



WISDOM INDUSTRIES, INC.



# REQUIRED INSPECTION NOTICE

**DATE:** JULY 31, 1998  
**RIDE:** ORIENT EXPRESS  
**SUBJECT:** ROD END COUPLER GREASE ZERK HOLES  
**COMPLIANCE:** MANDATORY  
**COMPLETION DATE:** IMMEDIATELY

One coaster has has one rod end crack at the grease zerk hole. Inspect the rod end, between the cars for cracking in the grease zerk area.

## TO INSPECT FOR CRACKS.

1. Thoroughly clean the area around the grease zerk.
2. Inspect the area around the ground zerk for cracks.
3. If there is a question about cracking use a dye penetrant kit to check for cracks.
4. If no cracks are found include a check of the grease zerk area in the daily inspection of the ride.
5. If the rod end is cracked replace the rod end.

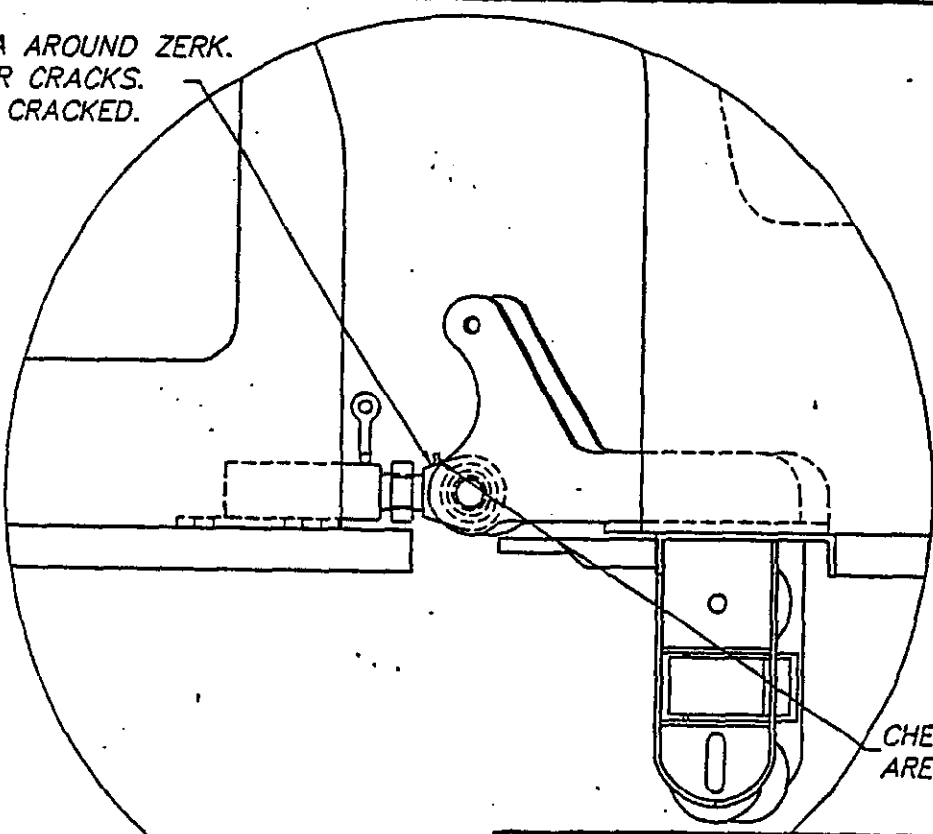
## REPLACING THE ROD END

1. Block up front of car that the rod end is going to be replaced on.
2. Remove 1 inch connecting bolt.
3. Disconnect safety chain.
4. Push car ahead to allow access to rod end.
5. Loosen lock nut.
6. Unscrew rod end from coupler.
7. Screw lock nut from original rod end onto new rod end.
8. Screw in new rod end.


**NOTE:** The threads must be screwed in at least 1 to 1.25 inches into the coupler.

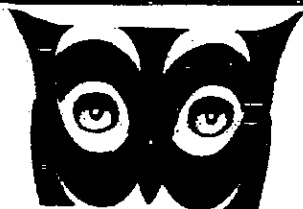
9. Screw new rod end into coupler.
10. Tighten lock nut.
11. Reconnect cars together with 1 inch bolt and lock nut.
12. Connect safety chain.
13. Check that the lock nut is tight.
14. Remove blocks and check track for objects that will stop the train.
15. Test run ride.
16. Check that the jam nut is tight daily.

CLEAN AREA AROUND ZERK.  
INSPECT FOR CRACKS.  
REPLACE IF CRACKED.



CHECK GREASE ZERK  
AREA FOR CRACKS.

 <b>WISDOM INDUSTRIES</b> Merino, CO 80741		APPROVED BY:	DRAWN BY: JLC
		SCALE: NTS	REVISID
DATE: 7-19-96		DESCRIPTION	
CAR HITCH			
EQUIPMENT:		DRAWING NUMBER	
COASTERS		DWG #	



**WISDOM  
INDUSTRIES, LLC**

# SAFETY BULLETIN

**DATE: DECEMBER 13, 2000**

**RIDE: ADULT DRAGON, ORIENT EXPRESS**

**SUBJECT: RODEND COUPLER ROLL PIN  
INSTALLATION**

**COMPLIANCE DATE: INSPECTION IMMEDIATE**

**COMPLETION DATE: 2 WEEKS**

1. Detach rodend eye from rear of car
2. Turn Jam nut until it is next to eye of rodend.
3. Screw rodend into front hitch threaded mount till threads bottom on jam nut.
4. Turn rodend out only enough to make the eye vertical and grease zerck is up.
5. Tighten jam nut.
6. Reattach rodend to rear of car with original 1" bolt. Use new lock nut.
7. Tighten 1" bolt and lock nut.
8. Run ride and check for clearance between cars in turns.
  - ◆ **NOTE: IF THERE IS NOT ADEQUATE CLEARANCE BETWEEN CARS CALL FOR AN EXTENDED FRONT HITCH MOUNT.**
9. Check for clearance between car rear bracket and shank of rodend. (See drawing)
10. If bracket is hitting rodend shank grind edge of rear bracket for clearance.

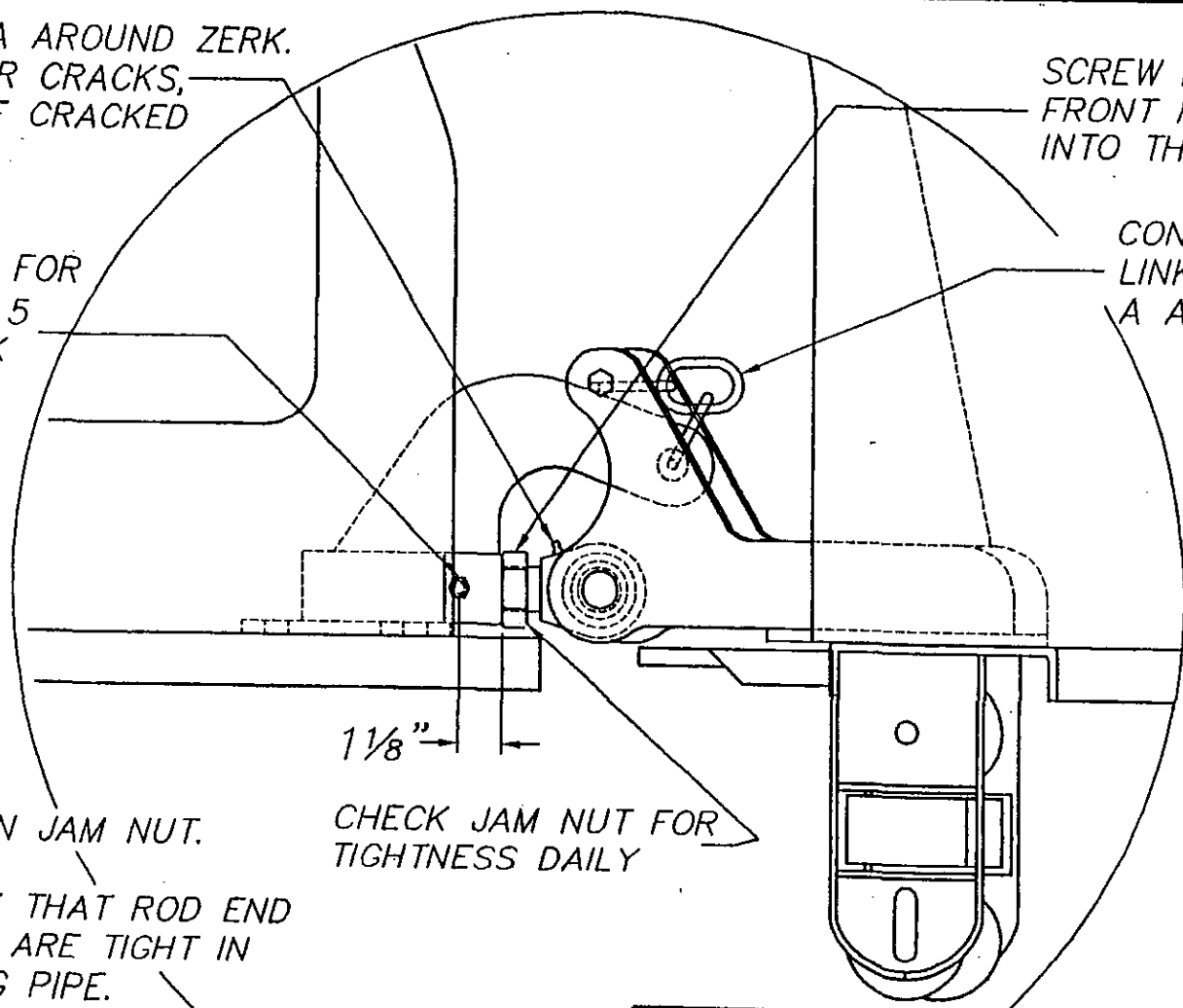
11. Measure 1 1/8" from where jam nut touches front hitch threaded mount. (See Drawing)
12. Cross drill threaded coupler mount for a 5/16 " bolt.
13. Install a 5/16 X 3" grade 5 bolt and lock nut and tighten.
14. Repeat for other rodends.

CLEAN AREA AROUND ZERK.  
INSPECT FOR CRACKS,  
REPLACE OF CRACKED

SCREW ROD END INTO  
FRONT HITCH COMPLETELY  
INTO THREADED HOUSING.

CROSS DRILL FOR  
5/16 GRADE 5  
BOLT. & LOCK  
NUT.

CONNECTED WITH 2  
LINKS OF CHAIN AND  
A ANCHOR SHACKLE




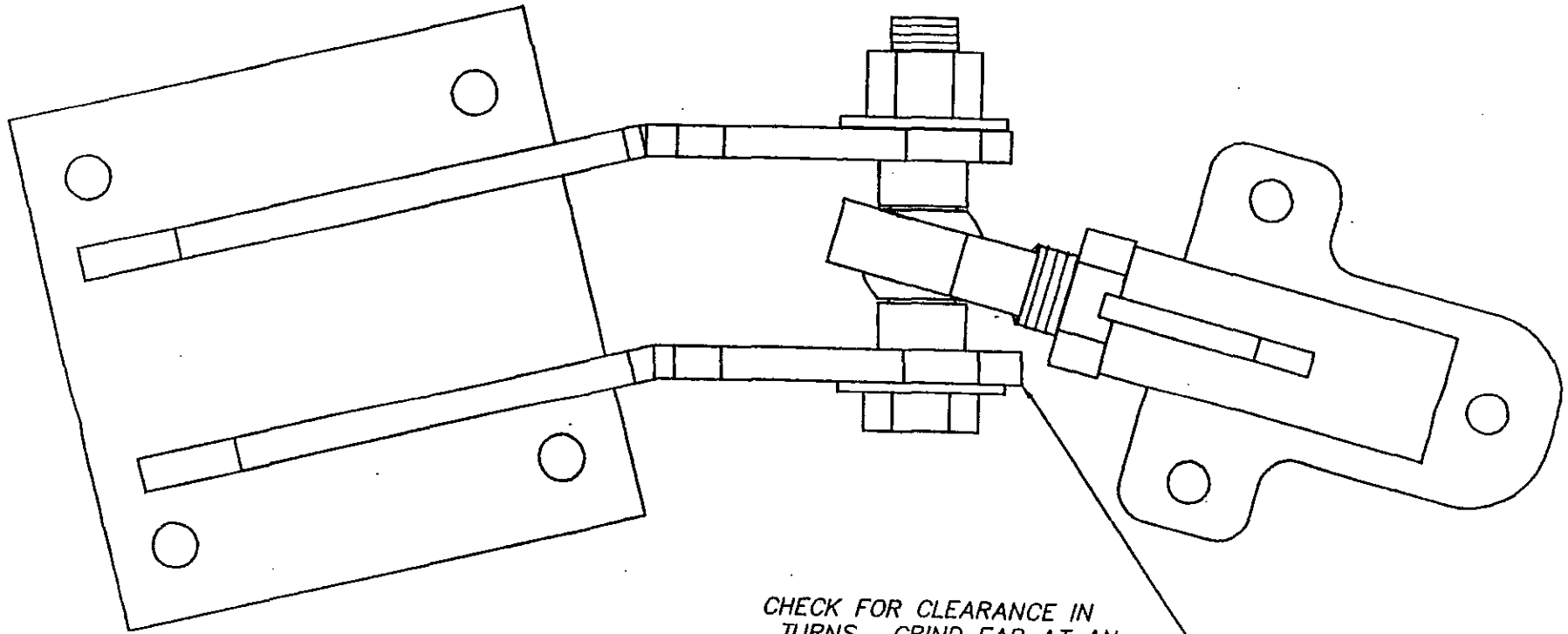
1. LOOSEN JAM NUT.

CHECK JAM NUT FOR  
TIGHTNESS DAILY



2. CHECK THAT ROD END  
THREADS ARE TIGHT IN  
MOUNTING PIPE.

3. TIGHTEN JAM NUT.

 <b>WISDOM INDUSTRIES</b> Merino, CO 80741		SCALE: NTS	APPROVED BY: <i>mtg/pt</i>	DRAWN BY: JJR
		DATE: 12-14-00		REVISED
DESCRIPTION CAR HITCH MODIFICATION				
EQUIPMENT: COASTERS			DRAWING NUMBER HITCH MOD	



CHECK FOR CLEARANCE IN  
 TURNS. GRIND EAR AT AN  
 ANGLE TO CLEAR ROD END  
 SHANK.

 <b>WISDOM INDUSTRIES</b> Merino, CO 80741	
SCALE: NTS	APPROVED BY: 
DATE: 12-14-00	DRAWN BY: JJR
DESCRIPTION	
CAR HITCH	
EQUIPMENT:	DRAWING NUMBER:
COASTERS	HITCH MOD