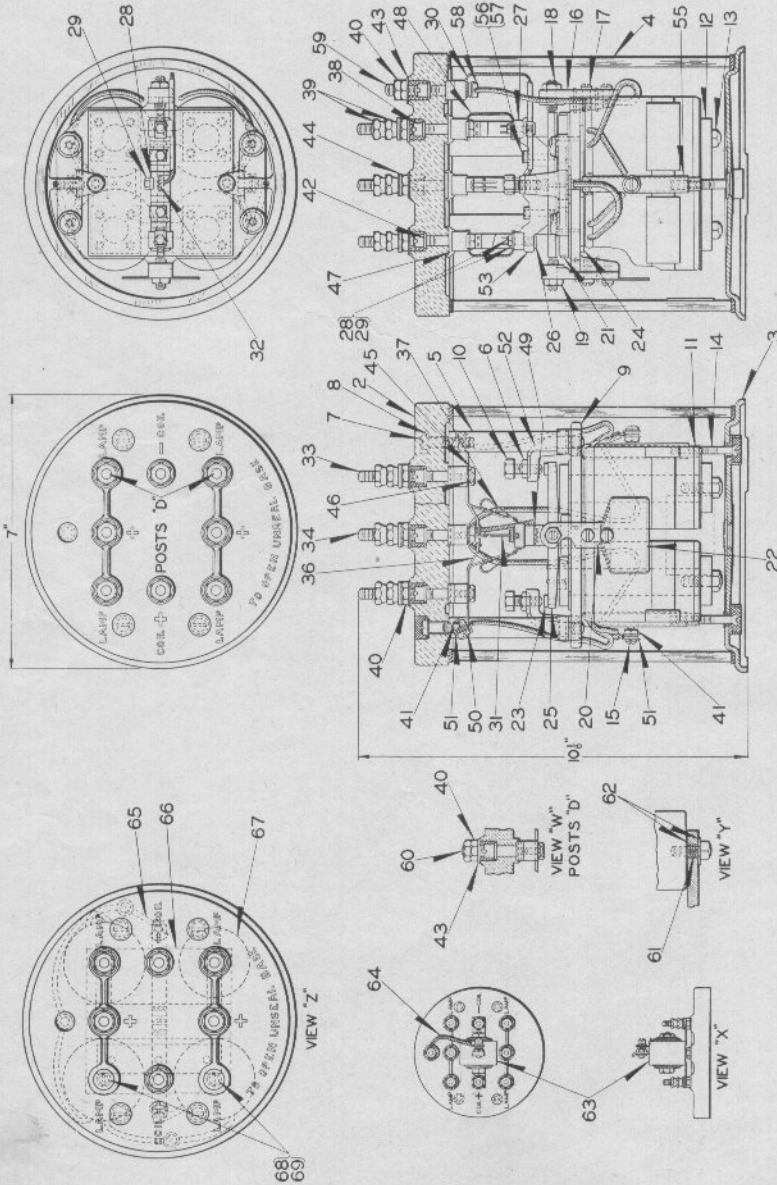


## UNION SWITCH & SIGNAL CO.



STYLE "NF" DIRECT CURRENT FLASHER RELAY  
DETAIL PARTS

## UNION SWITCH &amp; SIGNAL CO.

DETAILS OF THE STYLE "NF" D. C. FLASHER RELAY EQUIPPED  
WITH ARMATURE BACKSTOP

Order by Plate, Piece, Reference and Abbreviated Description Given in  
Heavy Face Type Only

| Piece  | Ref. | Description                                                                                                           | Drawing<br>Reference |
|--------|------|-----------------------------------------------------------------------------------------------------------------------|----------------------|
| 125353 | 2    | Top Plate, complete with terminal posts and contact springs.....                                                      | C-9027-1             |
| 125148 | 2a   | Top Plate, complete with Gasket for Refs. 2 and 2c...                                                                 | C-9028-1             |
| 33872  | 2b   | Gasket only for Refs. 2 and 3.....                                                                                    | 8078-76              |
| 156072 | 2c   | Top Plate, complete with terminal posts and contact springs (Posts "D" per View "W") (For Ref. Ag, Plate E-5050)..... | C-9027-1             |
| 125239 | 3    | Base, complete with Gasket, Ventilator and Collar...                                                                  | 10937-3              |
| 125249 | 4    | Glass Shield.....                                                                                                     | 8163-96              |
| 125625 | 5    | Stud for securing Ref. 9 to Ref. 2.....                                                                               | 8115-157             |
| 1509   | 6    | Hex. Nut for Ref. 10.....                                                                                             | 8109-15              |
|        | 7    | Machine Screw No. 14-24x1" Fil. Hd. S. (Cad. Pl.) for Ref. 2.                                                         |                      |
| 38448  | 8    | Washer only for Ref. 7.....                                                                                           | 7826-98              |
| 125243 | 9    | Core, complete.....                                                                                                   | C-9028-1             |
| 164586 | 10   | Adjusting Screw, complete with Nut Ref. 6.....                                                                        | 12471-31             |
| 131919 | 10a  | Adjusting Screw only for Ref. 10.....                                                                                 | 8190-359             |
| 135256 | 11   | Magnet Coil, complete 175-ohms.....                                                                                   | 8133-336             |
| 135257 | 11a  | Magnet Coil, complete 400-ohms.....                                                                                   | 8133-336             |
| 156106 | 11b  | Magnet Coil, complete 150-ohms (Slow Acting).....                                                                     | 8133-385             |
| 125244 | 12   | Backstrap.....                                                                                                        | 8162-214             |
|        | 13   | Cap Screw, S.A.E. 1/4"-28x3/4" Hex. Hd. for Ref. 12.                                                                  |                      |

# Zachary C. Gillihan 2008

PLATE E-5061

## UNION SWITCH & SIGNAL CO.

### DETAILS OF THE STYLE "NF" D. C. FLASHER RELAY EQUIPPED WITH ARMATURE BACKSTOP (Continued)

Order by Plate, Piece, Reference and Abbreviated Description Given in  
Heavy Face Type Only

| Piece  | Ref. | Description                                                                                                                                               | Drawing<br>Reference |
|--------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
|        | 14   | Machine Screw No. 10-30x1½" Flat Hd. S. (Cad. Pl.)<br>for Ref. 3.                                                                                         |                      |
|        | 15   | Machine Screw No. 10-30x⅞" Rd. Hd. Br. (N. P.)<br>complete with two washers Ref. 51, one Nut Ref. 41<br>and No. 10 Pl. S. Lock Washer (⅛"x⅜") (Cad. Pl.). |                      |
|        | 15a  | Machine Screw only No. 10-30x⅞" Rd. Hd. Br.<br>(N. P.) for Ref. 15.                                                                                       |                      |
| 125245 | 16   | Armature Bracket.....                                                                                                                                     | 8303-87              |
|        | 17   | Machine Screw No. 10-30x½" Fil. Hd. Br. (N. P.)<br>for Ref. 16.                                                                                           |                      |
| 128282 | 18   | Pivot Screw, complete with Nut Ref. 19.....                                                                                                               | 12471-20             |
| 535    | 19   | Hex. Nut for Ref. 18.....                                                                                                                                 | 8109-1               |
| 57497  | 20   | Dowel Pin.....                                                                                                                                            | 8097-872             |
| 125605 | 21   | Armature.....                                                                                                                                             | 8157-311             |
| 125161 | 22   | Name Plate.....                                                                                                                                           | 8225-245             |
| 138359 | 23   | Stud used as backstop on armature Ref. 25.....                                                                                                            | 8114-651             |
| 135871 | 24   | Ins. Washer (use as required).....                                                                                                                        | 8078-1042            |
| 125248 | 25   | Armature, complete.....                                                                                                                                   | 8157-310             |
| 164202 | 25a  | Armature, complete with terminal block, Contact Tip<br>and Middle Contact.....                                                                            | C-9027-1             |
| 125608 | 26   | Nut.....                                                                                                                                                  | 8109-419             |
| 125343 | 27   | Contact Tip.....                                                                                                                                          | 8341-109             |
| 125615 | 28   | Lock Washer for Ref. 29.....                                                                                                                              | 8486-365             |

UNION SWITCH & SIGNAL CO.

DETAILS OF THE STYLE "NF" D. C. FLASHER RELAY EQUIPPED  
WITH ARMATURE BACKSTOP  
(Continued)

Order by Plate, Piece, Reference and Abbreviated Description Given in  
Heavy Face Type Only

| Piece  | Ref. | Description                                                                                                                                   | Drawing<br>Reference |
|--------|------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| 125624 | 29   | Screw .....                                                                                                                                   | 8098-404             |
| 125614 | 30   | Connector, complete .....                                                                                                                     | 8064-562             |
| 125601 | 31   | Contact Spring, complete .....                                                                                                                | 8385-1943            |
| 125607 | 32   | Nut .....                                                                                                                                     | 8109-418             |
| 150486 | 33   | Terminal Post, complete with Nuts, Washers and<br>Lock Washers (Inc. 1-33a, 1-38, 2-39, 1-40, 1-42,<br>1-43, 2-44, 1-45, 1-46 and 1-47) ..... | 12451-250            |
| 125352 | 33a  | Terminal Post only for Ref. 33 .....                                                                                                          | 8094-2094            |
| 150487 | 34   | Terminal Post complete with Nuts, Washers and Lock<br>Washers (Inc. 1-34a, 1-38, 2-39, 1-40, 1-42, 1-43,<br>2-44, 1-45, 1-46 and 1-47) .....  | 12451-251            |
| 125351 | 34a  | Terminal Post only for Ref. 34 .....                                                                                                          | 8094-2094            |
|        | 35   | Terminal Post complete with Nuts, Washers and Lock<br>Washers (Used previous to 2-28-29) Not shown .....                                      | 12451-               |
| 125627 | 35a  | Terminal Post only for Ref. 35 .....                                                                                                          | 8094-2094            |
| 156661 | 36   | Contact with Silver Tip .....                                                                                                                 | 8094-2231            |
| 156133 | 37   | Contact Spring, complete .....                                                                                                                | 8385-2186            |
| 69706  | 38   | Nut .....                                                                                                                                     | 8109-383             |
| 29101  | 39   | Hex. Nut .....                                                                                                                                | 8109-193             |
| 29103  | 40   | Hex. Nut .....                                                                                                                                | 8109-194             |
| 26545  | 41   | Hex. Nut .....                                                                                                                                | 8109-181             |
| 70539  | 42   | Washer (Lead) .....                                                                                                                           | 8274-73              |



# Zachary C. Gillihan 2008

PLATE E-5061

## UNION SWITCH & SIGNAL CO.

### DETAILS OF THE STYLE "NF" D. C. FLASHER RELAY EQUIPPED WITH ARMATURE BACKSTOP (Continued)

Order by Plate, Piece, Reference and Abbreviated Description Given in  
Heavy Face Type Only

| Piece  | Ref. | Description                                                                                                                | Drawing<br>Reference |
|--------|------|----------------------------------------------------------------------------------------------------------------------------|----------------------|
| 69705  | 43   | Washer .....                                                                                                               | 7828-287             |
| 29102  | 44   | Washer .....                                                                                                               | 7828-139             |
| 129546 | 45   | Screw .....                                                                                                                | 8098-403             |
| 125616 | 46   | Lock Washer .....                                                                                                          | 8486-102             |
| 29063  | 47   | Lock Washer .....                                                                                                          | 8486-111             |
| 125611 | 48   | Connector .....                                                                                                            | 10934-107            |
| 125622 | 49   | Clip .....                                                                                                                 | 11893-217            |
|        | 50   | Machine Screw No. 10-30x $\frac{3}{8}$ " Fil. Hd. Br. (N. P.)<br>complete with one Washer Ref. 51 and Hex. Nut<br>Ref. 41. |                      |
|        | 50a  | Machine Screw No. 10-30x $\frac{3}{8}$ " Fil. Hd. Br. (N. P.)<br>for Ref. 50.                                              |                      |
| 53     | 51   | Washer for Refs. 15 and 50 .....                                                                                           | 7828-5               |
| 131880 | 52   | Armature Stop .....                                                                                                        | 8303-92              |
| 125342 | 53   | Terminal Block .....                                                                                                       | 9968-663             |
| 125339 | 54   | Eyelet (Used previous to 6-17-25) (Not shown) .....                                                                        | 12579-2              |
| 156774 | 55   | Stud complete .....                                                                                                        | 8114-715             |
| 162664 | 56   | Screw .....                                                                                                                | 8098-924             |
| 153987 | 57   | Nut Lock .....                                                                                                             | 8486-868             |
| 125623 | 58   | Screw .....                                                                                                                | 8098-403             |

## UNION SWITCH & SIGNAL CO.

### DETAILS OF THE STYLE "NF" D. C. FLASHER RELAY EQUIPPED WITH ARMATURE BACKSTOP (Continued)

Order by Plate, Piece, Reference and Abbreviated Description Given in  
Heavy Face Type Only

| Piece  | Ref. | Description                                                                                                         | Drawing<br>Reference |
|--------|------|---------------------------------------------------------------------------------------------------------------------|----------------------|
| 151661 | 59   | Terminal Post complete with Nuts, Washers and Lock Washers (Inc. 1-59a, 1-38, 2-40, 1-42, 1-43, 1-46 and 1-47)..... | 12451-252            |
| 156755 | 59a  | Terminal Post only for Ref. 59.....                                                                                 | 8094-2094            |
|        | 60   | Terminal Post complete with Nuts and Washers (Inc. 1-60a, 2-40, 1-43, 1-38 and 1-42) (For Top Plate Ref. 2c).....   | 12451-               |
| 156142 | 60a  | Terminal Post, only for Ref. 60.....                                                                                | 8094-2228            |
| 156150 | 61   | Ferrule.....                                                                                                        | 10389-29             |
| 156151 | 62   | Washer.....                                                                                                         | 7828-176             |
| 153194 | 63   | Type R-19 Rectifier.....                                                                                            | 12558-11             |
| 60539  | 64   | Lead complete.....                                                                                                  | B-9990-5             |
| 174931 | 65   | Lead.....                                                                                                           | B-9990-24            |
| 174812 | 66   | Armature complete for Ref. 66a.....                                                                                 | 8157-395             |
|        | 66a  | Armature complete with Terminal Block, Contact Tip and Middle Contact for Relay Ref. Af, Plate E-5050.....          | C-9027-3             |
| 174810 | 67   | Copper Washer.....                                                                                                  | 7828-368             |
|        | 68   | Machine Screw, No. 14-24x $\frac{3}{4}$ " Fil. Hd. S. (Cad. Pl.) (used as dummy post).                              |                      |
| 72948  | 69   | Nut, for Ref. 68.....                                                                                               | 8109-383             |