# **EXPLORER BACKPACK KIT**

#### **KIT CONTAINS:**

Pre-Cut Pre-Punched Leather Pre-Sewn Waxed Canvas Bag D-Rings (2) Button Studs (3) Rivets (18) Needles & Thread Instructions & Pattern



#### **BEFORE YOU BEGIN, YOU WILL NEED:**

- Flathead Screwdriver
- Deluxe Rivet & Snap Setter
- 3/32 in. Round Drive Punch or Rotary Punch
- Mallet
- Knife
- Scratch Awl
- Straight Edge

#### **▲** CAUTION

CUT HAZARD: Functional sharp points. CHOKING HAZARD: Small parts.

Keep out of reach of children.

#### PLEASE READ ALL INSTRUCTIONS BEFORE BEGINNING PROJECT.

NOTE: ALL STAINING, DYEING, CONDITIONING, AND TOOLING SHOULD BE DONE PRIOR TO ASSEMBLY.

# IN THIS KIT YOU WILL...

(TECHNIQUES USED)



#### TRANSFER PATTERNS

Use paper template to transfer pattern and mark punch holes onto leather.



#### **PUNCH HOLES**

Punch holes into leather for hardware and other items before constructing project.



#### STITCH LEATHER

Use a variety of stitching techniques to secure leather together and finish project.



#### **CUT LEATHER**

Cut leather to specific size and/ or trim corners for decorations and embellishment.



# **SET HARDWARE**

Set rivets, snaps, and/ or eyelets into leather before final assembly.

# **CUSTOMIZE YOUR KIT BY...**

(OPTIONAL TECHNIQUES)



#### **TOOLING LEATHER**

Stamp and carve leather into unique designs and creations.



#### **DYEING LEATHER**

Get creative by dyeing, staining or painting projects to add a personal touch.



#### **BURNISHING EDGES**

Give your project a clean professional look by burnishing edges with gum traganath or other solution.

#### WHAT'S INCLUDED?

Canvas Pouch (A)

Adjustable Straps (B)

Shoulder Straps (C)

Closure Tab (D)

Closure Button Tab (E)

Shoulder Strap Station (F)

D-Ring Keepers (G)

Interior Closure Keeper (H)

Exterior Closure Keeper (I)

Strap Ends (J)

Adjustable Anchors (K)

Strap Keepers (L)

Adjustable Strap End Template (M)

Button Stud (N)

D-Rings (O)

Small Rivets (P)

Medium Rivets (Q)

Large Rivets (R)

Needles & Thread

#### Not Shown:

Instructions & Pattern

#### **RECOMMENDED TOOLS:**

3-Prong Stitching Chisel to punch stitch holes.

Binder Clips or Preferred Adhesive to secure leather pieces.

Stitching Horse to hold leather pieces while stitching.

Scratch Awl to widen stitch holes.

Emery Board to sand edges.

Multi-size Wood Slicker to burnish edges.

Gum Tragacanth to burnish edges.

Cotton Swab to apply Gum Tragacanth.

#### **GLOSSARY:**

FLESH SIDE: The underside of an animal's hide. On veg-tanned tooling leather, this is the rough side.

GRAIN SIDE: The hide's surface that had the hair of the animal. Typically used for carving and stamping.



#### **OPTIONAL: BURNISHING HANDLES**

I. Before assembling, burnish edges to desired finish. See Level Up Your Skills starting on page 10 for detailed instructions on How to Burnish Edges.

# ATTACHING D-RING KEEPERS

- 2. Align punch holes of one of the D-Ring Keepers (G) under one of the Shoulder Straps (C), flesh sides together.
- 3. Slide two D-Rings (O) onto D-Ring Keepers (G). (Figure 1)
- 4. Cut thread 5 times the length of stitch line. Thread both ends with harness needles. **See Level Up Your Skills starting on page 11** for detailed instructions on How to Thread a Needle.
- 5. Saddle stitch around rectangle then stitch over the first 2-3 stitches to secure. (Figures 2-3) **See Level Up Your Skills starting** on page 11 for detailed instructions on How to Saddle Stitch.
- 6. Set two Large Rivets (R) to secure D-Ring Keepers (G). (Figure 4-5) **See Level Up Your Skills starting on page 10 for detailed instructions on How to Set Rivets.**
- 7. Repeat steps 2-6 on other set of D-Ring Keepers and Shoulder Straps (C). (Figure 5)

Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



- 8. Align stitch holes on Closure Button Tab (E) and Closure Tab (D) flesh sides together. (Figure 6)
- 9. Saddle stitch around rectangle then stitch over 2-3 stitches to secure. (Figures 7-8)

Figure 6



Figure 7

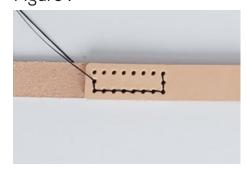


Figure 8



# **ATTACHING SHOULDER STRAPS**

10. Lay Shoulder Strap Station (F) grain side up. Feed Shoulder Straps (C), flesh side up, through oblong slot on Strap Station. Align punch and stitch holes. (Figure 9)

11. Saddle stitch across the short stitch line to secure Shoulder Strap (C) to Strap Station (F). Backstitch 2-3 stitches to secure. Repeat on the opposite side. (Figures 10-11) **See Level Up Your Skills starting on page 10 for detailed instructions on How to Backstitch.** 

Figure 9



Figure 10



Figure 11



12. Align the unstitched side of Closure Tab (D), on Strap Station (F), grain sides up. Saddle stitch around and stitch over 2-3 stitches to secure. (Figures 12-14)

Figure 12

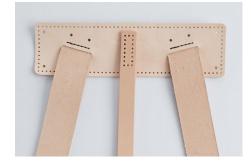


Figure 13



Figure 14



13. Set Medium Rivet (Q) through one of the punch holes on Strap Station (F) and Shoulder Straps (C). (Figure 15) 14. Set other three rivets on Shoulder Straps (C) and Strap Station (F). (Figure 16)

Figure 15



Figure 16



#### **ASSEMBLING BACK**

- 15. Align Adjustable Strap End Template (M) over Adjustable Straps (B) with the stitch holes facing the edge.
- 16. Use an awl to mark the three stitch holes and the punch hole closest to stitch holes. (Figure 17)
- 17. Use rotary punch or round drive punch and mallet to punch rivet hole. Use awl or stitching chisel and mallet to punch stitch holes. (Figure 18)

Figure 17



Figure 18



- 18. Feed Adjustable Strap (B), flesh side up, through the grain side of Adjustable Anchors (K). Align punch and stitch holes. (Figure 19)
- 19. Saddle stitch Strap (B) and Anchor (K) together. Tie a knot at the back to secure stitch line. (Figures 20)
- 20. Repeat steps 18 and 19 on the other Strap (B). (Figure 21)

Figure 19

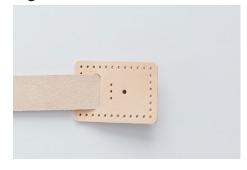
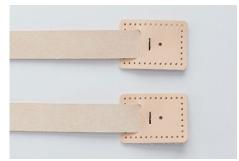


Figure 20



Figure 21



NOTE: Use a backing material (mat, wood, slab) inside of pouch while setting rivets.

- 21. Flatten Canvas Pouch (A). Align punch holes on strap assembly and the bottom back of Canvas Pouch (A). (Figures 22-23) **Pro Tip: Use Binder Clips to hold straps in place to stitch. Be sure strap placement is symmetrical.**
- 22. Set Small Rivets (P) on each side securing the Canvas Pouch (A) and the Adjustable Anchors (K). Saddle stitch each rectangle then stitch over 2-3 stitches to secure. To keep stitching holes aligned, use awl to pre-punch 4-5 stitch holes ahead of actual stitching. (Figure 24)

Figure 22



Figure 23



Figure 24



- 23. Place Strap Station Assembly (F & C) on the top back of Canvas Pouch (A) with straps going toward the top of the bag. Align four rivet holes. (Figure 25)
- 24. Rivet Strap Station Assembly to Canvas Pouch (A) in all four corners with Small Rivets (P). (Figure 26)
- 25. Saddle stitch around rectangle then stitch over 2-3 stitches to secure. Use the previously mentioned awl technique to stitch together. (Figures 27-28)

Figure 25



Figure 26



Figure 27

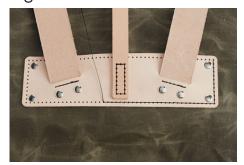


Figure 28



26. Flip strap assembly with D-Rings (O) down. Slide Strap Keepers (L) onto Adjustable Straps (B). Staple facing grain side. (Figure 29) 27. Slide Adjustable Strap (B) through both D-Rings (O) on each side. Then slide it back through the lower D-Ring (O) and Strap Keeper (L). (Figures 30-32)

Figure 29



Figure 30



Figure 31



Figure 32



#### **FITTING STRAP**

**NOTE:** Stuff your bag to properly size Adjustable Straps (B) to your desired fit.

28. Put backpack on your shoulders and adjust to the loosest desired fit.

# **OPTIONAL: TRIMMING STRAP**

- 29. Mark at desired length on both strap ends. Align Adjustable Strap End Template (M) on marked line with the single punch hole facing the strap end. Mark single punch hole with an awl. (Figure 33)
- 30. Trim at marked line and punch rivet hole. (Figure 34)
- 31. Fold Strap End (J), flesh sides together, over the end of the Adjustable Strap (B). Align punch holes and rivet together. Rivet together with Medium Rivets (Q). (Figure 35)
- 32. Repeat steps 29-31 on the other strap. (Figure 36)

Figure 33



Figure 34



Figure 35



Figure 36



#### **ASSEMBLING FRONT**

33. Align Interior and Exterior Closure Keeper (H & I) on perspective punch holes on the interior and exterior of the bag. Rivet together with Small Rivets (P). (Figures 37-39)

Figure 37



Figure 38



Figure 39



- 34. Fold front of Canvas Pouch (A) about 4 inches down.
- 35. Pull front strap through front keeper and back toward itself. (Figures 40-41)
- 36. Use an awl to mark one of the lowest holes on the strap. (Figure 41)
- 37. Punch hole at marked spot. Install button stud and attach strap. (Figures 42-44)

Figure 40



Figure 41



Figure 42



Figure 43



Figure 44



# CONGRATULATIONS, YOU'VE MADE A BACKPACK!





<sup>\*</sup> Images are for construction purposes only. Colors may vary.

**LEVEL UP YOUR SKILLS WITH TANDY** 

Burnishing consists of sealing edges with product by using hand tools and burnishing agents. The burnishing process gives smooth and clean edges to any veg-tan project.

- I. Rub emery board gently across the edges so that the leather is even and smooth. Dust off. (Figure 1)
- 2. Use a cotton swab to gently seal the edges with gum tragacanth burnishing agent. Let air dry. (Figure 2)
- 3. Burnish edges with a wood slicker. (Figure 3)
- 4. Repeat steps 2 and 3 until you reach desired outcome.

Figure 1



Figure 2



Figure 3



- 1. Place rivet post into correctly sized anvil divet. (Figure 2)
- 2. Place pattern piece(s) onto rivet post and cover post with rivet cap. (Figures 3-4)
- 3. Line up corresponding setter tool. Hit firmly with a mallet a few times to set the rivet. (Figures 5-6)

Figure 1

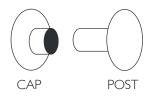


Figure 2



Figure 3



Figure 4



Figure 5



Figure 6



The backstitch is a securing stitch that goes over existing stitches to prevent unravelling.

I. At the final hole in the stitch line, reverse the direction of the needles and saddle stitch back through the last 2-3 holes in the line. If the stitch line meets back where the line began, simply saddle stitch over the first 2-3 stitches without reversing the direction of the needles to lock them in. **Pro Tip: If needles are difficult to pull through stitches, use a pair of needle nose pliers to help pull the needles through.** 

2. To finish, pull the remaining thread to the less visible side of the work. Snip off the excess, and tuck it into the last hole.

Figure 1



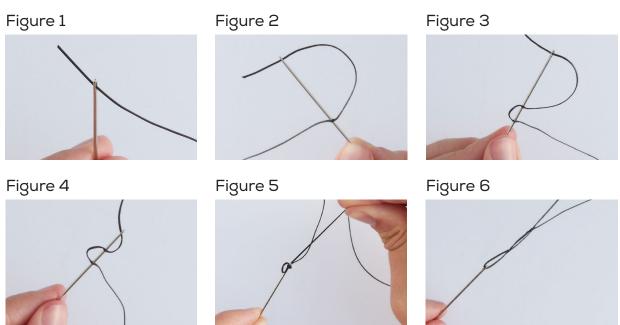
Figure 2



Figure 3



- 1. Cut your thread to 5 times the length of the stitch line.
- 2. Feed one end through the eye of one needle. (Figure 1)
- 3. Take the point of the needle and push it through the longer portion of the thread. Repeat and push needle through again. (Figures 2-3)
- 4. Pull long side of thread toward the eye of the needle to form a knot. (Figure 4-6)
- 5. Repeat steps 2-4 on the other side with other needle.



The saddle stitch is a strong stitch that is made up of two independent stitches that lock together. This allows the stitches to hold even if a stitch is broken.

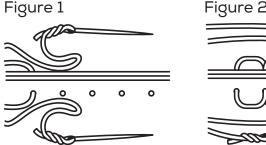
I. Holding one threaded needle in each hand, begin saddle stitching by inserting one needle into the first hole of stitch line. Pull the needle and thread through the hole until there are equal lengths of thread on either side. (Figure 1)

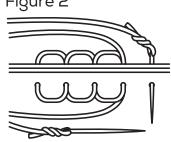
### Pro Tip: Use a stitching horse to secure your pieces in place and allow for easier sewing.

- 2. With one needle in each hand, begin weaving the needles through the next stitch hole, one needle at a time. It is important to be consistent with your motions. Always start each stitch with the same hand. We will start with the left-hand needle for each stitch for these instructions. Push the left needle through next hole in your stitch line.
- 3. Once the left needle is through the hole, insert your right-hand needle through the same hole, being sure to pull the left thread back to avoid piercing it with the right needle. Pull each side all the way through the hole and give the thread a gentle tug to tighten up the stitches. (Figure 2)

Optional: If your stitch holes are large enough, you can insert your needles in the same hole at the same time. Cross your needles into an "X" as you push them through the hole. Be sure to always place the same side needle on the top and bottom for each stitch, then pull the needles through and tighten up the thread with a gentle tug.

4. Repeat Steps 3-4 until you reach the end of the stitch line, starting with the same side needle for each stitch. Be sure to give the thread a light tug at the end of each stitch to keep even tension.





# LEVEL UP YOUR SKILLS WITH TANDY

| 1   | LEVEL 2   | LEVEL 3   | LEVEL 4   |
|---|---|---|---|
| Includes basic project assembly skills like lacing, braiding, and knot tying. | Focuses on handstitching techniques and other skills. | Introduces more complex & challenging projects that have more components. | Builds advanced skills & do not have pre-punched stitching holes. |

