

WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

1998 Toyota Supra

1997-98 WHEEL ALIGNMENT
Toyota - Specifications & Procedures

1997: Previa
1997-98: Avalon, Camry, Celica, Corolla, Land Cruiser/LX470,
Paseo, Supra, Tacoma, Tercel, T100, 4Runner
1998: Sienna

RIDING HEIGHT ADJUSTMENT

Before adjusting alignment, measure riding height. Riding height must be measured with vehicle on level floor and tires properly inflated. Bounce vehicle several times to allow suspension to settle.

Visually inspect vehicle for signs of abnormal height from front to rear or side to side. Check passenger and luggage compartments for extra heavy items, and remove them if present. If riding height is not within specification, inspect and repair or replace suspension components. See RIDING HEIGHT SPECIFICATIONS.

RIDING HEIGHT MEASUREMENT POINTS

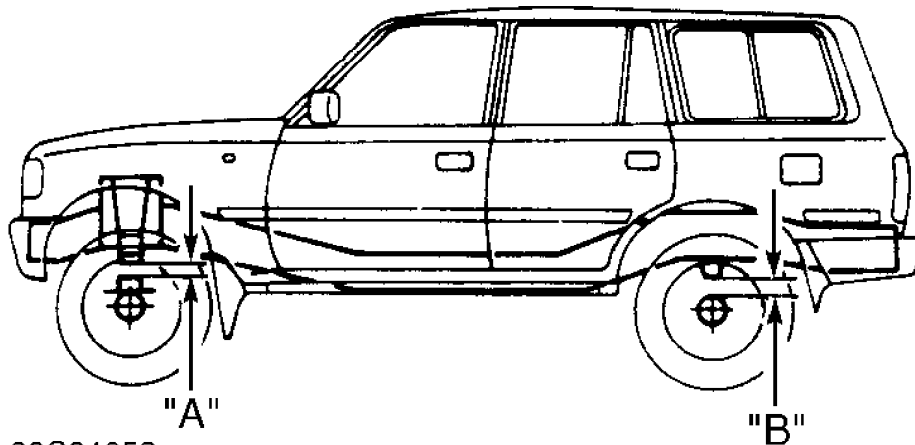
Avalon, Camry, Celica & Corolla

Measure front riding height from ground to center of lower control arm mounting bolt/nut. Measure rear riding height from ground to center of forward strut rod mounting bolt. Strut rod is parallel to side body panel.

Land Cruiser/LX470

On 1997 models, measure riding height at specified locations. See Fig. 1. Dimension "A" is follow spring clearance. Dimension "B" is bumper stopper clearance.

On 1998 models, front riding height specification is difference between spindle center height and lower control mounting bolt center height. Rear riding height specification is difference between rear axle shaft center height and trailing arm front mount bolt center height.



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Fig. 1: Identifying Riding Height Measurement Points (1997 Land Cruiser)

Courtesy of Toyota Motor Sales, U.S.A., Inc.

Paseo, Sienna & Tercel

Measure front riding height from ground to center of lower arm mounting bolt. Measure rear riding height from ground to center of rear lower control arm forward mounting bolt.

RAV4

Measure front riding height from ground to center of lower arm mounting bolt. Measure rear riding height from ground to center of body side No. 1 suspension arm mounting bolt.

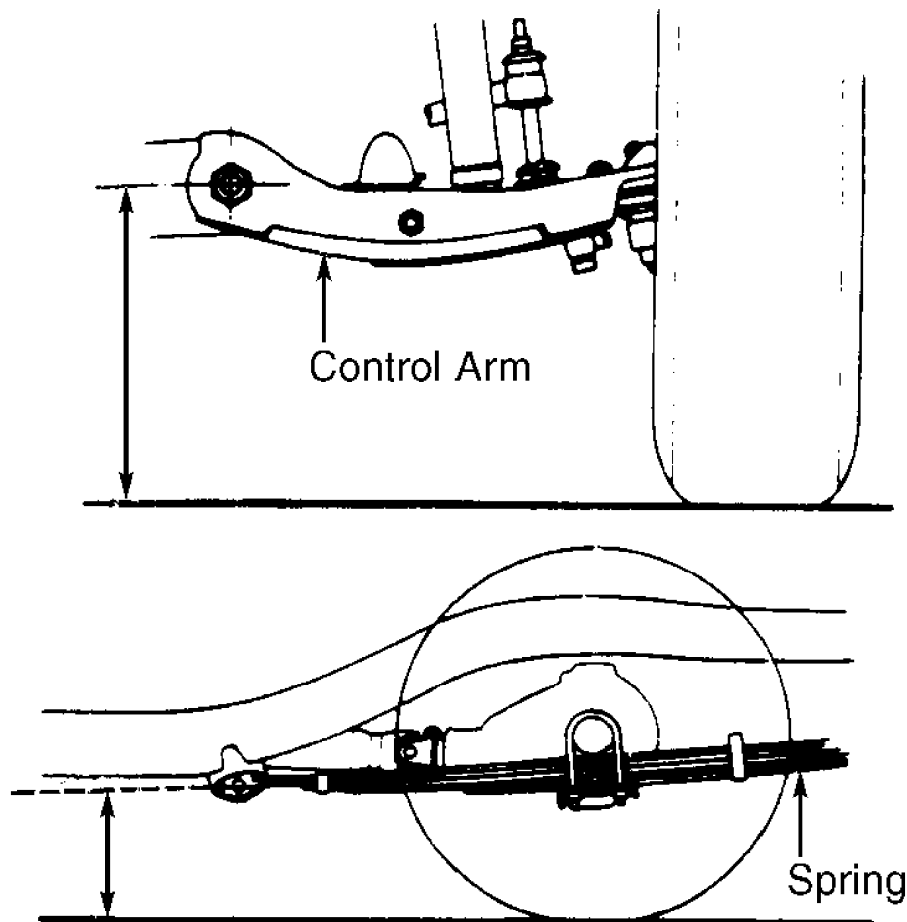
Supra

Measure front riding height from ground to center of lower suspension arm mounting bolt. Measure rear riding height from ground to center of No. 2 lower suspension arm mounting bolt.

Tacoma, T100 & 4Runner

1) Measure front riding height by subtracting height at center of lower arm adjuster cam bolt from height at center tip of spindle. See Fig. 2.

2) Measure rear riding height by subtracting height at center of front leaf spring mounting bolt from height at center line of rear axle shaft. The difference between measurements is riding height.



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Fig. 2: Riding Height Measurement Points (Tacoma Shown; T100 & 4Runner Are Similar)

Courtesy of Toyota Motor Sales, U.S.A., Inc.

RIDING HEIGHT SPECIFICATIONS

RIDING HEIGHT SPECIFICATIONS (CARS)

Model/ Application	Front In. (mm)	Rear In. (mm)
Avalon	8.43 (214)	10.47 (266)
Camry		
P195/70R14	8.35 (212)	10.39 (264)
P205/65R15	8.46 (215)	10.49 (266)
Celica		
P185/70R14	7.39 (187.6)	10.07 (255.8)
P205/75R15	7.19 (182.6)	9.84 (250)
Corolla		
175/65R14	7.28 (185)	9.65 (245)
185/65R14 (85S)	7.48 (190)	9.84 (250)
Paseo (185/60R14)	7.40 (188)	9.80 (249)
Supra		
Non-Turbo	7.32 (186)	9.68 (246)
Turbo	7.40 (188)	10.00 (254)
Terrel		
155SR13	7.63 (194)	9.92 (252)
175/65R14	7.76 (197)	9.96 (253)
185/60R14	7.56 (192)	9.84 (250)

RIDING HEIGHT SPECIFICATIONS (LAND CRUISER/LX470)

Year/ Application	Front In. (mm)	Rear In. (mm)
1997	1.42 (36)	4.09 (104)
1998	2.80 (71)	2.01 (51)

RIDING HEIGHT SPECIFICATIONS (PREVIA)

Year/ Application	Front In. (mm)	Rear In. (mm)
P205/75R14	9.37 (238)	11.06 (281)
P215/65R15	9.33 (237)	10.98 (279)

RIDING HEIGHT SPECIFICATIONS (RAV4)

Application "	Front In. (mm)	Rear In. (mm)
2WD		
215/70R16	8.94 (227)	13.90 (353)
4WD		
215/70R16	9.33 (237)	14.17 (360)
235/60R16	8.58 (218)	13.62 (346)

RIDING HEIGHT SPECIFICATIONS (SIENNA)

Application "	Front In. (mm)	Rear In. (mm)
205/70R15	9.06 (230)	12.76 (324)
215/65R15	8.90 (226)	12.60 (320)

RIDING HEIGHT SPECIFICATIONS (TACOMA 2WD)

Engine/ Application		Front In. (mm)		Rear In. (mm)
1997-98				
2.4L Reg Cab	.....	1.73 (44)	.....	2.40 (61)
2.4L Xtra Cab	.....	1.69 (43)	.....	2.68 (68)
3.4L Xtra Cab	.....	1.69 (43)	.....	2.40 (61)

RIDING HEIGHT SPECIFICATIONS (TACOMA 4WD)

Year/ Application		Front In. (mm)		Rear In. (mm)
1997				
RZN161L-TRMDKAB	.....	1.89 (48)	.....	1.50 (38)
RZN161L-TRPDKAB	.....	1.89 (48)	.....	1.50 (38)
VZN160L-TRMDKAB	.....	1.89 (48)	.....	1.50 (38)
RZN171L-CRMDKAB	.....	1.73 (44)	.....	1.34 (34)
RZN171L-CRPDKAB	.....	1.73 (44)	.....	1.34 (34)
VZN170L-CRMDKAB	.....	1.73 (44)	.....	1.38 (35)
VZN170L-CRPDKAB	.....	1.73 (44)	.....	1.38 (35)
VZN170L-CRMGKAB	.....	1.73 (44)	.....	1.34 (34)
VZN170L-CRPGKAB	.....	1.73 (44)	.....	1.34 (34)
1998				
2.7L Reg Cab	.....	1.90 (49)	.....	1.38 (35)
2.7L Xtra Cab	.....	1.89 (48)	.....	1.89 (48)
3.4L Xtra Cab	.....	1.89 (48)	.....	1.97 (50)

RIDING HEIGHT SPECIFICATIONS (T100 2WD)

Year/ Application		Front In. (mm)		Rear In. (mm)
1997-98				
RCK10L-TRMRKA				
P215/75R15	.....	1.79 (45.4)	.....	2.40 (60.9)
P235/75R15	.....	1.79 (45.4)	.....	2.36 (59.9)
RCK10L-TRSRKA				
P215/75R15	.....	1.79 (45.4)	.....	2.43 (61.8)
P235/75R15	.....	1.79 (45.4)	.....	2.40 (60.9)
VCK11L-TRMDKA				
P215/75R15	.....	1.89 (48.0)	.....	2.43 (61.8)
P235/75R15	.....	1.89 (48.0)	.....	2.39 (60.7)
VCK11L-THMDKA				
1-Ton	.....	1.94 (49.3)	.....	1.37 (34.9)
VCK11L-TRSDKA				
P215/75R15	.....	1.97 (49.9)	.....	2.48 (62.9)
P235/75R15	.....	1.97 (49.9)	.....	2.44 (62.0)
VCK11L-THSDKA				
1-Ton	.....	1.97 (49.9)	.....	1.41 (35.7)
VCK11L-CRMDKA				
P215/75R15	.....	1.53 (38.8)	.....	1.78 (45.3)
P235/75R15	.....	1.53 (38.8)	.....	1.77 (44.3)
VCK11L-CRMSKA				
P235/75R15	.....	1.53 (38.8)	.....	1.80 (45.6)
VCK11L-CRSDKA				
P215/75R15	.....	1.53 (38.8)	.....	1.82 (46.2)

P235/75R15	1.53 (38.8)	.....	1.78 (45.3)
VCK11L-CRSSKA			
P235/75R15	1.53 (38.8)	.....	1.83 (46.5)

RIDING HEIGHT SPECIFICATIONS (T100 4WD)

Year/ Application	Front In. (mm)		Rear In. (mm)
1997-98			
VCK21L-TRMDKA			
P235/75R15	1.52 (38.5)	.....	2.85 (72.3)
P265/75R16	1.52 (38.5)	.....	2.91 (74.0)
VCK21L-TRSDKA			
P235/75R15	1.58 (40.2)	.....	2.80 (71.1)
P265/75R16	1.58 (40.2)	.....	2.87 (72.8)
VCK21L-CRM*KA			
P235/75R15	1.28 (32.5)	.....	3.13 (79.4)
P265/75R16	1.28 (32.5)	.....	3.21 (81.6)
VCK21L-CRS*KA			
P235/75R15	1.28 (32.5)	.....	3.08 (78.3)
P265/75R16	1.28 (32.5)	.....	3.17 (80.6)

RIDING HEIGHT SPECIFICATIONS (4RUNNER)

Year Application	Front In. (mm)		Rear In. (mm)
1997-98			
P225/75R15	2.74 (69.6)	.....	1.95 (49.6)
P265/70R16	1.87 (47.5)	.....	1.16 (29.4)

JACKING & HOISTING

FLOOR JACK

Avalon, Camry, Celica & Corolla

To raise vehicle front, place floor jack under center of front longitudinal engine crossmember. For vehicle rear, place floor jack under rear suspension crossmember.

Land Cruiser/LX470

Place floor jack under front and/or rear differential to raise vehicle.

RAV4

To raise vehicle, place floor jack under front undercover support and/or rear suspension crossmember.

Paseo & Tercel

To raise vehicle, place floor jack under front crossmember and/or center of rear axle beam.

Previa, Sienna, Tacoma, T100 & 4Runner

To raise vehicle, place floor jack under front crossmember and/or rear axle housing/differential.

Supra

To raise vehicle, place floor jack under front suspension

crossmember and/or rear differential carrier.

EMERGENCY JACKING

Avalon, Camry, Celica, Corolla, Paseo, RAV4, Supra & Tercel

Place emergency jack on reinforced support points of side body panel (between front and rear wheels). Safety stands may also be placed at these points. See Fig. 3.

Land Cruiser/LX470

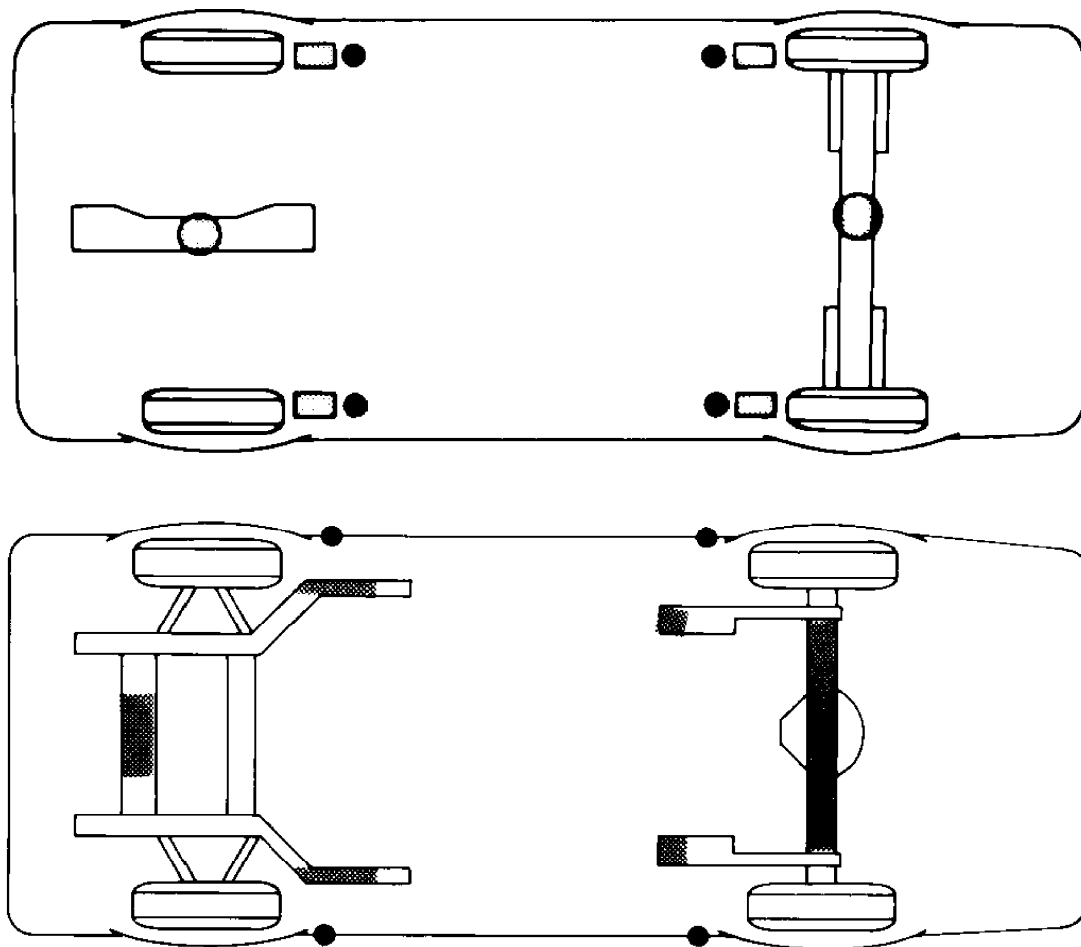
To raise vehicle, place emergency jack under front and/or rear axle.

Tacoma, T100 & 4Runner

Place emergency jack under front suspension crossmember and/or rear axle housing/differential.

Sienna

To raise vehicle, place emergency jack under frame support points between front and/or rear wheels.



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Fig. 3: Identifying Jacking & Hoisting Support Points (Typical)
Courtesy of Toyota Motor Sales, U.S.A., Inc.

LIFTING VEHICLE WITH HOIST

Avalon, Camry, Celica, Corolla, Paseo, RAV4, Supra & Tercel
Place lift blocks on reinforced support points of side body panel (between front and rear wheels). Safety stands may also be placed at these points. See Fig. 3.

Land Cruiser/LX470
Place lift blocks under front and rear axles to raise vehicle.

Tacoma, T100 & 4Runner
On 2WD models, place lift blocks under frame side rail and rear axle housing to raise vehicle. On 4WD models, place lift blocks under front suspension crossmember and rear axle housing to raise vehicle.

Previa & Sienna
Place lift blocks under frame side rail supports.

WHEEL ALIGNMENT PROCEDURES

TURNING ANGLE

On Land Cruiser/LX470, Previa, T100 and 4Runner, remove steering knuckle stopper bolt caps. On all models, turn steering wheel fully right and then left, and observe turning radius on both wheels. If turning radius is incorrect, inspect and replace any damaged or worn front suspension components. See WHEEL ALIGNMENT SPECIFICATIONS.

CAMBER ADJUSTMENT

Front Suspension (Avalon, Camry, Celica, Corolla, Land Cruiser, Paseo, Previa, RAV4, Sienna & Tercel)

1) Check tires for wear and improper inflation. Inspect front wheel bearings for looseness. Check wheel runout. Wheel runout should not exceed .039" (1.0 mm) on Avalon, Camry, Celica, Corolla and RAV4, .055" (1.4 mm) on Paseo, Previa and Tercel, or .118" (3.0 mm) on Land Cruiser/LX470.

2) Inspect front suspension components for looseness. Ensure front shock absorbers work properly. Measure vehicle riding height. See RIDING HEIGHT ADJUSTMENT.

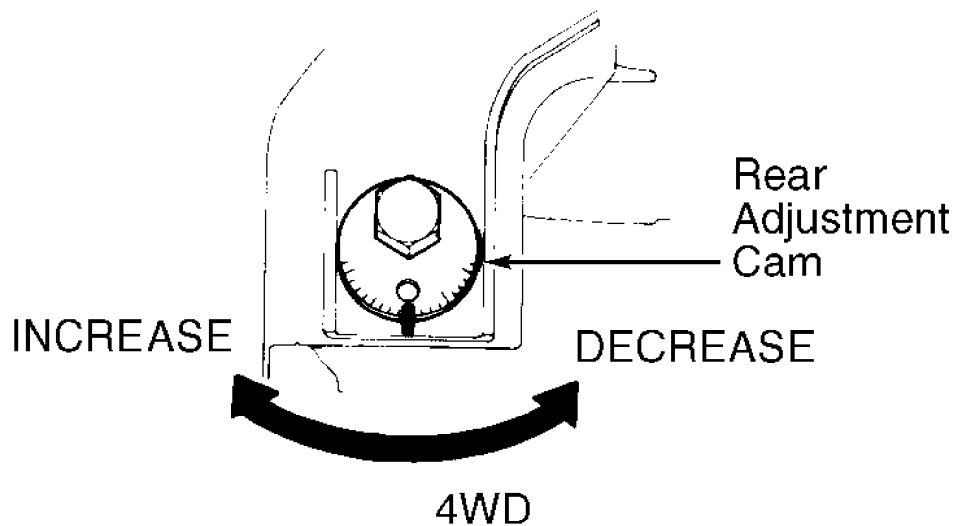
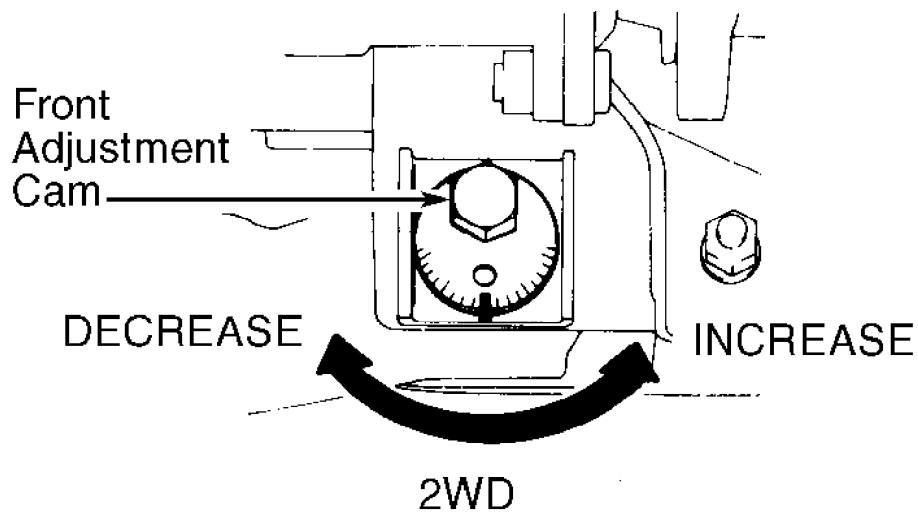
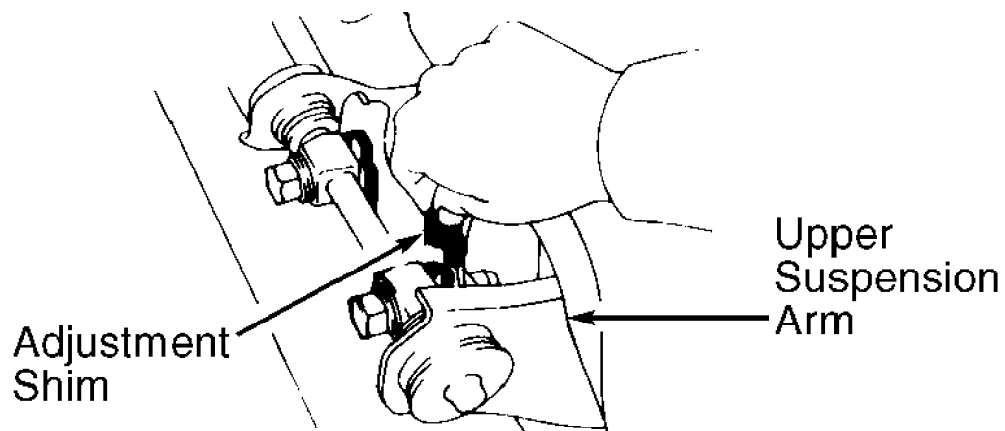
3) Measure camber of both front wheels. See WHEEL ALIGNMENT SPECIFICATIONS. If camber is not within specification, inspect and replace any damaged or worn front suspension components. Camber is not adjustable on all models listed except Sienna. On Sienna, loosen lower strut mounting bolts and move steering knuckle until camber is within specification. Tighten bolts to specification. See TORQUE SPECIFICATIONS.

Front Suspension (Tacoma, T100 & 4Runner)

1) Check tires for wear and improper inflation. Inspect front wheel bearings for looseness. Check wheel runout. Wheel runout should not exceed .118" (3.0 mm).

2) Inspect front suspension components for looseness. Ensure front shock absorbers work properly. Measure vehicle riding height. See RIDING HEIGHT ADJUSTMENT.

3) Measure camber of both front wheels. If camber is not within specification, add or remove shims on upper suspension arms on 2WD models. On 4WD models, loosen and rotate adjuster cams. See WHEEL ALIGNMENT SPECIFICATIONS. See Fig. 4.



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Fig. 4: Adjusting Front Camber & Caster (T100 & 4Runner Shown; Tacoma Is Similar)

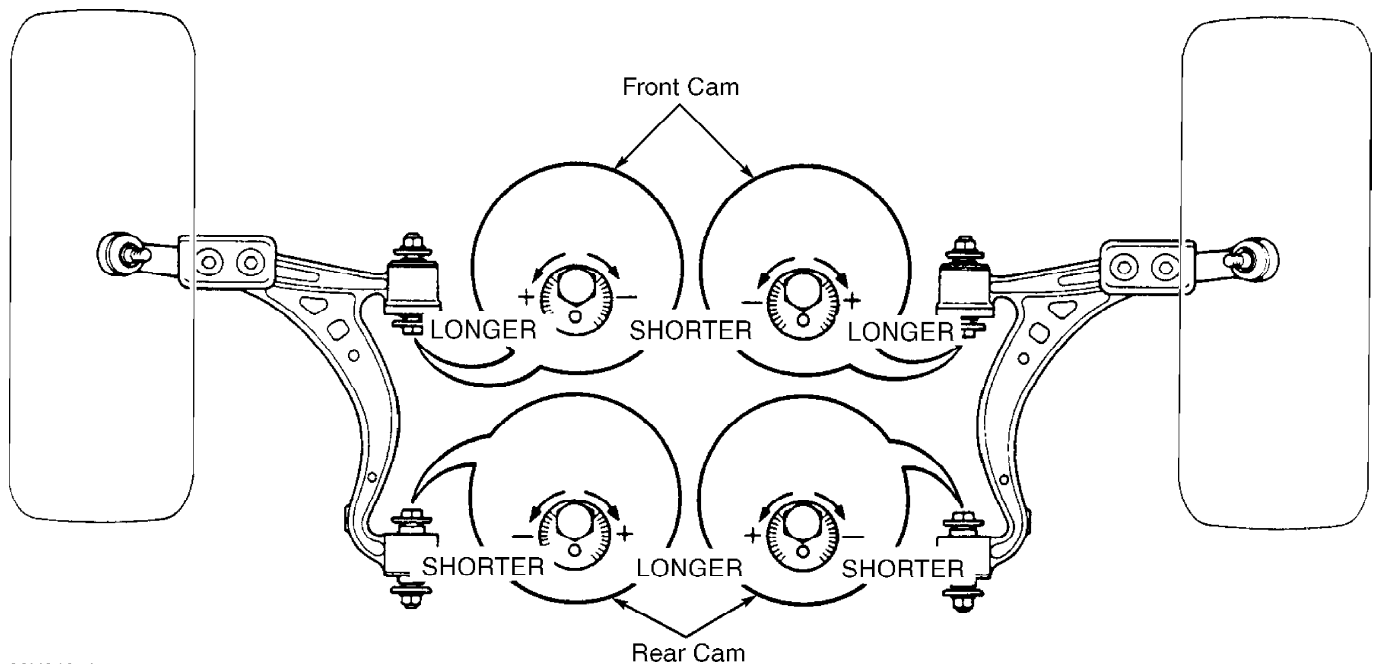
Courtesy of Toyota Motor Sales, U.S.A., Inc.

Front Suspension (Supra)

1) Check tires for wear and improper inflation. Inspect front wheel bearings for looseness. Check wheel runout. Wheel runout should not exceed .055" (1.4 mm).

2) Inspect front suspension components for looseness. Ensure front shock absorbers work properly. Measure vehicle riding height. See RIDING HEIGHT ADJUSTMENT.

3) Measure camber of both front wheels. If camber is not within specification, remove engine undercover. Remove front lower arm bracket strut. Loosen adjuster cam lock nuts. Rotate adjuster cams as necessary. See WHEEL ALIGNMENT SPECIFICATIONS. See Fig. 5. Tighten lock nuts to specification. See TORQUE SPECIFICATIONS.



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Fig. 5: Adjusting Front Camber & Caster (Supra)
Courtesy of Toyota Motor Sales, U.S.A., Inc.

Rear Suspension (Avalon, Camry, Celica & Corolla)

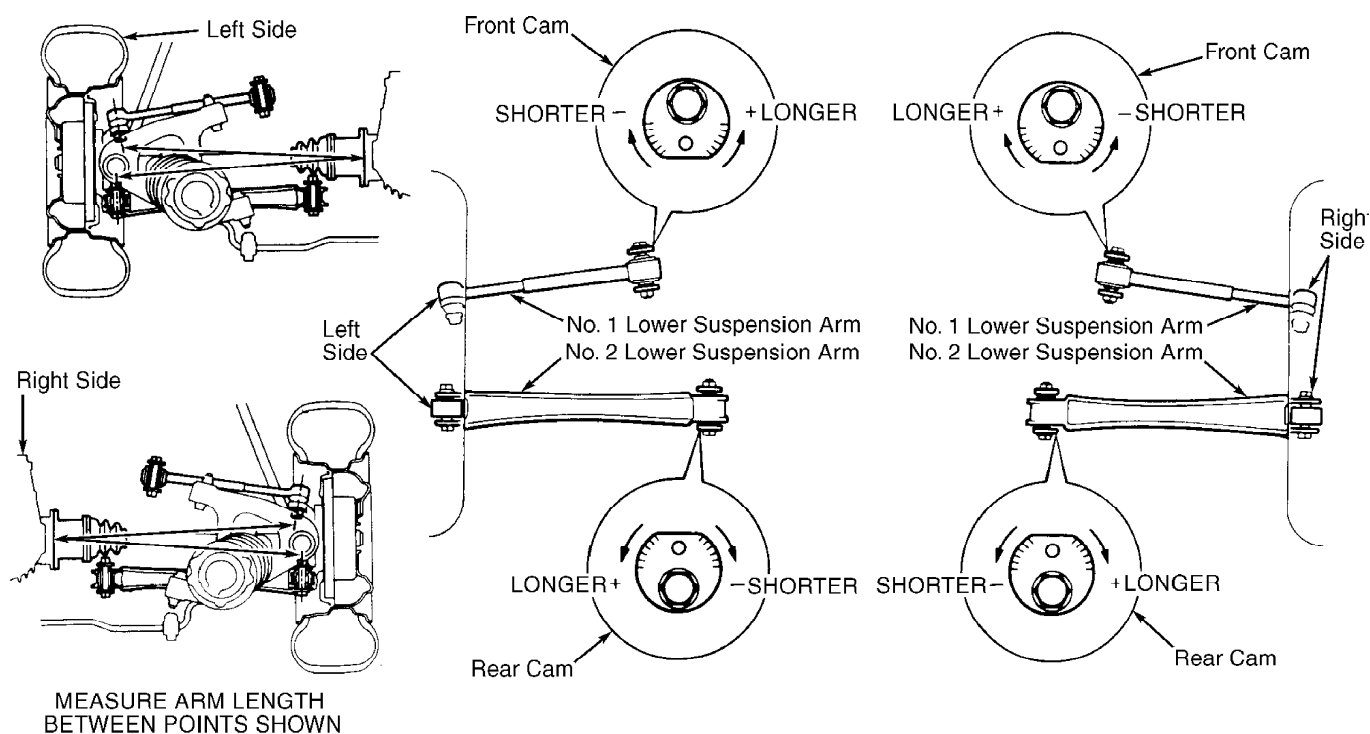
Check tires for wear and improper inflation. Measure camber of both rear wheels. See WHEEL ALIGNMENT SPECIFICATIONS. If camber is not within specification, inspect and replace any damaged or worn rear suspension components. Camber is not adjustable.

Rear Suspension (RAV4)

Check tires for wear and improper inflation. Check camber of both rear wheels. See WHEEL ALIGNMENT SPECIFICATIONS. If camber is not within specification, adjust camber by rotating adjuster cams.

Rear Suspension (Supra)

Check tires for wear and improper inflation. Ensure lengths of left and right No. 1 and No. 2 lower suspension arms are equal. See Fig. 6. Check camber of both rear wheels. See WHEEL ALIGNMENT SPECIFICATIONS. If camber is not within specification, adjust camber by rotating adjuster cams.



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Fig. 6: Identifying Rear Camber & Toe Adjuster Cams (Supra)
Courtesy of Toyota Motor Sales, U.S.A., Inc.

CASTER ADJUSTMENT

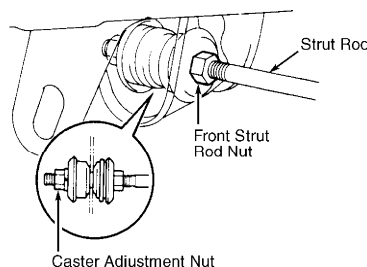
Front Suspension (Avalon, Camry, Celica, Corolla, Land Cruiser, Paseo, Previa, RAV4, Sienna & Tercel)

Measure caster of both front wheels. If caster is not within specification, inspect and replace any damaged or worn front suspension components. Caster is not adjustable.

Front Suspension (Tacoma, T100 & 4Runner)

1) Measure riding height, camber, and steering axis inclination. See WHEEL ALIGNMENT SPECIFICATIONS. If adjustment is necessary, see appropriate adjustment procedure.

2) Measure caster of both front wheels. If caster is not within specification, add or remove shims on upper control arms on 2WD models. On T100 2WD, adjust shim thickness between front and rear locations to within .16" (4 mm). If measurement cannot be met, adjust strut rod length by adjusting strut rod nuts. See Fig. 7. On 4WD models, loosen and rotate adjuster cams. See Fig. 4.



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Fig. 7: Identifying Caster Adjuster Nut (T100 2WD)
Courtesy of Toyota Motor Sales, U.S.A., Inc.

Front Suspension (Supra)

1) Measure riding height, camber, and steering axis inclination. See WHEEL ALIGNMENT SPECIFICATIONS. If adjustment is necessary, see appropriate adjustment procedure.

2) Measure caster of both front wheels. If caster is not within specification, remove engine undercover. Remove front lower arm bracket strut. Loosen adjuster cam lock nuts. Rotate adjuster cams as necessary. See WHEEL ALIGNMENT SPECIFICATIONS. See Fig. 5. Tighten lock nuts to specification. See TORQUE SPECIFICATIONS.

STEERING AXIS/KING PIN INCLINATION

Except Supra

Measure riding height and camber. See WHEEL ALIGNMENT SPECIFICATIONS. If adjustment is necessary, see appropriate adjustment procedure. Measure steering axis inclination of both front wheels. If steering axis inclination is not within specification, inspect and replace any damaged or worn front suspension components. See WHEEL ALIGNMENT SPECIFICATIONS. Steering axis/king pin inclination is not adjustable.

Supra

Measure riding height, camber, and caster. See WHEEL ALIGNMENT SPECIFICATIONS. If adjustment is necessary, see appropriate adjustment procedure. Measure steering axis inclination of both front wheels. If steering axis inclination is not within specification, inspect wheel bearing for looseness, or replace steering knuckle. See WHEEL ALIGNMENT SPECIFICATIONS. Steering axis/king pin inclination is not adjustable.

TOE-IN ADJUSTMENT

Front Suspension

Measure riding height, camber, steering axis inclination, and caster. See WHEEL ALIGNMENT SPECIFICATIONS. If adjustment is necessary, see appropriate adjustment procedure. Set front wheels to straight-ahead position. Bounce both ends of vehicle several times to settle suspension. Measure toe-in. If necessary, adjust toe-in by changing length of tie rods.

Rear Suspension (Avalon, Camry, Celica & Corolla)

1) Measure rear camber. See WHEEL ALIGNMENT SPECIFICATIONS. If adjustment is necessary, see appropriate adjustment procedure.

2) Bounce both ends of vehicle several times to settle suspension. Measure length of left and right No. 2 suspension arms. See Fig. 8. Ensure lengths of both arms are equal within .039" (1.0 mm).

3) If toe-in is not within specification, adjust toe-in by rotating rear toe adjuster sleeves, located on No. 2 suspension arms. See WHEEL ALIGNMENT SPECIFICATIONS. Tighten lock nuts to specification after adjustment. See TORQUE SPECIFICATIONS.

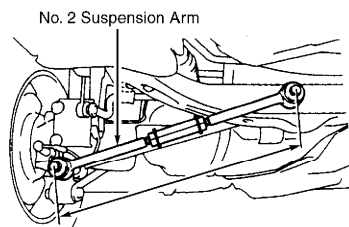


Fig. 8: Identifying No. 2 Suspension Arm (Avalon, Camry, Celica & Corolla)
Courtesy of Toyota Motor Sales, U.S.A., Inc.

Rear Suspension (Land Cruiser/LX470, Paseo, Previa, Sienna, Tercel, T100 & 4Runner)

Measure rear wheel toe-in. If toe-in is not within specification, inspect and replace any damaged or worn suspension components. See WHEEL ALIGNMENT SPECIFICATIONS. Rear toe-in is not adjustable.

Rear Suspension (Supra)

1) Measure rear camber. See CAMBER ADJUSTMENT under WHEEL ALIGNMENT PROCEDURES. Bounce both ends of vehicle several times to settle suspension.

2) Measure toe-in. If toe-in is not within specification, adjust by rotating adjuster cams. See WHEEL ALIGNMENT SPECIFICATIONS. See Fig. 6.

TORQUE SPECIFICATIONS

TORQUE SPECIFICATIONS (CARS)

Application	Ft. Lbs. (N.m)
Avalon & Camry	
Rear Toe Adjuster Sleeve Lock Nuts	41 (56)
Tie Rod Lock Nuts	55 (75)
Wheel Lug Nuts	76 (103)
Celica	
Rear Toe Adjuster Sleeve Lock Nuts	55 (75)
Tie Rod Lock Nuts	41 (56)
Wheel Lug Nuts	76 (103)
Corolla	
Rear Toe Adjuster Sleeve Lock Nuts	41 (56)
Tie Rod Lock Nuts	41 (56)
Wheel Lug Nuts	76 (103)
Paseo & Tercel	
Tie Rod Lock Nuts	35 (47)
Wheel Lug Nuts	76 (103)
Supra	
Front Adjuster Cam Lock Nuts	167 (226)
Rear Adjuster Cam Lock Nuts	136 (184)
Tie Rod Lock Nuts	41 (56)
Wheel Lug Nuts	76 (103)

TORQUE SPECIFICATIONS (LIGHT TRUCKS)

Application	Ft. Lbs. (N.m)
Land Cruiser/LX470	
Steering Knuckle Stopper Bolts	32 (44)
Tie Rod Clamp Nuts	27 (37)
Wheel Lug Nuts	
Aluminum Wheel	76 (103)
Steel Wheel	108 (147)
Previas & Sienna	
Lower Strut Mounting Bolts	155 (210)
Steering Knuckle Stopper Bolts	24 (33)
Tie Rod Lock Nuts	67 (91)
Wheel Lug Nuts	76 (103)
RAV4	
Tie Rod Lock Nuts	41 (56)
Wheel Lug Nuts	76 (103)
T100 2WD	

Tie Rod Lock Nuts	41 (56)
Upper Control Arm Bolts	71 (96)
Wheel Lug Nuts	76 (103)
T100 4WD	
Front Suspension Adjuster Cams	167 (226)
Steering Knuckle Stopper Bolts	35 (47)
Tie Rod Clamp Nuts	16 (22)
Wheel Lug Nuts	76 (103)
4Runner	
Front Suspension Adjuster Cams	96 (130)
Tie Rod Clamp Nuts	41 (55)
Wheel Lug Nuts	81 (110)

WHEEL ALIGNMENT SPECIFICATIONS

WHEEL ALIGNMENT SPECIFICATIONS (AVALON)

Application	Preferred	Range
Camber (1)		
Front	-0.62	-1.37 To 0.13
Rear	-0.77	-1.52 To -0.02
Caster (1)		
Front	2.18	1.43 To 2.93
Rear .....	.....	N/A
Steering Axis		
Inclination (1)	13.07	N/A
Toe-In (2)		
Front	0 (0)	-0.08 To 0.08 (-2 To 2)
Rear	0.16 (4)	0.08 To 0.24 (2 To 6)
Toe-In (1)		
Front	0	-0.2 To 0.2
Rear	0.4	0.2 To 0.6
Toe-Out On Turns (1)		
Inner	35.78	N/A
Outer	31.42	N/A

(1) - Measurement in degrees.

(2) - Measurement in inches (mm).

WHEEL ALIGNMENT SPECIFICATIONS (CAMRY)

Application	Preferred	Range
4-Cylinder		
Camber (1)		
Front	-0.6	-1.35 To 0.15
Rear	-0.7	-1.45 To 0.05
Caster (1)		
Front	2.17	1.42 To 2.92
Rear	N/A	N/A
Steering Axis		
Inclination (1)	13.02	N/A
Toe-In (2)		
Front	0 (0) ...	-0.08 To 0.08 (-2 To 2)
Rear	0.16 (4)	0.08 To 0.24 (2 To 6)
Toe-In (1)		
Front	0	-0.2 To 0.2
Rear	0.4	0.2 To 0.6
Toe-Out On Turns (1) (3)		

Inner	.....	37.20	.....	N/A
Outer	.....	32.35	.....	N/A
V6				
Camber (1)				
Front	.....	-0.62	.....	-1.37 To 0.13
Rear	.....	-0.75	.....	-1.5 To 0
Caster (1)				
Front	.....	2.18	.....	1.43 To 2.93
Rear	.....	N/A	.....	N/A
Steering Axis				
Inclination (1)	.....	13.7	.....	N/A
Toe-In (2)				
Front	.....	0 (0)	.....	-0.08 To 0.08 (-2 To 2)
Rear	.....	0.16 (4)	.....	0.08 To 0.24 (2 To 6)
Toe-In (1)				
Front	.....	0	.....	-0.2 To 0.2
Rear	.....	0.4	.....	0.2 To 0.6
Toe-Out On Turns (1) (3)				
Inner	.....	37.20	.....	N/A
Outer	.....	32.35	.....	N/A

(1) - Measurement in degrees.

(2) - Measurement in inches (mm).

(3) - If vehicle is equipped with P205/65R15 tires, inner is 35.78 degrees, outer is 31.42 degrees.

WHEEL ALIGNMENT SPECIFICATIONS (CELICA)

Application	Preferred	Range
1.8L		
Camber (1)		
Front	-0.85 -1.6 To -0.1
Rear	-1.27 -2.02 To 0.52
Caster (1)		
.....	2.12	..... 1.37 To 2.87
Steering Axis		
Inclination (1)	15.1 N/A
Toe-In (2)		
Front	0 (0) -0.08 To 0.08 (-2 To 2)
Rear	0.14 (3.5) .. 0.06 To 0.22 (1.5 To 5.5)
Toe-In (1)		
Front	0 -0.2 To 0.2
Rear	0.35 0.15 To 0.55
Toe-Out On Turns (1)		
Inner	36.73 N/A
Outer	30.63 N/A
2.2L		
Camber (1)		
Front	-0.77 -1.52 To -0.02
Rear	-1.17 -1.92 To 0.42
Caster (1)		
.....	2.08	..... 1.33 To 2.83
Steering Axis		
Inclination (1)	14.97 N/A
Toe-In (2)		
Front	0 (0) -0.08 To 0.08 (-2 To 2)
Rear	0.14 (3.5) .. 0.06 To 0.22 (1.5 To 5.5)
Toe-In (1)		
Front	0 -0.2 To 0.2
Rear	0.35 0.15 To 0.55
Toe-Out On Turns (1)		
Inner	36.9 N/A
Outer	30.73 N/A

- (1) - Measurement in degrees.
 (2) - Measurement in inches (mm).

WHEEL ALIGNMENT SPECIFICATIONS (COROLLA)

Application	Preferred	Range
Camber (1)		
Front	-0.18	-0.93 To 0.57
Rear	-0.92	-1.67 To 0.17
Caster (1)	1.32	0.57 To 2.07
Steering Axis		
Inclination (1)	12.63	N/A
Toe-In (2)		
Front	0.04 (1)	-0.04 To 0.12 (-1 To 3)
Rear	0.16 (3)	0.08 To 0.24 (2 To 6)
Toe-In (1)		
Front	0.10	-0.1 To 0.3
Rear	0.4	0.2 To 0.6
Toe-Out On Turns (1) (3)		
Inner	39.22	N/A
Outer	33.37	N/A

- (1) - Measurement in degrees.
 (2) - Measurement in inches (mm).
 (3) - If vehicle is equipped with manual steering, inner is 39.02 degrees, outer is 33.37 degrees.
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WHEEL ALIGNMENT SPECIFICATIONS (LAND CRUISER/LX470)

Application	Preferred	Range
1997		
Camber (1)		
Front	1	0.25 To 1.75
Caster (1)	3	2 To 4
Steering Axis		
Inclination (1)	13	N/A
Toe-In (2)	0.08 (2)	0.04 To 0.12 (1 To 3)
Toe-In (1)	0.2	0.1 To 0.3
Toe-Out On Turns (1)		
Inner	35.5	N/A
Outer	31	N/A
1998		
Camber (1)		
Front .....	.08	-0.67 To 0.83
Caster (1)	2.5	1.75 To 3.25
Steering Axis		
Inclination (1)	12.17	N/A
Toe-In (2)	0.04 (1)	-0.04 To 0.12 (-1 To 3)
Toe-In (1)	0.1	-0.1 To 0.3
Toe-Out On Turns (1)		
Inner	35.2	N/A
Outer	32.6	N/A

- (1) - Measurement in degrees.
 (2) - Measurement in inches (mm).
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WHEEL ALIGNMENT SPECIFICATIONS (PASEO)

Application	Preferred	Range
Camber (1)		
Front	-0.42	-1.17 To 0.33
Rear	-0.5	-1.25 To 0.25
Caster (1)	1.5	0.75 To 2.25
Steering Axis		
Inclination (1)	12.25	N/A
Toe-In (2)		
Front	0.04 (1) ...	-0.04 To 0.12 (-1 To 3)
Rear	0.13 (3)	0 To 0.26 (0 To 7)
Toe-In (1)		
Front	0.1	-0.1 To 0.3
Rear	0.33	0 To 0.66
Toe-Out On Turns (1)		
Inner	35.75	N/A
Outer	32.08	N/A

(1) - Measurement in degrees.

(2) - Measurement in inches (mm).

WHEEL ALIGNMENT SPECIFICATIONS (PREVIA)

Application	Preferred	Range
Camber (1)	0.08	-0.42 To 0.58
Caster (1)	5.5	5 To 6
Steering Axis		
Inclination (1)	10.58	N/A
Toe-In (2)	0.08 (2)	0 To 0.16 (0 To 4)
Toe-In (1)	0.16	0 To 0.32
Toe-Out On Turns (1)		
Inner	35.58	N/A
Outer	32.75	N/A

(1) - Measurement in degrees.

(2) - Measurement in inches (mm).

WHEEL ALIGNMENT SPECIFICATIONS (RAV4 - 2WD)

Application	Preferred	Range
Camber (1)		
Front	-0.33	-1.08 To 0.42
Rear		
2-Door	-1.33	-2.08 To -0.58
4-Door	-1.25	-2 To -0.5
Caster (1)	1.42	0.67 To 2.17
Steering Axis		
Inclination (1)	11.0	N/A
Toe-In (2)		
Front	0 (0)	-0.08 To 0.08 (-2 To 2)
Rear		
2-Door	0.16 (4)	0.08 To 0.24 (2 To 6)
4-Door	0.12 (3)	0.04 To 0.2 (1 To 5)
Toe-In (1)		
Front	0	-0.2 To 0.2
Rear		
2-Door	0.4	0.2 To 0.6
4-Door	0.3	0.1 To 0.5

Toe-Out On Turns (1)			
Inner	.....	33.25	..... N/A
Outer	.....	28.08	..... N/A

(1) - Measurement in degrees.
(2) - Measurement in inches (mm).

WHEEL ALIGNMENT SPECIFICATIONS (RAV4 - 2WD)

Application	Preferred		Range
Camber (1)			
Front	-0.33	..... -1.08 To 0.42
Rear			
2-Door	-1.33	..... -2.08 To -0.58
4-Door	-1.25	..... -2 To -0.5
Caster (1)	1.42	..... 0.67 To 2.17
Steering Axis			
Inclination (1)	11.0	..... N/A
Toe-In (2)			
Front	0 (0)	..... -0.08 To 0.08 (-2 To 2)
Rear			
2-Door	0.16 (4)	..... 0.08 To 0.24 (2 To 6)
4-Door	0.12 (3)	..... 0.04 To 0.2 (1 To 5)
Toe-In (1)			
Front	0	..... -0.2 To 0.2
Rear			
2-Door	0.4	..... 0.2 To 0.6
4-Door	0.3	..... 0.1 To 0.5
Toe-Out On Turns (1)			
Inner	33.25	..... N/A
Outer	28.08	..... N/A

(1) - Measurement in degrees.
(2) - Measurement in inches (mm).

WHEEL ALIGNMENT SPECIFICATIONS (RAV4 - 2-DOOR 4WD)

Application	Preferred		Range
215/70R16			
Camber (1)			
Front	-0.25	..... -1.0 To 0.5
Rear	-1.08	..... -1.83 To -0.33
Caster (1)	1.33	..... 0.58 To 2.08
Steering Axis			
Inclination (1)	10.75	..... N/A
Toe-In (2)			
Front	0 (0)	..... -0.08 To 0.08 (-2 To 2)
Rear	0.12 (3)	..... 0.04 To 0.2 (1 To 5)
Toe-In (1)			
Front	0	..... -0.2 To 0.2
Rear	0.3	..... 0.1 To 0.5
Toe-Out On Turns (1)			
Inner	33.25	..... N/A
Outer	28.08	..... N/A
235/60R16			
Camber (1)			
Front	-0.33	..... -1.08 To 0.42
Rear	-1.42	..... -2.17 To -0.67
Caster (1)	1.42	..... 0.67 To 2.17

Steering Axis			
Inclination (1)	11		N/A
Toe-In (2)			
Front	0 (0)	-0.08 To 0.08	(-2 To 2)
Rear	0.16 (4)	0.08 To 0.24	(2 To 6)
Toe-In (1)			
Front	0	-0.2 To 0.2	
Rear	0.4	0.2 To 0.6	
Toe-Out On Turns (1)			
Inner	33.25		N/A
Outer	28.08		N/A

(1) - Measurement in degrees.
(2) - Measurement in inches (mm).

WHEEL ALIGNMENT SPECIFICATIONS (RAV4 - 4-DOOR 4WD)

Application	Preferred		Range
215/70R16			
Camber (1)			
Front	-0.25	..... -1.0 To 0.5
Rear	-0.92	..... -1.67 To -0.17
Caster (1)	1.33	..... 0.58 To 2.08
Steering Axis			
Inclination (1)	10.75	..... N/A
Toe-In (2)			
Front	0 (0)	..... -0.08 To 0.08 (-2 To 2)
Rear	0.12 (3)	..... 0.04 To 0.2 (1 To 5)
Toe-In (1)			
Front	0	..... -0.2 To 0.2
Rear	0.3	..... 0.1 To 0.5
Toe-Out On Turns (1)			
Inner	33.25	..... N/A
Outer	28.08	..... N/A
235/60R16			
Camber (1)			
Front	-0.33	..... -1.08 To 0.42
Rear	-1.33	..... -2.08 To -0.58
Caster (1)	1.42	..... 0.67 To 2.17
Steering Axis			
Inclination (1)	11	..... N/A
Toe-In (2)			
Front	0 (0)	..... -0.08 To 0.08 (-2 To 2)
Rear	0.12 (3)	..... 0.4 To 0.2 (1 To 5)
Toe-In (1)			
Front	0	..... -0.2 To 0.2
Rear	0.3	..... 0.1 To 0.5
Toe-Out On Turns (1)			
Inner	33.25	..... N/A
Outer	28.08	..... N/A

(1) - Measurement in degrees.
(2) - Measurement in inches (mm).

WHEEL ALIGNMENT SPECIFICATIONS (SIENNA)

Application	Preferred		Range
Camber (1)			
Front	-0.53		-1.28 To 0.22

Rear	.....	-0.92	.....	-1.67 To -0.17
Caster (1)	.....	1.53	.....	0.78 To 2.28
Steering Axis				
Inclination (1)	.....	12.58	.....	N/A
Toe-In (2)				
Front	.....	0.1 (2.5)	.....	.02 To .18 (.5 To 4.5)
Rear	.....	0.09 (2)	.....	-.03 To .21 (-1 To 5)
Toe-In (1)				
Front	.....	27	.....	0.07 To 0.47
Rear	.....	0.22	.....	-0.8 To 0.52
Toe-Out On Turns (1)				
Inner	.....	34.32	.....	N/A
Outer	.....	30.32	.....	N/A

(1) - Measurement in degrees.

(2) - Measurement in inches (mm).

WHEEL ALIGNMENT SPECIFICATIONS (SUPRA)

Application	Preferred		Range
Non-Turbo			
Camber (1)			
Front	-0.33	.....	-1.08 To 0.4
Rear	-1.58	.....	-2.08 To -1.08
Caster (1)	3.33	.....	2.83 To 3.83
Steering Axis			
Inclination (1)	9.58	.....	N/A
Toe-In (2)			
Front	0 (0)	.....	-0.04 To 0.04 (-1 To 1)
Rear	0.12 (3)	.....	0.08 To 0.16 (2 To 4)
Toe-In (1)			
Front	0	.....	-0.1 To 0.1
Rear	0.3	.....	0.2 To 0.4
Toe-Out On Turns (1)			
Inner	35	.....	N/A
Outer	30.75	.....	N/A
Turbo			
Camber (1)			
Front	-0.5	.....	-1 To 0
Rear	-1.5	.....	-2 To -1
Caster (1)	3.5	.....	3 To 4
Steering Axis			
Inclination (1)	9.75	.....	N/A
Toe-In (2)			
Front	0 (0)	.....	-0.04 To 0.04 (-1 To 1)
Rear	0.12 (3)	.....	0.08 To 0.16 (2 To 4)
Toe-In (1)			
Front	0	.....	-0.1 To 0.1
Rear	0.3	.....	0.2 To 0.4
Toe-Out On Turns (1)			
Inner	34.92	.....	N/A
Outer	30.58	.....	N/A

(1) - Measurement in degrees.

(2) - Measurement in inches (mm).

WHEEL ALIGNMENT SPECIFICATIONS (TACOMA - 2WD)

Application	Preferred	Range
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Camber (1)	0.08	-0.67 To 0.83
Caster (1)		
2.4L Reg Cab	.58	0.17 To 1.33
2.4L Xtra Cab	.83	0.08 To 1.58
3.4L Xtra Cab	.67	-0.08 To 1.42
Steering Axis		
Inclination (1)	10	N/A
Toe-In (2)	0.08 (2)	-0 To 0.16 (0 To 4)
Toe-In (1)	0.2	0 To 0.4
Toe-Out On Turns (1)		
Inner	36	N/A
Outer	31	N/A

(1) - Measurement in degrees.
(2) - Measurement in inches (mm).

WHEEL ALIGNMENT SPECIFICATIONS (TACOMA - 4WD)

Application	Preferred	Range
1997		
Camber (1)		
2.7L Reg Cab	0.25	-0.5 To 1
3.4L Reg Cab	0.25	-0.5 To 1
2.7L Xtra Cab	0.33	-0.42 To 1.08
3.4L Xtra Cab	0.33	-0.42 To 1.08
Caster (1)		
2.7L Reg Cab	1.58	0.83 To 2.33
3.4L Reg Cab	1.58	0.83 To 2.33
2.7L Xtra Cab	1.75	1 To 2.5
3.4L Xtra Cab	1.75	1 To 2.5
Steering Axis		
Inclination (1)	10.5	N/A
Toe-In (2)	0.08 (2)	0 To 0.16 (0 To 4)
Toe-In (1)	0.2	0 To 0.4
Toe-Out On Turns (1)		
Inner	37.5	N/A
Outer	32.5	N/A
1998		
Camber (1)		
2.7L Reg Cab	0.17	-0.58 To 1
2.7L Xtra Cab	0.25	-0.5 To 1
3.4L Xtra Cab	0.25	-0.5 To 1
Caster (1)		
2.7L Reg Cab	1.67	0.92 To 2.42
2.7L Xtra Cab	1.5	.75 To 2.25
3.4L Xtra Cab	1.42	0.67 To 2.17
Steering Axis		
Inclination (1)	10.5	N/A
Toe-In (2)	0.08 (2)	0 To 0.16 (0 To 4)
Toe-In (1)	0.2	0 To 0.4
Toe-Out On Turns (1)		
Inner	37.33	N/A
Outer	32.64	N/A

(1) - Measurement in degrees.
(2) - Measurement in inches (mm).

WHEEL ALIGNMENT SPECIFICATIONS (TERCEL)

Application	Preferred	Range
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Camber (1)			
Front	-0.33 -1.08 To 0.42
Rear	-0.5 -1.25 To 0.25
Caster (1)	1.33 0.58 To 2.08
Steering Axis			
Inclination (1)	.....	12.17	..... N/A
Toe-In (2)			
Front	.....	0.04 (1)	..... -0.04 To 0.12 (-1 To 3)
Rear	.....	0.12 (3)	..... 0 To 0.24 (0 To 6)
Toe-In (1)			
Front	.....	0.1	..... -0.1 To 0.3
Rear	.....	0.3	..... 0 To 0.6
Toe-Out On Turns (1)			
Inner	.....	35.92	..... N/A
Outer	.....	32.17	..... N/A

(1) - Measurement in degrees.

(2) - Measurement in inches (mm).

WHEEL ALIGNMENT SPECIFICATIONS (T100 - REGULAR CAB)

Application		Preferred		Range
2WD				
Camber (1)	.....	0.4	.....	-0.35 To 1.15
Caster (1)	.....	2.4	.....	1.65 To 3.15
Steering Axis				
Inclination (1)	.....	12.08	.....	N/A
Toe-In (2)	.....	0.09 (2.5)	..	-0.01 To 0.19 (-0.5 To 4.5)
Toe-In (1)	.....	0.18	.....	-0.02 To 0.38
Toe-Out On Turns (1)				
Inner	.....	40.67	.....	N/A
Outer	.....	35.1	.....	N/A
4WD				
Camber (1)	.....	0.67	.....	-0.08 To 1.42
Caster (1)	.....	1.08	.....	0.33 To 1.83
Steering Axis				
Inclination (1)	.....	12	.....	N/A
Toe-In (2)	.....	0.1 (2.5)	.....	0 To 0.2 (0 To 5)
Toe-In (1)	.....	0.2	.....	0 To 0.4
Toe-Out On Turns (1)				
Inner	.....	32.75	.....	N/A
Outer	.....	30.52	.....	N/A

(1) - Measurement in degrees.

(2) - Measurement in inches (mm).

WHEEL ALIGNMENT SPECIFICATIONS (T100 - XTRA CAB)

Application		Preferred		Range
2WD				
Camber (1)	.....	.47	.....	-0.28 To 1.22
Caster (1)	.....	2.07	.....	1.32 To 2.82
Steering Axis				
Inclination (1)	.....	12	.....	N/A
Toe-In (2)	.....	0.17 (4)	.....	0.07 To 0.27 (1.5 To 7)
Toe-In (1)	.....	0.33	.....	0.13 To 0.53
Toe-Out On Turns (1)				
Inner	.....	40.8	.....	N/A

Outer	.....	35.68	.....	N/A
4WD				
Camber (1)	.....	0.58	.....	-0.17 To 1.33
Caster (1)	.....	0.92	.....	0.17 To 1.67
Steering Axis				
Inclination (1)	.....	12	.....	N/A
Toe-In (2)	.....	0.07 (2)	.....	-0.03 To 0.17 (-1 To 4)
Toe-In (1)	.....	0.13	.....	-0.07 To 0.33
Toe-Out On Turns (1)				
Inner	.....	33.12	.....	N/A
Outer	.....	30.52	.....	N/A

(1) - Measurement in degrees.
(2) - Measurement in inches (mm).

WHEEL ALIGNMENT SPECIFICATIONS (4RUNNER)

Application	Preferred	Range
2WD		
Camber (1)	-0.25 -1 To 0.5
Caster (1)	3.08 2.33 To 3.83
Steering Axis		
Inclination (1)	11 N/A
Toe-In (2)	0.08 (2) 0 To 0.16 (0 To 4)
Toe-In (1)	0.2 0 To 0.4
Toe-Out On Turns (1)		
Inner	35 N/A
Outer	31 N/A
4WD		
Camber (1)	0.17 -0.58 To 0.92
Caster (1)	2.42 1.67 To 3.17
Steering Axis		
Inclination (1)	10.58 N/A
Toe-In (2)	0.08 (2) 0 To 0.16 (0 To 4)
Toe-In (1)	0.2 0 To 0.4
Toe-Out On Turns (1)		
Inner	36 N/A
Outer	32 N/A

(1) - Measurement in degrees.
(2) - Measurement in inches (mm).