JACKS
444 TYPE
REQUIREMENTS AND ADJUSTING PROCEDURES

1. GENERAL

1.01 This section covers the 444-type jacks.

1.02 This section is reissued to add a requirement for contact alignment and to revise the tool list.

1.03 Reference shall be made to Section 020-010-711 covering general requirements and definitions for additional information necessary for the proper application of the requirements listed herein.

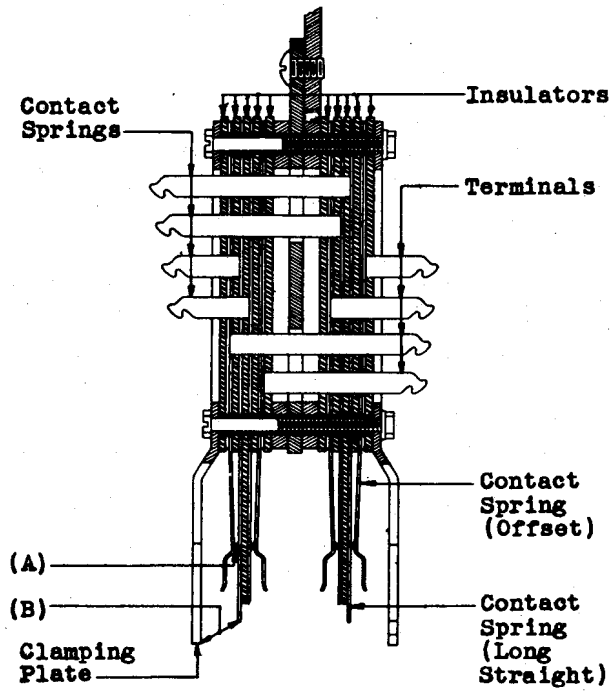

Fig. 1 — Illustrating Cross-Section of 444 Type Jacks

2. REQUIREMENTS

2.01 ***Contact Pressure*** — Fig. 1 (A): There shall be a pressure between all closed contacts of

Test — Min 30 grams
Readjust — Min 40 grams

Use the No. 70D gauge.

This pressure shall be measured as near the free end of the offset contact spring as possible.

2.02 ***Relation Between Contact Springs and Clamping Plates*** — Fig. 1 (B): With the No. 301A test plug or its equivalent inserted over the long straight contact springs and the associated clamping plate, the contacts shall open.

2.03 ***Contact Alignment*** — Fig. 2 (A): The contacts shall line up so that the width of the contact surface of each contact bar falls wholly within the length of its mating bar. Gauge by eye.

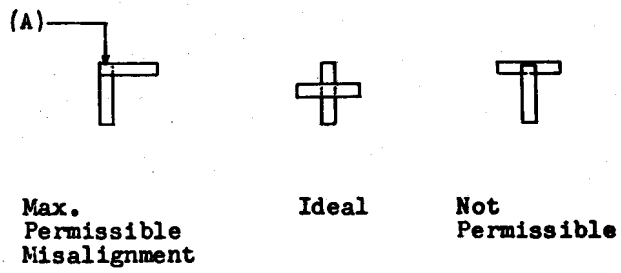

Fig. 2 — Alignment of Contacts — Plan View of Contact Surfaces

2.04 ***Cleaning:*** Contacts shall be cleaned, when necessary, in accordance with approved procedures.

3. ADJUSTING PROCEDURES

3.001 *List of Tools, Gauges and Test Apparatus*

CODE OR SPEC NO.	DESCRIPTION
TOOLS	
D-157398	Spring Adjuster
32 (2 required)	1/4" Hex. Single End Socket Wrench
—	6-1/2" P-Long-Nose Pliers
GAUGES	
70D	50-0-50 Gram Gauge
TEST APPARATUS	
301A	Test Plug

3.01 *Contact Pressure* (Reqt 2.01)

(1) If the pressure between contacts is not satisfactory, place the D-157398 spring adjuster on the offset contact spring just behind the contact and slide it back to where the spring leaves the insulators. Adjust the spring to the right or left as required. Exercise care not to touch the springs above or below the spring being adjusted. A gradual bow not exceeding the thickness of the spring over its entire length is permissible.

(2) If the desired pressure cannot be obtained as described above, place the spring adjuster on the spring just back of the contact and slide it back to where the spring leaves the insulators. Draw the spring adjuster forward the length of the spring meanwhile applying pressure as required so that the spring is formed into a slight gradual bow with the concave surface facing the associated spring. The magnitude of the bow to be formed in the spring must be learned by experience. It should be such that when the final tension adjustment is made at the base, the spring will be approximately straight. Move the adjuster to the base of the spring and adjust as described in (1).

3.02 *Relation Between Contact Springs and Clamping Plates* (Reqt 2.02)

(1) If the contacts do not open when the No. 301A test plug or its equivalent is inserted over the clamping plate and contact spring, the trouble may be due to the end of the offset portion of the contact spring or to the prong of the clamping plate being deformed. To correct, adjust the offset portion of the contact spring as required with the D-157398 spring adjuster or adjust the clamping plate at fault with the long-nose pliers. After making the necessary adjustments, check the contact pressure, and if necessary, adjust as described in 3.01.

3.03 *Contact Alignment* (Reqt 2.03)

(1) If the contacts do not line up loosen the four clamping plate mounting nuts with the two No. 32 wrenches applying one wrench to the head of a clamping screw and the other wrench to the associated mounting nut. Shift the springs to align the contacts as required and tighten the clamping plate mounting nuts.

3.04 *Cleaning* (Reqt 2.04)

(1) Clean the contacts in accordance with approved procedures.