

# Mama Bird All-In-One Diaper

This AIO is unique. The outer waterproof layer is separate from the inner absorbent layer in the leg areas, the areas most likely to wick. This ensures your baby will have dry clothing even when his diaper is soaked. Also, this allows water to get to both sides of the soaker equally, ensuring that your diaper is thoroughly cleaned. Since air can also reach both sides of the soaker well, this AIO dries as fast as a fitted diaper, whether you use the line or the machine.



## Materials

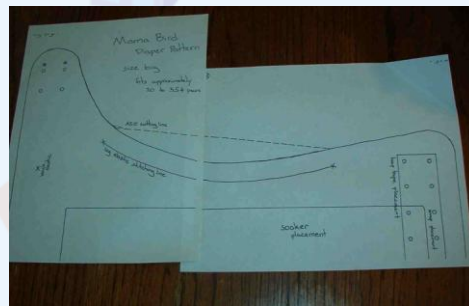
- > **Waterproof fabric**—PUL, Windro fleece, Ultrex, etc.
- > **Inner absorbent fabric**—flannel, hemp, interlock, etc. You may opt to use one layer of stay dry fabric (microfleece or suede cloth), but this may effect drying time. I have found that knit materials tend to bag and stretch in this style diaper, so I don't recommend you use knits for both inner layers. Using a woven, such as flannel, for at least one of the layers will prevent this.
- > **Soaker fabric**—this can be the same material as your inner absorbent fabric or something else. See [Soaker Materials](#) for more information.
- > **Fold-over elastic**—1½ yards is needed for the little size and 2 yards is needed for the big size. See [Fold Over Elastic](#) for more information.
- > **Snaps OR Hook and loop tape**
  - \* **Snaps**—4 stud snaps and 20 sockets for the little size and 4 stud snaps and 24 sockets for the big size. Snap tape may be a good alternative, when applied like hook and loop tape, but I haven't tried it.
  - \* **Hook and loop tape**—4 inches hook and 12 inches loop for the little size and 4 inches hook and 14 inches loop for the big size. I recommend 1 inch or 1½ inch wide tape for the little size and 1½ for the big size.
- > **100% polyester thread**—Moisture can wick through your thread to the outside of the diaper if you use cotton or cotton/polyester blend thread.

> **Needle**—A size 11 ball point needle is needed anytime you will be sewing through PUL or fleece.

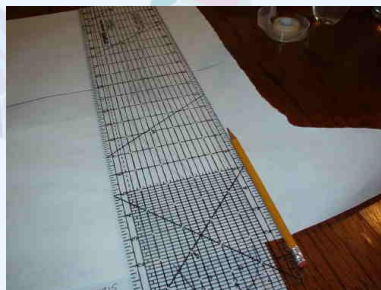
## Preparation

### Pattern preparation:

1. Print the pattern. Each pattern size comes in two pieces. Choose the size you need and fit the pieces together. The bottom edges of the pattern may not line up; it is more important to line up the pattern lines. Toward the top of the second page you will notice a half circle with a half X in it. This may or may not print on the first page. If this doesn't print on the first page, align the pattern lines and have the first page overlap the second until it just touches the half circle. If this does print on the first page, align the two half circles to make one full circle. I'm sorry for this inconvenience. I will soon be getting my own scanner and will address this printing problem. Tape the pieces together.



2. On a large piece of butcher paper, pattern paper, tissue paper, sew-in interfacing, or other tracing medium; draw a straight line down the middle. At the top of the line draw another straight line perpendicular. This is easily done with a quilting ruler or a book. The middle line is the fold line of the pattern and the perpendicular line is the back of the pattern. Place the tracing medium over the pattern and align the perpendicular line with the back of the pattern and the middle line with the bottom of the first page. Trace the pattern onto the tracing medium, tracing the dotted AIO lines at the leg area. Repeat with a new sheet of tracing medium, tracing the solid fitted diaper lines. Mark the back elastic marks at the edge of the pattern and mark the point where the dotted lines meet the solid lines on both tracings.



3. Fold the tracing medium along the middle line and cut out. Transfer markings to other half of the patterns. Now you have a full size symmetrical pattern for both the outer waterproof layer and the inner absorbent layers.



#### Cutting:

4. Cut one waterproof layer using the pattern that has the wider, dotted lines in the leg area. Transfer marks to fabric. I don't bother with disappearing markers. I simply place marks where they will be covered. I used a PUL cotton knit print.



5. Cut two inner layers from absorbent material with the pattern that has the narrower, solid lines in the leg area. Transfer markings to fabric. I used flannel.



6. If using hook and loop tape, cut the hook tape into two 2 inch pieces. Cut the loop tape into two 2 inch pieces, one  $1\frac{1}{2}$  inch piece, and you will have a remaining  $6\frac{1}{2}$  inch piece for the little size and an  $8\frac{1}{2}$  inch piece for the big size.

7. Cut your soaker. See [Soaker Materials](#) for more information. For the little size diaper, the finished soaker should measure approximately  $3\frac{1}{2}$  by  $12\frac{1}{2}$  inches. For the big size, it should measure approximately 4 by 14 inches. I used two layers of microfiber and two layers of flannel.



### Inner Layers:

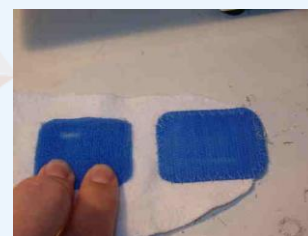
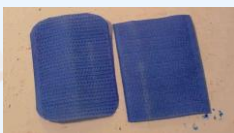
**8.** Place soaker layers together and stitch down the middle of the soaker to secure, using a wide and long zig zag. See Soaker Materials for more information. Sew soaker to wrong side of one of the diaper inner layers, aligning the soaker on the fabric even from the front, back, and sides. Start sewing with a machine knot, stitching with the machine set a 0 width and length, making four or five stitches in the same place. Sew around the soaker, near the edge, using a wide width and medium to wide length zigzag stitch.



**9.** Place both inner layers together, with right sides touching. Stitch them together at the leg areas only, starting just beyond one leg elastic mark and ending just beyond the other, using a  $\frac{1}{4}$  inch seam and a short to medium length straight stitch. Turn the layers right sides out and edge stitch between the leg elastic marks, approximately  $\frac{1}{2}$  inch from the edge. It is helpful to stitch all around the layers to secure them together.



**10.** If using hook and loop tape, round edges of hook tape. Sew to the right side of inner layer wings (side that will touch baby, best if not the side with soaker stitching), almost to the edge and parallel with the diaper back. Use a medium to wide width zig zag with a medium to narrow length. Stitch with the zig well on the tape into the hook (not just on the narrow edge) and the zag just barely off, starting and ending with a machine knot (see step 8). Repeat for the 2 inch loop tape pieces, aligning them with the hook tape,  $\frac{1}{2}$  inch away.



### Waterproof Layer:

**11.** Apply long piece of loop tape to the right side of the waterproof layer (side that will be the outside of the diaper), according to pattern placement. Sew the 1½ inch loop piece to the right side of one of the diaper wings. This will allow the wings to cross over each other to fit smaller babies and is optional. Sew loop tape according to the directions in step 10.

### OR

**11.** Apply socket snaps to the right side of the waterproof layer (side that will be the outside of the diaper), according to pattern placement. I am not experienced with snaps in diapers, but I imagine a reinforcing layer of material behind the snaps will be needed. Apply snaps according to manufacturer's suggestions.



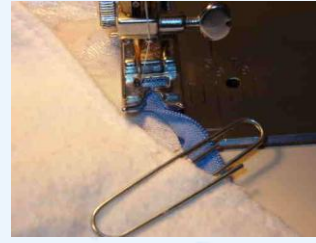
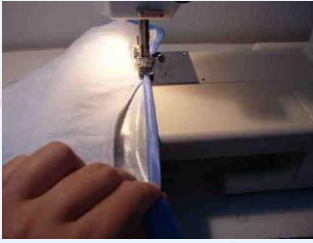
### Binding:

**12.** Place the waterproof layer down with wrong side up and place the inner layers on top of it with right side up. Pinning is inadvisable with some waterproof materials, such as PUL. I have found paper clips and hair clips to be good alternatives. Starting to one side of the front, bind the diaper together. Be sure to start a few inches from the edge of the FOE, leaving it to dangle free. I recommend a wide width and medium to wide zig zag stitch. Start and stop with a machine knot (see step 8). Bind around the diaper, keeping the FOE taut, but not stretched, with the inner layers up.

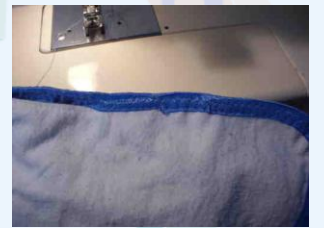
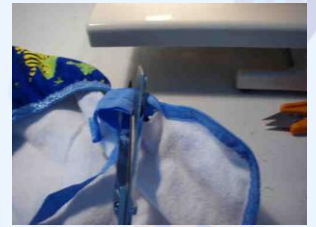


**13.** When you come to the first leg elastic mark, stop with the needle down. Push the inner layers to the left and continue sewing the waterproof layer by itself while stretching the FOE as much as you can. This is by far the most difficult part of making this diaper. Go slow and before long you will have the hang of it. Sew to the next elastic mark, where you will stop again with the needle down and will bring the inner layers back into your binding. Continue sewing the layers together without stretching the FOE (but still keeping it taut). The wings require a small amount of stretching to allow the FOE to lay flat while moving around the curve. When you reach the back elastic mark, stretch the FOE as much as you can while sewing it to all diaper layers. Stop stretching when you reach the other back elastic mark. Sew the opposite wing and leg area as the first.



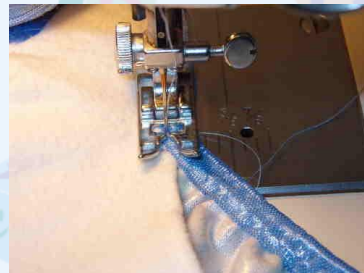


**14.** Stop sewing with a machine knot approximately 2 inches from where you started. Sew the loose ends of the FOE right sides together. Make sure it will cover the remaining distance without bunching or too much stretching and trim excess close to stitching. Finishing sewing FOE to diaper.



**15.** If using snaps, apply snap studs to the inside of the wings, according to pattern placement and manufacturer's suggestions. Also apply two socket snaps to the outside of one of the diaper wings. This will allow the wings to cross over each other to fit smaller babies and is optional.

**16.** The last step is to reinforce the diaper where the inner layers leave the binding. These areas receive a lot of stress during washing (occasionally the diaper will turn inside out during washing). Stitch back and forth a few times, using a short to medium straight stitch, on the FOE and through all layers in the place just before the inner layers leave the binding.



Congratulations on finishing your Mama Bird AIO diaper!



My toddler in his new Mama Bird AIO, size big. He is 17 months old and approximately 27 pounds in this picture.



