

How To Use This Manual

This manual provides detailed instructions on installation and maintenance of Orange Peel Guards, Type LSG, Line Shaft Guards, Sizes 10 thru 70.

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

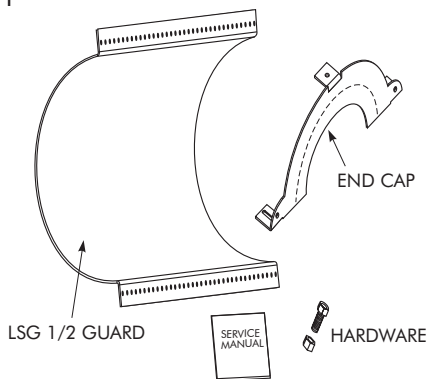
Introduction

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. It is the responsibility of the end user to determine if ANSI safety warning, translated warning labels or symbol based safety label training is required in their facility to ensure complete understanding of the warning being communicated.

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 the prime mover and remove all external loads from the equipment before opening or removing the guard. Do not use the guard as a step.

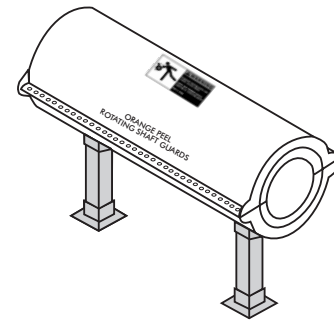
FIGURE 1



Installation

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

- Band saw, reciprocating saw, or hand saw with a blade suitable for cutting aluminum
- Electric or hand drill with suitable drill bit if optional leg extensions are used.
- 6mm for sizes 10/20 and 8mm for sizes 30-70 hex head sockets, socket wrench and open-end wrench
- Torque wrench
- Tape measure
- Metal file or other appropriate de-burring tool



- Optional 3mm/0.125 stainless steel pop rivets (8) and installation tool (for mechanical attachment of optional warning labels)

Lock Out Power at the starting switch of the prime mover. Clean all installation surfaces. Remove parts from the shipping box and verify quantities: (Figure 1)

1. Service manual (1)
2. Guard half (as ordered)
3. Optional end cap (0,1, or 2- as required)

Fastener kits can either be supplied by Rexnord or by the customer.

IF supplied by Rexnord:

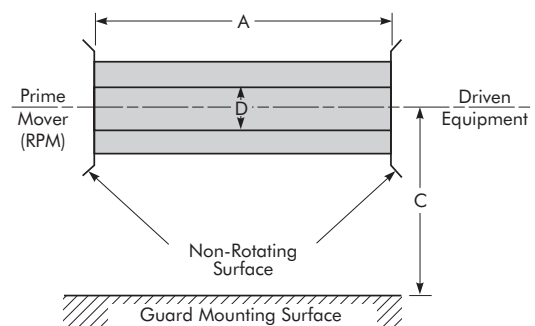
4. Hex head bolts (6mm for 10 and 20, 8mm for 30 through 70)
5. Hex head locknuts (6mm for 10 and 20, 8mm for 30 through 70)
- Foundation customer supplied fasteners (4- .500"); if using optional leg kit.

Measurements

Determine and record the following trimming dimensions:

- A: _____
 C: _____ If optional leg kit is used.

WARNING: Accurate measurements are required! It is the installer's responsibility to limit all interface gaps to less than 6mm/0.250".



Guard Trimming and Pre-Assembly (FIG 2)

Trim the aluminum guard section(s) to the A measurement. The guard section flange holes are spaced at 25.4 mm (1.00 inch) increments.

Caution: Be sure to trim the guard sections to their mating half.

These can be scribed or marked using the other extension half, to help ensure a straight cut. Be sure to double check your work. Support the section to be trimmed. It should be held firmly for safe trimming following the sawing tool manufactures operating instructions. Be sure to read and follow the instructions thoroughly. After trimming, file or de-burr the respective sections flat and smooth. You can now bolt the optional end caps (if required) to their mating guard section. The end cap center tab can be permanently fastened to guard half by drilling a pilot hole into the guard section and fasten with a bolt to retain it in place (one fastener per guard section).

FIGURE 2

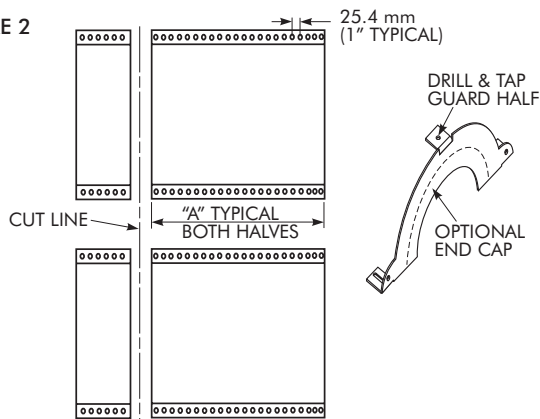
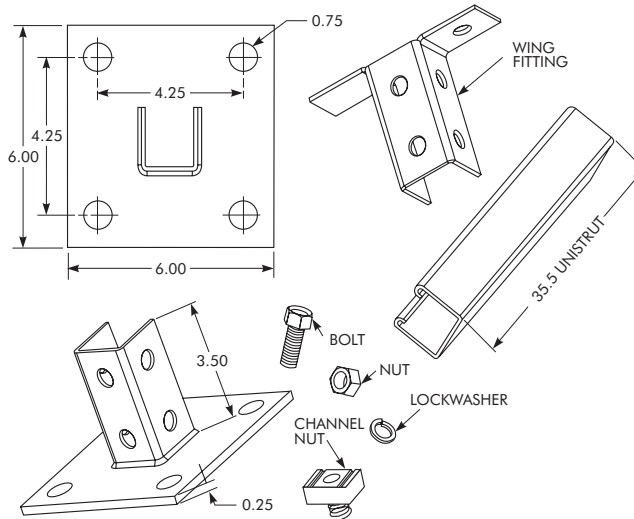


FIGURE 3



Guard Installation

Foundation attachment, using optional Leg kit

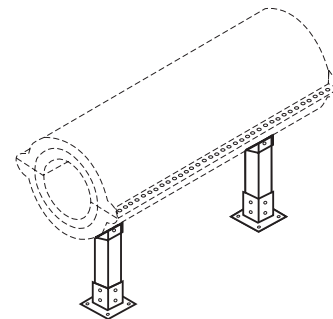
Refer to Figure 3 for parts list

Use the pre-determined centerline of the equipment being guarded. Cut the u-channel to length required for given centerline. For u-channel dimension, subtract the radius of the LSG guard (See Table 1, Page 3) plus 0.500" (the thickness of the wing bracket and base bracket) from the centerline dimension, cut u-channel accordingly. Put the base bracket on to the u-channel temporarily and the wing bracket on the u-channel temporarily. Do a preliminary verification fit of the guard and leg kit on the equipment, trim if necessary. At this time determine where the legs will be positioned on both the bottom of the guard and the base. You may have to manually bend the wing bracket to form it to the radius of the guard for proper fit. Mark the mounting holes for the wing bracket at this time.

Remove guard from the machine and drill holes into guard for mounting holes on the wing bracket. Install the wing brackets to the guard; be sure to put the locknuts on the guard outside to allow for proper clearances. Drill or fasten studs to foundation. Attach the base bracket to the U-channel and the U-channel to the wing brackets. Position the guard into proper location and re-verify the fit.

Position bottom guard section with leg kit(s) installed to guard section in its final location. Be sure the rotating members are centered in the guard and that no gaps greater than 6mm/0.250" exist. Mark the foundation drilling location in the center of each leg base hole. Drill or tap a hole for use with a suitable customer supplied fastener or mounting stud. See Figure 4 for leg kit base layout.

FIGURE 4



Optional Leg Kit parts list:

1. 1-35.5" length u-channel
2. 1-wing fitting
3. 1- square base
4. 4- channel nuts
5. 6- 0.500"-13 hex head cap screws
6. 2- 0.500"-13 Hexagon nuts
7. 2- 0.500" Lock washers

Machine mounting of guard

All of the LSG guards can be mounted and supported directly to machinery with customer supplied mounting brackets and hardware. It is the customers' responsibility to ensure that the mounting brackets are of sufficient strength and integrity. The LSG 10/20 have 6mm flange bolt holes and the LSG 30-70 has 8mm flange bolt holes spaced at 25mm (1.0 inch) increments.

Final Assembly

Bolt the bottom guard section to the foundation through the leg kit or position guard bottom guard section on customer supplied machine mounting brackets. (Leg kit brackets should be assembled with the locknuts on the guard outside to allow for proper clearances) in its final location. Be sure the rotating members are centered in the guard and that no gaps greater than 6mm/0.250" exist. You can now bolt the optional end caps (if required) to their mating guard section. The end cap center tab can be drilled and bolted to retain it in place. (1 fastener per guard section).

If Orange Peel leg kits are used, mount leg kits to base / foundation using customer supplied .500" fasteners. See Figure 4 for leg kit base layout.

Put the top guard section half on and mount all fasteners. See Table 2 for proper tightening torque values. Guard flange fasteners should be used at a minimum of 2 foot intervals. Finally, tighten all guard flange fasteners to required torque and tighten foundation / machine fasteners as required.

Safety Labels

If a safety label is required, clean the area where it will be installed and install the safety label. For severe wash down or other environments requiring mechanical label attachment, pop rivets can be utilized. Use 4, 3mm/0.125" medium length stainless steel pop rivets at the label corners to provide mechanical attachment.

Available safety Labels



Part # 2924290



Part # 2924296

Start Up — prior to starting equipment, inspect the guard installation for proper rotating equipment clearances.

Equipment Servicing

WARNING: LOCK OUT POWER at the starting switch of the prime mover and remove all external loads from equipment before opening or removing the guard.

To open the guard, remove the flange fasteners and any machine mounting fasteners that utilize the flange holes. Open the guard by removing the top half of the guard. If a major repair is being made, completely remove the guard from the foundation or machine and re-install BEFORE equipment is unlocked and started.

Guard Maintenance

Orange Peel guards are relatively maintenance free. They may need periodic 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 equipment shutdown and locked out. Check the guard for any damage or component failure. Check tightening torques on all fasteners. Also, make sure that the safety labels are clean and readable. If the safety label becomes loose, damaged, or unreadable, contact the Factory or a sales representative for replacement labels or guard service parts.

TABLE 1 — LSG Guard Radius

LSG Guard Size	Guard Radius (Inches)
10	1.500
20	2.500
30	3.500
40	4.625
50	5.625
60	6.375
70	8.375

TABLE 2 — Tightening Torques

Bolt Size	Type	Tightening Torques	
		In-Lb	Nm
6 mm ‡ 8 mm ‡ 0.500" - 13	Stainless	108	12
	Stainless	180	20
	Galvanized	600	70

‡ Factory supplied fasteners.