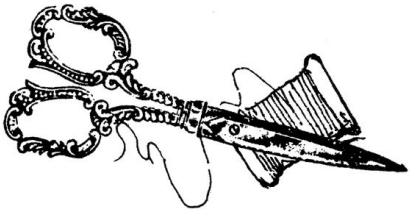
The Thoughtful Consumers'

Guide to Simple Mending



Mending Techniques

Material Knowledge

Textile Care

Mass consumerism is leading us towards mass extinction.

Linear consumption ideology of ~buy -> use -> throw away~ has violent material repercussions and must be rethought urgently on a massive scale. Linear chains of production rely on fracking the earth for 'resources' whose processes destroy delicate ecosystems on which we depend for carbon cycling, oxygen, and stable weather patterns. These 'resources' will be used briefly, then thrown into massive landfills who also displace and destroy ecosystems, release microplastics into our soils and water, and greenhouse gases into our atmosphere through chemical decomposition and burning.

This system also relies on violent dehumanization of factory workers, and colonialist practices in waste exportation that work to maintain systemic ignorance in privileged consumer countries. This wealthy consumer's insecurity is vital to corporate interest, fed by advertising propaganda aiming to maintain hegemonic ideal standards in beauty, class, race and gender. Identity becomes interlinked with consumerism, driving commodity fetishism and trend chasing cultures, at the expense of the rest of the world on which they are unknowingly, and unchangeably dependent.

Overconsumption has violent environmental, socio-economic, and interpersonal repercussions, and the fashion/textile industry is only one aspect of a much larger system. This industry does have sustainable intentions; in providing everyone with basic clothing, nor in protecting our precious and damaged environment by producing this clothing through circular means.

Failed by industry, systems, and corporations, this booklet aims to give every clothing-wearing individual the tools of basic mending, and thus the power to limit their individual consumption in textile industry. Cash-driven corporations rely on our wallets, and we have the power to starve them.

By mending, we also gain the power to denounce quick consumption culture at its root, by growing meaningful, long-lasting relationships with the material objects in our life. By listening to our garments, investing time and energy to repair and care for them, meditating with them through hand stitching, and embedding them with love, we create emotional longevity, and powerful sentimentality - an adversary to wastefulness. This is our second skin, by mending, we learn to see it as part of us.

We believe the mobilization of mending knowledge is essential, and should be accessible and free to everyone, hence not charging for this booklet. A free PDF can be found via the QR code on the back of this booklet. Please share, add to, photocopy, translate, plagiarize, republish this booklet.

Keep mending,
- the thoughtful consumer

Contents:

Mending Techniques

Equipment Key
Fixing Seams
Hemming
Sashiko
Darning Holes
Under Patching
Patching Holes
Reverse Applique
Gathering
Patchwork/Quilting
Sewing Buttons
Replacing Zips

Equipment Key:

Single Strand Thread

Stranded Embroidery Thread

Large Eye vs Small Eye Needles

Darning Mushroom

Ideal Pins

Ideal Glue

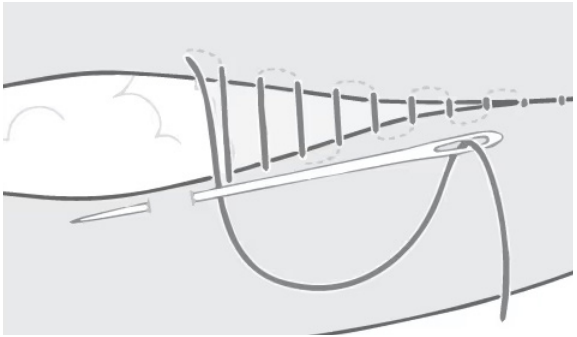
Fixing Seams

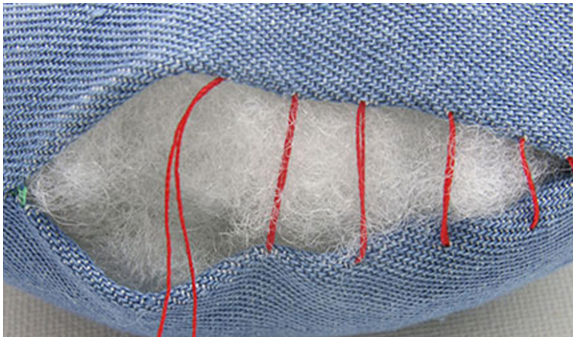
Ideal for:
All seams including ripped and split seams, taking in garments for smaller fit.

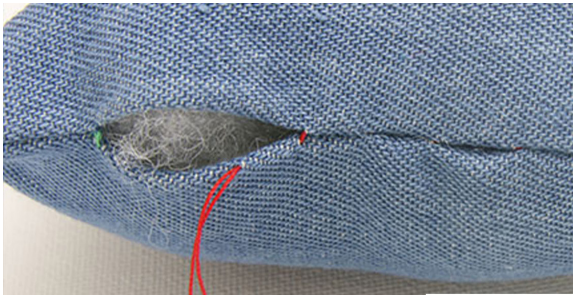
Equipment Required:
- single strand sewing thread
- hand sewing needle
- scissors

Ladder Stitch

1. Thread a needle and double knot the end.
2. Allowing 1.5cm seam allowance, pierce the seam from the inside so the knot is hidden.
3. On the other side of the seam, stitch 1.5cm from the edge of the fabric, parallel to the entry stitch. Slipping the needle under the fabric, make an approximately 2cm stitch under the fabric.
4. Repeat this process, keeping stitches parallel.
5. Once finished, pull the thread tight to close the seam, but not so tight that it puckers.
6. Tie a knot in the thread and cut.







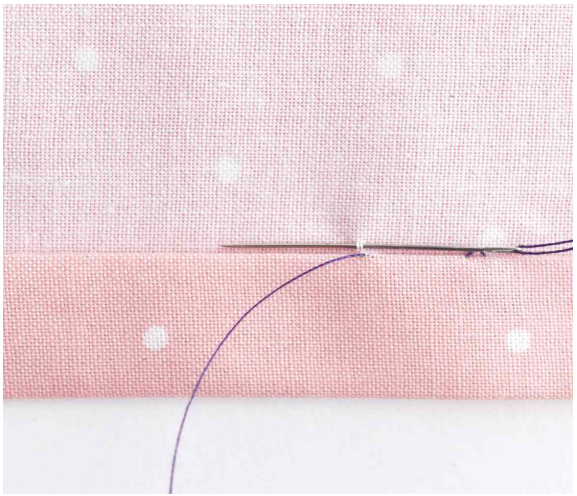
Hemming

Ideal for:
All hems including ripped hems, shortening garments.

Equipment Required:
- single strand sewing thread
- hand sewing needle
- scissors

Blind Hem

1. Fold the bottom of the garment twice to the desired length and press with an iron if possible.
2. Repeat steps for *ladder stitch* but with large stitches on the hem side, and only catching a very small amount of the fabric on the right side.



Sashiko

Ideal for:

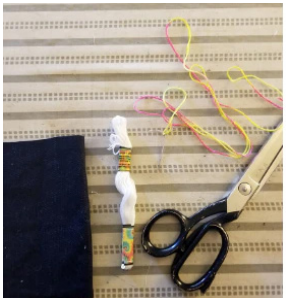
Weave fabrics, holes of all size, rips, decorative mending.

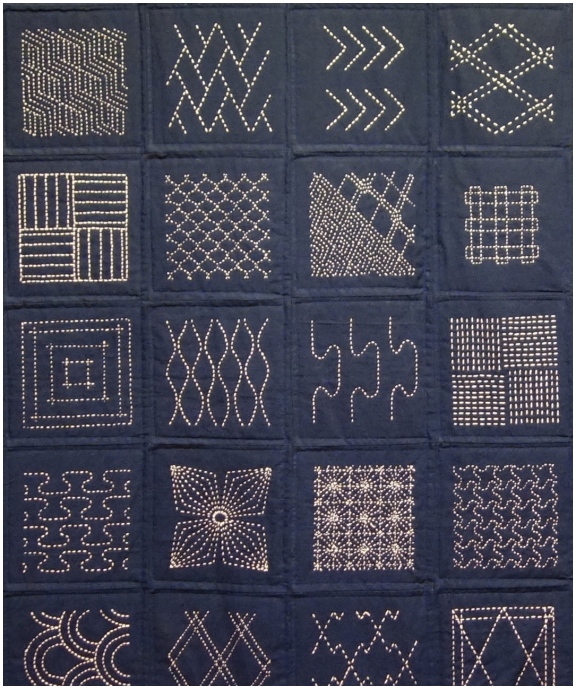
Equipment Required:

- stranded embroidery thread
- hand sewing needle with larger eye
- scissors
- fabric of same weight for patching
- pins and/or very light glue
- chalk (optional)
- ruler (optional)

Sashiko & Running Stitch

1. From a fabric of the same weight, cut a patch large enough to cover the hole area with at least 1 inch excess around the edge.
2. Place the patch underneath the hole and secure by pining, tacking or glue in place to hold whilst stitching.
3. Traditional Sashiko uses uniform stitches in repeating geometric patterns. Use chalk/ruler to trace the desired pattern overtop the hole.





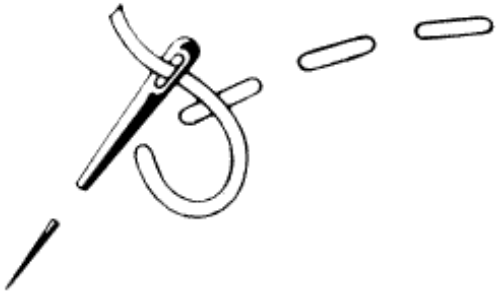
The pattern also doesn't have to be uniform, this technique can be used with any design. The example here uses crosses, and thus regular dots have been drawn as a guide.

4. Thread a needle with stranded embroidery thread and double knot it's end.

5. Pierce the garment from the underside so the knot will not be seen.

6. Use a running stitch (up, down, up, down) to trace the pattern. In the case of doing crosses, do all horizontal stitches first, then all vertical stitches to maintain clean work on the underside of the garment. Try to keep these stitches equal distance and length, using a ruler if needed.

7. Once finished, pierce the fabric so the needle is on the underside, tie a double knot and cut thread.



Images via Ardent Earth

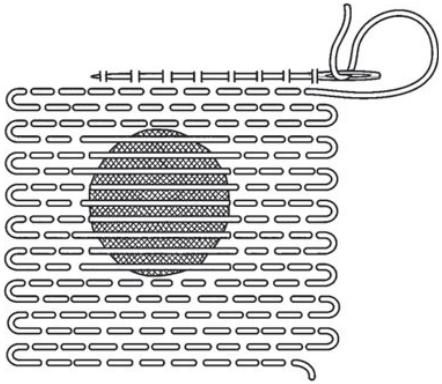
Darning Holes

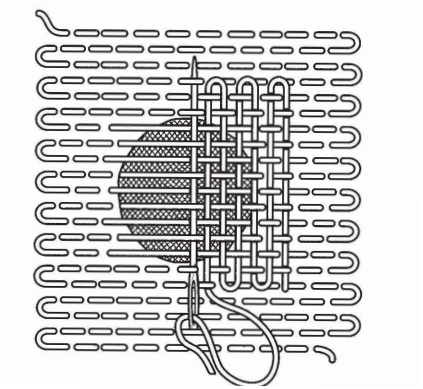
Ideal for:
Small holes in weave and knit fabrics.

Equipment Required:
- stranded embroidery thread or yarn
- long hand sewing needle with larger eye
- scissors
- darning mushroom or substitute i.e. ladle, ramekin or jar

Darning

1. Place darning mushroom or equivalent under garment to keep the ara taught whilst darning.
2. Thread a needle with stranded embroidery thread or thin yarn and tie a knot.
2. As shown in the diagram, sew a fine running stitch around the hole where the fabric is secure. Across the hole/damaged fabric, sew long stiches.
3. Once the hole is surrounded by and covered with horizontal stitches, weave vertical stitches across the hole area. Keep this weave as tight as possible for the best results.
5. Once hole is covered, tie off thread and cut.





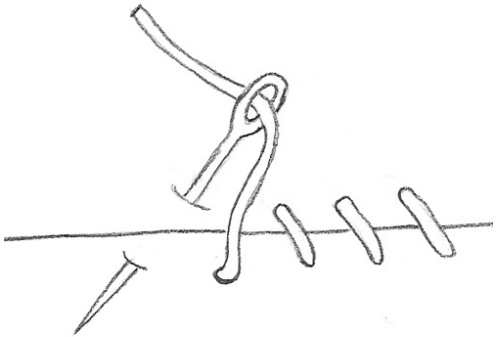
Under Patching

Ideal for:
Rips, holes, heavily frayed seams.

Equipment Required:
- single strand sewing thread
- hand sewing needle
- scissors
- fabric of same weight for patching
- pins and/or very light glue

Whipstitch

1. Cut a patch from a fabric of similar weight large enough to completely overlap the rip, with at least an additional inch around the edges.
2. Turn the garment inside out.
3. Tac, glue or pin the patch the rip, aligning the edges of the rip (on inside of garment) so the fabric is as smooth as possible.
4. Thread a needle and double knot the end.
5. Turn the garment right side out.
6. Use a whipstitch to secure the under patch, sealing the rip. A whipstitch is traditionally diagonal, but it can be horizontal for these purposes.
7. Pierce the underside of the fabric so the knot is hidden at least 1cm away from the rip (further if the fabric frays a lot). Reinsert the needle on the other side of the rip, securing it shut with the patch underneath for reinforcement.
8. Continue until the whole rip is sealed. If necessary for durability, repeat with the whipstitch facing diagonally in the other direction.
9. Once finished, pierce to the underside, tie a knot and cut thread.



Patching Holes

Ideal for:
All size holes, decorative mending, all fabric types.

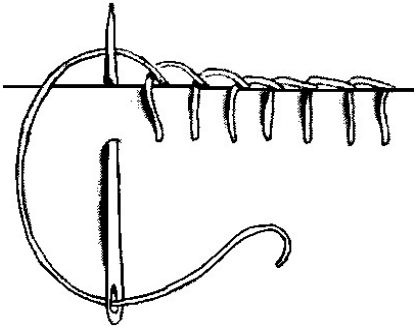
Equipment Required:
- stranded embroidery thread
- hand sewing needle with larger eye
- scissors
- fabric of same weight for patching
- pins and/or very light glue

Blanket Stitch / Backstitch

1. Cut a patch from a fabric of similar weight large enough to completely overlap the hole, plus an additional inch around the edges.
2. Fold the edges of the patch under by 1.5 cm and press with an iron, glue, or pin. The patch can have raw wedges, but this will aid longevity.
3. Tac, glue or pin the patch overtop the hole on the outside of the garment.
4. Thread a needle with stranded embroidery thread and double knot the end.

5. To start blanket stitch, pierce the garment from the underside so the knot is hidden, aligning the stitch with the edge of the patch.
6. Stitch 1cm into the patch perpendicular from the edge once, so the needle returns through the initial hole.
7. For the remaining stitches, stitch 1cm to the left of the last stitch, as shown in the diagram. When pulling the needle through, ensure it is overtop the thread, this will create the blanket effect.
8. Once the patch is secured, pierce to the underside, tie a knot and cut thread.

5. To backstitch, first make a single running stitch.
6. To continue the stitch, pierce the fabric 1cm behind the last exit point of the needle, and make a 2cm stitch under the patch.
7. Continue until the patch is secured, and tie off the thread on the underside.



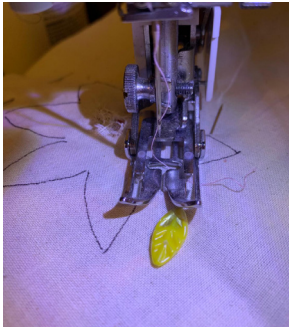
Reverse Applique

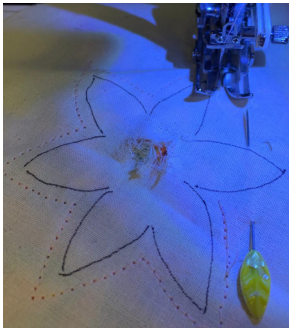
Ideal for:
Decorative mending, all
holes, better for weave fabrics.

Equipment Required:
- single strand sewing thread
- hand sewing needle or sewing machine
- fine scissors
- fabric of same weight for patching
- pins and/or very light glue
- chalk

Reverse Applique with Backstitch

1. Use chalk to a pen to draw the intended design on the outside of the garment around the hole.
2. Cut a patch of similarly weighted fabric that covers the design with excess.
3. Pin or tac the patch underneath the design, ensuring the patch is flat with the garment.
4. Backstitch or machine sew the patch in place 0.5 cm from the edge of the design.
5. Using fine scissors, cut from the hole to 0.5-1cm away from the seam.





Patchwork

Ideal for:
Fabric scraps, unfixable clothing, all fabric types.

Equipment Required:
- single strand sewing thread
- sewing machine
- scissors

Patchwork
Patchwork can be uniform or freeform, depending on the desired outcome. uniform patchwork is best achieved with cut squares/triangles of equal size from fabrics of the same type and similar weight. Freeform patchwork can use any shapes scrap and use a variety of fabric types in one piece. Patchwork may also be hand-sewn, though due to its laborious nature, it is easier to complete using a machine.

1. Cut scraps to desired shape if intended.
2. Use a 2.2mm running stitch to sew patches, right side together.
3. Open the seam allowance flat and use a zig zag stitch to stitch it flat.
4. Continue this process until the patchwork is the desired size/shape.

Square Patchwork:

Triangle Patchwork:

Hexagonal Patchwork:

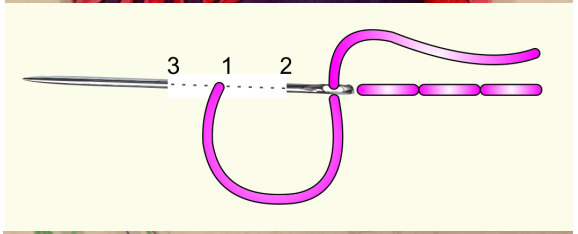
Gathering

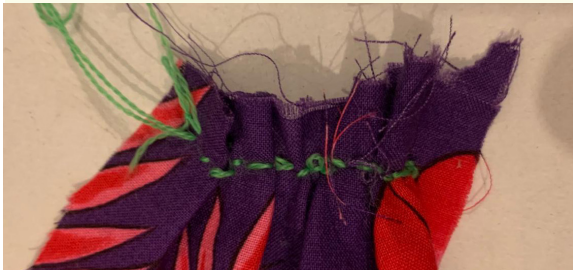
Ideal for:
All gathered seams i.e. gathered sleaves, gathered skirts.

Equipment Required:
- single strand sewing thread
- hand sewing needle
- scissors

Tacking & Back Stitch

1. Thread a needle and knot the end.
2. Make wide running stitches (up, down, up, down) across the area you want gathered.
3. Pull the thread tight, puckering the fabric along the thread. Once happy with the amount of gather, knot the thread.
4. Along the gathering stitch, backstitch to secure the gathers. to backstitch, pierce the fabric 1cm behind the last exit point of the needle, and make a 2cm stitch, as shown in the diagram to the right.
5. Once finished tie a knot and cut thread.





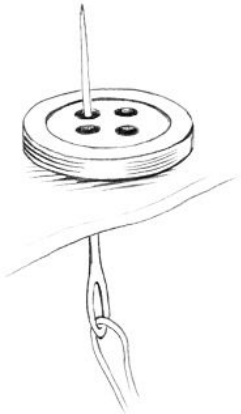
Sewing Buttons

Ideal for:
Loose buttons, broken buttons, ripped out studs.

Equipment Required:
- single strand sewing thread
- hand sewing needle
- scissors
- button (if needed)
- chalk or pen

Button Stitch

1. Lay the buttonhole overtop where you want the button to go, align edges of the garment to ensure it is placed correctly and make a mark through the buttonhole.
2. Thread a needle and double knot the end.
3. Hold the button overtop the mark, pierce the garment from the back and sew through 2 holes of the button.
4. Repeat approximately 10 times or until the button is secure.
5. Tie a knot in the thread on the underside.



Replacing Zips

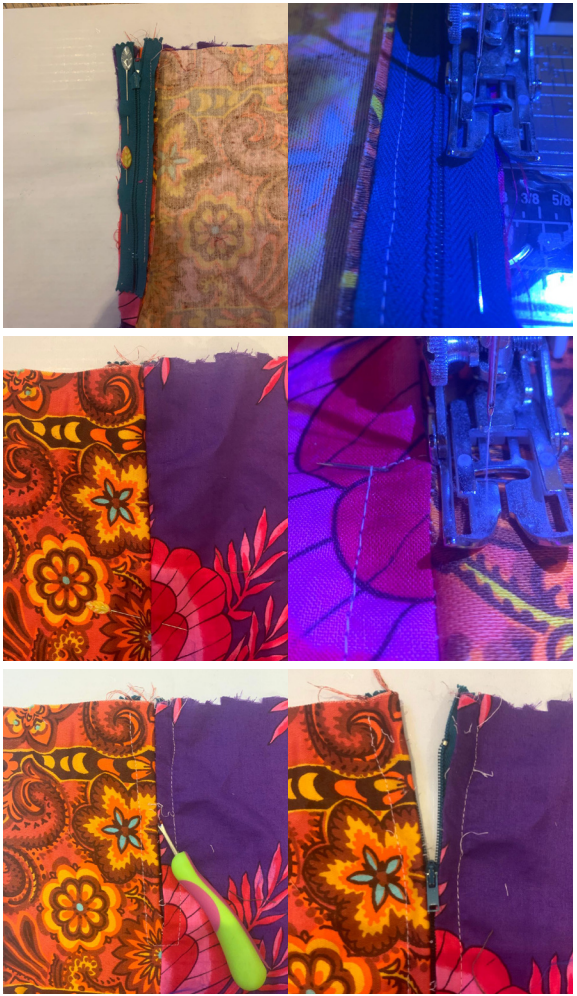
Ideal for:
Broken zips, new closure.

Equipment Required:
- single strand sewing thread
- sewing machine and zip foot
- scissors
- new zip (if needed)
- pins

Inserting a Zipper

1. Remove the previous zip completely if necessary.
2. Using a 5mm machine stitch, sew a seam (to be unpicked later) where the zip will be placed, right sides together with at least 1.5 seam allowance.
3. With the zip right side down, pin the zip tape to the seam allowance on the inside of the garment, aligning the bottom of the zip tape with the base of the seam.
4. Using a zip foot or a standard foot with stitch adjusted to the far left, sew a 2.2 mm seam securing the zip tape to the right side of seam allowance.

5. repeat on the other side so both sides of the zip tape are secured to the seam allowance.
6. Turn the garment to the outside. Stitch 0.5 cm from the seam, top stitching the zip in place. Use a 3mm stitch and turn when at the bottom of the zip so the zip tape is sewn over at the base of the zip.
7. Unpick the initial 5mm seam and test the zip works. If the zip won't open, the stitching may be too close to the zip teeth. Unpick this section and repeat process.



Material Knowledge

Hide
Natural Fibrous
Synthetic Fibrous
Weave
Knit
Felt
Bonded
Miscellaneous

Hide

Hide refers to any animal skin that has been processed extensively for textile use. It is strong, resilient, and biodegradable.

Hide is considered by some a sustainable textile as it can be sourced as a byproduct of the meat industry, and thus helps to reduce wasting parts of animals slaughtered for human consumption. This does not counter the degrading violence of the meat industry. This supposed 'sustainability' references traditional hunting practices, in which every part of the animal will be used out of respect for the life taken.

The mechanization of the meat *industry* can never mimic mindful hunting practices, and no part of the industry can be considered respectful to the animals it processes. However, the hide of these animals should be used as efficiently as possible, like any other 'resource' industry intentionally or unintentionally produces. Human industry creates human responsibility to *use* everything we produce through mindfulness or violence. Leather and sheep skins are examples of these hides.

More major ethical issues occur in the poaching of animals that are not bred for human consumption, for example furs and snake skins. Many rare animals whose hide/horns/tusks/shells/etc. have socially constructed status due to their scarcity, have been poached near extinction due to this cruel, wealth driven practice. Examples include lemurs, tigers, rhinoceros, turtles, elephants, etc.

Due to their longevity, secondhand hides are widely available, and the most ethical way of sourcing this material, as their purchase does not encourage industrialized animal slaughter. As mentioned previously, we have a responsibility to use these hides, out of respect to the lives that were taken to produce them, including controversial hides such as furs.

Synthetic hides such as 'vegan leather' are not resilient to wear, non-biodegradable, and composed of plastic composites which require land fracking to produce. Thus, synthetic hides are not sustainable, and cause much more damage than sourcing secondhand hides.

Natural Hide Synthetic Hide

Ideal Mends:
Ladder stitch for split seams in light weight hides, heavier hides may not have internal seams, and thus a visible running stitch seam along overlapping panels may be better.

Patching in a similar weight hide or thick weave fabric (i.e. denim) for small and large holes or rips.

Textile Specific Tips:
Hide can be hard to pierce, thus strong, thick, sharp needles are better when hand sewing.

When hand sewing very thick hides, piercing the holes using an awl prior to stitching is recommended. For very thick hides, thick waxed thread is better, and even a pair of pliers to help pull the needle through if necessary.

If using a machine, leather needles are an excellent option. Leather thread for machines can also be purchased. Very thick hides should not be sewn on domestic machines.

Hides do not fray and thus patches should not have hems to reduce bulk. The edges of a patch can be waxed instead if desired.

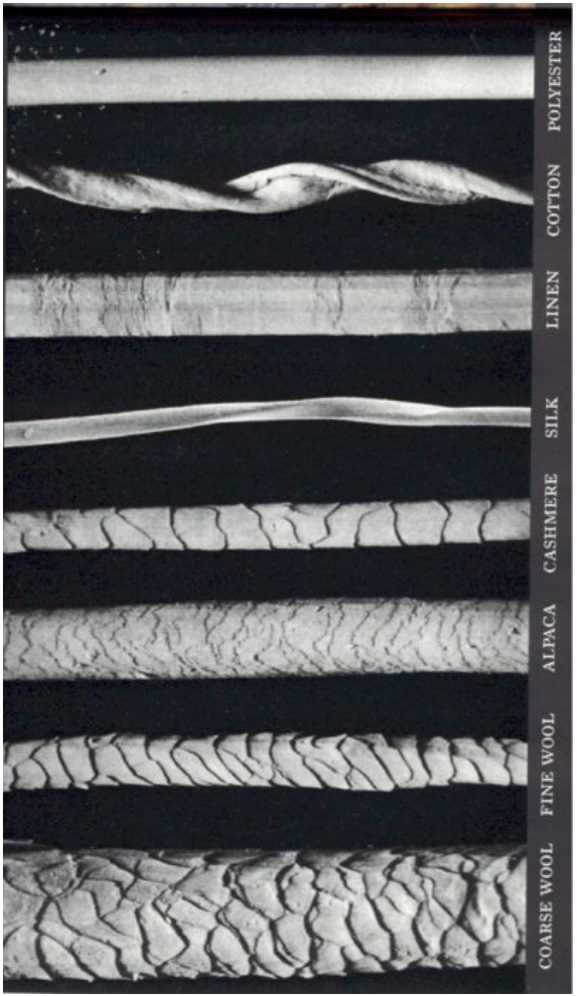
Pins are not ideal for hides, instead a light glue i.e. a glue stick, or small clamps or bulldog clips are recommended.

Natural Fiberous

Natural fibers require land to be cleared for farming, consuming massive amounts of water to maintain depending on animal/ plant type and the farm's location.

Planted fibers are grown in synthetic monoculture fields that require intensive human maintenance due to their inability to support biodiverse ecosystems. Once harvested, the fibers are chemically processed, often resulting in chemical residue run-off into local water and soils.

The fibers are then spun and manufactured into textile by knitting, weaving, or felting. Common natural fibers include cotton, hemp, and wool.



Synthetic Fiberous

Synthetic fibers are made from chemical compounds; either petroleum, coal-derived polymers or natural materials that are chemically altered.

Petroleum is derived from crude oil, that is fracked from limited naturally occurring oil reserves. Coal-derived polymers also require mining in their initial process to retrieve coal. Though coal is more abundant than oil, both are finite fossil resources that store carbon. Upon their breaking down though chemical processes such as burning, carbon dioxide is released into the atmosphere, dangerously adding to the compounding greenhouse gases responsible for global warming.

Polymers also take an exceptionally long time to biodegrade, dissolving into microplastics that enter water systems, food chains and soils.

Once processed into fibers and spun, synthetic textiles are manufactured through knitting, weaving, felting, or bonding. Many textiles use blends of synthetic and natural fibers.

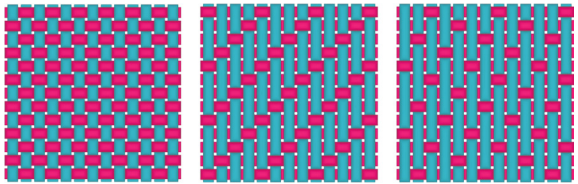
Synthetic fabrics are exceptionally resilient. The more already manufactured synthetic fabrics we can keep in use and out of landfill, the better. Thus, using and reusing pre-manufactured synthetic fibers is the most sustainable textile sourcing practice, though buying synthetic fabrics/clothing new supports the oil industry, global warming, and the further destruction of ecosystems.

Fibre-Specific Tips:

Due to their polymer nature, 100% synthetic materials can be finished by melting the edges. For fabrics prone to fraying such as taffetas or satins, lightly melting the cut edge of the textile with a lighter will prevent fraying and aid longevity. This is applicable to felted, bonded, and weave fabrics and some low-stretch knits. This is not recommended for high-stretch knits such as nylon tights.

Weave

A weave fabric is produced on a loom by interlocking vertical and horizontal spun fibers. The pattern of this interlocking will produce different weave types such as satin or twill.



plain weave twill satin

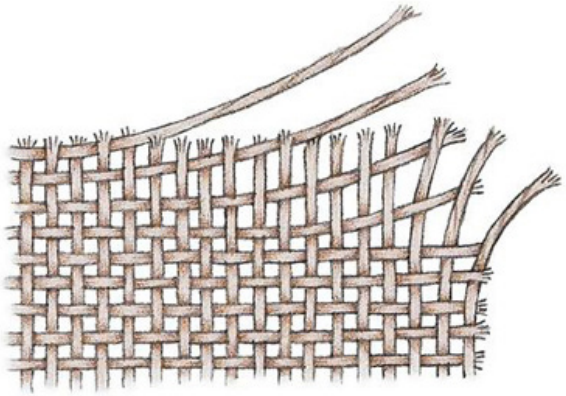
Weave fabrics are non-stretch when pulled vertically or horizontally but have a slight give when pulled diagonally - this is referred to as the bias.

Ideal Mends:
All mends are functional for weave fabrics.

Textile Specific Tips:
Weave fabrics fray easily, and care should be taken in how edges are finished to maintain longevity. See weave fray pattern below.

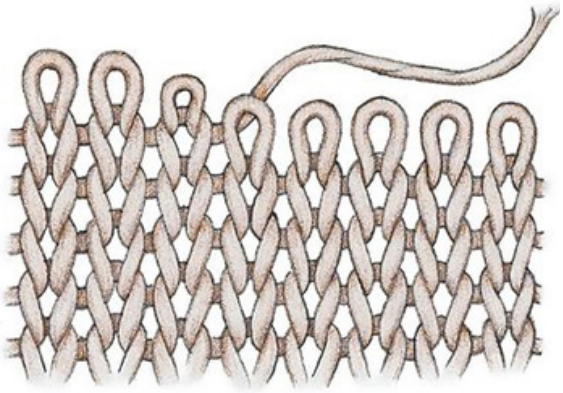
Seams should be sewn at 1.5cm from the edge of the material to prevent splitting from fraying edges.

Any weave prone to fraying should not be finished with an overlocker, as more interference with the weave will weaken the fabric.



Knit

Knit panels consist of a single thread bound through rows of interlocking loops.



Due to its being composed of a single thread, knit has a tendency to unravel, rather than fray like its weave counterpart. This is a quicker process of textile disintegration, and thus holes can damage a knit garment more intensively and quicker than within a weave garment. The larger and looser the knit, the quicker it will unravel; thus hand knitted garments are more susceptible to this quick damage than industrially produced, fine knits such as jersey.

The interlocking loops of a knit material give it a wide range of stretch without using elastic fibers. The larger and looser the knit, the more it will stretch.

Ideal Mends:
Darning/knit darning for small holes. Large holes can be patched, though if they are in a loose knit, the edges of the hole should be finished to avoid further disintegration.

ladder stitch between knit panels.

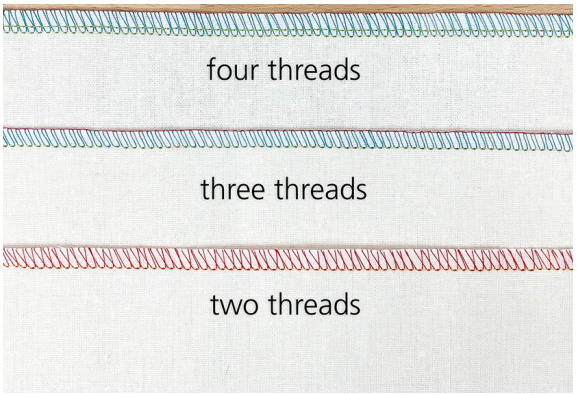
Textile Specific Tips:
Runs in a fine knits, such as in tights can be avoided by sealing the hole with a binding substance like glue or clear nail polish.

If sewing or mending knits with a sewing machine, a knit needle will avoid damaging the fabric. A knit needle is rounded, and less sharp, effectively pushing the textile fibers to the side rather than piercing them.

For fine knit garments whose seams need to maintain their stretch, a 3 or 4 threaded overlocked seam is far better than a standard machine seam, which will break upon stretching. A lightning, triple stretch or zig-zag stitch on a sewing machine will act similarly.

For hand sewing a large knit, blunt plastic knit needles can be used to avoid damage.

Overlocking Stitches:



Machine Sewing Stitches:

Felt

Felt is a freeform textile, manufactured by matting fibers into a smooth textile, that can be flat or sculptural. This is done using felting needles that push the fibers into the textile. Synthetic fibers can be used for felting though their structure is smooth, and thus more resistant to matting as fibers will easily 'slip away' from one another. Wool is a course fiber, whose texture aids the interlocking process of felting, and creates more resistance to being pulled apart, thus producing higher quality felt.

Felt will hold the shape it has been manipulated into, and thus does not have stretch qualities.

Felted material does not fray and thus doesn't deteriorate from it's edges. The edges of felted garments do not need to be finished. However, unlike structures textiles like weave or knit, felt can be pulled apart or tear easily, depending on its weight and quality.

Ideal Mends:
All mends are functional for felted fabrics.

Textile Specific Tips:
A hole in felt can be restored to its original quality by essentially felting it back together. This requires a felting needle, felting base (or substitute), and unspun yarn/ brushed out yarn.

The felting base is placed under the textile, and the yarn overtop the hole. The yarn is repeatedly punctured with the felting needle until it is matted.

This technique can be used for holes in any fibrous fabric and is effective in mending knits.

Bonded

Bonding uses adhesives, foam, or heat processes in the manufacturing the textiles. Some bonded fabrics are comprised of pre-manufactured textiles bonded together, or with another material such as a plastic coating. Other bonded textiles are manufactured by bonding raw fibers into textile using adhesives.

Waterproof fabrics are an example of a pre-manufactured textile bonded with a plastic composite, whereas disposable dish cloths are an example of bonded raw fibers.

Depending on their composition and manufactures process, bonded materials can have differing qualities, such as absorbency, heat resistance, wrinkle resistance, tear resistance and waterproofing.

All bonded textiles are at least partially synthetic, and thus require recycled plastics or extractants to produce. Due to this, bonded fabrics can take a very long time to decompose, even after visibly breaking down, micro-plastics enter and harm ecosystems through water and soil. Aiding this issue, bonded fabrics are frequently used in disposable products due to cheap manufacture costs.

Ideal Mends:
Bonded fabrics vary in qualities, and thus ideal mends will depend on the type of bonded fabric.

For non-waterproof, tear resistant bonded fabrics, all mend types are applicable.

Easily tearing bonded fabrics will weaken with more manipulation thus darning or overlocking are not recommended.

Piercing holes in a waterproof fabric will reduce its waterproof quality, however these holes can be filled using a liquid glue or clear nail polish. Patching is recommended for holes, darning is advised against.

Miscelaneous

Hide, weave, knit, felt, and bonded materials are 5 of the most frequently used textile types, however there are many more that have not been discussed in detail here.

In producing textile centric work, the lines between 'textile' and 'miscellaneous object' can also get blurry. Light metal, paper, foam, plant fibers, wood and plastic are all materials capable of being manipulated into clothing, though they are not considered 'textiles'.

In our making and mending for a better future, resourcefulness is a skill to be praised. The confines of traditional 'textile', or mending 'rules' should constrict the continuous reinvention of and creativity in our clothing. In this vein, miscellaneous textiles, especially when found from to-be-landfill, are our most abundant resource. Making with and finding purpose for what was to be discarded is our most powerful tool.

Patch woven from plastic bags.

Textile Care

Tags
Laundry Symbol Key

Tags

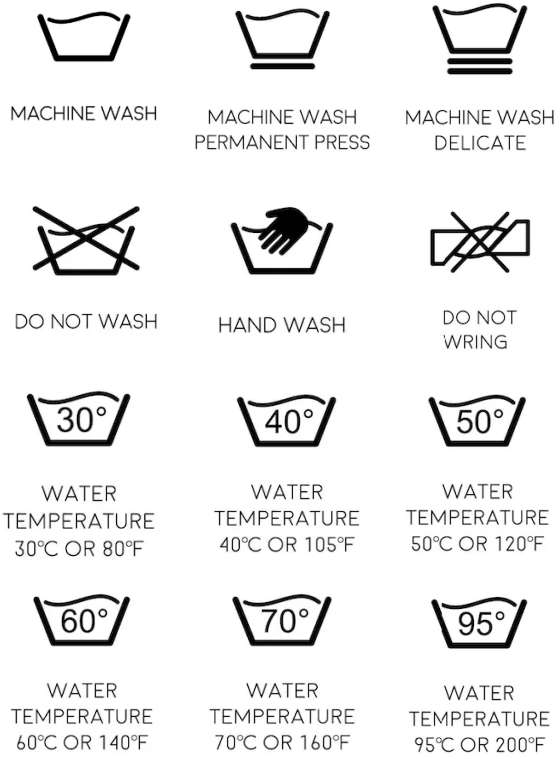
All clothing has a tag sewn into it which tells you the place of manufacture, textile composition and how to care for the garment.

Although laundry symbols are often ignored, they are vital to the maintenance and longevity of our clothing.

Not all tags will say explicitly what the laundry symbols means. The symbols are not intuitive, and require decoding to understand, hence often being overlooked.

The following is a key to what each laundry symbol means for your reference.

Domestic Laundry Symbols



WATER TEMPERATURE 30°C OR 80°F

WATER TEMPERATURE 40°C OR 105°F

WATER TEMPERATURE 50°C OR 120°F

WATER TEMPERATURE 60°C OR 140°F

WATER TEMPERATURE 70°C OR 160°F

WATER TEMPERATURE 95°C OR 200°F

BLEACH IF NEEDED

CHLORINE BLEACH IF NEEDED

NON-CHLORINE BLEACH IF NEEDED

NON-CHLORINE BLEACH IF NEEDED

DO NOT BLEACH

DO NOT BLEACH

IRON ANY TEMP. STEAM

STEAM

DO NOT STEAM

MAXIMUM TEMPERATURE 110°C OR 230°F

MAXIMUM TEMPERATURE 150°C OR 300°F

MAXIMUM TEMPERATURE 200°C OR 390°F

DO NOT IRON

DRY

DO NOT DRY

TUMBLE DRY

DO NOT TUMBLE DRY

DRY NORMAL NO HEAT

DRY NORMAL LOW HEAT

DRY NORMAL MEDIUM HEAT

DRY NORMAL HIGH HEAT

DRIP DRY

HANG TO DRY

DRY FLAT

DRY IN THE SHADE

DRIP DRY IN THE SHADE

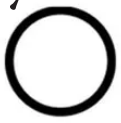
HANG DRY IN THE SHADE

DRY FLAT IN THE SHADE

DRYCLEAN

DO NOT DRYCLEAN

Professional Laundry Symbols



Dryclean

Any solvent

Any solvent except tetrachlorethylene

Petroleum solvent only

wet cleaning

wet cleaning

Do not wet cleani

Do not dryclean

Short cycle

Reduced moisture

Low heat

No steam finishing