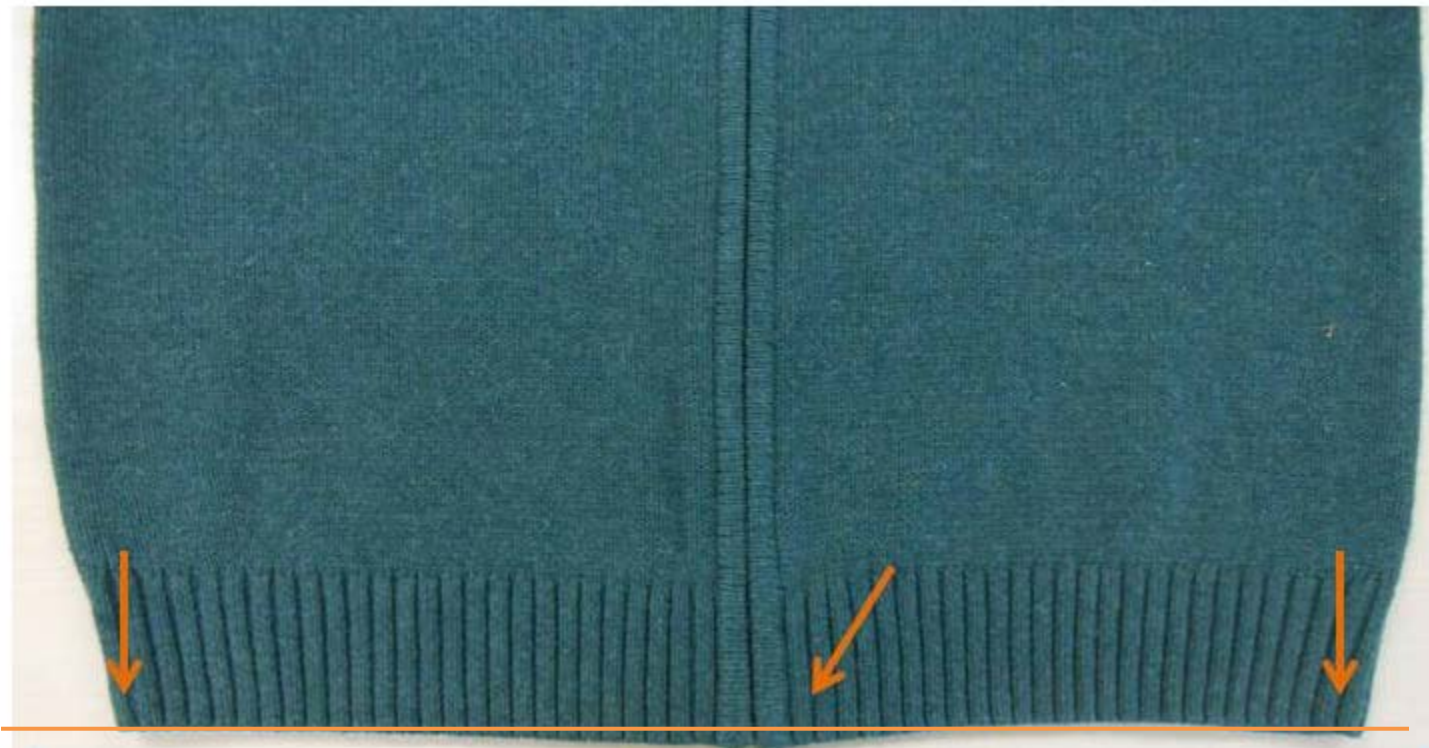
**NOT ACCEPTABLE** : Pocket flap is stretched out and wavy at top stitching.



**NOT ACCEPTABLE:** Pockets are not symmetrical and are not level.



**NOT ACCEPTABLE:** CF Placket is dipping because zipper is too long.



# WORKMANSHIP & CONSTRUCTION

**NOT ACCEPTABLE:** Zipper is peaking at top of collar and bottom of placket.

**ACCEPTABLE:** Zipper should lay flat.





# WORKMANSHIP & CONSTRUCTION

**NOT ACCEPTABLE:** Zipper length is too long. Zipper is wavy and does not lay flat.



**ACCEPTABLE:** Zipper is correct length and lays flat on the body.

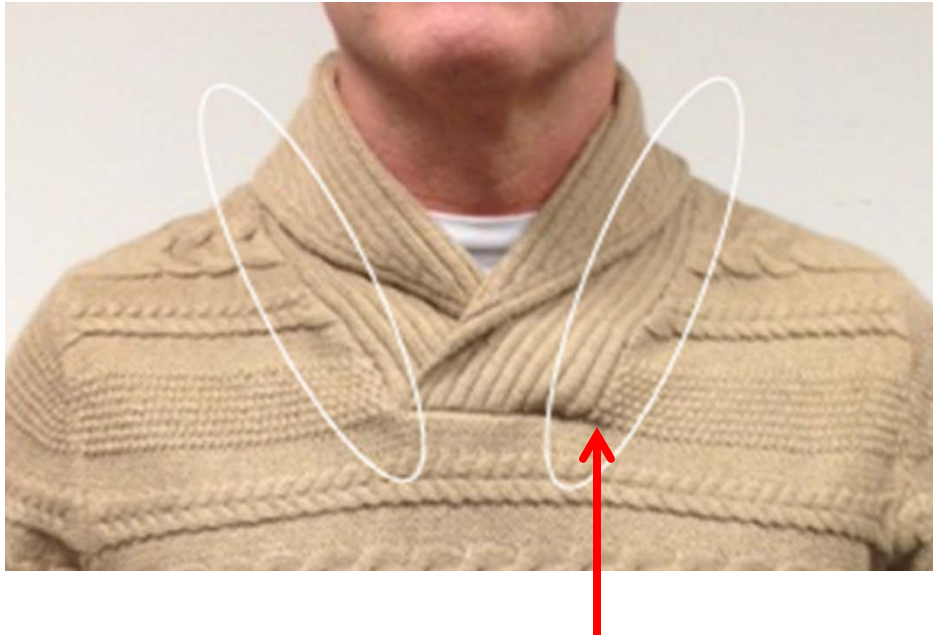




# WORKMANSHIP & CONSTRUCTION

**NOT ACCEPTABLE** : Collar length is too short at edge and is pulling at CF.

**ACCEPTABLE**: Collar lays flat and does not distort neck seam.



# WORKMANSHIP & CONSTRUCTION

**NOT ACCEPTABLE:** Placket trim length is too short and is hiking at CF, causing drag lines.



**ACCEPTABLE:** Placket is even at hemline and garment does not have drag lines.



# WORKMANSHIP & CONSTRUCTION

## NOT ACCEPTABLE:

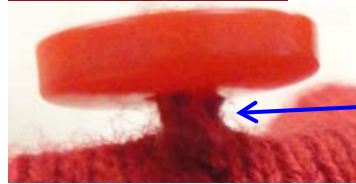
Placket is wavy at buttonholes.



No thread shank is added

7/30/2018

**ACCEPTABLE SOLUTION:** Do not stretch out placket when blocking. Press a 2<sup>nd</sup> time with placket unbuttoned if needed. Buttons must have long enough thread shank.



Good thread shank height



Use metal hook attachment to make sure there is enough button shank height when sewing buttons.



**NOT ACCEPTABLE:** Yoke was not set on straight.

