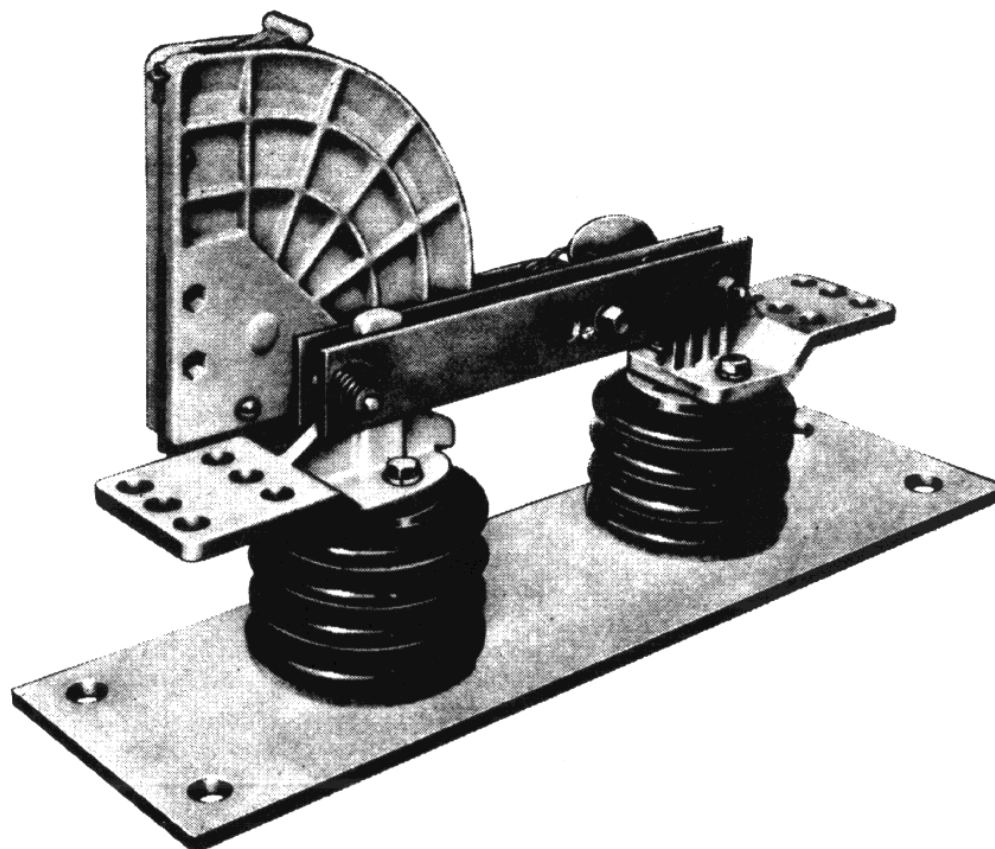


Installation/Maintenance Instructions and Renewal parts

I-T-E Interrupter Switches

Type HPL-C



IMPORTANT

Make absolutely sure applicable equipment is de-energized and properly grounded before proceeding with any installation or maintenance.

GENERAL

The HPL-C is an indoor, gang-operated, load-break switch, providing the advantage of high-pressure, silver-to-copper contacts, standard BIL insulation, and parallel blade construction for better short-circuit performance.

INSPECTION

Immediately upon receipt of shipment, the switch assembly or single poles should be unpacked and inspected for evidence of shipping damage. Any claim should be placed promptly with the carrier.

ORDERING

SPECIFY—Switch Type, Serial Number, Index Number, Name of Part and Quantity.

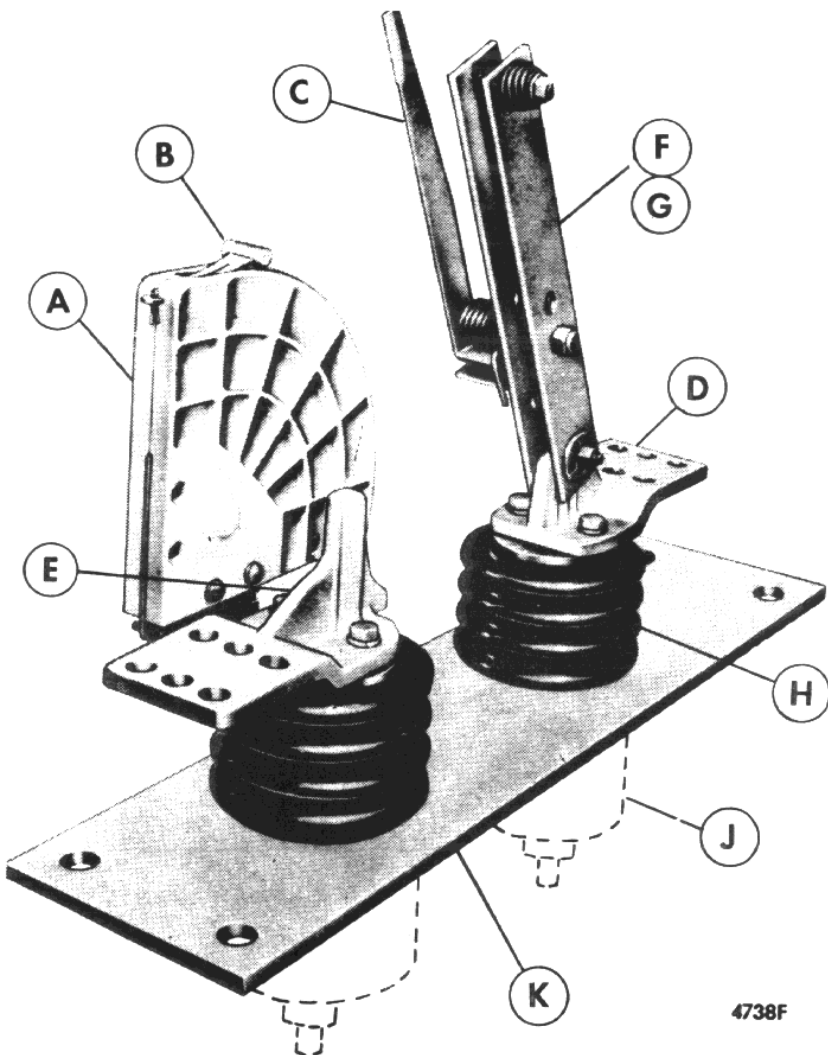


Fig. 1

RECOMMENDED STOCK FOR FIVE 3-POLE SWITCHES IN SERVICE

Index Number	Name of Part	Quantity	Index Number	Name of Part	Quantity
A	Arc Chute Assembly, with Flipper	None	H	Front-Connected Insulator	4
B	Flipper, for Arc Chute	3	J	Back-Connected Insulator	4
C	Quick-Break Auxiliary Blade	None	K	Base	None
D	Hinge Casting	None	L	Barrier	1 set (4)
E	Jaw Casting	None	M	Barrier Spacer	1 set (4)
F	Main Blade Assembly, 600A	None	N	Insulating Link Assembly	1 set (3)
G	Main Blade Assembly, 1200A	None			

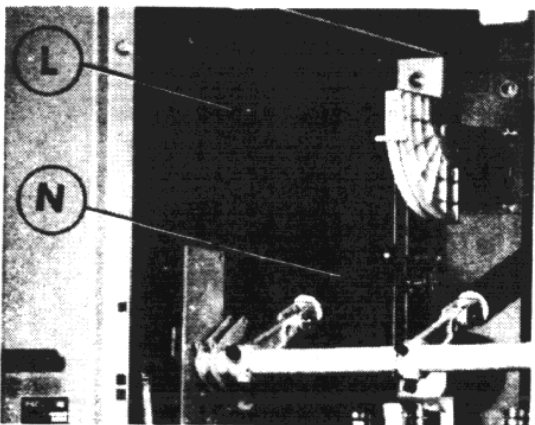


Fig. 2

4781A

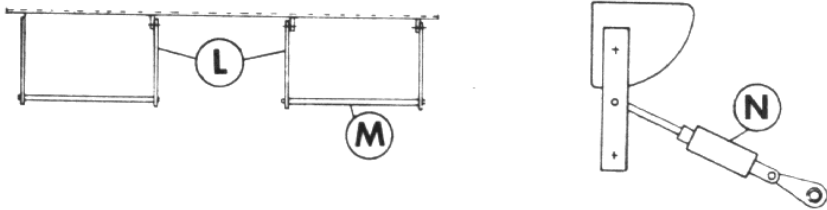


Fig. 3. Barriers and insulating links.

These instructions do not purport to cover all details or variations in equipment nor to provide for every possible contingency to be met in connection with installation, operation, or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes the matter should be referred to the nearest District Office.

LUBRICATION

Switches that are normally closed, only require lubrication of jaw contacts approximately every 500 open-close operations. Use grade "E" No-Oxide or equivalent.

Switches that are open long periods of time should have jaw contacts cleaned and greased lightly with grade "E" No-Oxide as service conditions dictate.

MAINTENANCE

HPL-C interrupter switches are designed to give trouble-free operation with a minimum of maintenance. The interrupting contacts, quick-break blade and arc chute, however, erode when interrupting current, and should be visually inspected after approximately 100 normal load-interrupting operations. This inspection can be performed by opening the switch and noting the condition of the quick-break blades.

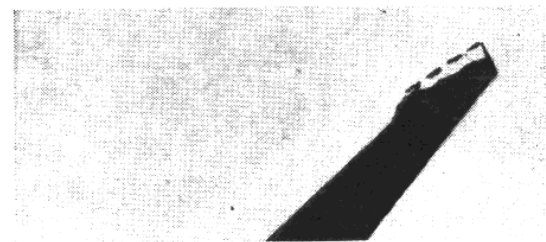


Fig. 4. End of auxiliary quick-break blade showing erosion at arcing tip.

If the moving arcing electrode (on the tip of the auxiliary, quick-break blade) shows bad erosion, Fig. 4 (approximately one-third burned away), the arc chute and quick-break blade should be replaced. To replace arc chute, loosen locknuts holding arc chute to support, (Fig. 6), pull arc chute away from switch base, rotating toward hinge, and remove. Discard and replace with new unit. To replace quick-break blade, remove bolt P (Fig. 5) and lift off used blade.

Operate switch to check on opening. Quick-break blade should not release until its hinge end contacts latch hook O (Fig. 5). On closing, quick-break blade should not leave flipper C (Fig. 7) until jaw and blade have made contact R.

CONTACT ADJUSTMENT

Should it ever be necessary to adjust the hinge contact pressure—(1) Loosen pressure adjusting nut S (Fig. 7) until there is negligible contact pressure (no clearance), (2) Tighten nut one-half turn. Hinge friction should be sufficient to hold a 4.8-kv blade (9-inch insulator centers) in any position and to just allow a 13.8-kv blade (12-inch insulator centers) to fall. No adjustment is required on jaw contact.

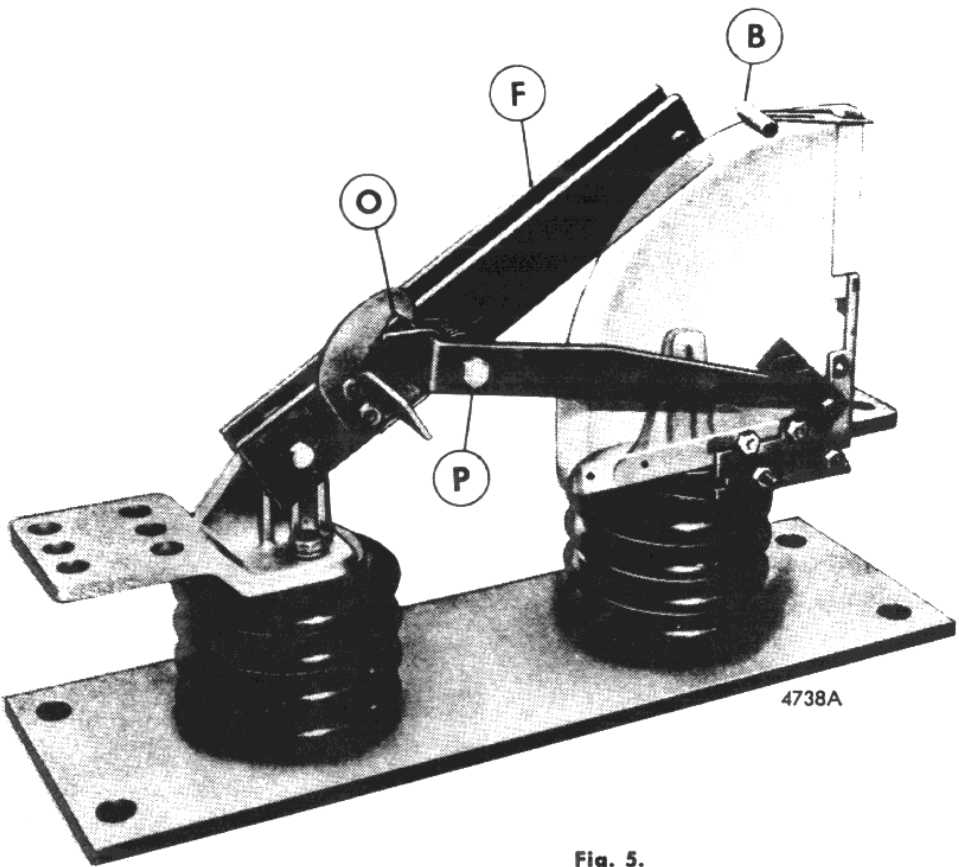


Fig. 5.
Main blade opening, auxiliary blade about to be released.

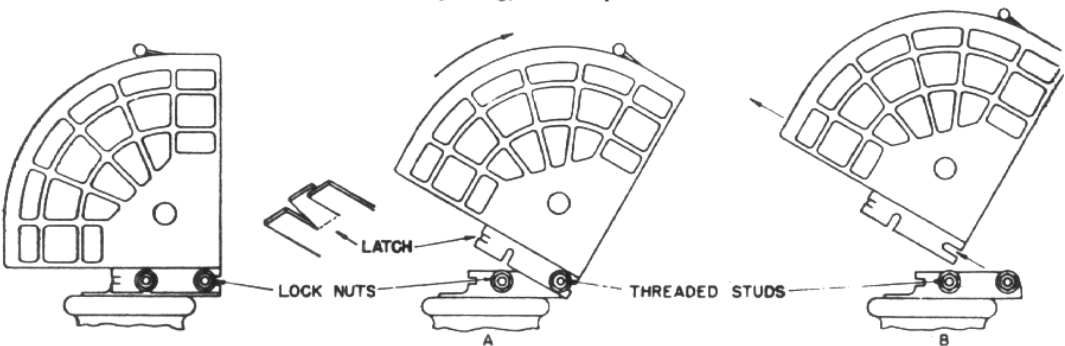


Fig. 6
Progressive steps in arc-chute removal.

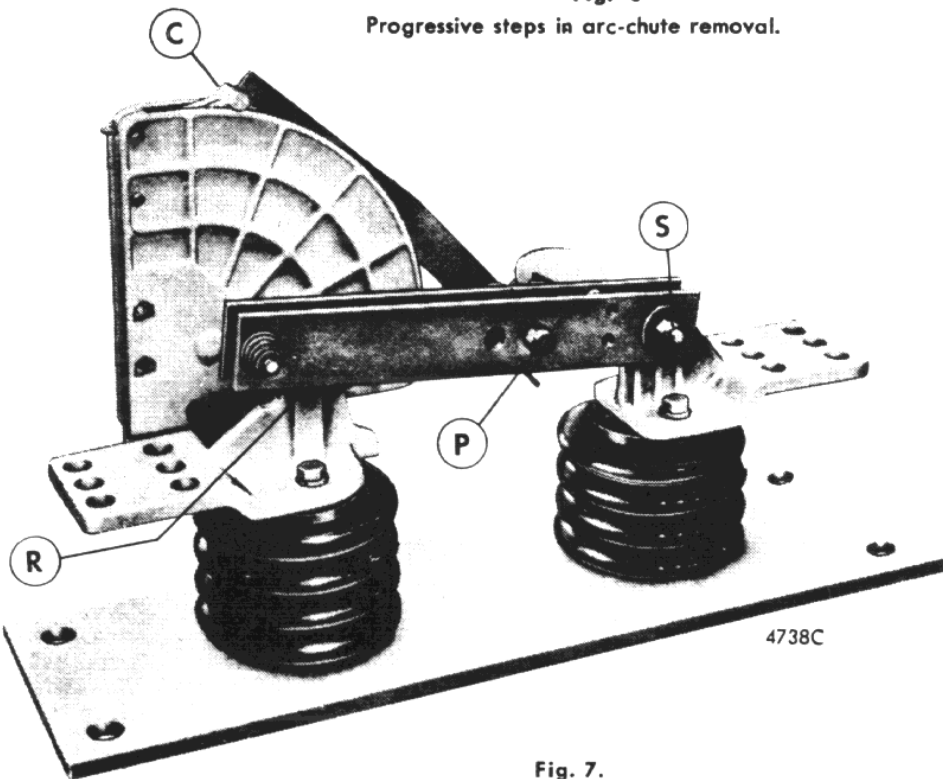


Fig. 7.
Main blade closing, auxiliary blade restrained and about to be released for closing.



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