

JULY 23, 1954

PARTS LIST AND DIAGRAM
AMERICAN FLYER TRANSFORMER

Model No. 19B



SPECIFICATIONS

Case is high impact molded material. Equipped with built-in circuit breaker which prevents burn-out due to over-load or shorts. Has three output terminals for simplified wiring. Exclusive "Dead Man's Control" to halt train when throttle is released.

Operates on 110-120 volts, 60 cycles A.C. with an output of 300 watts.

THE A. C. GILBERT COMPANY

NEW HAVEN 6, CONN., U.S.A.



SERVICE INSTRUCTIONS FOR 19B TRANSFORMER

When a transformer is not functioning properly, the first thing to do would be to test for operation. Use a voltmeter and ammeter in checking the output. If transformer has to be taken apart, the plug must be removed from wall socket.

STEPS TO CHANGE PARTS:

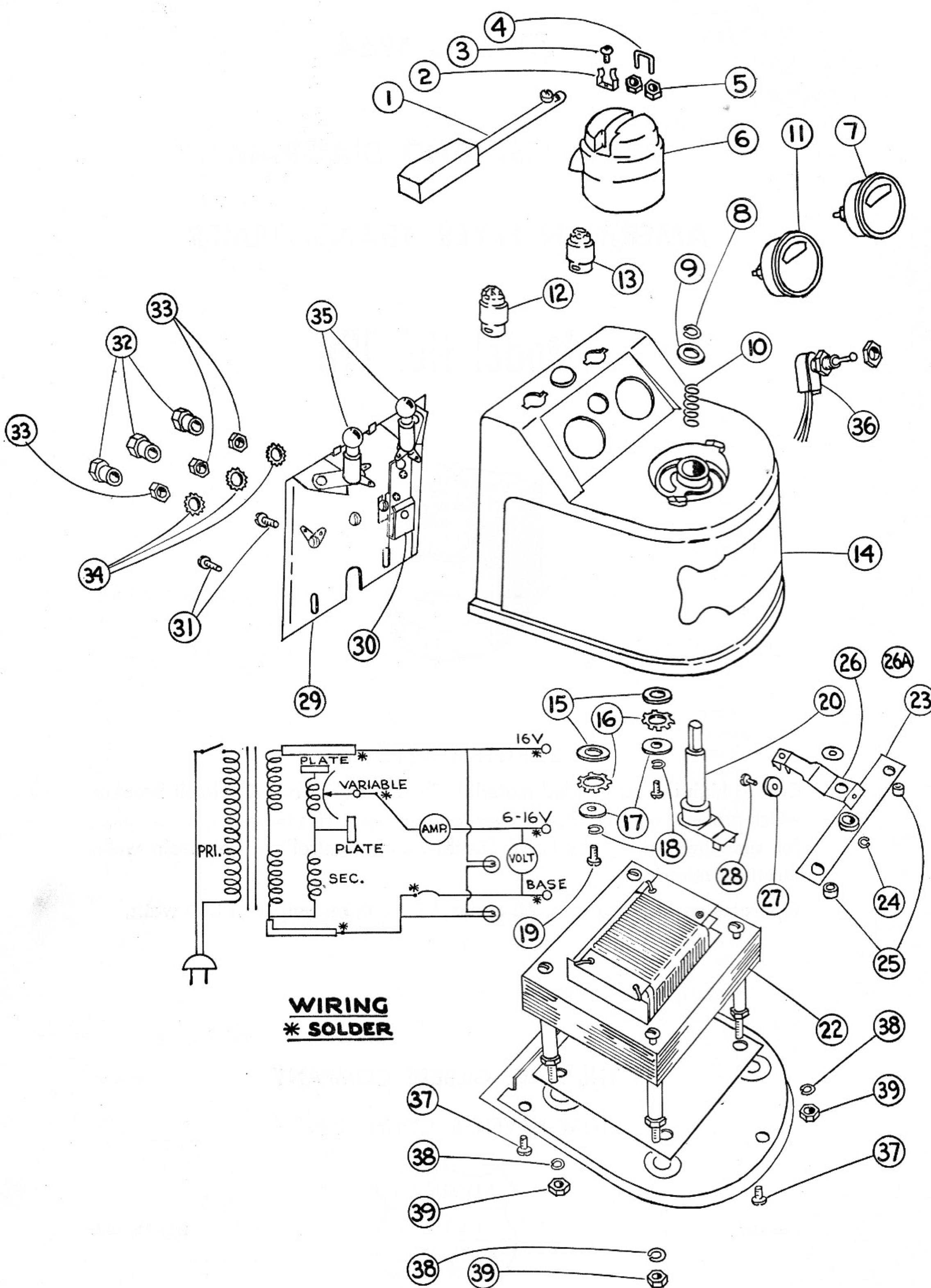
- 1. BULB**
 - (a). Remove light covers (#12 & 13).
 - (b). Replace burned out Bulb (#35) by pushing down, turning and lift up.
 - (c). Place cover back in place, by lining up the nibs on the Cover (#12) with the slots on the Case (#14). Insert and twist until locked in place.
- 2. CASE**
 - (a). Take off Handle (#1) by loosening screw.
 - (b). Remove Screws (#37) and lift Case (#14) from base.
 - (c). Remove Screws (#31) to free Case (#14) from Back Plate Assembly (#29).
 - (d). Take off Control Knob (#6) by removing two Screws (#19) and parts 15 to 18 from the underneath side of case. The knob is free and can be taken out of the case.
 - (e). Take off Contact lever & stud assembly (#20) by removing parts 8 to 10, and pull part out of case.
 - (f). You can now replace Case (#14).
- 3. SWITCH**
 - (a). Follow instructions on replacing case from A to C.
 - (b). Remove nut holding switch in the case and take out Switch (#36).
 - (c). Unsolder lead wires and replace part.
- 4. VOLTMETER AND AMMETER**
 - (a). Follow instructions on replacing case from A to C.
 - (b). Loosen nuts on meters (#7 & #11) and take off lead wires.
 - (c). From the inside of case, push meter out by using thumbs.
 - (d). Replace broken or defective part.
- 5. CONTROL KNOB**
 - (a). Follow instructions on replacing case from A to D.
 - (b). Remove Screw (#3) and Clip (#2).
 - (c). Take off bead of solder and remove Nuts (#5) and Retaining Pin (#4).
 - (d). Replace broken or defective part.
 - (e). When re-assembling, make sure you have enough clearance to insert handle.
- 6. CLIP (#2) by removing Screw (#3).**
- 7. RETAINING PIN**
 - (a). Following instructions for removing case from A to D.
 - (b). Take off bead of solder and remove Nuts (#5) and Retaining Pin (#4).
 - (c). Replace broken or defective part.
 - (d). When re-assembling, make sure you have enough clearance to insert handle.
- 8. CONTACT LEVER AND STUD ASSEMBLY**
 - (a). Follow instructions on replacing case from A to E.
 - (b). Replace broken or defective part.
- 9. CONTACT ARM AND STRIP AND BEARING ASSEMBLY**
 - (a). Follow instructions on replacing case from A to C.
 - (b). Remove two nuts and two screws along with the two short sleeves (#25), holding the strip and bearing to the coil.
- 10. CARBON ROLLER AND CONTACT ARM**
 - (a). To change Contact Arm (#26), remove Retaining Ring (#24), and lift out broken or defective part.
 - (b). To change Carbon Roller (#27), take out Brad (#28) by clipping pointed end with cutting pliers. Pull brad out and replace part. Insert new brad and pinch the pointed end to keep roller from dropping out.
- 11. CIRCUIT BREAKER**
 - (a). Remove two Screws (#31) and pull out Back Plate Assembly (#29).
 - (b). Remove parts 32 to 34 and pull out Circuit Breaker (#30) and Screw.
 - (c). Remove Screw from Circuit Breaker.
 - (d). Unsolder lead wires and resolder to new part.

SPECIAL INFORMATION

If the transformer operates properly, but the reading on the Voltmeter is erratic, then we suggest you check the tension of Contact Arm (#26) on coil or there may be specks of dirt on roller or coil surface.

When a transformer hums, it generally indicates that the wood wedges have become loose allowing the coil to vibrate. This can be overcome by adding an additional wood wedge.

If a circuit breaker does not function properly, we recommend a replacement instead of an adjustment. Also make sure the terminal screw in the circuit breaker is tight before assembling unit to case.



No. 19B TRANSFORMER WITH CIRCUIT BREAKER

PARTS FOR 19B TRANSFORMER

Diagram Number	Part No.	Description	Price
1	XA11773	Control Handle Assembly w/Screw	\$.60 ea.
2	PA11768	Clip .....	.02 ea.
3	S242	Screw .....	.01 ea.
4	PA11769	Retaining Pin .....	.08 ea.
5	N1	Nut .....	.01 ea.
6	PA13B092	Control Knob .....	.58 ea.
7	PA11763	Ammeter	3.75 ea.
8	PA11847	Retaining Ring (Large) .....	.02 ea.
9	W140	Washer (Control Knob) .....	.01 ea.
10	PA11770	Spring .....	.05 ea.
11	PA11771	Voltmeter	3.75 ea.
12	PA12A112R	Red Light Cover .....	.10 ea.
13	PA12A112G	Green Light Cover .....	.10 ea.
14	XA11765-RP	Case	5.48 ea.
15	PA11282	Washer (Control Knob) .....	.01 ea.
16	P10406-A	Retaining Spring (Control Knob) .....	.02 ea.
17	W141	Steel Washer (Control Knob) .....	.01 ea.
18		Lockwasher (NO LONGER NECESSARY)	
19	S4N02	Screw (Control Knob) .....	.04 ea.
20	XA11A934	Contact Lever & Stud Assembly .....	.56 ea.
22	XA11740-RP	Coil & Stack Assembly (NOT SUPPLIED)	
23	XA11752-RP	Strip & Bearing Assembly .....	.10 ea.
24	PA11749	Retaining Ring (Small) .....	.02 ea.
25	PA11808	Short Sleeve .....	.04 ea.
26	XA11754	Contact Arm Assembly .....	.68 ea.
26A	XA11754-RP	Contact Arm & Strip & Bearing Assembly ....	.76 ea.
27	PA11757	Carbon Roller .....	.25 ea.
28	A43	Brad .....	.05 dz.
29	XA11726-A	Back Plate Assembly (NOT SUPPLIED)	
30	PA12A099	Circuit Breaker	1.10 ea.
31	S184	Parker Kalon Screw .....	.10 dz.
32	PA11826	Terminal Nut .....	.08 ea.
33	N57	Nut (Back Plate Assembly) .....	.05 ea.
34	W89	Lockwasher .....	.05 dz.
35	PA12A125	Clear Lamp .....	.35 ea.
36	PA11761	Switch	1.05 ea.
37	S4N03	Screw for Base .....	.01 ea.
38	W33	Lockwasher .....	.05 dz.
39	N25	Nut (Coil & Stack) .....	.01 ea.