

BELL SYSTEM PRACTICES
Teletypewriter and Data Stations

ADDENDUM P31.161
Issue 1, July, 1958
AT&TCo Standard

255A, 209-, AND 215-TYPE RELAYS

REQUIREMENTS AND PROCEDURES

1. GENERAL

1.001 This addendum supplements Section P31.161, Issue 6, which contains the requirements and adjusting procedures for the maintenance of 255A, 209- and 215-type relays.

1.002 This addendum is issued to revise the cleaning and burnishing instructions in accordance with the latest information on cleaning and burnishing of relays.

2. CARE OF TOOLS

The following change applies to Part 2 of the section:

(a) 2.01—revised

2.01 Contact burnishers, stones, files, and thickness gauges should be kept clean. Use a clean cloth dampened with KS-8372 trichloroethylene to wipe them. Allow burnishers and tools to dry thoroughly before use.

5. ALTERNATE PROCEDURES FOR RESURFACING CONTACTS

The following changes apply to Part 5 of the section:

(a) 5.04—added sentences

(b) 5.04.1—added paragraph

(c) 5.05(a) and 5.05(b)—replaced by 5.05

(d) 5.06(b)(6)—revised note

(e) 5.07(a)(5) and 5.07(b)(2)—added

(f) 5.08—revised

(g) 5.09(d)—added

5.04 (Add after last sentence) The height of tungsten contacts on contact screws of the 209FG, 209FH, 255A, and 215H relays should not be less than 0.009 inch. The contact

ends should present an even, flat surface alignment with the associated disc contacts. The height of contact metal on the contact discs should not be less than 0.015 inch. **Figs. 6 and 7**

5.04.1 After burnishing, remove all foreign particles from the contact with a clean, small, camel's hair brush, if available, or with KS-6528 linen tape.

Note: To clean the brush, dip the hairs of the brush once their full length in clean KS-8372 trichloroethylene and then wave the brush until it is dry.

5.05 **Cleaning:** Back off the pole-piece screws. Then wrap a layer of friction tape over the end of an orange stick, with the stickier side of the tape toward the stick. Press, do not rub, the tape against the pole-piece screws. Then wipe the pole-piece screws, using a piece of clean, dry KS-2423 cloth wrapped around the orange stick. **Fig. 8**

Caution: No cleaning fluid should ever be used on the assembled relay.

5.06(b)(6)

Note: The old-style armature of the 215H relay should be removed only when it needs to be replaced or when it requires a more thorough cleaning than that provided by burnishing. In either event, the replacement should be the P290441 all-metal antichatter armature.

5.07(a) **Screw Contacts**

(5) The height of the tungsten contacts on contact screws of the 209FG, 209FH, 255A, and 215H relays should not be less than 0.009 inch. The contact ends should present an even, flat surface alignment with the associated disc contacts.

5.07(b) **Armature Contacts**

(2) The height of contact metal on the contact discs should not be less than 0.015 inch.

5.08 **Cleaning:** With a clean KS-2423 cloth or clean camel's hair brush moistened with KS-8372 trichloroethylene, wipe the armature, contact screws, and pole-piece screws. For removal of the old-style armature of 215H relays and its replacement by the new-style P290441 armature, see **Note** under 5.06(b)(6).

Caution: After cleaning, the parts should be allowed to dry until the cleaning fluid has completely evaporated. In reassembling the relay, take care to keep fingers from touching the contact surfaces.

5.09(d) **Screw Contacts**

- (1) After reassembly of any relay, burnish the contacts with a clean burnishing tool.
- (2) Remove all foreign particles from the contacts with a clean, small, camel's hair brush, if available, or with KS-6528 linen tape.