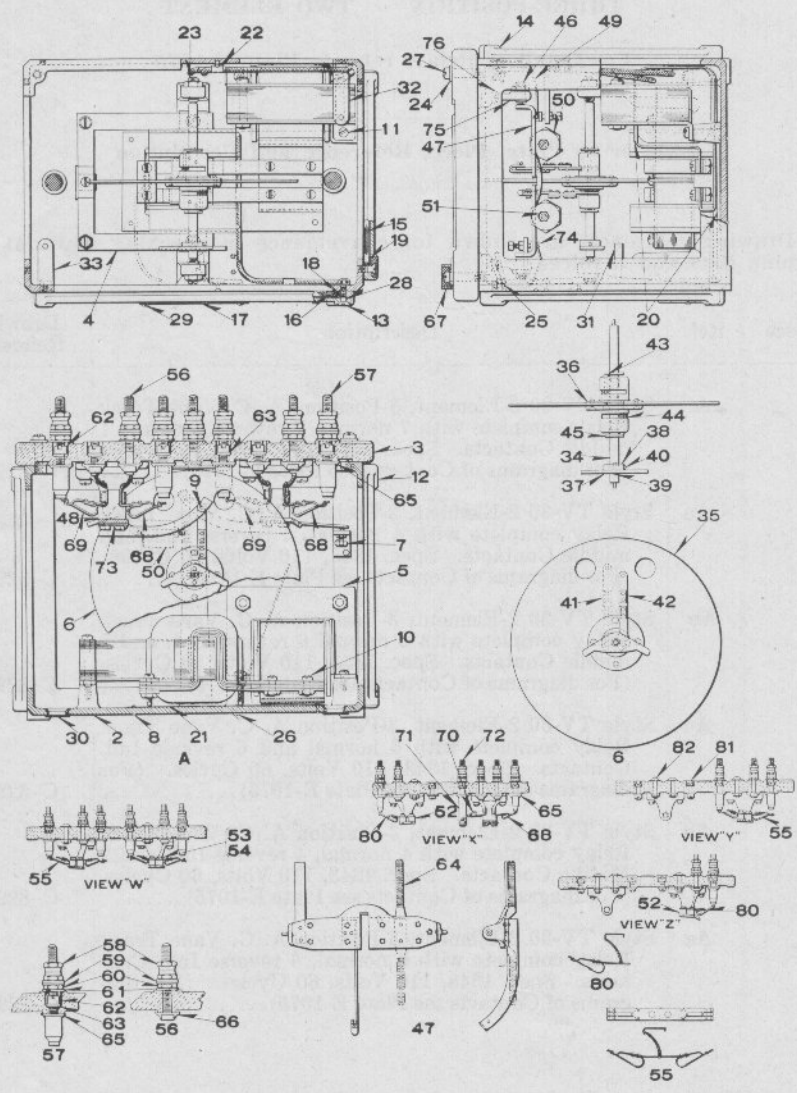


UNION SWITCH & SIGNAL CO.

Zachary C. Gillihan 2008



DETAILS OF STYLE TV-30 TWO-POSITION VANE RELAY

UNION SWITCH &amp; SIGNAL CO.

**Zachary C. Gillihan 2008**

STYLE TV-30 TWO-ELEMENT TWO-POSITION VANE  
TRACK RELAY DETAIL PARTS

For Ordering References of Complete Relay Refer to Plate E-1071

Order by Plate, Piece, Reference and Description

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

| Piece  | Ref. | Description                                                                                                                                 | Drawing Reference |
|--------|------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| 133299 | 2    | Case, complete with ventilators and Straps.....                                                                                             | C-8296-2          |
| 117976 | 2a   | Case only.....                                                                                                                              | C-8296-2          |
|        | 3    | Top Plate and Contact Combination complete, (Orders must specify Contact Combination desired).....                                          | C-8297-2          |
| 117854 | 3a   | Top Plate, complete with Contact Bar Brackets Straps and Insulation.....                                                                    | C-8297-1          |
|        | 3b   | Glass Top Plate, only.....                                                                                                                  | C-8296-4          |
|        | 4    | Field, complete (Orders must specify Voltage and Frequency, also Piece Number of the Relay with which Field is to be used).....             | C-8206-3          |
|        | 5    | Transformer complete, (Orders must specify Voltage and Frequency, also Piece Number of the Relay with which Transformer is to be used)..... | C-8605-11         |
| 133300 | 6    | Vane, complete.....                                                                                                                         | 10985-37          |
| 29354  | 7    | Screw complete with Lock Nut 7a.....                                                                                                        | 8098-500          |
| 32498  | 7a   | Lock Nut for 7.....                                                                                                                         | 8198-223          |
| 54921  | 8    | Rivet, for 6, 21 and 33.....                                                                                                                | 10301-1           |
| 62223  | 9    | Pin.....                                                                                                                                    | 8097-837          |
|        | 10   | Machine Screw No. 10-30 x $\frac{1}{2}$ " Fil. Hd. Br. with Hex. Nut 10a                                                                    |                   |
| 26545  | 10a  | Hex. Nut for 10.....                                                                                                                        | 8109-181          |
|        | 11   | Machine Screw No. 10-30 x $\frac{1}{2}$ " Fil. Hd. S. (Cad. Pl.).                                                                           |                   |
| 91076  | 12   | Door.....                                                                                                                                   | C-8101-7          |
| 118314 | 13   | Door.....                                                                                                                                   | C-8101-7          |
| 91075  | 14   | Door.....                                                                                                                                   | C-8101-7          |

UNION SWITCH & SIGNAL CO.  
**Zachary C. Gillihan 2008**  
 STYLE TV-30 TWO-ELEMENT TWO-POSITION VANE  
 VANE TRACK RELAY DETAIL PARTS

(Continued)

For Ordering References of Complete Relay Refer to Plate E-1071

Order by Plate, Piece, Reference and Description

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

| Piece  | Ref. | Description                                                                                       | Drawing Reference |
|--------|------|---------------------------------------------------------------------------------------------------|-------------------|
| 86392  | 15   | Glass Shield .....                                                                                | 8163-255          |
| 86391  | 16   | Glass Shield .....                                                                                | 8163-255          |
| 118315 | 17   | Name Plate .....                                                                                  | 8228-228          |
| 90947  | 18   | Gasket .....                                                                                      | 8078-1268         |
| 70823  | 19   | Gasket .....                                                                                      | 8078-1268         |
| 118264 | 20   | Insulation .....                                                                                  | 8750-914          |
| 118017 | 21   | Insulation .....                                                                                  | 8750-228          |
| 116272 | 22   | Wire Clip .....                                                                                   | 8735-580          |
| 126857 | 23   | Trunnions, complete with Hex. Lock Nut .....                                                      | 12471-5           |
| 131440 | 24   | Washer, for 27 .....                                                                              | 7828-6            |
|        | 25   | Machine Screw, No. 6-40 x $\frac{1}{4}$ " Rd. Hd. Br. (Nickel Plated) with two Washers, Ref. 25a. |                   |
| 20686  | 25a  | Washer only for 25 .....                                                                          | 7828-108          |
|        | 26   | Machine Screw, No. 6-40 x $\frac{1}{4}$ " Rd. Hd. S. (Cad. Pl.)                                   |                   |
|        | 27   | Machine Screw, No. 14-24 x $\frac{1}{8}$ " Fil. Hd. Br. (Nickel Plated)                           |                   |
|        | 28   | Machine Screw, No. 10-30 x $\frac{3}{8}$ " Flat. Hd. S. (Cad. Pl.)                                |                   |
|        | 29   | Machine Screw, No. 6-40 x $\frac{3}{16}$ " Rd. Hd. S. (Nickel Plated)                             |                   |
| 34340  | 30   | Ventilator .....                                                                                  | C-7459-6          |
| 117945 | 31   | Pin for Case .....                                                                                | 8114-539          |
| 117622 | 32   | Stop Bracket .....                                                                                | 11893-159         |

UNION SWITCH & SIGNAL CO.  
**Zachary C. Gillihan 2008**  
 STYLE TV-30 TWO-ELEMENT TWO-POSITION  
 VANE TRACK RELAY DETAIL PARTS  
 (Continued)

For Ordering Reference of Complete Relay Refer to Plate E-1071

Order by Plate, Piece, Reference and Description

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

| Piece  | Ref. | Description                                                                | Drawing Reference |
|--------|------|----------------------------------------------------------------------------|-------------------|
| 117623 | 33   | Stop Bracket.....                                                          | 11893-159         |
| 117974 | 34   | Shaft, complete for 6.....                                                 | C-8296-2          |
| 117954 | 35   | Vane, for 6.....                                                           | 10985-36          |
| 117966 | 36   | Washer, for 6.....                                                         | 7828-343          |
| 117949 | 37   | Stop, for 6.....                                                           | 11893-166         |
| 117948 | 38   | Collar, for 6.....                                                         | 8350-529          |
| 54928  | 39   | Rivet for 38.....                                                          | 10301-21          |
| 119297 | 40   | Pin for 38.....                                                            | 8097-999          |
| 133303 | 41   | Long Link complete (R. H.).....                                            | 8232-185          |
| 133304 | 42   | Short Link, complete (L. H.).....                                          | 8232-185          |
| 117295 | 43   | Pin.....                                                                   | 8097-837          |
| 117786 | 44   | Washer.....                                                                | 7828-184          |
|        | 45   | Washer $\frac{3}{16}$ " Std. Plate (Cad. Pl.).....                         |                   |
| 96403  | 46   | Trunnion, complete with Lock Nut.....                                      | 12471-5           |
| 133298 | 47   | Contact Spring Support complete, L. H. as shown in dot and dash lines..... | C-8296-1          |
| 131078 | 47a  | Contact Spring Support, complete (R. H.) as shown on full lines.....       | C-8296-1          |
| 62135  | 48   | Contact Spring Board for Independent Contacts.....                         | 9968-397          |
| 73587  | 49   | Flexible Connectors.....                                                   | 10934-107         |
| 69827  | 50   | Counterweight.....                                                         | 9672-162          |
| 26942  | 51   | Hex. Nut for 47.....                                                       | 8109-184          |



STYLE TV-30 TWO-ELEMENT TWO-POSITION  
VANE TRACK RELAY DETAIL PARTS

(Continued)

For Ordering References of Complete Relay Refer to Plate E-1071

Order by Plate, Piece, Reference and Description

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

| Piece  | Ref. | Description                                                                                                                            | Drawing Reference |
|--------|------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| 22621  | 52   | Ins. Bushing.....                                                                                                                      | 8095-199          |
| 1515   | 53   | Nut for 48 and 52.....                                                                                                                 | 8109-23           |
| 19409  | 54   | Lock Washer for 52.....                                                                                                                | 8486-68           |
| 88944  | 55   | Contact Springs complete.....                                                                                                          | 8385-1659         |
|        | 56   | Terminal Post, complete with Nuts, Washers, and Lock Washers.....                                                                      | 12451-            |
| 130200 | 56a  | Terminal Post, only for 56.....                                                                                                        | 8094-1192         |
|        | 57   | Terminal Post, complete with Nuts, Washers and Lock Washers, (Includes 1-56a, 1-57a, 1-65, 1-63, 1-61, 1-62, 1-60, 2-59 and 2-58)..... | 12451-            |
| 112419 | 57a  | Contact Holder complete with Graphite Contact for 57.....                                                                              | 8094-1192         |
| 29101  | 58   | Nut.....                                                                                                                               | 8109-193          |
| 29102  | 59   | Washer.....                                                                                                                            | 7828-139          |
| 29103  | 60   | Nut.....                                                                                                                               | 8109-194          |
| 69705  | 61   | Washer.....                                                                                                                            | 7828-287          |
| 72948  | 62   | Nut.....                                                                                                                               | 8109-383          |
| 70539  | 63   | Washer.....                                                                                                                            | 8274-73           |
| 48144  | 64   | Counterweight Support for 6.....                                                                                                       | C-8102-2          |
| 29063  | 65   | Lock Washer for 57.....                                                                                                                | 8486-111          |
| 121616 | 66   | Lock Washer for 56.....                                                                                                                | 8486-362          |
| 131435 | 67   | Sealing Cup.....                                                                                                                       | 11893-257         |
| 110663 | 68   | Contact Spring complete.....                                                                                                           | 8385-1882         |

UNION SWITCH & SIGNAL CO.  
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 STYLE TV-30 TWO-ELEMENT TWO-POSITION  
 VANE TRACK RELAY DETAIL PARTS  
 (Continued)

For Ordering References of Complete Relay Refer to Plate E-1071

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

| Piece  | Ref. | Description                                                                                                       | Drawing Reference |
|--------|------|-------------------------------------------------------------------------------------------------------------------|-------------------|
| 112738 | 69   | Contact Spring complete.....                                                                                      | 8385-1882         |
| 110664 | 70   | Contact Spring complete.....                                                                                      | 8385-1882         |
| 72667  | 71   | Terminal Bracket, complete with Graphite Contact<br>for Contact Spring 70 .....                                   | 8094-1190         |
|        | 72   | Terminal Post, complete with Nuts, Washers and<br>Lock Washers for 71.....                                        | 12451             |
| 1399   | 72a  | Terminal Post, only for 72.....                                                                                   | 8094-706          |
| 74798  | 73   | Lock Washer for 48.....                                                                                           | 8486-155          |
|        | 74   | Machine Screw No. 6-40x1/4" Rd. Hd. Br. (Nickel<br>Plated) with one washer 25a for attaching 49 to 47<br>and 47a. |                   |
| 132645 | 75   | Contact Bar Bracket for Top Plate.....                                                                            | C-8814-24         |
|        | 76   | Machine Screw No. 14-24x1 3/8" Fil. Hd. Br. (Nickel<br>Plated) for 75.                                            |                   |
| 132644 | 77   | Strap for Top Plate (Not Shown).....                                                                              | 11893-263         |
| 130178 | 78   | Insulation for Top Plate (Used under 75) not shown.                                                               | 8750-2152         |
| 36073  | 79   | Washer (Used under 77) not shown.....                                                                             | 7828-101          |
| 88945  | 80   | Contact Spring complete.....                                                                                      | 8385-1659         |
|        | 81   | Dummy Post complete No. 14-24x3/4" Fil. Hd. S. (Cad.<br>Pl.) with one washer 63. One washer 59 and Nut 62         | 12471             |
|        | 82   | Dummy Post complete with nut 60 washer 61 and<br>washer 59.....                                                   | 12471             |