



PREMIER
THE FIRST NAME IN QUALITY COUPLINGS

Installation, Inspection, Operation & Maintenance Guide



Model 360

IMPORTANT

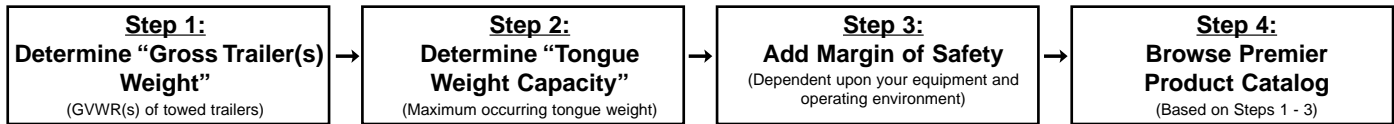
Read these instructions completely before installing, using or attempting to repair this coupling. If you have any questions, call Premier at 1-800-255-5387 (1-503-234-9202).

Do not remove "Important Warning" label attached to hitch.

Selecting The Right Equipment

Whatever your application, selecting the proper equipment for the job is very important. Proper selection along with regular inspection and maintenance will help keep operating costs minimal while providing long life to each component. Below are general guidelines for selecting Premier Couplings and Drawbar Eyes. If you feel that your application is unique, please give Premier a call so that we may help you through the selection process.

Follow these four steps to ensure proper selection of Premier Couplings and Drawbar Eyes.



Step 1: Determine "Gross Trailer(s) Weight"

"Gross Trailer(s) Weight" is usually determined by the Gross Vehicle Weight Rating (GVWR). This information is attached to the trailer by the trailer manufacturer.

Double Trailer Configuration



Example only, each application may vary and should be considered unique.

For "Double Trailer" configurations, only the rear trailer is considered when selecting your Premier Coupling or Drawbar Eye. In this example, a Coupling and Drawbar Eye with a "Gross Trailer Weight" rating of 40,000 lbs. (18,143 kg) would be the minimum rating acceptable for normal, over-the-road applications (see Tongue Weight section below).

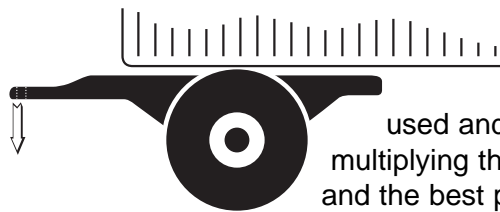
Triple Trailer Configuration



Example only, each application may vary and should be considered unique.

For "Triple Trailers", only the two most rearward trailers are considered in selecting your Premier Coupling or Drawbar Eye. In this example, a Coupling and Drawbar Eye with a "Gross Trailer Weight" rating of 80,000 lbs. (36,287 kg) would be the minimum acceptable for normal, over-the-road applications (see Tongue Weight section below).

Step 2: Determine "Tongue Weight Capacity"



"Tongue Weight Capacity" is the maximum expected weight at the drawbar eye. If a hinged drawbar is used, the maximum weight will be approximately 1/2 the overall drawbar weight. If a non-hinged drawbar is used and the actual tongue weight is not known, you can approximate the weight by multiplying the GVWR of the towed trailer by 15%. However, each application is unique and the best practice is to weigh the tongue when the trailer is loaded to its GVWR.

Step 3: Considering Operating Conditions and Environments

Environments such as rough uneven roads or off-road use can dramatically increase shock loads to both drawbar eyes and couplings. Certain types of equipment and/or operating practices can also dramatically increase loads through equipment binding and/or improper loading practices. Of special concern is high tongue weight. In general, increasing the "Gross Trailer Weight" (Step 1:) and "Tongue Weight Capacity" (Step 2:) by a minimum of 25% will be sufficient for many applications. However, each application is unique and every environment different, therefore your application may require more than 25%.

Once both "Gross Trailer(s) Weight" (Step 1:) and "Tongue Weight Capacity" (Step 2:) have been determined, evaluate your operating conditions and apply an appropriate margin of safety.

Step 4: Browse Premier Product Catalog

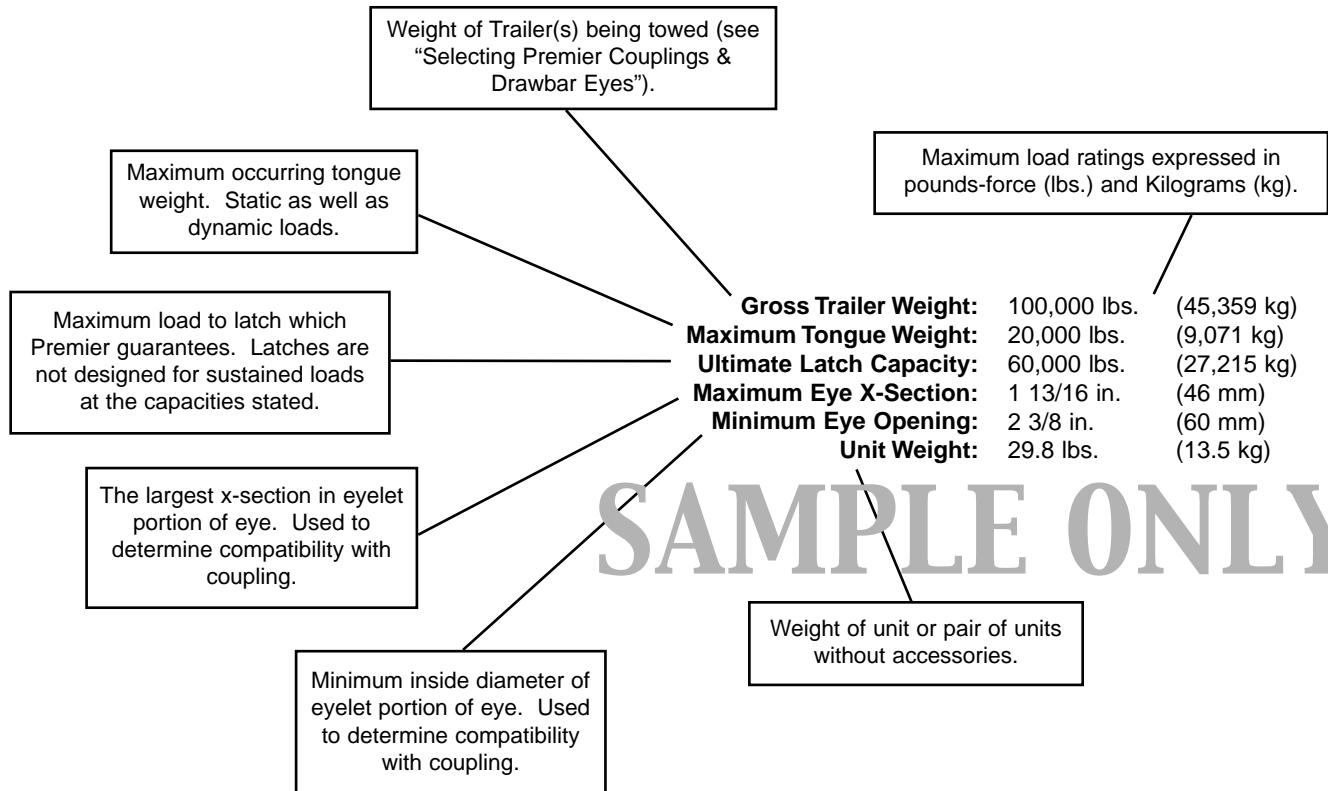
Browse the Premier Product Catalog and refer to the "Specifications" section of each product. Be sure to review the "Understanding Premier Load Specifications" section on the next page and "Coupling to Drawbar Eye Cross-Reference" sheet.



Selecting The Right Equipment

Understanding Premier Load Specifications

Each Premier product undergoes extensive design and testing prior to being introduced. We use the latest in Computer Aided Design and Analysis Software as well as physical destructive tests. Premier's published load specifications are the maximum load a given product or part will withstand without failure. Premier's testing procedures closely follow the Society of Automotive Engineers (SAE) guidelines of Recommended Practice for testing Couplings and Drawbar Eyes (SAE J847 & J849).



Importance of Inspection and Maintenance

Whether you use Premier Jacks, Couplings, Drawbar Eyes, Hinge Assemblies or any other Premier product, regular inspection and maintenance are essential for proper function, keeping repair costs to a minimum and above all, safe and efficient operation.

As part of our effort to assist you, Premier has developed Serviceability Gages (picture at right) that help judge the useful life of couplings and drawbar eyes. Premier also provides Service Guides for each of our major product lines that help guide you through inspection, routine maintenance and part replacement. Another resource is our World Wide Web Site at www.premier-mfg.com. Here you will find Service Guides, Installation Guides, Distributor Locations and links to trucking resources.



Selecting The Right Equipment

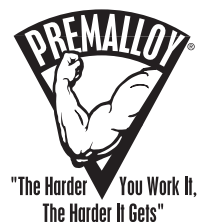
Coupling to Drawbar Eye Cross Reference Chart

Couplings	Drawbar Eyes																																			
	2*	3	4	5	6/6A	8	11	20	21	22	23	107	108	110	123	125	126	127	200	203	205	207	238DB†	245DB†	245DB-3†	300	304	305	306	307	309	405	407SE	410		
16	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
24	•																																			
40	•																																			
100†			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
100-4†			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
100-4H†			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
130	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
135	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
140		•																																		
150			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
160	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
235			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
240			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
270			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
290			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
360			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
370			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
370B			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
470			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
470H			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
480			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
570			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
580	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
580J			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
590	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
690/690T			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
770			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
780			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
790																																				
880																																				
890/890C			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2200			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2300			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2300B			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2400			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2400H			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

† Saf-Tite Product
 * Industrial Application
CAUTION: Verify that both couplings and drawbar eyes rated capacities meet your application(s) requirements.

“Premalloy” - Premier’s Exclusive Alloy

“The harder you work it, the harder it gets” best defines the properties of Premalloy. Premalloy will actually work harden during normal use. This translates into long life and more efficient operations for you. Many of Premier’s couplings are made from this exclusive alloy. As you are browsing the catalog, look for the Premalloy icon next to product photos.



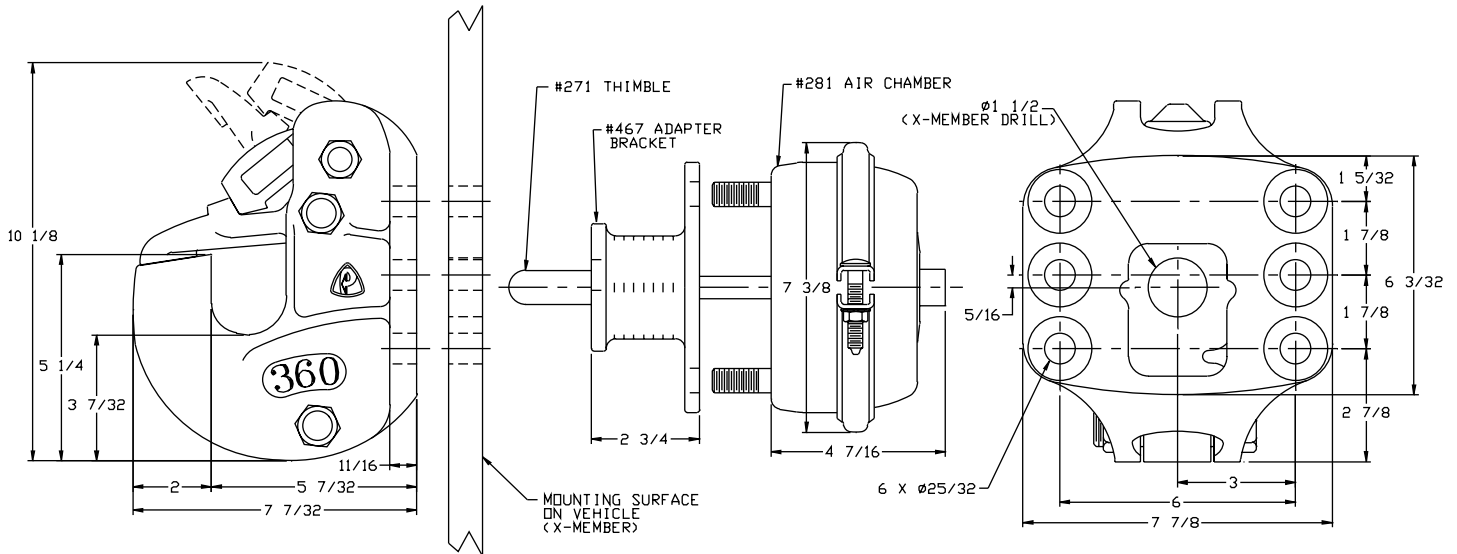
360 SPECIFICATIONS AND LOAD CAPACITIES

SAFETY WARNING

This coupling is designed for towing under normal conditions within the stated gross trailer weight. Do not overload or abuse this hitch. Overloading or abuse may lead to property damage, severe injury, or death.

Gross Trailer Weight:	100,000 lbs. (45,359 kg)
Maximum Tongue Weight:	20,000 lbs. (9,071 kg)
Ultimate Latch Capacity:	40,000 lbs. (18,143 kg)
Maximum Eye X-Section:	1 13/16 in. (46 mm)
Minimum Eye Opening:	2 3/8 in. (60 mm)
Unit Weight:	30.5 lbs. (13.8 kg)

360 STANDARD INSTALLATION DRAWING



Pushrod length should be 4 in. (102 mm) plus thickness of mounting structure for standard installations.

360 REPLACEMENT PART INFORMATION



60PK Parts Kit Includes:

262: Latch	375: Bolt
263: Pawl	375A: Locknut
263A: Bushings (2)	605: Flat Washer
264: Wedge (2)	*266: Spring
264B: Wedge Spring	*271: Thimble
265: Wedge Safety Lock	*274: Bolt
265A: Torsion Spring	*274A: Locknut
274A: Locknut	*279: Shoe
374: Bolt	

*Not included in parts kit, available individually

360 ACCESSORIES

Standard Installation Kit (360A) Includes:

360 Coupling, 502 Bolt Kit, 281 Air Chamber, 467 Air Chamber Adapter Bracket and 271 Thimble.

Optional Accessories:

- 282 Type-30 Air chamber: Provides a larger diaphragm for greater shoe force compared to 281 Air Chamber.
- Air Chamber Brackets: 467H (3/4"/19mm), 467F (5 1/2"/140mm)
- Thimbles: 271B (4 3/8"/111mm), 271C (5 1/2"/140mm)
- 378 Drawbar Guides: Helps guide drawbar eye into coupling.



Model 360

360 INSTALLATION

Installation Procedure:

1. Measure mounting structure thickness and cut pushrod length on air chamber to 4" plus mounting structure thickness. (i.e. 1" thick mounting structure would equate to: 4" + 1" = 5" pushrod.)
2. Plumb air line to coupling service chamber from vehicle's emergency side air supply. NEVER use service side air supply.
3. Prior to drilling cross member on vehicle, make certain that structure coupling is to be attached to is of adequate strength.
4. Measure and layout cross member according to drawing and then drill holes.
5. Mount coupling using Premier's 502 Bolt Kit or use 6 - 3/4" grade-8 bolts and grade-C lock nuts. Only use new fasteners when mounting couplings or drawbar eyes and torque to SAE specifications.
6. Once mounted, check latch components for proper operation and clearances (see next section for opening and closing latch). If operation of latch components is sticky, lubricate rotation points with a light penetrating oil. Work latch assembly several times to distribute lubricant evenly and remove any excess with a rag.
7. **WARNING! Keep fingers clear of coupling during this test.** Activate emergency side air supply and visually verify activation of 279 Shoe. Shoe should rotate forward when emergency air supply is charged and retract when air supply is removed. Please note: The 279 Shoe acts as a shock absorbing device to help smooth rides between mated vehicles. **It is not considered part of the latching mechanism.**

Special Notes:

1. Never weld on any coupling assembly in order to repair damaged or worn bodies or parts. Field or shop weld repairs are inadequate, and may further weaken the coupling.
2. Use only genuine PREMIER replacement parts on any repairs. Use of other parts, which can have different specifications or tolerances, may fail to alert you to non-obvious damage to the hitch which can lead to hitch failure.

360 INSPECTION, OPERATION & MAINTENANCE

Inspection and Maintenance:

1. Visually inspect the coupling body and latch components for cracks, impact damage or deformation before each and every use. DO NOT USE if any of these conditions exist.
2. Check for gap between the latch and top of the horn on coupling body before each and every use. A gap of 3/8" or more means the hitch must be taken out of service and repaired or replaced.
3. If the wear area on the pintle/horn has worn more than 20% from its original cross-section, the coupling is considered out of service and must not be used.
4. Lubrication of latch components must be performed at 90-day intervals or sooner depending on the operating environment. Lubricate latch components with a spray-type lubricant to evenly coat all pins. Rotate each latch component several times to evenly distribute lubricant.
5. Remove any excess lubricant with rag. Do not apply lubricant to pintle/horn or saddle area of hitch body.

WARNING: OTHER INSPECTIONS AND PROCEDURES ARE ALSO REQUIRED PRIOR TO OPERATION OF COMBINATION VEHICLES. CONSULT AND FOLLOW ALL FEDERAL MOTOR CARRIER SAFETY REGULATIONS AS WELL AS LOCAL OR STATE GUIDELINES, INCLUDING THE USE OF ADEQUATELY RATED SAFETY CHAINS.



360 INSPECTION, OPERATION & MAINTENANCE

OPENING COUPLING LATCH:

1. Grasp and rotate 265 Wedge Safety Lock to clear 264 Wedges. While holding, squeeze both 264 Wedges to be flush with sides of 263 Pawl. Rotate 263 Pawl upward to full rotation and hold in position.
2. Grasp 262 Latch with other hand and rotate to fully open position.
3. Slowly release 263 Pawl until it catches on top ledge of 262 Latch holding it in the open position.

CLOSING COUPLING LATCH:

1. Once coupled or uncoupled, push 263 Pawl back (rotating further open) until 262 Latch has released from catch ledge of 263 Pawl.
2. Rotate 262 Latch downward, seating it onto top of 360 Coupling horn.
3. Release 263 Pawl. Pawl should rotate into locked position behind ledge of 262 Latch. 264 Wedges on each side of 263 Pawl should lock into position on each side of coupling body. 265 Wedge Safety Lock should be blocking 264 Wedges from being squeezed inward.
4. To verify latching, grasp 262 Latch and pull upward. There should be minimal movement and LATCH SHOULD NOT OPEN! If latch does not stay closed, do not use until repaired or replaced.
5. **WARNING: PRIOR TO TOWING, MAKE CERTAIN THAT ADEQUATELY RATED SAFETY CHAINS HAVE BEEN PROPERLY CONNECTED!**

IMPORTANT GUIDELINES THAT APPLY TO ALL PREMIER AIR ADJUSTED COUPLINGS

- DO NOT WELD ON ANY COUPLING ASSEMBLY
- ALWAYS USE GRADE 8 FASTENERS PROPERLY TORQUED
- DO NOT APPLY GREASE TO HOOK / HORN OR SADDLE AREA
- AIR SERVICE CHAMBER MUST BE TYPE 24 OR TYPE 30 WITH 90-120 PSI AIR SUPPLY
- CLEAN, INSPECT AND LUBRICATE ALL COUPLING COMPONENTS AT A MINIMUM OF 90 DAY INTERVALS



WARNING!

This envelope contains important instructions AND MUST REMAIN ATTACHED TO THIS HITCH. It may be removed only by the end user or by an Original Equipment Manufacturer who preserves this envelope and instructions and provides it to the end user.



PREMIER MANUFACTURING COMPANY

THE FIRST NAME IN QUALITY COUPLINGS

800-255-5387 (503) 234-9202

www.premier-mfg.com

MODEL 360

WARRANTY: We warrant all Premier products to be free from defects in material or workmanship for one year. We will repair or replace, at our option, any Premier product which our examination reveals to be defective, provided that the product is returned to our factory, at Portland, Oregon transportation prepaid, within one year of purchase by the first retail purchaser. Our warranty does not extend to products which have been subject to misuse, neglect, improper installation, maintenance or application, nor does our warranty extend to products which have been repaired or altered outside of Premier's facility unless the repair or alteration has been expressly authorized in writing by Premier. ***This warranty is in lieu of all other warranties, express or implied, and excludes warranties of merchantability, fitness for a particular purpose and otherwise, and in no event will Premier be liable for incidental, special, contingent or consequential damages.***

DISCLAIMER: Although great care has been taken to ensure accurate information throughout this catalog, Premier Manufacturing Company must reserve the right to alter any information contained within. These changes include but are not limited to: Dimensional changes, in load capacity and availability of any part or assembly.

© 1999, 2000, 2001, 2002, 2003 Premier Manufacturing Company

All rights reserved. Any reproduction of the photographic images or any other portion of this catalog, including but not limited to the photocopying, or retention and/or storage in a retrieval system of any kind, is strictly prohibited without prior express written permission from Premier Manufacturing Company.



PREMIER MANUFACTURING COMPANY

Revision Date: 3/11/2003