

INSTRUCTIONS FOR INSTALLING AND ADJUSTING
THE 112008 MODIFICATION KIT TO PROVIDE
RAPID FEED-OUT OF TAPE ON PERFORATOR-TRANSMITTER

OCT 15 1953

1. GENERAL

a. The 112008 modification kit provides a keyboard perforator-transmitter with a repeat feature which permits rapidly-repeated perforation of characters in the tape, when a "Tape" key lever and any other key lever are simultaneously depressed.

b. The 112008 modification kit consists of the following:

| | | |
|---|-------------------|----------------------------------|
| 1 | 125124 | Screw |
| 1 | 110435 | Nut |
| 1 | 1025 | Stud, Eccentric |
| 2 | 1026 | Screw |
| 1 | 1051 | Screw |
| 1 | 1176 | Screw |
| 4 | 2191 | Washer, Lock |
| 1 | 3598 | Nut |
| 1 | 3599 | Nut |
| 2 | 3606 | Nut |
| 2 | 3640 | Washer, Lock |
| 1 | 2605 | Spring |
| 1 | 13681 | Spacer |
| 1 | 73276 | Screw |
| 2 | 80342 | Screw |
| 7 | 82249 | Shim |
| 1 | 85932 | Keytop |
| 1 | 97393 | Screw |
| 1 | 100106 | Screw |
| 1 | 109152 | Screw |
| 1 | 112009 | Bracket |
| 1 | 112011 | Extension, Keylever |
| 1 | 112012 | Key Lever Assembly including: |
| 1 | 72539 | Disc |
| 1 | 112069 | Cable |
| 1 | 112105 | Guard, Contact |
| 1 | 112106 | Spacer |
| 1 | 112108 | Bracket |
| 1 | 112116 | Lever, Detent |
| 1 | 112117 | Lever |
| 1 | 112118 | Plate |
| 1 | 112503 | Contact Assembly consisting of: |
| 2 | 1051 | Screw |
| 1 | 41732 | Plate |
| 3 | 41733 | Insulator, Bakelite |
| 2 | 81726 | Terminal |
| 1 | 82547 | Insulator, Bakelite |
| 1 | 86955 | Spring Assembly, Contact (Short) |
| 2 | 86959 | Bushing, Bakelite |
| 1 | 112010 | Bracket |
| 1 | 112505 | Spring Assembly, Contact (Long) |

1—112504 Contact Assembly consisting of:

| | | |
|---|--------|----------------------------------|
| 2 | 1051 | Screw |
| 1 | 41732 | Plate |
| 4 | 41733 | Insulator, Bakelite |
| 2 | 76790 | Bushing, Bakelite |
| 2 | 80334 | Terminal |
| 1 | 100419 | Stiffener |
| 1 | 112013 | Bracket |
| 1 | 112111 | Spring Assembly, Contact (Long) |
| 1 | 112112 | Spring Assembly, Contact (Short) |

c. For part numbers referred to in this specification but not included in the foregoing list refer to Teletype Parts Bulletin.

2. INSTALLATION

a. On units equipped with the positive action perforating feature (which may be identified by the shape of the 102885 latch bracket illustrated in Figure 1), remove and discard the rear screw in the position identified by the letter "X" but retain the lock washer. Mount the 112504 contact assembly as shown in Figure 1, using the 1026 screw furnished and the lock washer formerly removed.

b. On units having a 91555 punch contact bracket as illustrated in Figure 2, remove the two bracket mounting screws, washers and lock washers. Place the 112106 spacer on top of the 91555 bracket so that the stud in the spacer is uppermost and to the rear. Place the 112504 contact assembly on top of the 112106 spacer so that the stud in the spacer enters the rearmost hole in the 112504 contact assembly. Fasten the parts to the perforator casting using the two screws and lock washers formerly removed, but discard one of the washers.

c. On units equipped with the mechanism shown in Figure 1, remove and discard the 102893 spring plate and the 1159 rear mounting screw for the 99987 retaining bracket but retain the spring, nuts, washers, and lock washers. Mount the 112118 plate as shown in Figure 1, using the parts formerly removed and the 1051 screw and 82249 shims furnished.

Note: In order to facilitate mounting the 112118 spring plate it may be necessary to remove the No. 1269 screw on the No. 91544 spring adjusting lever and the No. 102889 screw on the anti-chatter lever. Replace the above parts after mounting the 112118 spring plate.

d. On units equipped with the mechanism shown in Figure 2, remove and discard the 1159 rear mounting screw for the 99987 retaining bracket but retain the washer and lock washer. Mount the 112118 plate, as shown in Figure 2, using the 1051 screw and 82249 shims furnished and the 3598 nut and 2191 lock washer used to secure the 81564 anti-chatter lever adjusting screw.

e. Mount the 112117 lever and the 112116 detent lever on the 112013 bracket using the mounting parts furnished, as shown in Figure 3, and install the 2605 spring.

f. On units equipped with the 92225 filter for the punch magnet contacts, replace the 91733 filter bracket with the 112108 bracket furnished.

g. As indicated on Figure 9, drill a 5/16" hole in the condenser retaining plate

(situated on the top side of the keyboard directly beneath the key levers) near its left end. Remove burrs from the edges of the hole.

h. Remove and discard the two No. 6746 screws on the left hand side of the 83302 front keylever guide but retain the 2191 lockwashers. Mount the 112009 bracket, 112012 key lever assembly, 112011 key lever extension, 85932 keytop, and 1025 eccentric stud as shown in Figure 4, using the screws, nuts, and lock washers furnished as indicated and the lockwashers formerly removed.

i. Remove and discard the 89354 cable strap from the under side of the keyboard casting at the left and substitute the 112503 contact assembly, mounting it with the screws just removed. Also mount the 112105 contact guard as shown, using the screws furnished. (See Figure 4.)

j. Install the 112069 cable (starting with the two-wire end) from the contact terminals, under the keyboard and across the underside of the 83370 extension casting; follow the cable already installed and utilize the existing cable clamps.

k. Wire in accordance with Figure 10 when a universal bar contact filter is present and in accordance with Figure 11 when no universal bar contact filter is used.

3. ADJUSTMENTS

NOTE

When installing this set of parts in a machine that has been in service, the 89499 selector finger guide and the 81593 armature shaft should be checked for excessive wear and worn parts should be replaced.

a. Make the following standard adjustments in accordance with Bulletin 148:

- (1) Selector Finger Retainer Adjustment
- (2) Punch Contact Bracket Adjustment
- (3) Punch Contact Adjustments
- (4) Anti-Chatter Mechanism Adjustments

b. The repeat mechanism should be adjusted as follows:

- (1) Repeat Contact Bracket Adjustment (Figure 5)

There should be some clearance, not less than .002", between the rear edge of the plate on the armature and the adjacent vertical edge of the forward cut-out in the 112117 lever when the parts are so positioned that the clearance between them is a minimum. To adjust, utilize the play of the contact bracket on its mounting screws.

- (2) Detent Lever Eccentric Screw Adjustment (Figure 6)

With the armature in its unoperated position and the 112117 lever

held against the top of the plate, the detent point of the 112117 lever should be approximately as far below the apex of the detent lever as it is above the apex of the detent lever when the armature is in its operated position and the 112117 lever is held against the bottom of the plate. To adjust, position the detent lever eccentric screw, utilizing the forward semicircle of adjustment.

(3) Detent Lever Spring Tension (Figure 6)

With the armature in the unoperated position and the 112117 lever held against the top of the plate, hook an 8 oz. scale over the top of the detent lever and pull horizontally rearward. It should require 3 to 4 ozs. to move the detent lever away from the 112117 lever.

(4) Repeat Contact Adjustments - Perforator

(a) The contact points should be in line and there should be .015" to .045" clearance between the insulator on the long contact spring and the bottom of the upper cut-out in the 112117 lever (Figure 5.) To adjust, position the contact pileup by means of the clamping screws. Recheck standard adjustment: Punch contact operating lever backstop adjustment.

(b) With the long contact spring held away from the short contact spring, hook an 8 oz. scale over the end of the short contact spring and pull horizontally rearward. It should require 6 to 8 ozs. to separate the contact spring from the end of the stiffener (Figure 6). To adjust, bend the short contact spring.

(c) Unhook the detent lever spring from the detent lever. When the armature is held partially operated so that neither lobe of the 112117 lever is touching the plate, the contact points should meet squarely and it should require 1 to 2 ozs. to separate the points when the push end of an 8 oz. scale is applied to the long contact spring between the rivets (Figure 5). To adjust, bend the long contact spring.

(d) With the armature held in the operated position by energizing the magnets, there should be a clearance of .020" to .025" between the contacts (Figure 6). To adjust, bend the stiffener. Recheck adjustments (b) and (c). Rehook the detent lever spring.

(5) Repeat Contact Adjustments - Keyboard

(a) With the "Tape" key lever completely depressed and the long contact spring in contact with the bottom of the key lever extension, there should be a clearance of .020" to .040" between contacts (Figure 7). To adjust, bend the short contact spring.

(b) With the keyboard in a vertical position resting on its rear edge and the keyboard repeat contacts touching each other, hook an 8 oz. scale over the long contact spring just above the contact and pull horizontally at a right angle to the contact spring (Figure 8). It should require 2-1/2 to 3-1/2 ozs. to separate the contacts. To adjust, bend the long contact spring.

(6) Tape Key Lever Eccentric Stud Adjustment

With the contacts closed and the "Tape" key lever held against its

eccentric stud, there should be a clearance of .010" to .030" between the key lever extension and the insulator on the long contact spring (Figure 8). To adjust, position the eccentric stud and tighten the lock nut.

4. LUBRICATION

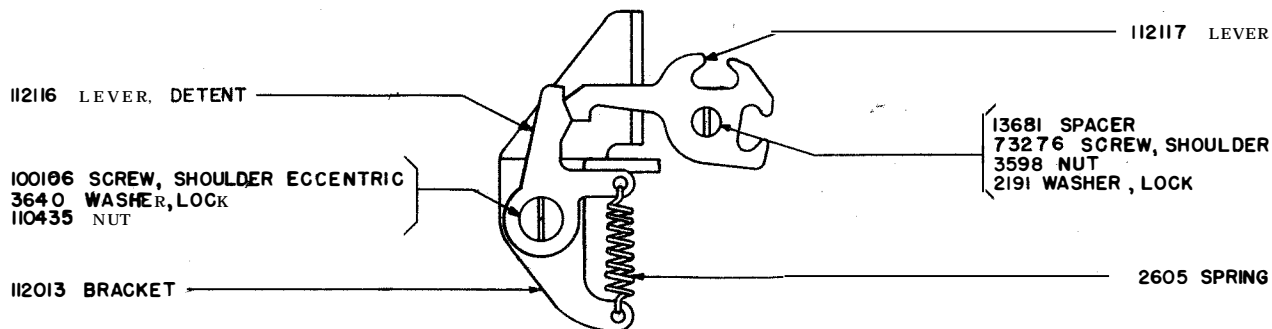
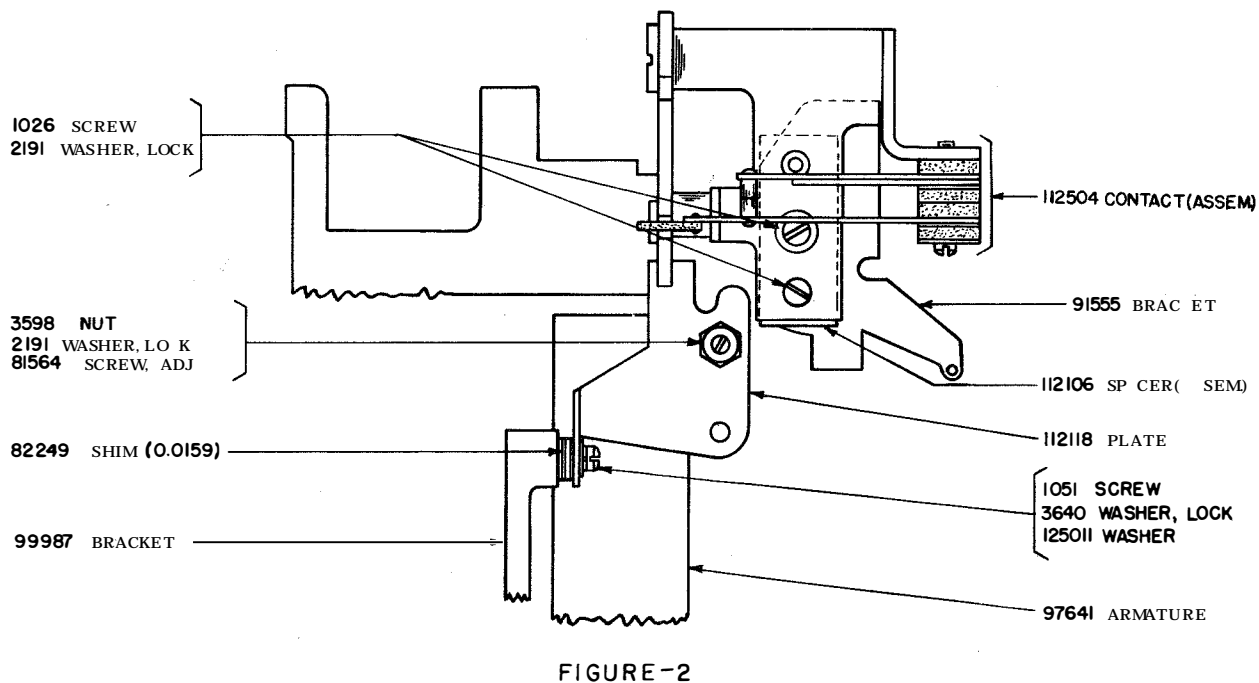
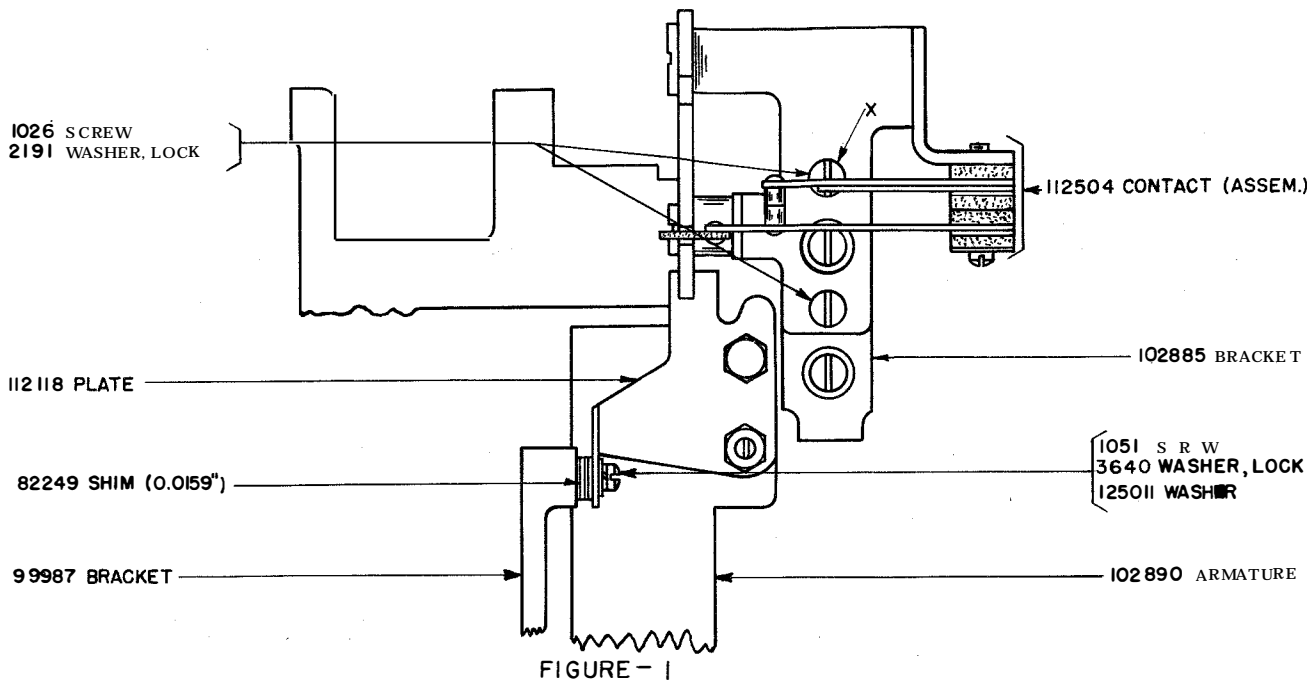
a. Apply one drop of oil at each of the following locations:

- (1) 112011 key lever extension and 112012 key lever assembly - at bearings.
- (2) 112116 detent lever and 112117 lever - at bearings.
- (3) At spring eyes.

b. Apply thin film of grease at each of the following locations:

- (1) 112116 detent lever - at apex.
- (2) 112117 lever - at four lobes and apex.
- (3) 112011 key lever extension - at working edges.

* * *



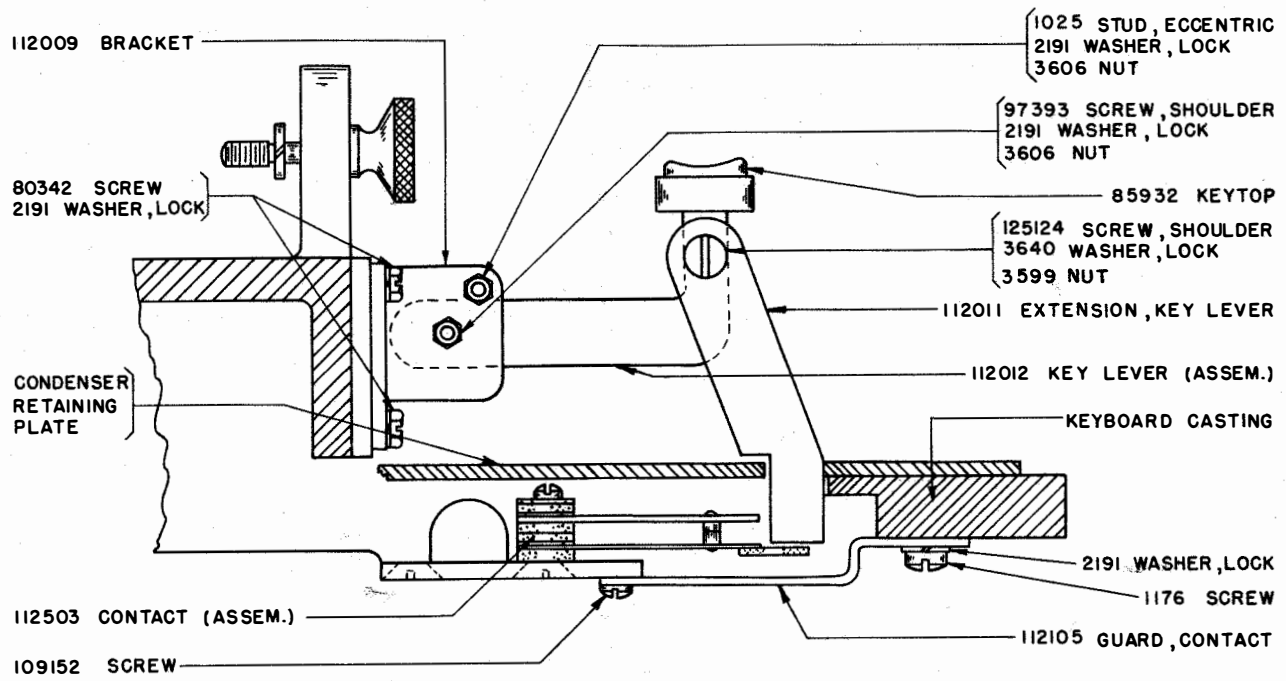


FIGURE - 4

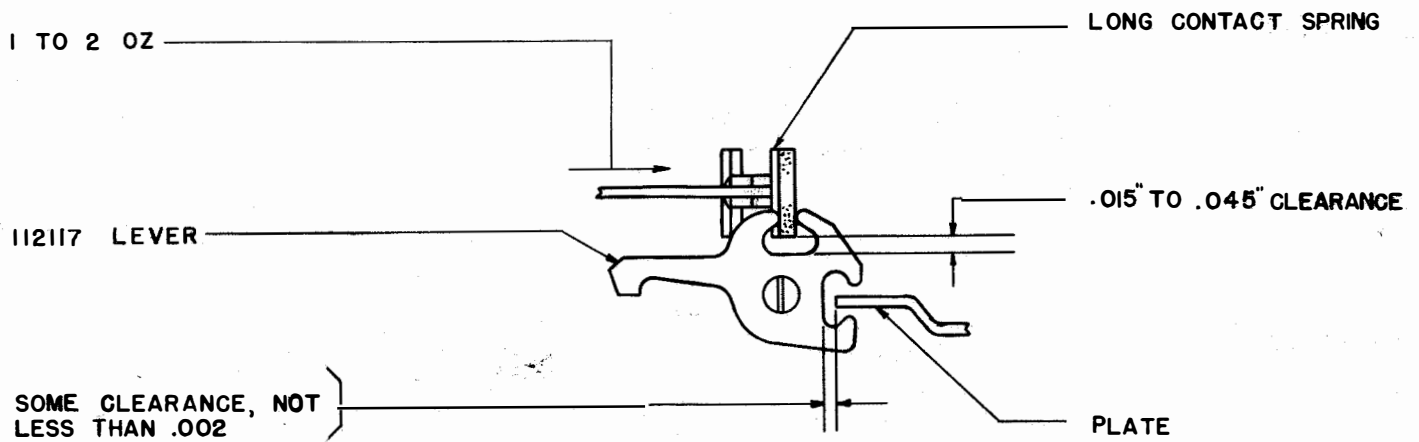


FIGURE 5

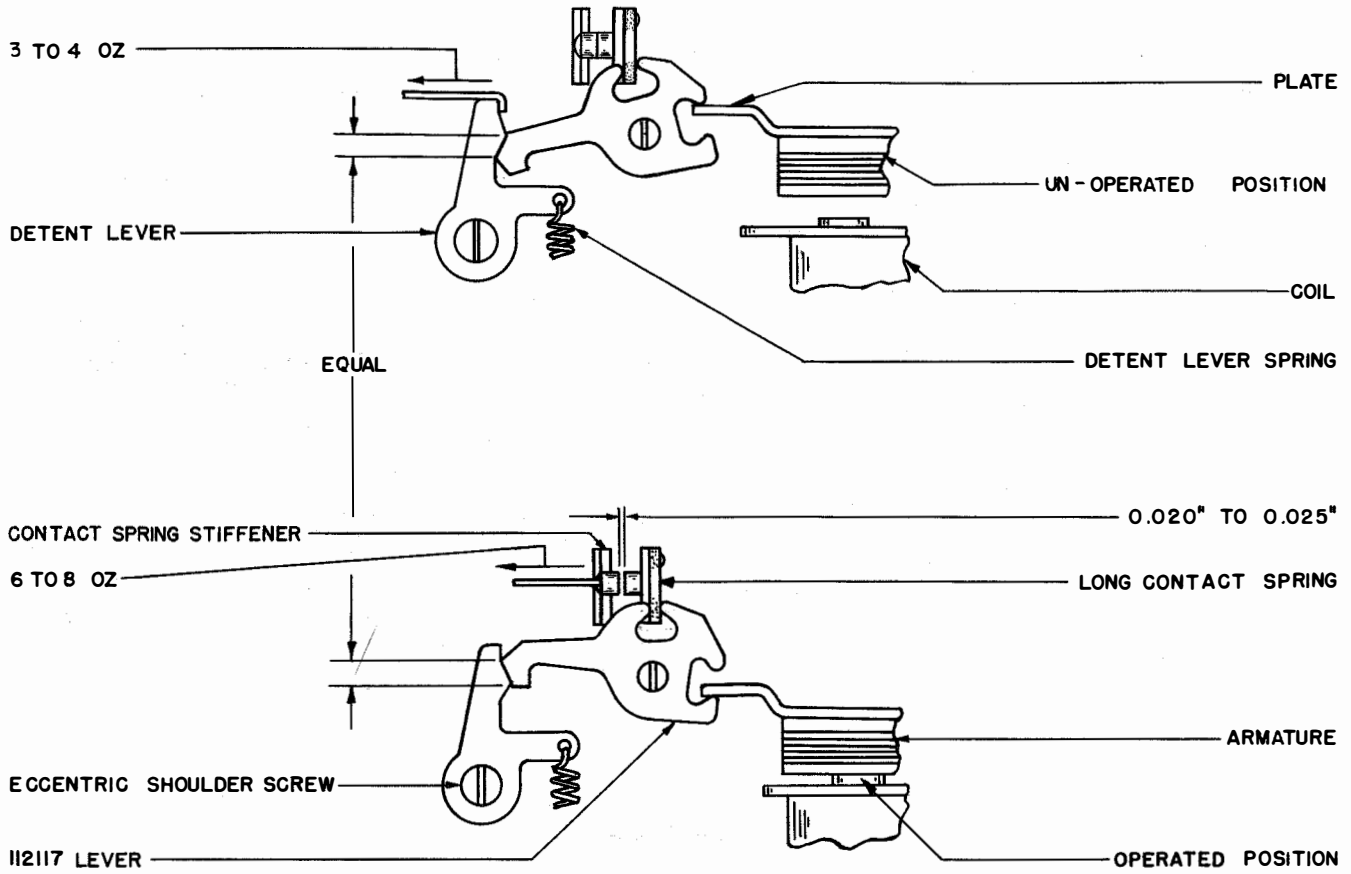


FIGURE - 6

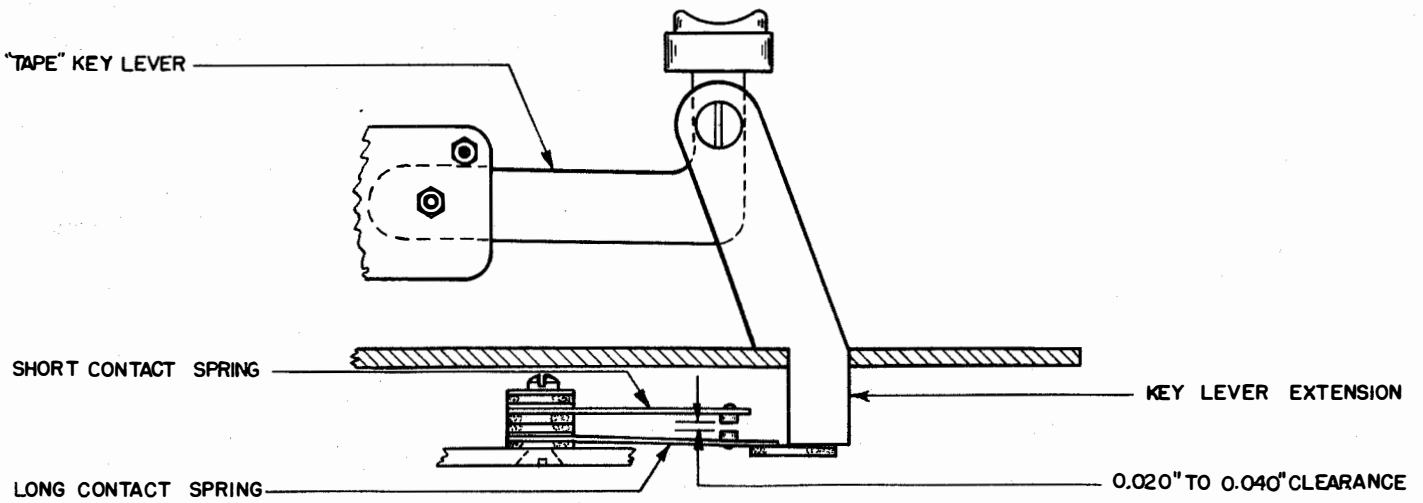


FIGURE - 7

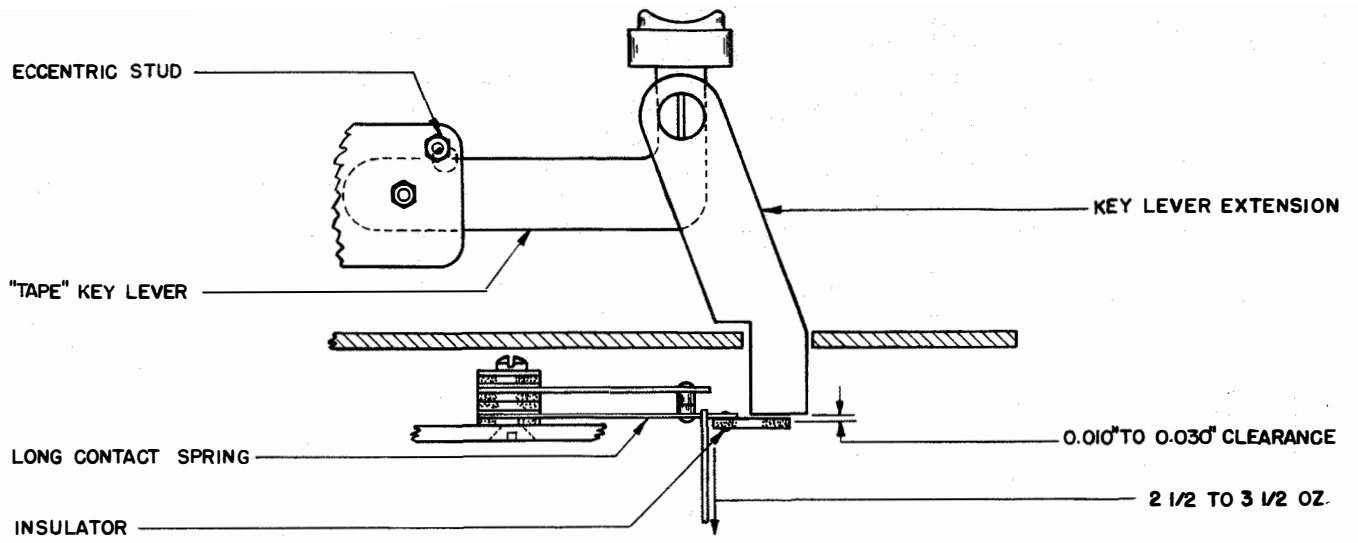


FIGURE - 8

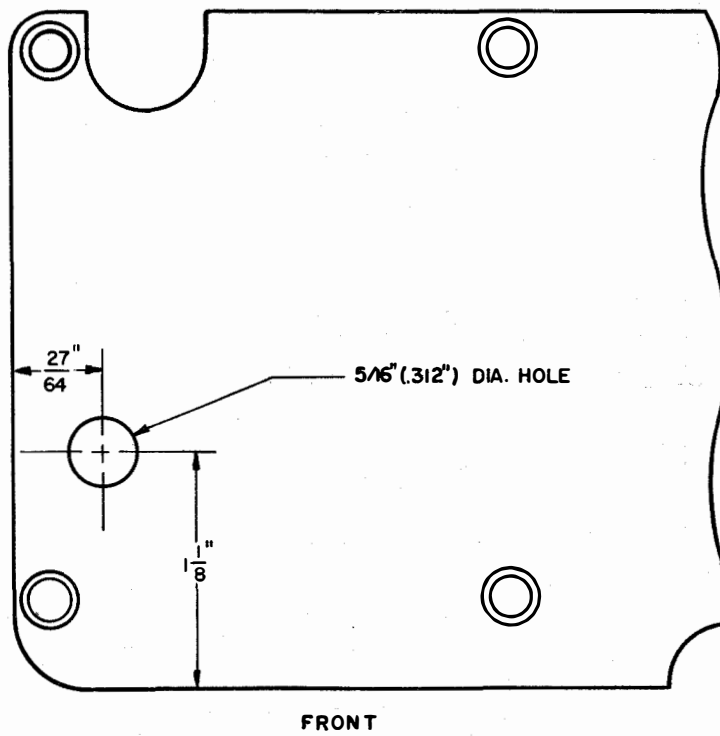
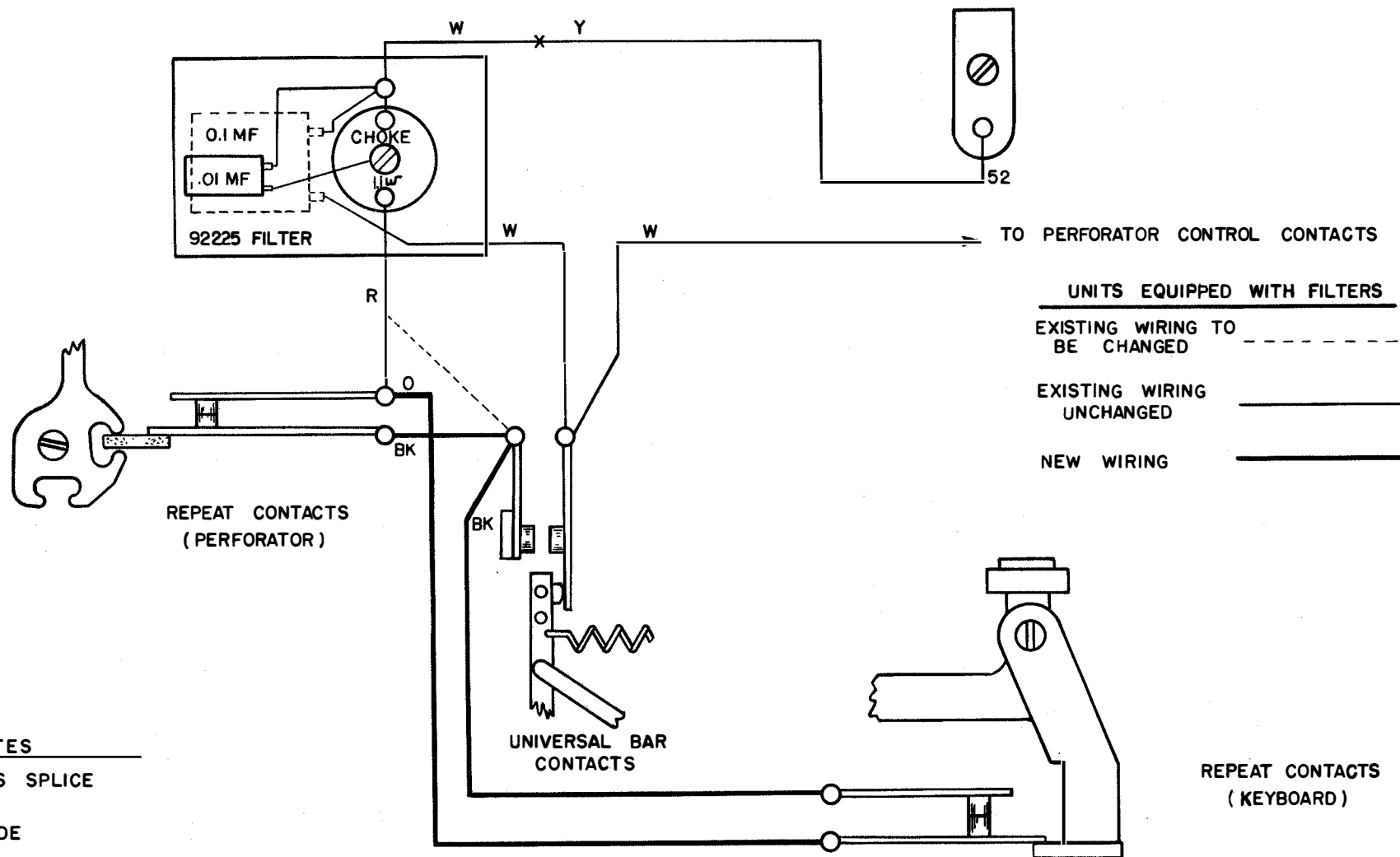


FIGURE - 9



NOTES

1. X- DENOTES SPLICE
2. COLOR CODE
 R- RED
 W- WHITE
 Y- YELLOW
 O- ORANGE

FIGURE - 10

- NOTES**
- I. COLOR CODE
 BK - BLACK
 BR - BROWN
 W - WHITE
 O - ORANGE

