

THE FIRST NAME IN QUALITY COUPLINGS

# Installation, Inspection, Operation & Maintenance Guide



## **MODEL 450 HINGE ASSEMBLY**

PART #10001005

### MODEL 450A HINGE ASSEMBLY

PART #10001007

### **IMPORTANT**

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

#### 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 Coupling 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"

(GVWR(s) of towed trailers)

#### STEP 2: Determine "Tongue Weight Capacity"

(Maximum occurring tongue weight)

#### STEP 3: Add Margin of Safety

(Dependent upon your equipment and operating environment)

#### STEP 4: Browse Premier Product Catalog

(Based on Steps 1-3)

#### 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.

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).

acceptable for normal, over-the-road applications (see Tongue Weight section below).

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).

#### Double Trailer Configuration



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

#### **Triple Trailer Configuration**



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

### 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 GVWR.



#### **STEP 3:** Consider 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. 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. Even if an application is used off-road occasionally, the minimum increase necessary for Gross Trailer and Tongue Weight is 25%. 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. However, each application is unique and every environment different, therefore your application may require more than 25%.

Once both "Gross Trailers(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

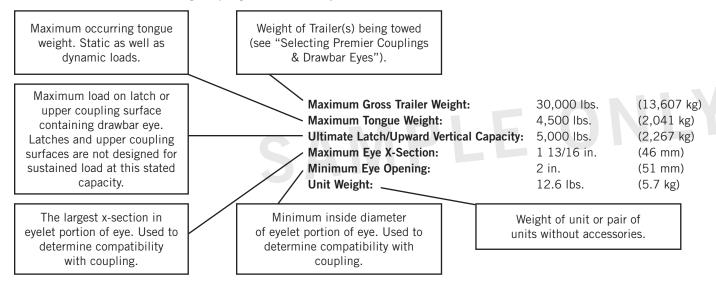
Browse the Premier Product Catalog and refer to the "Specifications" section of each product. Be sure to review the "Understanding Premier Load Specifications" sections and "Coupling to Drawbar Eye Cross-Reference" sheet on the next couple of pages.



#### 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.

To determine wear limits, Premier created Wear Gages that help judge the useful life of couplings and drawbar eyes (details in catalog). In accordance with Premier and the Federal Motor Carrier Safety Regulations, these were designed to identify wear at the critical percentages of 18% and 20%, by measuring the cross-section of coupling hooks (horn) and drawbar eye loops. 18% wear indicates that the product should be replaced as soon as possible. At 20% wear, the product is no longer in usable condition and must be taken out of service immediately and replaced. The latch gage bar measures the gap space between the top of the coupling hook and the closed latch. If the 3/8" latch gage bar can



pass between this region, then the latch components should be considered worn past safe limits and replaced. Please note that these wear gage specifications are in accordance with Premier Mfg. and the Federal Motor Carrier Safety Regulations (refer to other manufacturer's specifications for wear limits on their products).

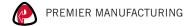
Premier also provides Installation Guides for each of our major products. These help guide you through installation, inspection, routine maintenance and part replacement. Another resource is our website at **www.premier-mfg.com**. Here you will find Installation Guides, Service Guides, distributor locations, online catalogs, product information, trade show schedules and links to trucking resources.

#### Additional Product Resources at Your Fingertips

**Customer Service:** We are always here to support you. Do you need additional information or assistance? Your phone calls are greeted by our courteous receptionist, during business hours. We have exceptional, personable Customer Service Reps for you to rely on. If you have product questions or want to place an order, you can speak directly with one of our experienced and knowledgeable Customer Service Representatives.

**Sales Representatives:** Would you like on site training or assistance? Contact one of our veteran Premier Sales Reps for more information about product training for your staff. Or be sure to visit with them at a Trade Show (see website for schedule).

www.premier-mfg.com: Our website is an informative resource at your fingertips. In addition to our Installation and Service Guides, you will find Territory Manager contact information, distributor locations, product specifications, product selectors, cross-reference forms, digital product catalog, trade show schedule, and links to trucking resources.



#### Specifications and Load Capacities

#### **SAFETY WARNING**

This product is designed for towing under normal conditions within the stated gross trailer weight capacity of the hinge assembly being used. Do not overload or abuse this product. Overloading or abuse may lead to property damage, severe injury, or death.

 Max. Gross Trailer Weight (pair):
 100,000 lbs.
 (45,359 kg)

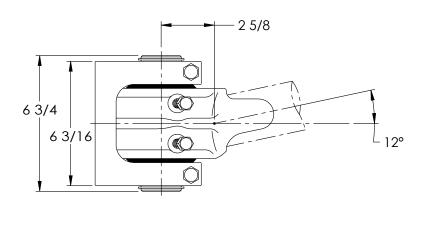
 Bushing I.D.:
 2 in.
 (51 mm)

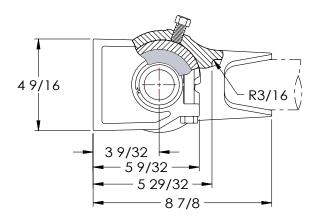
 Bushing O.D.:
 3 1/2 in.
 (89 mm)

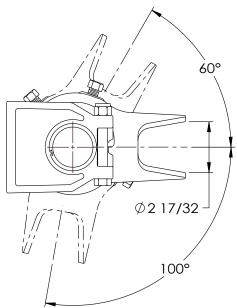
 Bushing Length:
 1 3/4 in.
 (44 mm)

 Unit Weight (pair):
 46.2 lbs.
 (21.0 kg)

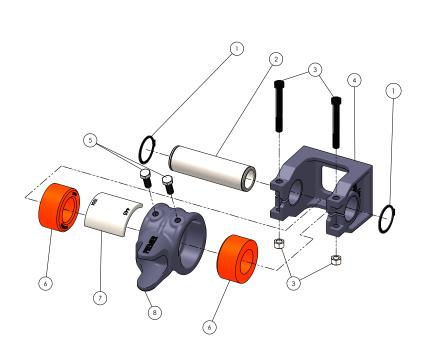
#### Standard Installation Drawing







#### Parts & Accessories



#### Parts Included Per Hinge:

Item #	Model #	Part #	Description			
1	653	10001022	Snap Ring (2)			
2	442	10004780	Pin			
3	351	10004756	Bolt (2) & Nut (2)			
4	441	10000994	Bracket			
5	447	10001002	Bolt (2)			
6	**448	10001003	Rubber Bushing (1 pair)			
6	448A	10001004	Poly Bushing (1 pair)			
7	445	10000997	Adjustable Shoe			
8	*446R	10001000	Housing, Right			
8	*446L	10000998	Housing, Left			

#### <u>Bushing Replacements</u> (Use ONLY Premier's Bushings):

Model #	Part #	Description			
***448	10001003	Rubber Bushing (1 pair)			
***448A	10001004	Poly Bushing (1 pair)			

<sup>\*</sup>Housings are side-specific.

Each HINGE includes a 446L or 446R Housing.

#### Installation

The 450 and 450A Hinge Assemblies are ONLY to be used and maintained with Premier parts. Any substitution or use of non-Premier parts in a 450/450A Hinge Assembly will VOID ALL PRODUCT WARRANTY.

#### **Installation Procedure:**

- 1. 450 and 450A Hinge Assemblies must be installed to comply with the Federal Motor Carrier Safety Regulations. Specifically, Section 393.70, Paragraph C: "Towing of Full Trailers." Prior to install or operation, consult with local, State and Federal agencies, as there may be additional applicable laws governing the installation and use of this product.
- 2. Prior to welding, Premier strongly suggests building a jig to properly locate the 446L and 446R Housings and 441 Brackets. The jig should ensure the two Hinge Assemblies, shown in Figure 1, are of equal height above the ground, parallel and equidistant from the trailer centerline.
- 3. All welds used to install the 450 and 450A Hinge Assemblies must follow one of the three attached Welding Procedure Specifications; GMAW, SMAW or FCAW. Welding should only be performed by a certified welder skilled in structural welding practices.
- 4. All weld locations must be clean, paint free and void of any moisture, oil, grease, oxides or loose or thick scale.

Because 450/450A Hinge Assemblies operate in pairs, the installation instructions below are to be simultaneously followed for each hinge assembly.



<sup>\*\*450</sup> comes with 448 Rubber Bushings

<sup>\*\*\*</sup> Bushings are sold as a pair.

<sup>\*\*\*</sup> Order 1 - 448 or 1 - 448A per Hinge.

<sup>\*\*\*</sup> Order 2 - 448s or 2 - 448As per set of hinges.

#### Installation

#### 446L & 446R Housing Installation:

- 5. The 446 Housings accommodate a front end structure consisting of 2 ½" round tubing. The converging angle of each tube into each housing is 12° (see Figure 2). Note that when the install is complete, the two housings are to be equidistant from the trailer centerline and their bores aligned.
- 6. Fit-up, between the 2 ½" tube and the mounting surface of the 446 Housing, must be flush, as shown in Figure 2. Failure to have a flush fit prior to welding will cause the capacities to be negatively affected. Figure 2A shows one possible example of an improper fit-up that must be avoided.
- 7. Attach the 446 Housing to the front end tube with a minimum 3/8" fillet weld that encompasses the entire interface between the housing and tube as shown in Figure 2.

#### 441 Bracket Installation:

- 8. The two 441 Brackets must be equal in height above the ground, parallel, equidistant from the trailer centerline and their bases must be flush with the mounting structure surface. Misaligned brackets or a failure to have a flush fit with the mounting surface prior to welding will cause poor hinge operation as well as negatively affect their capacities.
- 9. Tack weld the 441 Brackets in place and test fit the 446 Housings. Before proceeding, make sure the centerlines and bores of the housings align with the centerlines and bores of the brackets.
- 10. Attach the 441 Bracket to the mounting surface with a minimum 3/8" fillet weld around the outer and inner surfaces of the bracket as shown in Figure 3.

#### 450 / 450A Hinge Assembly after Welding

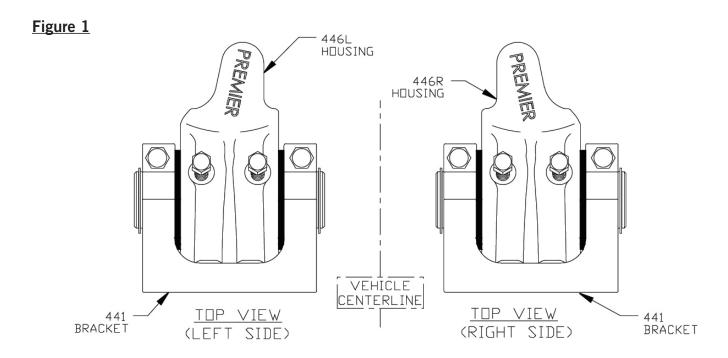
(450: Premier 448 Rubber Bushings only) (450A: Premier 448A Poly Bushings only)

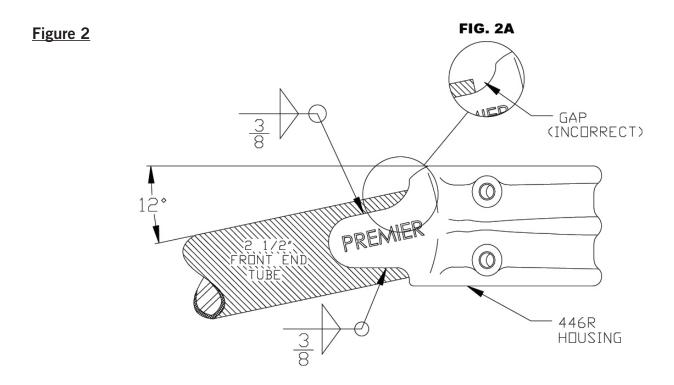
- 11. Allow the finished structures to cool.
- 12. Loosen the two 447 Bolts in the 446 Housing far enough so they do not protrude into the housing bore.
- 13. Slide one of the two 448/448A Bushings, chamfered end first (see parts drawing), into one side of the 446 Housing. Roughly 3/16" of the bushing will stick out of the housing. From the other side of the 446 Housing that the 448/448A Bushing was placed, slide the 445 Shoe into the housing's bore with the shoe's outside curved surface adjacent to the two 447 Bolts. The shoe needs to slide in far enough for its internal rib to be in alignment with the housing's internal rib.
- 14. Place the other 448/448A Bushing, chamfered end first, into the 446 Housing.
- 15. Place the 446L and 446R Housings into each 441 Bracket aligning the bores as much as possible.
- 16. Slide the 442 Pin through the aligned bores of the 441 Bracket and 424 Housing far enough so both snap ring grooves at the end of the pin are visible.
- 17. Attach the 653 Snap Rings into the grooves at each end of the 442 Pin and ensure the snap rings are fully seated in the grooves. Use caution when installing the snap rings and make certain not to over expand them as this will cause permanent damage to the snap rings.
- 18. Tighten the 351 Bolts to 80 ft-lbs of torque.

  These bolts compress the 441 Bracket, clamping the 442 Pin.
- 19. Torque the 447 bolts equally and test the hinge assemblies for desired rotational stiffness. If a stiffer hinge is desired, tighten both 447 Bolts until the desired stiffness is reached.
- 20. An "IMPORTANT WARNINGS!" sticker was enclosed. This must be attached to the front end, adjacent to the drawbar eye, visible for the end user to read.

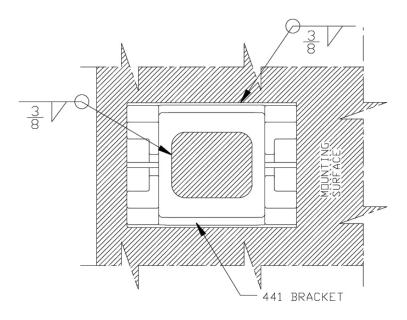


#### Installation





#### Figure 3



#### Inspection/Operation/Maintenance

- 1. Visually inspect the hinge assembly for cracks, impact damage and/or deformation before each and every use. Do NOT use if any of these conditions exist.
- 2. Over time, slack may develop in the hinge assembly due to normal bushing wear. Therefore, clean and inspect every 90 days or sooner if your application dictates, and adjust or replace the bushings if slack is noted.
- 3. To check for bushing wear, place a crowbar near the center of the bracket adjacent to the housing. Apply pressure to the bar and visually test for free-play between either the bushing & the housing or the bushing & the taper pin. If free-play is noted tighten and/or replace bushing.
  - NOTE: Pulling forward or backward while the trailer brakes are set is not an acceptable method to check for bushing wear.
- 4. This product is designed to be operated within the free rotation limits of the coupling to drawbar eye connection. It is the responsibility of the vehicle designer/end user to ensure that these limits are not exceeded (do not bind-up/jackknife).
- 5. WARNING: Prior to towing, make certain that adequately rated safety chains have been properly connected.
- 6. Never weld on any Premier part in order to repair damaged or worn areas. Field and/or shop weld repairs are inadequate and may further weaken the hinge assembly.

#### **IMPORTANT GUIDELINES that apply to all Premier Hinge Assemblies**

- Never attempt weld repair of damaged or worn components
- Clean and inspect hinge assemblies for damage or excessive wear before each and every use
- All welds should be performed by a certified welder skilled in structural welding practices
- The mounting structure the hinges are welded to must be of sufficient strength to withstand load ratings of hinges
- Do not bind-up (Jackknife) any application as stresses can cause damage to products or components, resulting in failure and detachment of the trailer while in use



### Welding Procedures

## WELDING PROCEDURE SPECIFICATION (WPS) Yes (X) PREQUALIFIED (X) QUALIFIED BY TESTING (X) or PROCEDURE QUALIFICATION RECORD (PQR) Yes (X)

G	MAW	Identification #: H				
9	HILLAND	Revision 0	Date: 2/1/00	3y: PI		
Company Name: Premier	Vanufacturing Co.	Authorized By: Safe				
Walding ⊐rocess(es): GM/	AW .	[Type: Manual	Sem:	-Automatic: (X)		
Supporting PQR No.(s): N	A Prequalified	Vachino:	Auto	matic:		
JOINT DESIGN USED		POSITION				
Type: All Fillers, Butts (Sec	Attached)	Position of Groove: 1G, 2G Filet:				
Single (X)	Double Wald (X)	Vertical Progress	ion: Up (X)	Down ( )		
Backing: Yes (X)	No (X)	LECTRICAL CH	ARACTERISTICS	•		
Backing Material, M1-P1-5	1 Group 1 &2	Transfer Mode (6	SMAW) short-circuiting (	)		
Root Opening:	Root Face Dimension:	Globular (X) Spra	y (X)			
Groove Angle:	Racius (J-U):	Current: AC ( )	DCEP(X) DCEN()	Pulsed ( )		
Back Gonging: Yes (X) No	r (X) Method: Mech/Thermal	Other:				
BASE METALS		TECHNIQUE				
Material Spec.: Mt-P1-S1	1026 Carbon Steel	Stringer or Weave Bead: String or Weave				
Type or Grade, Group 1 &	2	Multi-Pass or Single Pass (per side): Single, Multiple				
Thickness: Groove: 1/8 - 1	1/8 Fillet: Unlimited	Number of electrodes: Single				
Diameter (Pipe): 4" minimu	,	Electrode Spacin	g: Longitu	dinal:		
FILLER METALS			Lateral:	***		
AWS Specification: A5.18			Angle: -	Angle:		
AWS Classification: F70S	1	Contact Tube to Work Distance: 3/4" ±1/8"				
SHIELDING		Peening: Recommended				
Flux:	Gas: CO <sup>2</sup>	Interpass Cleaning: Mechanical				
Composition: 100%		POSTWELD HEAT TREATMENT				
Electroce-Flux (Class)	Flow Rate: 30-50 oth	Temp.:				
	Gas Cup Sizo: 1/2" Dia.	fime:				
PREHEAT						
Preheat Tamp.: Min.: 1001	F					
Interpass Temp.: Min. 100	°F Max.: 600°F					

#### WELDING PROCEDURE Filler Metals Current Pass or Weld Layer(s) Class Amps or Wire Feed Speed 190-230 Dlam. See Attached E70S-X 22-31 GMAW 0.035 13 ±1 IPM All. GMAW 13 ±1 IPM E70S-X

### WELDING PROCEDURE SPECIFICATION (WPS) Yes (X) PREQUALIFIED (X) QUALIFIED BY TESTING ( ) or PROCEDURE QUALIFICATION RECORD (PQR) Yes ( )

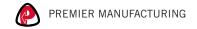
	SMAW	Identification #: PM	Identification #: PMSMA-1				
	OWATE	Revision D	Dale, 2/1/0				
Company Name: Pren	nier Manufacturing Co.	Authorized By: Date.					
Welding Process(cs):	SMAW	Type: Manual: (X)	Manual: (X) Semi-Au				
Supporting PQR No.(s	): N/A (Sre-Qualified)	Machine:	ne: ^ Automatic:				
JOINT DESIGN USED		POSITION					
Type: All Filiets-Buits (	See Attached)	Position of Groove:	Pasition of Groove: All Fillet: All				
Single (X)	Double Weld (X)	Verlical Progression	. Up (X)	Down ( )			
Backing: Yes (X)	No (X)	ELECTRICAL CHA	RACTERISTICS	S			
Backing Material: M1-I		Transfer Mode (GM	AW) short-choul	iting ( )			
Roof Opening:	Root Face Dimension. —	Giobular ( ) Spray	Θ.				
Groove Angle:	Redius (J-U): —	Gurrent: AG ( ) 96	Current: AC ( ) DCPP (X) DCEN ( ) Pulsed ( )				
Buck Grouging, Yes (X)	No (X) Method: Mech/Thermal	Other:					
BASE METALS		TECHNIQUE	TECHNIQUE				
Materia: Spec.: M1-P*	-S1 1026 Carbon Steel	Stringer or Weave B	krad: String and	Weave			
Type or Grade: Croup	1 and 2 .	Multi-Pass or Single	Pass (per side)	: Multiple/Single			
Thickness: Groove: 1/4	3"-1 5/2 Fillet: Unlimited	Number of electrode	es: Singre				
Diameter (Pipe): 4° M:	nimum	Electrode Spacing	Longitzdi	Longitzdinal: N/A			
FILLER METALS			Laterat: N	Laterat: N/A			
AWS Specification, A5	.1 -A6.0		Angie: No	Angle: N/A			
AWS Classification: E7	018	Contact Table to Wo	rx Distance: N/A	ź <u> </u>			
SHELDING		Peening: Resomme	Peening: Resommended				
Flux:	Gas: N/A	Interpass Cleaning: Mechanical Only					
	Composition; N/A		POSTWELD HEAT TREATMENT				
Electrode-Flux (Class)	Flow Rate: N/A	Temp.: N/A					
	Gas Cup Size N/A	Time: N/A	Time: N/A				
PREHEAT							
Proheat Temp. Min.: 16	00°F						
Interpass Tomp., Min.:	100°F Max : 600°F						

	l '	Filler	uctals		ROCEDURE reni			Joint Details	ı
Pass of Weld Layer(s)	Process	Class	Diam.	Type & Polarity	(Amps) or Wire Feed Speed	Volts	Travel Speed	See Alfardies And AWS 121.1	7
All :	SMAW	E7018	3/32"	OCEP	70-110	19-22	As .	1	į
All	SMAW	E7018	1/8"	OCEP	90-150	20-24	Required		:
All	SMAW	F7018	5/32"	DOEP	129-190	23-24	Ī		i

### WELDING PROCEDURE SPECIFICATION (WPS) Yes (X) PREQUALIFIED (X) QUALIFIED BY TESTING ( ) or PROCEDURE QUALIFICATION RECORD (PQR) Yes ()

	FCAW	Identification #: PMFG-1	10 10 10 10 10 10			
	1 07 111	Revision C Date: 2/1/00	By Pi			
Company Name: Promier I	Aunufacturing Co.	Authorized By:				
Wolcing Proreas(es): IrCA	w ·	Type: Manua : (X) Semi-Automatic:				
Supporting POR No.(s): No	A (Pre-Quatried)	Machine: Automatic:				
JOINT DESIGN USED		POSITION				
Type: All Fillets-Butts (Sco	Attached)	Position of Groave: All Fillet: All				
Single (X)	Double We'c (X)	Vertical Progression: Up (X)	Down ( )			
Backing: Yes (X)	No(X)	ELECTRICAL CHARACTERIST	ics			
Backing Material: V11-I41-S	1, Group 1 &2	Transfer Mode (GMAW) shart-di	reuiting ( )			
Root Opening:	Reat Face Dimension:	Globular (X; Spray (X;				
Groove Ang c:	Radies (J-II)	Current: AC ( ) DCEP(X) DC8	EN ( ) Pulsed ( )			
Back Googing: Yes (X) No	(X) Method: Mech-Thermal	Other:				
BASE METALS		TECHNIQUE				
Material Spec.: M1-P1-S1	i 026 Carbon Steel	Stringer or Meave Bead, String and Weave				
Type or Grace: Group 1 ar	nd 2	Multi-Pasa or Single Pasa (per s	ide): Multiple/Single			
Thickness: Groove: 1/8"-1	72" Fillet: Unlimfled	Number of electrodes: Single				
Diameter (Pipa): 4" Minim.	/F:	Electrode Spacing: Long	jitudinal: N/A			
FILLER METALS		Late	rul: N/A			
AWS Specification: A5.20		Angl	e. N35			
AWS Classification: E79T-	1/E71T-1	Contact Tube to Work Distance:	3/4" ±1/4"			
SHIELDING		Peening: Recommended				
Flux:	Gas: CO <sup>2</sup>	Interpass Cleaning: Mechanical Cnly				
	Composition: 100%	POSTWELD HEAT TREATMEN	17			
Electrode Finx (Class)	Flow Rate: 30-50 ofh	Temp: N/A				
	Ces Cup Size: 1/2" Dis. N'n.	Time N/A				
PREHEAT						
Preheat Temp : Min.: 1901	_	1				

				WELDING PE				
		Filler J	Metals	Cu	rrent			Joint Details
Pass or Weld Layer(s)	Process	Class	Diam.	Type& Polarity	(Amps) or Wire Feed Speed	Valts	Travel Speed	See Attached Add
Ali	FCAW	E700-4	0.045	DOEP	100-280	24-28	As	AWS 21.1
ΑII	FCAW	E71T-1	0.032	DOEP	190-300	24-29	Required	
All	FCAW		893.0	DOFF	210-350	24-29	1	
All	FCAW		5/64"	DCEP	250-460	26-30	1	

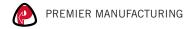


# **ATTENTION!**

End Users must read and follow this information.

DISTRIBUTORS & OEM'S: Please ensure that your customers are made aware of the following information on this page.

- 1. VERIFY THAT BOTH COUPLING'S AND DRAWBAR EYE'S RATED CAPACITIES MEET YOUR APPLICATION(S) REQUIREMENTS.
- 2. DO NOT OVERLOAD COUPLING OR DRAWBAR EYE.
- 3. INSPECT COUPLING, LATCH AND DRAWBAR EYE FOR CRACKS, BENDING DAMAGE OR EXCESSIVE WEAR. **DO NOT USE IF ANY OF THESE CONDITIONS EXIST!**
- 4. CHECK FOR GAP BETWEEN CLOSED LATCH AND TOP OF HORN OR COUPLING BALL. DO NOT USE IF GAP IS 3/8 IN. OR MORE.
- 5. MAKE SURE COUPLING IS LATCHED AND THAT LATCH WILL NOT OPEN.
- 6. PRIOR TO USE, ALWAYS CONNECT SAFETY CHAINS OF ADEQUATE STRENGTH FOR LOAD(S) BEING TOWED.
- 7. DO NOT BIND-UP (JACKKNIFE) ANY APPLICATION AS STRESSES CAN CAUSE DAMAGE TO THE COUPLING, DRAWBAR EYE, OTHER COMPONENTS OR ANY COMBINATION OF THEM. JACKKNIFING MAY RESULT IN FAILURE OF PRODUCTS OR COMPONENTS, RESULTING IN DETACHMENT OF THE TRAILER WHILE IN USE.
- 8. DO NOT APPLY LUBRICANTS TO THE COUPLING HOOK OR DRAWBAR EYE LOOP, AS THEY CAN COVER UP POSSIBLE DAMAGE AND ACCELERATE WEAR.
- 9. ALWAYS ABIDE BY ALL APPLICABLE STATE AND FEDERAL REGULATIONS GOVERNING SAFE AND PROPER TRANSPORTATION.
- 10. NEVER STRIKE ANY OF THESE COMPONENTS WITH A HAMMER OR ANY OTHER DEVICE.
- 11. ALWAYS VERIFY PROPER OPERATION OF LATCHING SYSTEM AND COUPLING COMPONENTS PRIOR TO DRIVE OFF.
- 12. NEVER USE A COUPLING THAT YOU DO NOT FULLY UNDERSTAND HOW TO PROPERLY OPERATE AND VERIFY SECURE LATCHING OF.
- 13. NEVER REPLACE ANY PART IN ANY OF PREMIER'S ASSEMBLIES WITH NON-PREMIER COMPONENTS. DOING SO WILL VOID ALL WARRANTY AND POTENTIALLY COMPROMISE THE UNIT'S INTEGRITY, WHICH COULD RESULT IN PROPERTY DAMAGE, SERIOUS INJURY, OR DEATH.



This envelope contains important instructions

**AND MUST REMAIN ATTACHED TO THIS** 

Manufacturer who preserves this envelope and instructions and provides it to the end user **PRODUCT.** It may be removed only by the User or by an Original Equipment

THE FIRST NAME IN QUALITY COUPLINGS

(503)234-9202

800-255-5387

www.premier-mfg.com

PREMIER MANUFACTURING

Model 450/450A **Hinge Assembly** 

**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 Tualatin, 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 3UHPLHU·V 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 document, Premier Manufacturing must reserve the right to alter any information contained within. These changes include but are not limited to: Dimensional changes, load capacity and availability of any part or assembly.

#### © 2009 Premier Manufacturing

All rights reserved. Any reproduction of the photographic images or any other portion of this document, 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.

