

Revised 1/14/94 Destroy all previous copies

Applies To:

AT Style Hardware gliders, (All RamAirs and later models and modified HP AT, Sport AT, Spectrum, and Super Sport).

A new top and bottom plug fitting for streamlined downtubes is designed to provide "toe-in" to the downtube in such a manner as to more accurately align it with the relative airflow and thus to reduce drag. (Toe-in means that the leading edge of the streamlined downtube is angled inwards, towards the center of the glider. The relatively high degree of rake in the control bar on later models causes a significant angle of a non toed-in downtube to the relative airflow, and makes the use of toe-in significant in terms of drag reduction).

The fitting contains two overlapping holes for the clevis pin which secures it to the streamlined leg. This allows any fitting to be used as either a right or left hand fitting.

Important Note:

New Style toe-in fittings cannot be used on any glider which has the original, smaller AT bottom side wire tangs (See Tech Bull 930802). This includes all non RamAir gliders produced to date that have not been specifically modified with new bottom side wires with new style tangs. Anyone wishing to make this modification must order a new set of bottom side wires and specifically request that they be custom made, with the new style tang part # is 20E-2209). Also, toe-in fittings and old style non toe in fittings CANNOT be mixed on the same downtube. If they are, and the downtube is assembled to the glider, it will introduce a torsional stress in the tube which will weaken it.

Toe-in type fittings and non-toe in type fittings can be used on the same glider (i.e. left downtube is toed in and right is not).

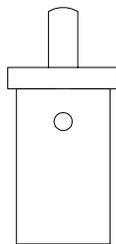
No change in the downtube itself is required with the use of the new style toe-in plug fitting.

Wills Wing will continue for the present to supply the original type fittings as replacement parts on request for pilots who need to replace only one fitting and who do not wish to convert over to the toe-in type fittings. At such time as the inventory of the original type fittings is exhausted, all parts replacement of plug fittings will require at minimum that both fittings on any downtube be toe-in fittings.

***When ordering replacement AT type plug fittings for streamlined legs
be sure to specify toe-in type or non toe-in type.***

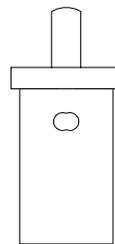
OLD STYLE

NEW STYLE



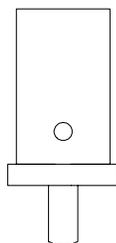
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CBAR PLUG AT LEG TOP STREAM



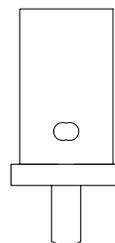
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CBAR PLUG AT LEG TOP STR TOEIN



20G-1422

CBAR PLUG AT LEG BOT STRM 93



20G-1423

CBAR PLUG AT LEG BOT STR TOEIN