DESCRIPTION INSTALLATION

INSTRUCTIONS

DESIGN N
ELECTRICAL INTERLOCKS
TYPES L50, L51, L52

TYPES L50, L51, AND L52 INTERLOCKS are designed for use on the Type N Size 0, 1, and 2 contactors and starters respectively. Each complete interlock consists of two basic parts; (1) the ***interchangeable*** interlock unit without operating arm and (2) the operating arm which is ***different*** with each contactor size (See Fig. 4).

These interlocks are applied principally in A-C Control and relaying circuits not exceeding 5 amperes, 600 volts. The D-C rating of the interlocks is 50 volt-amperes with a maximum current of 1 ampere.

Standard contactors and starters come equipped with a ***standard*** normally open interlock mounted on the left hand side. If a ***second*** interlock is desired, use an additional ***standard*** interlock on the right side of the contactor or starter (See Fig. 1, R.H. Assy.). The ***extra*** interlock is designed to meet the requirement of a ***third or fourth*** interlock as shown in Fig. 3.

Fig. 1 shows the 1st and 2nd interlocks assembled, using elastic stop nut item (9) and rubber nut retainers (26) placed in the slot on all contactors and linestarters assembled at the factory. Fig. 1 illustrates the use of nut (9) and retainer (26) as used on the Size 1 and 2, two and three pole units.

Fig. 2B illustrates the use of nut (9) and retainer (27) used on the Size 0. The rubber nut retainers (26) (27) and elastic stop nut (9) remain in place when removing or changing interlocks from make to break or vise versa from the front. Two rubber nut retainers (26) are furnished with each interlock package for the 1st and 2nd interlocks on the Size 1 and Size 2, 2 and 3 pole units, and only one rubber nut retainer item (27) is furnished for the Size 0 units.

For all 4 and 5 pole units, discard the rubber nut retainer items (26) (27) since the open hex slot is accessible for installing elastic stop nut item (9). Remove and discard the rubber nut retainers, items (26) (27) ,and elastic stop nut (9) when assembling 3rd or 4th electrical interlocks.

Knowing the starter or contactor size—additional interlocks may be ordered by style from Table No. 1.

INTERLOCK CONVERSION

Normally open standard and extra interlock units may readily be converted to give ***normally closed operation.*** This may be accomplished by reassembling parts (3), (4) and (6) in Fig. 1 as shown in Fig. 2. (To detach the smaller spring (6) from plunger (2) compress inturned end of spring against moving contact (3) and rotate spring). Replace springs in original positions, after reversing the movable contact bar, (and moving it to the other side of the plunger shoulder) and be sure the end of spring (6) is returned to the hole from which it was removed.

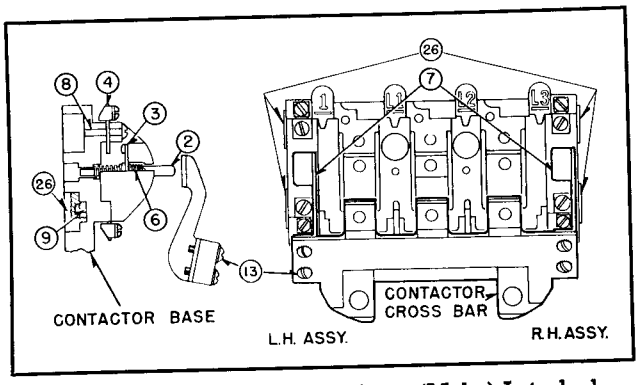

FIG. 1. Standard Normally Open (Make) Interlock

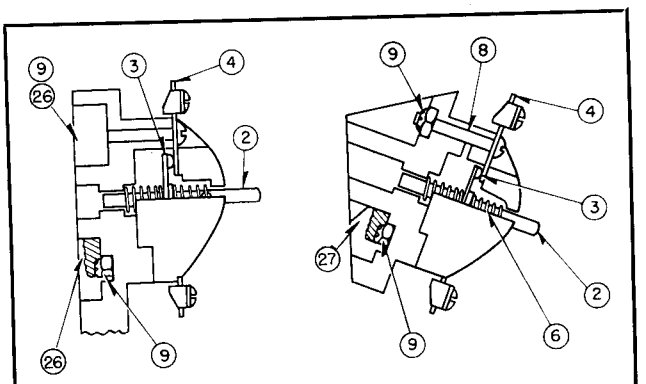

FIG. 2A FIG. 2B

FIG. 2. Standard Normally Closed (Break) Interlock

CONSTRUCTION

All contacts are made of fine silver and need no dressing throughout their life. The solid silver stationary contacts (4) may be inverted after lengthy service to provide a renewed contact surface. All current carrying parts are of high conductivity copper alloy.

Pressure type connectors permit the use of either solid or stranded wire without soldered joints or looped wire. The interlock plunger (2) is made of non-corrosive nickel-chrome steel assuring long trouble-free service.

Table No. 1. INTERLOCK STYLE NUMBER

INTERLOCK DESCRIPTION	STYLE NUMBER	TYPE	DESIGN N CONT. SIZE
Std. (second) Normally Open	453D976G01	L-50	0
Extra (3d or 4th) Normally Open	453D976G03	L-50	0
Std. (second) Normally Closed	453D976G02	L-50	0
Extra (3d or 4th) Normally Closed	453D976G04	L-50	0
Std. (second) Normally Open	453D976G05	L-51	1
Extra (3d or 4th) Normally Open	453D976G07	L-51	1
Std. (second) Normally Closed	453D976G06	L-51	1
Extra (3d or 4th) Normally Closed	453D976G08	L-51	1
Std. (second) Normally Open	453D976G09	L-52	2
Extra (3d or 4th) Normally Open	453D976G11	L-52	2
Std. (second) Normally Closed	453D976G10	L-52	2
Extra (3d or 4th) Normally Closed	453D976G12	L-52	2

INSTALLATION

Standard Interlocks 1. Remove and discard fiber strip supporting interlock unit.

2. Insert into base slot the respective rubber nut retainer items (26) or (27) complete with elastic stop nut (9).

3. Mount interlock unit (without operating arm) on the contactor base as shown in Fig. 1. Interlock mounting screws need not be tightened excessively, as Elastic Stop Nuts provide positive locking.

4. Attach operating arm (11) to contactor cross bar with screws (13) supplied with the interlock.

5. With contactor closed check 1/16 in. to 5/64 in. gap shown in Fig. 4. If adjustment is necessary adjust operating arm *only* in area indicated in Fig. 4.

Extra Interlocks 1. Loosen mounting screws (8), and discard nut (9) and retainer (26) or (27) from standard interlock.

2. Slip Moldarta sub-base (A), on which interlock unit is mounted into slots provided in contactor base and secure with screws (8) & lock washers (28) as shown in Fig. 3.

3. Remove screw assembly (13), Fig. 1, and mount operating arm supplied with interlock to Moldarta cross bar extension (15), Fig. 3.

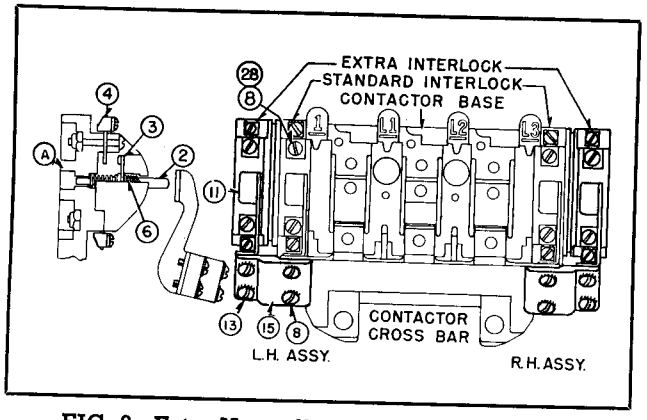

FIG. 3. Extra Normally Open (Make) Interlock

4. Attach cross bar extension (15) to the contactor cross bar with screws (8) and lockwashers (28) furnished with the interlock as shown in Fig. 3.

5. With contactor closed check 1/16 in. to 5/64 in. gap shown in Fig. 4. If adjustment is necessary adjust extra interlock operating arm *only* in area indicated in Fig. 4.

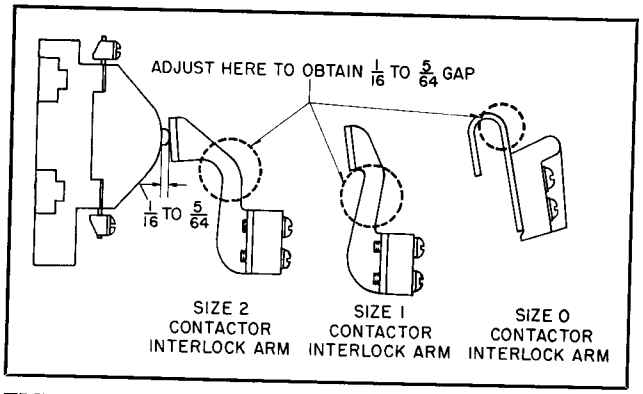

FIG. 4. Operating Arm Adjustment (Energized Position)

RENEWAL PARTS

Renewal parts for Electrical Interlocks may be ordered by Style No. from Table No. 2. See Fig. 5 for identification of the various item numbers.

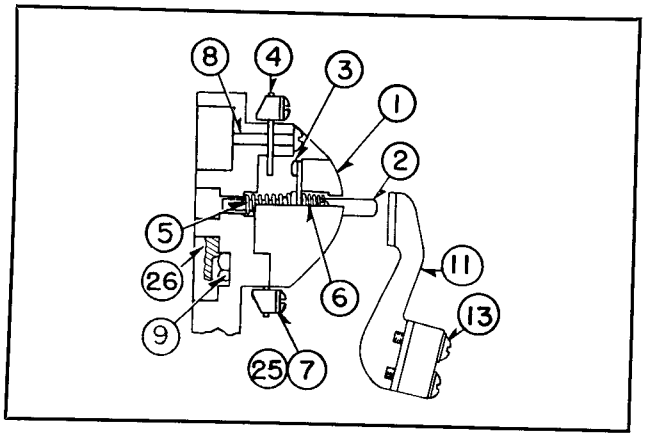

FIG. 5. Renewal Parts Item Numbers

Table No. 2. RENEWAL PARTS DATA

ITEM NO.	DESCRIPTION	STYLE NO.
1	Cover	1314 918
2	Plunger	1314 905
3	Moving contact	1314 941
4	Stationary contact	18C4899P3
5	Spring (lower)	1314 939
6	Spring (upper)	1314 940
	Operating Arm used on:	
10	Size 0 Contactor or Starter	1314 917
11	Size 1 Contactor or Starter	1314 916
12	Size 2 Contactor or Starter	1314 904
8	6-32 x 13/16" Pan Scr. 15000-11	
9	6-32 Elastic Stop Nut 15033-1	
13	6-32 x ½ Pan. Scr. 15000-11	
27	Size 0 Rubber Nut Retainers	1631 947
26	Size 1 & 2 Rubber Nut Retainers	1631 435
25	Terminal Lug	313C191H03
7	8-32 x ¼" Pan Screw 15000-11	
28	.138 L. washer 15017-1	