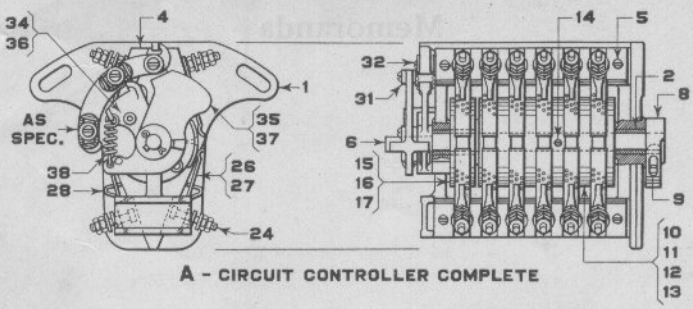
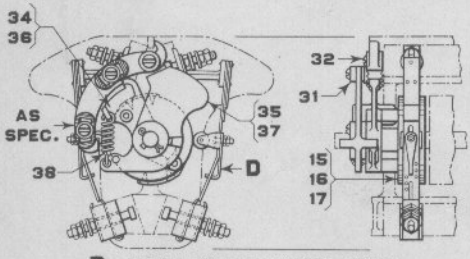
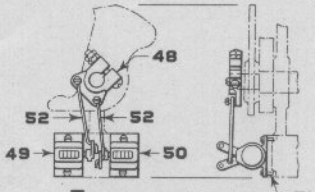


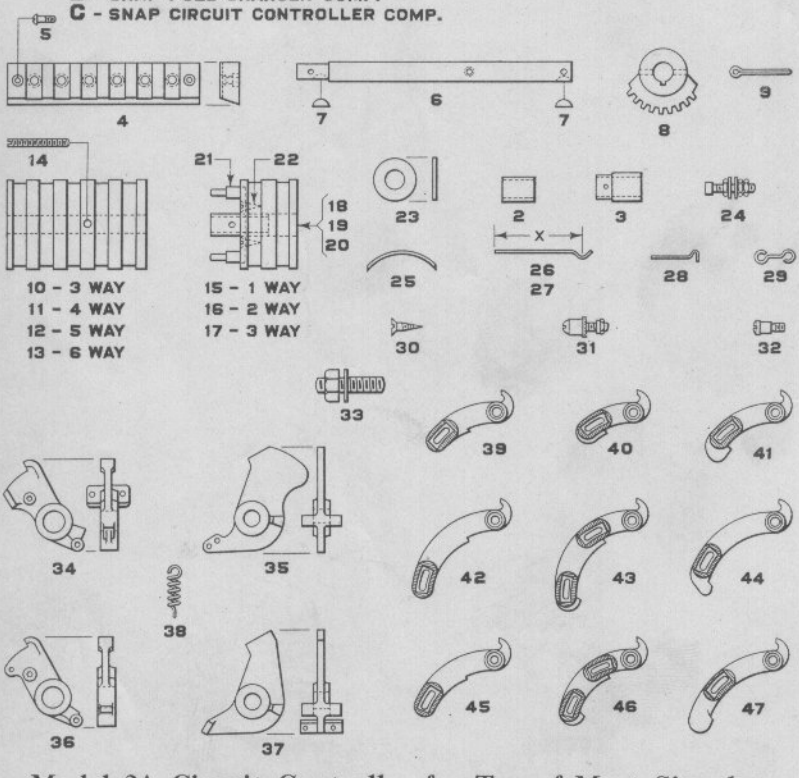
A - CIRCUIT CONTROLLER COMPLETE



B - SNAP POLE CHANGER COMP.
C - SNAP CIRCUIT CONTROLLER COMP.



E - COUNTER COMP.



Model 2A Circuit Controller for Top-of-Mast Signals

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Model 2A

Circuit Controller and Parts

For Top-of-Mast Signal Mechanism

NOTE: Circuit controller as illustrated on opposite page is shown principally for convenience in ordering repair parts. When circuit controller complete is desired, that shown on Plate H1401 will be furnished unless it is specifically specified in the order that the circuit controller shown on the opposite page is desired.

For relay type contacts and other parts of circuit controller see Plate H1407.

SPECIFICATIONS FOR CIRCUIT CONTROLLER:

1. Specify whether signal is two or three position.
2. Specify whether signal operates in upper or lower quadrant, right or left hand indication.
3. Specify degrees of travel of signal arm.
4. Specify whether or not pole changing contacts are required. If required, state position of signal arm at which polarity is to be changed.
5. Specify whether dynamic or battery indication.
6. Specify number of extra contacts.
7. Specify position of signal arm at which each extra contact is to make and break.

Extra contacts are all contacts other than those required for the local control of signal mechanism in question.

Combinations of contacts are as follows:

12 drag contacts.
10 drag contacts and 2 snap contacts.
8 drag contacts and 4 snap contacts.
6 drag contacts and 6 snap contacts.

Drawing references are shown for convenience in checking shipping lists and invoices.

Fig. No.	Name	Drawing Reference
	Order by plate, figure number and name	
A	Circuit Controller Complete. See specifications above.....	
B	Snap Pole Changer Complete. See specifications above.....	
C	Snap Circuit Controller Complete, equipped with regular Contacts in place of Pole Changer Contacts Fig. D. See specifications above.....	
D	Pole Changer Contact Complete. For details see Plate H1407 Fig. B.....	

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Circuit Controller and Parts

For Top-of-Mast Signal Mechanism

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Fig. No.	Name	Drawing Reference
	Order by plate, figure number and name	
E	Counter Complete as shown, for three position Signals. (1-48, 1-49, 1-50, 4-51, 2-52)	35843
E1	Counter Complete, for two position Signals. (1-48, 1-50, 2-51, 1-52)	35842
1	Frame, with Bushing Fig. 2	
2	Bushing, for Frame Fig. 1	29850
3	Bushing, used with five way Commutator when no Snap Commutator is used	29980
4	Contact Block	29858
5	Screw, No. 10 x $\frac{5}{8}$″ rd. hd., for fastening Contact Block Fig. 4 to Frame Fig. 1	2829
6	Shaft	29974
6a	as above, except with two Woodruff Keys Fig. 7 and one $\frac{1}{8}$″ x $\frac{3}{4}$″ Cotter Pin	
7	Woodruff Key, for fastening Sector Fig. 8 and Trippers Fig. 35 and Fig. 37 to Shaft Fig. 6	027
8	Sector, for operating Circuit Controller	29842
9	Cotter Pin, $\frac{3}{16}$″ x 2″, for fastening Sector Fig. 8 to Shaft Fig. 6.	046
10	Drag Commutator, three way	30888
11	Drag Commutator, four way	30823
12	Drag Commutator, five way	29972
13	Drag Commutator, six way	30838
14	Set Screw, No. 10 x $1\frac{15}{16}$″, headless, for fastening Drag Commutators to Shaft	42147
15	Snap Commutator, one way, with Plate, Bushing and Screws. (1-18, 1-21, 4-22)	29984
16	Snap Commutator, two way, with Plate, Bushing and Screws. (1-19, 1-21, 4-22)	30886
17	Snap Commutator, three way, with Plate, Bushing and Screws. (1-20, 1-21, 4-22)	30885
18	Snap Commutator, one way, with Bushing, for Fig. 15	

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Model 2A

Circuit Controller and Parts

For Top-of-Mast Signal Mechanism

Drawing references are shown for convenience in checking shipping lists and invoices.

Fig. No.	Name	Drawing Reference
	Order by plate, figure number and name	
19	Snap Commutator, two way, with Bushing, for Fig. 16	
20	Snap Commutator, three way, with Bushing, for Fig. 17	
21	Plate, with Studs, for Snap Commutators Figs. 15, 16 and 17	
22	Screw, No. 8 x 1″ flat head, for fastening Plate Fig. 21 to Snap Commutators Fig. 19 and Fig. 20	0599
22a	Screw, No. 8 x $\frac{3}{4}$″, flat head, for fastening Plate Fig. 21 to Snap Commutator Fig. 18	26513
23	Washer, used between Commutators	35133
24	Binding Post, with Nuts and Washers. (1-24a, 3-24b, 2-24c)	
24a	Screw, $\frac{1}{4}$″ x $1\frac{1}{4}$″, sq. hd., for Binding Post Fig. 24	21713
24b	Nut, $\frac{1}{4}$″ hex., for Binding Post Fig. 24	20098
24c	Washer, $\frac{1}{4}$″, for Binding Post Fig. 24	1225
25	Contact. State the positions of Signal Arm at which Contact is to make and break	
26	Contact Spring, dimension X = $2\frac{3}{8}$″	29966
27	Contact Spring, dimension X = $2\frac{3}{4}$″	30829
28	Adjuster, for Contact Springs Fig. 26 and Fig. 27	29967
29	Connector, for Binding Posts	35377
30	Wood Screw, No. 6 x $\frac{1}{2}$″, flat head, for fastening Contact Fig. 25 to Commutators	30127
31	Knob, with Screw and Nuts, for Latch Arms Fig. 39 to Fig. 47 inclusive. (1-31a, 1-31b, 1-31c, 1-31d)	
31a	Knob only, for Fig. 31	29969
31b	Screw, $\frac{1}{4}$″ x $1\frac{1}{4}$″, rd. hd., for Knob Fig. 31	9530
31c	Nut, $\frac{1}{4}$″ hex., for Screw Fig. 31b	7395
31d	Nut, $\frac{1}{4}$″ square, for Screw Fig. 31b	37884
32	Stud, for holding Latch Arms Fig. 39 to Fig. 47 inclusive to Frame Fig. 1	29968
33	Stud, with Washer and hex. Nut, for fastening Frame Fig. 1 to Mechanism Frame	
33a	Washer, $\frac{1}{2}$″, for Stud Fig. 33	17492

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Circuit Controller and Parts

For Top-of-Mast Signal Mechanism

Drawing references are shown for convenience in checking shipping lists and invoices.

Fig. No.	Name	Drawing Reference
	Order by plate, figure number and name	
33b	Nut, $\frac{1}{2}''$ hex., for Stud Fig. 33	0286
34	Latch, used with Tripper Fig. 35	29853
35	Tripper, keyway not cut, used with Latch Fig. 34	
36	Latch, used with Tripper Fig. 37	30512
37	Tripper, keyway not cut, used with Latch Fig. 36	
38	Spring, for Latch Arms Fig. 34 and Fig. 36	38187
39	Latch Arm, 2 position, snaps at 60°	29854
40	Latch Arm, 2 position, snaps at 45°	32732
41	Latch Arm, 2 position, snaps at 45° going to danger, for 10 volt three position Signal	30029
42	Latch Arm, 2 position, snaps at 90°	30510
43	Latch Arm, 3 position, snaps at 45° and 90°	29851
44	Latch Arm, 2 position, latches at 60° and snaps at 75° to 90°	37990
45	Latch Arm, 2 position, snaps at 75°	29996
46	Latch Arm, 3 position, snaps at $37\frac{1}{2}°$ and 75°	30839
47	Latch Arm, 2 position, latches at 45° and snaps at 55° to 60°	38455
48	Clamp Arm, with Screw and Nuts, for Counters. (1-48a, 1-48b, 2-48c, 2-48d)	
48a	Clamp Arm only, for Fig. 48	30874
48b	Screw, No. 10 x $1\frac{1}{4}''$ rd. hd., for Clamp Arm Fig. 48	4591
48c	Nut, No. 10 hex., for Screw Fig. 48b	577
48d	Screw, No. 6 x $\frac{3}{8}''$ rd. hd., for holding Operating Rod Fig. 52 to Clamp Arm Fig. 48	36392
49	Counter, left hand	20567
50	Counter, right hand	26674
51	Screw, No. 4 x $\frac{3}{8}''$ rd. hd., for fastening Counters Fig. 49 and Fig. 50 to Frame Fig. 1	29107
52	Operating Rod, for Counters Fig. 49 and Fig. 50	30806