

IMMEDIATE ACTION

SERVICE



BULLETIN

NUMBER 50

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SUBJECT: Ribstitching

MODELS AFFECTED: E2, J2, J3, J4 and J5

It has been brought to our attention that there have been a number of reported failures of the ribstitching both in the wing and control surface covering.

In the wings, these stitches carry the air loads from the fabric to the wing structure and on the control surfaces the stitches serve to keep the fabric securely attached to the frames.

It is possible, therefore, that the failure of a number of these stitches may weaken the fabric attachment to the extent that the covering may be torn from the structure while in flight.

We, therefore, recommend that you inspect the condition of the fabric and ribstitching at each periodic inspection.

As the under surface of the wing is slightly concave and any failure of the ribstitching will allow the fabric to straighten out, it will be possible to detect failed stitches by pressing up on the bottom surface of the wing at each stitch.

In replacing wing rib stitches, we recommend that a minimum of three consecutive stitches be used in case of one stitch failure and, in case of several consecutive failures, we recommend that the stitching be carried one stitch beyond the last failure at either end. The original stitches, reinforcing tape and finishing tape need not be removed; but a finishing tape should be doped over the repair stitching. If polishing wax has been used on finish, it should be removed by light sanding before making these repairs.

Stitches on control surfaces may be replaced by adding a stitch adjacent to the one which has failed. A piece of reinforcing tape approximately 1" long should be used under each side of the stitch. This is to prevent the stitch from pulling through the fabric. A finishing patch should be doped over the repair stitch.

PIPER AIRCRAFT CORPORATION, LOCK HAVEN, PA., U. S. A.