

THE SERVO SOLVER TRANSMITE TRAY

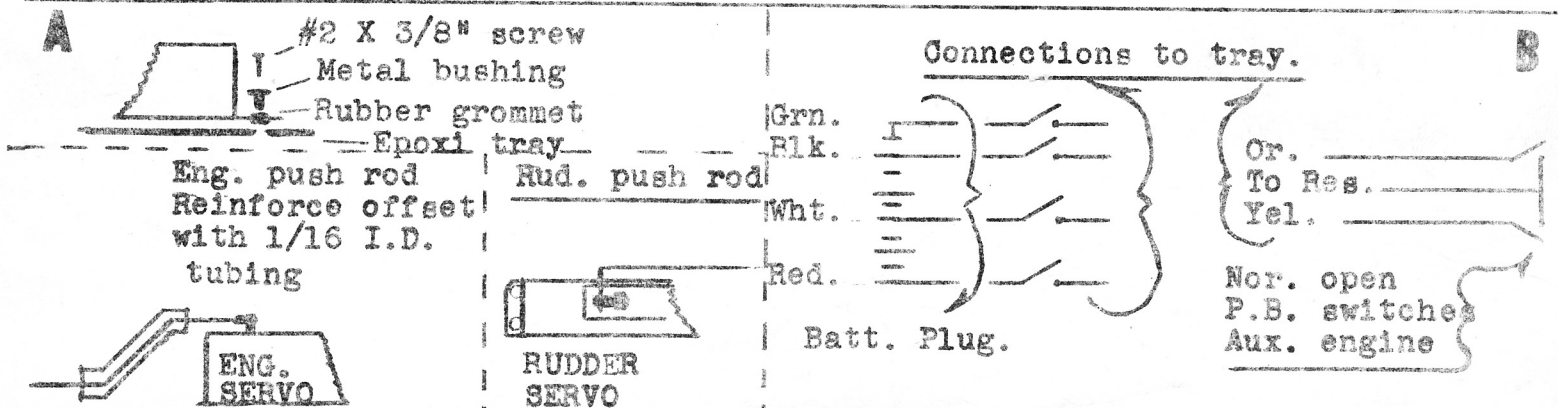
The R.G.A. Specialties Servo Solver Transmite Tray is the basic unit of the revolutionary "Servo Solver System" developed by Bob George. It may be used independently for its own advantages or it may be coupled with the R.G.A. "Servo Overdrive" and "Switcher Board" for an entire system of additional functions from Transmite servos. This component is of the finest material.

The epoxi-glass tray simplifies, improves, beautifies and strengthens fuselage servo installations and obsoletes bulky and expensive plugs on fuselage servos. The printed circuit contains provisions for optional addition of "Servo Overdrive" and "Switcher Board", plus your standard power switches, receiver wires and (if you wish) two subminiature push-buttons to advance and retard throttle when your transmitter is off. The assembly and installation procedure is quite simple if you thoroughly familiarize yourself by reading instructions through before beginning. The 2 3/4" width is ideal for most modern planes but may be narrowed slightly on a power-sander or a file. (Note: File bite must be worked against copper laminate to avoid ripping copper from board.) In bulkier fuselages, enlarge servo mounting rails or other structure as necessary to accommodate Transmite Tray. NOTE: Mounting holes for attaching Transmite Tray to fuselage structure have not been drilled. You may relocate them closer to the tray's edges if necessary to suit your particular installation.

PRELIMINARY: Before mounting any equipment on tray, fit tray inside fuselage to determine if any filing, sanding or relocating of mounting holes will be required and accomplish if necessary. When satisfied all is well, remove tray to work table. Drill tray mounting holes, either as shown on etching or to suit your particular installation.

SERVO MOUNTING PROCEDURE: (IMPORTANT: SERVOS MOUNT ON SIDE OPPOSITE FROM THE PRINTED CIRCUIT.) (1) Install large rubber grommet in hole marked "REC". (2) Install six remaining rubber grommets in remaining holes. (3) Mount servos to tray in their proper locations as identified on circuit board, in the following manner: (A) First fit all wires from servo through rubber grommet. (B) Using the small metal mounting bushings supplied with Transmite, install them through servo case mounting grommets as shown in sketch A. (C) Affix servo to tray with enclosed #2 X 3/8" screws as shown in drawing A. Thread screws into epoxi tray tightening firmly but being careful not to over-tighten and strip out hole in tray. Properly done, this makes an extremely firm and simple mounting. **CAUTION:** Use a good screw driver of proper size because of firm pressure required to thread screws into epoxi tray. A slip could damage a servo. Repeat the above procedure for each servo until all four are mounted.

WIRING PROCEDURE: As you procede, cut each wire to its proper length for a neat installation. Use a good grade of resin core solder and a soldering iron (not a gun) of not over 60 watts. Tin each wire before soldering. You will note that each point a solder connection is required on the printed circuit, the end of the circuit "branch" is rounded or there is a rounded "land" on the branch. This helps in locating exact solder points. Solder connections closest to the servo wire grommets first and then work outward toward the edges of the tray. This is the most efficient work pattern to get a neat wiring job. You may now procede with soldering all connections according to the coded drawing on the back of this sheet. Do a good job and you'll be delighted with your Servo Solver Transmite Tray. Standard installations will hereafter appear "old fashioned" to you.



WIRING AND SOLDERING GUIDE

This Transmite Tray is compatible with any receiver. Receiver connections below are for a six volt superhet receiver, but any receiver may be wired to the same lands by referring to the manufacturers instructions.

The following abbreviations are used in the code to the soldering diagram below. PLEASE NOTE THAT ALL POINTS REQUIRING A SOLDER JOINT ARE PREFACED WITH AN "X".

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|-------------------------|---------------------------------------------------------------------------------------|--|
| EL.S. -- ELEVATOR SERVO | AUX.P.B. -- AUXILLARY PUSH-BUTTONS (OPTIONAL) | |
| EN.S. -- ENGINE SERVO | REC. -- RECEIVER WIRES (to rec. plug) | |
| A.S. -- AILERON SERVO | S.O. -- R.G.A. SERVO OVERDRIVE (OPTIONAL) | |
| T.S. -- TRIM SERVO | S.B. -- R.G.A. SWITCHER BOARD (OPTIONAL) | |
| R.S. -- RUDDER SERVO | (Note: Full instructions for connecting S.O. and S.B. are provided with those units.) | |
| LtoR -- LEFT TO RIGHT | | |

IMPORTANT: ALL COLORS ARE SAME AS SHOWN IN YOUR TRANSMITE INSTRUCTIONS.

SPARE TERMINALS

TRAY MNTG. HOLES

- X GREEN WIRES FROM 4 SERVOS: LtoR, EL.S
- R.S., T.S., & EN.S.

X BLACK WIRES (as above)

X WHITE WIRES (as above)

X RED WIRES (as above)

EL.S. WIRES GROMMET

R.S. WIRES GROMMET

X 6v. PLUS (RED), REC. PLUS & A.S. RED WIRES

X A.S. & BATT. WHITE

X A.S. & BATT. BLACK

X A.S. & BATT. GREEN AND REC. MINUS

A.S. PLUG WIRES GROMMET

X A.S. YELLOW (FROM PLUG)

X A.S. ORANGE (FROM PLUG)

ON-OFF SW. WIRES HOLE

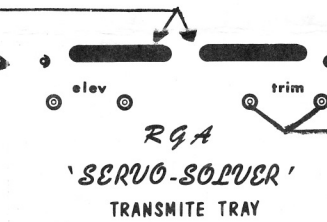
X ONE A.S. WIRE FROM REED BANK IN RECEIVER

X OTHER A.S. WIRE FROM REED BANK IN RECEIVER

REC. WIRES FEED-THRU HOLE

X 8 REED BANK WIRES FROM REC. TO THESE 8 LANDS, TOP DOWN IN THIS ORDER:
EL.S., R.S., T.S., EN.S.
(AUX.P.B. WIRES ALSO GO TO 2 BOTTOM LANDS)

X AUX.P.B. COMMON WIRE



SERVO MNTG. HOLES (as designated)

SPARE TERMINALS

T.S. WIRES GROMMET

EN.S. WIRES GROMMET

X S.B. GRAY & BROWN AND S.O. PURPLE & BLUE WIRES IF INSTALLED. (OPTIONAL)

NOTE: Colors LtoR below.

X EL.S. OR. & YELL. WIRES

X R.S. OR. & YELL. WIRES

X T.S. OR. & YELL. WIRES

X EN.S. OR. & YELL. WIRES

IF OPTIONAL AUX.P.B. CIRCUIT IS USED, SOLDER 6800 OHM RESISTOR ACROSS THESE TWO LANDS.

NOTE: If any servo runs reverse to the direction you want, exchange its orange and yellow wire connections.

After you have checked out Servo Solver, apply Plio-Bond cement to all servo mounting screws. Also, to prevent accidental short circuits, spray printed circuit with a protective coating of Krylon or similar material. Clear dope may also be used. Coat well.

SPARE LANDS

R. G. A. Specialties

P. O. BOX 2241

KALAMAZOO, MICHIGAN