

## Falcon Basetubes Not Interchangeable

It has come to our attention recently that there is a possible source of confusion with the control bar basetubes on the Falcon 3's as compared to those on the Falcon 2's and Falcon 1's.

THE FALCON 3 BASETUBES ARE NOT INTERCHANGEABLE with those of the Falcon 2 / Falcon 1 - because they are different in length. They are the same construction (unlike the Falcon 3 downtubes, which are obviously different from the AT downtubes used on the Falcon 2 / Falcon 1 models), so it is possible to mistake one for the other, and it is possible to install one in place of the other, but the AT basetubes are shorter, so the glider geometry will not be correct.

If you install an AT basetube from a Falcon 2 or Falcon 1 on the corresponding size of Falcon 3, it will be difficult or impossible to tension the crossbar, because the side wire loop will go tight before the sweep wire tang reaches the anchor bolt at the rear of the keel.

If you install an F3 basetube on the corresponding size of Falcon 2 or Falcon 1, there will be excess slack in the bottom side wires, and excess dihedral in the glider, which will result in inappropriate flight characteristics. This would be particularly extreme on a Falcon 1 or Falcon 2 140, if the basetube from a Falcon 3 145 were installed, because the Falcon 3 145 uses the same length basetube as the Falcon 3 170, which is much longer than the AT 60 basetube used on the Falcon 1 and Falcon 2 140's.

Below are the various basetube lengths, for reference:

Model	Basetube Designation	Basetube Overall Length
Falcon 1 / Falcon 2 140	AT 60	49.00
Falcon 3 145	F3 62	52.75
Length Difference		3.75
Falcon 1 / Falcon 2 170	AT 62	51.00
Falcon 3 170	F3 62	52.75
Length Difference		1.75
Falcon 1 / Falcon 2 195	AT 65	53.50
Falcon 3 195	F3 65	55.75
Length Difference		2.25

As stated in the Falcon 3 owner's manual, there are many parts on the Falcon 3's that are not interchangeable with those on earlier Falcons. In the case of basetubes, because they are the same configuration and can therefore be mounted to the wrong glider by mistake, and especially in a school environment where basetubes may be fitted with wheels and then stored outside the glider bag, it is particularly important that special attention be paid to this. When ordering replacement parts you will want to be especially careful to order the correct item, and when stocking parts in inventory you may want to clearly label each individual part to avoid confusion.

For your reference, below are the part numbers and descriptions for the Falcon 3 145, 170 and 195 control bar parts. (Falcon 3 Tandem control bar parts are the same as those for the Falcon Tandem).

ID	Description	Standard/Optn
40F-1329	BASETUBE F3 62 SPEEDBAR	Standard
40F-1328	BASETUBE F3 62 STRAIGHT .095	Option
40F-1339	BASETUBE F3 65 SPEEDBAR	Standard
40F-1338	BASETUBE F3 65 STRAIGHT .095	Option
40G-1215	LEG F3 60 .065 ROUND	Standard
40G-1225	LEG F3 62 .065 ROUND	Standard
40G-1236	LEG F3 65 .065 ROUND W/ SLEEVE	Standard