

# INVOICE

BRAINERD PRODUCTS  
4419 VIRGINIA  
ST. LOUIS, MO 63111-1252  
1-800-737-8082  
NO: 01

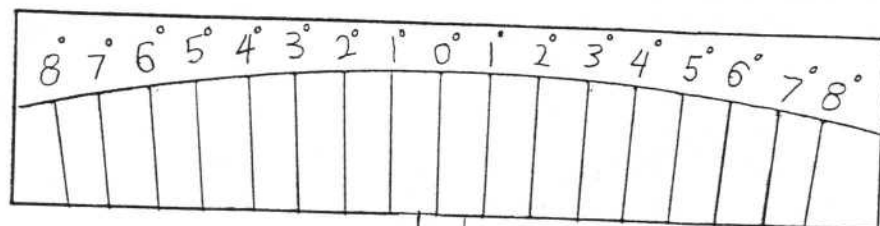
To: Bob Austino

Ship To: P.O. Box 490  
Vineland, NJ 08360

SALESPERSON	DATE	SHIP VIA
Mike	May 1, 1996	USPS
F.O.B.	TERMS Pay on delivery	REFERENCE

QUANTIT Y	DESCRIPTION	UNIT PRICE	AMOUNT
1	Alignment Tool	\$21.95	21.95
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00

Subtotal	\$21.95
Tax Rate	
Sales Tax	\$0.00
Shipping & Handling	\$3.50
Total Due	\$25.45



THUMBSCREW HOLE

HORIZ POSITION

HOLE FOR SUPPORT ROD

SUPPORT ROD

# INSTRUCTIONS

Assemble tool by referring to drawing.

When using this alignment it is not necessary for the airplane to be level in the longitudinal axis. It should be resting reasonable level in the lateral axis. But even if the wingtips are not level by an inch or so, it will not make any noticeable difference in the readings. The "V" shaped mounting slot allows mounting on any engine shaft up to at least one half inch diameter, and allow clearance for prop lock pins should your engine have them.

Install the engine alignment tool to your engine in place of the propeller. Tie a loop in one end of the string and slip it over the brass rivet head on the end of the beam. Tie the rubber band at a length on the string so that it must be stretched a little to slip it over the fin, rudder, or a pin inserted near the tail in line with the centerline of the fuselage. Adjust the support rod so that the short end of the rod is resting flat on the table or workbench, and tighten the thumbscrew, not too tight. Loosen the wing nut holding the beam a little so that you can adjust the beam up or down to place the string just a little above the scale on the end of the beam, then tighten the wing nut.

Move engine in the desired direction to place the thrust angle desired directly under the string, each number representing one full degree. With the large one quarter inch spacing between lines (degrees), you can "eyeball" one quarter degree very accurately. Once angle is selected, mark engine mounting holes, or tighten mounting bolts if just checking alignment.

For up and down thrust angles, first mark datum line at aft end of fuselage. Remove support rod and thumb screw from the vertical mounting position and install in the horizontal mounting position. Measure from top of workbench to center of prop shaft, and adjust support rod so that it is the same distance from the workbench to the center of the brass rivet. Tape or pin end of string to datum line mark, reading up or down thrust on the scale.