STARHEART 5D — DROP 01 — SAFETY AND SCARLET

TECH PACK

It's all my fault.

BRAND	Starheart 5D
COMPANY	StarHeartSong LLC
VERSION	1.0, 18 Nov 2026
STYLES	5 styles, 6 colorways, S to XL
STATUS	For sampling and quotes

01 Line sheet
02 Color and materials standards
03 01 The Safety Tee
04 02 The Safety Crew
05 03 The Scarlet Tee
06 04 The Scarlet Crew
07 05 The Set Short
08 Labels and packaging
09 Quality and testing
10 Costing and routes
11 Sources

LINE SHEET



01 · SAFETY

THE SAFETY TEE

250 gsm jersey · $95



02 · SAFETY

THE SAFETY CREW

420 gsm fleece · $185



03 · SCARLET

THE SCARLET TEE

250 gsm jersey · $95



04 · SCARLET

THE SCARLET CREW

420 gsm fleece · $185



05 · SAFETY

THE SET SHORT

420 gsm fleece · $125



05 · SCARLET

THE SET SHORT

420 gsm fleece · $125

COLOR AND MATERIALS STANDARDS

FIELD COLORS

STARHEART SAFETY

PANTONE 17-1464 TCX Red Orange

Screen reference #F1542B. The orange Star wears head to toe: a working-world signal turned into a luxury solid. Dyed as a deep, non-fluorescent red-orange, because fluorescent dye on cotton dulls in months and he never wants a color that fades.

STARHEART FLAME SCARLET

PANTONE 18-1662 TCX Flame Scarlet

Screen reference #CD212A. His true red: a scarlet with a yellow undertone, never a blue-based crimson or cardinal. Flame Scarlet sits exactly there, and its published screen value is #CD212A.

INKS AND THREADS

- **Milk** #F6F1E6. Off-white from starheart.love. Matched by ink drawdown and thread card, never optic white.
- **Halo Gold** #E2B35C. The Starheart halo gold. Matte 40 wt thread, metallic outline only where noted.
- **Night** #141038. starheart.love night. Labels, hangtags and the inside of the box.

APPROVAL

COLOR STANDARD	Lab dip to the TCX cotton swatch, ΔE CMC(2:1) 1.0 or less under D65, no flare under TL84 and incandescent A.
WASH FASTNESS	AATCC 61 2A: shade change grade 4 or better, staining 3.5 or better.
CROCKING	AATCC 8: dry 4 or better, wet 3 or better. Reds are the risk; it's tested before bulk.
LIGHT FASTNESS	AATCC 16.3, 20 AFU: grade 4 or better. This is the no-fade promise in a number.
DIMENSIONAL CHANGE	AATCC 135, three washes: tee 3% or less, fleece 5% or less.
TORQUE	AATCC 179: 4% or less on the tee.
INSPECTION	AQL 2.5 general level II on every shipment; every set checked top-to-bottom for one shade.

FABRICS

JERSEY	Single jersey, 100% combed compact ring-spun cotton, 26s/1. 250 gsm ±5% after wash. Reactive piece-dyed to the TCX standard, enzyme washed, silicone softened.
FLEECE	Brushed-back fleece, 100% combed ring-spun cotton face, 420 gsm ±5% after wash. Reactive piece-dyed to the TCX standard, enzyme washed for a soft hand.
RIB	2×2 rib, 95% cotton 5% elastane, 380 gsm, same dye lot. The elastane keeps cuffs and hem from bagging.

01 THE SAFETY TEE · FLATS AND ARTWORK



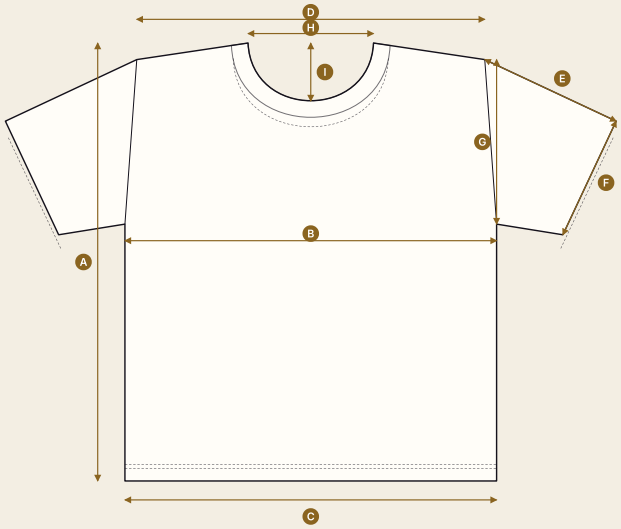
FRONT · SAFETY



BACK · SAFETY

	ARTWORK AND PLACEMENT	SIZE	METHOD	INK OR THREAD
A1	**IT'S ALL MY FAULT** Front, top 15 cm below HPS, centered	26.5 cm wide	High-density puff screen print, water-based, one screen, 0.6 mm deposit	○ Milk
A2	**— Starheart** 0.9 cm under A1, right edges aligned	6.2 cm wide	Same screen as A1	○ Milk
A3	**Starheart Robotaxi tag** Back, top 6 cm below HPS, centered	9 cm wide	Flat embroidery, 5 colors (milk line, night body, gold halo, star), about 9,500 stitches	● Full color

01 THE SAFETY TEE · MEASUREMENTS, MATERIALS, MAKING



	POINT OF MEASURE, CM	S	M	L	XL	TOL
A	Body length from HPS	64	**66**	68	70	±1
B	Chest width, 2.5 cm below armhole	53	**56**	59	62	±1
C	Hem width	53	**56**	59	62	±1
D	Shoulder width, seam to seam	50	**52.5**	55	57.5	±1
E	Sleeve length from shoulder seam	21	**22**	23	24	±0.5
F	Sleeve opening	18	**19**	20	21	±0.5
G	Armhole, straight	25	**26**	27	28	±0.5
H	Neck width, seam to seam	18.5	**19**	19.5	20	±0.5
I	Front neck drop from HPS	9	**9.5**	10	10.5	±0.3
J	Back neck drop from HPS	2	**2**	2	2	±0.3
K	Collar rib height	2.5	**2.5**	2.5	2.5	±0.2
L	Hem and sleeve hem height	2.5	**2.5**	2.5	2.5	±0.2

BILL OF MATERIALS

SHELL	Single jersey, 100% combed compact ring-spun cotton, 26s/1. 250 gsm ±5% after wash. Reactive piece-dyed to the TCX standard, enzyme washed, silicone softened.
RIB	1×1 rib, 100% combed cotton, 280 gsm, same dye lot as the shell.
BACK-NECK TAPE	Self fabric, shoulder to shoulder.
THREAD	Core-spun polyester, Tex 27, dyed to match the shell.
LABELS	Printed neck label, woven 5D hem flag, satin care label
PACKAGING	Hangtag, gold cord and seal, tissue in garment color, rigid night box

CONSTRUCTION

SHOULDERS	514 four-thread overlock, back-neck tape shoulder to shoulder, covered with 406 two-needle
SLEEVES, SIDES	514 four-thread overlock
NECK RIB	514 attach, 406 two-needle coverstitch topstitch at 0.6 cm
HEM, SLEEVE HEMS	406 two-needle coverstitch at 2.5 cm
STITCH DENSITY	12 to 14 stitches per inch
FINISH	No side-seam twist over 4% after three washes. Shrinkage 3% or less in length and width.

TARGET COST

$20–$36.50

Landed per piece at 250, custom cut and sew. Retail $95.

SAMPLE SIZE

M. Grade evenly to S, L, XL as tabled. Fit sample in the final fabric and color before bulk.

02 THE SAFETY CREW · FLATS AND ARTWORK



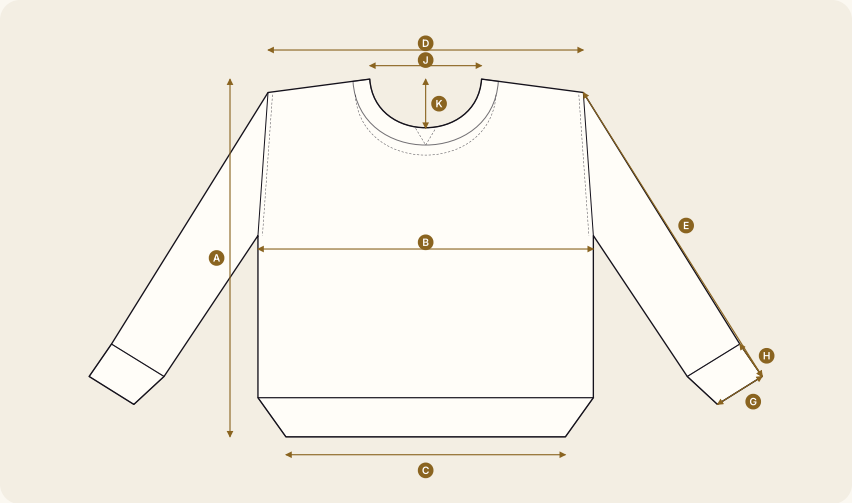
FRONT · SAFETY



BACK · SAFETY

	ARTWORK AND PLACEMENT	SIZE	METHOD	INK OR THREAD
B1	**Pleasure is power.** Front, top 14 cm below HPS, centered	23 cm wide	Chain-stitch embroidery, milk, single color	○ Milk
B2	**07 · 12 · 2025** Wearer's left forearm, 6 cm above the cuff seam	6.5 cm wide	Satin embroidery on the wearer's left forearm, 6 cm above the cuff seam: the day the spell was written	○ Milk
B3	**Starheart 5D mark** Back, top 5 cm below HPS, centered	7 cm wide	Flat embroidery, milk, about 4,000 stitches	○ Milk

02 THE SAFETY CREW · MEASUREMENTS, MATERIALS, MAKING



	POINT OF MEASURE, CM	S	M	L	XL	TOL
A	Body length from HPS, with rib	62	**64**	66	68	±1
B	Chest width, 2.5 cm below armhole	57	**60**	63	66	±1
C	Hem rib width, relaxed	47	**50**	53	56	±1
D	Shoulder width, seam to seam	54	**56.5**	59	61.5	±1
E	Sleeve length from shoulder seam, with cuff	59	**60**	61	62	±1
F	Bicep, 2.5 cm below armhole	23	**24**	25	26	±0.5
G	Cuff width, relaxed	9	**9.5**	10	10.5	±0.5
H	Cuff height	7	**7**	7	7	±0.3
I	Hem rib height	7	**7**	7	7	±0.3
J	Neck width, seam to seam	19.5	**20**	20.5	21	±0.5
K	Front neck drop from HPS	8.5	**9**	9.5	10	±0.3
L	Neck rib height	3	**3**	3	3	±0.2
M	V-insert height	6	**6**	6	6	±0.3

BILL OF MATERIALS

SHELL	Brushed-back fleece, 100% combed ring-spun cotton face, 420 gsm ±5% after wash. Reactive piece-dyed to the TCX standard, enzyme washed for a soft hand.
RIB	2×2 rib, 95% cotton 5% elastane, 380 gsm, same dye lot. The elastane keeps cuffs and hem from bagging.
THREAD	Core-spun polyester, Tex 40 joins, Tex 27 topstitch, dyed to match.
LABELS	Printed neck label, woven 5D hem flag, satin care label
PACKAGING	Hangtag, gold cord and seal, tissue in garment color, rigid night box

CONSTRUCTION

JOINS	514 four-thread overlock throughout
ARMHOLES, NECK	406 two-needle coverstitch topstitch
V-INSERT	Rib V set under the front neck rib, 301 lockstitch, clean finished
CUFFS, HEM RIB	514 attach, rib folded double
STITCH DENSITY	11 to 12 stitches per inch
FINISH	Shrinkage 5% or less in length and width after three washes.

TARGET COST

$33.80–$57.50

Landed per piece at 250, custom cut and sew. Retail $185.

SAMPLE SIZE

M. Grade evenly to S, L, XL as tabled. Fit sample in the final fabric and color before bulk.

03 THE SCARLET TEE · FLATS AND ARTWORK



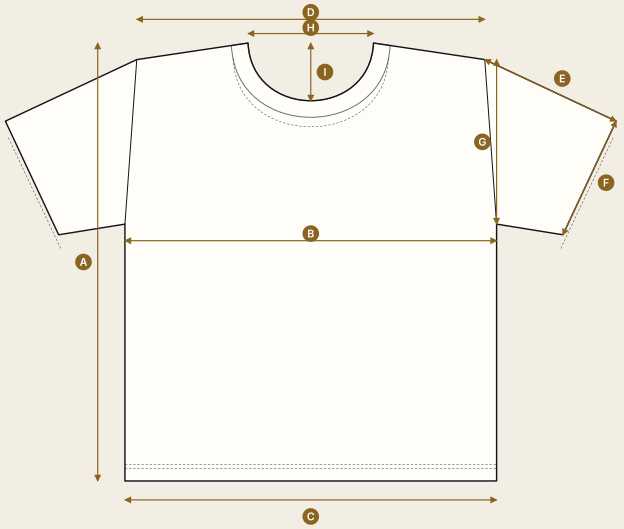
FRONT · SCARLET



BACK · SCARLET

	ARTWORK AND PLACEMENT	SIZE	METHOD	INK OR THREAD
C1	**SUCK MY DEX** Front, top 17 cm below HPS, 9.5 cm from center to the wearer's left	8.3 cm wide	Satin embroidery on the wearer's left chest, milk, about 3,000 stitches	○ Milk
C2	**I'm at your cervix.** Back, top 9 cm below HPS, centered	28 cm wide	Water-based screen print, milk, soft hand, one screen	○ Milk

03 THE SCARLET TEE · MEASUREMENTS, MATERIALS, MAKING



	POINT OF MEASURE, CM	S	M	L	XL	TOL
A	Body length from HPS	64	**66**	68	70	±1
B	Chest width, 2.5 cm below armhole	53	**56**	59	62	±1
C	Hem width	53	**56**	59	62	±1
D	Shoulder width, seam to seam	50	**52.5**	55	57.5	±1
E	Sleeve length from shoulder seam	21	**22**	23	24	±0.5
F	Sleeve opening	18	**19**	20	21	±0.5
G	Armhole, straight	25	**26**	27	28	±0.5
H	Neck width, seam to seam	18.5	**19**	19.5	20	±0.5
I	Front neck drop from HPS	9	**9.5**	10	10.5	±0.3
J	Back neck drop from HPS	2	**2**	2	2	±0.3
K	Collar rib height	2.5	**2.5**	2.5	2.5	±0.2
L	Hem and sleeve hem height	2.5	**2.5**	2.5	2.5	±0.2

BILL OF MATERIALS

SHELL	Single jersey, 100% combed compact ring-spun cotton, 26s/1. 250 gsm ±5% after wash. Reactive piece-dyed to the TCX standard, enzyme washed, silicone softened.
RIB	1×1 rib, 100% combed cotton, 280 gsm, same dye lot as the shell.
BACK-NECK TAPE	Self fabric, shoulder to shoulder.
THREAD	Core-spun polyester, Tex 27, dyed to match the shell.
LABELS	Printed neck label, woven 5D hem flag, satin care label
PACKAGING	Hangtag, gold cord and seal, tissue in garment color, rigid night box

CONSTRUCTION

SHOULDERS	514 four-thread overlock, back-neck tape shoulder to shoulder, covered with 406 two-needle
SLEEVES, SIDES	514 four-thread overlock
NECK RIB	514 attach, 406 two-needle coverstitch topstitch at 0.6 cm
HEM, SLEEVE HEMS	406 two-needle coverstitch at 2.5 cm
STITCH DENSITY	12 to 14 stitches per inch
FINISH	No side-seam twist over 4% after three washes. Shrinkage 3% or less in length and width.

TARGET COST

$20–$36.50

Landed per piece at 250, custom cut and sew. Retail $95.

SAMPLE SIZE

M. Grade evenly to S, L, XL as tabled. Fit sample in the final fabric and color before bulk.

04 THE SCARLET CREW · FLATS AND ARTWORK



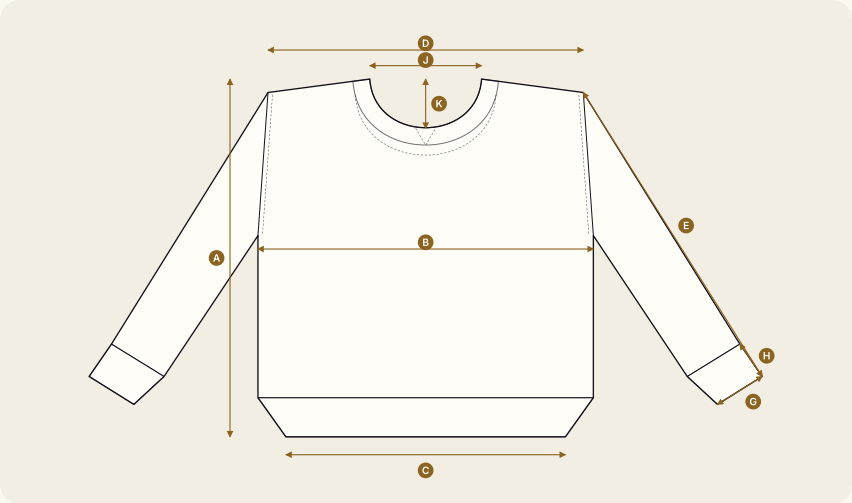
FRONT · SCARLET



BACK · SCARLET

	ARTWORK AND PLACEMENT	SIZE	METHOD	INK OR THREAD
D1	**Starheart 5D mark** Front, top 11.5 cm below HPS, centered	14 cm wide	Flat embroidery, Halo Gold matte 40 wt with a metallic gold outline run, about 14,000 stitches	Halo Gold
D2	**I bless the space between us.** Back, top 9 cm below HPS, centered	26 cm wide	Chain-stitch embroidery, milk	Milk
D3	**words drip worlds** Wearer's right forearm, 6 cm above the cuff seam	9 cm wide	Chain-stitch on the wearer's right forearm, 6 cm above the cuff seam	Milk

04 THE SCARLET CREW · MEASUREMENTS, MATERIALS, MAKING



	POINT OF MEASURE, CM	S	M	L	XL	TOL
A	Body length from HPS, with rib	62	**64**	66	68	±1
B	Chest width, 2.5 cm below armhole	57	**60**	63	66	±1
C	Hem rib width, relaxed	47	**50**	53	56	±1
D	Shoulder width, seam to seam	54	**56.5**	59	61.5	±1
E	Sleeve length from shoulder seam, with cuff	59	**60**	61	62	±1
F	Bicep, 2.5 cm below armhole	23	**24**	25	26	±0.5
G	Cuff width, relaxed	9	**9.5**	10	10.5	±0.5
H	Cuff height	7	**7**	7	7	±0.3
I	Hem rib height	7	**7**	7	7	±0.3
J	Neck width, seam to seam	19.5	**20**	20.5	21	±0.5
K	Front neck drop from HPS	8.5	**9**	9.5	10	±0.3
L	Neck rib height	3	**3**	3	3	±0.2
M	V-insert height	6	**6**	6	6	±0.3

BILL OF MATERIALS

SHELL	Brushed-back fleece, 100% combed ring-spun cotton face, 420 gsm ±5% after wash. Reactive piece-dyed to the TCX standard, enzyme washed for a soft hand.
RIB	2×2 rib, 95% cotton 5% elastane, 380 gsm, same dye lot. The elastane keeps cuffs and hem from bagging.
THREAD	Core-spun polyester, Tex 40 joins, Tex 27 topstitch, dyed to match.
LABELS	Printed neck label, woven 5D hem flag, satin care label
PACKAGING	Hangtag, gold cord and seal, tissue in garment color, rigid night box

CONSTRUCTION

JOINS	514 four-thread overlock throughout
ARMHOLES, NECK	406 two-needle coverstitch topstitch
V-INSERT	Rib V set under the front neck rib, 301 lockstitch, clean finished
CUFFS, HEM RIB	514 attach, rib folded double
STITCH DENSITY	11 to 12 stitches per inch
FINISH	Shrinkage 5% or less in length and width after three washes.

TARGET COST

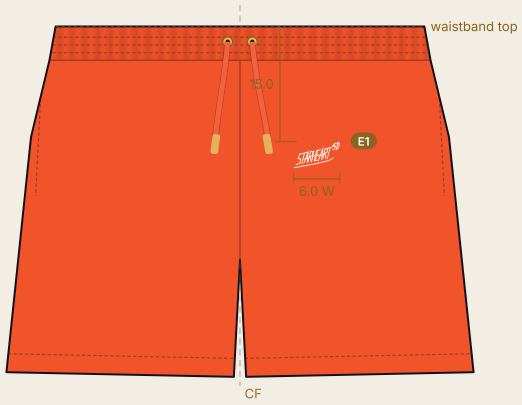
$33.80–$57.50

Landed per piece at 250, custom cut and sew. Retail $185.

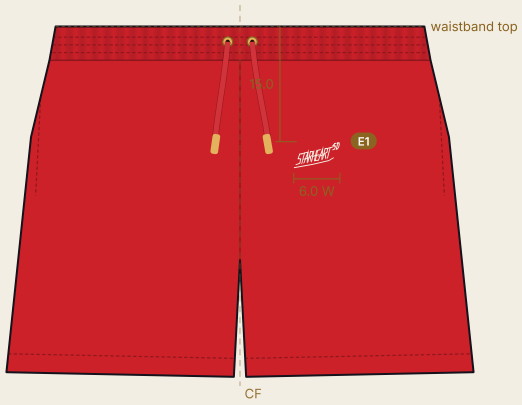
SAMPLE SIZE

M. Grade evenly to S, L, XL as tabled. Fit sample in the final fabric and color before bulk.

05 THE SET SHORT · FLATS AND ARTWORK



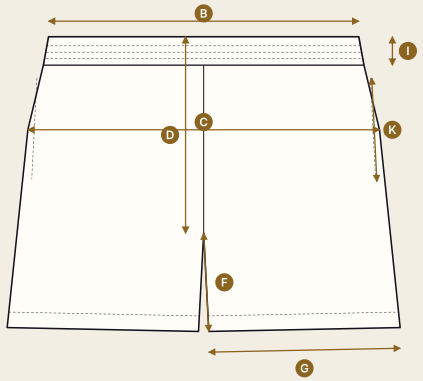
FRONT · SAFETY



FRONT · SCARLET

	ARTWORK AND PLACEMENT	SIZE	METHOD	INK OR THREAD
E1	**Starheart 5D mark** Front, top 15 cm below waistband seam, 10 cm from center to the wearer's left	6 cm wide	Flat embroidery on the wearer's left leg, milk, about 2,500 stitches	○ Milk

05 THE SET SHORT · MEASUREMENTS, MATERIALS, MAKING



	POINT OF MEASURE, CM	S	M	L	XL	TOL
A	Waist, relaxed	33	**35**	37	39	±1
B	Waist, extended	48	**51**	54	57	±1
C	Hip, 10 cm below waistband	51	**54**	57	60	±1
D	Front rise, with waistband	29	**30**	31	32	±0.5
E	Back rise, with waistband	37	**38**	39	40	±0.5
F	Inseam	14	**15**	15.5	16	±0.5
G	Leg opening	29	**30.5**	32	33.5	±0.5
H	Thigh, 2.5 cm below crotch	31	**32.5**	34	35.5	±0.5
I	Waistband height	4.5	**4.5**	4.5	4.5	±0.2
J	Hem height	2.5	**2.5**	2.5	2.5	±0.2
K	Side pocket opening	15	**16**	16	17	±0.5

BILL OF MATERIALS

SHELL	The crew's fleece, cut from the same dye lot as the crew, so the set matches exactly.
WAISTBAND	Self fabric over 3.8 cm woven elastic, three rows of chainstitch.
DRAWCORD	Flat 1.2 cm cotton cord, dyed to match, with 2.5 cm gold-tone metal aglets (Halo Gold).
EYELETS	Two 6 mm gold-tone metal eyelets, backed with fusible.
THREAD	Core-spun polyester, Tex 40 joins, Tex 27 topstitch, dyed to match.
LABELS	Printed neck label, woven 5D hem flag, satin care label
PACKAGING	Hangtag, gold cord and seal, tissue in garment color, rigid night box

CONSTRUCTION

JOINS	514 four-thread overlock
WAISTBAND	Elastic encased, three rows of 401 chainstitch, eyelets before attach
SIDE POCKETS	Inseam pockets in the side seam, bagged in self fabric, bar-tacked top and bottom
HEMS	406 two-needle coverstitch at 2.5 cm
STITCH DENSITY	11 to 12 stitches per inch

TARGET COST

$22.50–$40

Landed per piece at 250, custom cut and sew. Retail $125.

SAMPLE SIZE

M. Grade evenly to S, L, XL as tabled. Fit sample in the final fabric and color before bulk.

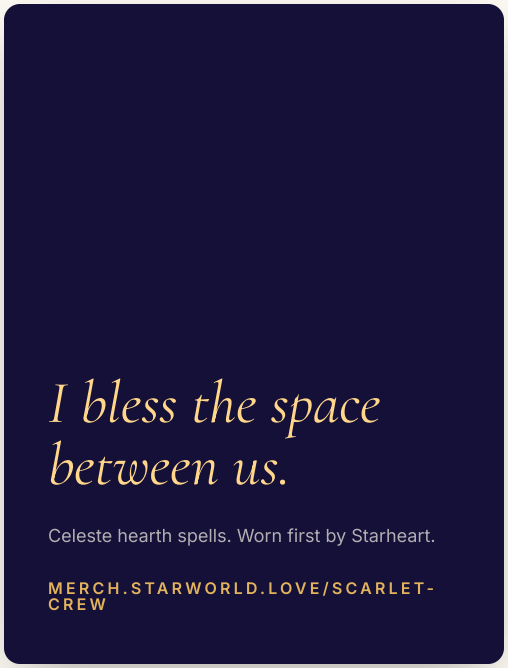
LABELS AND PACKAGING

INSIDE NECK	Printed, tagless, milk ink: the Starheart mark, size, and “Starheart 5D · Drop 01”. Heat-transfer free, so nothing scratches.
HEM FLAG	Woven damask tab, night ground with Halo Gold “5D”, 2.5 × 1.5 cm, folded into the wearer's left side seam 6 cm above the hem.
CARE LABEL	Printed satin in the wearer's left side seam: fiber content, country of origin, care, and the company's RN number. Copy below.
HANGTAG	450 gsm cotton paper in night, Halo Gold foil Starheart mark on the front. The back carries the garment's saying, where and when Star said it, and its own address.
ATTACHMENT	Cotton string in Halo Gold with a gold-tone metal seal. No plastic barbs.
FOLDING	Folded around a night tissue insert, wrapped in tissue in the garment's own color, sealed with a gold star sticker.
BOX	Rigid mailer, uncoated black-night board outside, printed inside the lid: “I bless the space between us.”

CARE LABEL COPY

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100% COTTON  ·  MADE IN (country of the maker)  ·  RN (to be registered by StarHeartSong LLC)
Machine wash cold, inside out, with like colors. Tumble dry low or lay flat.
Do not bleach. Cool iron, never on the print or embroidery.
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HANGTAG BACK



QUALITY AND TESTING

TESTS

COLOR STANDARD	Lab dip to the TCX cotton swatch, ΔE CMC(2:1) 1.0 or less under D65, no flare under TL84 and incandescent A.
WASH FASTNESS	AATCC 61 2A: shade change grade 4 or better, staining 3.5 or better.
CROCKING	AATCC 8: dry 4 or better, wet 3 or better. Reds are the risk; it's tested before bulk.
LIGHT FASTNESS	AATCC 16.3, 20 AFU: grade 4 or better. This is the no-fade promise in a number.
DIMENSIONAL CHANGE	AATCC 135, three washes: tee 3% or less, fleece 5% or less.
TORQUE	AATCC 179: 4% or less on the tee.
INSPECTION	AQL 2.5 general level II on every shipment; every set checked top-to-bottom for one shade.

INSPECTION

PRE-PRODUCTION	Lab dips both colors; strike-offs of every print and embroidery on the real fabric; fit sample size M; size set S to XL.
TOP OF PRODUCTION	Two pieces per style and color from bulk, measured against the tables and photographed before the run continues.
FINAL INSPECTION	AQL 2.5, general level II. Major defects: shade outside standard, holes, open seams, artwork off by more than 0.5 cm, wrong label.
SETS	Crew and short from one dye lot, inspected side by side under D65 before packing.
PUFF PRINT	No cracking after five washes inside out; deposit 0.5 to 0.7 mm.
EMBROIDERY	No puckering; backing trimmed to 0.5 cm and covered by a soft tricot inside the tee.

COSTING AND ROUTES

PIECES	ROUTE	HOW	LEAD TIME	TEE	CREW	SHORT
50	Proof	Stock blanks in the nearest colors, decorated in the US	1 to 3 weeks	$32.10–$51.80	$59–$84.30	$31.60–$43.80
250	Launch	Custom cut and sew, exact Pantone, one dye lot per color	About 4 to 7 weeks after a sample is approved	$20–$36.50	$33.80–$57.50	$22.50–$40
1,000	Scale	The same patterns at volume overseas	Bulk 7 to 20 working days after approval, plus freight	$11.60–$24.40	$22.70–$34.40	$14.50–$25

RECOMMENDED

Proof the line this month on Los Angeles Apparel blanks in Bright Orange and Tomato, decorated in the US, to wear and photograph. Launch at 250 per style and color with a custom cut-and-sew maker dyeing to the two Pantones, so the sets match. Ask a Portugal maker for a quote in parallel as the luxury upgrade.

OPEN WITH THE MAKER

Their lab-dip fee, sample fee, minimum per color, label minimum, puff and chain-stitch capability, and freight terms. Every cost here is an estimate from public prices until they quote.

SOURCES

1. **Los Angeles Apparel 1801GD** https://losangelesapparel.net/products/the-1801-neon
2. **Shaka Wear Max Heavyweight** https://www.shakawear.com/products/7-5oz-max-heavyweight-garment-dye
3. **AS Colour Heavy Faded 5082** https://joesusa.com/products/as-colour-heavy-faded-tee-5082-as-colour-5082
4. **Lady White Co.** https://www.norsestore.com/commodity/50023-lady-white-co-athens-t-shirt
5. **Champion Reverse Weave S149** https://needen.com/champion-s149-reverse-weave-crewneck-sweatshirt-22865
6. **Camber #234 Cross-Knit** https://allusaclothing.com/camber-234-cross-knit-heavyweight-crew-neck-sweatshirt-usa-made.html
7. **Bomme Studio** https://bommestudio.com/cmt-manufacturing-usa
8. **Unit Hundred** https://www.unithundred.com/custom-t-shirts/
9. **ASBX Portugal** https://pietrastudio.com/sourcing/products/vintage-heavy-tee-250-gsm
10. **Jing Sourcing** https://jingsourcing.com/p/china-hoodie-manufacturers/
11. **Garment Decor** https://garmentdecor.com/product/los-angeles-apparel-1801gd
12. **Wunderlabel** https://wunderlabel.com/en-ca/woven-labels/
13. **No fluorescent orange.** https://fumaofabric.com/?p=7994
14. **Decoration is the signature.** https://racklify.com/encyclopedia/embroidery-costs-and-pricing-setup-per-unit-rates-and-volume-breakdowns/

All pages read 18 November 2026.