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LITERATURE NUMBER MPD 80282

# ADJUSTABLE HEIGHT COUPLERS

ENGLISH, FRANÇAIS (et Canada)

•Installation •Operation •Maintenance  
 Effective 11/21/07

## SAFETY ALERT SYMBOLS

Safety Symbols alerting you to potential personal safety hazards. Obey all safety messages following these symbols.

**WARNING**  
 avoid possible injury or death

**CAUTION**  
 avoid possible injury and/or property damage

FOR YOUR SAFETY READ ALL INSTRUCTIONS BEFORE INSTALLATION AND OPERATION

**Installer:** Provide these instructions to the consumer.  
**Consumer:** Read and keep documents available for future reference.

## INSTALLATION

### CAUTION HAZARDOUS FUMES

- Adequate ventilation must be provided when welding.

## WELDING INSTRUCTIONS

- **M.I.G. OR STICK** - Class 4 coupler-Attach with 5/32" fillet weld minimum.
- **M.I.G. WELDING** - Use A.W.S. ER 70S-3 or 6 wire or equivalent with a diameter of .035 - .045. The recommended shielding gas mixture is 75% - 95% Argon & 25% - 5% CO<sub>2</sub>.
- **STICK WELDING** - Use E6011 A.W.S. welding rod or equivalent with a diameter are as follows: 5/32" electrode set power between 140-160 Amps DC.

### CAUTION PRODUCT DAMAGE

- Coupler latching mechanism must operate freely after welding installation see FIG 2 & 3.
- Do not attach ground strap to latch during welding.

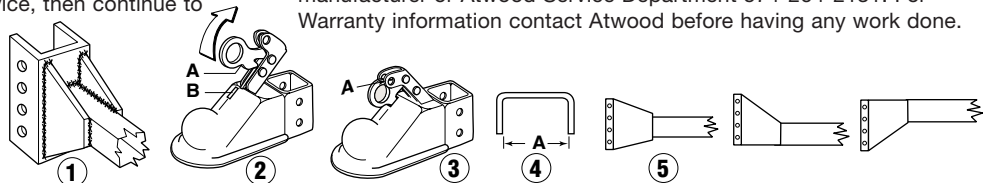
## ADJUSTABLE COUPLERS - Part No. 80281

### WELD ON BRACKET:

1. **POSITIONING BRACKET** - Center bracket side to side on trailer tongue with bracket height adjusted to meet your towing needs FIG 5. Allow adequate ground clearance and provide position options for coupler. Trailer must travel in a level, horizontal to ground position. This will provide optimal coupler axle loading and range of motion. Support mounting bracket sides with C-clamps or bolts before welding to prevent distortion of brackets during welding process. Inside dimension of bracket must be 3.00"±.03" after welding FIG 4-A.
2. Follow **WELDING INSTRUCTIONS**.
3. Weld along top, bottom and sides of bracket where it meets trailer tongue. Add gussets (5/16" thick steel plate) equal in height to bracket as shown in FIG 1 to fully support bracket. Weld along all joint edges of gusset using **WELDING INSTRUCTIONS**.

### BOLT APPLICATION

1. Fasten coupler to bracket with two 5/8" diameter bolts S.A.E. grade 8 and lock nuts or nuts and lock washers.
2. Torque bolts to 200-230 ft. lbs. (dry).
3. Retorque bolts after first two hours of service, then continue to follow maintenance schedule.



## OPERATION

### CAUTION PRODUCT DAMAGE

- Use caution when backing or towing vehicle for hook-up, damage to coupler may result.
- Avoid sharp turns when towing or backing. Jack-knifing could bend coupler or create extreme stress or fracture.

### WARNING PERSONAL INJURY

- Safe towing practice requires the proper use of safety chains used in accordance with instructions provided by the trailer manufacturer.
- Check that the ball has been completely inserted into the coupler ball socket and the ball clamp (inside the coupler) is closed around the underside of the tow ball and the handle is in the closed position.
- The loaded weight of the trailer must never exceed the least capacity marked on the coupler, tow ball, hitch, trailer or vehicle.
- Check coupler, hitch and ball for damage or wear before each use. Assure all parts operate freely. Replace any component if worn or damaged.
- Failure to follow warnings and instructions could result in separation of tow vehicle and trailer which can result in death, personal injury and property damage.

### WARNING PERSONAL INJURY

- For proper tow vehicle and trailer hookup, towing performance and to prevent damage to hitch and trailer coupling, the tow vehicle and trailer are to be level with respect to flat ground after hitching up. If your trailer is not level, equipment is available to raise or lower the hitch ball.

## LATCHING INSTRUCTIONS

### WARNING PERSONAL INJURY

- Always open latch handle before inserting ball.

1. Insert finger in latch hole. Pull out and up on latch FIG 2. Rotate latch 90° from original position. FIG 3.
  2. Place coupler on 2-5/16" ball of same or greater capacity than trailer GVW.
  3. When ball is completely nested in ball socket, push forward on latch FIG 3. Be sure that the nib FIG 2-A on the latch is secured in slot FIG 2-B.
  4. Extend jack to ground and lift car/trailer combination 2"-4" to insure coupler is securely attached to tow ball. Retract jack completely before towing.
  5. Insert padlock or bolt through lock hole FIG 3-A in latch for theft protection.
- Note: These couplers are not adjustable for ball size.

## MAINTENANCE

1. Lubricate ball socket and ball clamp with wheel bearing grease. Clean and lubricate monthly.
2. Check towing hitch, ball and coupler for signs of wear before each trip. Replace coupler if damaged or worn.
3. Lubricate moving or sliding parts monthly with S.A.E. 30 weight oil.
4. Should problems or questions arise, contact your dealer, the trailer manufacturer or Atwood Service Department 574-264-2131. For Warranty information contact Atwood before having any work done.