



Chassis Parts – Service Information

Subject: Inspection of worn or damaged upper control arms (**stamped steel versions**) and replacement with upper ball joint (**ACDelco# 45D0104**) that must be properly indexed

Vehicles Involved: 1999-2006 Cadillac Escalade ESV, Chevrolet Avalanche ¾ ton, Suburban ¾ ton, Silverado ½ ton HD, ¾ and 1 ton. Express Cab, Hummer H2, GMC Sierra ½ ton HD, ¾ and 1 ton, Yukon XL. (Please refer to catalog for specific vehicle applications)

***Note:** Pre-mature ball joint wear, or control arm failure, may result from improper repair procedures. It is critical that the proper steps are followed for ball joint removal, control arm inspection, and ball joint installation.*

Ball Joint Removal:

Before removing the existing ball joint from the control arm, it is imperative that the ball joint housing is inspected. Damaged ball joints and ball joints with excessive rust, are likely to enlarge the control arm hole, making ball joint replacement unacceptable. The ball joint should never be removed by hammering, or pressed out at an angle. These techniques would also damage the control arm. If the ball joint appears acceptable for removal, following its removal, the control arm hole and surrounding area must be inspected for wear, fatigue, and elongation. If any of these issues are discovered, the complete control arm assembly must be replaced. An expanded hole does not allow for an adequate mechanical bond between the new ball joint housing and the control arm resulting in the ball joint not being held securely in place.

ACDelco now offers a complete control arm assembly (**45D1083**) with the ball joint (**45D0104**) already installed for those repairs that may require the assembly due to a problem with the control arm hole.

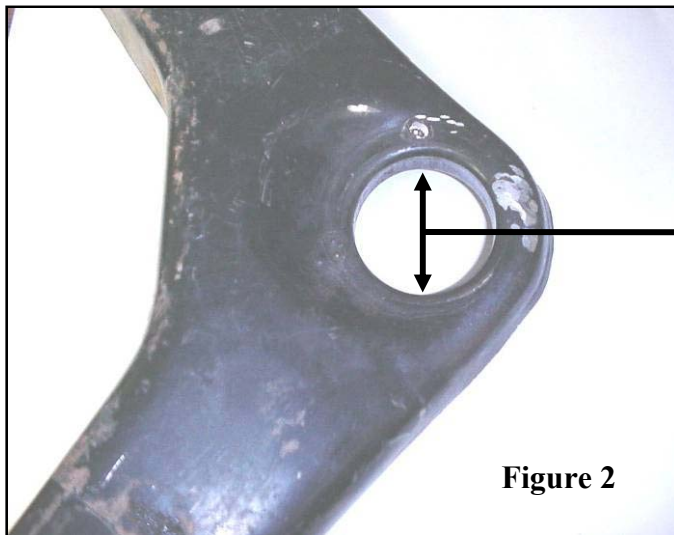
**ACDelco#
45D0104**



**ACDelco#
45D1083**



Control arm holes that exhibit any signs of wear, fatigue, oblong shape or other visible damage **must** be replaced (Figure 2).



Check hole for elongation, wear, fatigue, or other damage

Figure 2

Important Service Note ... Please Read!!!

In order to avoid premature ball joint wear, or control arm failure due to improper installation, the ACDelco upper ball joint (45D0104) for the above vehicle applications **must** have the ball joint housing properly indexed to the existing control arm prior to being pressed in.

Repair and Installation Procedure:

Stamped on the bottom of the upper ball joint (Figure 3) are the words, "INSTALL INBOARD". It is important that the new ACDelco ball joint (45D0104) be installed with those words "INSTALL INBOARD" facing towards the engine compartment of the vehicle (Figure 4).

Because the ball joint is a "directional" type (Figure 5), the swing angle of the ball joint stud is limited in its range of motion (inboard-to-outboard). Incorrect installation (i.e., orientation of the housing) could cause damage to the ball joint resulting in premature failure.



Figure 3

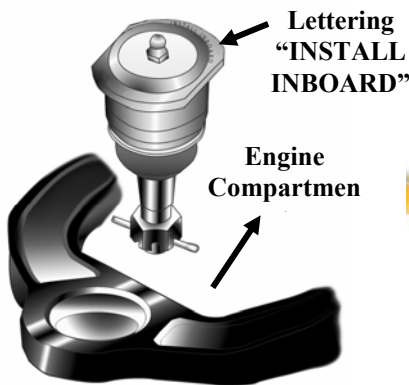


Figure 4

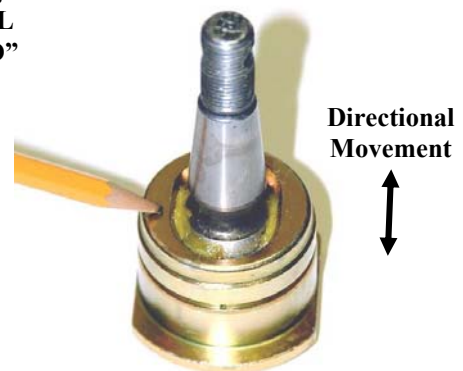


Figure 5