

### **Read, Understand, Follow and Save These Instructions**

Read, understand and follow all of these instructions and warnings (Instructions) before installing and using this product. Install and use this product only as specified in these instructions. Improper installation or use of this product may result in property damage, serious injury, and/or death. Never allow installation or use of this product by anyone without providing them with these instructions. You must read, understand and follow all instructions and warnings for any product(s) to which this product is used in conjunction with or installed. Save these instructions with the product for use as a reference for any future installation and use of the product.

### **WARNING**

**Failure to follow these warnings and instructions may result in property damage, serious bodily injury, and/or death.**

- Purchaser/owner must ensure that product is installed according to these instructions. Purchaser/owner must not alter or modify the product.
- Operator and bystanders should never position any part of body under any portion of this product or the load being supported.
- Do not allow children to play on or around this product or the load being supported.
- Weigh your trailer plus added load. Do not exceed lesser of mounting bracket, coupler, hitch, vehicle, ball, or trailer weight ratings (including load).
- Use only the proper ball for this coupler as indicated on the coupler body.
- Always secure load, vehicle and trailer (by blocking wheels) before latching/unlatching coupler.
- Use caution when uncoupling as tongue may rise suddenly due to negative tongue load.
- After installing mounting bracket and/or coupler, if coupler operation has been impaired in any way, do not use it.
- Keep the ball pocket and mechanism clean. When parking or storing your trailer, keep the coupler off the ground so dirt and/or other foreign material will not build up in the coupler ball pocket.

- Do not tow if ball is not fully seated and/or coupler is not closed.
- All welding must be performed by a certified AWS welder.

#### **Before Towing:**

- Check vehicle, mounting bracket, hitch, hitch ball and coupler for signs of wear or damage and that the coupler handle opens and closes freely. If coupler and/or mounting bracket is deformed or damaged, replace complete coupler and mounting bracket.
- Replace bent, broken, or worn parts before using this product.
- Close coupler securely by ensuring that the hitch ball is fully seated in the coupler ball pocket and the handle or latch is in the closed position.
- Check mounting bracket hardware for wear and proper tightness. Replace bent, broken, or worn hardware. Tighten hardware to appropriate SAE proofload specifications (See table specs). Use only grade 5 hardware.
- Make sure that the trailer safety chains are properly connected to the towing vehicle and trailer according to SAE J684.
- Make sure that all trailer lighting is hooked up and working properly.

### **Coupler Installation**

**Warning: Failure to follow all installation instructions could result in coupler failure.**

Before mounting the coupler confirm that there will be no interference from the tow vehicle, tongue, ground, and any other mounted accessories while stationary or in motion. Before installing, check for interference in open and closed positions. Check for interference again after installation is complete. All welding must be performed by an AWS certified welder. The coupler must be rigidly attached to the trailer in order for the coupler to support its maximum rated load according to SAE J684. After installation, check to make sure that coupler operation has not been impaired in any way. Do not use coupler if its operation has been impaired. If coupler is to be primed/painted after installation, make sure excess paint/primer buildup is removed from ball pocket and latching mechanism.

### **Bolt-on Couplers:**

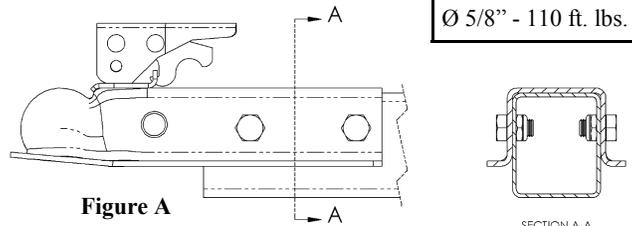
#### **Bolting Instructions:**

Assure coupler's internal stop is butted against end of trailer tongue for maximum overlap. The number and size of fasteners required must be specified by the trailer manufacturer.

#### **Torque Specs**

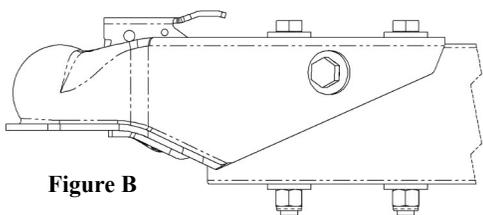
Ø 3/8" - 23 ft.lbs.
Ø 1/2" - 55 ft. lbs.
Ø 5/8" - 110 ft. lbs.

**Straight Tongue Couplers:** For **Class 1** couplers, the preferred method is to use (4) 3/8" grade 5 bolts through side holes (Fig. A). An alternate method is to use (2) 3/8" grade 5 through bolts and locknuts providing they can be torqued to appropriate SAE proof load specifications (See table specs). No deformation of trailer tongue end allowed. For **Class 2, 3 & 4** couplers, the preferred method is to use (4) 1/2" grade 5 bolts through side holes (Fig. A). An alternate method is to use (2) 1/2" grade 5 through bolts and locknuts providing they can be torqued to appropriate SAE proof load specifications (See table specs). No deformation of trailer tongue end allowed.

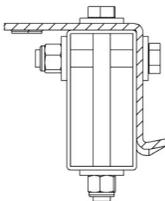


**Figure A**

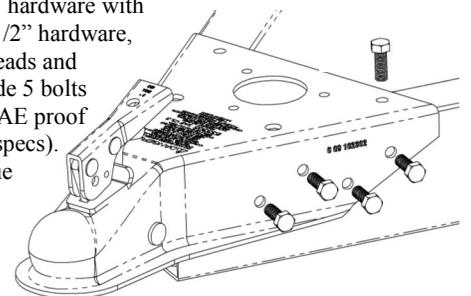
SECTION A-A



**Figure B**

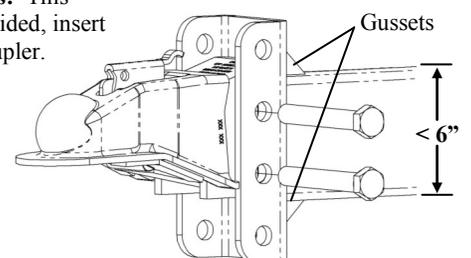


**A-Frame Couplers:** This coupler can only be used with 50 degree trailer tongues. Using available mounting holes in coupler housing, bolt coupler to tongue members using grade 5 hardware with locknuts. For couplers using 1/2" hardware, use washers beneath all bolt heads and locknuts (Fig. B). Torque grade 5 bolts with locknuts to appropriate SAE proof load specifications (See table specs). No deformation of trailer tongue end allowed.



#### **Adjustable Height Channel: ("Mounting Bracket")**

If tongue height is 6" or less, gussets are required. Mounting bracket must be centered on tongue and remain vertical after installation. A 1/4" minimum fillet weld is required all around. **Bolting Instructions:** This coupler must be secured using two sets of holes in the mounting bracket. Using the hardware provided, insert the two (2) 5/8" x 5" grade 5 bolts through desired mounting bracket holes and the holes of the coupler. Tighten lock nuts to 100-110 ft. lbs.



After installation is complete, check that the coupler operation has not been impaired in any way. Do not use coupler if its operation has been impaired.

## **Weld-on Couplers:**

### **Welding instructions:**

All welding must be performed by an AWS certified welder.

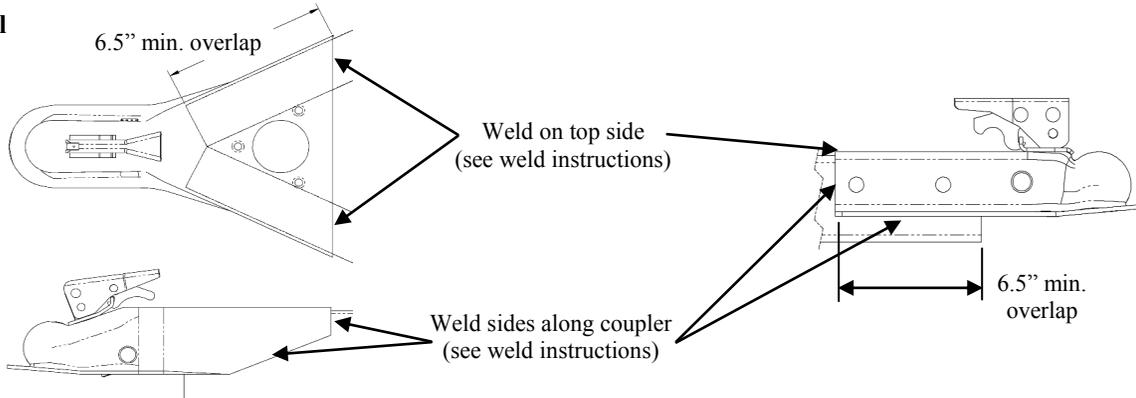
Assure coupler's internal stop is butted against end of trailer tongue for maximum overlap. A minimum coupler/tongue overlap of 6.5" is required.

**Straight Tongue Couplers:** Place the coupler on trailer tongue members. Weld on both sides and the top using a 1/8" minimum fillet weld as shown.

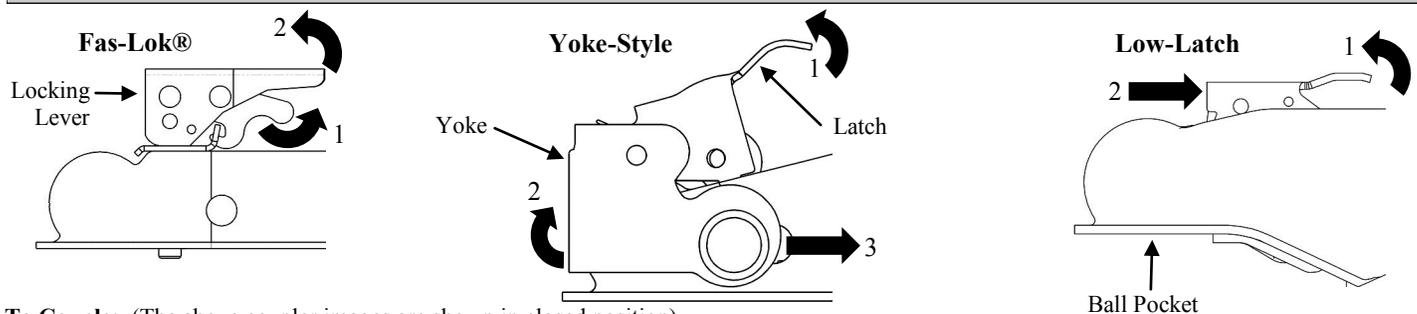
**A-Frame Couplers:** This coupler can only be used with 50 degree trailer tongues. Place the coupler on trailer tongue members. Weld on both sides and the top using a 3/16" minimum fillet weld as shown.

If coupler is to be primed/painted after installation, make sure excess paint/primer buildup is removed from ball pocket and latching mechanism. After installation is complete, check that the coupler operation has not been impaired in any way. Do not use coupler if its operation has been impaired.

### **Weld-on detail**



## **Operation**



**To Couple:** (The above coupler images are shown in closed position)

Block trailer wheels. Align hitch ball beneath coupler ball pocket.

**Fas-Lok® style Coupler:** Open coupler by pulling latch trigger and lifting the locking lever. Lower the coupler over the hitch ball until ball is fully seated into the ball pocket. Move locking lever to the closed position. Check that the latch is engaged by lifting up on back of locking lever. Also, check that the hitch ball is fully seated and ball clamp is below the ball. If the ball is not seated with lever in the closed position and latch engaged, DO NOT TOW. Repeat the above steps.

**Yoke-style Coupler:** Open coupler by (1) lifting latch, (2) raising yoke and (3) pulling back, resting it on top of coupler nose. Lower the coupler over the hitch ball until ball is fully seated into ball pocket. Push latch handle forward until yoke drops over coupler nose and latch handle tips enter slots on top of coupler. Check that the hitch ball is fully seated and ball clamp is below the ball. If the ball is not seated with yoke in closed position and latch handle engaged, DO NOT TOW. Repeat the above steps.

**Low-Latch Coupler:** Open coupler locking lever by (1) lifting latch upward and (2) pulling back. Lower the coupler over the hitch ball until ball is fully seated into ball pocket. Move locking lever forward until latch handle tips enter slots on top of coupler. Check that the hitch ball is fully seated and ball clamp is below the ball. If the ball is not seated with lever in the closed position, DO NOT TOW. Repeat the above steps.

### **To Uncouple:**

Block trailer wheels. Open locking lever and raise trailer off of hitch ball. Return handle to closed position.

## **Maintenance**

Keep ball pocket and mechanism clean. The following procedures should be performed at least annually:

- Check welds and mounting bolt torque
- Grease ball pocket
- Oil pivot points with SAE 30 wt. motor oil