M-TYPE RELAYS
REQUIREMENTS
(CONDENSED SECTION FOR 040-516-701)

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

1.01 ***Spring Tang Position:*** Overlap spoolhead 1/32 inch but do not rub on spoolhead when spring is moved.

1.02 ***Adjusting Stud Clearance:*** Fig. 101(A)— Armature shall clear stud.

1.03 ***Armature Stud Clearance:*** Stud shall clear springs through which it passes. ←

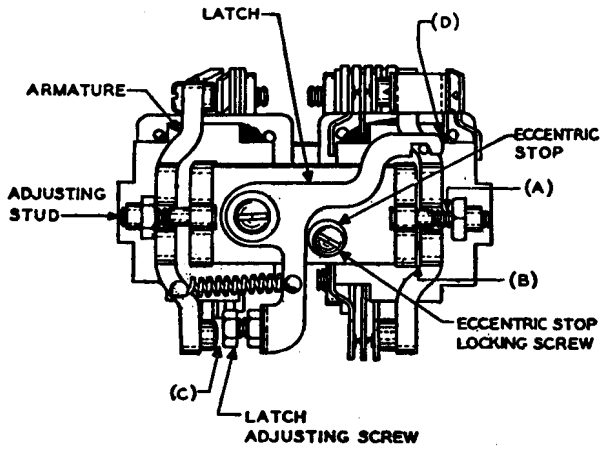


Fig. 101 – M-type Relay

1.04 ***Armature Travel:*** Meet requirements on circuit requirements table. Tolerance shall be

Test	— +0.005 inch,	−0.0025 inch
Readjust	— +0.0025 inch,	−0.0025 inch

Use the No. 66D gauge. ←

1.05 ***Operated Armature Airgap:*** Fig. 101(B) — Max 0.005 inch with armature locked operated.

Use the No. 66D gauge.

1.06 ***Latch and Armature Stud Gap:*** Fig. 101C — Max 0.010 inch between latch adjusting screw and armature stud with restoring unit unoperated and operating unit locked operated.

Use the No. 66D gauge. ←

1.07 ***Latch and Contact Spring Clearance:*** Fig. 101(D) — 0.005 inch between top of latch and nearest contact spring with latch pressing against eccentric stop.

1.08 ***Contact Pressure:*** As indicated in Cont. Press. and Fig. No. columns of circuit requirements table. For figures covered by Fig. No. column, see Figs. 4, 36, and 44.

Use the No. 70D gauge.

1.09 ***Stud Gap:*** Slight clearance at point designated S in Fig. 44.

Exception: Requirement is met for springs with 25 grams pressure or more (to meet nonoperate requirement) regardless of minimum tension specified if contacts do not break with 0.003-inch gauge (Readjust — 0.005 inch) between adjusting nut and armature.

Use the No. 66D gauge.

1.10 ***Contact Separation:*** 0.005 inch.

Use the No. 74D gauge.

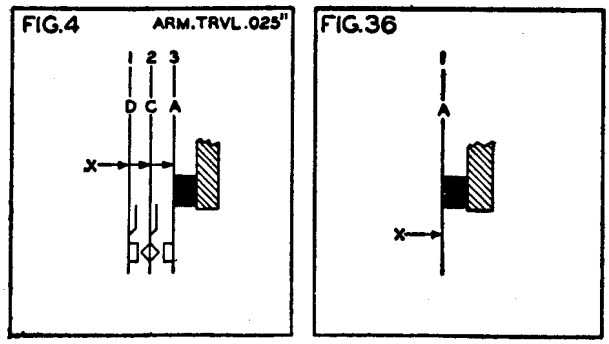
1.11 ***Contact Follow:*** 0.010 inch (Readjust — 0.012 inch) for make contacts. Requirement is met if contacts make with 0.008-inch gauge (Readjust — 0.010 inch) inserted between stop pins and core.

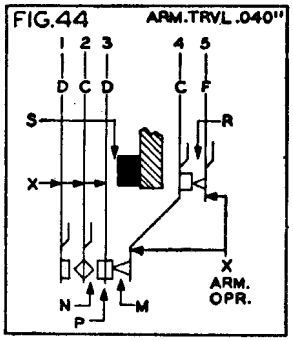
Use the No. 66D gauge.

1.12 ***Spring Sequence:*** Meet sequence requirement covered by Fig. 44 or on circuit requirements table.

1.13 ***Latch Spring Tension:*** 10 grams at head ← of latch adjusting screw with armature of operating unit held against core.

Use the No. 70F gauge.





CONT. PRESS.		SPRING DESIGNATIONS		
		C	D	F
L OR 10	T	5	8	25
	R	6	9	27
H OR 20	T	5	15	25
	R	6	17	27

Explanation of Designations Used in Figs. 4, 36, and 44.

A = Hold armature against adj nut.

M and N = M shall break before N makes.

S = Slight clearance (1.09).

X = Arrows indicate direction of Tension.

Y = Spoolhead springs.