

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

- 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: This adjustable ball joint replaces the O.E. upper ball joint only.**

- 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.

**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 multi-purpose water resistant 3% molybdenum grease or equivalent. The adjustable ball joint contains an internal seal to keep water and contaminants out. A dust boot is not required.**

- 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)**

- 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.

FIG 1



FIG 2



FIG 3



FIG 4



FIG 5

