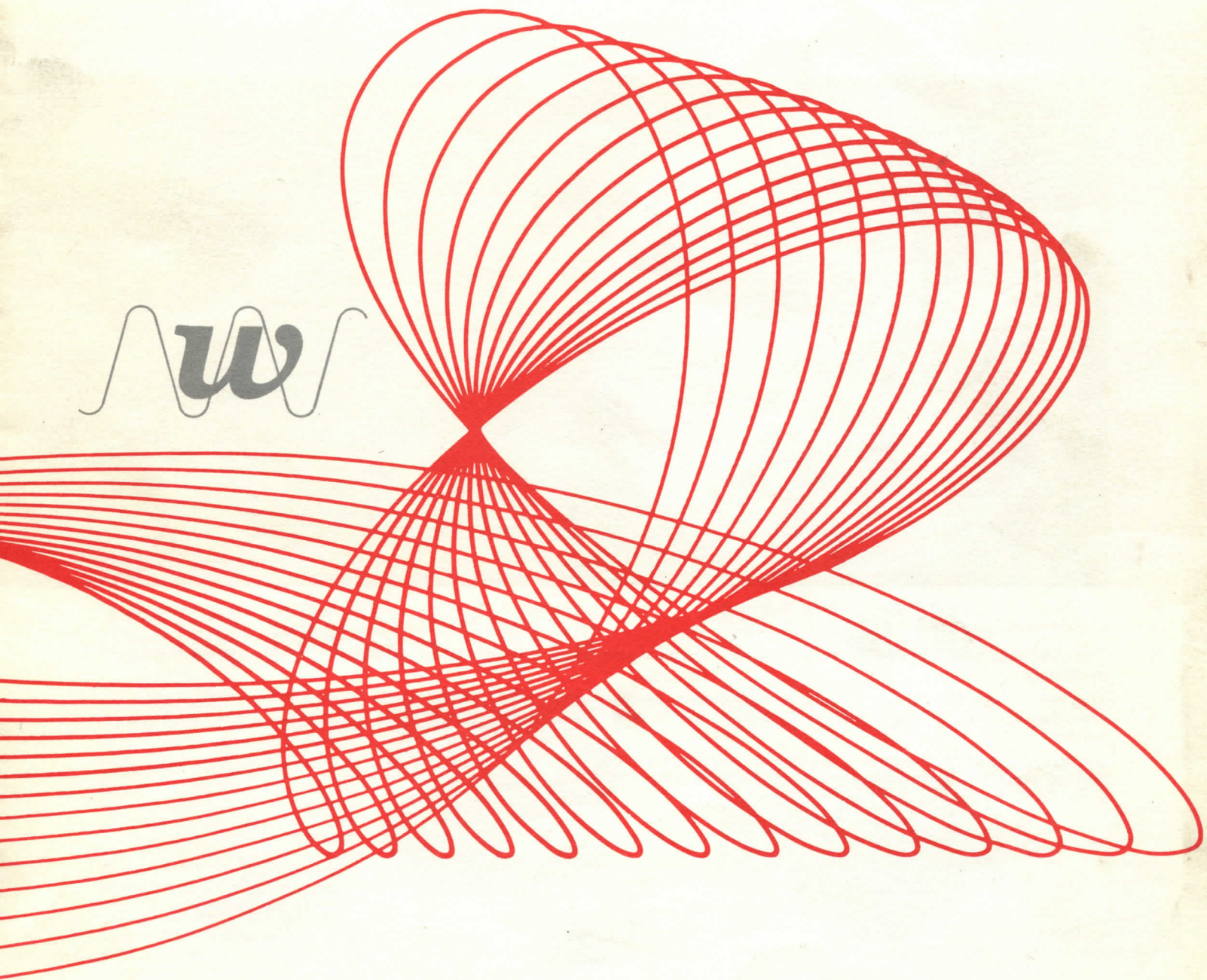
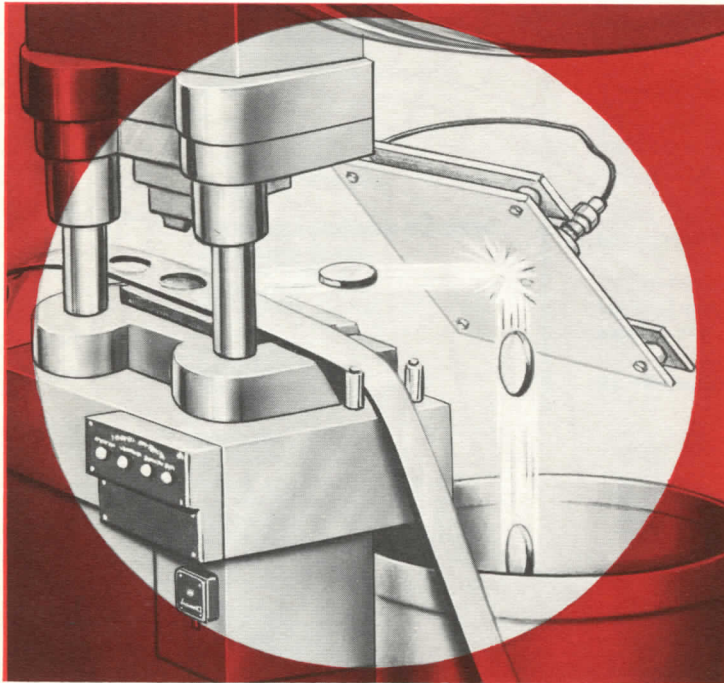


Wintriss Controls for Pressroom Automation

Eliminate damage caused by non-ejection □ overload □ non-transfer □ buckling □ misfeed □ end-of-material □ faulty positioning



MISSING PARTS DETECTOR



APPLICATIONS

The MISSING PARTS DETECTOR can be applied to any press where it is desirable to monitor movement, failure of movement (i.e. part ejection)

COMPLETELY AUTOMATIC

After the initial installation, there are no adjustments of any kind to make.

The MISSING PARTS DETECTOR is not affected by voltage fluctuations, temperature or any other mechanical changes which occur while the machine is in operation.

AUXILIARY CONTROLS, FEATURES

Buckling, misfeed, end of material and other sensors will stop the press through the same control unit.

Secondary circuit in the MISSING PARTS DETECTOR will stop the press when any contact to "ground" is made.

Sonic plates and other pick-up assemblies are available for specific applications.

OPERATION

The MISSING PARTS DETECTOR requires two impulses in sequence to operate.

One impulse comes from a cam operated pulse switch assembly and the other from the finished part making contact with a pick-up assembly.

If a part fails to eject on schedule, the impulse sequence is interrupted and the press will stop immediately . . . BEFORE A MALFUNCTION CAN OCCUR.

BASIC OPERATION

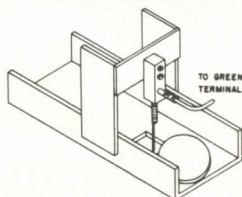
Pulse switch assembly is set for normal ejection time.

Part failing to eject during this time stops press.

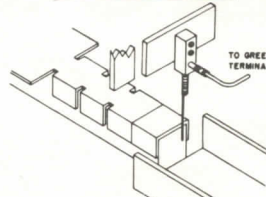
Immediately disengages clutch control to prevent damage.

No controls to set – no adjustments. Completely automatic.

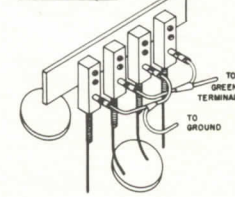
CHUTE MOUNTED SINGLE PROBE



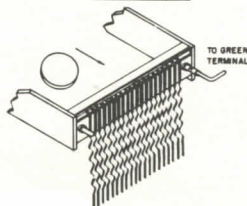
PRESS MOUNTED SINGLE PROBE



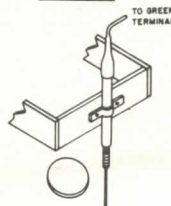
MULTIPLE PROBES



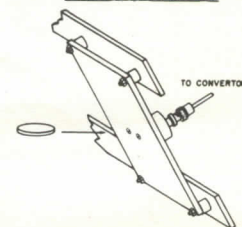
FEELER ASSEMBLY



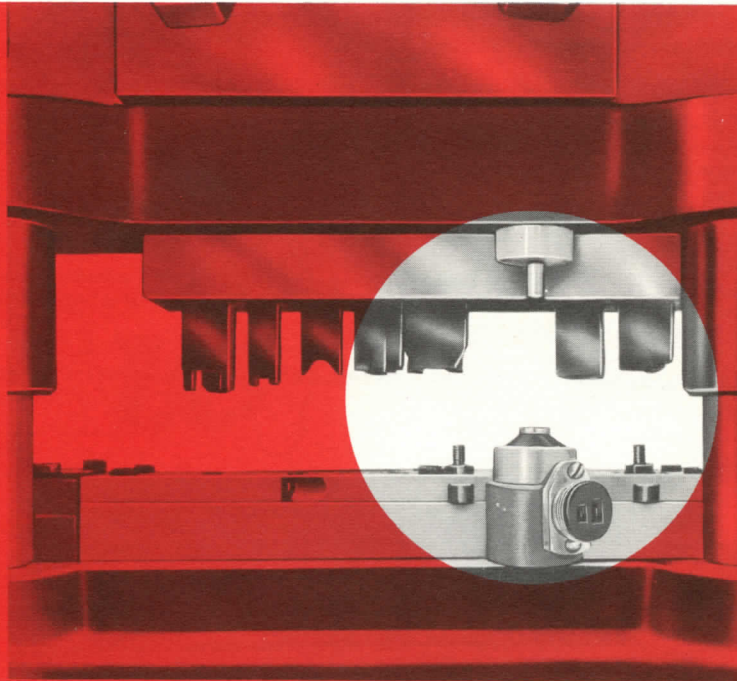
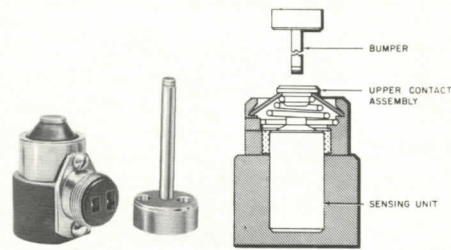
SWITCH PROBE



SONIC REFLECTOR ASSEMBLY



PRESS OVERLOAD DETECTOR



COMPLETELY AUTOMATIC

The PRESS OVERLOAD DETECTOR contains a patented sensing unit that automatically compensates for temperature changes, voltage fluctuation, mechanical changes and any gradual changes such as the normal \pm commercial tolerance of coil stock that occur while an automatic machine is in operation.

FEATURES AND ATTACHMENTS

Buckling, end-of-material and misfeed attachments will also control the press through the secondary circuit in the overload detector. Additional sensing controls may be added to the same circuit to provide added monitoring of auxiliary motions as required, affording complete protection for dies and high speed equipment.

Fixed sensors for special applications are available (i.e. strip feeding)

APPLICATIONS

The Overload Detector has been specifically designed for presses with flattening, forming, coining or similar operations. It may be adapted to any press equipment where the closed position of the dies are fixed or of consistent shut height.

OPERATION

The patented motion sensing unit is designed to monitor the proper shut-height of the die. Any sudden change in the shut-height by as little as .004 or more will automatically signal the existing press stop circuit.

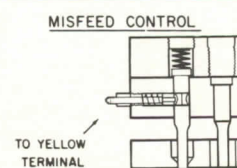
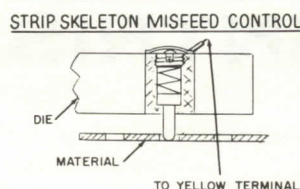
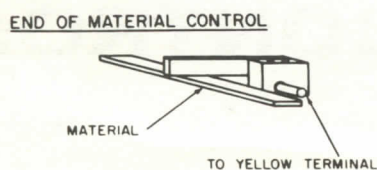
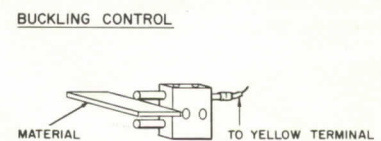
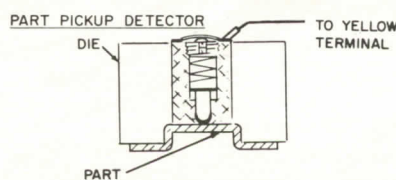
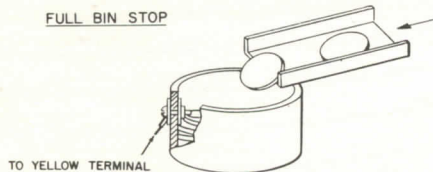
The standard unit, after being compressed has a rate of rise of approximately .001 of an inch per second. The motion sensing unit will function within plus or minus $\frac{1}{32}$ of an inch of its established working height and within this range is completely self-leveling and will adjust itself for wear, changes of temperature or other factors causing gradual changes.

BASIC OPERATION

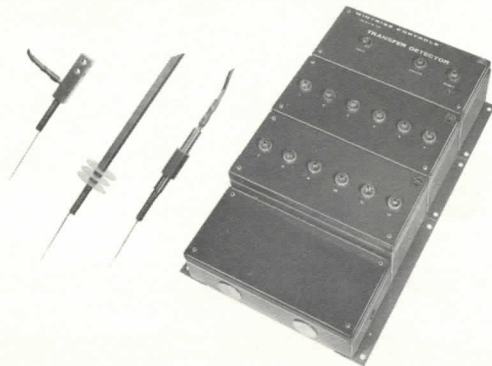
Directly measures normal die shut height. Instantly senses minute changes in shut height due to overloads, jams, buckling, slugs, double thickness. Immediately disengages clutch control to prevent damage.

No controls to set — no adjustments. Completely automatic.

SECONDARY CIRCUIT APPLICATIONS IN THE MISSING PARTS DETECTOR, PRESS OVERLOAD DETECTOR, AUTOTRANSFER



AUTOTRANSFER



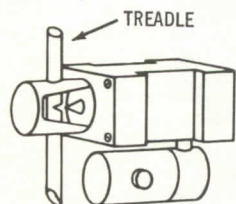
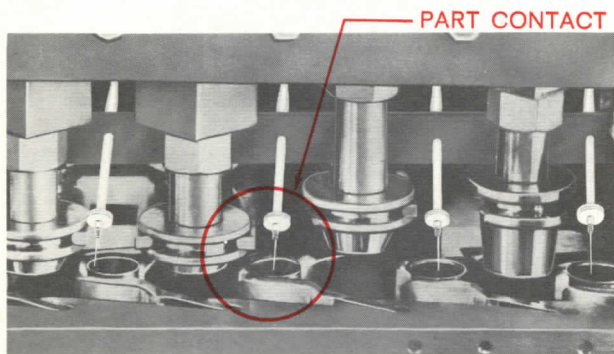
APPLICATION: The AUTOTRANSFER has been designed especially for slide transfer machines. This unit will detect a potential overload and stop the press before the overload occurs. It will protect any or all stations of a slide transfer machine, by detecting the failure of a part to transfer from one station to the next. Within a milli-second the press stop circuit is signaled. At the same time an indicating light will pin-point the exact location of the malfunction.

OPERATION: The AUTOTRANSFER operates from two types of impulses. One type comes from feeler assemblies (as they touch parts being transferred from one station to the next). These feeler assemblies need not touch the parts at exactly the same time. The other type of pulse comes from a cam contact assembly located on the slide shaft. If one part fails to transfer, an impulse is missing and the machine is immediately stopped.

COMPLETELY AUTOMATIC: The AUTOTRANSFER after initial installation, requires no further adjustments.

AUXILIARY CONTROLS: Other controls, for Buckling, End-of-Material, Misfeed, may also be operated through the secondary circuit of the transfer control.

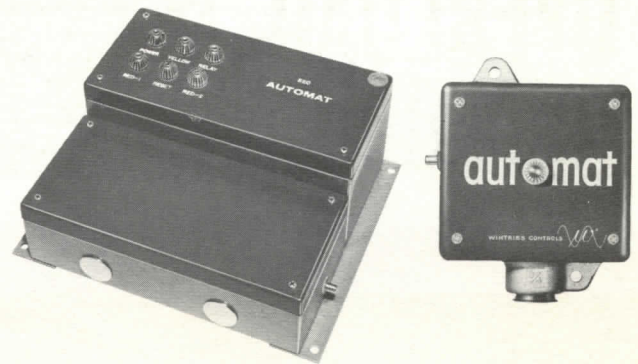
NOTE: Autotransfer may be used for applications requiring the control of MULTIPLE MOTIONS within one cycle. Any number of indicating stations are available.



TREADLE LOCK - CM1100A

Solenoid operated air cylinder releases treadle in event malfunction occurs. Minimum installation: two bolt mounting to press. Standard air hose fitting. THE TREADLE LOCK MAY BE USED WITH ANY WINTRISS CONTROL.

AUTOMAT



FOR CONTROLLING STRIP FEED, BUCKLING, END OF MATERIAL, MISFEED.

OPERATION: The unit has four inputs by which it may be operated. The first is normally above "ground"; "ground" to operate circuit. The number of these contacts that may be used at any one time is unlimited.

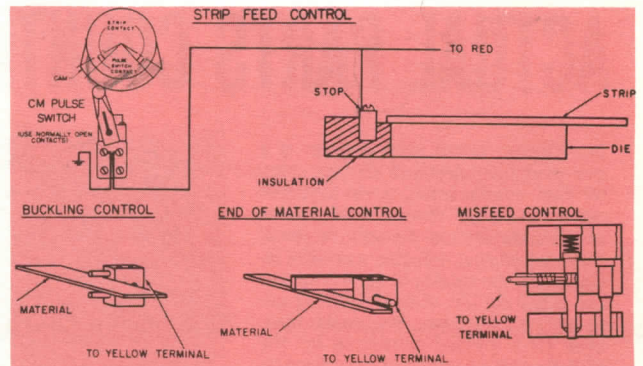
The second and third are normally "grounded"; break to operate circuit. The fourth is a normally closed stop circuit. Because the AUTOMAT is a low voltage unit, any low resistance probe or contact may be used.

The AUTOMAT is wired into the press STOP circuit and responds within milli-seconds if a malfunction occurs.

MODELS: Two AUTOMAT models are available: the 510 AC and the 520 DC. The AUTOMAT 520 DC is a heavy duty electronic unit, with a life expectancy rated in hundreds of millions of operations. It is equipped with six indicator lights that monitor all control functions.

The AUTOMAT 510 AC is a low cost unit intended for such auxiliary application as buckling control, end-of-material control.

PRIMARY CIRCUIT APPLICATIONS IN THE AUTOMAT



AUTOMATE YOUR KEY CLUTCH PRESSES WITH WINTRISS "AUTOMATION PACKAGE"

Convert mechanically operated presses to full electric control. In the event any malfunction occurs, press stops AUTOMATICALLY! Control stops press by releasing treadle rod if material BUCKLES, MISFEEDS, RUNS OUT.

Complete package includes:

1. TREADLE LOCK
2. BUCKLING CONTROL
3. END OF MATERIAL CONTROL
4. ANY WINTRISS CONTROL UNIT
5. START/STOP BUTTON

UNDER-FEED DETECTED through provisions in control unit. ELIMINATES SWITCHES - NO ADJUSTMENT - SIMPLE INSTALLATION.

LONG LIFE

MAGNETIC SWITCH



The Wintriss magnetic switch has been designed for applications requiring maximum dependability and minimum maintenance, at a reasonable price. No external moving parts mean no wear, nothing to clog or stick. An extremely long life (more than 100 million operations) may be expected, even under severe operation conditions. Once installed, the unit may be forgotten. The switch element is hermetically sealed. Its small size makes it possible to mount in close quarters where other switches will not fit.

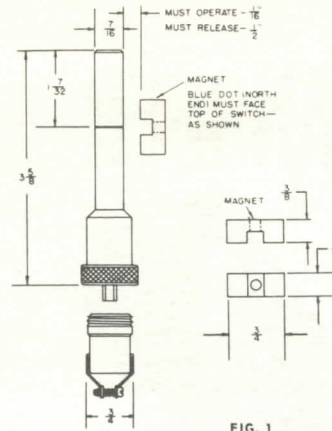


FIG. 1

SPECIFICATIONS

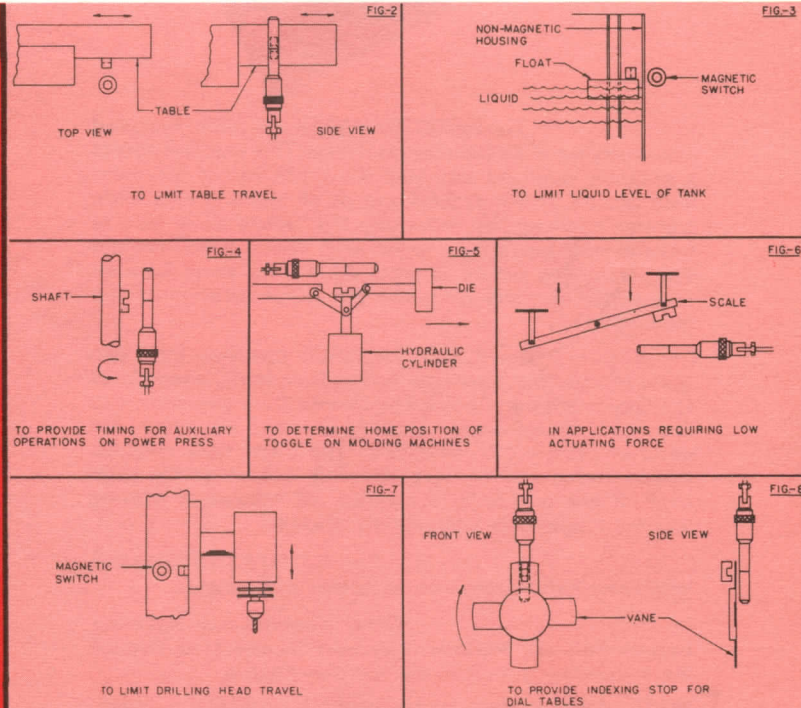
Contact arrangement:
Form A Normally—"Open"
Form B Normally—"Closed"
Contact Material—Silver
Contact Rating:
AC — 50 volt amps
DC — 25 watts
15 amps in rush
Available with 15VA, 15W rating
Breakdown voltage: — 500 volts min.
Life expectancy: 100,000,000 oper.
Actuating time: .001 Sec. Aver.
Contact bounce: .001 Sec. Aver.
Repeatability: within a few thousands

APPLICATIONS: Fast operating speed, and short contact bounce suggest applications in telemetering or other critical circuits. Pick-offs from delicate mechanisms are possible because of the very low actuating force needed, (Fig. 6). The fact that the switch is unaffected by abrasive environments, allows such applications as grinding table limit switches, (Fig 2).

Because a magnetic field can travel through most nonferrous materials, it is possible to sense motion through a metal plate without drilling holes in it. (Fig. 3). The extremely long life of the switch suggests the timing of auxiliary operations or motions of high speed power presses, (Fig. 4).

IN QUANTITY, PHYSICAL & ELECTRICAL SPECIFICATIONS MAY BE VARIED TO SPECIAL REQUIREMENTS.

INSTALLATION: The switch may be operated in three ways, (a) By moving a magnet toward, or by it, see Fig. 2 to 7 (refer to Fig. 1 for typical operating distance), (b) by moving a ferrous vane between the magnet and switch, (Fig. 8), (c) by electrically energizing a coil. No ferrous materials should be placed within 3/8" of the groove on the switch body or between the switch and magnet, unless it is intended to operate the unit as in Fig. 8. Refer to Fig. 1 for magnet positioning. For a longer operating time, several magnets may be placed side-by-side 3/8" apart, with the Blue end (N. pole) facing away from the switch plug. Delrin strips of various lengths with magnets mounted on them are available from the factory.



ACTUAL PARTS COUNTER

The Wintriss actual parts counter is a new electrically-actuated six-digit counter that counts actual parts produced rather than press strokes. Part ejection actuates the counter. No part, no count. Thus, the counter will give a reliable indication of the number of parts produced and actual die life, without counting set-up and try-out strokes. The counter operates from pulses produced by the Wintriss Control Unit. A control pulse indicates the press ram has descended and alerts the parts counter. A second pulse produced by an ejected part actuating any one of the standard Wintriss part ejection detectors advances the counter. If no part ejection signal is produced before the next control pulse, the counter is not actuated. The counter may be used for any application where part contact can be made. The standard ACTUAL PARTS COUNTER is a manually-reset counter.



AVAILABLE: A total parts counter, a preset counter that signals or stops the press when the predetermined count has been reached. A tamper proof remote counter, and other variations.

NOTE: The actual parts counter may be used with any Wintriss Control to add malfunction detection features.

MALFUNCTION INDICATOR



The malfunction indicator is designed for use with any Wintriss "secondary circuit" for auxiliary controls. It is designed to pinpoint the exact location of a malfunction. Any number of indicating stations are available.

SALES ENGINEERS

SOUTHERN CALIFORNIA

Western Operations Co.
830 Crescent Drive
Monrovia, Calif.
213-358-4469
213-449-4945

NORTHERN CALIFORNIA

Batina Machinery
72 East Third Avenue
San Mateo, Calif.
415-DI 2-1813

CHICAGO—NORTHERN ILLINOIS

Production Engineering
353 E. Butterfield Road
Elmhurst, Illinois
312-TE 4-4818

CONNECTICUT

Press Automation Equipment Co.
110 Trumbull Ave.
Plainville, Conn.
203-SH 7-3535
203-SH 7-3438

INDIANA

Henry J. Morath
325 Bankers Trust Bldg.
Indianapolis 4, Indiana
317-ME 5-4082

KANSAS-OKLA.-ARK.

Barry J. Galliger
P.O. Box 1019
Mission, Kansas 66222
913-HE 2-7474

MASSACHUSETTS, RHODE ISLAND

Joseph Bisonette
P.O. Box 815
BillERICA, Mass.
617-667-7806

MICHIGAN

Pressmetal Equipment Co.
P.O. Box 555
Grand Blanc, Michigan
313-694-6991
Al Wilkins
1130 Walsh Street, S.E.
Grand Rapids, Michigan
616-452-5689

MINNESOTA, W. WISCONSIN

N. B. Kelly Co.
590 Bayfield St.
St. Paul, Minn.
612-227-6673

MISSOURI, KANSAS, S.W. ILLINOIS

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34 N. Brentwood Blvd.
St. Louis, Missouri
314-PA 6-0332

NEW YORK STATE

Kean W. Stimm
1807 Elmwood Avenue
Buffalo, New York
716-875-9003
634-2240

IOWA, NEBRASKA

Donald D. Kucharo Co.
P.O. Box 727
Betterdorf, Iowa
319-355-0371

N. & S. CAROLINA

Armentrout Machinery Co., Inc.
2122 Enterprise Road
Greensboro, North Carolina
919-272-6142

METROPOLITAN NEW YORK, LONG ISLAND — NEW JERSEY

Production Machine Co., Inc.
363 Bloomfield Avenue
Montclair, N. J.
212-WO 2-7650

NORTHERN OHIO

Vaughn O'Neill & Co.
1090 Homeland Drive—Rocky River
Cleveland, Ohio 44116
216-331-4273
216-331-9831

S. OHIO

Besco & Associates
3349 Meyer Place
Cincinnati, Ohio 45211
513-662-4967

PITTSBURGH

Walter N. Laska
530 Sixth Avenue
Pittsburgh, Pa.
412-GR 1-0490

WESTERN PENNSYLVANIA

Merit Machinery, Inc.
2311 Babcock Blvd.
Pittsburgh, Pa.
412-931-6800

EASTERN PENNSYLVANIA, SOUTHERN NEW JERSEY, MD., DELAWARE, VIRGINIA

Kenneth B. Erdman Co.
7906 Montgomery Avenue
Elkins Park, Philadelphia, Pa. 19117
215-CA-4-1833

WISCONSIN

Production Equipment, Inc.
11800 W. Ripley Avenue
Milwaukee, Wisconsin 53226
414-476-6075

TENNESSEE — NORTHERN MISSISSIPPI

Hicks Machine Tool Co.
673 South Cooper
Memphis, Tenn.
901-276-2741

John Rier

P.O. Box 42
Signal Mountain, Tenn.
615-886-1297

LOUISIANA — GEORGIA ALABAMA — FLORIDA

Robt. W. Adams Co., Inc.
P.O. Box 7266 Station C
Atlanta, Georgia, 30309
404-355-7796

SOUTHERN MISSISSIPPI

Oliver H. Van Horn Co.
1728 St. Charles St.
New Orleans, La.
504-JA 2-8631

TEXAS

Lay Machinery Co., Inc.
6300 North Central Expwy.
Dallas 6, Texas
214-EM 3-6229

FOREIGN REPRESENTATIVES

CANADA

Power Press & Equipment Co.
9150 Meilleur St.
Montreal 11, Quebec
514-DU 9-8484
No. 2 Thorncliffe Park Dr.
Toronto 17, Ontario, Canada
416-421-2663

EUROPE

J. Broughton & Son Ltd.
Security Works
Pershore Road South
Kings Norton Factory Centre
Birmingham 30, England

INSTALLATION: All WINTRISS controls are supplied with clearly marked color-coded terminal boards for ease of installation. The controls operate on standard 110-120v 60 cycle A. C. power supply. Both normally closed and normally open contacts are provided for maximum flexibility in wiring into the existing "stop" circuits of the equipment being monitored.

NOTE: INITIAL INSTALLATION SUPERVISION PROVIDED WITHOUT CHARGE BY OUR SALES ENGINEERS

USE OF POSITIVE MOMENTARY CONTACT FOR SIGNALS ELIMINATES PROBLEMS OF MISTS, LUBRICANTS, ATMOSPHERIC CONDITIONS AFFECTING RAYS, LIGHT BEAMS. NO SENSITIVITY OR SPEED CONTROLS TO SET. ONCE INSTALLED, WINTRISS CONTROLS ARE COMPLETELY AUTOMATIC.

INDICATION LIGHTS: All controls have malfunction indicator lights to pin-point exact location of a malfunction. In addition, lights are designed to show proper operation of Wintriss Controls.

STATIC CONTROLS: Components are designed for long life. Circuitry activates only when malfunction occurs.

FREE APPLICATION SERVICE: Wintriss' experienced engineering staff will study your automation requirements and recommend the proper control for your specific application without obligation. All prints and information will be held in the strictest confidence.

FREE TRIAL: A 30 day "no strings" trial of a WINTRISS CONTROL can be arranged through your local sales engineer.

DEMONSTRATION: Each Sales Engineer is equipped with a demonstrator that can be connected to a standard outlet for demonstrating every aspect of the Wintriss Controls.

U.S. Patents, Nos. 2,864,910 and 3,023,283 • Other U.S. and Foreign Patents Granted and Pending.



WINTRISS CONTROLS

A TYCO SUBSIDIARY

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