## **GM HD TRUCK OFFSET BALL JOINT INSTRUCTION SHEET**

This ball joint will provide up to ±2.5° of camber and/or caster change.

CAUTION! Due to strength concerns with the OEM upper control arm. this product should not be used on trucks with tires taller than 33" unless equipped with a "tall knuckle" style lift. DO NOT use on trucks with kits that lower the upper control arm. as the additional stresses due to high operating angles and larger tires could result in damage the OEM arm.

This part should only be installed by personnel who have the necessary skill, training and tools to do the job correctly and safely. Incorrect installation can result in personal injury, vehicle damage and / or loss of vehicle control.

- Always check for loose or worn parts, tire pressure and tire wear.
- Raise and support the vehicle under the front lower control arms.
- Remove the tire and wheel assembly.
- Remove the nut retaining the upper ball joint to the knuckle. Break the taper using the #8370 or equivalent. Support the hub assembly so it does not fall uncontrolled.
- 5. Using a standard #72509 ball joint press or equivalent, press out the upper ball joint.

Note: The arm may be removed from the vehicle if desired. Follow manufacturers recommended procedures.

Press the top plate #3 into the control arm from the

Note: To set the balljoint for the desired caster and/or camber change, consult the chart below to determine whether to set the point or the flat of the hex in the top plate toward the tire. Once the plate is pressed in, the balljoint may be installed in any one of six positions. (Actual change may vary on trucks with aftermarket

RIGHT

RIGHT

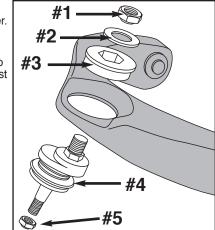
RIGHT

## suspensions.)

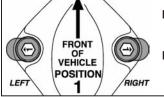
- 7. Install the ball joint housing #4 up through the hex plate on the underside of the control arm. The offset position of the housing will determine the camber/caster change according to the chart.
- Install the flat washer #2 and recessed nut #1. Make sure the recess of the nut fits into the washer.
- Torque the top nut to 175 lb-ft.
- 10. Install the ball joint tapered shaft into the knuckle and install the supplied castle nut #5. Torque nut to at least 45 lb-ft. then tighten more to line up nearest slot to pin hole. Install the cotter pin.

Note: Rerouting of the ABS wiring may be necessary with the balljoint clocked in some positions. Check to make sure the ABS wire does not have tension when wheels are turned either direction. (Moving the plastic clip at the knuckle from the forward slot to the rearward slot in the mounting tab generally works well.)

11. Check alignment readings and adjust stock upper control arm adjuster to fine tune alignment readings. Road test vehicle.







FRONT

OF

VEHICLE

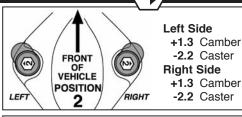
POSITION

Left Side +2.5 Camber 0.0 Caster Right Side

+2.5 Camber 0.0 Caster

Left Side

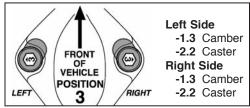
-2.5 Camber 0.0 Caster **Right Side** -2.5 Camber 0.0 Caster



FRONT (P) (5) VEHICLE POSITION RIGHT

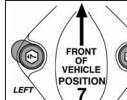
Left Side -1.3 Camber +2.2 Caster Right Side

-1.3 Camber **+2.2** Caster





## - Top Plate FLAT side towards tire Position 7 through 12



OF VEHICLE

POSITION

10

Left Side

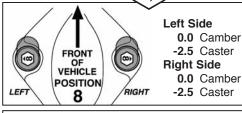
+2.2 Camber -1.3 Caster

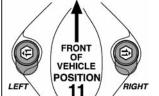
Right Side

+2.2 Camber -1.3 Caster

+1.3 Caster

Left Side -2.2 Camber +1.3 Caster Right Side -2.2 Camber





-2.5 Caster Right Side 0.0 Camber -2.5 Caster

0.0 Camber

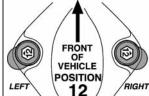
0.0 Camber

+2.5 Caster

+2.5 Caster

Left Side

**Right Side** 



FRONT

VEHICLE

POSITION

LEF

Left Side -2.2 Camber -1.3 Caster Right Side -2.2 Camber RIGHT -1.3 Caster

> Left Side +2.2 Camber +1.3 Caster **Right Side** +2.2 Camber +1.3 Caster



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