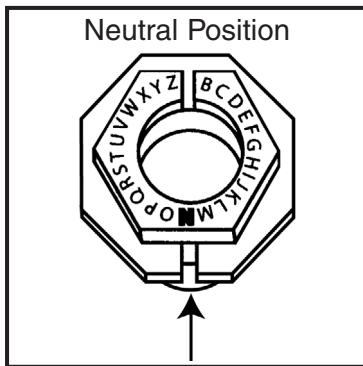


1. Take initial alignment reading to determine the vehicle is out of OEM specification.
2. Remove tire and wheel assembly for easy access. This also reduces the weight being supported by the upper ball joint stud.
3. If clearance allows for proper retorquing, loosen the LOWER ball joint stud nut.
4. Remove cotter key from the upper ball joint stud and remove nut.
5. Using a hammer, strike the knuckle assembly sharply a few times to break the interference taper between the ball joint and bushing. (Supporting the axle hub will aid greatly in the removal and installation of bushings. Take care not to damage brake or vacuum lines.)
6. Remove currently installed bushing from the upper ball joint.
7. Install the DUAL-AXIS ADJUSTABLE BUSHING in the Neutral or 0 Degree position by dialing the "N" of the INNER BUSHING to the SLOT of the OUTER BUSHING (See illustration #1). It does not matter at this point in what position the Dual-Axis bushing is installed in the knuckle.

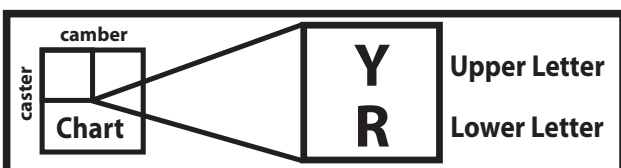
Illustration #1



8. Take a new alignment reading to determine the amount of positive (+) or negative (-) Camber & Caster changes necessary.
9. Refer to the chart on the other side of this page.
10. Follow both measurements (camber & caster changes required) to their intersection on the chart. In this box you will find letters. The UPPER letters represents the code for positioning the INNER adjuster. The LOWER letters is the reference for positioning the OUTER adjuster (See illustration #2).

Note: (If there are two upper letters or lower letters in a box, position the bushing between the two letters.)

Illustration #2



INSTALLATION INSTRUCTIONS

Dual - Axis Adjustable Bushings

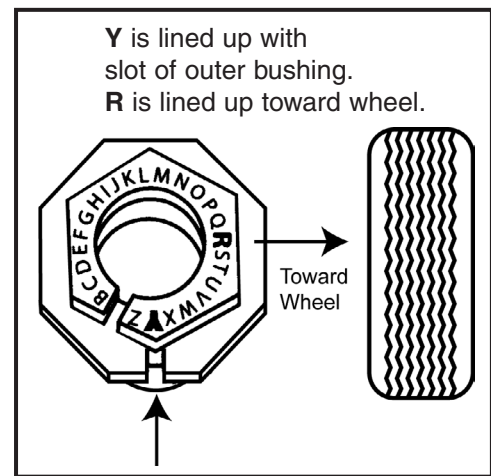
Application

Ford	F450/550	2005–up
	Super Duty 4x4/4x2	

11. It is not necessary to remove the DUAL-AXIS bushing to index to the proper position.
12. Simply adjust the INNER bushing so the UPPER letter recorded earlier lines up with the slot of the OUTER bushing. Dial the OUTER bushing so that the Slot lines up in the appropriate location of the knuckle according to the LOWER number of the chart (See illustration #3).

Note: (Using a thin wall socket or channel type pliers will make adjustments easy.)

Illustration #3



13. If clearance allows, referencing step #3, tighten lower ball joint nut to interim torque 44 ft lbs. (59nm).
14. Install upper ball stud nut included with bushing and torque to manufacturer's specifications. Advance nut to next castellation and install cotter pin.
15. If clearance allows, referencing step #3, tighten lower ball joint nut to final torque of 150 ft lbs. (204nm).
16. Proceed with alignment and road test the vehicle.

FORD F450/550 Superduty 4x4/4x2 2005-up

		CAMBER																																					
		+ POSITIVE +												- NEGATIVE -																									
		4°	3 3/4°	3 1/2°	3 1/4°	3°	2 3/4°	2 1/2°	2 1/4°	2°	1 3/4°	1 1/2°	1 1/4°	1°	3/4°	1/2°	1/4°	0°	-1/4°	-1/2°	-3/4°	-1°	-1 1/4°	-1 1/2°	-1 3/4°	-2°	-2 1/4°	-2 1/2°	-2 3/4°	-3°	-3 1/4°	-3 1/2°	-3 3/4°	-4°					
DRIVER SIDE	CASTER	-4°																																		4°			
		-3 3/4°																																			3 3/4°		
		-3 1/2°																																				3 1/2°	
		-3 1/4°																																				3 1/4°	
		-3°																																				3°	
		-2 3/4°																																					2 3/4°
		-2 1/2°																																					2 1/2°
		-2 1/4°																																					2 1/4°
		-2°																																					2°
		-1 3/4°																																					1 3/4°
		-1 1/2°																																					1 1/2°
		-1 1/4°																																					1 1/4°
		-1°																																					1°
		-3/4°																																					3/4°
		-1/2°																																					1/2°
		-1/4°																																					1/4°
		0°																																					0°
		1/4°																																					-1/4°
		1/2°																																					-1/2°
		3/4°																																					-3/4°
1°																																					-1°		
1 1/4°																																					-1 1/4°		
1 1/2°																																					-1 1/2°		
1 3/4°																																					-1 3/4°		
2°																																					-2°		
2 1/4°																																					-2 1/4°		
2 1/2°																																					-2 1/2°		
2 3/4°																																					-2 3/4°		
3°																																					-3°		
3 1/4°																																					-3 1/4°		
3 1/2°																																					-3 1/2°		
3 3/4°																																					-3 3/4°		
4°																																					-4°		

+ POS +

PASSENGER SIDE

- NEG -