

Revised 1/14/94 Destroy all previous copies

Applies To:

HP AT 145 and HP AT 158 gliders delivered before July 1st, 1990.

All HP ATs delivered by Wills Wing before July 1st, 1990 were produced with the VG Lever Assembly shown below in the figure labeled "Obsolete". These assemblies were subject to two maintenance problems: first, the inner delrin bushing deteriorates prematurely increasing VG activation forces and play in the lever assembly; second, the 3/16 clinch nuts sometimes loosen and fall off rendering the VG mechanism inoperable. We have designed a retrofit assembly which addresses both of these problems and is simple to install.

Retrofit Kit Contents

- (2) 5/32 rivets
- (2) eyelet spacers
- (2) 3/16 clinch nuts MS21042-3
- (2) ss spacers .308*.190*.050
- (2) bronze bushings .439*.313*.130
- (4) nylon washer .560*.320*.016
- (2) steel washers .560*.190*.050

Tools Required

- Drill with 3/16 bit
- Pop rivet tool with 5/32 jaws
- 1/4 hex head wrench
- 5/64 allen wrench

Instructions

Disassemble the lever assembly (not shown) by drilling out the rivets holding the plates together. Discard the washers and the clinch nut shown in the "obsolete" diagram. Retain the lever handles, lever spacers and HiLocs. Reinstall the HiLoc though the lever handle, inside nylon washer and VG bracket hole (for each side). Rivet the lever handles together (with the lever spacers between the handles) through the eyelet spacers inserted in the companion handle. Align each brass bushing axially with hole in the aluminum bracket and push it into place. It may be necessary to lightly tap the bushing but be careful to avoid misalignment. Install the remaining ss spacer, nylon washer, steel washer and clinch nut. Tighten the clinch nut firmly - the spacer should prevent the handle from binding on the bushing. The finished assembly should swivel freely and independently from the bronze bushing and bracket assembly.

