# **HOLDERS II**

### **DESCRIPTION**

# **TOOLS**

#### 1. GENERAL

- 1.01 This practice describes coded, noncoded, and commercial holders within the part or type number range of 651 through 788, R-2598, AT-8923, KS-16913, KS-20545, and commercial holder tools.
- 1.02 Revision arrows are used to emphasize significant changes. The reasons for reissuing this practice are listed below.
  - (a) To rate the 653B scouring pad tool Mfr Disc.
  - (b) To rate the R-2598 brush holder tool Mfr Disc.
- 1.03 See the tool index for other Holder practices.

#### 2. DESCRIPTION OF TOOLS

- 2.01 651B, C, and D: The 651B, C, and D holder tools are molded plastic covers intended for use in conjunction with the 639A- and 360-type tools for making test connections to stationary contacts on wire spring type relays.
  - (a) **651B:** The 651B holder tool (Fig. 1) is used on 24-position, AJ-type relays.

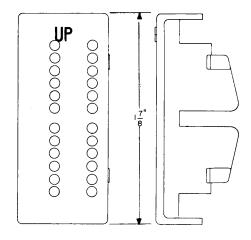


Fig. 1—651B Holder Tool

(b) **651C:** The 651C holder tool (Fig. 2) is used on AF-, AG-, and 12-position, AJ-type relays which are not equipped with a spring for retaining the relay contact cover.

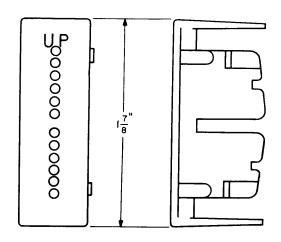


Fig. 2—651C Holder Tool

(c) **651D:** The 651D holder tool (Fig. 3) is used on AF-, AG-, 12-position, AJ- and AK-type relays equipped with a spring for retaining the relay contact cover.

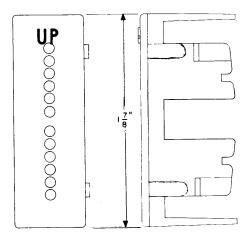


Fig. 3—651D Holder Tool

- 2.02 652A and B: The 652A and B spring holder tools are used to engage the movable springs during removal of the cards from the AJ200- and AJ700-type relays.
  - (a) **652A:** The 652A tool (Fig. 4) is used for holding movable springs in positions 19 to 24.

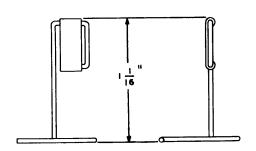


Fig. 4—652A Spring Holder Tool

(b) **652B**: The 652B tool (Fig. 5) is used for holding movable springs in positions 13 to 18.

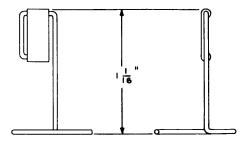


Fig. 5—652B Spring Holder Tool

- 2.03 653A and B: ♦The 653A and B scouring pad tool holders are rated Mfr Disc. with no replacement. ♦
- 2.04 675A and B: The 675A and B slotted spring holder tools are used for retaining the movable wire spring break contacts when replacing the cards of AK-type relays.
  - (a) **675A:** The 675A tool (Fig. 6) is used to engage springs in positions 8 through 12.

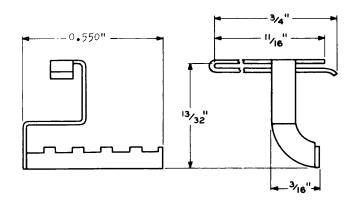


Fig. 6-675A Slotted Sping Holder Tool

(b) **675B:** The 675B tool (Fig. 7) is used to engage springs in positions 1 through 5.

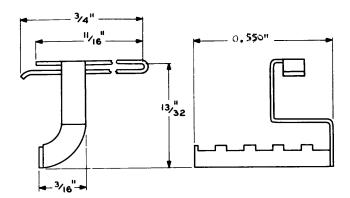


Fig. 7—675B Slotted Spring Holder Tool

- 2.05 688A and B: The 688A and B spring holder tools are slotted to engage the movable make contact springs of the AK-type relays. The 688A and B tools are used with the 675A and B tools in guiding the movable make springs when replacing cards on AK-type relays.
  - (a) **688A:** The 688A tool (Fig. 8) is used to engage springs in positions 8 through 12.

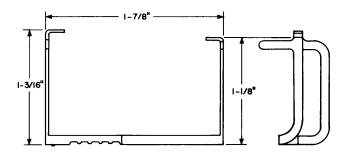


Fig. 8-688A Spring Holder Tool

(b) **688B**: The 688B tool (Fig. 9) is used to engage springs in positions 1 through 5.

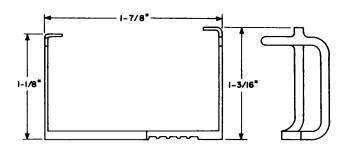


Fig. 9-688B Metal Spring Holder Tool

2.06 689A: The 689A spring holder tool (Fig. 10) is used on the left row of movable contact springs when replacing stationary contacts of 286-, 287-, and 288-type relays.

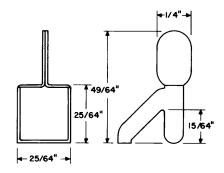


Fig. 10-689A Spring Holder Tool

2.07 698A: The 698A multiple strip holder tool (Fig. 11) consists of a pair of metal prongs inserted in a handle of insulating material. The 698A tool is used in supporting the front multiple contact strip on vertical units of the 324-, 325-, and 328-type switches.

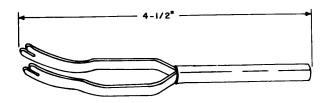
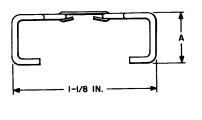


Fig. 11—698A Multiple Strip Holder Tool

2.08 749A and B: The 749A and B balancing spring holder tools (Fig. 12) consist of a formed metal wire holder held rigidly by a metal plate used as a finger grip.



CODE	DIM. A
749A	0.392 IN.
749B	0.986 IN.

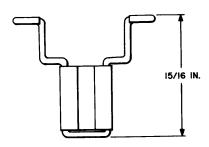


Fig. 12—749A or B Balancing Spring Holder Tool

- (a) **749A:** The 749A tool is used for holding the balancing springs during removal of the card from BF-, BG-, and BL-type relays.
- (b) **749B**: The 749B tool is used for holding the balancing springs during removal of the card from BJ-type relays.
- 2.09 788K1: The 788K1 conductor holder tool (Fig. 13) is a single piece of molded plastic with a flat handle and a head configured to hold up to ten conductors and leave the block accessible for removal. The 788K1 tool is used to hold conductors in place on an 88-type wiring block during the removal of an 88-type connector block from the 88-type connector system.

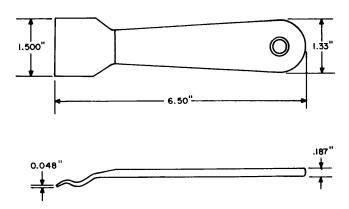


Fig. 13—788K1 Conductor Holder Tool

2.10 R-2598: ♦The R-2598 brush holder tool is rated Mfr Disc. with no replacement. •

2.11 AT-8923: The B test set holder tool (Fig. 14) fits on the B pouch belt and is for holding a telephone handset and the 188A test set voltage probe.

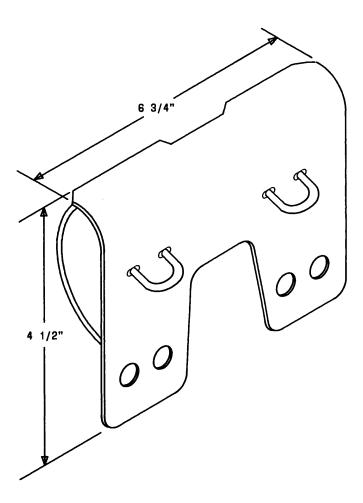


Fig. 14—AT-8923 B Test Set Holder Tool

2.12 KS-16913, L1: The KS-16913, L1, holder tool is rated Mfr Disc. with no replacement.

2.13 KS-20545, L1: The KS-20545, L1, holder tool (Fig. 15) is a molded plastic rod, tapered and slotted at one end to form jaws for retaining a strip of KS-7187 cleaning paper (must be ordered separately). A snap ring on the opposite end of the rod captivates a sliding metal sleeve that operates the opening and closing of the jaws. The KS-20545, L1, holder tool is used in cleaning contacts of wire spring relays and crossbar switches.

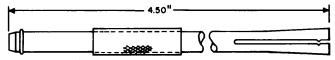


Fig. 15—KS-20545, L1, Holder Tool

2.14 Apco-Mossberg Co. No. 825: The 825 holder tool (Fig. 16) is used with 1/4-inch square drive supplied with Apco-Mossberg Company B50 torque screwdriver.



Fig. 16—Apco-Mossberg Co. No. 825 Holder Tool