

Scale inspection access covers

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Written by Ron Peterka

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SCALE INSPECTION ACCESS COVERS

Ron Peterka

Here's a way to dress up a model of a fabric covered aircraft, an ARF or a full on build project. It is best applied to larger scale models of 1:6 or larger. A lot of pilots are modifying their models to avoid the 'look alike' factor of ARF models. This is very scale but not difficult and can be added without recovering or repainting anything except the covers themselves.

Full scale fabric covered aircraft very often have round inspection access holes to make 100 hour or annual inspections possible. They are usually five or six inches in diameter and access wing bolts, hinges, etc. The holes are almost always located on the bottom of the wing to avoid the lower pressure on the top of the wing during flight 'sucking' the covers off the airplane. Each access hole will have a plastic ring reinforcing the edge of the hole and after painting the hole is cut open inside the reinforcement. Some rings are installed over areas that are not required for inspection, but might be needed for minor repairs at some later time. These access points are simply painted over with the ring and left uncut until, or unless, needed.

The covers themselves are simply a slightly dished aluminum disc with a 1 inch wide spring steel strap riveted or bolted to the inside concave surface of the cover. To install the cover it is 'sprung' opposite to the dish in the cover, one end of the spring is inserted into the open inspection hole, the cover is slid over until the other end of the spring is able to be pushed into the hole, and the cover is centered and sprung back to its original shape.

The attached photo shows both uncut inspection hole and simulated covers on a 1:5 scale model of a Stinson Reliant wing. There are no actual holes in the wing surface.



So where do you find these nice dished aluminum covers? First you have to have a few cans of your favorite brew or soda to think this over. When empty, turn the can over and observe the perfectly concave bottom of the can. Get the idea. The other side of the bottom is perfectly shaped for an inspection cover of the diameter needed. For a 1:5 scale a one inch diameter is about right. Using snips or a rotary cutting wheel in your Dremel tool, carefully cut out the bottom. Mark the bottom with a hole pattern or a coin near the center of the bottom and trim with snips or scissors. A little sanding or filing will smooth the edge and you are ready to glue the cover in place. I like to use a dab of 'hot' glue because it stays flexible and attaches fabric and aluminum well.

