

KEYS
STROMBERG-CARLSON 307, 311, 319 AND 320 TYPES
REQUIREMENTS
(CONDENSED SECTION FOR 032-790-701 AND 032-790-702)

1. REQUIREMENTS (Also See Section 020-012-711)

NO. 307 TYPE KEYS

- 1.01 Cam Movement** — Not bind.
- 1.02 Relation of Plunger Springs to Rollers** — Clearance between rollers and springs in normal position of lever.
- 1.03 Contact Separation** — .013" (Readj. .015"), except make-before-make springs .008" (Readj. .010").
- 1.04 Spring Clearance** — .010" (Readj. .012").
- 1.05 Contact Pressure** — 50 grams (Readj. 55 grams). 68B gauge.
Exception: Plunger springs 350 grams.
- 1.06 Contact Follow** — .013" (Readj. .015") except heavy spring of make-before-break combination.
- 1.07 Contact Sequence** — .004" (Readj. .005") between making of open contacts and opening of closed contacts, lever toward locking position or between breaking of closed contacts and making of open contacts, lever toward non-locking position.
- 1.08 Lever Release** — 50 grams (Readj. 55 grams). 68B gauge.

NO. 311 TYPE KEY

- 1.09 Cam Movement** — Not bind.
- 1.10 Relation of Plunger Springs to Rollers**
- (a) Plunger springs of locking combinations rest against rollers. Buffer spring hold lever vertical.
 - (b) .020" between roller and plunger springs of non-locking combinations.
- 1.11 Relation of Buffer Spring to Key Frame** — Spring shall not touch key frame.

- 1.12 Contact Separation** — .010" except between plunger springs and normally open contacts of non-locking combinations .040".

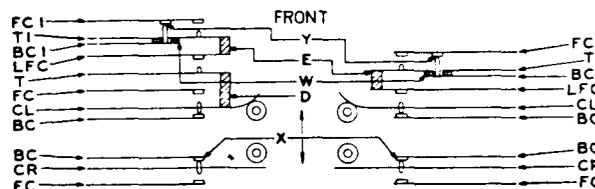


Fig. 1 - 311 Type Key Spring Arrangement

- 1.13 Spring Clearance** — .010" (Readj. .012").
- 1.14 Contact Pressure** — 50 grams (Readj. 55 grams). 68B gauge.
Exception: Fig. 1 — Plunger springs (CR) approximately 850 grams. Plunger springs (CL) approximately 575 grams. Spring (T) shall hold stud "D" against spring (CL). Springs (LFC) and (TI) tensioned against stud "E" so that washer "W" is against spring (BC1) and there is .040" separation between contacts on (LFC) and contact on adjacent facing spring. Spring (FC1) approximately 225 grams against long contact of (BC1).
- 1.15 Contact Follow** — .018" (Readj. .020") for back contact on non-locking side. .008" (Readj. .010") for front contact at plunger spring on locking side.
- 1.16 Contact Sequence** — .004" (Readj. .005") between making of open contacts and opening of closed contacts, lever toward locking position or between breaking of closed contacts and making of open contacts, lever toward non-locking position.
- 1.17 Lever Release** — 50 grams (Readj. 55 grams). 68B gauge.

1.18 *Non-Click* — Fig. 1 — Lever release shall not open "X" or "Y" contacts.

NO. 319 TYPE KEY

1.19 *Cam Movement* — Not bind.

1.20 *Relation of Plunger Springs to Rollers*

(a) Plunger springs of locking combinations rest against rollers. Buffer spring hold lever vertical.

(b) Locking plunger springs approximately 735 grams. Non-locking plunger springs approximately 145 grams.

1.21 *Relation of Buffer Spring to Key Frame*— Spring shall not touch sides of key frame and meet rollers as in Fig. 2.

1.22 *Contact Separation* — .012" (Readj. .015") except contacts at "Y" Fig. 3, approximately .030".

1.23 *Spring Clearance* — .012" (Readj. .015"). .040" between non-locking plunger springs and rubber separators on traveling springs. .010" between right-hand (FC) spring and separator on (T-1) spring of Fig. 2.

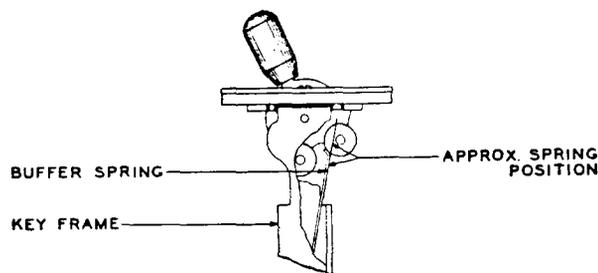


Fig. 2 — Buffer Spring Position

1.24 *Contact Pressure* — 50 grams (Readj. 55 grams). 68B gauge.

Exception: Fig. 3 — Approximately 225 grams at contact "X" with lever normal.

1.25 *Contact Follow* — .008" (Readj. .010").

1.26 *Contact Sequence*—Fig. 3—.005" (Readj. .006") between make of "Y" and break of "X," between break of "X" and make of "Z" and between make of "W" and make of "Z" contacts, lever toward locking position. Also, be-

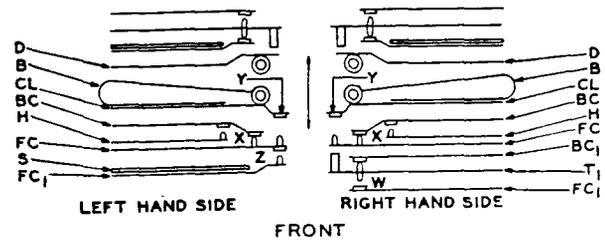


Fig. 3 — 319 Type Key Spring Arrangement

tween break of closed contacts and make of open contacts, lever toward non-locking position.

1.27 *Lever Release* — 50 grams (Readj. 55 grams). 68B gauge.

1.28 *Non-Click* — Fig. 3 — Lever release from operated position shall not open normally closed contacts of opposite side or "X" contacts of same side.

NO. 320 TYPE KEY

1.29 *Cam Movement* — Not bind.

1.30 *Relation of Plunger Springs to Rollers* — Clearance between rollers and springs in normal position of lever.

1.31 *Contact Separation*—.013" (Readj. .015"), except make-before-make springs .008" (Readj. .010").

1.32 *Spring Clearance* — .010" (Readj. .012").

1.33 *Contact Pressure* — 50 grams (Readj. 55 grams). 68B gauge.

Exception: Plunger springs approximately 350 grams.

1.34 *Contact Follow*—.013" (Readj. .015"), except heavy spring of make-before-break combination.

1.35 *Contact Sequence* — .004" (Readj. .005") between making of open contacts and opening of closed contacts, lever toward locking position or between breaking of closed contacts and making of open contacts, lever toward non-locking position.

1.36 *Lever Release* — 50 grams (Readj. 55 grams). 68B gauge.