



SYNERGY MFG. 870 INDUSTRIAL WAY, SAN LUIS OBISPO, CA (805) 242-0397

SYNERGY MFG HEAVY DUTY BALL JOINTS

4120, 4120-04, 8009-12, 8009-1204

Version 1.5

GENERAL NOTES:

- These instructions are also available on our website; www.synergymfg.com. Check the website before you begin for any updated instructions and additional photos for your reference.
 - Refer to the factory service manual for general installation instructions for ball joints, these are no different, any important differences are noted below.
 - A special ball joint C-frame press and adapters are required for installation. OTC and Miller special tools have quality tools available.
 - Lubricate the ball joints at every oil change using Synergy High Performance Chassis & Bearing Grease (4119).
 - These HD ball joints carry a 12-month unlimited warranty available to the original purchaser from the date of purchase and is non-transferable.
1. Remove the boots prior to installation to prevent damage. Do not forget to reinstall them prior to installing the knuckles
 2. Install the ball joints using the factory service manual as a guide. Torque the lower ball joint nut to 80 ft-lbs, then tighten the upper ball joint nut to 75 ft-lbs. Further tighten to align the cotter key holes, do not loosen to align the cotter key.
 3. Orient the lower ball joint so the grease fitting is pointing forward.
 4. Wait until the ball joints are installed to install the grease zerk fittings. You have two options for the lower ball joint grease zerk: Use the flush style grease zerk **ONLY** if you are using RCV axle shafts; you will need a long needle adapter to grease the lower ball joints. If you are using standard U-joint axle shafts, you can use the regular grease zerk provided, and a standard grease gun fitting will work.
 5. Recheck caster on vehicle after new ball joints have been installed as worn ball joints could result in an increase in actual caster due to excessive play.
 6. Due to the nature of metal on metal ball joints, these ball joints will require a small break-in period for the first 500 miles or so for the bearing surfaces to seat. The steering may feel *sticky* or lack self-centering during this time.