# Dodge Ram ¾ and 1 ton 4x4 Adjustable Upper Ball Joint

FIG 1

1) Check vehicle for bent, worn or loose components and repair as necessary.
2) Check alignment and determine camber change required.
3) Lift vehicle under front axle. Support safely.

NOTE: The original equipment ball joint is a "plunge joint" design and is intended to be non-weight bearing. This adjustable replacement ball joint is of a similar design. Therefore, IT IS IMPORTANT TO CHECK THE CONDITION OF THE LOWER BALL JOINT FOR ANY LOOSENESS/WEAR, AS LOWER BALL JOINTS LOOSENESS MAY CAUSE PREMATURE FAILURE OF THE UPPER BALL JOINT.

FIG 2

4) Remove wheel assembly and brake caliper and support. Place chalk marks on the hub and rotor to insure proper reassembly. Remove rotor.
5) Remove nut from steering arm. Using an appropriate tool, break the taper and remove the tie rod end from the arm.
6) Place chalk marks on bearing hub, backing plate, and steering knuckle to insure proper reassembly.
7) Using the proper 12-point socket, remove the four bearing hub bolts from the backside of the steering knuckle. Remove the ABS sensor as required.
8) Place puller adapter flange on lug studs. Use washers under lug nuts to prevent damage, tighten lug nuts. Use slide hammer to loosen assembly.
9) Remove bearing hub and axle as a unit, using care not to damage inner seal.
10) Loosen ball joint nuts until they are within 2 or 3 threads from removal. Break tapers of ball joints. Remove steering knuckle. Support knuckle and ABS wiring, if so equipped. (Fig1)
10) Press out upper ball joint using a press and proper adapters.

FIG 3

**NOTE: The adjustable ball joint is pre-lubricated during assembly. After installation and adjustment has been completed, install grease fitting and fill ball joint with multipurpose water resistant 3% molybdenum grease or equivalent. The adjustable ball joint contains an internal seal to keep water and contaminates out. A dust boot is not required.**

FIG 4

1) Remove grease fitting from adjustable ball joint. Use ball joint press and proper adapters, properly seat ball joint into axle yoke. (Fig 2)
2) Reposition steering knuckle onto ball joints, install and tighten lower nut to factory specifications. Thread upper self lock nut on by hand at this time.
3) Place a film of grease on inner axle splines to keep from damaging internal seal. Place a film of anti-seize on mating surfaces of hub and steering knuckle. Install backing plate and axle assembly, aligning parts with chalk marks. Reinstall ABS wiring if required.
4) Put Anti-seize on hub bolt threads. Reinstall hub bolts, torque to factory specifications.
5) Place tie rod into steering knuckle and torque to factory specifications. Reinstall rotor, caliper, and wheel assembly, torque all fasteners to factory specifications.
6) Install and compensate alignment sensor.
7) Lower vehicle onto turntables.
8) Before installing grease fitting, insert a 5/16" Allen wrench through the grease- fitting opening and into top of ball joint stud. Rotate ball stud to achieve camber adjustment. (fig 3)

**NOTE: Do not adjust past one degree of negative Camber. Check for any clearance issues. (Fig 4)**

FIG 5

9) While holding the ball stud with a 5/16" Allen wrench to prevent it from turning, tighten and torque lock nut to factory specifications.
10) Verify alignment readings. Install grease fitting and grease ball joint as previously stated. (fig 5)
11) Complete alignment and road test vehicle.