

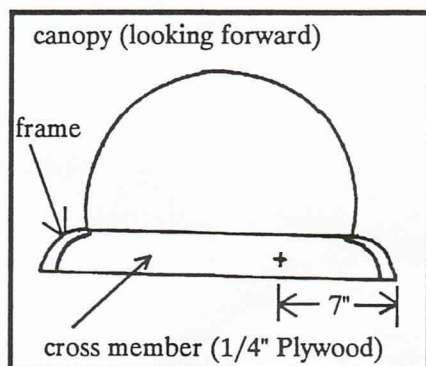
## Gas Spring for your Canopy

*Skip Barchfeld* - The gas spring I used is from McMaster-Carr catalog # 97 page 1497. I used the smallest spring (#9416K61 - \$14.95) with the least pressure (20 pounds). I also ordered the attach parts #9416K73 (\$1.49) and #9416K77 (\$.45). Previous auto springs were too strong and bent up all my parts.

I modified the canopy by removing the arrow stock that ran through the canopy just aft of the headrest. In it's place I installed a more substantial cross member made of 1/4" marine plywood. This 1-1/2" wide member was covered with 4 plies of BID and made long enough to be floxed into the canopy rails 1-1/2" aft of the head rest. That location allowed room for the gas spring.

I drilled a 1/4" hole in the cross member 7" from the canopy rail. Then I cut out a 1" X 1" piece of the head rest centered 2-1/2" from the top and floxed in a 1" X 1" piece of aluminum. I covered it with 1 ply BID. I then drilled a 1/4" hole in the center of the aluminum insert and tapped it to 1/4-24 thread so the attaching part #9416K73 threaded right in. The gas spring was attached to the head rest and the cross member holes and secured with the supplied nut.

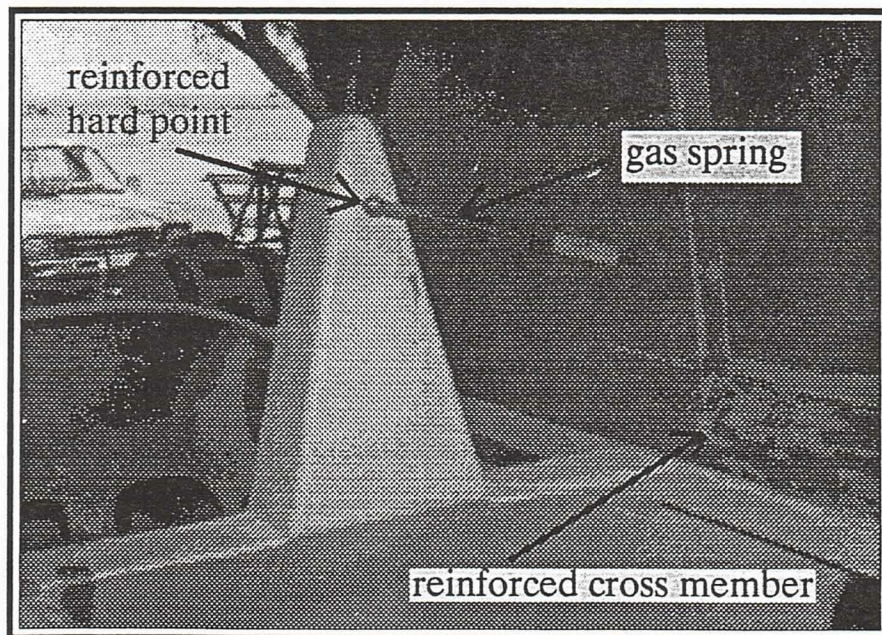
The spring acts as a stop to permit the canopy opening to only 90 degrees. The pressure of the spring will hold the canopy open to most wind gusts. Before flight the canopy must be latched. This might be easy to forget as the gas spring holds the canopy down when it is closed.



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**Skip's gas spring installation**