Fancy Pet Bed

Router Bits and Accessories Used:

Fast Joint Precision Joinery System (#9411)
Dog Bone Accessory Template for Fast Joint Precision Joinery System (#9454)
1-1/4” diameter Forstner Bit (#9217)
1/4” Rabbeting Bit (#5392/7692)
3/8” Spiral Upcut Bit (#7467) or Plunge Cutting Straight Bit (#5451/7751)
3/16” Radius Round Over Bit (#6351/8651)
Molding Plane Profile Bit (#7965)

Other Tools Used:

Drill Press
Band Saw or Jig Saw
Sanding Drum
Chisel and Mallet
Drill Bits with Countersink
MLCS Small Parts Holder (item #9542)

Our dog bed is sized for a small breed dog and is designed to accommodate a small 19” x 13” dog bed insert. You may need to modify this plan if you have a medium sized or larger dog to accommodate a larger dog bed insert.
1. Plane enough cherry and walnut stock to 3/4” finished thickness to create the front, back and sides for the bed box. We will be using cherry for the front and back. We will be using walnut for the sides. You should start with stock at least 48” long and 6-1/2” wide to have enough to create the bed box. After surface planning, joint one edge and rip the stock to a final width of 5-1/4”

2. Cut your stock to the final length required for your particular joinery option so that you will end up with an interior dimension in the box of 13” x 19”. For use with the Fast Joint, the front and back pieces will a final length of 20-1/4”. The sides will be cut to a final length of 14-1/2”. After milling the rough stock for the bed box, set up the Fast Joint Precision Joinery System with the optional Dog Bone style template. If you do not have the Fast Joint Precision Joinery System, you may always substitute an alternative joinery system (dovetail or lock miter) to join the box sides. We chose the Dog Bone profile since it is related to the theme of this project.

3. Use the instructions included with the Fast Joint Precision Joinery System, or the joinery system of your choice to make the cuts on the front, back and sidepieces for the bed box. (see figs. A & B)

4. Before the bed box can be assembled, the dropped section for the dog to enter must be made. Using the dimensions given on the layout sheet, layout the dropped front on the bed box. Use a 1-1/4” diameter forstner bit to create the radius for the corners at the bottom of the recess. Use a jigsaw or band saw to cut the remaining part of the top away to create the dropped front. Sand the cuts smooth. (see figs. C, D & E)
5. The bed box can now be glued up and set aside to allow the glue to dry. (see fig. F)

6. After the glue has dried, a 1/4” rabbeting bit will be used to cut a 1/2” tall x 1/4” deep rabbet around the inside of the bottom edge of the bed box. (see fig. G) Use a chisel to clean up the radius in the corners. (see fig. H)

7. To make the headboard, plane down a piece of stock at least 24” long by 4-1/2” wide to a finished thickness of 3/8”. Joint one edge of this stock to align the template against for making the decorative scallop cut on the headboard. Rip the stock to a finished width of 4” and crosscut the headboard panel to a finished length of 19-1/2” (save the cutoff piece to make the caps on the headboard posts). Transfer the template profile onto the headboard blank. Use a forstner bit to create the circular shape out of the center of the headboard. Use a scroll saw, jigsaw or band saw to finish the cut along the layout line. Sand the cut smooth. A sanding drum will make smoothing the wavy profile much easier. The final step that needs to be done on the headboard blank is to notch the ends to create the tenon to fit into the mortise on the headboard posts. Cut a 1/2” long x 1/2” deep notch on the top and bottom edges of the headboard blank. (see fig. I, J & K)
8. To make the headboard posts, a piece of 3/4” x 1-1/2” stock will be used. A mortise will need to be cut in the inside edge of each headboard post to accept the tenon on the headboard center panel. Use a 3/8” diameter straight or spiral bit to cut a 9/16” deep mortise on the inside edge of each headboard post. Use the layout diagram to mark the starting and ending locations of the mortise. After the mortise has been cut, the front face of the headboard post will need to be notched to overlay the bed box. To make the notch, it will need to be 5-1/4” long and 3/8” deep. (see figs. L & M)

9. After machining the mortise and rabbet, attach one of the headboard posts to the back of the box. The headboard posts will overlap the back of the bed box and be flush with the outside edges of the bed box. Pre drill and countersink the hole in the back of the headboard post. (see fig. N) Slide the tenon on the end of the headboard center section into the mortise on the headboard post. (see fig. O) Do the same on the opposite end and then attach the other headboard post in place on the opposite end of the bed box. (see figs. P & Q)
10. Using a Molding Plane bit, rout a 6’ piece of walnut for the foot base of the pet bed. (see fig. R) The bed box will sit on a mitered base made from this molding. The bed box should be inset 1/4” when the mitered jointed base is completed. A 1/4” Rabbeting bit will be used to create the rabbet that the bed box will sit on. (see fig. S) The base will only have two sides and a front to it, and only the front and side intersections will need to have a miter joint on them. The back of the mitered base will have a straight 90 degree cut and be flush with the back of the headboard posts. The bed box will be attached to the mitered base using only wood glue. No additional fasteners are needed. (see fig. T)
11. Cut the 1/2” plywood for the bed box bottom to the finished dimension of 19-1/2”x 13-1/2”. Glue the bottom into the rabbet. A few brads or wood screws may be used to reinforce the glue joint. They will not be visible as they will be on the bottom of the box.

12. The final construction step is to create the caps for the top of the headboard posts. From the waste stock used to make the center panel for the headboard, cut out two pieces, 2-1/4” long x 1-1/8” wide. Using a small parts holder or other safety jig, rout a small 3/16” radius round over profile along the two short sides and along one of the long sides. (see fig. U) Glue these onto the top of the headboard posts keeping the flat edge flush with the back of the headboard post. (see fig. V)

13. Apply a finish and insert a pet pillow available from any pet supply store to complete your fancy pet bed.