



### Bushing Position Chart for CAMBER/CASTER CHANGE

EXAMPLE SHOWN IS for a 2° Bushing installed on the Drivers side. Camber readings (+ or -) are reversed for the passenger side.

EXAMPLE: The example shown is a 2° Bushing used on a 2 W/D application. Placed in the vehicle with the slot toward the front (as shown) CASTER only would change. (2° Negative in the sample shown.) If the bushing were rotated to the “B” position CASTER & CAMBER would each decrease 1-3/8°. This is illustrated by the (-) marks in both the CASTER CHANGE Circle and CAMBER CHANGE Circle intersecting the line to the letter “B”.

© Copyright 2008 by Northstar Manufacturing Company, Inc. All rights reserved. No part of this chart may be reproduced without specific permission in writing from the copyright owner.

Bushing I.D. Number	+ or - Degrees of Adjustment			
	2WD		4WD	
	Max. Camber or Caster	Combined Camber & Caster	Max. Camber or Caster	Combined Camber & Caster
SL-0	0	0	0	0
SL-1/2	.50 (1/2)	.3 (5/16)	.4 (3/8)	.2 (1/4)
SL-1	1.00 (1)	.7 (11/16)	.7 (3/4)	.5 (1/2)
SL-1½	1.50 (1½)	1.1 (1-1/16)	1.0 (1)	.7 (3/4)
SL-2*	2.00 (2)	1.4 (1-3/8)	1.4 (1-3/8)	1.0 (1)
SL-2½*	2.50 (2½)	1.7 (1-15/16)	2.00 (2)	1.3 (1-1/4)
SL-3*	3.00 (3)	2.1 (2-1/4)	2.50 (2½)	1.6 (1-3/4)

\*Note: Do not exceed 2° Negative change on 2W/D models.  
Also, check for clearance on 4W/D models when high degree changes are made.

# SPECIAL INSTRUCTIONS

## INSTRUCTIONS FOR LOCKING ALIGNMENT BUSHING

Patent Pending

- 1.) Set up alignment gauges, take and record readings.
- 2.) Determine the bushing needed to adjust readings to desired angles. NOTE: When using the bushing for combination changes the amount of change is less than the degree of change stamped on the bushing.

When installed in 4WD vehicles, the amount of adjustment is less than when installed in 2WD vehicles. This is due to the wider upper/lower ball joint spacing to accommodate the driveshaft in the 4WD axle.

ON HIGHER DEGREE BUSHINGS IT MAY BE NECESSARY TO WIDEN THE GAP OF THE PINCH BOLT ASSEMBLY SLIGHTLY FOR EASE OF INSTALLATION.

- 3.) Raise the vehicle with an air jack or other suitable lift so that approximately half of the vehicle weight is off the tire/wheel assembly.
- 4.) Remove upper ball joint stud snap ring (where applicable).
- 5.) Using an appropriate socket, loosen, then remove the upper ball joint pinch bolt and remove the factory bushing by prying upward under the bushing shoulder.
- 6.) Install the new bushing with the slot facing in the desired direction. Make sure one of the six slots on the top of the bushing lines up with the gap in the knuckle. Refer to the chart on the backside of this page for proper slot direction for desired angle changes.
- 7.) Tap downward on the bushing to seat it. Reinstall snap ring (where applicable).
- 8.) Lower the vehicle and jounce the suspension. Take alignment reading and make any necessary final adjustments to the bushing to obtain desired final results.
- 9.) Install special locking key so it properly engages chosen top bushing slot (Image #1).
- 10.) **IMPORTANT!** Install NEW PINCH BOLT and torque to manufacturer's specifications according to year/make/model, making sure that it has properly engaged the special locking key.
- 11.) After adjustment of camber and caster on both sides adjust toe to specifications.
- 12.) Road test vehicle.



Image #1