

Don Steeb Incorporated

PRECISION MODEL EQUIPMENT

70 Holworthy St. Rochester 6, N. Y.

IDlewood 6-0058

INTRODUCTION

The ATLAS multi channel servo is the result of months of testing different designs and principles in actual flight. After completion of these tests, a final design was arrived at and production was begun. The original servos of this design were put in a plane and flown for months without any service whatsoever. We have been very pleased with the results of our efforts and believe this servo to be the finest on the market today. Its compact size makes it possible for aileron installation even in a fairly thin wing in which the servo is completely covered. The power take-off disk has four holes so the servo can be mounted in any position without alteration. The contacts employed are the rotary type which in tests proved to be the best because they do not flex or spring which means they will retain their setting through-out their life. This type of contact wipes with each operation therefor requires no cleaning under normal use. The very low current draw makes possible the use of a very small battery complement.

OUTSTANDING FEATURES

- Precision fitted, brass gears.
- Motor-ball bearing (in metal race), twin alnico magnets, silver graphite brushes.
- 24st chasis for maximum protection.
- Mounts in any position without alteration.
- Completely adjustable neutral.
- Positive limits (no overtravel).
- Limit pin (extra safety feature).
- Photo etched, nickel rhodium plated circuit board (rotary type).
- Phosphor bronze rotary contacts (never need adjustment).
- Oilite bearings on main shaft.
- Excess of power due to $82\frac{1}{2}$ to 1 gear ratio.
- Very compact size (only 1" high 1-5/8" wide 2-1/2" long).
- Weight only 3 oz.
- Current drain only 200ma. or less.
- CAN be made trimable in neutral (if desired).

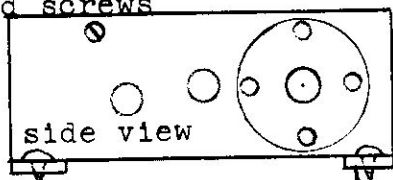
MAINTENANCE

The servo as it is recieved is ready for installation unless trim is desired. Very little need be done as far as service is concerned but its a good idea about every 10 hours of use to take the covers off the servos and inspect all parts clean if nessary. Oil all bearings and gears with very little oil. DO NOT oil motor bearings as they are factory lubricated and should require no attention under normal use.

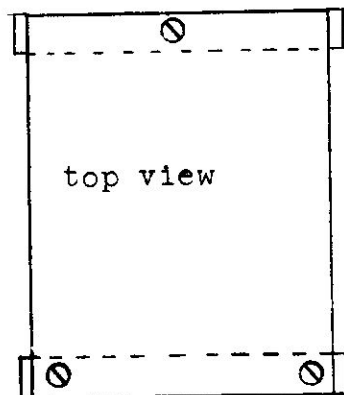
This servo was designed and produced with one purpose in mind, to give the multi-flyer a quality servo with the utmost in reliability. We believe this has been accomplished so, GOOD LUCK WITH OUR NEW PRODUCT.

MOUNTING

Mount with nuts and bolts or wood screws



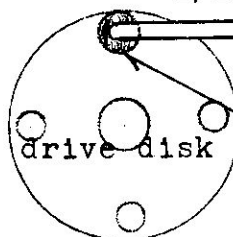
side view



top view

wood pads

1/16" pushrod



drive disk

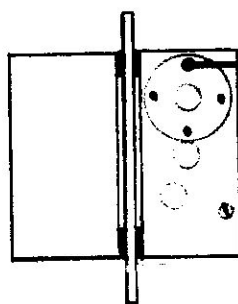
washer soldered to pushrod

keeper shape

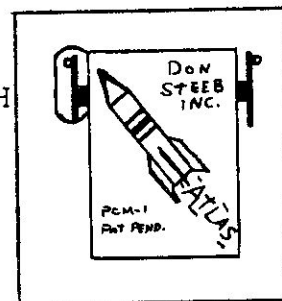
.040

soft wire wrapped and soldered

VERTICAL TRAY MOUNTING (most crash resistant)



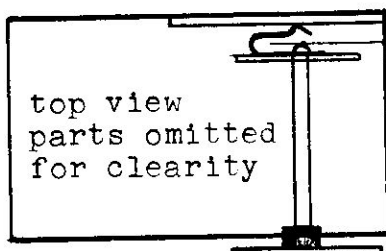
HOLE THROUGH TRAY FOR PUSHROD



PLYWOOD TRAY

keep chassis from twisting

TRIM and NEUTRAL ADJUSTMENTS



top view
parts omitted for clarity

adjust top contact in this direction for trim
adjust top contact in opposite direction for closer neutral.

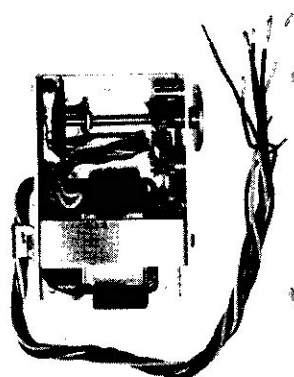
Be sure when adjustment is complete, the contacts have retained their pressure against the circuit board and are riding in their proper place. When adjusting for a very close neutral for aileron ect. be sure there is no short in neutral.

WIRING DIAGRAM

SERVO CABLE

Use a clean iron and a good grade of solder.

Check all joints. a good installation is only as good as its poorest joint.



DON STEEB INC.

PCM-1 PAT. PEND.

