FRONT END ALIGNMENT

CONTENTS

DESCRIPTION AND OPERATION

FRONT END ALIGNMENT

Wheel alignment is the process of adjusting the position of the front wheels in order to attain proper vehicle handling characteristics and the least steering effort with a minimal amount of tire wear.

Wheel and tire balance has an important effect on steering and tire wear. If wheels and tires are out of balance, "shimmy" or "tramp" may develop causing tires to wear unevenly and give the erroneous impression that the wheels are not in proper alignment. For this reason, the wheel and tire assemblies should be known to be in proper balance before assuming that the front suspension is out of alignment.

With the type of front suspension used, the toe-in adjustment is usually more important than caster and camber as far as tire wear is concerned.

In the majority of cases, services consisting of inflating tires to specified pressure and interchanging tires at recommended intervals, balancing all wheels and tires, adjusting steering gear and setting toe-in correctly will provide more improvement in car handling and tire wear than will front end alignment adjustments.

The correct use of accurate front end alignment equipment is essential to determine whether front suspension parts have been damaged, and to obtain correct alignment settings after new parts have been installed.

MAINTENANCE AND ADJUSTMENTS

FRONT END ALIGNMENT

Inspection Before Checking Front Wheel Alignment

Before making any adjustment affecting caster, camber, toe-in, theoretical king pin inclination, or steering geometry, the following checks and inspections should be made to insure correctness of alignment equipment readings and alignment adjustments.

1. Front tires should have approximately the same wear and all tires must be inflated to specified pressus.

2. Check front wheel bearings for looseness and adjust if necessary.

3. Check for run-out of wheels and tires.

4. Check wheels and tires for balance and correct if out-of-balance.

5. Check for looseness at ball joints, tie rod ends, and steering relay rods; if found excessive, it must be corrected before alignment readings will have any value.

6. Check trim height; if out of limits, correct with shims or replace spring. Consideration must be given the optional equipment on the car, undercoating, dirt, etc. Vehicle should be at curb or free height when an alignment operation is performed. (All excess equipment, such as tool boxes, fishing or golfing

equipment should be removed from the vehicle.) The vehicle should have a full tank of fuel.

Good judgment should be exercised before replacing a spring when car trim height is only slightly out of limits. Spring replacement under conditions of excessive weight as mentioned above will accomplish little and must be accompanied by shimming to obtain satisfactory results. Front and rear shims are available through the Parts Department.

7. It is advisable to check the condition and accuracy of any equipment being used to check front end alignment and to make certain that instructions of the manufacturer are thoroughly understood and followed.

Checking Caster and Camber Settings

Caster is the forward or rearward tilt of the steering knuckle pivot centerline from true vertical as viewed from the side of the vehicle. If the top of the steering knuckle pivot centerline is tilted forward of true vertical, it is called "negative caster." If the top of the steering knuckle pivot centerline is tilted rearward of true vertical, it is called "positive caster."

Camber is the inward or outward tilt of the top of a wheel from true vertical as viewed from the front of the vehicle. If the top of a wheel is tilted outward from true vertical, it has "positive camber." If the top of a wheel is tilted inward from true vertical, it has "negative camber."

Since caster and camber settings are both adjusted by shimming in the same locations, both of these settings must be checked before changing shims.

Regardless of equipment used to check caster and camber, the car must be on level surface both transversely and fore and aft.

When alignment equipment is used which bears against the tire or wheel rim to obtain readings, it is very essential that the tires or wheels be checked for lateral run-out.

Caster and camber readings must be taken at points on the wheels which have no run-out or which lie in the same plane. Caster and camber should be within the service limits shown in Figure 3D-1. Note that the caster angles at both front wheels need not be exactly the same but must be within 1 degree of each other. Likewise, the camber angles on both sides must be within 1 degree of each other. If caster and camber are not within the specified limits, adjust in the following manner.

Caster and Camber Adjustment

For caster and camber adjustment purposes, use the following guide:

1. To increase camber only - (More positive) Remove and equal amount of shims from front and rear bolts.

2. To decrease camber only - (Less positive) add an equal amount of shims to front and rear bolts.

3. To increase caster only - (More positive) Remove an amount of shims from front bolt and add an equal amount of shims at rear bolt.

4. To decrease caster only - (Less positive) Add an amount of shims at the front bolt and remove an equal amount of shims from the rear bolt.

5. To increase caster and camber at the same time - remove an amount of shims *at front bolt only.*

6. To decrease caster and camber at the same time - add an amount of shims *at front bolt only.*

The following guide lines will help you select and correctly shim with minimum effort. Shim thickness limit for any one stack is .600 of an inch.

Shims are available in .030", .060", and .120" thickness.

By adding a pack of shims .090" thick at both sides, camber will be decreased by approximately 1/2 degree.

By adding a .030" shim on one bolt and removing a .030" shim from the other, caster will change approximately 3/8 degree.

To help you determine the shim thickness change required to return caster and camber to design dimension, two dimension change charts have been developed to enable you to do quicker and more accurate work. See Figures 3D-2A and 3D-2B. This chart indicates in thousandths of an inch, the change required at (F) front and (R) rear shim position in order to return the initial reading to factory specifications. For example: Assume the initial readings for one B Series wheel were, camber plus 1/2° left side and 0° right side. Caster minus 1/4 degrees. Figure 3D-2B indicates that a subtraction of 0.15 shim thickness to the (F) front shim position and addition of plus 0.06 shim thickness to the (R) shim position would be required to adjust this wheel to factory specifications.

Torque control arm shaft nuts to 75 lb. ft.

It is imperative that this torque specification be closely adhered to.

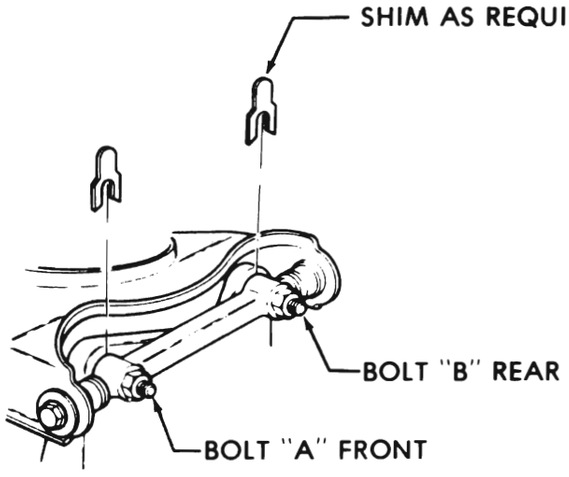
Checking Theoretical Kingpin (Steering Axis) Inclination

When checking theoretical king pin inclination, car

CASTER AND CAMBER ADJUSTMENT

FOR CASTER AND CAMBER DIMENSIONS, SEE WHEEL ALIGNMENT AND SPEC CHART.

FOR INCREASED OR POSITIVE CASTER, DECREASE SHIMS AT BOLT "A" AND INCREASE SHIMS AT BOLT "B" BY TWICE THIS AMOUNT



FOR DECREASED OR NEGATIVE CASTER, INCREASE SHIMS AT BOLT "A" AND DECREASE SHIMS AT BOLT "B" BY TWICE THIS AMOUNT

FOR INCREASED CAMBER, DECREASE SHIMS AT BOTH "A" AND "B" BOLTS. SHIMMING GREATER THAN .750 NOT PERMISSIBLE

SHIM THICKNESS AT "A" AND "B" LOCATION TO BE WITHIN .40 OF EACH OTHER

3D-3

Figure 3D-3 - Upper Control Arm Shimming Locations

must be on a level surface both transversely and fore and aft, must have trim heights within limits, and must be at curb load.

Set camber and caster to the desired specifications as shown in Figure 3D-1. Measure king pin or steering axis inclination relative to a vertical plane. Add to the measured king pin axis angle the value of the positive camber angle (subtract if the camber is negative) and compare the resulting angle to the value given in Figure 3D-4 or 3D-5.

There is no adjustment for theoretical king pin inclination as this factor depends on the accuracy of the front suspension parts. Distorted steering knuckles should be replaced with new parts.

Any heating, welding, or bending of front suspension parts to correct errors or repair damage must be avoided as this may produce soft spots in the metal in which fatigue and breakage may develop in service.

Checking and Adjusting Toe-In

Toe-in is the distance in fractions of an inch that the front of the wheels are turned inward from a straight-ahead position.

Car must be at curb weight and front and rear suspension trim should be within specified limits. Bounce front end and allow it to settle to operating height. Steering gear and front wheel bearings must be properly adjusted with no looseness at tie rod ends. The car should be moved forward one complete revolution of the wheels before the toe-in check and adjustment are started and the car should never be moved backward while making the check and adjustment. This presets the front suspension and removes lash from the joints.

1. Turn steering wheel to straight-ahead position, with front wheels in same position.

2. Using a suitable toe-in gauge, measure the distance between outside walls of tires at the front at a height approximately horizontal to floor and through the centerline of the wheel assembly. An accurate check also can be made by raising and rotating front wheels to scribe a fine line near the center of each tire, then, with tires on the floor and front end at running height, measure between scribed lines with a suitable trammel.

3. Roll the car forward until measuring points on tires are approximately 180 degrees from point used in Step 2 above.

The measurement at the front should be 1/16" less than the measurement at the rear.

4. If toe-in is not within specified limits, loosen clamp bolts and turn adjusting sleeves at tie rod ends as required. Decrease toe-in by turning left sleeve in same direction as wheel rotates moving forward and turn right sleeve in opposite direction. Increase toe-in by turning both sleeves in opposite direction.

Left and right adjusting sleeves must be turned exactly the same amount but in opposite directions when changing toe-in, in order to maintain front wheels in straight-ahead position when steering wheel is in straight-ahead position.

Approximately the same amount of thread engagement in the adjuster sleeve should be noted for the inner and outer tie rod ends. The distance between the inner and outer tie rod ends in the adjuster sleeve should be approximately equal for both right and left wheels. The tie rods should never be lengthened to

the point where the inner and outer threaded tie rod ends are outboard of the inner edge of the adjuster sleeve "U" clamps. If proper toe-in cannot be obtained within this amount of adjustment, inspect the suspension and steering linkage for bent parts.

5. After correct toe-in is secured, tighten clamp bolts securely.

The steering knuckle and steering arm "rock" or tilt as front wheel rises and falls. Therefore, it is of vital importance to center the travel of the inner tie rod joint by centering the tie rod stud in the socket (socket front face should be approximately vertical) and then position the bottom face of tie rod end parallel with machined surface at outer end of steering arm when tie rod length is adjusted. Severe damage and possible failure can result unless this precaution is observed. Refer to Steering Linkage Section for tie rod sleeve clamp position.

Checking Steering Geometry (Turning Angles)

Be sure that caster, camber, and toe-in have all been properly corrected before checking steering geometry. Steering geometry must be checked with the weight of the car on the wheels.

1. With the front wheels resting on full floating turntables, turn wheels to the right until the outside (left) wheel is set at 20 degrees. The inside (right) wheel should then be at the angle specified in Figure 3D-4 or 3D-5.

2. Repeat this test by turning front wheels to the left until the outside (right) wheel is at 20 degrees; the inside (left) wheel should then be at the angle specified in Figure 3D-4 or 3D-5.

3. Errors in steering geometry generally indicate bent steering arms, but may also be caused by other incorrect front end factors. If the error is caused by a bent steering arm, the complete knuckle must be replaced. Replacement of such parts must be followed by a complete front end alignment check as described above. Never heat or bend a steering arm or knuckle to correct steering geometry, since doing so may cause the part to break in service.

SPECIFICATIONS

FRONT END ALIGNMENT SPECIFICATION CHARTS

FRONT END ALIGNMENT

Satisfactory vehicle operation may occur over a wide range of front end (wheel) alignment settings. Nevertheless, should settings vary beyond certain tolerances, readjustment of alignment is advisable. The specifications stated in Chart "A" of this manual should be used by owners, dealers, and repairmen as guidelines in vehicle diagnosis, either for repairs under the new vehicle warranty or for maintenance service at customers' requests. These specifications provide an acceptable all-around operating range in that they prevent abnormal tire wear caused by wheel alignment.

WHEEL ALIGNMENT SPECIFICATIONS

		CHART A Specifications for Diagnosis for Warranty Repairs Or Customer Paid Service	CHART B Specifications for Resetting Alignment
Caster	Lower Series		
	Man Strg	$-1^{o} + 1^{o}$	$-1^{o} + 1/2^{o}$
	Power Strg	$0^{o} + 1^{o}$	$0^{o} + 1/2^{o}$
	Upper Series	$+1^{o} + 1^{o}$	$+1^{o} + 1/2^{o}$
Camber	Lower Series		
	R.H. Side	$+1/2^{o} + 3/4^{o}$	$+1/2^{o} + 1/2^{o}$
	L.H. Side	$+1^{o} + 3/4^{o}$	$+1^{o} + 1/2^{o}$
	Upper Series		
	R.H. Side	$1/2^{o} + 3/4^{o}$	$1/2^{o} + 1/2^{o}$
	L.H. Side	$1^{o} + 3/4$	$1^{o} + 1/2^{o}$
Toe In	All Series	1/16" + 1/8"	1/16" + 1/16"
Cross Caster	All Series	No more than 1^{o} side to side variation	No more than $1/2^{o}$ side to side variation
Cross Camber	All Series	Desirable - L.H. camber $+1/2^{o}$ more than R.H. Camber limits - L.H. camber $-1/2^{o}$ to $+1\ 1/2^{o}$ of R.H. camber	L.H. camber to be $+1/4^{o}$ to $+3/4^{o}$ of R.H. camber

Governmental Periodic Motor Vehicle Inspection programs usually include wheel alignment among items that are inspected. To provide useful information for such inspections, the tolerances shown in Chart "C" are applicable and well within the range of safe vehicle operation.

MOTOR VEHICLE INSPECTION STATION TOLERANCES

CHART C

Caster	Lower Series		Upper Series	$+3^{o}$ to -1^{o}
	Man. Strg.	$+1^{o}$ to -3^{o}		
	Power Strg.	$+2^{o}$ to -2^{o}		
Camber	Lower Series		Upper Series	
	R.H. Side	$+2^{o}$ to -1^{o}	R.H. Side	$+2^{o}$ to -1^{o}
	L.H. Side	$+2\text{-}1/2^{o}$ to $-1/2^{o}$	L.H. Side	$+2\text{-}1/2^{o}$ to $-1/2^{o}$
Toe in	1/16" ± 3/8"			

In the event the actual settings are beyond the specifications set forth in Chart "A" or "C" (whichever is applicable), or whenever for other reasons the alignment is being reset, Buick recommends that the specifications given in Chart "B" of the aforesaid applicable chart be used.

Figure 3D-1 All Series Wheel Alignment Chart

FRONT SUSPENSION ALIGNMENT CHART
1973 "A" SERIES
CURB LOAD

				MEASURED CASTER										
Power Steering				+1¼°	+1°	+¾°	+½°	+¼°	0°	−¼°	−½°	−¾°	−1°	−1¼°
Manual Steering				+¼°	0°	−¼°	−½°	−¾°	−1°	−1¼°	−1½°	−1¾°	−2°	−2¼°
MEASURED CAMBER	Left	Right												
	+2¼°	+1¾°	F	+0.30	+0.30	+0.27	+0.27	+0.24	+0.24	+0.21	+0.21	+0.18	+0.18	+0.15
			R	+0.12	+0.15	+0.18	+0.18	+0.21	+0.24	+0.24	+0.27	+0.30	+0.30	+0.33
	+2°	+1½°	F	+0.27	+0.27	+0.24	+0.21	+0.21	+0.18	+0.18	+0.15	+0.15	+0.12	+0.09
			R	+0.06	+0.09	+0.12	+0.15	+0.18	+0.18	+0.21	+0.21	+0.24	+0.27	+0.30
	+1¾°	+1¼°	F	+0.21	+0.21	+0.18	+0.18	+0.15	+0.15	+0.12	+0.12	+0.09	+0.06	+0.06
			R	+0.03	+0.06	+0.06	+0.09	+0.12	+0.15	+0.15	+0.18	+0.21	+0.21	+0.24
	+1½°	+1°	F	+0.18	+0.15	+0.15	+0.12	+0.12	+0.09	+0.09	+0.06	+0.06	+0.03	0.00
			R	−0.03	0.00	+0.03	+0.06	+0.06	+0.09	+0.09	+0.12	+0.15	+0.18	+0.18
	+1¼°	+¾°	F	+0.12	+0.12	+0.09	+0.06	+0.06	+0.03	+0.03	+0.03	0.00	−0.03	−0.03
			R	−0.06	−0.06	−0.03	0.00	+0.03	+0.03	+0.06	+0.09	+0.09	+0.12	+0.15
	+1°	+½°	F	+0.06	+0.06	+0.03	+0.03	0	0	0.00	−0.03	−0.06	−0.06	−0.09
			R	−0.12	−0.09	−0.06	−0.06	−0.03	0	0.00	+0.03	+0.06	+0.06	+0.09
	+¾°	+¼°	F	+0.03	0.00	0.00	−0.03	−0.03	−0.03	−0.06	−0.09	−0.09	−0.12	−0.12
			R	−0.18	−0.15	−0.12	−0.09	−0.09	−0.06	−0.03	−0.03	0.00	+0.03	+0.06
	+½°	0°	F	−0.03	−0.03	−0.06	−0.06	−0.09	−0.09	−0.12	−0.12	−0.15	−0.18	−0.18
			R	−0.21	−0.15	−0.18	−0.15	−0.12	−0.12	−0.09	−0.06	−0.06	−0.03	0.00
	+¼°	−¼°	F	−0.06	−0.09	−0.09	−0.12	−0.12	−0.15	−0.15	−0.18	−0.18	−0.21	−0.21
			R	−0.27	−0.24	−0.21	−0.21	−0.18	−0.15	−0.15	−0.12	−0.09	−0.06	−0.06
	0°	−½°	F	−0.12	−0.12	−0.15	−0.15	−0.18	−0.18	−0.21	−0.21	−0.24	−0.24	−0.27
			R	−0.30	−0.30	−0.27	−0.24	−0.21	−0.21	−0.18	−0.18	−0.15	−0.12	−0.09
	−¼°	−¾°	F	−0.15	−0.18	−0.18	−0.21	−0.21	−0.24	−0.24	−0.27	−0.27	−0.30	−0.33
			R	−0.36	−0.33	−0.33	−0.30	−0.27	−0.27	−0.24	−0.21	−0.18	−0.18	−0.15

F — Shim pack thickness change required at front bolt (Inches)

R — Shim pack thickness change required at rear bolt (Inches)

\+ Means shim addition

— Means shim removal

3D-2A

Figure 3D-2A A Series Alignment Shim Instructions

Front Suspension Alignment Chart
1973 B-C-E Series
Curb Load

Measured Caster (Degrees)

Measured Camber (Degrees)

Left	Right		+2½°	+2¼°	+2°	+1¾°	+1½°	+1¼°	+1°	+¾°	+½°	+¼°	0°	-¼°	-½°
+2½°	+2°	F	+0.36	+0.36	+0.33	+0.33	+0.30	+0.30	+0.27	+0.27	+0.27	+0.24	+0.24	+0.21	+0.21
		R	+0.12	+0.15	+0.18	+0.21	+0.24	+0.27	+0.30	+0.33	+0.33	+0.36	+0.39	+0.42	+0.45
+2¼°	+1¾°	F	+0.33	+0.30	+0.30	+0.27	+0.27	+0.24	+0.24	+0.21	+0.21	+0.21	+0.18	+0.18	+0.15
		R	+0.09	+0.09	+0.12	+0.15	+0.18	+0.21	+0.24	+0.27	+0.30	+0.33	+0.36	+0.39	+0.42
+2°	+1½°	F	+0.27	+0.24	+0.24	+0.24	+0.21	+0.21	+0.18	+0.18	+0.15	+0.15	+0.15	+0.12	+0.12
		R	+0.03	+0.06	+0.09	+0.12	+0.15	+0.15	+0.18	+0.21	+0.24	+0.27	+0.30	+0.33	+0.36
+1¾°	+1¼°	F	+0.21	+0.21	+0.18	+0.18	+0.18	+0.15	+0.15	+0.12	+0.12	+0.09	+0.09	+0.09	+0.06
		R	- 0.03	0	+0.03	+0.06	+0.09	+0.12	+0.15	+0.18	+0.21	+0.24	+0.27	+0.30	+0.33
+1½°	+1°	F	+0.18	+0.15	+0.15	+0.12	+0.12	+0.12	+0.09	+0.09	+0.06	+0.06	+0.06	+0.03	+0.03
		R	- 0.06	- 0.03	0	0	+0.03	+0.06	+0.09	+0.12	+0.15	+0.18	+0.18	+0.24	+0.30
+1¼°	+¾°	F	+0.12	+0.12	+0.09	+0.09	+0.06	+0.06	+0.06	+0.03	+0.03	0	0	0	- 0.03
		R	- 0.12	- 0.06	- 0.06	- 0.03	0	+0.03	+0.06	+0.09	+0.09	+0.12	+0.15	+0.18	+0.21
+1°	+½°	F	+0.09	+0.06	+0.06	+0.03	+0.03	0	0	0	- 0.03	- 0.03	- 0.06	- 0.06	- 0.06
		R	- 0.15	- 0.12	- 0.12	- 0.09	- 0.06	- 0.03	0	+0.03	+0.06	+0.09	+0.12	+0.15	+0.18
+¾°	+¼°	F	+0.03	0	0	- 0.03	- 0.03	- 0.03	- 0.06	- 0.06	- 0.06	- 0.09	- 0.09	- 0.12	- 0.12
		R	- 0.21	- 0.18	- 0.15	- 0.12	- 0.09	- 0.06	- 0.06	- 0.03	0	+0.03	+0.06	+0.09	+0.12
+½°	0°	F	0	- 0.03	- 0.03	- 0.06	- 0.06	- 0.09	- 0.09	- 0.12	- 0.12	- 0.12	- 0.15	- 0.15	- 0.15
		R	- 0.24	- 0.24	- 0.21	- 0.18	- 0.15	- 0.12	- 0.09	- 0.06	- 0.03	0	+0.03	+0.06	+0.09
+¼°	-¼°	F	- 0.06	- 0.06	- 0.09	- 0.09	- 0.12	- 0.12	- 0.15	- 0.15	- 0.15	- 0.18	- 0.18	- 0.21	- 0.21
		R	- 0.30	- 0.27	- 0.24	- 0.21	- 0.21	- 0.18	- 0.15	- 0.12	- 0.09	- 0.06	- 0.03	0	+0.03
0°	-½°	F	- 0.12	- 0.12	- 0.12	- 0.15	- 0.15	- 0.18	- 0.18	- 0.21	- 0.21	- 0.21	- 0.24	- 0.24	- 0.27
		R	- 0.36	- 0.33	- 0.30	- 0.27	- 0.27	- 0.24	- 0.21	- 0.18	- 0.15	- 0.12	- 0.09	- 0.06	- 0.03
-¼°	-¾°	F	- 0.15	- 0.18	- 0.18	- 0.18	- 0.21	- 0.21	- 0.24	- 0.24	- 0.27	- 0.27	- 0.27	- 0.30	- 0.03
		R	- 0.39	- 0.36	- 0.33	- 0.33	- 0.30	- 0.27	- 0.24	- 0.21	- 0.18	- 0.15	- 0.12	- 0.09	- 0.06
-½°	-1°	F	- 0.21	- 0.21	- 0.24	- 0.24	- 0.24	- 0.27	- 0.27	- 0.30	- 0.30	- 0.33	- 0.33	- 0.33	- 0.36
		R	- 0.45	- 0.42	- 0.39	- 0.36	- 0.33	- 0.30	- 0.27	- 0.27	- 0.24	- 0.21	- 0.18	- 0.15	- 0.12

F - Shim pack thickness change required at front Bolt (inches)

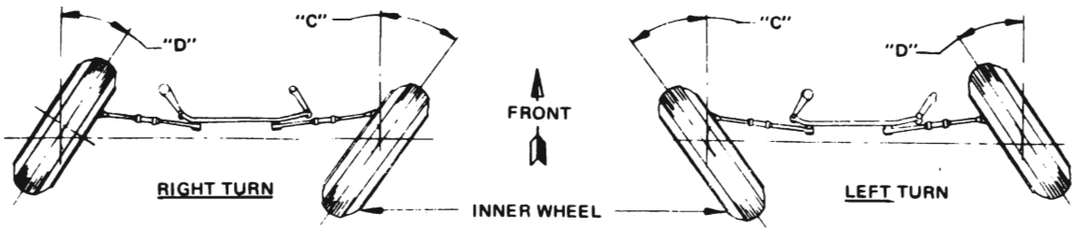
R - Shim pack thickness change required at rear bolt (inches)

+ Means shim addition

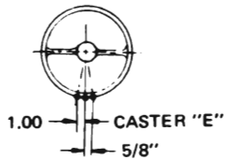
- Means shim removal

3D-2B

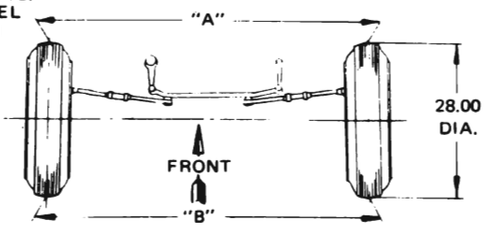
Figure 3D-2B B-C-E Series Alignment Shim Instructions



NOTE: STEERING WHEEL MUST BE HELD IN STRAIGHT AHEAD POSITION DURING TOE-IN SETTING. AFTER TOE-IN SET, THE STEERING WHEEL MUST BE IN STRAIGHT AHEAD POSITION WITHIN 1.00 LEFT AND 5/8 RIGHT.

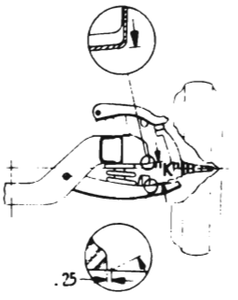


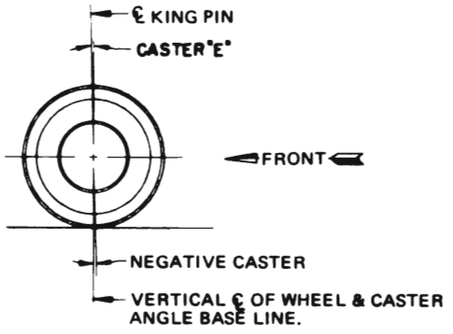
TURNING ANGLES

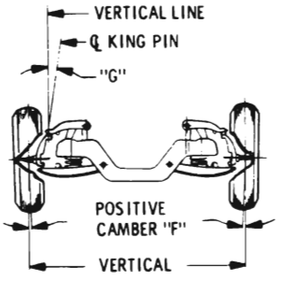


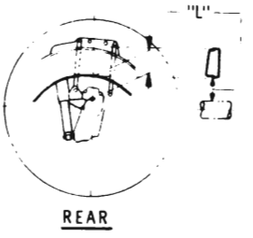
DIM. "J" = DIM. "B" MINUS DIM. "A"

TOE-IN







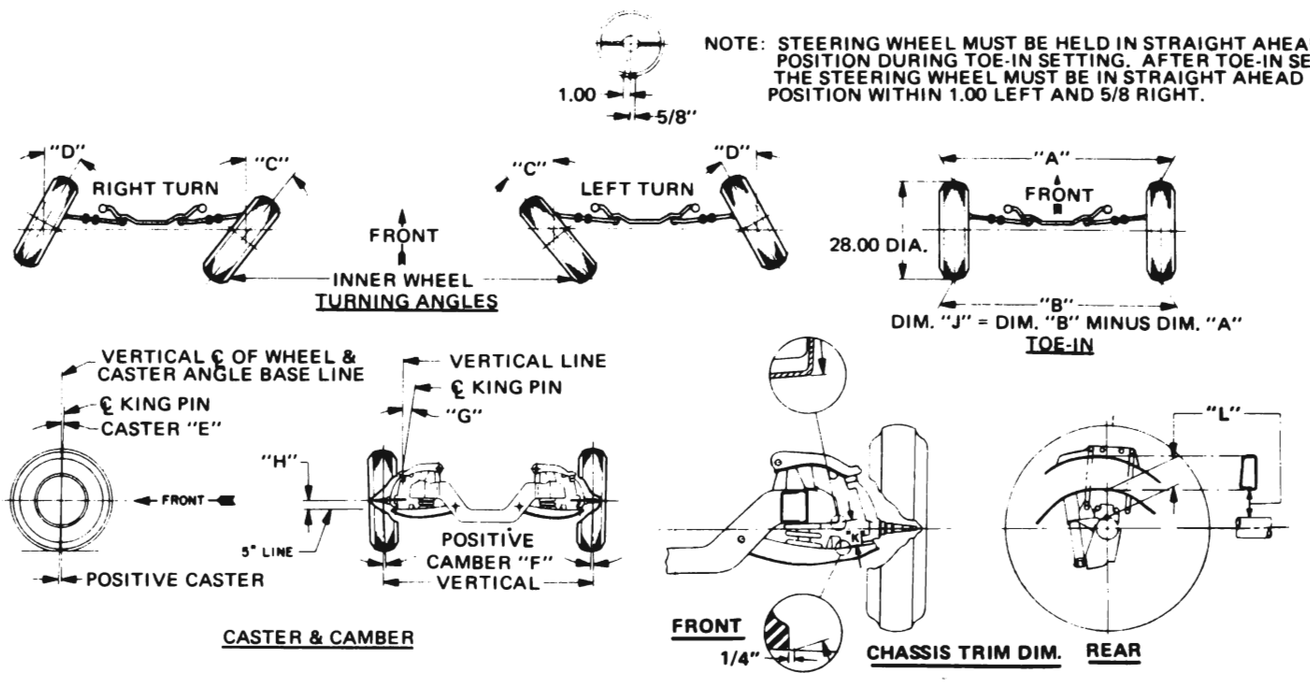


CASTER & CAMBER

MODEL	CHASSIS TRIM DIM. CURB WEIGHT		FULL TURN INNER WHEEL "C"	FULL TURN OUTER WHEEL "D"	OUTER WHEEL ANGLE WITH INNER WHEEL AT 20°	STEERING AXIS ANGLE "G" AT 1° CAMBER
	FRONT "K" ± 3/16	REAR "L" ± 1/4				
Century	3 15/16	4 7/16	34 1/2°	Manual & Wagon R - 33 1/2° L - 32 3/16°	Manual & Wagon R - 19 3/16° L - 18 13/16°	9 5/8°
Century Wagon	4	4 3/8		Power less Wagon R - 32 15/16° L - 32 13/16°	Power less Wagon R - 19° L - 18 11/16°	
Century Luxus & Regal	3 15/16	4 7/16				

3D-4

Figure 3D-4 A Series Alignment Specifications



THESE DIMENSIONS DO NOT APPLY TO OPTIONAL SPRINGS

MODEL	FULL TURN INNER WHEEL "C" CURB	FULL TURN OUTER WHEEL "D" CURB	OUTER WHEEL ANGLE WITH INNER WHEEL AT 20°	STEERING AXIS ANGLE "G" AT 0° CAMBER	CHASSIS TRIM DIM. CURB WEIGHT	
				FRONT "K" $\pm$ 3/16"	REAR "L" $\pm$ 1/4"	
LeSabre	35 1/4°	32 1/4°	18 1/2°	10 1/2°	4 1/16"	5 1/4" *
Estate Wagon	34 3/4°	31 1/2°	18 1/2°	10 1/2°	4 1/4"	5 3/8"
Centurion	35 1/4°	32 1/4°	18 1/2°	10 1/2°	4 1/16"	5 1/4" *
Electra	35 1/4°	32 1/4°	18 1/2°	10 1/2°	4 1/8"	5 1/4" *
Riviera	35 1/4°	32 1/4°	18 1/2°	10 1/2°	4 1/16"	4 5/8" *

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* 1/2" less if car is equipped with automatic level control

Figure 3D-5 B-C-E Alignment Specifications