DESCRIPTION • INSTALLATION • MAINTENANCE

INSTRUCTIONS

LIMIT SWITCHES FOR REVERSING PLANERS

Class 15-075—Types PD & PS

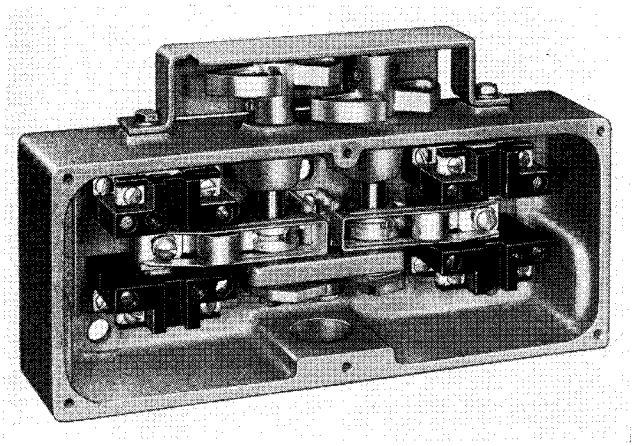

FIG. 1. Type PD Limit Switch

GENERAL DESCRIPTION

THE TYPES PD & PS LIMIT SWITCHES are primarily designed for use on electrically-driven reversing planers. The Type PD limit switch is a double shaft unit, in which each shaft independently operates two normally-open and two normally-closed contacts. Its primary use is for reversing the motion of the planer bed. The Type PS limit switch is a single shaft switch having two normally open and two normally-closed contacts, and is used principally for slow-down use.

RATINGS

The ratings of both the normally-open and normally-closed contacts are as follows:

Continuous rating A-C or D-C..... 6 amperes
Rupturing rating, A-C..... 6 amperes
Rupturing rating, D-C.....150 volt-amperes
with a maximum of 1 ampere

CONSTRUCTION

The cases of both the Type PD and PS limit switches are of heavy cast iron construction, gasketed against the entrance of falling dust and oil. A pressed steel cover protects the operating cams from falling chips and other foreign matter. The heat treated cams are securely clamped and pinned to the shaft. To permit flexibility in applying the Type PD limit switch, the bottom of the case is provided with a 1 5/32″ conduit hole, which the user may tap with a 1″ pipe thread if he desires. The ends of the case are equipped with internal pads to provide stock for the user's optional drilling and tapping of additional conduit holes, should these be required. The Type PS limit switch is provided at its ends with conduit holes having 1/2″ pipe threads.

INSTALLATION

The limit switches should be securely mounted to pads on the planer beds, machined so that the distance from the mounting pads to the nearest part of the operating dog is not less than 2 1/16″. The Type PD reversing limit switch should be so arranged that approaching operating dogs will turn their respective cams toward the center of the switch.

Care should be taken in wiring to see that the wires are so arranged in the case that their insulation is not injured by operating parts of the limit switches.

The making of the connections to the rear terminals may be facilitated by removing the two

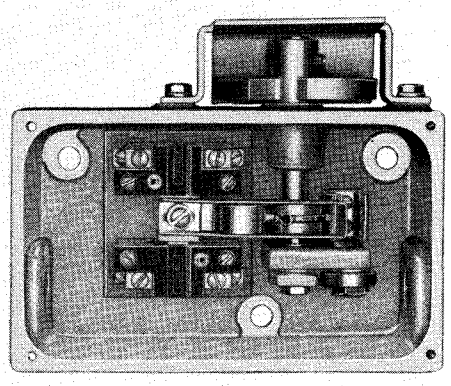

FIG. 2. Type PS Limit Switch

screws holding the stationary contact base assembly to the case, and lifting the front half of the assembly from the unit. The parts should be replaced, and thoroughly secured, after completing the connections.

Before the limit switch is put into service for the first time, care should be taken to see that all bolts are tight, particularly the clamping screws for the operating cams. All terminals should be tight. The operating shaft should turn freely without excessive friction.

MAINTENANCE

The cover should be kept secured in place during operation of the switch to exclude oil and dirt. Remove the cover periodically for inspection of the contacts and operating parts.

The operating shafts are borne in oil-impregnated porous bronze bearings. Oil may be applied sparingly at suitable intervals.

The knife-edge bearings of the operating mechanisms are given a coating of grease at the factory. This should be removed and replenished if deterioration occurs in service.

Replacement of the contacts is best effected by first removing the stationary contact bases by extracting the screws holding them to the back of the case. Should the moving contacts require replacement, it is recommended in general that the entire assembly comprising the molded crossbar with the two contacts pinned in place be removed as a unit.

Should it be necessary to replace any of the operating parts, the assembly should be examined afterward to see that all parts move freely and with positive action. The force to separate the contacts, whether normally-open or normally-closed, should be 1¼ to 2 lbs. when measured at the center of the molded moving contact crossbar.

PRINCIPAL RENEWAL PARTS

Moving Contact Assembly	S* 1776895
Stationary Contact, Rear	1776896
Stationary Contact, Front	1776897
Contact Arm	1776898
Toggle Spring	1818191

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BUFFALO PLANT • MOTOR AND CONTROL DIVISION • BUFFALO 5, N. Y.
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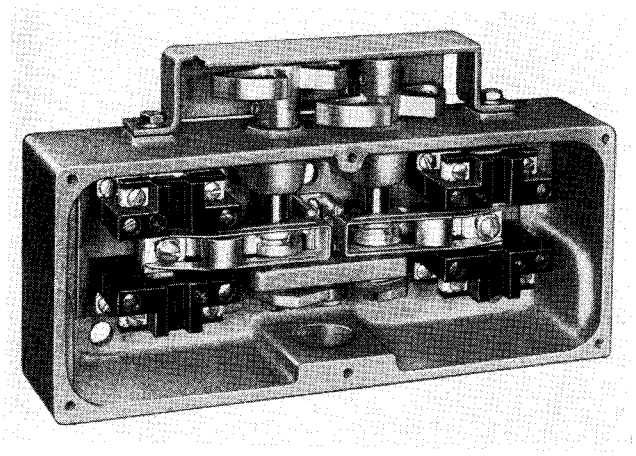

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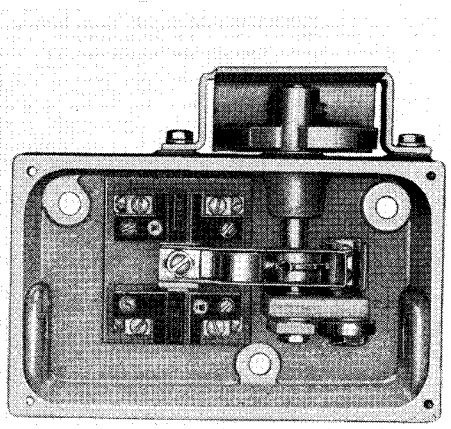

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