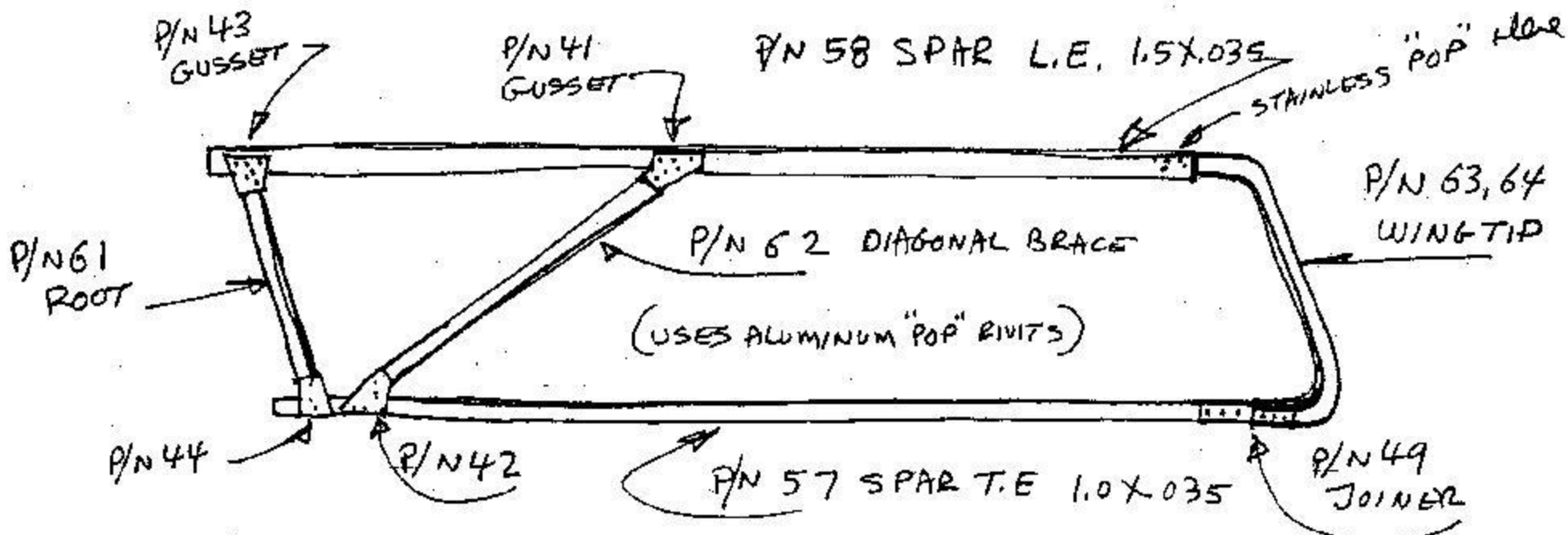
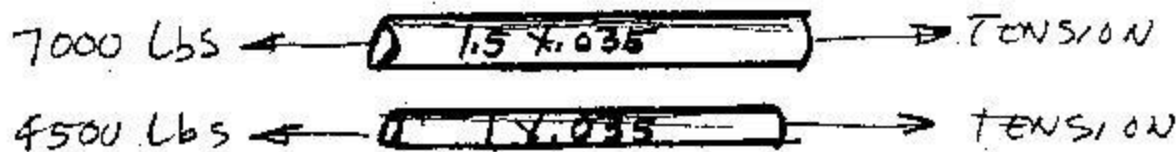


WING FRAME



THE WING FRAME IS CONSTRUCTED OF HIGH STRENGTH DURABLE 6061-T6 ALUMINUM TUBING. ALL PARTS ARE PRE-BENT READY TO ASSEMBLE. 6061-T6 HAS A TENSILE STRENGTH OF 42,000 P.S.I. AND A YIELD STRENGTH OF 35,000 P.S.I. SO IT WILL BEND BEFORE IT BREAKS. IT IS NOT BRITTLE AND HAS VERY GOOD RESISTANCE TO CORROSION.



THE DESIGN OF THE BI-PLANE PUTS THESE MEMBERS IN EITHER TENSION OR COMPRESSION.

THE LOWER SPARS ARE IN TENSION & UPPER'S IN COMPRESSION.

THE ONLY BENDING FORCES ON THE WING ARE THOSE ON THE REAR SPAR OF THE UPPER WING OUTBOARD OF THE RUDDER. UPON HIGH "g" MANEUVERS, THE REAR SPAR WILL FLET UPWARD WHICH INCREASES THE WING TWIST (WASHOUT) WHICH INHIBITS ACCELERATED (DUE TO HIGH LOADS) STALL AT THE WING TIP.