DESCRIPTION • INSTALLATION

INSTRUCTIONS

UNIVERSAL ELECTRICAL INTERLOCKS
TYPES L53, L54, L55

TYPES L53, L54, AND L55 INTERLOCKS are designed for use on the Design N Size 0, 1, and 2 contactors and starters respectively. Each complete interlock consists of two basic parts; (1) the ***universal*** interlock unit without operating arm and (2) the operating arm which is ***different*** with each contactor size (See Fig. 3).

These interlocks may be used in A-C control and relaying circuits not exceeding 5 Amps and 600 volts. The maximum D-C rating of the interlock is 50 volt amperes with maximum current and voltage ratings of 1 ampere and 250 volts, respectively. When used for 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 a ***second*** interlock is desired, use an additional ***universal*** interlock on the right side of the contactor or starter (See Fig. 2, R.H. Assy.). The ***extra*** interlock is designed to meet the requirement of a ***third or fourth*** interlock as shown in Fig. 2.

Fig. 2 shows the 1st and 2nd interlocks assembled, using elastic stop nut item (9) and rubber nut retainers (14) placed in the slot on all contactors and linestarters assembled at the factory. Fig. 2 illustrates the use of nut (9) and retainer (14) as used on the Size 1 and 2, two and three pole units.

Fig. 3 illustrates the interlock used on the Size 0. The rubber nut retainers and elastic stop nut remain in place when removing or changing interlocks from the front. Two rubber nut retainers 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 is furnished for the Size 0 units.

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

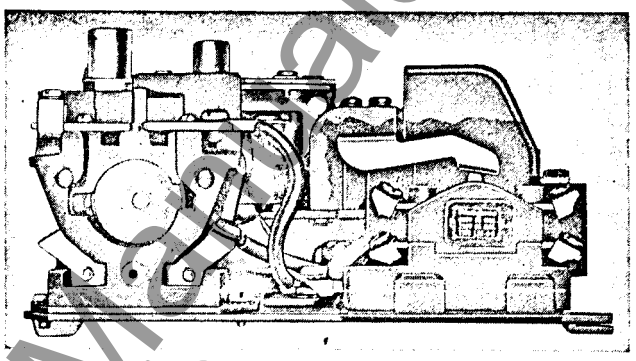

FIG. 1 Standard Universal Interlock

Additional interlocks may be ordered by style from Table No. 1.

CONSTRUCTION

Contact surfaces are made of fine silver and need no dressing throughout their life. All current carrying parts are of high conductivity copper alloy.

A nylon bushing which insulates the 6-32 x 1 1/8 long machine screw from the stationary contacts, is spun over to retain the contacts in place on the molded cover. The 8-32 pan head screws and terminal lugs will accept either solid or stranded wire without soldered joints or looped wire, and terminals may be accomodated by discarding the "U" shaped terminal lug.

The interlock plunger is made of hardened, chromium-plated steel to provide long, trouble-free service.

Table No. 1 INTERLOCK STYLE NUMBER

UNIVERSAL INTERLOCK 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

INSTALLATION

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

2. Insert into base slot the respective rubber nut retainer items (14) or (15) complete with elastic stop nut (9).

3. Mount interlock unit 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 (7) to contactor cross bar with screws (10) supplied with the interlock.

Extra Interlocks 1. Loosen mounting screws (8) sufficient to withdraw, and discard nut (9) and retainer (14) or (15) from standard interlock.

2. Slip Moldarta sub-base (11), on which interlock unit is mounted into slots provided in contactor base and secure with screws (8) as shown in Fig. 2.

3. Remove screw assembly (13), Fig. 2, and mount operating arm supplied with interlock to Moldarta cross bar extension (12), Fig. 2.

4. Attach cross bar extension (12) to the contactor cross bar with screws and lockwashers (13) furnished with the interlock as shown in Fig. 2.

ADJUSTMENT

1. Place contactor in normal vertical operating position.

2. Place interlock assembly on contactor base (as shown in Fig. 1) making sure that spring (1) in Fig. 3 does not foul movement of plunger.

3. Operate interlock by hand several times to check freedom of motion of moving parts.

4. Mount interlock arm (as shown in Fig. 3) and secure in place.

5. With contactor in fully closed position, clearance between cover and arm must measure .063 to .078 inch to assure correct overtravel of contacts in the N.O. 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.

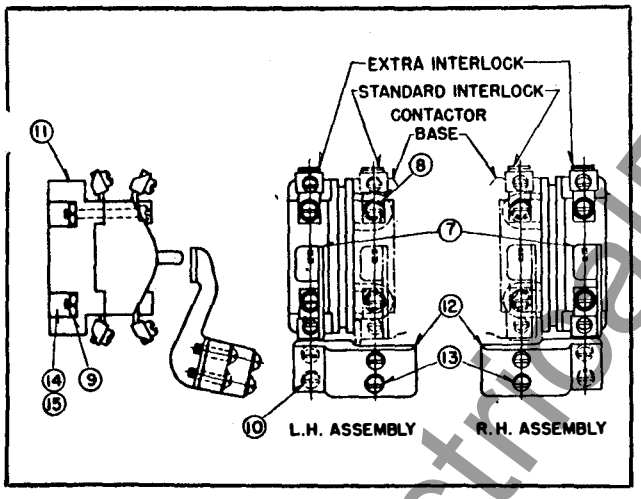

FIG. 2 Extra Interlock

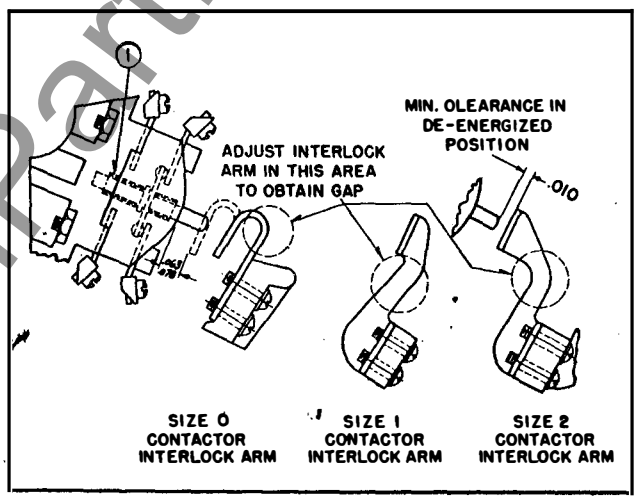

FIG. 3 Operating Arm Adjustment

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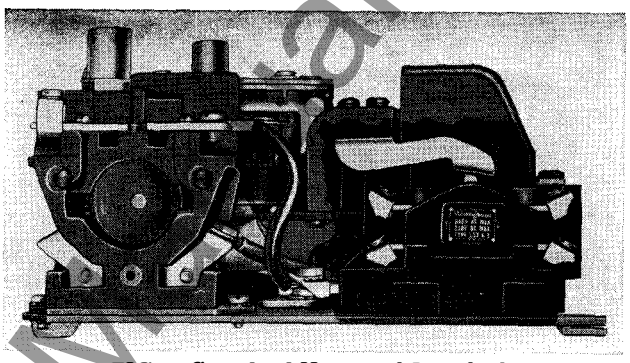

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Size 2 Extra Electrical Interlock...	L-55	453D502G06

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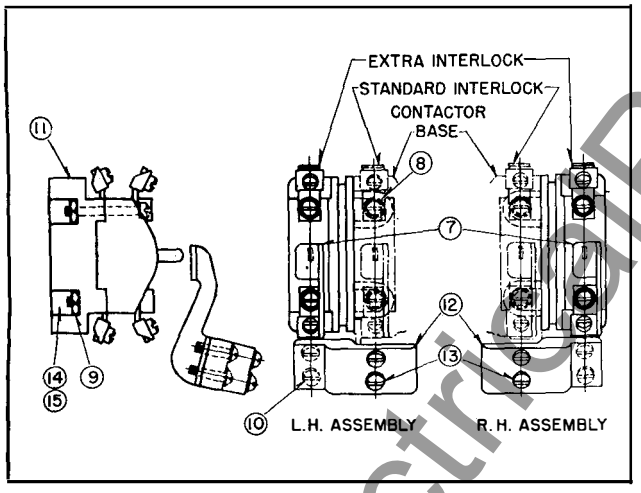
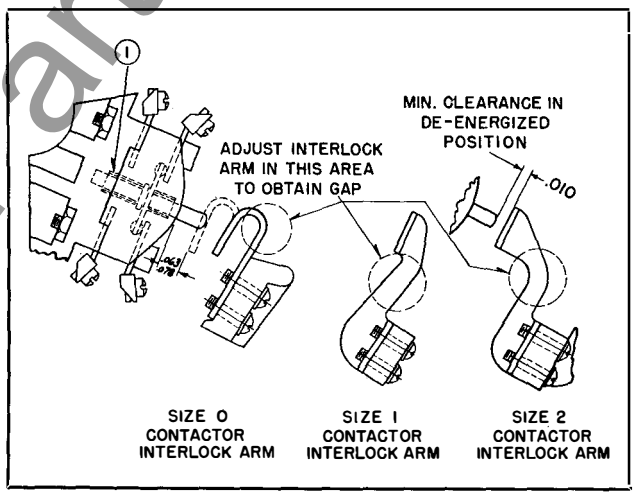


FIG. 2 Extra Interlock



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