

# TYPE L-41 ELECTRICAL INTERLOCK

## INSTRUCTIONS

### APPLICATION

The Type L-41 electrical interlock is an auxiliary contacting device to be mounted on Sizes 2, 3 and 4 Dn contactors.

### Rating

The interlock will carry 6 amperes continuously in control circuits up to 600 volts A-C.

### DESCRIPTION

#### Sizes

The Type L-41 electrical interlock is produced in two sizes: Size 2 for Size 2 Dn contactors, and Size 3 for Sizes 3 and 4 Dn contactors. The only difference between the two exists in the insulating base, which is slightly smaller in the Size 2 interlock.

#### "Make" and "Break"

The interlock is shipped for "make" or "break" service, as ordered. Any Type L-41 "make" interlock may readily be converted to a "break" interlock by substituting stationary break contacts 11 (Fig. 1) for the make contacts 10; and rotating the moving contact assembly 3 one-half turn about the mounting screw 21 to accomplish this. A "break" interlock may be converted to a "make" interlock in an inverse manner.

#### Contact Tips

Both the moving and stationary contacts of the Type L-41 interlock are equipped with silver buttons securely welded in place.

### INSTALLATION

#### Location

The Type L-41 electrical interlock may be mounted on a 2, 3 or 4 pole contactor in any or all of three locations, depending upon the limitations of space imposed by the presence of other equipment.

On a **LINESTARTER** one of these interlock locations is occupied by the overload relay, leaving but two locations available. These two locations are indicated by B and C in Fig. 1. Location C (mounting holes shown dotted in Fig. 1) is generally available in addition to B and C on panel mounting applications.

On a reversing **LINESTARTER**, the upper contactor affords only locations

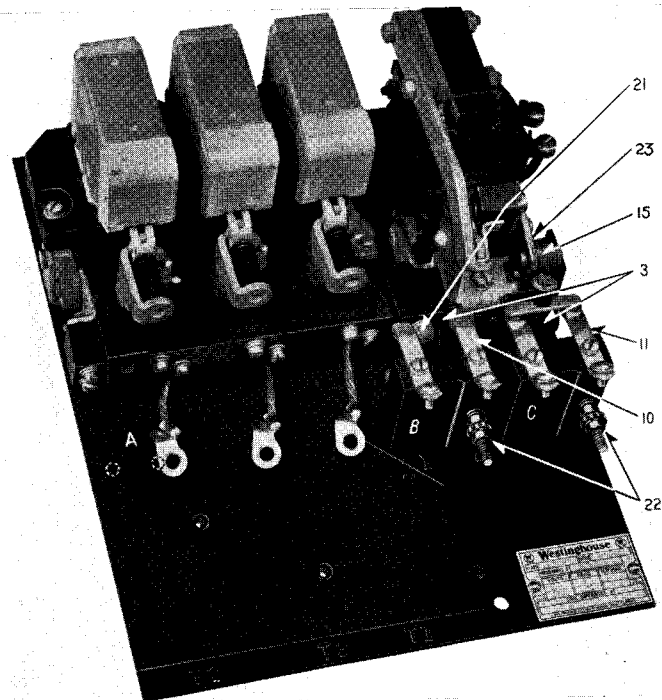


FIG. 1—SIZE 2 TYPE L-41 INTERLOCKS APPLIED TO A SIZE 2, 3 POLE **LINESTARTER** (OVERLOAD RELAY REMOVED, LEAVING CONTACTOR SHUNTS UNATTACHED)

A and B, location C being obstructed by the mechanical interlock. The lower contactor, being accompanied by the overload relay, has available for the interlock only positions B and C.

Since interlocks are more accessible in locations A and B, these locations are to be preferred to location C.

#### Mounting

In locations A and B, the moving contact assembly 3 of the interlock is held to a projecting surface of the insulation cross-bar of the contactor by the mounting screw 21 (a  $\frac{1}{4}$ -20 fillister head iron machine screw  $\frac{5}{8}$  of an inch long). In position C, an adaptor 15 is required, by means of which the moving contact assembly 3 is secured to the armature bracket 23 of the contactor. The adaptor used with the Size 2 interlock differs from that used with the Size 3 interlock. When ordering, see Renewal Parts List.

The interlock base is secured directly to the contactor panel or mounting plate, employing studs for insulation panel mounting or machine screws inserted from the rear for **LINESTARTER** on steel plate mounting. The threaded holes provided in the interlock base to receive the mounting screws or studs are completely insulated from current-

carrying parts. Mounting hardware is included in the interlock styles in the Renewal Parts List.

#### Contact Pressure

The contacts should have long life without much attention. They should be replaced, however, before the contact buttons have become reduced to one-third their original thickness.

The normal overtravel of the contact support after the contacts touch is approximately  $\frac{3}{32}$  of an inch.

#### Extra Terminals

For the convenience of the user, the interlock base is provided with holes to receive extra terminals (22, Fig. 1), insulated from current-carrying parts and from ground. These will be found especially useful when it is desired to operate the contactor coil from a separate control circuit, or when unusual master switch connections are to be made.

The Size 2 interlock contains one hole, and the Size 3 interlock contains two holes. The terminals are included in the styles for **LINESTARTER** or steel plate mounting. See Renewal Parts List.

## TYPE L-41 ELECTRIC INTERLOCK RENEWAL PARTS DATA

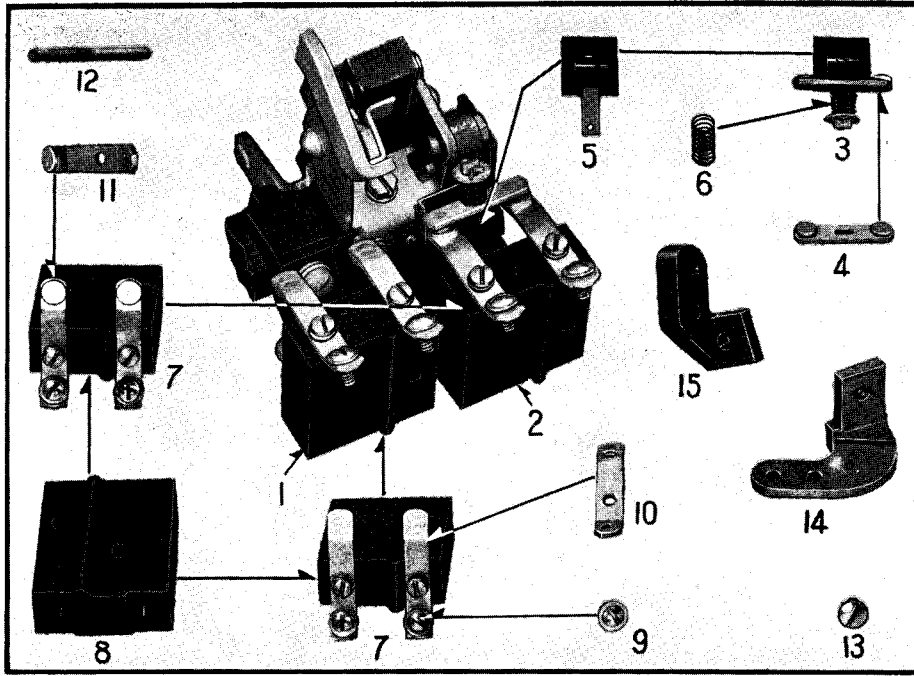


FIG. 2—RENEWAL PARTS FOR TYPE L-41 ELECTRICAL INTERLOCK

### RECOMMENDED STOCK OF RENEWAL PARTS

Type of Mounting	LINESTARTER or Steel Plate		Insulation Panel		No. Per Interlock	Interlocks in Use					
	Make	Break	Make	Break		1	5				
	Ref. No. 1	Ref. No. 2	Ref. No. 1	Ref. No. 2							
Contact Arrangement											
Size No. 3 Interlock Style No.	897 835 △897 839 △972 915	897 836 △897 840 △972 916	897 837 △897 841 972 913	897 838 △897 842 972 914							
Style No. 2 Interlock Style No.	974 326 △974 330 △974 337	974 327 △974 331 △974 338	974 328 △974 332 974 335	974 329 △974 323 974 336							
Ref. No.	Description of Part				Style Number of Part						
3	Moving Contact Complete				897 832	897 832	897 832	897 832	1	0	0
4	Moving Contact				884 643	884 643	884 643	884 643	1	1	2
5	Moving Contact Support				884 648	884 648	884 648	884 648	1	0	0
6	Moving Contact Spring				972 843	972 843	972 843	972 843	1	0	1
7	°Stationary Contact Complete				897 833	897 834	897 833	897 834	1	0	0
8	°Stationary Contact Base				884 647	884 647	884 647	884 647	1	0	0
9	°Washer Head Screw				540 190	540 190	540 190	540 190	2	0	0
10	°Stationary Contact				884 644	884 644	884 644	884 644	2	2	4
11	°Stationary Contact				884 645	884 645	884 645	884 645	2	2	4
7	xStationary Contact Complete				974 324	974 325	974 324	974 325	1	0	0
8	xStationary Contact Base				974 009	974 009	974 009	974 009	1	0	0
9	xWasher Head Screw				540 190	540 190	540 190	540 190	2	0	0
10	xStationary Contact				884 644	884 644	884 644	884 644	2	2	4
11	xStationary Contact				884 645	884 645	884 645	884 645	2	2	4
12	Stud				361 705	361 705	361 705	361 705	2	0	2
13	Mounting Screw				970 317	970 317	970 317	970 317	2	0	2
14	°Adaptor				884 640	884 640	884 640	884 640	1	0	0
15	xAdaptor				974 129	974 129	974 129	974 129	1	0	0
†	°Terminal				974 334	974 334	974 334	974 334	2	0	0
‡	xTerminal				974 334	974 334	974 334	974 334	1	0	0

† Not Illustrated.  
 ° Used only on Interlock Size No. 3.  
 x Used only on Interlock Size No. 2.  
 △ Adaptor included in these Interlock Styles.  
 Parts indented are included in the part under which they are indented.

This is a list of the Renewal Parts and the quantities of each that we recommend should be stocked by the user of this apparatus to minimize interrupted operation caused by breakdowns. The parts recommended are those most subject to wear in normal operation or those subject to damage or breakage due to possible abnormal conditions.

This list of Renewal Parts is given only as a guide. The parts illustrated may not be identical in construction with the parts needed, but the views in Fig. 2 will assist ordering.

#### ORDERING INSTRUCTIONS

Name the part and give the complete name plate reading. State whether shipment is desired by express, freight or by parcel post. Send all orders or correspondence to nearest Sales Office of the Company. Small orders should be combined so as to amount to a value of at least \$1.00 net; where the total of the sale is less than this, the material will be invoiced at \$1.00.

**Westinghouse Electric & Manufacturing Company**

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