

# GOUP SERVICE BULLETIN SPRINGS



# **Ball Hitch Inspections**

May 1, 1990

# PREVENTIVE MAINTENANCE PROGRAM

The ball hitch assembly is designed to be operated within 30° articulation, and is not designed to be jackknifed. Exceeding the articulation limits, or jackknifing the two units in excess of 90°, can result in damage to the ball hitch assembly.

Therefore, as part of your regular preventive maintenance program, inspect both the ball assembly (*ITEM 1*) and the coupler assembly (*ITEM 2*) for any indication of limited articulation and/or jackknifing. These marks will most likely appear around the outer edges of the ball assembly platform, or on the coupler tonque (see *FIGURE 1*).

This inspection should be conducted every 3 months, or 30,000 miles, or sooner if over-articulation is possible in your application.

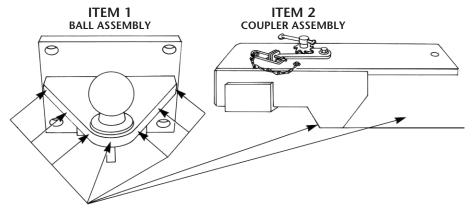


If during operation, jackknifing or over-articulation is suspected, the integrity of the ball assembly must be verified — as outlined below — before further use.

Inspect the ball and coupler in the areas indicated in *FIGURE 2*. If, upon inspection, burrs and indications of limited articulation are discovered, the following procedures are recommended:

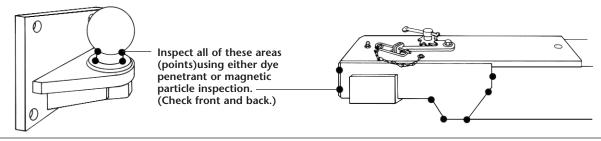
- 1. Do what you can to eliminate it from happening again (change your route, system design, driver training, etc.).
- 2. Verify the integrity of the ball and coupler assembly using either dye penetrant or magnetic particle inspection. Inspect the areas shown in *FIGURE 2*.

FIGURE 1



Inspect these areas for marks and burrs indicating jackknife or lack of articulation.

### FIGURE 1



XL-SB025

# SAFETY CHAIN/CABLE USE

A safety chain/cable system is required by federal, state, and provincial law when using a Holland ball hitch assembly. The system must have the following requirements:

- Cannot be attached to the ball/coupler drawbar arrangement.
- 2. The system must have no more slack than is necessary to permit the vehicles to turn properly.
- 3. The system, and it's attachments, must have an ultimate strength of not less than the gross weight of the vehicles or the vehicles being towed.
- 4. The system must be connected in a manner which prevents the tow bar from dropping to the ground in the event that it fails or becomes disconnected.
- 5. The system must have two (2) attachment points on the towed vehicle, which are as far apart as the configuration of the frame or axle permits.
- 6. When two safety chains or cables are used and attached to the towing vehicle at separate points, the points of attachment must be located equally distant from and on opposite sides of the centerline of the towing vehicle.

# **SAFETY CHAIN/CABLE INSPECTION**

Inspection of the safety chain/cable system should be conducted in conjunction with the ball and coupler inspection — every 3 months, or 30,000 miles.

The inspection should confirm conformance to the above requirements. Any worn or frayed component which would reduce the system's strength should be replaced.

Copyright © November 2002 • The Holland Group, Inc.

800-565-7753

519-863-2398