

SUPPLEMENT

Topic: MX Sprint and MXII Sprint wing cover attachment

Broad objective: Create a good looking, wrinkle-free wing cover

Main objective: Satisfy the requirements of necessary features as follows:

- 1) Set the distance between the inboard edges of the wing cover to allow proper overlap of the gap cover such that a majority of the velcro on the gap cover mates with the velcro on the wing cover.
- 2) Pull the sail cover taut span-wise with approximately 30 to 40 lbs. of tension. Pulling with inadequate tension will tend to leave wrinkles and bunching of the wing cover. Pulling with excessive tension will tend to warp wing fabric away from the spar between the inboard and outboard pull points to the point where the chord-wise tension created by ribs will not suffice to draw the fabric closer to the spar. The result of excessive span-wise tension is bagginess along the leading edge.

Important point: Keep the crease (fold line) in the middle of the wing cover leading edge pocket on the centerline of the forward face of the leading edge spar (refer to Figure 1). The crease must be on the centerline along the entire length of the spar because twisting will cause wrinkles. The wing cover will tend to orient itself properly with a few ribs installed. However, the method of tensioning span-wise can cause twisting, especially at the wing cover ends. Avoid twisting the wing cover at the ends.

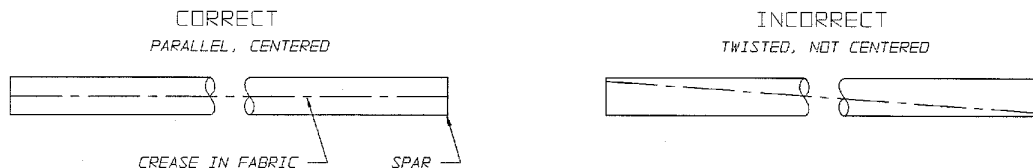


Figure 1.

Note 1: Grommet locations may not correspond with the position illustrated in the assembly manual. Leading edge grommets have been moved from the forward face of the leading edge to the bottom face. Do NOT force the grommets to be oriented as illustrated in the assembly manual by twisting the wing fabric –let them seat naturally (the crease in the L.E. should remain on the spar centerline).

Note 2: The manual procedures for wing cover attachment call for wing fabric to be pulled from wing tip to root. The procedure is the easiest for installation, however, on occasion, the two main objectives listed above conflict. The wing cover may be tensioned excessively span-wise in order to establish a proper overlap of the gap cover. Therefore, it is recommended that one of the following procedures be followed. For either procedure, note that a gap of 9" between inboard edges of MX Sprint wing covers and 13" for MXII Sprint wing covers should allow for proper gap cover overlap.

Either:

Method 1: (Per assembly manual, pull tip to root, but make adjustments)

Set the wing cover position at the tip as illustrated in the manual. Drill only a small hole to restrain the wing cover at the grommet with a removable pin to hold tension rather than popping a rivet. Stretch the wing cover to the root with appropriate tension. At both the leading and trailing edge, mark the spar with a pencil line at the position of the inboard edge of the wing cover.

Measure the distance from the pencil line to the root tube centerline.

Calculate the difference, if any, between this measurement and the distance needed to achieve proper gap cover overlap. Remove the pin at the tip grommet, slide the wing cover out of the way, and make a pencil mark at the calculated distance inboard of the first drilled hole. Drill a 3/16-diameter hole at the new location and secure the grommet with a rivet.

Or:

Method 2: (Pull root to tip)

Set the distance between the inboard edges of the wing cover to allow proper gap cover overlap. Drill 3/16-diameter holes through the inboard wing cover grommets and secure with rivets. Stretch the wing cover from the root to the tip with appropriate tension and mark with pencil on the spar the position of the grommet hole. Drill 3/16-diameter holes at the pencil mark, compensating to allow the edge of the rivet to push against the outboard edge of the grommet. Once again, stretch the wing cover to the tip and secure outboard grommets with rivets.

Note 3: It is OK for more spar at the wing tip to be exposed than specified in the manual and illustration.

Note 4: The crease in the fabric along the leading edge will disappear after some time in the sun and flying.

Final Note: Do NOT heat cut compression strut holes and do NOT pop rivets until the two main objectives listed above are accomplished. Do NOT proceed in error.