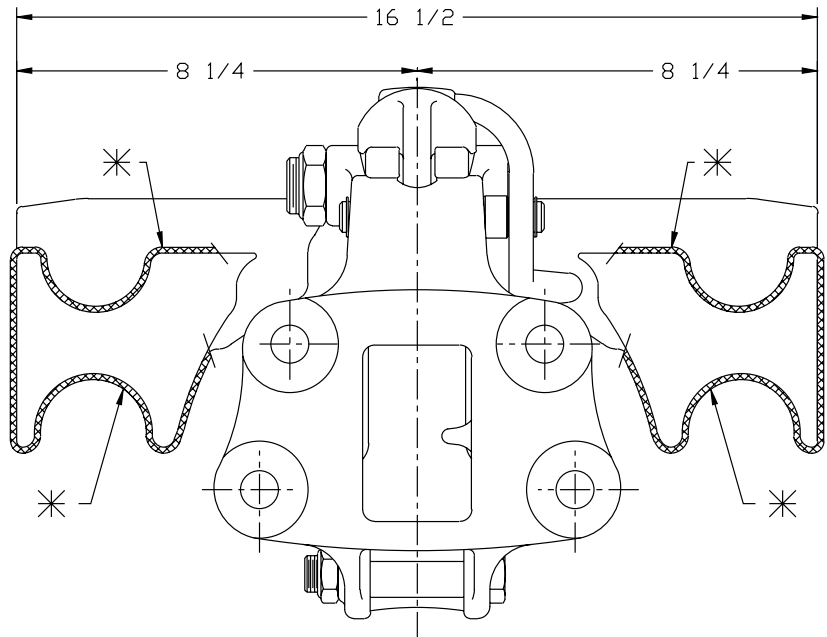
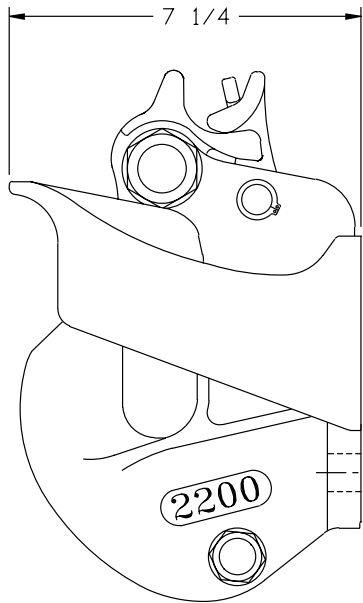




PREMIER MANUFACTURING CO.

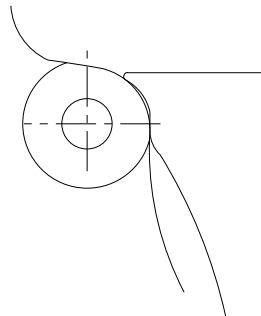
THE FIRST NAME IN QUALITY COUPLINGS

438 DRAWBAR GUIDE TO 2200L INSTALLATION GUIDE

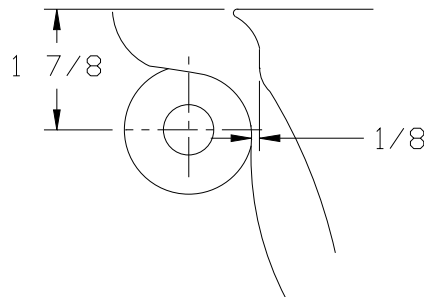


* - The cross hatched area on above drawing indicates perimeter of 438 that is to be welded.

To install 438 drawbar guides, follow steps 1 through 3 (see illustration below).



STEP 1



STEP 2

STEP 1: Match contours on coupling and top of guide's mounting base.

STEP 2: Once positioned, move 438 guide vertically (straight up), until top of guide's mounting surface is $1 \frac{7}{8}$ " from coupling's top hole center, and horizontally $\frac{1}{8}$ " away from 2200L body. The distance between the outer edges of the two guides should be $16 \frac{1}{2}$ ".

STEP 3: Weld each drawbar guide to the trailer cross member/frame with a minimum $\frac{1}{4}$ " fillet weld around the indicated perimeter.

NOTE: DO NOT WELD THE DRAWBAR GUIDES TO THE 2200L COUPLING.

MLK 08/02/12



438 Drawbar Guides

WELDING PROCEDURES

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

GMAW		Identification #: PMEM-1	
Revision 0		Date: 2/1/00	By: PI
Company Name: Premier Manufacturing Co.		Authorized By:	Date:
Welding Process(es): GMAW		Type: Manual: (X)	Semi-Automatic: ()
Supporting PQR No.(s): N/A Prequalified		Machine:	Automatic:
JOINT DESIGN USED		POSITION	
Type: All Fillets, Butts (See Attached)		Position of Groove: 1G, 2G	
Single (X)	Double Weld (X)	Vertical Progression: Up (X)	Down ()
Backing: Yes (X)	No (X)	ELECTRICAL CHARACTERISTICS	
Backing Material: M1-P1-S1 Group 1 & 2		Transfer Mode (GMAW) short-circuiting ()	
Root Opening: ---	Root Face Dimension: ---	Globular (X) Spray (X)	
Groove Angle: ---	Radius (J-U): ---	Current: AC () DCEP(X) DCEN () Pulsed ()	
Back Gouging: Yes (X) No (X) Method: Mech/Thermal		Other:	
BASE METALS		TECHNIQUE	
Material Spec.: M1-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" minimum	Electrode Spacing:	Longitudinal: ---	Later: ---
FILLER METALS		Angle: ---	
AWS Specification: A5.18		Contact Tube to Work Distance: 3/4" ±1/8"	
AWS Classification: E70S-1		SHIELDING	
Flux:		Peening: Recommended	
Gas: CO ²	Composition: 100%	Interpass Cleaning: Mechanical	
Electrode-Flux (Class)	Flow Rate: 30-50 cfh	POSTWELD HEAT TREATMENT	
Gas Cup Size: 1/2" Dia.	Temp.:	Time:	
PREHEAT			
Preheat Temp.: Min.: 100°F			
Interpass Temp.: Min.: 100°F		Max.: 500°F	

WELDING PROCEDURE

Pass or Weld Layer(s)	Process	Filler Metals		Current			Travel Speed	Joint Details
		Class	Diam.	Type & Polarity	Amps or Wire Feed Speed	Volts		
All	GMAW	E70S-X	0.035	DCEP	190-230	22-31	13 ±1 IPM	See Attached
All	GMAW	E70S-X	0.045	DCEP	280-290	27-31	13 ±1 IPM	

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

SMAW		Identification #: PMSMA-1	
Revision 0		Date: 2/1/00	By: PI
Company Name: Premier Manufacturing Co.		Authorized By:	Date:
Welding Process(es): SMAW		Type: Manual: (X)	Semi-Automatic:
Supporting PQR No.(s): N/A (Pre-Qualified)		Machine:	Automatic:
JOINT DESIGN USED		POSITION	
Type: All Fillets-Butts (See Attached)		Position of Groove: All	
Single (X)	Double Weld (X)	Vertical Progression: Up (X)	Down ()
Backing: Yes (X)	No (X)	ELECTRICAL CHARACTERISTICS	
Backing Material: M1-P1-S1, Group 1 & 2		Transfer Mode (GMAW) short-circuiting ()	
Root Opening: ---	Root Face Dimension: ---	Globular () Spray ()	
Groove Angle: ---	Radius (J-U): ---	Current: AC () DCEP (X) DCEN () Pulsed ()	
Back Gouging: Yes (X) No (X) Method: Mech/Thermal		Other:	
BASE METALS		TECHNIQUE	
Material Spec.: M1-P1-S1 1026 Carbon Steel		Stringer or Weave Bead: String and Weave	
Type or Grade: Group 1 and 2		Multi-Pass or Single Pass (per side): Multiple/Single	
Thickness: Groove: 1/8"-1 1/2"	Fillet: Unlimited	Number of electrodes: Single	
Diameter (Pipe): 4" Minimum	Electrode Spacing:	Longitudinal: N/A	Later: N/A
FILLER METALS		Angle: N/A	
AWS Specification: A5.1-A5.5		Contact Tube to Work Distance: N/A	
AWS Classification: E7018		SHIELDING	
Flux:		Peening: Recommended	
Gas: N/A	Composition: N/A	Interpass Cleaning: Mechanical Only	
Electrode-Flux (Class)	Flow Rate: N/A	POSTWELD HEAT TREATMENT	
Gas Cup Size: N/A	Temp.: N/A	Time: N/A	
PREHEAT			
Preheat Temp.: Min.: 100°F			
Interpass Temp.: Min.: 100°F		Max.: 500°F	

WELDING PROCEDURE

Pass or Weld Layer(s)	Process	Filler Metals		Current		Volts	Travel Speed	Joint Details
		Class	Diam.	Type & Polarity	(Amps) or Wire Feed Speed			
All	SMAW	E7018	3/32"	DCEP	70-110	19-22	As Required	See Attached And AWS D1.1
All	SMAW	E7018	1/8"	DCEP	90-150	20-24		
All	SMAW	E7018	5/32"	DCEP	120-190	20-24		

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

FCAW		Identification #: PMFC-1	
Revision 0		Date: 2/1/00	By: PI
Company Name: Premier Manufacturing Co.		Authorized By:	Date:
Welding Process(es): FCAW		Type: Manual: (X)	Semi-Automatic:
Supporting PQR No.(s): N/A (Pre-Qualified)		Machine:	Automatic:
JOINT DESIGN USED		POSITION	
Type: All Fillets-Butts (See Attached)		Position of Groove: All	
Single (X)	Double Weld (X)	Vertical Progression: Up (X)	Down ()
Backing: Yes (X)	No(X)	ELECTRICAL CHARACTERISTICS	
Backing Material: M1-P1-S1, Group 1 & 2		Transfer Mode (GMAW) short-circuiting ()	
Root Opening: ---	Root Face Dimension: ---	Globular (X) Spray (X)	
Groove Angle: ---	Radius (J-U): ---	Current: AC () DCEP(X) DCEN () Pulsed ()	
Back Gouging: Yes (X) No (X) Method: Mech/Thermal		Other:	
BASE METALS		TECHNIQUE	
Material Spec.: M1-P1-S1 1026 Carbon Steel		Stringer or Weave Bead: String and Weave	
Type or Grade: Group 1 and 2		Multi-Pass or Single Pass (per side): Multiple/Single	
Thickness: Groove: 1/8"-1 1/2"	Fillet: Unlimited	Number of electrodes: Single	
Diameter (Pipe): 4" Minimum	Electrode Spacing:	Longitudinal: N/A	Later: N/A
FILLER METALS		Angle: N/A	
AWS Specification: A5.20		Contact Tube to Work Distance: 3/4" ±1/4"	
AWS Classification: E70T-1/E71T-1		SHIELDING	
Flux:		Peening: Recommended	
Gas: CO ²	Composition: 100%	Interpass Cleaning: Mechanical Only	
Electrode-Flux (Class)	Flow Rate: 30-50 cfh	POSTWELD HEAT TREATMENT	
Gas Cup Size: 1/2" Dia. Min.	Temp.: N/A	Time: N/A	
PREHEAT			
Preheat Temp.: Min.: 100°F			
Interpass Temp.: Min.: 100°F		Max.: 500°F	

WELDING PROCEDURE

Pass or Weld Layer(s)	Process	Filler Metals		Current		Volts	Travel Speed	Joint Details
		Class	Diam.	Type & Polarity	(Amps) or Wire Feed Speed			
All	FCAW	E70T-1	0.045	DCEP	180-280	24-28	As Required	See Attached And AWS D1.1
All	FCAW	E71T-1	0.052	DCEP	190-300	24-29		
All	FCAW		0.068	DCEP	210-350	24-29		
All	FCAW		5/64"	DCEP	250-400	26-30		

