

## TRACK TYPE LIMIT SWITCH RENEWAL PARTS DATA

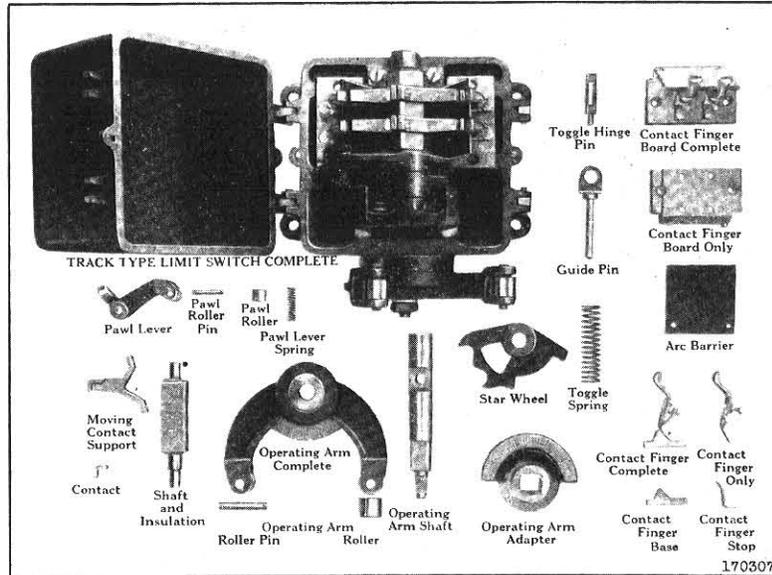


FIG. 2—RENEWAL PARTS FOR TRACK TYPE LIMIT SWITCH

### RECOMMENDED STOCK OF RENEWAL PARTS

Track Type Limit Switch	Single Pole Switch Style No. 404813,A			Double Pole Switch Style No. 404814,A				
	No. Per Unit	1	5	No. Per Unit	1	5		
For Switches in use up to and including								
Name of Part	No. Per Unit	Recommended for Stock	Style No. of Part	No. Per Unit	Recommended for Stock	Style No. of Part		
Moving Contact Support.....	2	0	0	425519	4	0	0	425519
Contact.....	2	2	4	323217	4	4	8	323217
†Moving Contact Screw, "190-32x1/2 Flat Head B. M. Screw.....	2	0	1	Std.Hdw.	4	0	2	Std.Hdw.
Shaft and Insulation.....	1	0	0	409090	1	0	0	409090
Star Wheel.....	1	0	0	409091	1	0	0	409091
Contact Finger Complete.....	2	0	0	874403	4	0	0	874403
Contact Finger Only.....	2	2	4	261865	4	4	8	261865
Contact Finger Base.....	2	0	0	425520	4	0	0	425520
Contact Finger Stop.....	2	0	0	261866	4	0	0	261866
Contact Finger Board Only.....	2	0	0	425517	2	0	0	425517
Arc Barrier.....	2	0	0	425518	2	0	0	425518
Pawl Lever.....	1	0	0	409092	1	0	0	409092
Pawl Roller.....	1	0	1	297836	1	0	1	297836
Pawl Roller Pin.....	1	0	1	88355	1	0	1	88355
Pawl Lever Spring.....	1	0	1	700478	1	0	1	700478
†Pawl Pin.....	1	0	0	425514	1	0	0	425514
†Toggle Spring.....	1	0	1	409088	1	0	1	409088
†Toggle Hinge Pin.....	1	0	1	425515	1	0	1	425515
†Toggle Lever—Large.....	1	0	0	425455	1	0	0	425455
†Toggle Lever—Small.....	1	0	0	425456	1	0	0	425456
Guide Pin.....	1	0	0	425457	1	0	0	425457
Operating Arm Shaft.....	1	0	0	425458	1	0	0	425458
Operating Arm Complete.....	1	0	0	874404	1	0	0	874404
Operating Arm.....	1	0	0	425450	1	0	0	425450
Roller.....	2	0	1	409093	2	0	1	409093
Roller Pin.....	2	0	1	186929	2	0	1	186929
Operating Arm Adapter.....	1	0	0	425451	1	0	0	425451
†Bushing for Frame.....	1	0	1	425512	1	0	1	425512
†Front Bearing.....	1	0	0	874406	1	0	0	874406
†Middle Bearing.....	1	0	0	425454	1	0	0	425454
†Rear Bearing.....	1	0	0	425453	1	0	0	425453
†Cover.....	1	0	0	874405	1	0	0	874405
†Hinge Bolt for Cover.....	4	0	0	425516	4	0	0	425516
†Hinge Bolt Pin.....	4	0	0	63599	4	0	0	63599
†Wing Nut for Hinge Bolt.....	4	0	2	197939	4	0	2	197939

Parts indented are included in the part under which they are indented.

†Not listed on illustration.

\*To be filed as Renewal Parts Data and as an Instruction Leaflet; for Instructions, see reverse side of this sheet.

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 service interruptions caused by breakdowns. The parts recommended are those most subject to wear in normal operation, or to damage or breakage due to possible abnormal conditions.

This list of Renewal Parts is given only as a guide. When continuous operation is a primary consideration, additional insurance against shutdowns is desirable. Under such conditions more renewal parts stock should be carried, considering the severity of the service and the time required to secure replacements.

#### ORDERING INSTRUCTIONS

Name the part and give its style number. 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

## TRACK TYPE LIMIT SWITCH

### General Information

Track type limit switches are used as accessories to magnetic controllers for the purpose of obtaining a change in the sequence of operation. These switches are used (ordinarily) to provide a slow-down, and then to stop a motor at the end of travel. They are particularly suitable for moving parts that have a long travel and that must be stopped at definite points.

### Construction

Westinghouse track type limit switches are enclosed in a cast iron base, and provided with a cast iron cover (Fig. 1). The base and cover are machined so that when assembled with a gasket between the two, water-proof construction is obtained. The operating arm or "Fork" is made of malleable iron to eliminate breakage, and operates through an angle of 45°. This fork may be adjusted to any angle on the operating shaft, so that it is not necessary to line up the switch with the moving part. The fork is so constructed that the operating "dog" may vary in size and uniformity of movement without affecting the operation of the switch.

The switching mechanism gives quick make and quick break of the contacts. The switch can be supplied in either

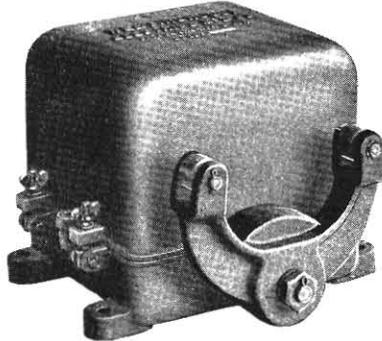


FIG. 1—TRACK TYPE LIMIT SWITCH

single or double pole construction, and the double pole switch is so constructed that the drum contacts may be assembled to open one circuit and close another when such operation is desirable. The moving contacts are held in place by screws which are not subjected to the arc. This eliminates welded contacts and screws and permits speedy repairs to be made when necessary. The fingers are of drop forged copper, with flat steel spring and leaf copper shunt. The tip is adjustable

for wear by an adjusting screw which is readily accessible when the cover is removed.

The enclosing case is provided with two tapped holes for  $\frac{3}{4}$  inch conduit, and one pipe plug is furnished for closing the hole not used. The cover is held in place by four eye bolts with wing nuts. Two of these bolts serve as hinges, so that the cover may be opened yet held in place by the hinges. These hinges may be on either side of the switch to suit the particular application. When the cover is open all parts are readily accessible, as the cover is hinged low and all parts and connections are exposed.

### Maintenance

The arcing tips on the drum, and the fingers are the only parts which are likely to require renewals due to ordinary wear (Fig. 2). We recommend frequent inspection to insure that fingers and segments are making good contact, and that screws, nuts, etc., have not loosened.

Minor adjustments and replacements at the time of inspection may prevent more expensive replacements.

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