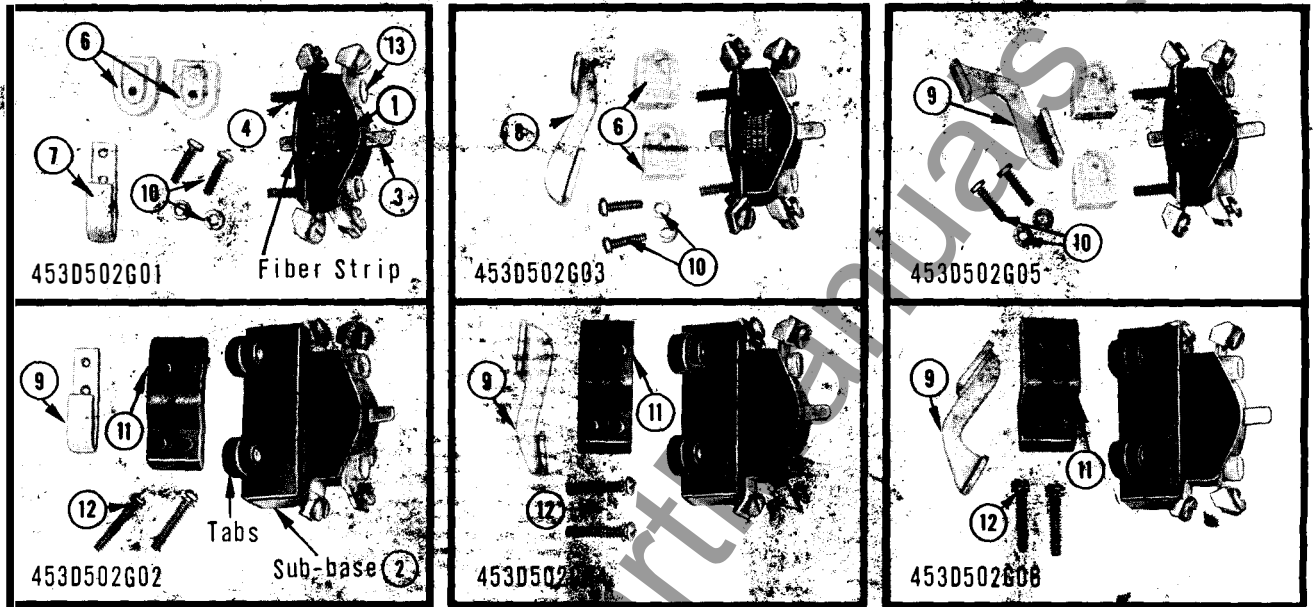


Instructions For Types L53, L54, L55 Universal Electrical Interlocks For Type N Size 0, 1 and 2 Contactors and Starters



I. L. 12528-A



L-53 - SIZE 0

L-54 - SIZE 1

L-55 - SIZE 2

Fig. 1 - Component Parts of L53, L54, L55 Electrical Interlock Kits

- | | | |
|---------------------|--------------------------------|--------------------------|
| (1) Interlock Cover | (6) Nylon Nut | (11) Cross Bar Extension |
| (2) Sub Base | (7) Operating Arm - Size 0 | (12) SEMS Screw |
| (3) Plunger | (8) Operating Arm - Size 1 | (13) Nylon Bushing |
| (4) Mounting Screws | (9) Operating Arm - Size 2 | (14) Tabs |
| (5) Terminals | (10) Pan Screw and Lock Washer | |

Installation - Universal Interlocks - (First and Second)

1. Remove and discard fiber strip supporting interlock unit. (Fig. 1)
2. Insert into base slot the respective nylon nuts (6). (See Figs. 2 and 3)
3. Mount interlock unit only on the contactor base as shown in Figs. 2 and 3. Interlock mounting screws (4) need not be tightened excessively, as the nylon nut provides positive locking.
4. Attach operating arm (7), (8) or (9) to contactor cross bar with screws and lock washers (10) from kit. (Figs. 1, 2 and 3)

5. Adjust as outlined in "Adjustments", page 4 and in Fig. 6.

Installation - EXTRA Interlocks - (Third and Fourth)

1. Loosen mounting screws (4) and discard nylon nut (6) from "first" or "second" Universal interlock. See Figs. 2, 3, 4 and 5.
2. Holding "first" or "second" Universal interlock in position, slip tabs of Extra interlock sub-base into slots of contactor base to align with screws (4). Tighten screws (4). This will secure both the "first" or "second" interlock and the Extra interlock to the contactor base. See Figs. 4 and 5.

3. Remove screws (10) holding "first" or "second" interlock operating arm and use these screws to mount the Extra interlock operating arm (9) to cross bar extension (11) from kit. Take screws (12) from kit and mount cross bar extension with Extra interlock operating arm attached, to contactor cross bar and "first" or "second" interlock operating arm as shown in Figs. 4 and 5.

4. Adjust as outlined in "Adjustments", page 4 and as shown in Fig. 6.

Description

The Westinghouse Types L53, L54 and L55 Electrical Interlocks consist of two basic parts:

- (a) The Universal interlock unit without operating arm

- (b) The operating arm which is different with each contactor size. (See Figs. 1 and 6)

Knowing the Starter or Contactor size - interlocks may be ordered by style number from Table 1.

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 maximum current and voltage ratings of 1 ampere and 250 volts respectively.

When used with both N.O. and N.C. functions, both circuits must be of the same polarity (connected to the same side of the line.)

Standard contactors and starters come equipped with a Standard normally open interlock mounted on the left hand side. If

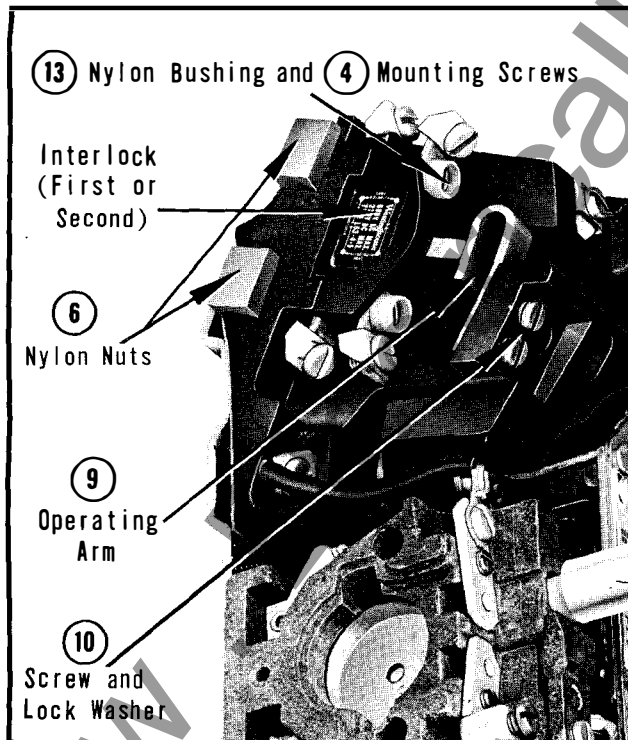


Fig. 2 - Left and Right Hand Mounted Standard Interlocks - Size 0 Life-Line Starter

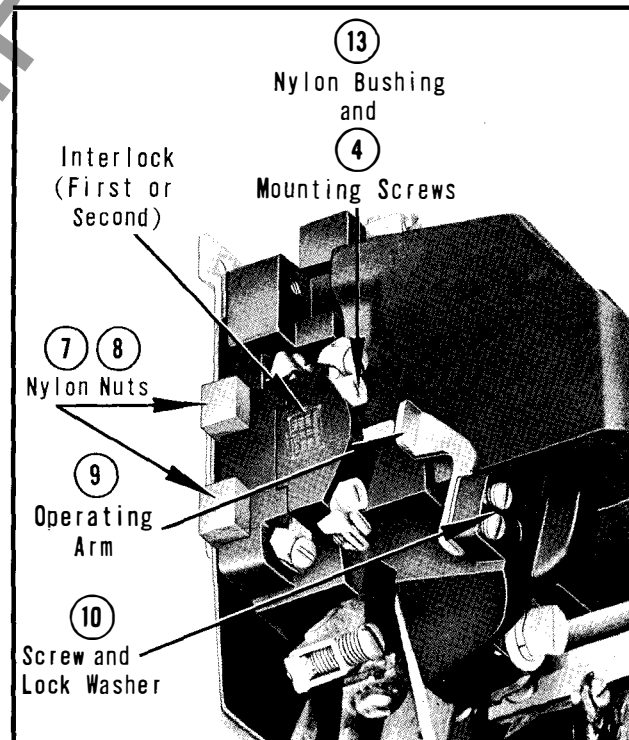


Fig. 3 - Left and Right Hand Mounted Standard Interlocks - Size 1 or 2 Life-Line Starter

TABLE 1. UNIVERSAL ELECTRICAL INTERLOCKS		
Description	Type	Style Number
Size 0 Electrical Interlock	L-53	453D502G01
Size 0 Extra Electrical Interlock	L-53	453D502G02
Size 1 Electrical Interlock	L-54	453D502G03
Size 1 Extra Electrical Interlock	L-54	453D502G04
Size 2 Electrical Interlock	L-55	453D502G05
Size 2 Extra Electrical Interlock	L-55	453D502G06

a second interlock is desired, use the correct size Universal interlock kit (Table 1) and mount the interlock on the right side of the contactor or starter as shown in Figs. 2 and 3.

The Extra Interlock Kits are designed to meet the requirements of a "third" or

"fourth" interlock and are mounted in the positions shown in Figs. 4 and 5.

Construction

All contacts are made of fine silver and need no dressing throughout their life. Pressure type connectors permit the use of either solid or stranded wire without soldered joints or looped wire. Terminals may be accommodated by discarding the "U" shaped terminal lug. The interlock plunger (3) is made of hardened and plated steel to provide long trouble-free service.

A nylon bushing (13) insulates the screw (4) from the stationary contacts and is spun over to retain the contacts in place on the molded cover.

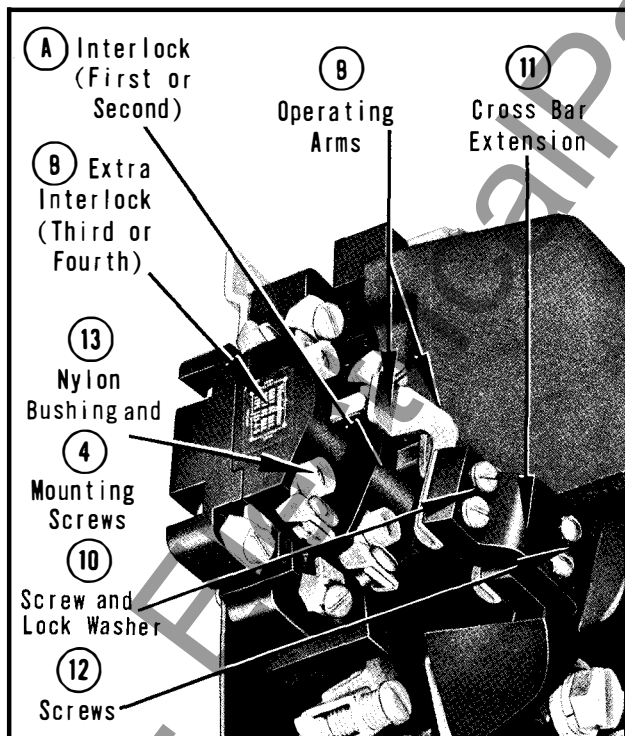


Fig. 4 - Mounting of Extra Universal Interlocks on Size 0 Life-Line Starter

- A) - A Standard "First" or "Second" Electrical Interlock
- B) - An Extra "Third" or "Fourth" Electrical Interlock

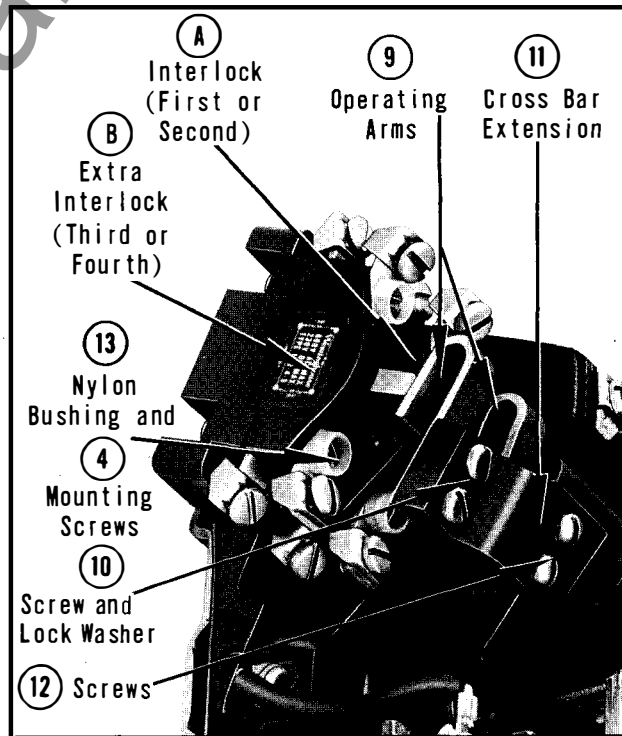


Fig. 5 - Mounting of Extra Universal Interlock on Size 1 or 2 Life-Line Starter

- A) - A Standard "First" or "Second" Electrical Interlock
- B) - An Extra "Third" or "Fourth" Electrical Interlock

Adjustment

1. Place contactor in normal vertical operating position.
2. Place interlock assembly on contactor base (as shown in Figs. 2 or 3) making sure that spring (A) in Fig. 6 does not interfere with movement of plunger.
3. Operate interlock by hand several times to check freedom of motion of moving parts.
4. Mount interlock arm (see Fig. 6) and secure in place.

5. With contactor in fully closed (energized) position, clearance between cover and arm must measure .063 to .078 inch to assure correct overtravel of normally open (N.O.) contacts in the interlock. If necessary, adjust interlock arm by bending in area shown to provide this dimension.

6. With contactor de-energized, check for .010 min. clearance between pushrod and interlock arm. Failure to provide this clearance may result in erratic operation of the N.C. contacts.

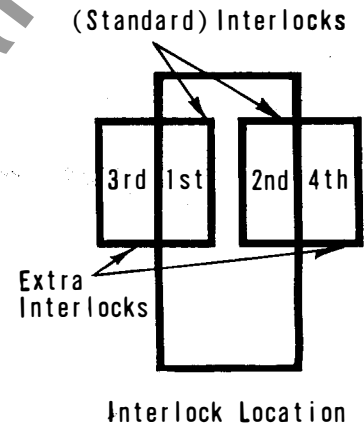
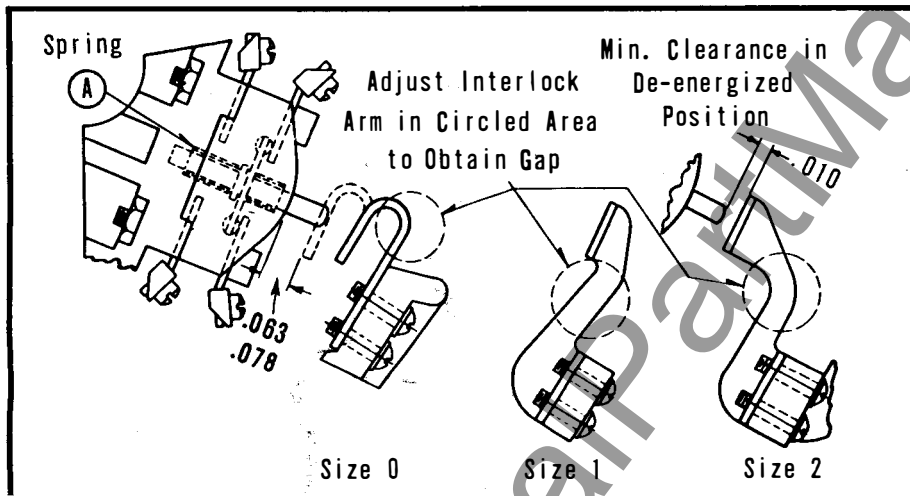


Fig. 6 - Operating Arm Adjustment