



REPLACEMENT PARTS FOR WRISTLETS AND ARM RESTRAINTS



Photo 1 - Nylon Wristlets

Photo 2 - Restraint Straps



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IN GENERAL

Safety Precautions

“ DANGER” Danger is used to indicate the presence of a hazard which **WILL** cause **SEVERE** personal injury if the warning is ignored.

“” **THIS SAFETY ALERT SYMBOL IDENTIFIES IMPORTANT SAFETY MESSAGES IN THIS MANUAL. WHEN YOU SEE THIS SYMBOL , BE ALERT TO THE POSSIBILITY OF PERSONAL INJURY, AND CAREFULLY READ THE MESSAGE THAT FOLLOWS.**

Efficient and safe machine operation depends on the development, implementation and enforcement of a safety program. This program requires, among other things, the proper selection of point-of-operation guards and safety devices for each particular job or operation, a thorough safety training program for all machine personnel, that includes instruction on the proper operation of the machine, the point-of-operation guards and safety devices on the machine, and a regularly scheduled inspection and maintenance program.

Rules and procedures covering each aspect of your safety program should be developed and published both in an operator's safety manual, as well as in prominent places throughout the plant and on each machine. Some rules or instructions which must be conveyed to your personnel and incorporated into your program include:

 DANGER **Never** place your hands or any part of your body in this machine.

 DANGER **Never** operate this machine without proper eye, face and body protection.

 Never operate this machine unless you are fully trained, instructed, and have read the instruction manual.

 Never operate this machine if it is not working properly—stop operating and advise your supervisor immediately.

 Never use a foot switch to operate this machine unless a point-of-operation guard or device is provided and properly maintained.

 Never operate this machine unless two-hand trip, two-hand control or presence sensing device is installed at the proper safety distance. Consult your supervisor should you have any questions regarding the proper safety distance.

 Never tamper with, rewire or bypass any control or component on this machine.

A company's safety program must involve everyone in the company, from top management to operators, since only as a group can any operational problems be identified and resolved. It is everyone's responsibility to implement and communicate the information and material contained in catalogs and instruction manuals to all persons involved in machine operation. If a language barrier or insufficient education would prevent a person from reading and understanding various literature available, it should be translated, read or interpreted to the person, with assurance that it is understood.

 For maintenance and inspection always refer to the OEM's (Original Equipment Manufacturer's) maintenance manual or owner's manual. If you do not have an owner's manual, please contact the original equipment manufacturer.

Safety References

OSH ACT AND FEDERAL REGULATIONS

Since the enclosed equipment can never overcome a mechanical deficiency, defect or malfunction in the machine itself, OSHA (Occupational Safety and Health Administration) has established certain safety regulations that the employers (users) must comply with so that the machines used in their plants, factories or facilities are thoroughly inspected and are in first-class operating condition before any of the enclosed equipment is installed.

1. U.S. Government—An Act—Public Law 91-596, 91st Congress, S. 2193, December 29, 1970:

Duties

SEC. 5. (a) Each employer—

(1) shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees;

(2) shall comply with occupational safety and health standards promulgated under this Act.

(b) Each employee shall comply with occupational safety and health standards and all rules, regulations, and orders issued pursuant to this Act which are applicable to his own actions and conduct.

2. OSHA 29 CFR Sections that an employer (user) must comply with include:

1910.211 Definitions.

1910.212 General requirements for all machines.

1910.217 Mechanical power presses.

1910.219 Mechanical power-transmission apparatus.

3. OSHA 29 CFR 1910.147 The control of hazardous energy (lockout/tagout).

4. OSHA Publication

“General Industry Safety and Health Regulations Part 1910,” Code of Federal Regulations, Subpart O

This publication can be obtained by contacting:

U.S. Government Printing Office
P.O. Box 371954
Pittsburgh, PA 15250-7954
Phone: (202) 512-1800
<http://bookstore.gpo.gov>

ANSI SAFETY STANDARDS FOR MACHINES

The most complete safety standards for machine tools are published in the ANSI (American National Standards Institute) B11 series. The following is a list of each ANSI B11 Standard available at the printing of this publication.

B11–2020	Safety of Machinery
B11.1	Mechanical Power Presses
B11.2	Hydraulic & Pneumatic Power Presses
B11.3	Power Press Brakes
B11.4	Shears
B11.5	Ironworkers
B11.6	Manual Turning Machines (Lathes) w/ or w/o Auto Control
B11.7	Cold Headers and Cold Formers
B11.8	Manual Milling, Drilling, & Boring Machines
B11.9	Grinding Machines
B11.10	Sawing Machines
B11.11	Gear and Spline Cutting Machines
B11.12	Roll Forming and Roll Bending Machines
B11.13	Single & Multiple-Spindle Automatic Bar and Chucking Machines
B11.14	Withdrawn (See ANSI B11.18)
B11.15	Pipe, Tube and Shape Bending Machines
B11.16	Powder / Metal Compacting Presses
B11.17	Horizontal Hydraulic Extrusion Presses
B11.18	Machines Processing or Slitting Coiled or Non-Coiled Metal
B11.19	Performance Requirements for Risk Reduction Measures: Safeguarding and other Means of Reducing Risk
B11.20	Integration of Machinery into a System
B11.21	Machine Tools Using Lasers for Processing Materials
B11.22	Turning Centers and Automatic Numerically Controlled Turning Machines
B11.23	Machining Centers & CNC Milling, Drilling & Boring Machines
B11.24	Transfer Machines
B11.25	Large Machines
B11.26	Functional Safety for Equipment / Machine Control Systems
B11.27	Electro-Discharge Machines
B11.TR1	Ergonomics
B11.TR2	Metal Working Fluids
B11.TR3	Withdrawn (See ANSI B11.0)
B11.TR4	Selection of Programmable Electronic Systems (PES/PLC)
B11.TR5	Noise Measurement
B11.TR6	Withdrawn (See ANSI B11.26)
B11.TR7	Integration of Lean and Safety
B11.TR8	Guide to Inspection of Risk Reduction Measures
B11.TR9	Cybersecurity
B11.TR10	Guidance on Artificial Intelligence into Machinery Safety Applications
ANSI/ISO 12100	Safety of machinery (identical adoption of ISO 12100-2010)

IN GENERAL

Arm-Type and Overhead-Type Restraints

R15.06	Robotic Safeguarding
B15.1	Mechanical Power Transmission Apparatus
B56.5	Guided Industrial Vehicles and Automated Function of Manned Industrial Vehicles
B65.1	Printing Press Systems
B65.2	Binding and Finishing Systems
B65.5	Stand-Alone Patten Presses
B151.1	Horizontal (Plastic) Injection Molding Machines
B152.1	Hydraulic Die Casting Presses
B154.1	Rivet Setting Machines
B155.1	Packaging Machinery
O1.1	Woodworking Machinery

These standards can be purchased by contacting:

ANSI—American National Standards Institute
25 West 43rd Street, 4th Floor
New York, New York 10036
Phone: (212) 642-4900
www.ansi.org

Warranty

9. Limited Warranties.

9.1. (i) Subject to Section 8.1(ii) below, Rockford Systems makes to Customer the following sole and exclusive warranties with respect to Goods:

(a) with respect to Goods that are manufactured based on Customer specifications, at the time of shipment by Rockford Systems, the Goods sold under the Agreement that are manufactured by Rockford Systems pursuant to such specifications conform to such specifications set forth in the applicable Order Documentation; and

(b) at the time of shipment by Rockford Systems, the Goods sold under the Agreement that are manufactured by Rockford Systems are free from defects in material and workmanship.

(c) Rockford Systems's warranty is for a period of 1 year, and begins from date of shipment from Rockford Systems to the original purchaser.

This warranty does not include accessories, parts or equipment sold hereunder that are manufactured by someone other than Rockford Systems.

(ii) Every claim by Customer against Rockford Systems for breach of warranty with respect to the Goods shall be deemed waived by Customer unless written notice thereof is received by Rockford Systems within fifteen (15) days after discovery.

9.2. If Rockford Systems breaches either of the warranties set forth in Section 8.1(i) above, and written notice thereof is received by Rockford Systems from Customer within the applicable time period specified in Section 8.1(ii) above, Customer's sole and exclusive remedy and Rockford Systems's only obligation shall be, as Rockford Systems in its sole and exclusive judgment shall determine, the replacement of the nonconforming Goods, or an adjustment to the purchase price for the nonconforming Goods or the repair of the nonconforming Goods. All transportation charges related to replacement or repair of Goods shipped to Rockford Systems's plant or facility (or other place at

NATIONAL SAFETY COUNCIL SAFETY MANUALS

Other good references for safety on machine tools are the National Safety Council's Safety Manuals. These manuals are written by various committees including the Power Press, Forging and Fabricating Executive Committee. Copies of the following publications are available from their library:

- Power Press Safety Manual - 5th Edition
- Safeguarding Concepts Illustrated - 7th Edition
- Forging Safety Manual

These manuals can be obtained by contacting:

National Safety Council
1121 Spring Lake Drive
Itasca, IL 60143-3201
1-800-621-7615
www.nsc.org

Rockford Systems's direction) shall be prepaid by Customer. Rockford Systems shall be responsible for reasonable transportation charges back to Customer for Goods that have been replaced or repaired by Rockford Systems. Any replacement Goods or repaired Goods shall be subject to these Terms and Conditions.

9.3. THE EXPRESS WARRANTIES SET FORTH HEREIN ARE THE ONLY WARRANTIES APPLICABLE TO THE SALE OF GOODS BY ROCKFORD SYSTEMS TO CUSTOMER PURSUANT TO THE AGREEMENT, AND THEY EXCLUDE ALL OTHER EXPRESS, ORAL OR WRITTEN WARRANTIES, AS WELL AS ANY WARRANTIES IMPLIED BY LAW WITH RESPECT TO THE GOODS, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PURPOSE, NOTWITHSTANDING ANY DISCLOSURE TO ROCKFORD SYSTEMS OF THE INTENDED USE OF THE GOODS.

9.4. Rockford Systems's warranties under Section 8.1(i) are void if repairs or modifications of the Goods are made by anyone other than Rockford Systems. Without limitation of the foregoing, Rockford Systems assumes no responsibility for and shall have no obligations to Customer because defects in any materials furnished by, or any faulty workmanship provided by, any party other than Rockford Systems.

9.5. Rockford Systems reserves the right to improve its products through changes in design or material without being obligated to incorporate such changes into products of prior manufacture. Customer cannot rely on any such changes as proof of insufficiency or inadequacy of prior designs of the Goods or material contained in the Goods.

9.6. If Customer grants to an end user of the Goods (or any other customer of Customer) any warranty that is greater in scope or time than the warranty and claims period stated herein, Rockford Systems shall not be liable beyond the scope of the limited warranty, the claim period, the damages and the remedies provided for under this Section.

9.7. Solely to the extent transferable, Rockford Systems assigns and transfers to Customer the original manufacturer's warranty on Goods sold hereunder that are not manufactured by Rockford Systems.

Danger Sign(s) to be Mounted on Machine

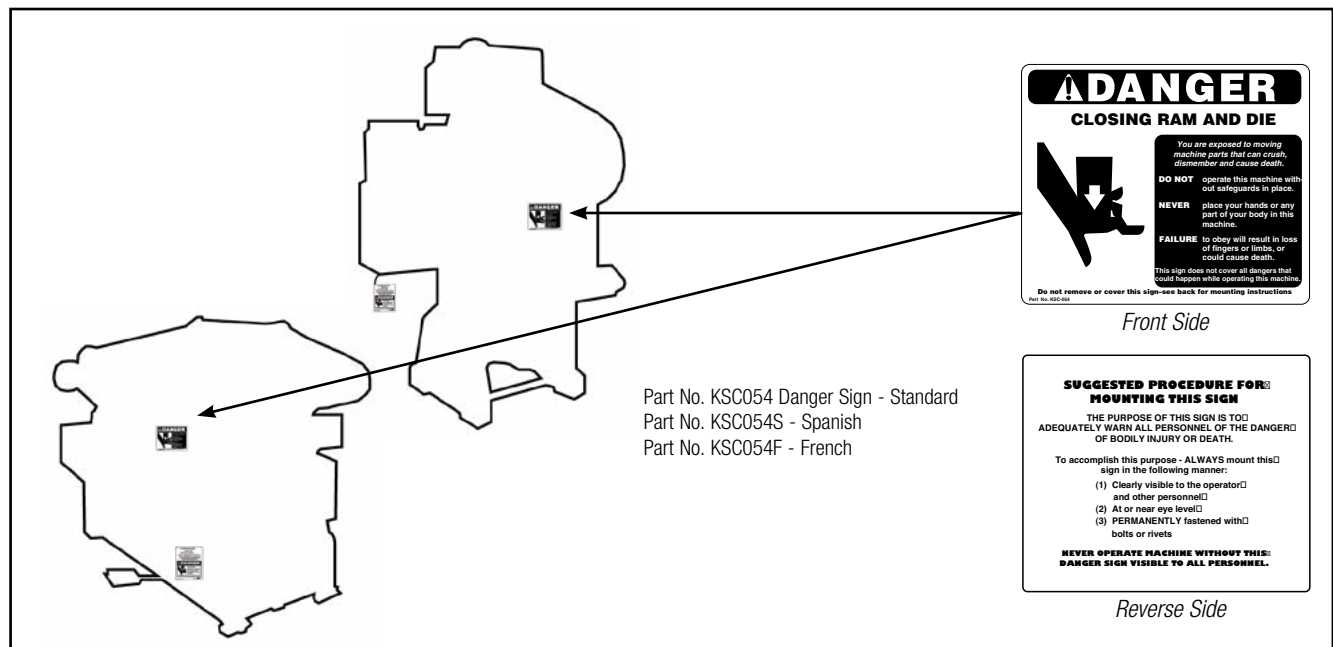


Danger signs **MUST BE PERMANENTLY MOUNTED IN A PROMINENT LOCATION** on the machine where this equipment is installed. This sign must be in a **LOCATION THAT IS EASILY VISIBLE** to the operator, setup person, or other personnel who work on or around this machine. **ALWAYS** mount these signs with bolts or rivets.

If any danger sign becomes destroyed or unreadable, the sign must be replaced immediately. Contact for a replacement danger sign.



Never operate any machine unless a danger sign is in place.



IN GENERAL

Arm-Type and Overhead-Type Restraints

Overhead and Arm-Type Restraint Device



152 (Strap Only)

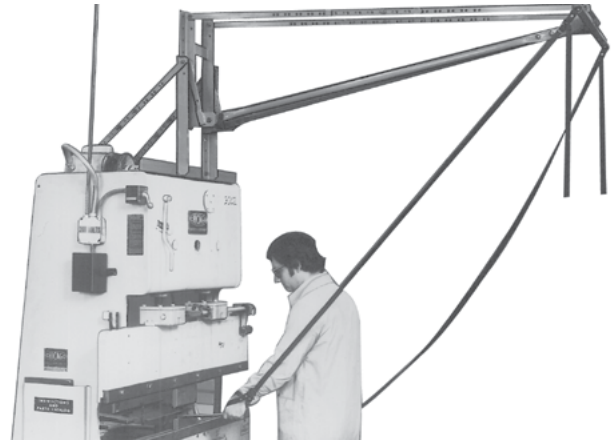
(Face Press to Determine Right or Left Side)

Item No.	Part No.	Description
147	WEB200MN	Nylon Wristlets (Pair) Extra-Small
	WEB200S	Nylon Wristlets (Pair) Small
	WEB200M	Nylon Wristlets (Pair) Medium/Standard
	WEB200L	Nylon Wristlets (Pair) Large
	WEB200XL	Nylon Wristlets (Pair) Extra-Large
148	WEB302	Restraint Device Connector- 1" D-Ring
152	WEB301	Restraint Strap - 42" Long

Single

The Overhead Restraint Device is suitable for large presses and press brakes. This device is a logical safeguarding choice when the operator never has to reach into, along side of, or near the point of operation to perform their job.

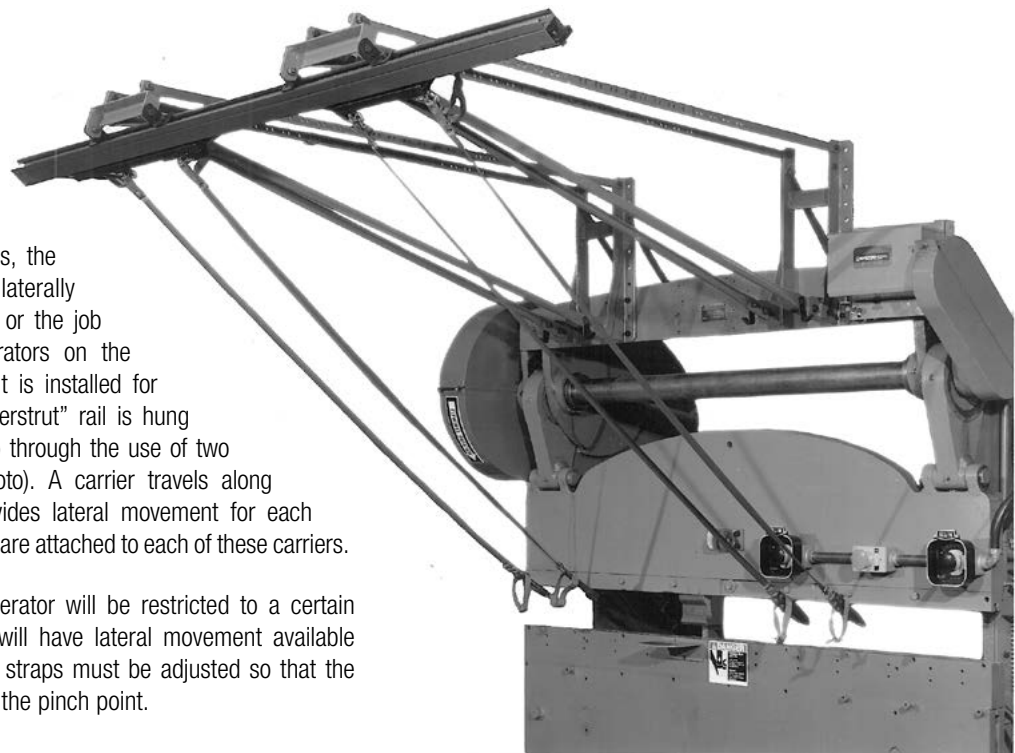
Through the use of an overhead frame, boom rails and braces, a support bar is situated above and behind the operator. Adjustable nylon straps, with wristlets, are attached to the support bar. This provides the operator with restraint protection for each hand but allows ample freedom away from the machine to handle large or clumsy parts without having to remove the wristlets.



Sliding

On wide presses or press brakes, the operator may have to move laterally across the front of the machine or the job may require two or more operators on the same machine. When a restraint is installed for two operators, a length of "powerstrut" rail is hung above and behind the operator(s) through the use of two single restraint frames (see photo). A carrier travels along the "powerstrut" rail which provides lateral movement for each operator. A pair of restraint straps are attached to each of these carriers.

With this arrangement, each operator will be restricted to a certain reach toward the machine but will have lateral movement available through the sliding carriers. The straps must be adjusted so that the operator(s) is **never** allowed into the pinch point.



Arm Type Restraint

The arm-type restraint device is suitable for small to medium size presses, and short-bed press brakes when the operator is able to load and unload, or hold parts without reaching into, along side of, or near the point of operation.



PRELIMINARY CONSIDERATIONS FOR ALL RESTRAINTS

Arm-Type and Overhead-Type Restraints

Before adjusting and using the restraint systems, perform the following steps:

1. The components must be inspected, found in safe operating condition and the inspection recorded.
2. The operator must be wearing his wristlets and wearing them properly as illustrated below.

NYLON WRISTLETS



Always wear wristlets properly. These nylon wristlets have a hand loop, not a thumb loop. The four fingers—not the thumb—are inserted through the loop. The wrist strap buckle adjusts for comfort. The wristlet must be worn in this manner, as illustrated in the photo at right. To ensure the proper fit, wristlets are available in various sizes.



Never wear wristlets with thumb through the loop.



Never fail to fasten the wristband.



3. Wristlets must be properly attached to the straps at all times.
4. There must be no bolts, studs, stops, blow-off tubes or other objects projecting in such a way that the wristlets, snaps or cables may be caught by them.
5. Do not allow the operator to wear rings or any other object which might become caught while operating the machine.

Adjusting Restraints or Hold-Outs

With the arms in the up position and the wristlets on the operator's hands, adjust (shorten) end attached to clip to restrain operator's extended finger tips from any possible nip point in the point of operation.



Always check finger clearance:

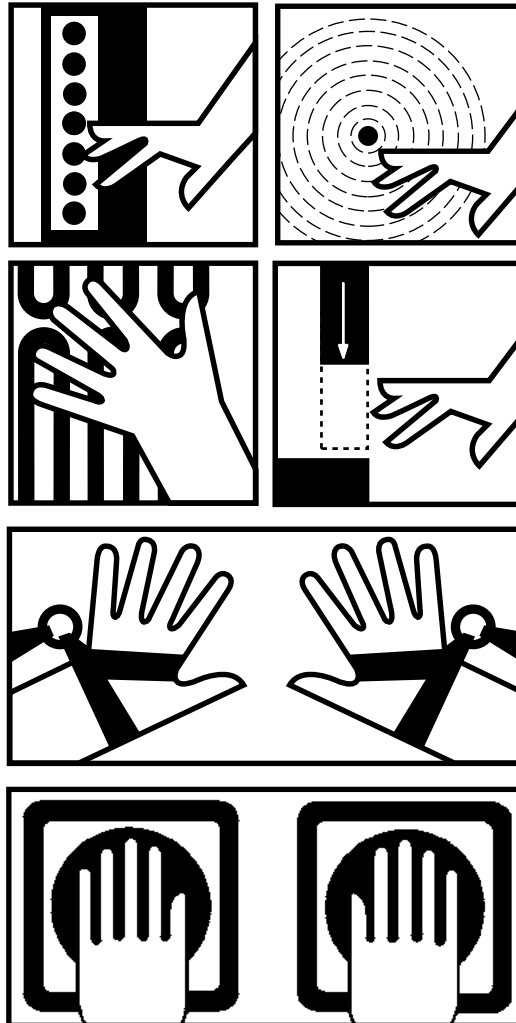
1. After changing any adjustment,
2. After changing operators, dies, or shifts, and
3. As frequently as necessary to ensure that any restraint in use is properly adjusted for the job and for the operator using it.

Maintenance Requirements

1. All parts, fasteners and press mountings must be inspected frequently using a check list.
2. Straps must be examined daily and replaced if worn or damaged.
3. Inspect wristlets, wristlet rings, wristlet rivets and wristlet buckles daily. Replace all parts as soon as they show wear or damage.
4. Keep all mounting brackets, bolts and nuts secure and tight. Inspect daily.



Never operate any machine until you read and understand all instructions regarding the use of restraints.



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