#### **Machine Guarding Basic Requirements**

- Prevent contact: The safeguard must prevent hands, arms and any
  other part of a operator's body from making contact with dangerous
  moving parts. A good safeguarding system eliminates the possibly of the
  operator or another worker placing parts of their bodies near hazardous
  moving parts.
- Secure: Operators should not be able to easily remove or tamper with the safeguard, because a safeguard that can easily be made ineffective is no safeguard at all. Guards and safety devices should be made of durable material that will withstand the conditions of normal use. They must be firmly secured to to the machine.
- Protect from falling objects: The safeguard should ensure that no objects can fall into moving parts. A small tool which is dropped into a cycling machine could easily become a projectile that could strike and injure someone.
- Create no new hazards: A safeguard defeats its own purpose if it creates
  a hazard of its own such as a shear point, a jagged edge, or an unfinished
  surface which can cause a laceration. The edges of guards, for instance,
  should be rolled or bolted in such a way that they eliminate sharp edges.
- Protection: Machine guards must protect the operator and other employees in the machine area from hazards created at the point of operation, ingoing nip points, rotating parts, flying chips and sparks.
- Area: All pulleys, belts, shafts, couplings, gears etc. that are within 7 feet of the floor or working level require proper machine quarding.
- Create no interference: Any safeguard which impedes an operator from performing the job quickly and comfortably might soon be overridden or disregarded. Proper safeguarding can actually enhance efficiency since it can relieve the operator's apprehensives about injury.
- Allow safe lubrication: If possible, one should be able to lubricate the
  machine without removing the safeguards. Locating oil reserviors
  outside the guard, with a line leading to the lubrication point, will reduce
  the need for the operator or maintenance operator to enter the
  hazardous area.

OSHA compliant opening size (in inches)	
Distance of opening from Point of Operation Hazard (inches)	Maximum width of opening (inches)
1/2 to 1 1/2	1/4
1-1/2 to 2-1/2	3/8
2-1/2 to 3-1/2	1/2
3-1/2 to 5-1/2	5/8
5-1/2 to 6-1/2	3/4
6-1/2 to 7-1/2	7/8
7-1/2 to 12-1/2	1-1/4
12-1/2 to 13-1/2	1-1/2
15-1/2 to 17-1/2	1-7/8
17-1/2 to 31-1/2	2-1/8



# Non-Metallic Engineered Barrel Guard Options

Barrel Style Pump Guards for ANSI Pumps are ANSI/OSHA Compliant

Nonmetallic guards will not dent or rust. Cantilevered guard bolts direct to rear of the pump and eliminates drilling base plates to mount guards. ANSI Pump Guards install in just a couple of minutes and can be removed and remounted in about two minutes. All Uniguard Machine Guards are UV Protected for outdoor use.

Non-Metallic ANSI Pump Barrel guards. Replaces Gould, Flowserve, and many others. Extremely easy to install and use. No trimming or fitting required. Available in many different sizes.



Part Number "Stock" Barrel Type Guards	
A-3175L	Goulds Model 3175L - 19.50" Dia. x 20.00" Min Length x 26.50" Max Length
A-3175M	Goulds Model 3175M - 16.50" Dia. x 19.50" Min Length x 24.75" Max Length
A-31755	Goulds Model 31755 - 16.50" Dia. x 15.50" Min Length x 22.75" Max Length
A-3196-MTI/LTI	Goulds Model 3196-MTI/LTI - 11.00" Dia. x 9.00" Min Length x 13.50" Max Length
A-3196-MTI/LTI-PLATE	Goulds Model 3196-MTI/LTi - Adapter Plate Only
A-3196-I/X-MULTIADPT	Goulds Model 3196-I/X MultiAdapter - 11.00" Dia. x 9.00" Min Length x 13.50" Max Length
A-3196-MTX/LTX	Goulds Model 3196-MTX/LTX - 11.00° Dia. x 9.00° Min Length x 13.50° Max Length
A-3196-MTX/LTX-PLATE	Goulds Model 3196-MTX/LTX - Adapter Plate Only
A-3196-STX/i	Goulds Model 3196-STX/i - 8.00" Dia. x 8.75" Min Length x 12.00" Max Length
A-3196-XLTX/i	Goulds Model 3196-XLTX/i - 16.50" Dia. x 15.50" Min Length x 20.75" Max Length
A-3410L	Goulds Model 3410L - 16.50" Dia. x 8.50" Min Length x 13.25" Max Length
A-3410M/S	Goulds Model 3410M/S - 16.50" Dia. x 8.50" Min Length x 12.00" Max Length
A-MARK-3/1	Durco Model - MARK 3 Grp 1 - 8.00° Dia. x 8.75° Min Length x 12.00° Max Length
A-MARK-3/2	Durco Model - MARK 3 Grp II - 11.00" Dia. x 9.00" Min Length x 13.50" Max Length
A-MARK-3/3	Durco Model - MARK 3 Grp III - 16.50" Dia. x 15.50" Min Length x 20.75" Max Length

Call for More Information or Your Free UNIGUARD Sizing Chart Phone: 888-549-4622





## **TOUGH • SAFE • SIMPLE**

Installation Instructions for Uniguard<sup>©</sup> for Uniguard Inspection Window on Barrel Style Guards





#### Features:

- Designed to fit all Uniquard Barrel Machine Guards
- Saves money by decreasing down time
- Makes coupling maintenance less of an effort
- Easy to install
- Economical
- Allows for visual inspection of the rotating element without removing the guard.

# THANK YOU FOR CHOOSING UNIGUARD MACHINE GUARDS

Your comments, questions, and suggestions are very important to us.

Please feel free to call us at:

888-549-4622



## **Tools Required**

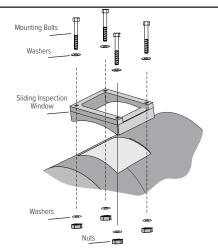
- Tape Measure.
- Reciprocating saw with coarse blade suitable for cutting thermoplastics.
- Power drill with .125" (3mm) drill bit and .375" (10mm) drill bit.
- One .75" hex head socket wrench and one open end wrench.

#### **Guard installation**

- Width of guard should extend from face of drive motor to face of driven equipment (Fig. 2).
- Base of guard should be fastened with mechanical fasteners through supplied angle bracket to stationary base. Fasteners should be utilized in four opposing corners of guard to prevent lateral deflection.
- Although Uniguard Machine Guards are designed to last the life of the equipment they are used on periodic inspections are required. With equipment locked out check for loose fasteners or component failures.

# **A** WARNING

**NOTE:** Before installation make sure power source is disconnected and locked out according to proper procedures.



### Assembly:

Uniguard's Insprection Window on Barrel Style Guards design allows complete assembly in about 15 to 30 minutes depending if cutting is required.



# **WARNING**

OSHA, ANSI & ASME Requires entire width of rotating element to be shielded. For further information visit the OSHA Web site at www.osha-slc.gov.,

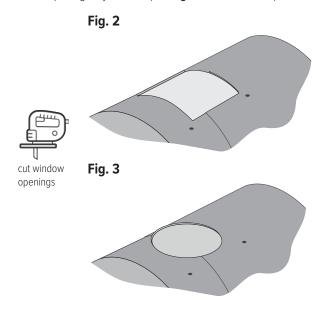
Standard -29-1910.219

**1.** Guards should be mounted and adjusted to proper width before installing Inspection Window.



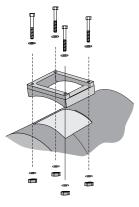
NOTE: Once the Inspection Window is installed the guard will no longer be adjustable. Position Window on guard, directly overcoupling location and mark for opening and bolt hole location.

**2.** Opening should be cut with a reciprocating saw with a coarse blade or alternatively a large hole saw, roughly the diameter of the window opening may be used (*See Figure 2 and 3 below*).



**3.** Secure window frame to guard body with provided fasteners. Two neoprene washers are provided to be used as spacers should position of window frame straddle adjustment seam on barrel of guard.

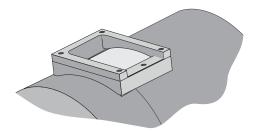
Fig. 4



Note: Supplied with your inspection window are special bolts that have been specially designed for thermal plastics to prevent pullout. DO NOT SUBSTITUTE BOLTS!

**4.** Installation will be complete once the frame has been secured to guard side window into place and secure with supplied fasteners.

Fig. 5



**5.** Alert employees and reduce liability to potential hazards. Adhere supplied ANSI Z535 Safety Label to an area of the coupling guard most noticeable by employees.

Fig. 6

