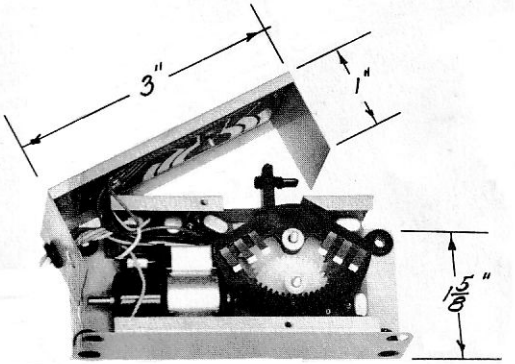
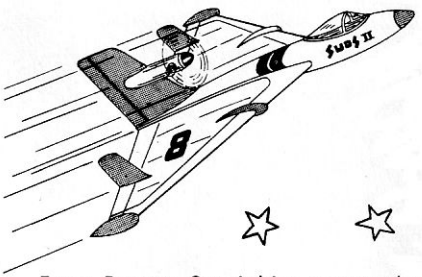
Bonner TRANSMITE MULTI-SERVO

FOR RELAYLESS OPERATION IN SELF NEUTRALIZING OR TRIM RADIO CONTROL SYSTEMS



BUILT-IN 6 TRANSISTOR CIRCUIT PERFORMS FUNCTIONS OF 2 RELAYS & REED FILTERING

• POWERFUL • DEPENDABLE •
• LIGHTWEIGHT • VERSATILE •
• FINE ADJUSTMENT SCREW •



• SPECIFICATIONS •

Weight . . . 3 oz. — Travel . . . 5/8"
No Load current 200-300 ma.
Winding 3 ohm — Voltage 2½-3V
Centering Plus or Minus .007"
Oilite Bearings — Nylon Housing
93% silver brushes
Turned & undercut commutator
Minimum signal input = 1.5 ma.
Life cycle tested @ 140 f.
Durable switching contacts

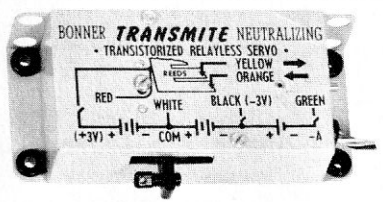
☆ ☆ IT'S THE LATEST! ☆ ☆ ☆

From Bonner Specialties comes the latest innovation in reed flying — the relayless TRANSMITE multi-servos. This servo contains the transistor circuitry necessary to operate directly from the reed contacts, completely eliminating the relays. Full control with neutralizing is made possible using standard reed banks and does **not** require split, insulated reeds.

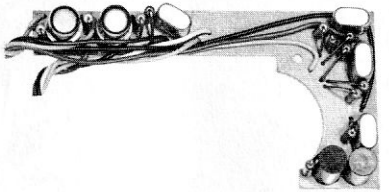
The TRANSMITE makes it possible for the receiver to be smaller, lighter, more rugged, lower cost and provides simpler wiring installation. The battery power required is essentially that available in standard receivers making possible conversion of present receivers. Relayless receivers are also manufactured specifically for TRANSMITE operation.

Nothing has been spared in the design of the transistor circuitry to obtain extreme reliability and long life even under adverse conditions of poor tuning, heat, vibration, etc. The TRANSMITE contains the same reliable motor, gearing and etched circuit switching as the proven Bonner DURAMITE multi-servo.

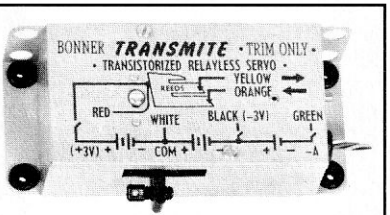
PRECISION BUILT AND TESTED — EACH TRANSMITE MULTI SERVO IS PUT THROUGH A COMPLETE VISUAL AND OPERATIONAL CHECK TO ASSURE COMPLETE SATISFACTION AND TROUBLE FREE PERFORMANCE



NEUTRALIZING OR TRIM **$29.95**



AMPLIFIER ONLY **$19.95**



TRIM ONLY **$27.95**

• BONNER SPECIALTIES • 2900 Tilden Ave., Los Angeles 64, Calif. •

INSTALLATION INSTRUCTIONS

The Bonner Transmite may be bolted directly through the rubber shock mounts to either a mounting plate or cross beams on the fuselage sides in an R/C plane, boat or car. Tighten screws or bolts only enough to just start compressing the rubber grommets. Excessive tightening destroys the shock absorbing effect on the servo. For edge mounting move the four grommets from base holes to the edge holes. Connect wires as shown on the servo cover diagram. Refer to the instructions with the radio receiver for correct connections. —A may be 1¼ to 3V. The motor contains oilite bearings and needs no further lubrication. To change neutralizing Transmite for trim only operation, bend the 2 outermost contacts so they do not touch switching board.

ADJUSTMENT FOR NEUTRAL

(Neutralizing type only)

The Transmite may be adjusted for tight or loose centering. Moving the center screw in the cover shifts the switching board. For wider centering shift board with screw toward output arm.

(CAUTION — If neutral contacts touch both neutralizing segments at once, both transistor amplifiers will be turned on, producing a near short circuit across the servo batteries and overheating of the transistors. Guard against this by making adjustments with power disconnected. Upon connecting power, immediately check that motor shaft can be turned 1½ or more revolutions by hand before neutralizing circuit is activated.)

CONVERSION INSTRUCTIONS

Remove the 2 outermost sheet metal screws holding cover to base (do not change setting of center screw which controls centering.) Remove cover by raising end opposite motor shaft and pull all wires through grommet.

Unsolder all except yellow wire from switching circuit board in cover and discard wires. Also unsolder green wire from motor and discard.

Trim and strip yellow wire and solder to patch on switching board as shown in Fig. 1.

Place cover assembly and amplifier as shown in Fig. 1.

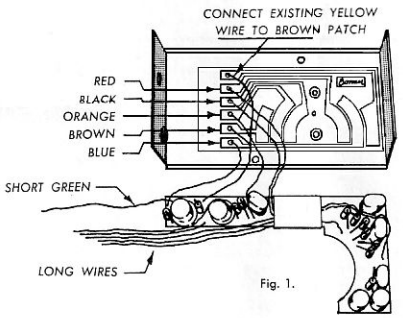


Fig. 1.

Tin all 6 short wires on amplifier and solder 5 of them to patches on switching boards as shown (be sure correct color goes to corresponding patch). You will have the short green wire left for later connection. Carefully remove washers, sector and 2 combination gears from base and motor assembly. Observe order and placement of the washers to insure correct re-assembly later. Do not remove motor or crown gear. Account for all washers as removed as they may be clinging to the magnets of the motor and shake into gears or short out amplifier if left loose in servo. Using insulator board from conversion kit as a template drill 3/32" hole through hole already in template and base with template placed against sector post.

Remove insulator board and clean burrs from drilled hole in base. Blow out all chips.

Slide the amplifier with cover assembly into base between side and sector post keeping all wires dressed toward motor end as shown in Fig. 2.

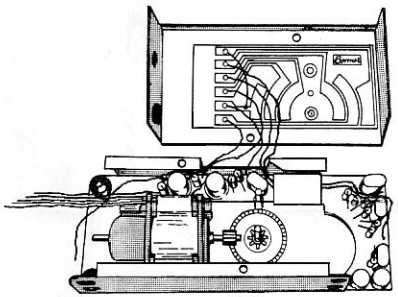


Fig. 2.

Raise amplifier strip and slide insulator previously used as drill template between amplifier and bottom of base. Now solder short green wire to motor where former green wire was removed. Pull all 6 long wires including white wire from motor through grommet in end of cover assembly. Re-assemble gears, washers and sector in exact order as original arrangement. Fit cover assembly to base as before (pull lightly on wires to take out internal slack. Reassemble the 2 outer cover screws.

To convert neutralizing servo to trim servo bend the 2 outermost contacts on the sector away from switching board. This disconnects the neutralizing circuitry.