INSPECTION REQUIREMENTS

RELAYS

221, 222, 223, 224, 225, 247, 248, 251, AND 252 TYPE(S)

(STEP-BY-STEP TYPES)

GENERAL EQUIPMENT REQUIREMENTS

COMMON SYSTEMS

TABLE 800-668-190

Lot Range		A	B	C	D	E	F	G	H	I	J
Lot Size (number of relays in lot) (see note 8)		1 100	101 300	301 600	601 1000	1001 2000	2001 3000	3001 5000	5001 10,000	10001 20,000	20001 50,000
Sample Size (relays) (see note 1)		All	90	165	245	325	385	455	520	650	710
Inspection Item (For requirements, refer to Section 040-236-701 and sections of Division 800. Also see note 2.)	Basis For Counting Defects	Allowable Defects Numbers									
		AN	AN	AN	AN	AN	AN	AN	AN	AN	AN
1. Functional, Numerical, and Group Designations (on relays and on covers)	Relay	Record all defects found. See note 3.									
2. Relay Mounting	"	0	0	1	2	3	4	5	6	8	9
3. Vertical Clearance Between Relays	"	0	0	1	2	3	4	5	6	8	9
4. Contact Alignment	"	0	0	1	2	3	4	5	6	8	9
5. Straightness of Springs (see note 4)	"	0	1	2	4	6	7	9	10	13	15
6. Armature Movement	"	0	1	2	4	6	7	9	10	13	15
7. Residual Air Gap or Armature Backstop Screw Position	"	0	0	1	2	3	4	5	6	8	9
8. Heel Piece Air Gap	"	0	0	1	2	3	4	5	6	8	9
9. Armature Travel	"	0	1	2	4	6	7	9	10	13	15
10. Position of First Lever Spring with Respect to the Armature Lever Stud	"	0	0	1	2	3	4	5	6	8	9
11. Contact Separation	"	0	0	1	2	3	4	5	6	8	9
12. Contact Sequence (other than make-before-break contacts)	"	0	0	1	2	3	4	5	6	8	9
13. Contact Pressure (make-before-break contacts)	"	0	0	1	2	3	4	5	6	8	9
14. Contact Follow - Make Contacts (see note 6)	"	0	0	1	2	3	4	5	6	8	9
15. Contact Follow - Break Contacts	"	0	0	1	2	3	4	5	6	8	9
16. Electrical Requirements (see notes 6 and 7)	"	0	1	2	4	6	7	9	10	13	15
17. Timing Requirements (see note 5)	"	0	0	0	0	1	1	2	2	3	3
AN = Allowable Number of defects in sample											

SPOTTINESS TABLE

Size of Subsample	3 25	26 70	71 125	126 175	176 200	201 250	251 300	301 350	351 400	401 450	451 500	501 550	551 600	601 650	651 700	701 750	751 800	801 850	851 900	901 950	951 1000
SN	2	3	4	6	7	8	10	11	12	13	14	16	17	19	20	22	23	24	25	26	28
SN = Spottiness Number (applying to subsample)																					

Note 1: For relay equipment of step-by-step switches (197 and 198 type) and repeaters, the lot consists of the total number of relays in the equipment group or groups included in the inspection lot. The relays of the sample for inspection items 1 to 16 inclusive shall be distributed among the equipment groups in approximately the same proportion as they occur in the lot. The equipment group subsample shall be distributed on the basis of switches and all the relays on the switches selected shall be inspected. A sufficient number of switches (or repeaters) shall be selected to satisfy the relay subsample size requirement. The switches of the sample shall, in general, be distributed by selecting five switches (or repeaters) per shelf from a sufficient number of shelves. Where there is not a sufficient number of shelves for the above method of distribution, an equal number of switches per shelf shall, insofar as possible, be selected. In the case of line finder units of 16 line finder capacity, the unit shall be used in place of the shelf in determining the distribution.

Note 2: For those cases where the circuit requirements table still includes the spring combination schematic for the relay, refer also to Section 040-236-711.

Note 3: For each type of defect recorded, sufficient additional inspection shall be made to insure elimination of the irregularity in the equipment involved.

Note 4: Where the allowable defect number for Inspection Item 5 is not exceeded, correction of defects for this item may be omitted. Where the allowable defect number is exceeded, the case shall be reviewed with the operating company people to determine the corrective measures to be taken.

Note 5: The inspection for item 17 will be made on all step-by-step relays in No. 1, 350, or intertoll step-by-step equipment for which timing requirements are provided on the circuit requirement table or in Section 040-013-711. For other types of step-by-step equipment, inspection will be made for item 17 only when specifically requested by the operating company. Where timing requirements are provided, inspection for item 16 for such relays shall be limited to a check of the nonoperate portion of the electrical requirements.

Note 6: When pulse repeating requirements are applied, a complete check shall be made in all cases for this requirement either as a part of the verification or of the testing procedures.

Note 7: Where AC values only are specified for the electrical requirements for connector ringing relays and where the connector operation test specified in the Performance Requirements section is applied, a check for the AC values for these relays in any lot may be omitted as a part of the verification procedure.

Note 8: Except for relays mounted and wired during installation, inspection for this type of relay is not required except when testing results or other evidence indicates an unsatisfactory condition of adjustment.

For detailed explanation and use of tables, refer to Section 800-668-180.

REASONS FOR REISSUE

To reduce the sample size requirements to conform with the process average quality of the manufactured product and to remove previously designated Selected Items.