



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

## HEAVY DUTY BALL JOINTS

PPM-4120

PPM-4120-01

PPM-8009-12

PPM-8009-12-01

Version 1.3

### GENERAL NOTES:

- These instructions are also available on our website; [www.synergymfg.com](http://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 (PPM-4119).
  - These HD ball joints carry a 12 month unlimited warranty. Available to the original purchaser from the date of purchase and are 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 Balljoints have been installed as worn balljoints could result in an increase in actual caster due to excessive play.