

## How to Use This Manual

This manual provides detailed instructions on installation and maintenance of Orange Peel Guards, Type CCG, Close-Coupled Coupling Guards, Sizes 10 thru 50.

**CAREFULLY FOLLOW THE INSTRUCTIONS IN THIS MANUAL AND SUPPLEMENTAL POWER TOOL MANUALS FOR OPTIMUM SAFETY AND PERFORMANCE.**

## Introduction

**NOTICE:** Install and operate Orange Peel products in conformance with applicable local and national safety codes, and per the supplied Orange Peel installation and maintenance manual. Guards are supplied as standard with ANSI Z535.4 English

Warning Labels. Optional ISO 3864 Symbol Based Warning Labels can be supplied if required. It is the responsibility of the end user to determine if translated warning labels or symbol based safety training are required in their facility, to ensure complete understanding of the warning being communicated. Custom translated warning labels are also available, upon request.

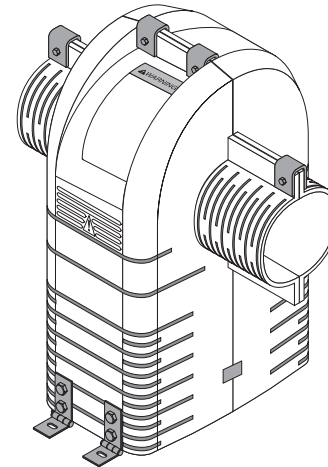
**CAUTION:** Observe all safety rules when installing or servicing guards and equipment.

**WARNING:** Exposed moving parts can cause severe injury. **LOCK OUT POWER** at the starting switch of prime mover and remove all external loads from equipment before opening or removing the guard. Do not use the guard as a step.

## Installation

Installation of Orange Peel Rotating Shaft Guards requires standard mechanics tools, a power saw or hand saw, and a drill. These are as follows:

- Circular saw, reciprocating saw, or hand saw with a blade suitable for cutting high density polyethylene plastic
- Electric or hand drill
- 6mm (Size 10/20) or 8mm (Size 30/40/50) hex head sockets/socket wrench and open end wrench
- 6mm/.250" drill bit (Size 10/20) or 8mm/.313" drill bit (Size 30/40/50)
- Torque wrench
- Tape measure
- File or coarse sandpaper
- Optional 3mm/.125" stainless steel pop rivets (8) and installation tool (for mechanical attachment of warning labels)

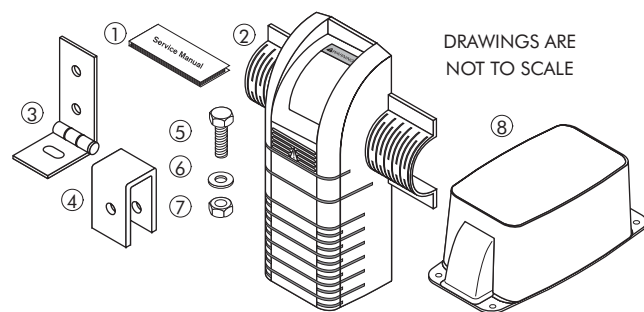


**LOCK OUT POWER** at the starting switch of the prime mover and remove all external loads from equipment. Clean all installation surfaces. Remove parts from the shipping box and verify quantities:

- 1 - Service Manual (1)
- 2 - Guard Halves (2)
- 3 - Hinges (2) on Size 20, (4) on Sizes 30/40/50
- 4 - Clips (4), Splices on Sizes 30/40/50 (2)
- 5 - Hex Head Bolts (16)
- 6 - Fender Washers (14)
- 7 - Hex Head Locknuts (16)
- 8 - Optional Pedestal (1)

**Note:** Foundation Fasteners (4) (customer supplied - see Table 1)

**Note:** 4 extra bolts, 4 nuts and 8 washers have been supplied for use with the optional guard pedestal. Customer supplied inch stainless steel fasteners can be used in place of the standard metric stainless steel fasteners.



**TABLE 1 — Type CCG Fasteners and Tightening Torques**

GUARD SIZE	Attachment	Fastener/Nut Size		Fender Washer Size		Tightening	
		mm	Inch	mm	Inch	Nm	lb-in
20	Hinge	M6-1.0 x 20	.250-20 x 1.0	M6 6.4 x 18 x 1.6	.250 x .750	12	108
	Clip	M6-1.0 x 20	.250-20 x 1.0	M6 6.4 x 18 x 1.6	.250 x .750	12	108
	Foundation	M6 by Purchaser	M6 by Purchaser	...	...	12	108
30/40/50	Hinge	M8-1.25 x 30	.313-18 x 1.25	M6 6.4 x 18 x 1.6	.313 x 1.0	20	180
	Clip	M8-1.25 x 30	.313-18 x 1.25	M6 6.4 x 18 x 1.6	.313 x 1.0	20	180
	Foundation	M8 by Purchaser	M6 by Purchaser	...	...	20	180

### Measurements

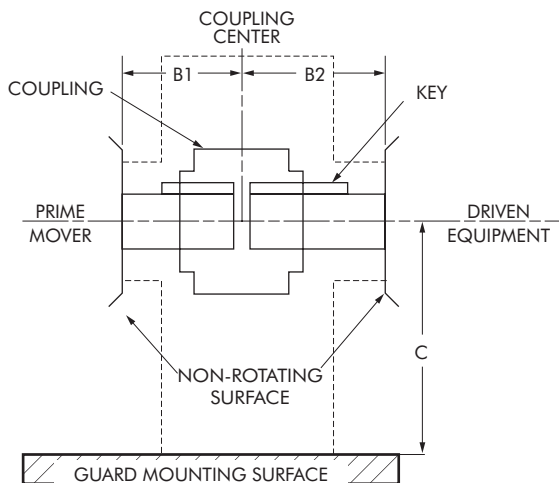
Determine and record the following trimming dimensions: (To retain extension clip, guard can be offset, if clearances are maintained. See Figure 1.)

B1 \_\_\_\_\_

B2 \_\_\_\_\_

C \_\_\_\_\_ A Guard Pedestal is required if C is greater than C max.

**WARNING:** Accurate measurements are required! It is the purchaser's responsibility to limit all interface gaps to less than 6mm/.250".



### Trimming

Locate and mark the base and extension trim lines that correspond to the recorded measurements. **CAUTION:** Be sure to trim the guard halves to their mating extensions! These can be scribed to ensure a straight cut. Be sure to double check your work. The numbers molded into the extensions and base indicate the distance from the guard centerline, for trimming reference. If a pedestal is used, trim the difference between the w/pedestal C max dimension and the actual C dimension, from the guard halves. Next support the guard half to be trimmed. It should be held firmly and allow for the safe trimming following the sawing tool manufacturers operating instructions. Be sure to read instructions thoroughly. Trim the guard half extensions and base. At times it may be necessary to notch the guard for protrusions. Sand or file all edges smooth. Guard edge should sit flat against the mounting surface.

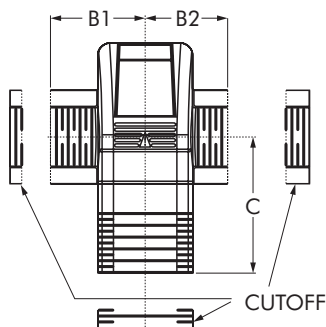


Figure 1

### Guard Installation

**HINGES** — The hinges should be mounted so the guard sits flush with the mounting surface. (See Figure 2.) The hinges on Size 20 (quantity, 2) should be centered with the guard body partial trim lines and flush with the bottom edge, as shown. (See Figure 3.) The hinges on Size 30/40/50 (qty. 4) should be aligned with the inside edge of the partial trim lines and flush with the bottom edge, as shown. (See Figure 3.) Once in position, use the hinge as a template for drilling the fastener holes. Install the hex head bolt through the hinge and use a fender washer and hex head lock nut on the backside. Tighten to 12 Nm/108 lb-in for Size 20 and 20 Nm/180 lb-in. for Size 30/40/50. Hinges can be reverse mounted, if required.

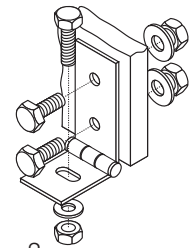


Figure 2

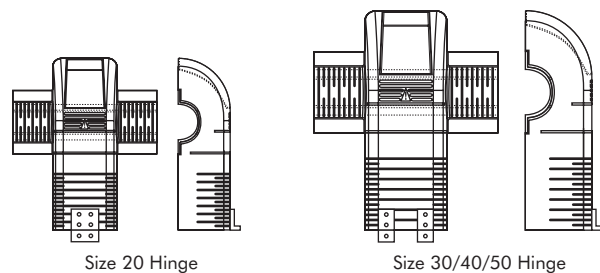
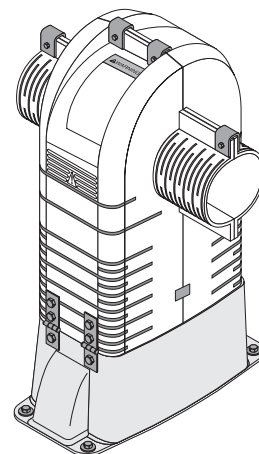


Figure 3

**OPTIONAL PEDESTAL** — A pedestal may be required for applications having a high base to centerline. The pedestal is attached to the guard halves, using the extra fasteners. This must be done prior to positioning the guard on the foundation, since the fasteners are secured internal to the pedestal. (See Figure 4.) Use a fender washer between the foundation fastener and pedestal mounting hole.

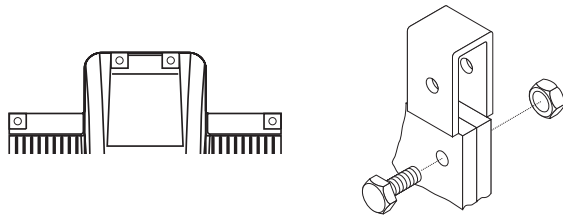


Optional Pedestal

Figure 4

**FOUNDATION ATTACHMENT** - Position the guard in its final location. Be sure the rotating members are centered in the guard and that no gaps greater than 6mm/.250" exist. Mark the foundation drilling location in the center of the hinge slotted hole (or Pedestal base). Drill or tap a hole for use with a suitable customer supplied fastener. (see Table 1).

**CLIPS** — The clips should be located and attached flush with the extension ends and butted against the guard body ribs, as shown. If the extension is completely trimmed off, no clip is required. On Size 30/40/50, the unused extension clip should be added to the center flange. Once in position, use the clip as a template for drilling the fastener holes. Install the hex head bolt through the clip and use a hex head lock nut on the backside (without washer). Tighten to 12 Nm/180 lb-in for Size 20 and 20 Nm/180 lb-in for Size 30/40/50. On Size 30/40/50, an optional butt joint splice can be used for alignment.



**WARNING LABELS** — Warning labels (7 mil) have been factory installed on each guard half. If an ISO or special requested label has been supplied, remove the existing label, clean the area and install safety label. For severe wash down or other environments requiring mechanical label attachment, pop rivets can be utilized. Use 4, 3mm/.125" medium length stainless steel pop rivets at the label corners to provide mechanical attachment. (See Figure 5.)



ANSI Z535.4



ISO 3864

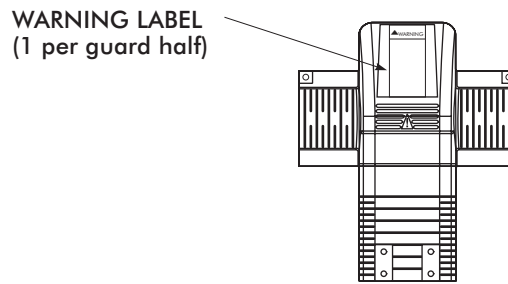
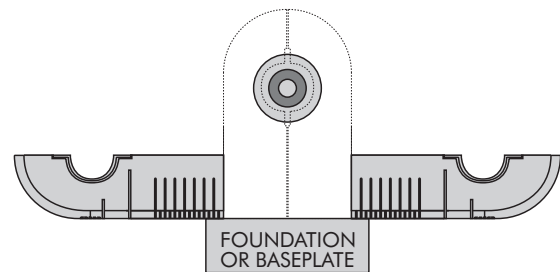


Figure 5

**START UP** — Prior to starting equipment, inspect the guard installation for proper clearances.

### Equipment Servicing

**WARNING: LOCK OUT POWER** at the starting switch of prime mover and remove all external loads from equipment before opening or removing the guard. To open the guard, remove the clip fasteners and clips. Open the guard laying it flat against the foundation or until an obstruction is incurred. If a major repair is being made, completely remove the guard from the foundation and re-install BEFORE equipment is unlocked and started.



### Guard Maintenance

Orange Peel guards are virtually maintenance free. They never need painting and are supplied with non-corrosive stainless steel hardware. Periodic visual inspection should be performed every 60 days, along with general equipment inspections with the equipment shut down and locked out. Check the guard for any damage or component failure. Check tightening torques on all fasteners. Also, make sure that the warning labels are clean and readable. If the warning label becomes loose, damaged, or unreadable, contact Rexnord for replacement labels or guard service parts.

**TABLE 2 — Type CCG Service Parts**

GUARD SIZE	Description	Part Number
20	Fastener Kit (1 Set)	2924298
30/40/50	Fastener Kit (1 Set)	2924299
10/20	Clip Kit (4)	2924302
30/40/50	Clip Kit (4)	2924303
20	Hinge Kit (2)	2924304
30/40/40	Hinge Kit (4)	2924305
20/ Type CCG	Warning Label Size 48 x 95mm (1.88" x 3.75")	2924286
30/40/50 Type CCG	Warning Label Size 75 x 150mm (3" x 6")	2924288