

RELAYS

114, 124, 126, 174, 196, AND 198 TYPES

PIECE-PART DATA AND REPLACEMENT PROCEDURES

1. GENERAL

1.01 This section covers the information necessary for ordering parts to be used in the maintenance of 114-, 124-, 126-, 174-, 196-, and 198-type relays.

1.02 This section is reissued to revise piece-part information and to add the No. 114CG and 196-type relays. Since this reissue covers a general revision, the arrows ordinarily used to indicate changes have been omitted.

1.03 Part 2 of this section covers the piece-part numbers and the corresponding names of the parts which it is practicable to replace in the field in the maintenance of these relays. No attempt should be made to replace parts not designated. Part 2 also contains explanatory figures showing the different parts. This information is called Piece-part Data.

1.04 Part 3 of this section covers the approved procedures for the replacement of the parts covered under Part 2. This information is called Replacement Procedures.

1.05 Before making any replacements on the apparatus covered herein, remove the circuit from service.

2. PIECE-PART DATA

2.01 The figures included in this part show the various piece parts in their proper relation to other parts of a relay. The piece-part numbers of the various parts are given together with the names of the parts as listed by the Western Electric Company Merchandise Department. When these names differ from those in general use in the field, the latter names, in some cases, are shown in parentheses.

2.02 When ordering parts for replacement purposes, give the piece-part number as well as the name of the part; for example "P-122628 Frame." Do not refer to the section number or any information shown in parentheses following the piece-part number.

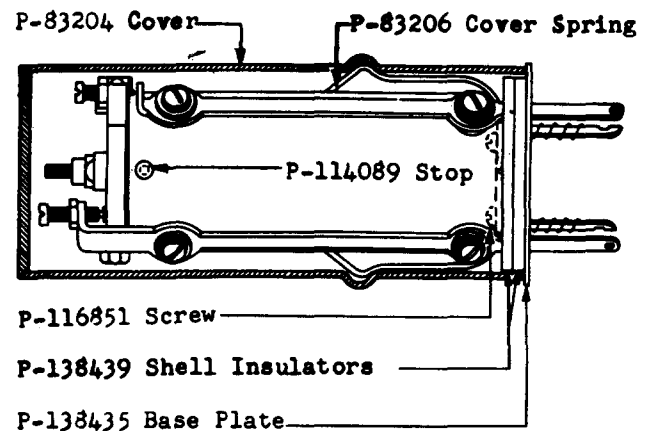


Fig. 1 - Cover for 126- and 174-type Relays

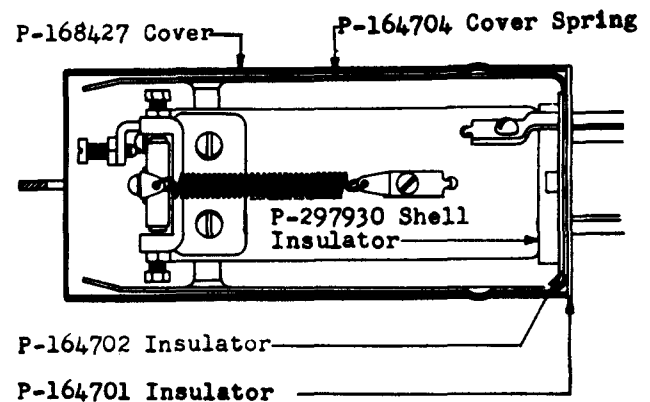


Fig. 2 - No. 1A Relay Cover (For 114- and 124-type Relays)

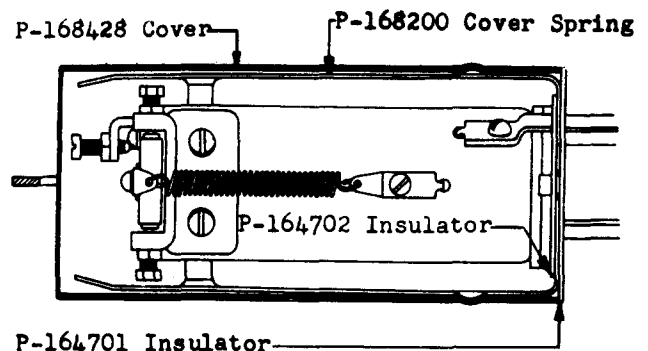


Fig. 3 - No. 2A Relay Cover (For 198-type Relays)

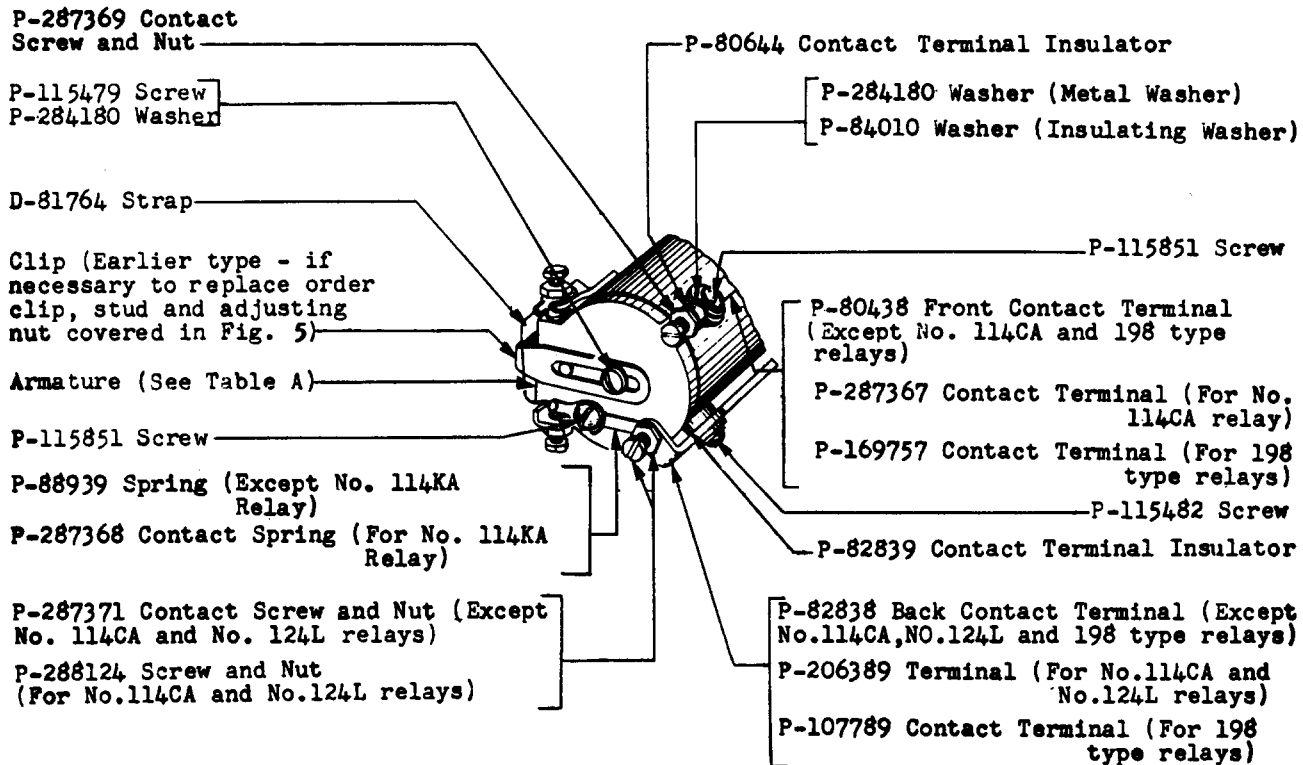


Fig. 4 - Contact and Armature Arrangement Except for 196-type Relays

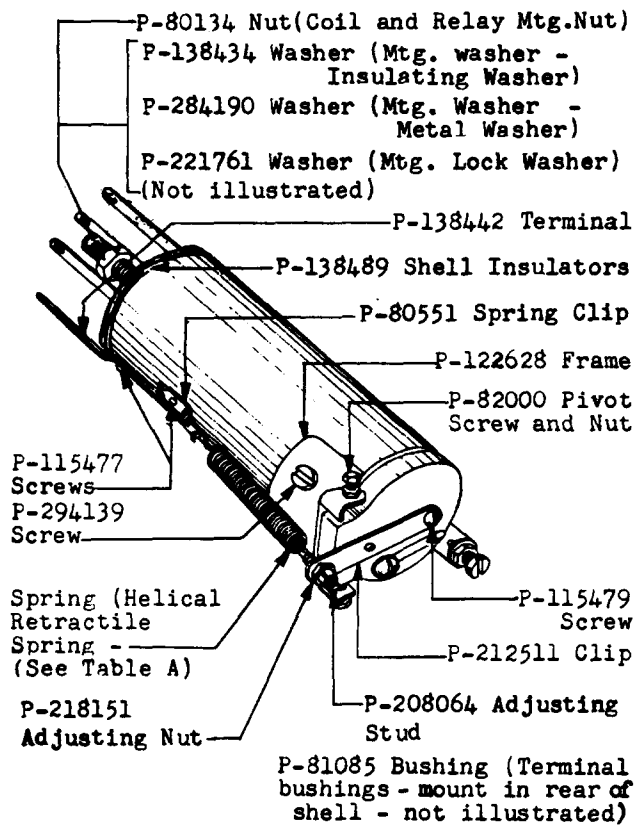


Fig. 5 - Helical-type Retractable Spring
(Relay Having Break Spring Combination Illustrated)
(Figure Does Not Apply to 196-type Relays)

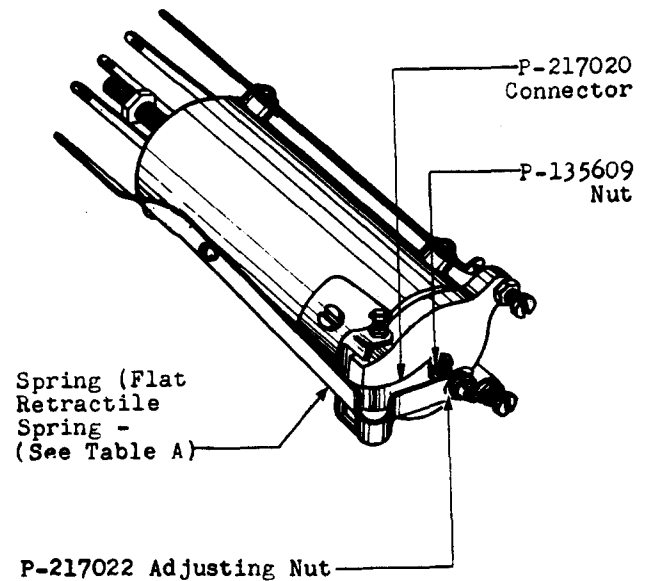


Fig. 6 - Flat-type Retractable Spring
(Relay Having Transfer Spring Combination Illustrated)
(Figure Does Not Apply to 196-type Relays)

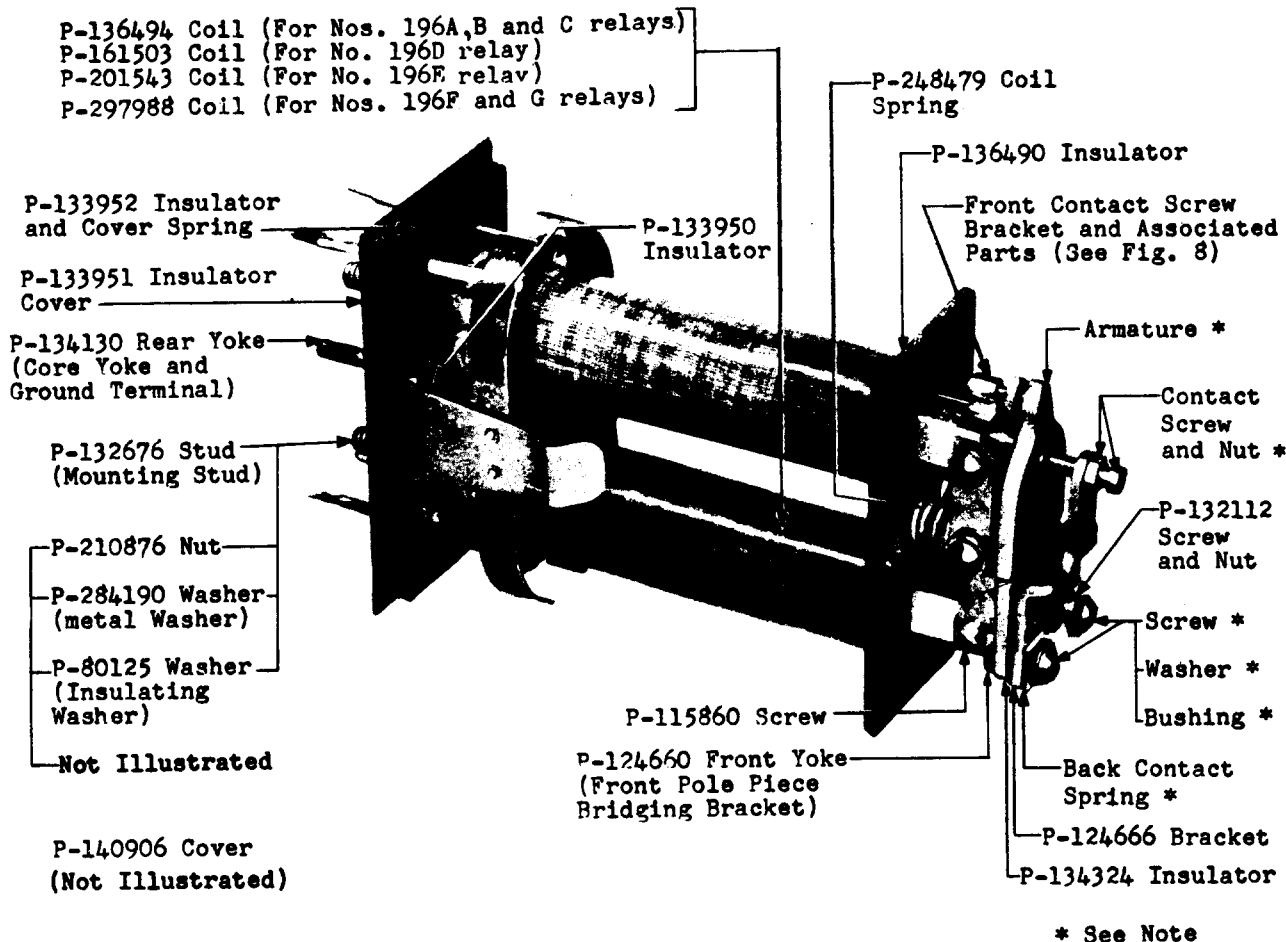
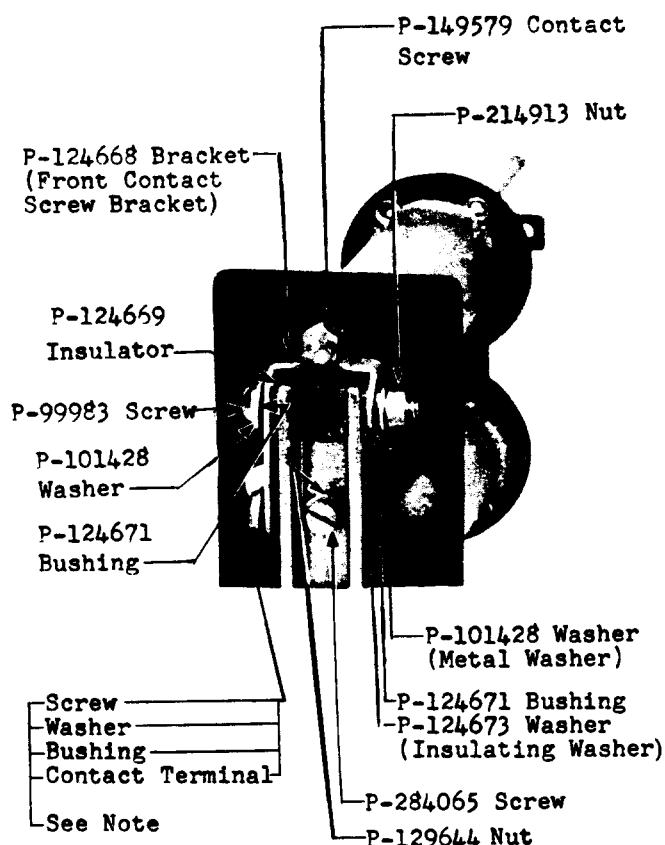


Fig. 7 - 196-type Relay (No. 196F Relay Illustrated)

NOTE FOR FIG. 7

When ordering give the part number followed by the name of part.

Part Name	Nos. 196A,B,E, F, and G Relays	Nos. 196C and D Relays
Screw	P-115859	P-108962
Washer	P-101428	P-101428
Bushing	P-298841	P-298843
Contact Screw and Nut	P-287369	Screw (contact) P-91349 Nut P-129644
Back Contact Spring	P-124667	
Armature	P-288112	196C P-288110 196D P-288111

**NOTE**

When ordering give the part number followed by the name of part.

Part Name	Nos. 196A,E, and F Relays	Nos. 196B,C,D, and G Relays
Screw	P-121498	P-146945
Washer	P-101428	P-205066
Bushing	P-124671	P-146943
Contact Terminal	_____	P-146944

Fig. 8 - 196-type Relay - Front Contact Screw Bracket and Associated Parts (Armature and Back Contact Screw Removed)

Table A - List of Piece Parts of 114-, 124-, 126-, 174-, and 198-type Relays Which Vary for Individual Relay Codes

Relay	Armature (See Note 2)	Spring (Retractable Spring) (See Notes 1 and 2)	Relay	Armature (See Note 2)	Spring (Retractable Spring) (See Notes 1 and 2)	Relay	Armature (See Note 2)	Spring (Retractable Spring) (See Notes 1 and 2)
114A	P-89926	P-90450	114AB	P-89926	P-90450	114BH	P-246650	P-219439
114B	P-89926	P-90450	114AC	P-89926	P-90450	114BJ	P-89926	P-90450
114C	P-89926	P-90450	114AD	P-89926	P-90450	114BK	P-89926	P-90450
114D	P-89926	P-90450	114AF	P-89926	P-90450	114BL	P-247254	P-219439
114E	P-89926	P-90450	114AG	P-123188	P-90450	114BM	P-89926	P-90450
114F	P-89926	P-90450	114AH	P-89926	P-90450	114BP	P-295825	P-219439
114G	P-89926	P-90450	114AJ	P-89926	P-90450	114BR	P-295825	P-219439
114H	P-89926	P-90450	114AK	P-247254	P-219439	114BS	P-295825	P-219439
114J	P-89926	P-90450	114AL	P-89926	P-90450	114BT	P-295825	P-219439
114K	P-246650	P-219439	114AP	P-89926	P-90450	114BU	P-295825	P-219439
114L	P-89926	P-90450	114AR	P-123160	P-90450	114BW	P-295825	P-219439
114M	P-89926	P-90450	114AT	P-89926	P-90450	114BY	P-295825	P-219439
114N	P-89926	P-90450	114AU	P-89926	P-90451	114CA	P-206387	P-90450
114P	P-89926	P-90450	114AW	P-149705	P-121942	114CB	P-89926	P-121942
114R	P-123160	P-90451	114AY	P-149705	P-90451	114CC	P-295825	P-219439
114S	P-89926	P-90450	114BB	P-89926	P-90450	114CD	P-295825	P-219439
114T	P-89926	P-90450	114BC	P-89926	P-121942	114CE	P-89926	P-90450
114W	P-149705	P-90451	114BD	P-89926	P-90451	114CF	P-149705	P-135361
114Y	P-89926	P-90450	114BE	P-246650	P-219439	114CG	P-89926	P-121942
114AA	P-89926	P-90450	114BF	P-89926	P-90450	114EA	P-295825	P-219439

Table A (Contd)

Relay	Armature (See Note 2)	Spring (Retractable Spring) (See Notes 1 and 2)	Relay	Armature (See Note 2)	Spring (Retractable Spring) (See Notes 1 and 2)	Relay	Armature (See Note 2)	Spring (Retractable Spring) (See Notes 1 and 2)
114EB	P-295825	P-219439	126A	P-89926	P-90450	198C	P-123160	P-121942
114KA	P-295825	P-219439	126B	P-89926	P-90450	198D	P-149705	P-90450
124A	P-89926	P-90450	126C	P-89926	P-90450	198F	P-123160	P-121942
124B	P-89926	P-90450	126D	P-89926	P-90450	198G	P-123160	P-121942
124F	P-89926	P-90450	126F	P-89926	P-121942	198H	P-123160	P-121942
124G	P-89926	P-90450	174A	P-89926	P-90450	198J	P-123160	P-121942
124H	P-89926	P-90450	174B	P-89926	P-90450	198K	P-123160	P-121942
124J	P-89926	P-90450	174C	P-89926	P-90450	198L	P-123160	P-121942
124K	P-123160	P-90450	198A	P-149705	P-90450	D-85297	P-123160	P-121942
124L	P-123159	P-90450	198B	P-123160	P-121942			

Notes

1. Piece part P-219439 covers the flat-type retractile spring illustrated in Fig. 6. All other piece parts specified are helical-type retractile springs illustrated in Fig. 5.
2. When replacing the retractile spring or armature on a relay equipped with a helical-type retractile spring and the piece-part information in the table specifies P-219439 retractile spring for the relay, replace the retractile spring and armature by the parts specified in the table and also replace the parts listed in Fig. 6.

3. REPLACEMENT PROCEDURES**3.01 List of Tools**Code or
Spec No.Description**Tools**

45B	5/16-inch Hex. Single-end Socket Wrench
72	Combination 5/32- and 3/16-inch Hex. Double-end Socket Wrench and Screwdriver
474A	3/16- and 1/4-inch Hex. Closed Double-end Offset Wrench
485A	Smooth-jaw Pliers
KS-6854	3-1/2-inch Screwdriver

3.02 After making any replacement of parts of a 114-, 124-, 126-, 174-, 196-, or 198-type relay, the part or parts replaced shall meet the readjust requirements involved as specified in Section 040-220-701 covering the 114-, 124-, 126-, 174-, and 198-type relays and Section 040-227-701 covering the 196-type relay. Other parts whose adjustments may have been directly disturbed by the replacing operations shall be checked to the readjust requirements and an over-all operation check shall be made of the relay before restoring the circuit to service.

3.03 Replacement procedures for parts are not included because of the simplicity of the replacement operations. Where a relay is equipped with a shell, and screws are to be mounted into the shell, make sure that the screws do not extend within the shell. Screws which extend within the shell shall be filed off until they are flush with the inside of the shell.