





## UPPER BALL JOINT

**GM TRUCKS** 

# THE PROBLEM SOLVER®

#### PROBLEM:

# Lack of induction hardening of entire ball stud

The upper ball joint for this vehicle fits a broad range of GVW, including  $\frac{3}{4}$  ton. It is important that the replacement ball joint is designed to meet or exceed OE specification. The OE ball stud is induction hardened. Other suppliers may not induction harden the entire ball stud for this application. This may lead to stud fracture.

Description	Years	Make/Model	Part Number
Upper Ball Joint	1999-2004	Chevrolet Silverado 2500, GMC Sierra 2500	- K6696
	2000-2010	Chevrolet Suburban 2500, GMC Yukon XL 2500	
	2001-2007	Chevrolet Silverado 1500 HD, GMC Sierra 1500 HD	
	2001-2007	Chevrolet Silverado 3500, GMC Sierra 3500	
	2001-2010	Chevrolet Silverado 2500 HD, GMC Sierra 2500 HD	
	2002-2006	Chevrolet Avalanche 2500	
	2007-2010	Chevrolet Silverado 3500 HD, GMC Sierra 3500 HD	
	2001	GMC Sierra C3	
	2003-2009	Hummer H2	

RESULT OF FAILED UPPER



STUD WITH NO INDUCTION HARDENING IS 50% LOWER IN FATIGUE STRENGTH.

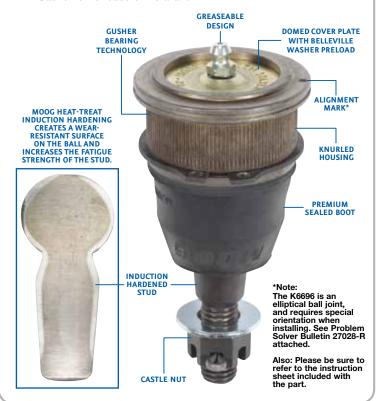


## **SOLUTION:**

## MOOG" Problem Solver" K6696 Upper Ball Joint

MOOG® Problem Solver® K6696 upper ball joint features a ball stud that is completely induction hardened – including the taper. This provides up to twice the strength of a part that is not entirely treated. In addition, this ball joint features other problem-solving technologies to give it longer service life and dependable operation:

- Exclusive "gusher" bearing technology for durability and long life.
- Greaseable design flushes contamination and keeps part lubricated.
- MOOG patented domed cover plate and Belleville washer ensure proper preload and consistent socket torque for the life of the part.
- Castle nut for ease of installation.





tech line: 1-800-325-8886















# BALL JOINT FAILURE DUE TO IMPROPER INSTALLATION

PRESS-IN BALL JOINT APPLICATIONS

# THE PROBLEM SOLVER®

## **PROBLEM:**

# Improper installation alignment can lead to early component failure

Press-in ball joints on some late-model vehicles are now designed with an elliptical stud opening. Failure to properly align the ball joint in the control arm during installation could result in loss of vehicle control due to ball joint failure.

If an elliptical joint is pressed into the control arm without regard to orientation, it is possible that normal vertical suspension movement will cause the ball joint stud to contact the housing, resulting in stud and/or housing failure.

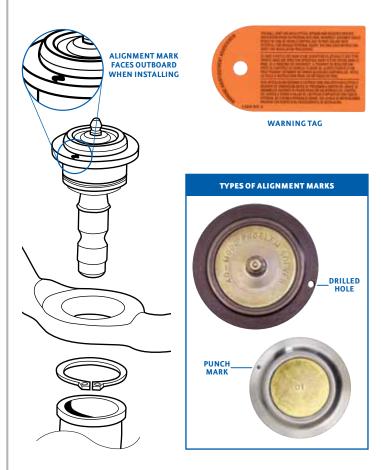
Elliptical openings are not visible on ball joints with preinstalled boots.



## **SOLUTION:**

# MOOG\* Problem Solver\* ball joints feature special installation aids

Always look at press-in ball joints for alignment marks such as drilled holes, arrows, punch marks, etc., and follow instructions regarding orientation when installing the joint in the arm. MOOG instruction sheets contain specific information about ball joint orientation where applicable. In addition, MOOG ball joints with elliptical openings have a warning tag on the stud.





For parts lookup, visit www.FMe-cat.com

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