

SERVICE MANUAL	
Applies to: Hyundai Coupe/Tiburon 1998-2000	
GROUP	
Suspension System	General

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TIGHTENING TORQUE

	Nm	Kg.cm	lb.ft
Front strut upper installation nut	40-50	400-500	29-36
Front strut assembly to knuckle	110-130	1100-1300	81-95
Front strut mounting self locking nut	60-70	600-700	43-51
Lower arm ball joint to knuckle	60-72	600-720	44-53
Lower arm bush A mounting bolt	100-120	1000-1200	72-87
Lower arm rod bush mounting bolt	80-100	800-1000	58-72
Lower arm rod bush mounting nut	35-45	350-450	25-33
Lower arm self locking nut	125-155	1250-1550	92-114
Stabilizer link to lower arm mounting nut	35-45	350-450	25-33
Stabilizer bar lower/upper bracket mountain bolt	35-45	350-450	25-33
Tie rod end ball joint to knuckle	15-34	150-340	11-25
Wheel bearing nut	200-230	2000-2300	147-169
Rear strut upper mounting nut	20-30	200-300	14-22
Rear strut to carrier	110-130	1100-1300	81-96
Stabilizer link mounting nut	35-45	350-450	25-33
Trailing arm to carrier	100-120	1000-1200	72-87
Trailing arm complete to floor	40-50	400-500	29-36
Suspension arm to carrier	80-100	800-1000	58-72
Suspension arm (A) to rear cross member	80-100	800-1000	58-72
Suspension arm (T) to rear cross member	80-100	800-1000	58-72
Center member mounting bolt	60-80	600-800	44-59
Center member to roll stopper bracket	30-40	300-400	22-29

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SPECIFICATIONS

FRONT SUSPENSION SYSTEM: MCPHERSON STRUT WITH STABILIZER BAR TYPE

COIL SPRING FREE HEIGHT AND IDENTIFICATION COLOR

MODEL	FREE HEIGHT MM (IN.)	IDENTIFICATION COLOR
1.8 GL + M/T (ALL)	311.2 (12.25)	Yellow 3 line
2.0 GLS + M/T (ALL)		
1.8 GL + A/T (ALL)	317.2 (12.48)	White 3 line
2.0 GLS + A/T (ALL)		

- M/T : MANUAL T/M
- A/T AUTOMATIC T/M
- S/R : SUN ROOF
- A/C : AIR CONDITIONER
- ABS : ANTI-LOCK BRAKE SYSTEM
- ALL : WITH ONE OR PERMISSIBLE ALL OPTION

Shock absorber

Type	Hydraulic cylindrical double-acting type
Maximum length	488.7 mm (19.24 in.)
Compressed length	334.7 mm (13.18 in.)
Stroke	154 mm (6.06 in.)

Stabilizer bar

Length (center to center)	1041.2 mm (41 in.)
O.D.	25.4 mm (1 in.)

Wheel and Tire

Tire size	P195/60 R14
Tire inflation pressure kpa (psi)	210 (30)
Wheel size	5.5 J x 14 (Steel wheel)
	5.5 JJ x 14 (Al wheel)

Temporary spare tire

Wheel size	4Tx 15
Tire size	T125/70D15
Tire inflation pressure kpa (psi)	414 (60)

REAR SUSPENSION SYSTEM

Coil spring	Dual link type
Wire dia. x O.D. x free height mm (in.)	(111,141) 0.44 x (4.38, 5.56 x 11.94)
Identification color	Red 2 line

Shock absorber	Dual link type
Type	Hydraulic, cylindrical, double acting type
Max. length	535.3 mm (21.07 in.)
Min. length	353.6 mm (13.92 in.)
Stroke	181.8 mm (7.15 in.)

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SERVICE STANDARD

Standard value

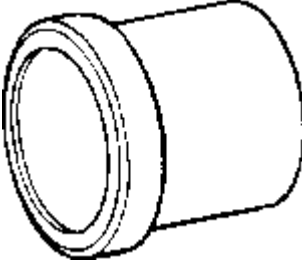
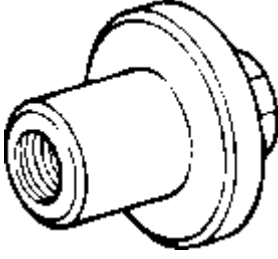
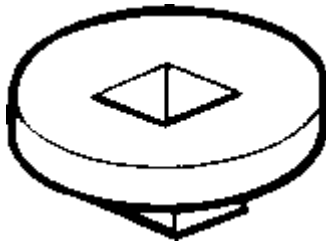

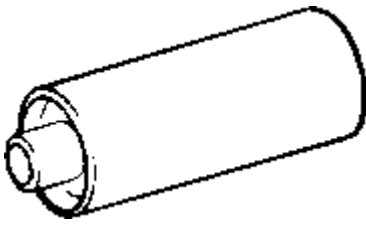
Toe-in	Front	3 mm - 3 mm (0.12 in - 0.12 in.)	Rear: 7 mm - 3 mm (0.28 in - 0.12 in.)
Camber	Front	-10' ± 30'	Rear: -54' ± 30'
Caster		2°27' ± 30'	
King pin inclination angle		12°43' ± 30'	
King pin offset		-1.2 mm	
Wheel runout		[Steel wheel]	[Aluminum wheel]
Radial	mm (in.)	0.6 (0.024): Average of LH & RH	0.3 (0.012)
Axial	mm (in.)	1.0 (0.039)	0.3 (0.012)
Lower arm ball joint rotating torque		Nm (kg cm, lb ft)	2-10 (20-100, 17.7-88.5)

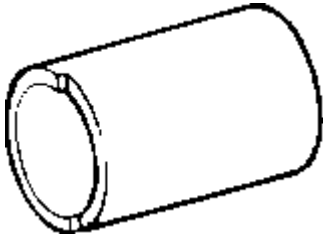
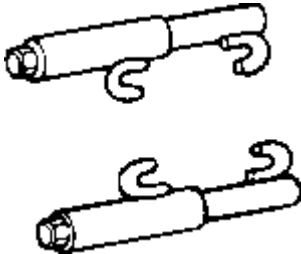
Stabilizer link rotating torque			
Front		Nm (kg cm, lb in)	1.7-3.2 (17-32, 15-27)
Rear		Nm (kg cm, lb in)	0.3-1.0 (3-10, 2.7-8.8)
Tread depth of tire (limit)		mm (in.)	1.6 (0.06)

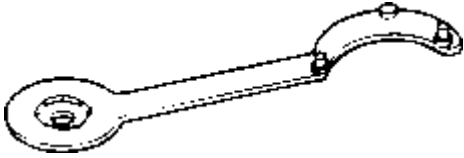
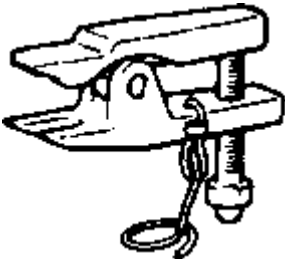
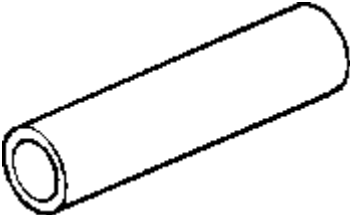
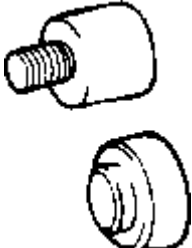
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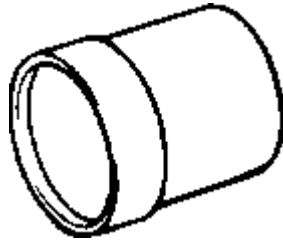
SPECIAL TOOLS

Tool (Number and Name)	Illustration	Use
09221-21000 Camshaft oil seal installer		Removal of the front lower arm ball joint (use with 09545-11000)
09529-21000 Wheel alignment gauge attachment		Front wheel alignment for aluminum type wheel
09532-11600 Pre-load socket		Measurement of the front lower arm ball joint starting torque
09545-11000 Ball joint remover and installer (A/B)		<ol style="list-style-type: none"> 1. Removal and installation of the front lower arm ball joint 2. Installation of the front lower arm ball joint dust cover
09545-28100 Lower arm bushing arbor		Removal and installation of the front lower arm bushing (use with 09545-34000)

<p>09545-34000 Lower arm bushing remover and installer</p>		<p>Removal & installation of the front lower arm bushing (use with 09545-28100)</p>
<p>09546-11000 (J38402) Spring compressor</p>		<p>Compression of the front coil spring</p>

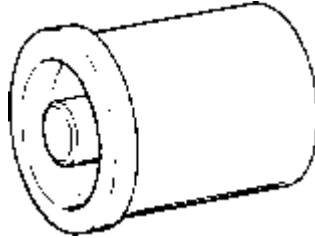
Tool (Number and Name)	Illustration	Use
<p>09546-21000 Special spanner</p>		<ol style="list-style-type: none"> 1. Removal & installation of the front coil spring 2. Removal & installation of the shock absorber oil seal
<p>09568-34000 Ball joint remover</p>		<p>Removal of front lower arm and tie rod end ball joint</p>
<p>09432-22000 Bushing remover</p>		<p>Removal of rear driling arm bushing and rear axle carrier bushing (use with 09546-21100)</p>
<p>09546-21000 Bushing installer</p>		<p>Installation of rear suspension arm bushing and rear axle carrier bushing (use with 09221-21000)</p>

09545-21100
Bushing remover and installer



Installation of rear suspension
arm bushing and rear axle
carrier bushing (use with
09432-22000, 09552-31000)

09552-31000
Bushing installer



Installation of rear trailing arm
bushing and rear axle carrier
bushing (use with 09545-
21100)

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LUBRICATION

I	Recommended lubricant	Quantity
Front wheel bearing	SAE J310a Multi-purpose grease NLGI-2 or equivalent	As required
In ball joint of lower arm	Valiant R-2 grease or POLY LUB GLY 801 K	As required
In insulator bearing of strut	SAE J310a, Chassis grease (NLGI No. 0 or equivalent)	As required
Inside surface and lip of ball joint dust cover	Sunlight MB-2	As required
Wheel bearings, oil seal lip, inside surface of the hub and hub cap	SAE J310a Multi-purpose grease NLGI-2 or equivalent	As required

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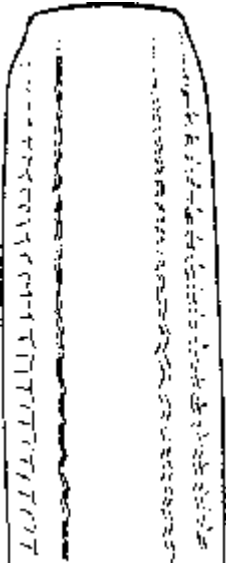
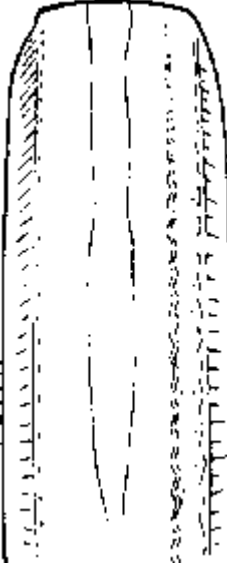
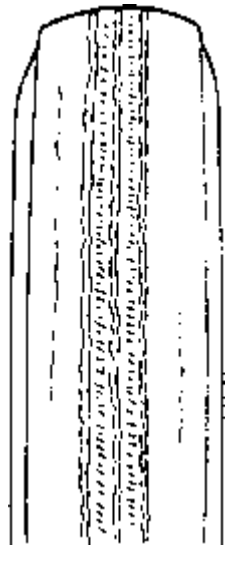
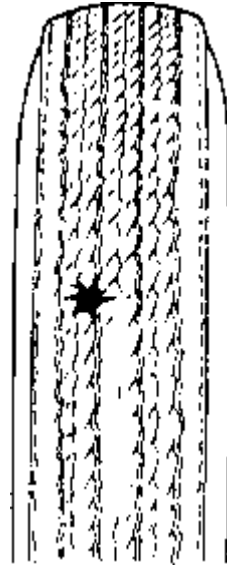
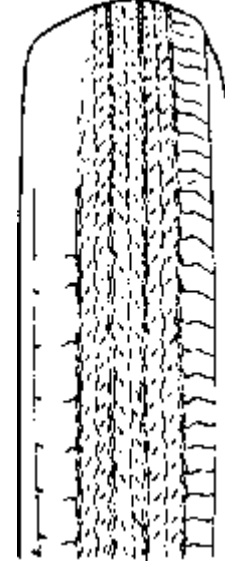
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TROUBLESHOOTING

Symptom	Probable cause	Remedy
Hard steering	Improper front wheel alignment	Correct
	Excessive turning resistance of lower arm ball joint	Replace
	Flat tire	Adjust
	No power assist	Repair and replace
Poor return of steering wheel to center	Improper front wheel alignment	Correct
Poor riding	Improper front wheel alignment	Correct
	Malfunctioning shock absorber	Repair or replace
	Broken or worn stabilizer	Replace
	Broken or worn coil spring	Replace
	Worn lower arm bushing	Replace the lower assembly
Abnormal tire wear	Improper front wheel alignment	Correct
	Malfunctioning shock absorber	Replace
Wandering	Improper front wheel alignment	Correct
	Poor turning resistance of lower arm ball joint	Repair
	Loose or worn lower arm bushing	Retighten or replace
Vehicle pulls to one side	Improper front wheel alignment	Correct
	Excessive turning resistance of lower arm ball joint	Replace
	Broken or worn coil spring	Replace
	Bent lower arm	Repair
Steering wheel shimmy	Improper front wheel alignment	Correct
	Excessive turning resistance of lower arm ball joint	Replace
	Broken or worn stabilizer	Replace
	Worn lower arm bushing	Replace
	Malfunctioning shock absorber	Replace
Bottoming	Broken or worn coil spring	Replace
	Malfunctioning shock absorber	Replace

Symptom	Probable cause	Remedy
Abnormal sound	Loose installation parts	Tighten
	Damaged or worn wheel bearings	Replace
	Faulty shock absorber	Replace damaged parts
	Defective tire	Replace
Poor ride control	Excessive tire pressure	Adjust pressure
	Faulty shock absorber	Replace
	Loose wheel nuts	Tighten to specified torque
	Sagging or broken coil spring	Replace
	Defective tire	Replace
	Worn bushing	Replace
Vehicle body tilts to one side	Deformation of torsional axle and arm assembly	Replace
	Worn bushings	Replace
	Sagging or broken coil spring	Replace

WHEEL AND TIRE DIAGNOSIS

CENTER OF TREAD WORN	CENTER OF TREAD WORN	BOTH SIDES OF TREAD WORN	CHUNKING OF TIRE	ONE SIDE OF TIRE WORN
*Over-inflation	*Center-tread down to fabric due to excessive over-inflation	*Under-inflation *Bulge at the shoulder *Wear rapidly	*When a patch of tread has loosened, it torn off the tire by centrifugal force at high speed	*Incorrect camber angle
				
FLAT SPOT	FEATHERING	BAD PLUGGING	UNEVEN TIRE WEAR	TOTALLY UNSAFE TIRE
*Caused by heavy braking which makes the wheels	*Excessive TOE-	*Using more than one plug distort	*Bad wheel balance, fault in	*Tread worn below

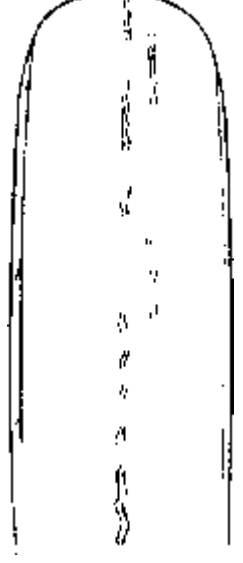
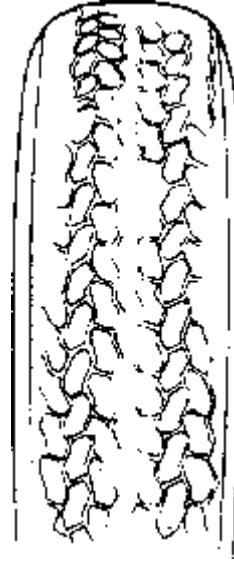
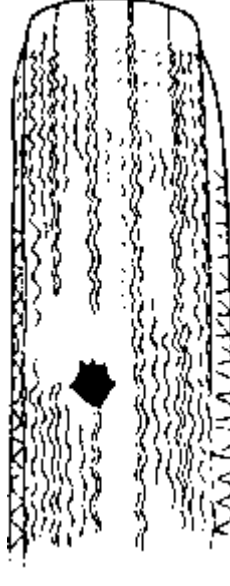
lock and scrubs
the tires along the
road surface

IN TOE-OUT

the tread, resulting
in carcass failure

suspension,
steering gear or
bearing

the limit



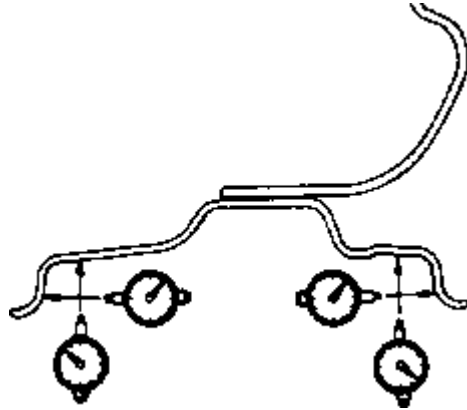
SERVICE MANUAL	
Applies to: Hyundai Coupe/Tiburon 1998-2001	
GROUP	
Suspension System	Tires/Wheels

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WHEEL RUNOUT

Jack up the vehicle and support it with floor stands.

Measure wheel runout with a dial indicator as illustrated.



Replace the wheel if wheel runout exceeds the limit.

Wheel runout

MEASUREMENT SPECIFICATION	
Steel type wheel (radial) (average of LH & RH)	0.6 mm (0.024 in)
Steel type wheel (axial)	1.0 mm (0.039 in)
Aluminum type wheel (radial)	0.3 mm (0.012 in)
Aluminum type wheel (axial)	0.3 mm (0.012 in)

WHEEL NUT TIGHTENING

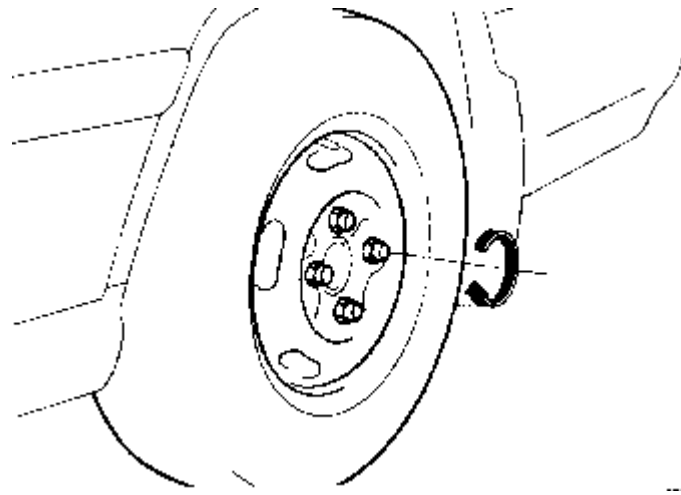
Steel and aluminum alloy wheel tightening torque.

TORQUE SPECIFICATION	
Specified torque	90-110 Nm (900-1,100 kg·cm, 66-81 lb·ft)

CAUTION

When using impact-wrench, final tightening torque should be checked using a hand torque wrench.

Tightening order.



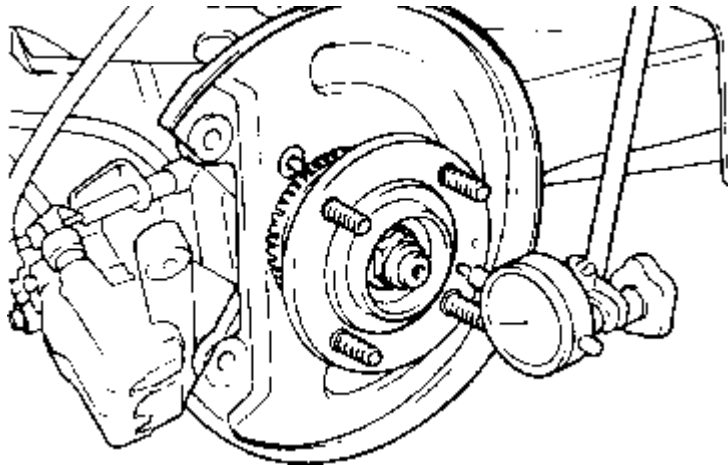
Go around the wheel tightening every other nut until they are all tight. Then double-check each nut for tightness.

WHEEL BEARING END PLAY INSPECTION

Inspect the play of the bearing while the vehicle is jacked up and resting on floor jack.

If there is any play, remove the hub cap and then release the parking brake.

Check the bearing end play. Place a dial gauge against the hub surface, then move the hub in the axial direction and check whether or not there is end play.



MEASUREMENT SPECIFICATION	
Service limit	0.005-0.025 mm (0.0002-0.001 in)

or less

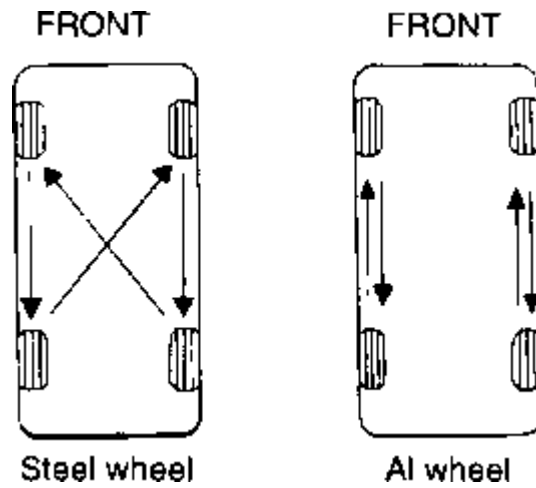
If the end play exceeds the limit, the rear wheel bearing nut should be tightened to the specified torque and check the end play again.

Replace the rear hub bearing unit if an adjustment cannot be made to within the limit.

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WHEEL ROTATION

Rotate the tires in the patterns illustrated.



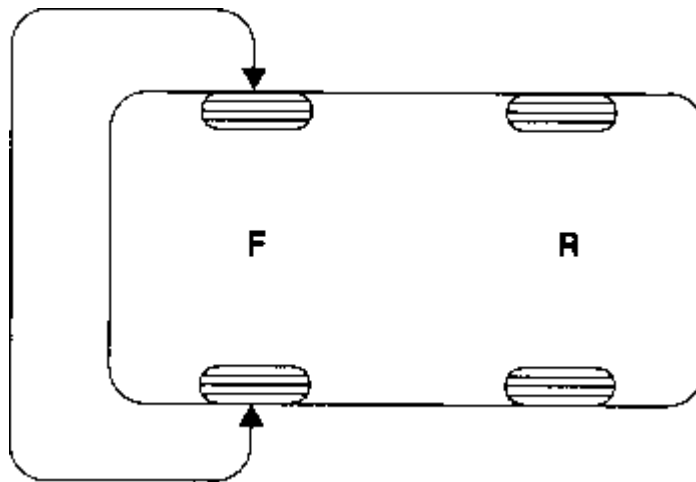
CAUTION

The temporary spare tire should not used in the wheel rotation.

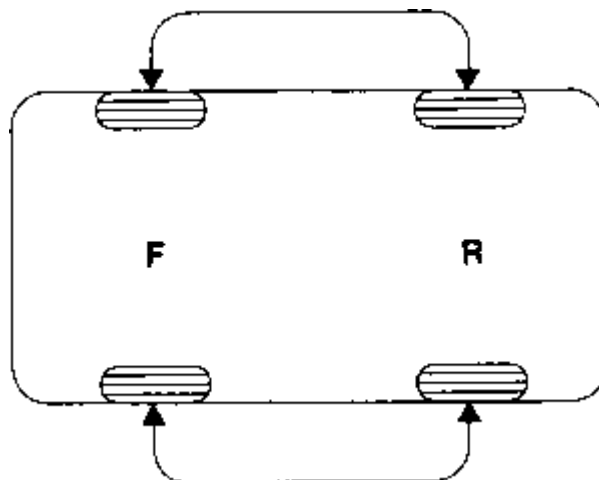
CHECKING FOR PULL AND WANDER

If the steering pulls to one side, use the following wheel rotation by following procedure.

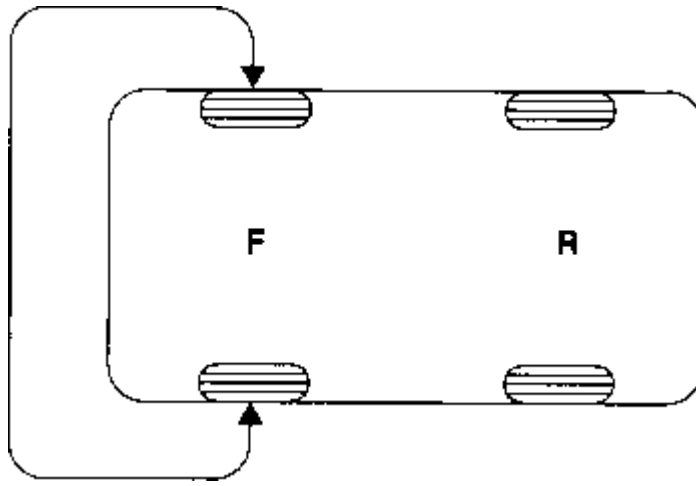
Interchange the front right and front left tires, and perform the road test in order to confirm the vehicle stability.



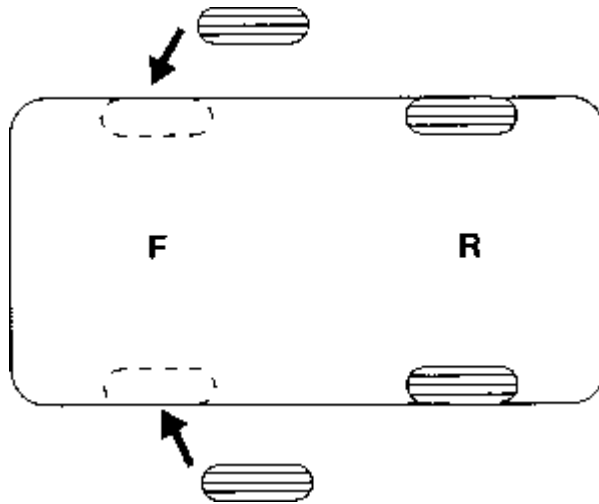
If the steering wheel pulls to opposite side, interchange the front and rear tires, and again perform the road test.



If the steering wheel continues to pull to one side. Interchange the front right and left tires again, and again perform the road test.



If the steering wheel continues to pull to the opposite side, replace the front wheels with new ones.



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WHEEL

INSTRUCTIONS FOR ALUMINUM TYPE WHEELS

Aluminum wheels need special attention. If salt or chemicals have adhered to the wheels, they need to be rinsed off as soon as possible. After cleaning the wheels, a coating of wax should be applied to prevent corrosion.

When cleaning the vehicle with steam, do not direct steam onto the aluminum type wheels.

- Clean the hub surface of aluminum type wheels.
- After tightening wheel nut by finger, tighten them to specifications.
- Do not use an impact wrench or push the wrench by foot to tighten the wheel nuts
- Do not apply oil to the threaded portions.

TIRE CHAINS AND SNOW TIRES

Use tire chains only on front wheels, not on rear wheels.

When using snow tires, use them on all four wheels for maneuverability and safety.

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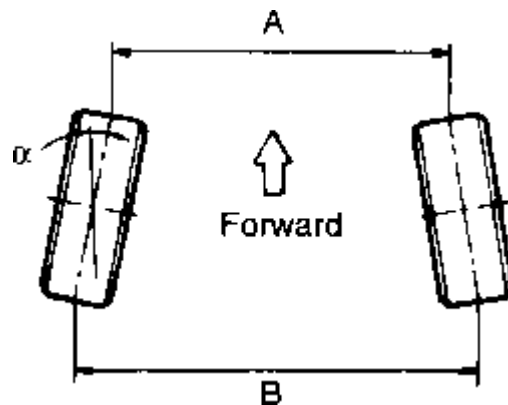
SERVICE ADJUSTMENT PROCEDURES

FRONT WHEEL ALIGNMENT

When using a wheel alignment tester to inspect front wheel alignment, always position the car on a level surface and the front wheels in the straight ahead position. Prior to inspection make sure that the front suspension and steering system are in normal operating condition and that wheels and tires are free of deflection and tires are inflated to specification.

TOE-IN

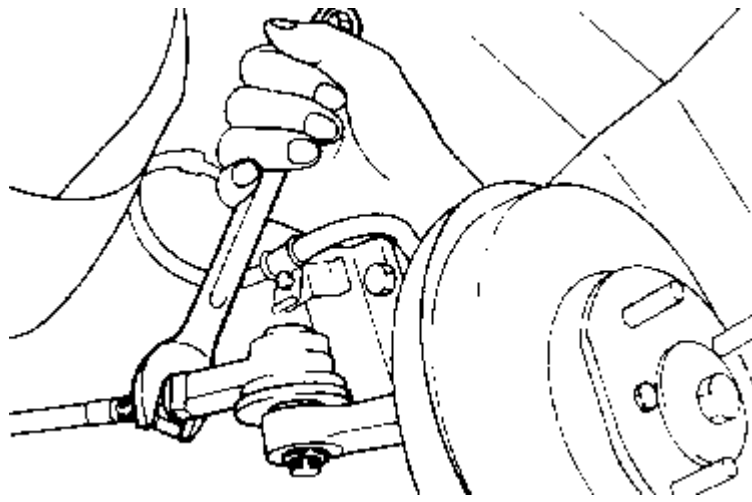
Toe-in (B-A or angle infinity) is adjusted by turning the tie rod turnbuckles. Toe in on the left front wheel can be reduced by turning the tie rod toward the rear of the car. Toe change is achieved by turning the tie for the right and left wheels simultaneously the same amount as follows:



MEASUREMENT SPECIFICATION	
Toe (B-A) mm (in.) [Standard value]	3 mm in ~- mm out (0.12 in-0.12 out) none

NOTE

1. Toe-in adjustment should be made by turning the right and left tie rods the same amount.
2. When adjusting toe-in, loosen the outer bellows clip to prevent twisting the bellows. After the adjustment, firmly tighten the tie rod end lock nuts and reinstall the bellows clip.



Description	No. of turns	Toe changes mm (in.)/deg.
No. of turns of tie rod (same amount for right and left)	1/2	Approx. 5.5 (0.217)/32.5'
	1	Approx. 11 (.433)/1°5'

TORQUE SPECIFICATION

Tie rod end lock nuts	50-55 Nm (500-550 kg·cm, 36-39 lb·ft)
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CAMBER

The steering knuckle which is integral with the strut assembly is preadjusted to the specified camber at the factory and requires no adjustment.

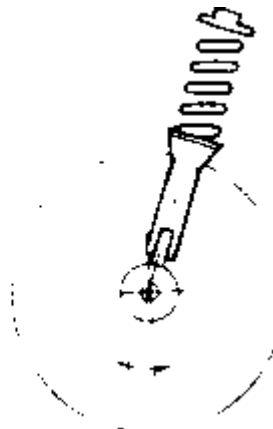
SPECIFICATION

Camber [Standard value]	-10° ± 30'
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CASTER

Caster is pre-set at the factory and can not be adjusted. If caster is not within standard value, replace the bent or damaged parts.

Forward

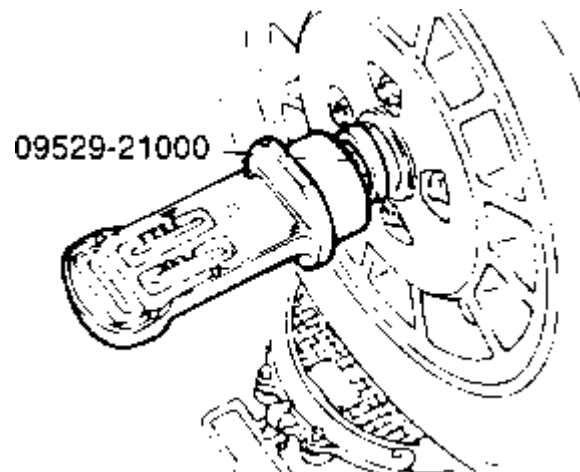


SPECIFICATION

Caster	2° 27' ± 30'
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NOTE

1. The front suspension assembly must be free of worn, loose or damaged parts prior to measuring front wheel alignment.
2. Measure wheel alignment by using the special tool.



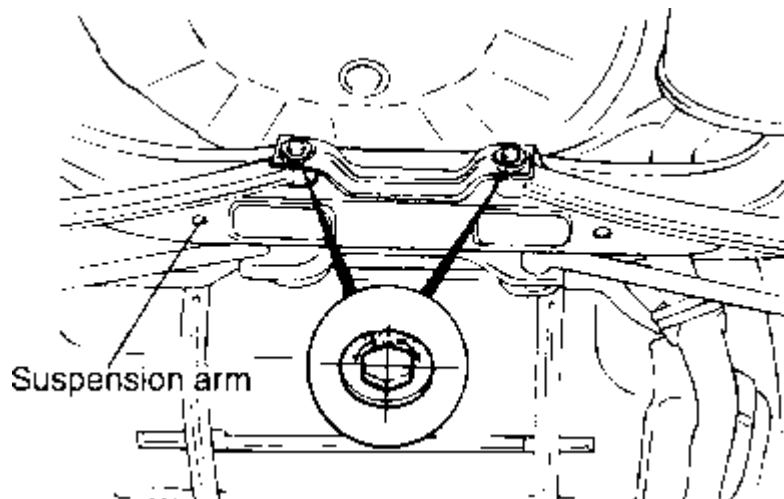
3. Camber and caster are pre-set at the factory and cannot be adjusted.
4. If camber and caster are not within specifications, replace bent or damaged parts.

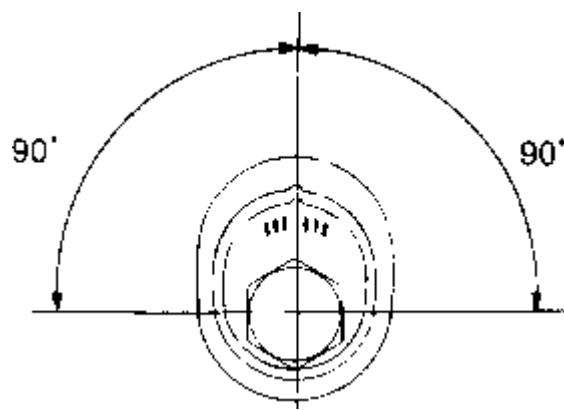
REAR WHEEL ALIGNMENT INSPECTION

MEASUREMENT SPECIFICATION	
REAR WHEEL ALIGNMENT	7 - 3 mm (0.28 - 0.12 in)

NOTE

The rear suspension (T) mounting bolt should be turned an equal amount on both sides when adjusting. Loosen the rear-side nut prior to adjust the eccentric bolt.





SPECIFICATION

Left wheel: Clockwise direction	toe-in
---------------------------------	--------

SPECIFICATION

Right wheel: Clockwise direction	toe-in
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The scale has gradations of approximately 2.4 mm (0.09 in.) (signal side to angle equivalent to 14')

CAUTION

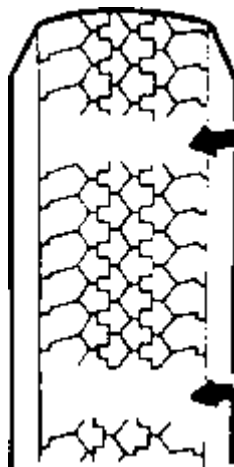
The eccentric bolt should be adjusted within a 90° range left and right from the center position.

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TIRE

TIRE WEAR

Measure the tread depth of tires.



MEASUREMENT SPECIFICATION

Tread depth of tire [Limit]	1.6 mm (0.06 in)
-----------------------------	--------------------

If the remaining tread depth is less than the limit, replace the tire.

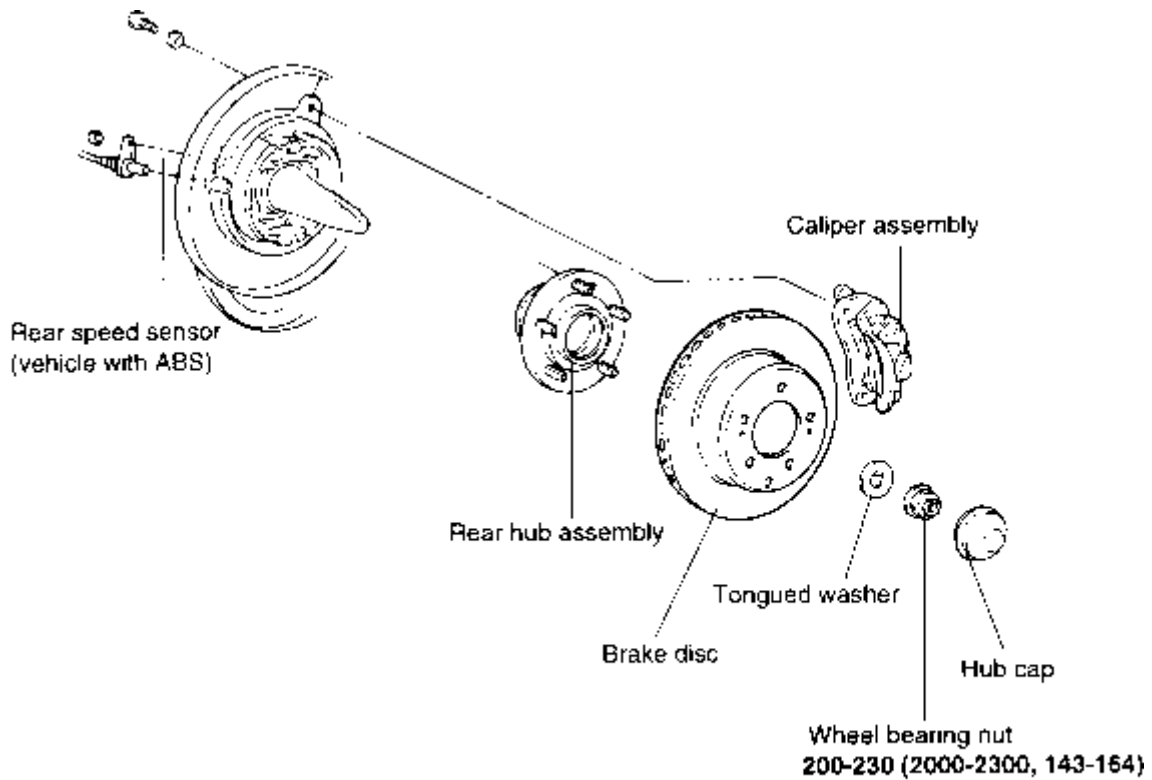
NOTE

When the tread depth of the tires is reduced to 1.6 mm (0.06in.) or less, the wear indicators will appear.

SERVICE MANUAL	
Applies to: Hyundai Coupe/Tiburon 1998-2001	
GROUP	
Suspension System	Rear Suspension System

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

COMPONENTS

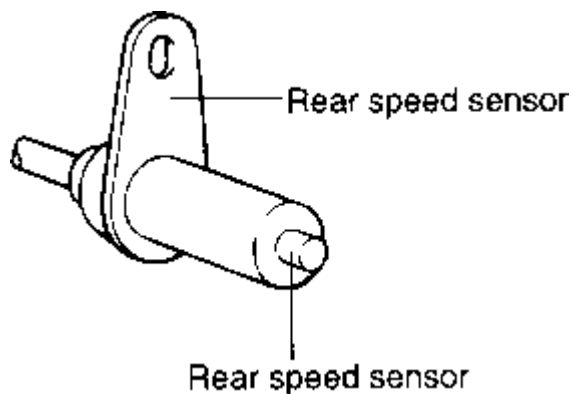


TORQUE : Nm (kg-cm, lb-ft)

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

REMOVAL

Remove the rear speed sensor (Vehicles with ABS)



CAUTION

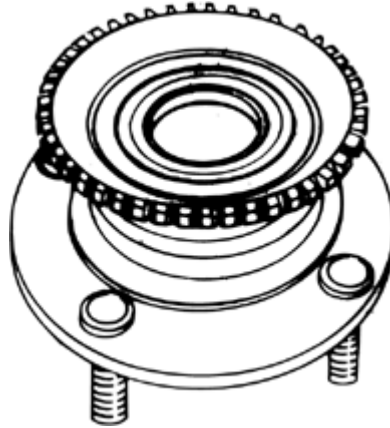
When removing the speed sensor from the adapter, be careful that the end pole piece does not strike the teeth of the rotor or other parts.

Remove the caliper assembly and suspend it.

Remove the brake disc.

Remove the hub cap, wheel bearing nut and tongued washer.

Remove the rear hub assembly.



CAUTION

The rear hub unit bearing should not be dismantled.

CAUTION

(Vehicles with ABS) Care must be taken not to scratch or otherwise damage the teeth of the rotor, The rotor must never be dropped. If the teeth of the rotor are chipped, resulting in a deformation of the rotor, it will not be able to accurately detect the wheel rotation speed, and the system will not function normally.

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

INSPECTION

Check the oil seal for cracks or damage.

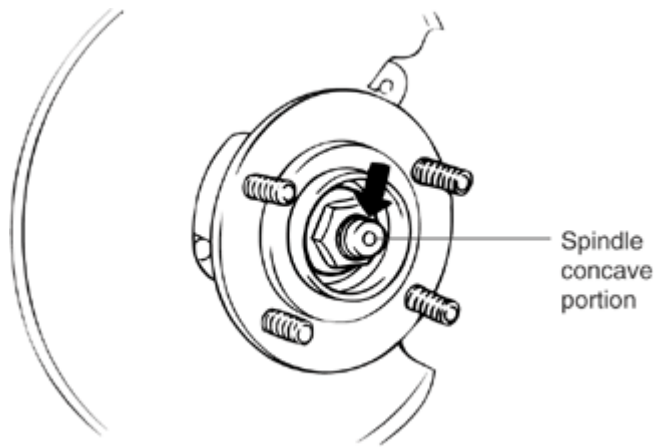
Check the rear hub unit bearing for wear or damage.

Check the rear rotor for chipped teeth.

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

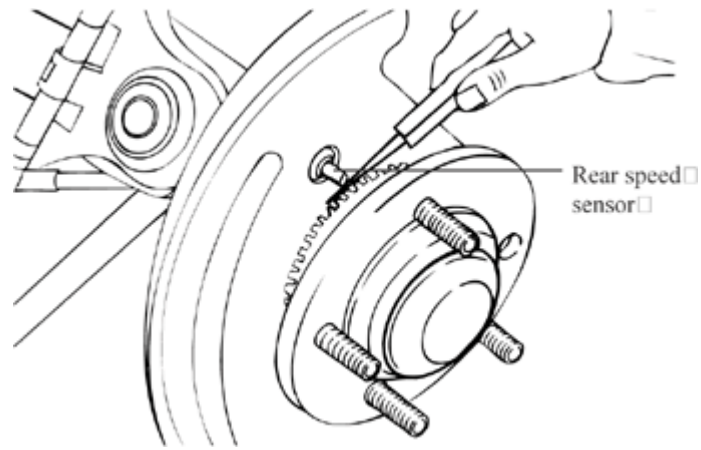
INSTALLATION

After tightening the wheel bearing nut, crimp the nut to meet the concave portion of the spindle.



Installation of rear speed sensor (Vehicles with ABS):

Insert a feeler gauge into the space between the speed sensor's pole piece and the rotor's toothed surface, and then tighten the speed sensors at the position where the clearance at all places is within the standard value.



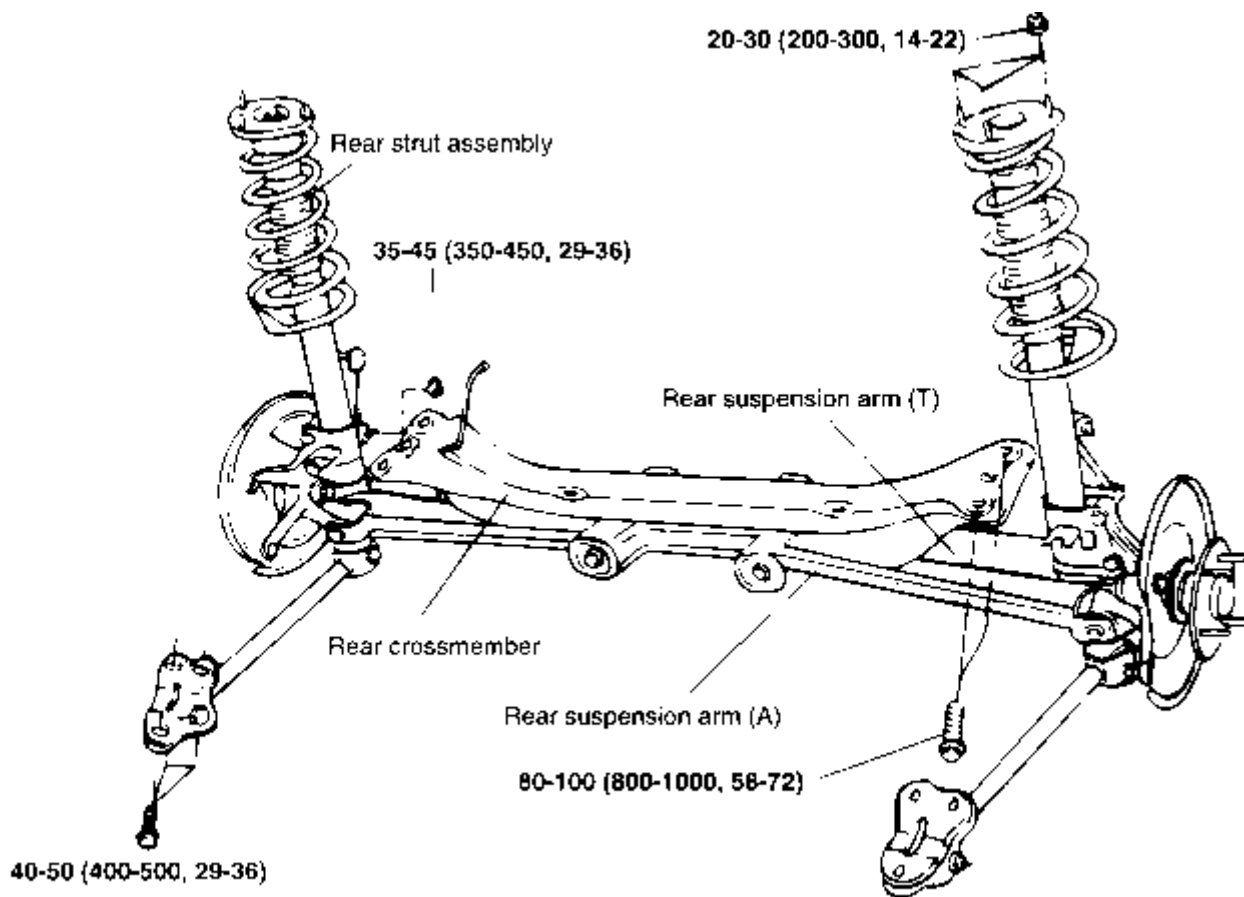
MEASUREMENT SPECIFICATION	
Clearance	0.2-1.3 mm (0.008-0.051 in)

Install the hub cap.

SERVICE MANUAL	
Applies to: Hyundai Coupe/Tiburon 1998-2001	
GROUP	
Suspension System	Rear Suspension System

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

COMPONENTS

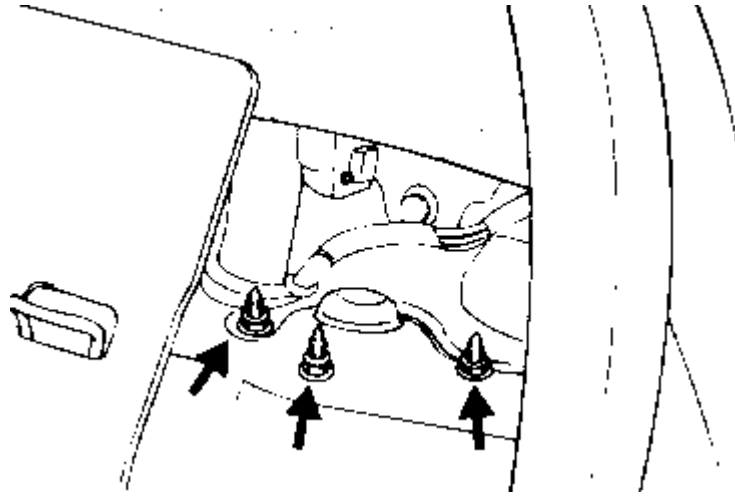


TORQUE : Nm (kg-cm, lb-ft)

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

REMOVAL

Remove the strut upper mounting nuts.



Raise the vehicle and position the jack stands.

Remove wheel and tire.

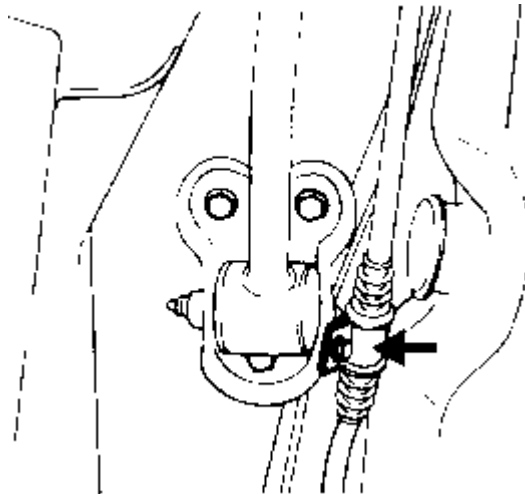
Remove the brake caliper assembly and suspend it with a wire.

Remove the brake disc.

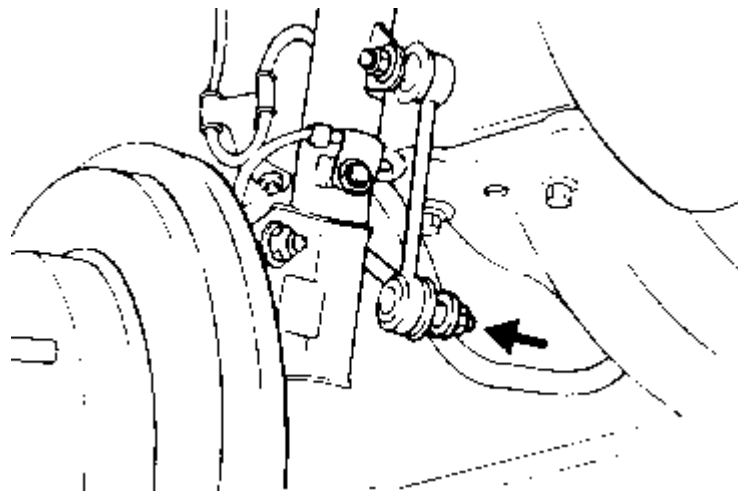
NOTE

Brake hose does not need to be disconnected from brake caliper. Be careful not to depress brake pedal or to popout piston.

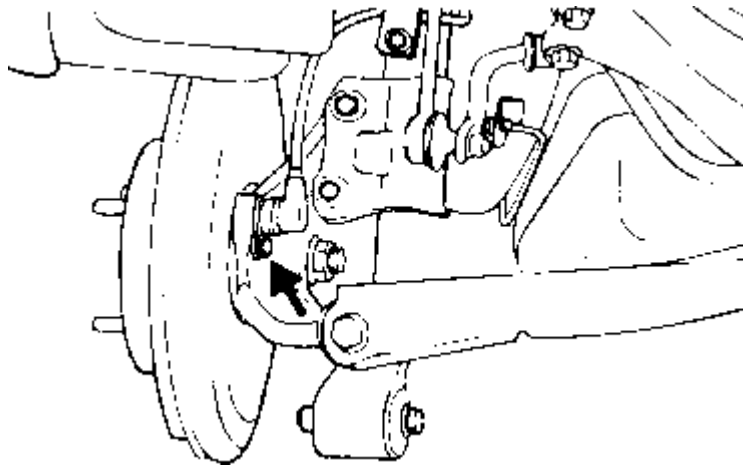
To remove rear suspension assembly, loosen the parking brake cable clip mounting nut, and then remove trailing arm mounting bolts from the vehicle.



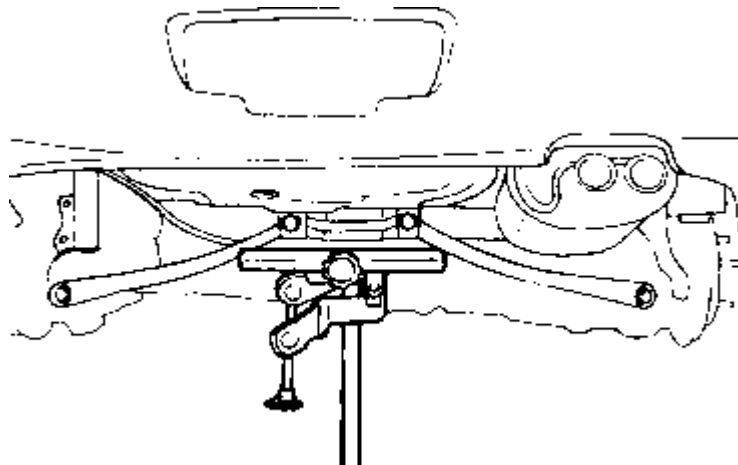
Remove the stabilizer bar link mounting nut.



Disconnect the ABS wheel sensor and cable from the knuckle.



Before removing the crossmember mounting bolts, support the crossmember with a transaxle jack.



Remove the crossmember mounting bolts.

Remove the rear suspension assembly.

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

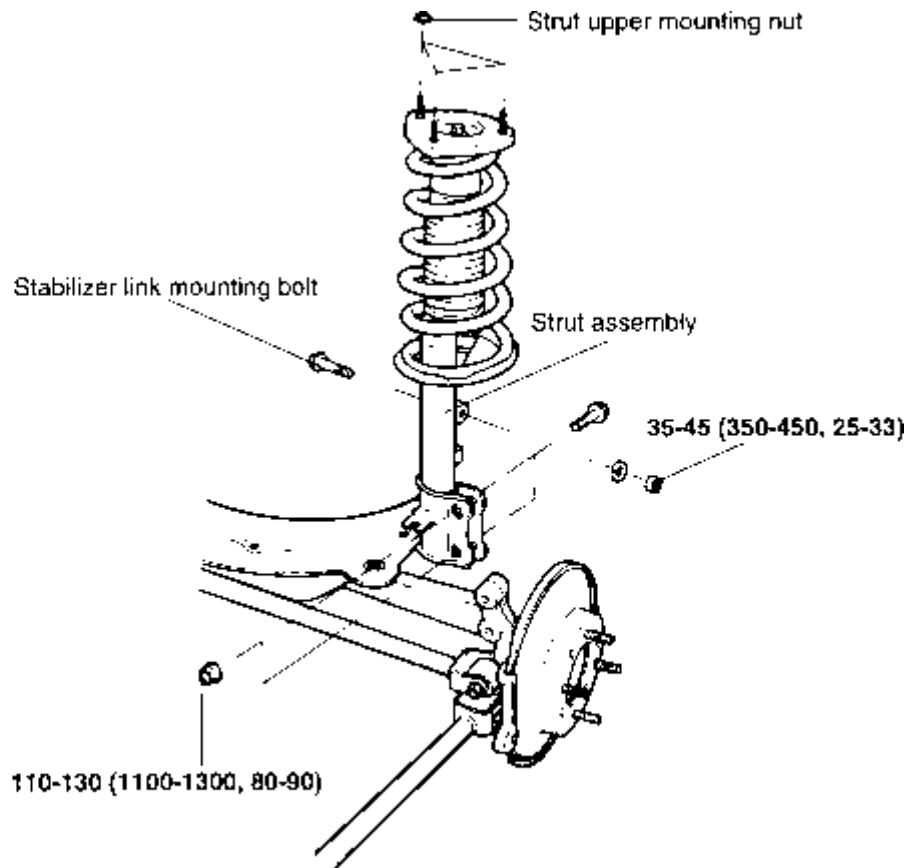
INSPECTION

Check rear suspension for cracks or other damage

SERVICE MANUAL	
Applies to: Hyundai Coupe/Tiburon 1998-2001	
GROUP	
Suspension System	Rear Suspension System

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

COMPONENTS



TORQUE : Nm (kg-cm, lb-ft)

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

INSPECTION

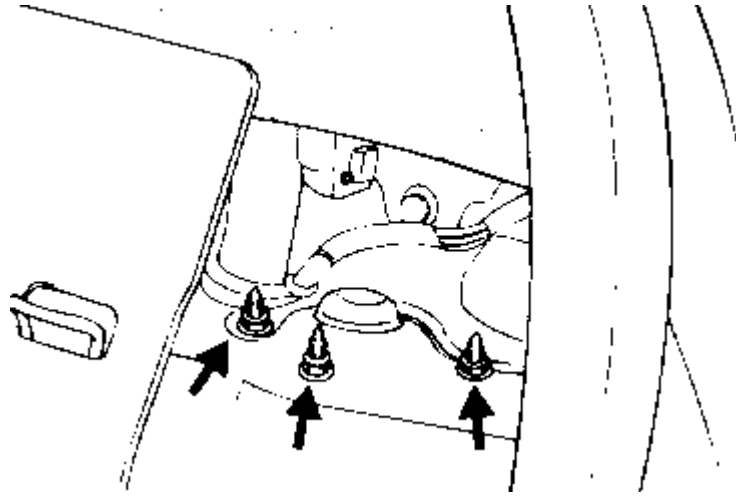
Check the rubber parts for damage.

Check the coil springs for damage or deterioration.

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

REMOVAL

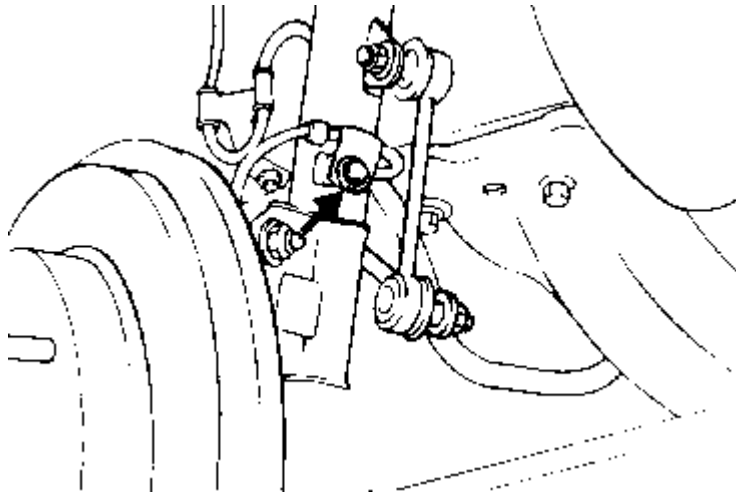
Remove the rear strut upper mounting nut.



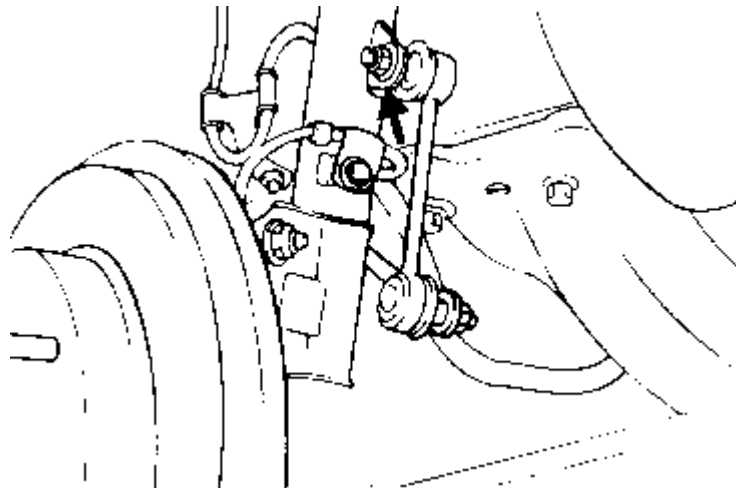
Raise the vehicle and position the jack stands.

Remove the wheel and tire.

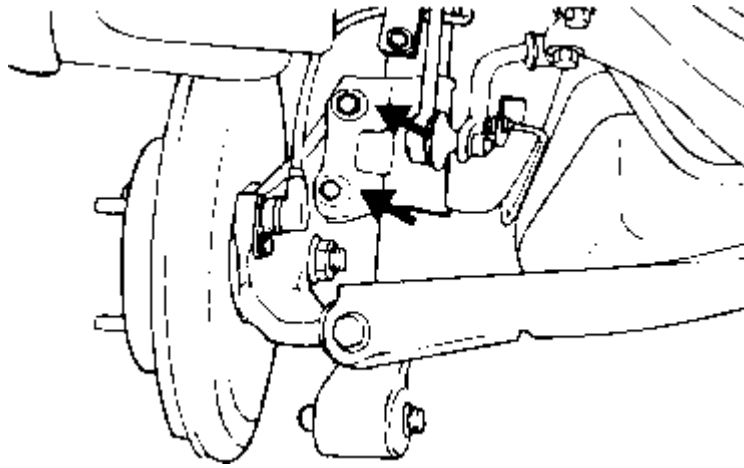
Disconnect the ABS wheel sensor wiring from the strut assembly.



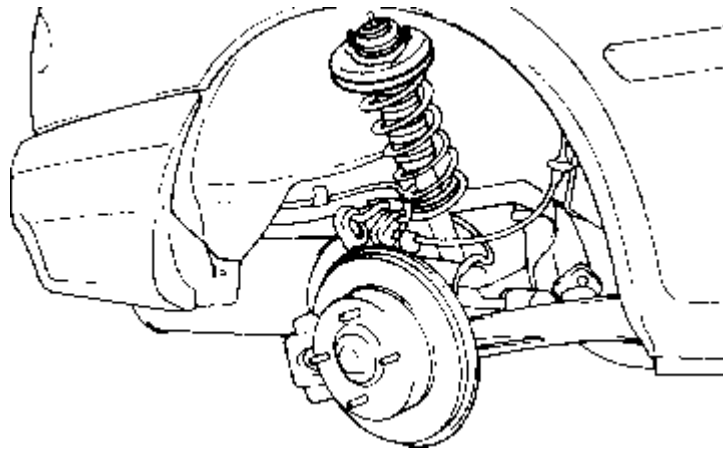
Remove the stabilizer link mounting nut from the strut assembly.



While supporting the rear suspension assembly with a transaxle jack, loosen the strut assembly mounting bolts from the knuckle.

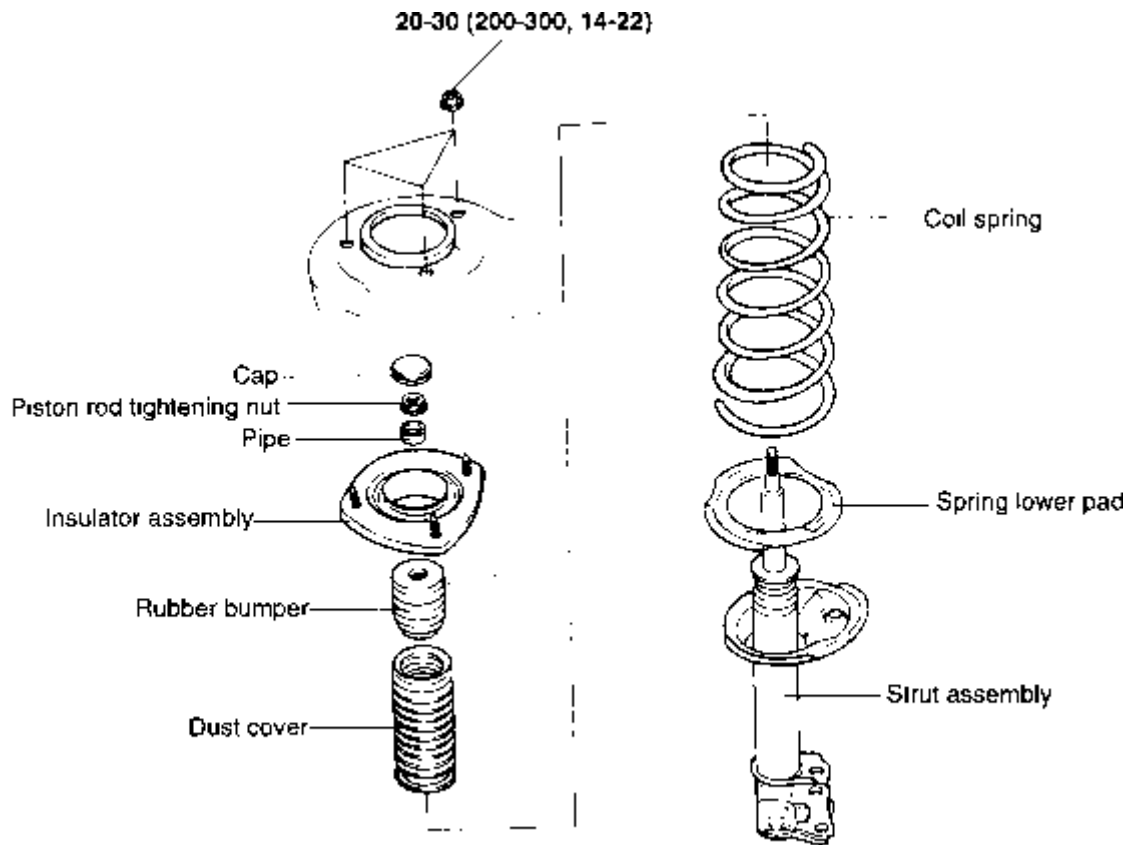


Remove the strut assembly.



Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

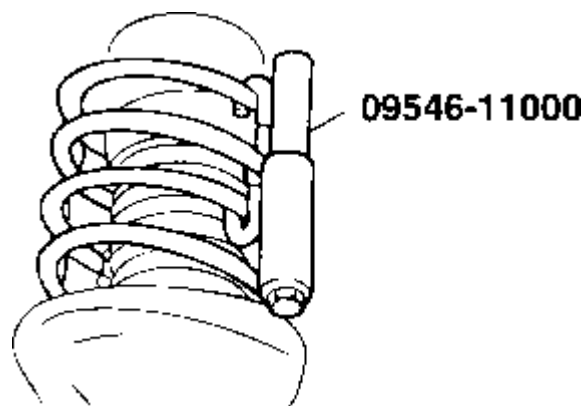
COMPONENTS



TORQUE : Nm (kg·cm, lb·ft)

DISASSEMBLY

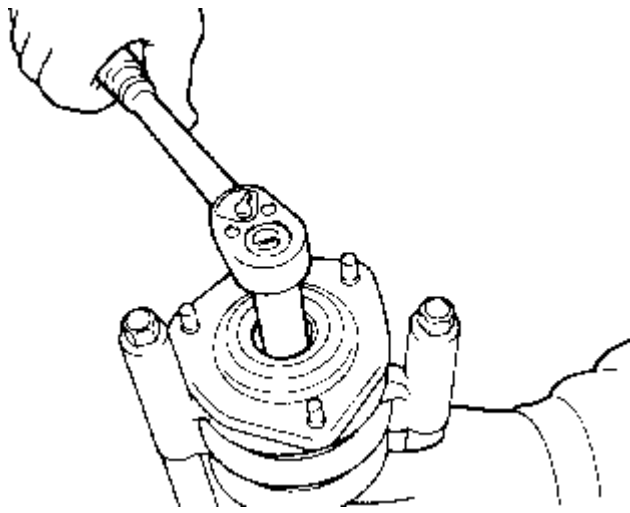
Before removing the piston rod tightening nut, compress the coil spring using special tool.



CAUTION

Do not use an air tool to tighten the bolt of the special tool.

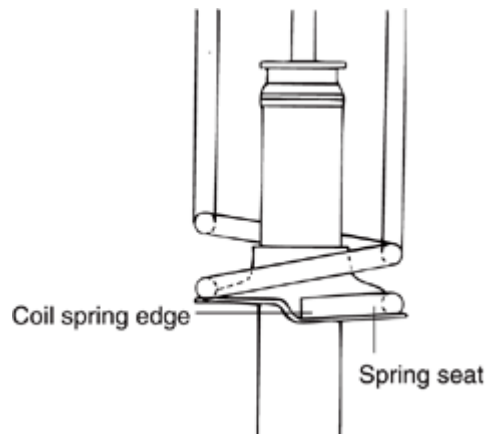
While holding the piston rod, remove the piston rod tightening nut.



Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

ASSEMBLY

Compress the coil spring using the special tool and insert it in the rear strut.

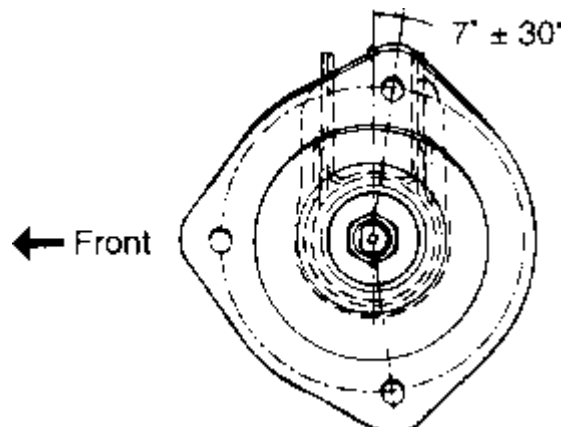


Align the edge of the coil spring to the position of the rear strut spring seat as shown.

NOTE

When replacing a coil spring, be sure to use a spring having the appropriate identification mark.

With the position of the bracket assembly as shown in the illustration, tighten the tightening nut according to the specified torque.



SERVICE MANUAL	
Applies to: Hyundai Coupe/Tiburon 1998-2000	
GROUP	
Suspension System	Rear Suspension System

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

REMOVAL

Raise the vehicle and position the jack stands.

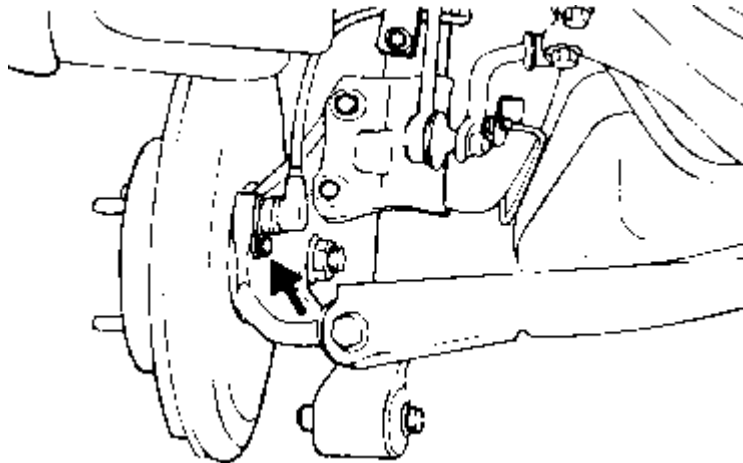
Remove the wheel and tire.

Remove the ABS wheel sensor from the knuckle.

Remove the rear brake assembly from the knuckle and suspend it with a wire.

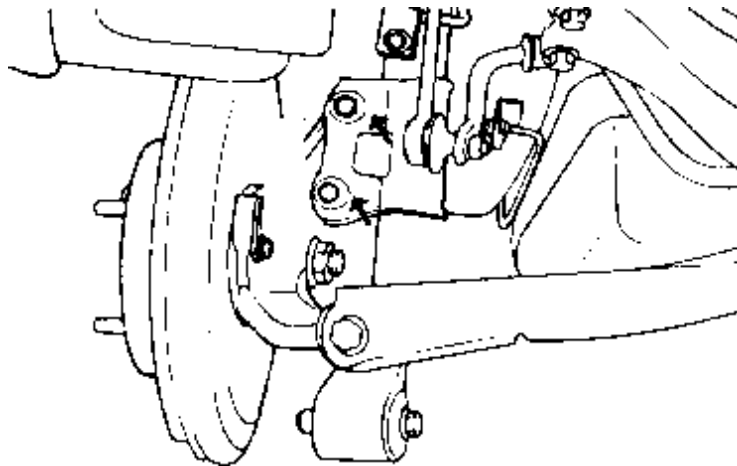
CAUTION

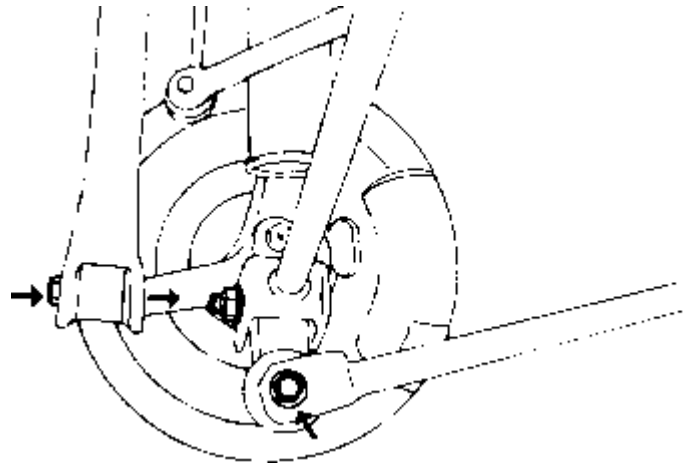
Brake hose does not need to be disconnected from brake caliper. Be careful not to depress brake pedal, otherwise, piston will pop out.



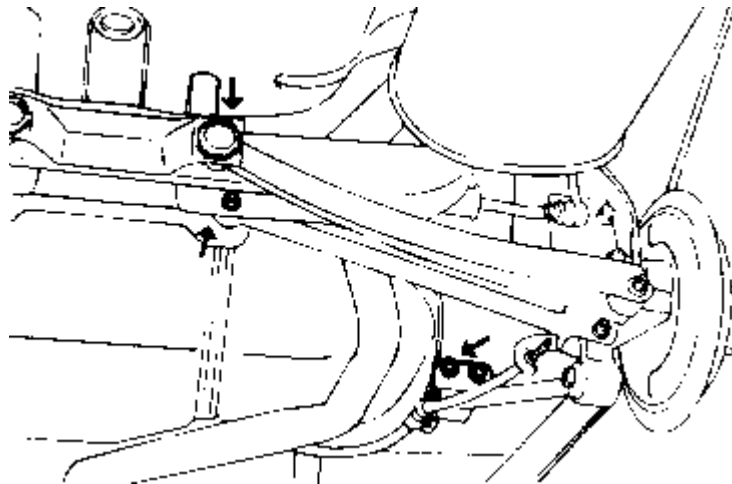
Remove the knuckle from the strut assembly.

Remove the rear suspension arm and trailing arm mounting bolts from the rear axle carrier.





Remove the trailing arm and suspension arm from the vehicle.



SERVICE MANUAL	
Applies to: Hyundai Coupe/Tiburon 1998-2001	
GROUP	
Suspension System	Rear SuspensionSystem

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

INSPECTION

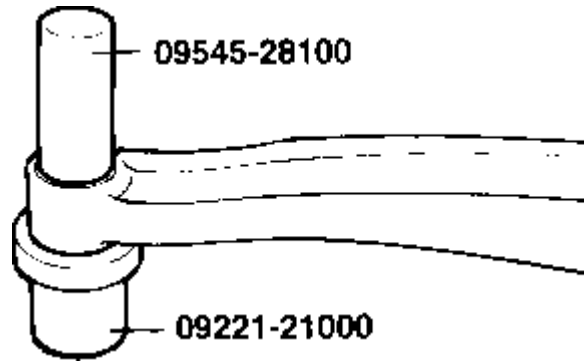
- Check the bushing for wear and deterioration.
- Check the upper arm or lower arm or assist link for bend or breakage.
- Check all bolts for condition and straightness.

SERVICE MANUAL	
Applies to: Hyundai Coupe/Tiburon 1998-2001	
GROUP	
Suspension System	Rear Suspension System

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

REAR SUSPENSION ARM BUSH REPLACEMENT

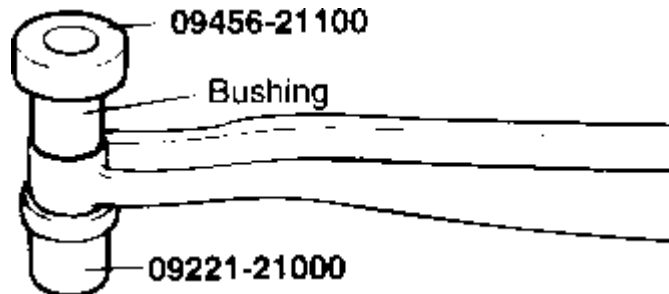
Install special tools (09221-21000, 09545-28100) on the rear suspension arm.



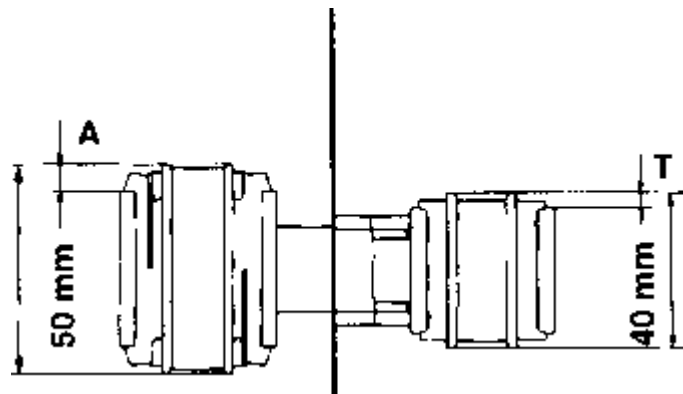
Press out the bushing.

Apply soap solution to the new bushing and rear suspension arm bushing mount.

Install special tools and new bushing onto the rear suspension arm.



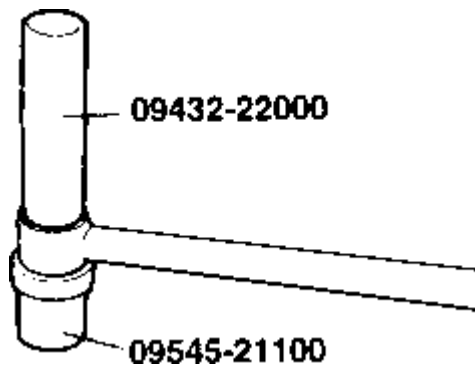
Press until the inner pipe projection is at the standard value.



MEASUREMENT SPECIFICATION	
A	5.3 - 4.7 mm
T	5.3 - 4.7 mm

TRAILING ARM BUSH REPLACEMENT

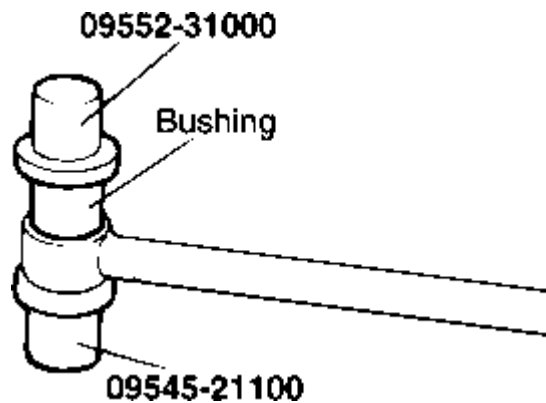
Install the special tools (09432-22000, 09545-21100) on the trailing arm.



Press out the bushing.

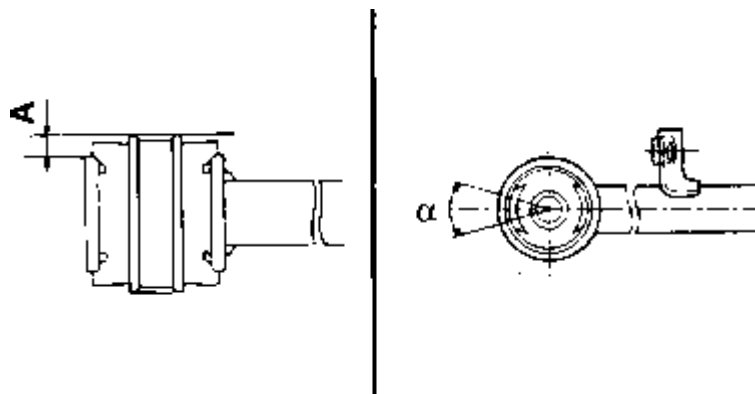
Apply soap solution to the new bushing and trailing arm bushing mount.

Install special tools (09545-21100, 09552-31000) and new bushing on to the trailing arm.



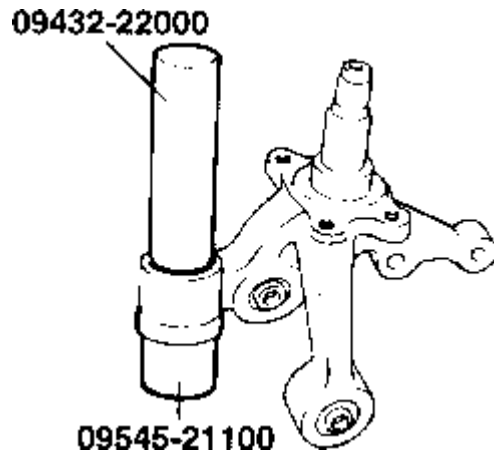
Press fit the bushing into the trailing arm bushing mount as shown in the illustration.

SPECIFICATION	
Standard Value	(A) : 7.2 - 7.8 mm
Standard Value	(a) : $0^{\circ} \pm 3^{\circ}$



REAR AXLE CARRIER BUSH REPLACEMENT

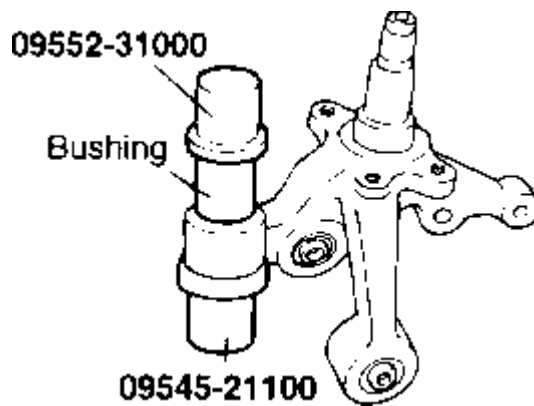
Install special tools (09432-22000, 09545-21100) on the rear axle carrier trailing arm bushing.



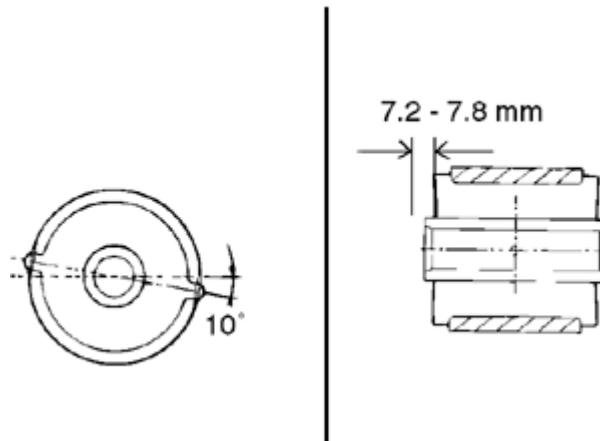
Press out the bushing.

Apply soap solution to the new bushing and trailing arm bushing mount.

Install special tools (09545-21100, 09552-31000) and new bushing onto the rear axle carrier.



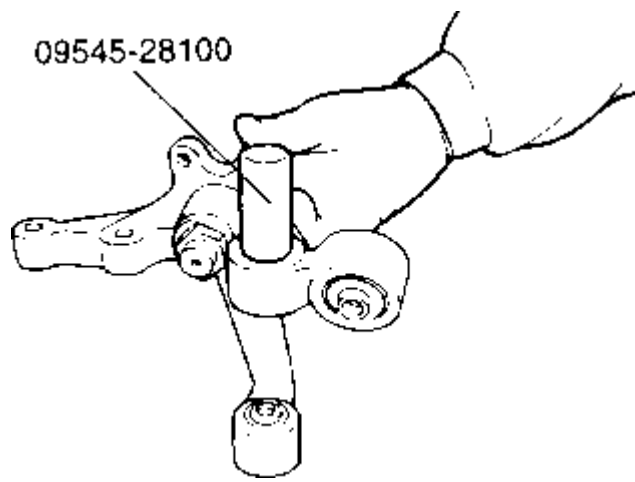
When press fitting, press in the direction of the arrow into the position as shown in the illustration.



Press fit the bushing in to the bushing mount.

SPECIFICATION	
Standard value (A)	7.2-7.8 mm (0.28-0.30 in.)

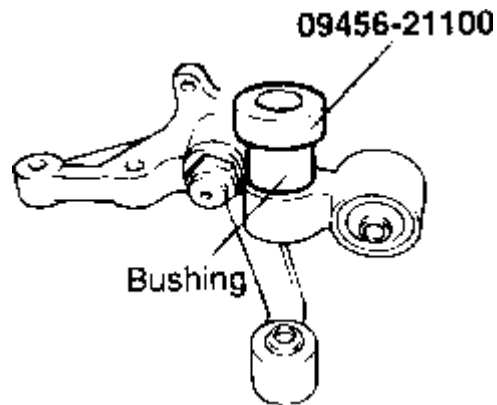
Install the special tool (09545-28100) on the rear axle carrier suspension arm bushing.



Press out the bushing.

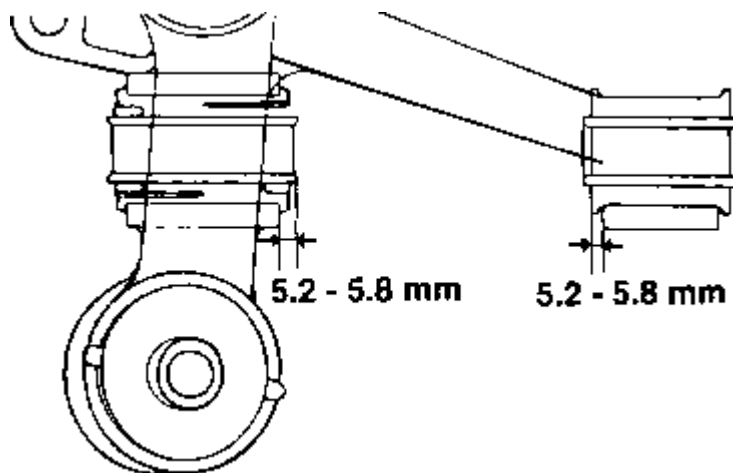
Apply soap solution to the new bushing and suspension arm bushing mount.

Install the special tool (09456-21100) and new bushing onto the rear axle carrier.



Press fit the bushing into the suspension arm bushing mount as shown in the illustration.

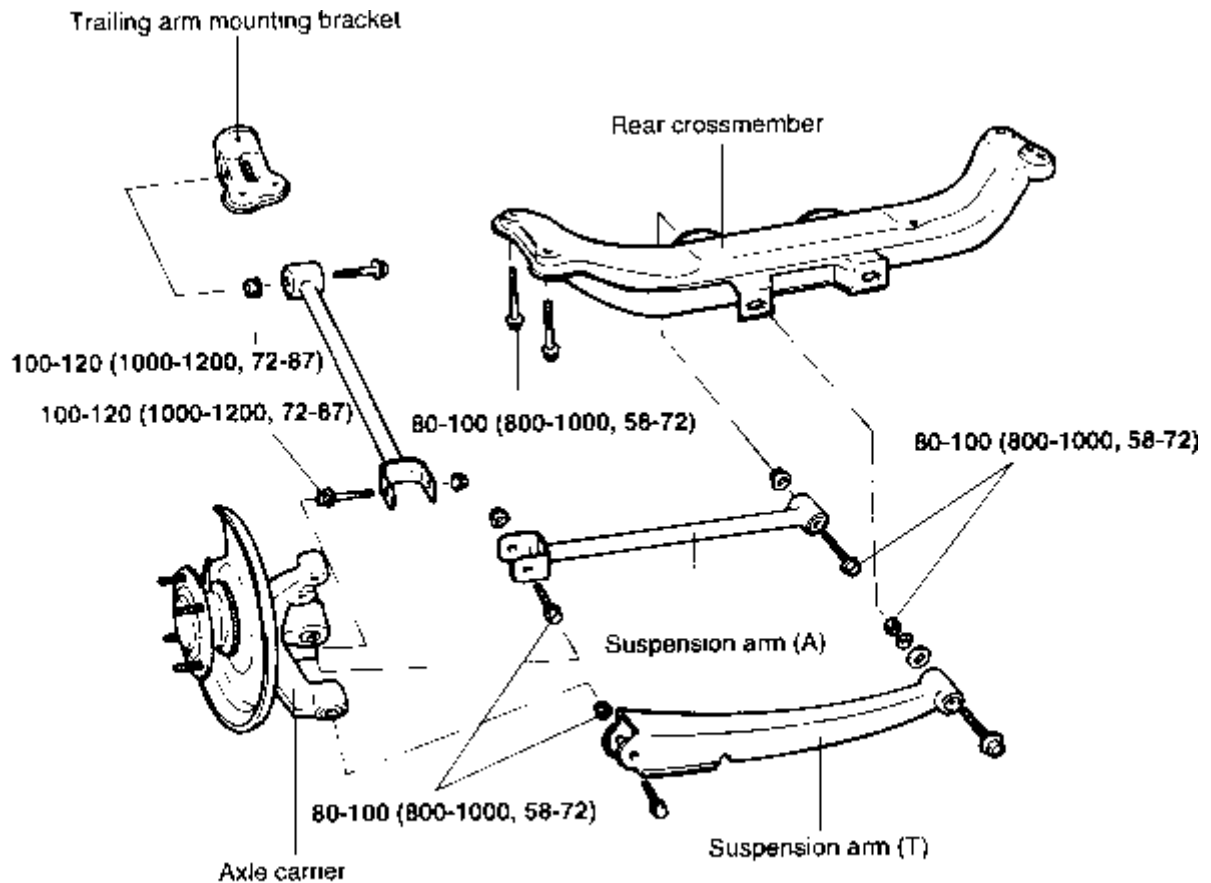
SPECIFICATION	
Standard value (A)	4.7-5.3 mm



SERVICE MANUAL	
Applies to: Hyundai Coupe/Tiburon 1998-2000	
GROUP	
Suspension System	Rear Suspension System

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

COMPONENTS

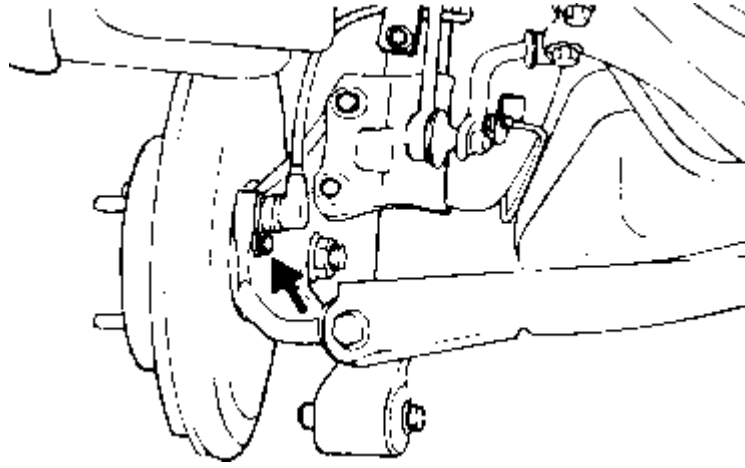


TORQUE : Nm (kg·cm, lb·ft)

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

REMOVAL

- Raise the vehicle and position the jack stands.
- Remove the wheel and tire.
- Remove the ABS wheel sensor from the knuckle.

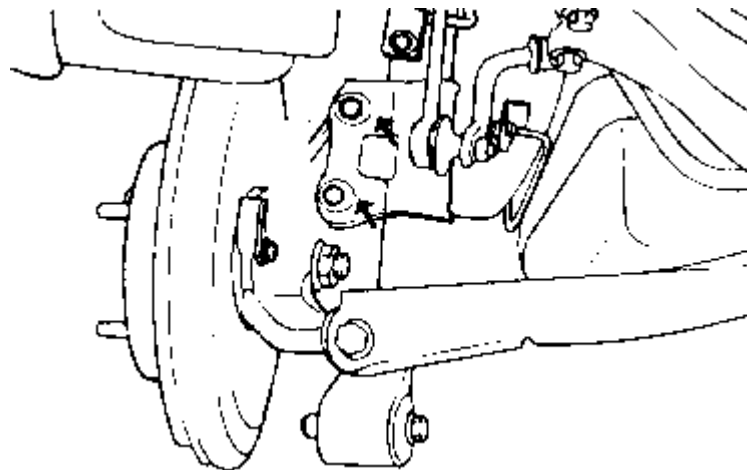


Remove the rear brake assembly from the knuckle and suspend it with a wire.

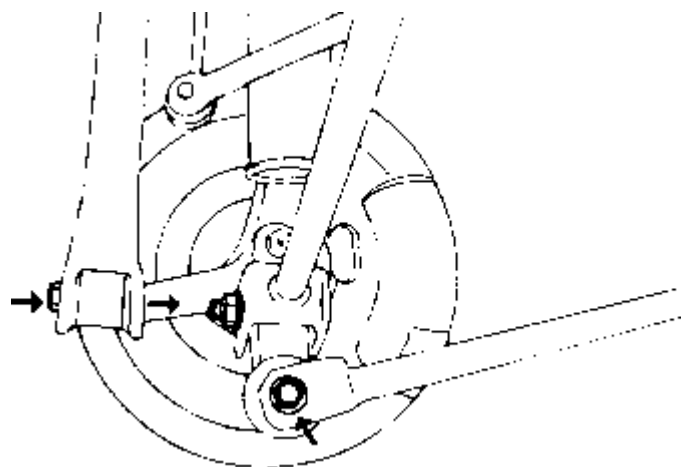
CAUTION

Brake hose does not need to be disconnected from brake caliper, Be careful not to depress brake pedal, otherwise, piston will pop out.

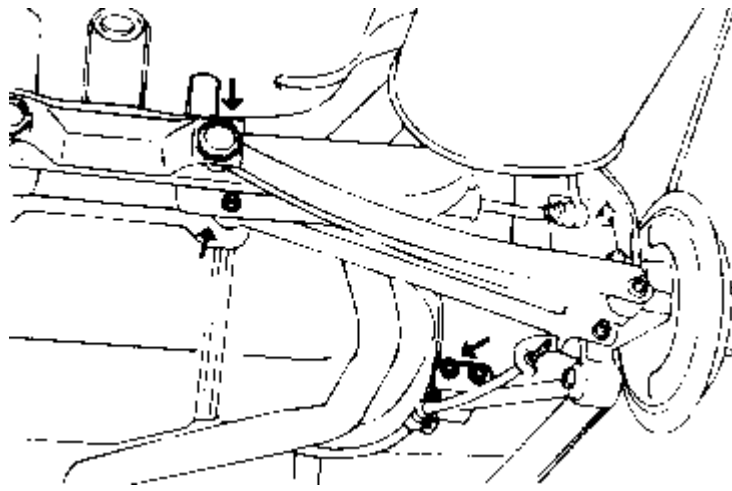
Remove the knuckle from the strut assembly.



Remove the rear suspension arm and trailing arm mounting bolts from the rear axle carrier.



Remove the trailing arm and suspension arm from the vehicle.



Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

INSPECTION

Check the bushing for wear and deterioration.

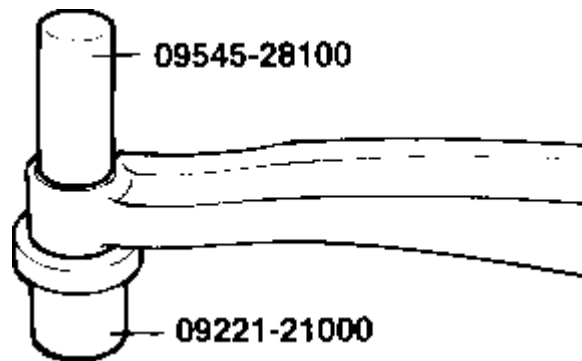
Check the upper arm or lower arm or assist link for bend or breakage.

Check all bolts for condition and straightness.

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

REAR SUSPENSION ARM BUSH REPLACEMENT

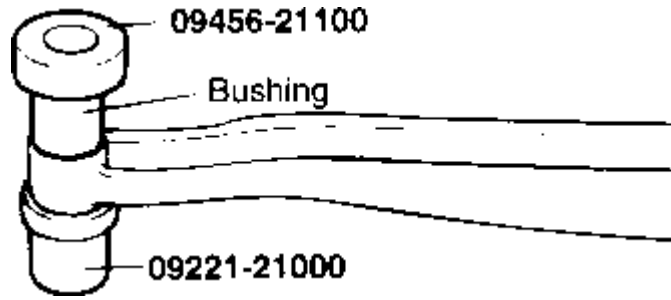
Install special tools (09221-21000, 09545-28100) on the rear suspension arm.



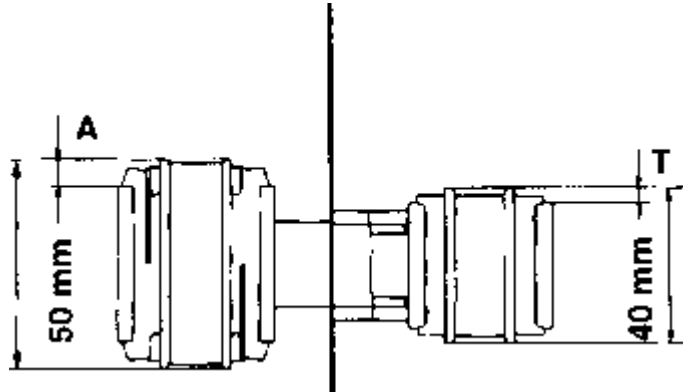
Press out the bushing.

Apply soap solution to the new bushing and rear suspension arm bushing mount.

Install special tools and new bushing onto the rear suspension arm.



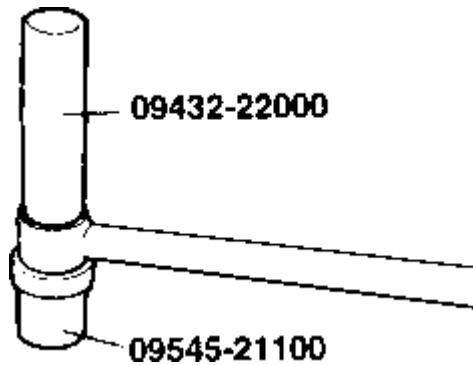
Press until the inner pipe projection is at the standard value.



MEASUREMENT SPECIFICATION	
A	5.3 - 4.7 mm
T	4.3 - 3.7 mm

TRAILING ARM BUSH REPLACEMENT

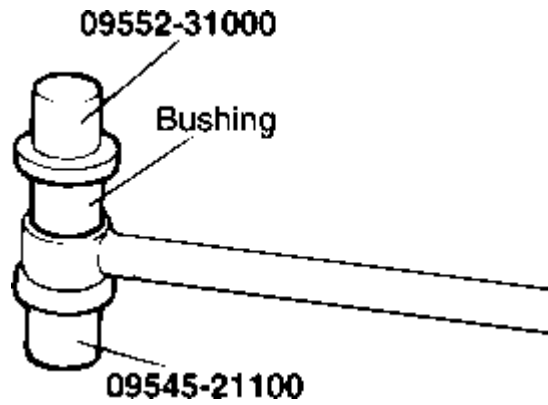
Install the special tools (09432-22000, 09545-21100) on the trailing arm.



Press out the bushing.

Apply soap solution to the new bushing and trailing arm bushing mount.

Install special tools (09545-21100, 09552-31000) and new bushing on to the trailing arm.

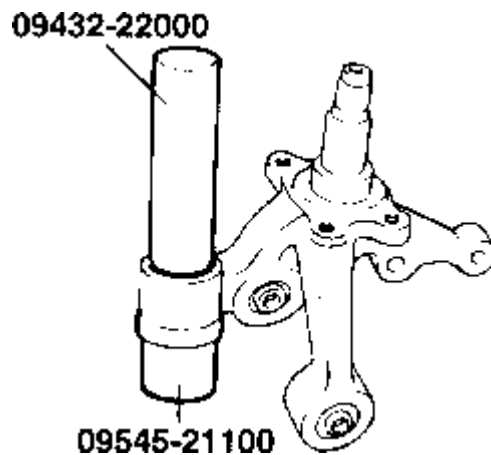


Press fit the bushing into the trailing arm bushing mount as shown in the illustration.

MEASUREMENT SPECIFICATION	
A	7.2 - 7.8 mm
angle infinity	0° ± 3° none

REAR AXLE CARRIER BUSH REPLACEMENT

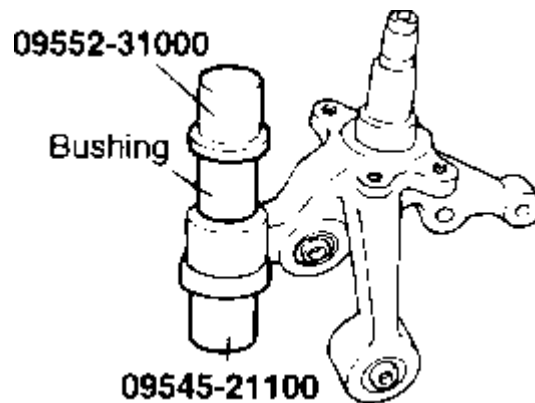
Install special tools (09432-22000, 09545-21100) on the rear axle carrier trailing arm bushing.



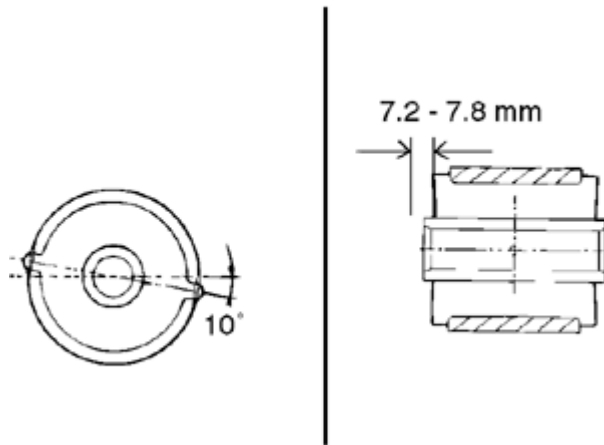
Press out the bushing.

Apply soap solution to the new bushing and trailing arm bushing mount.

Install special tools (09545-21100, 09552-31000) and new bushing onto the rear axle carrier.



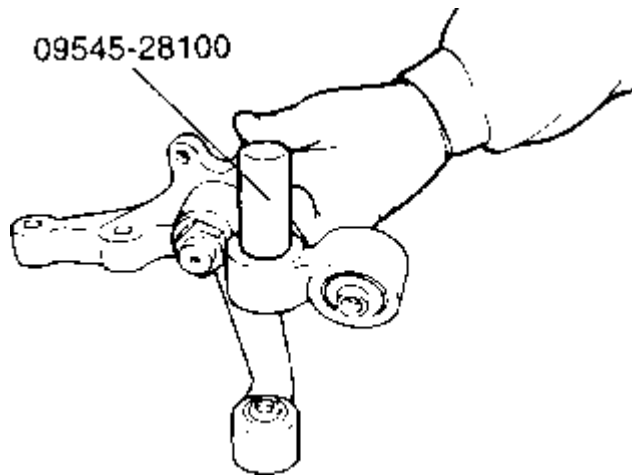
When press fitting, press in the direction of the arrow into the position as shown in the illustration.



Press fit the bushing in to the bushing mount.

MEASUREMENT SPECIFICATION	
A	7.2 - 7.8 mm (0.28-0.30 in)

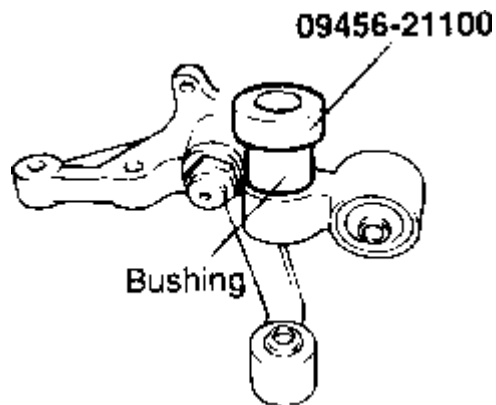
Install the special tool (09545-28100) on the rear axle carrier suspension arm bushing.



Press out the bushing.

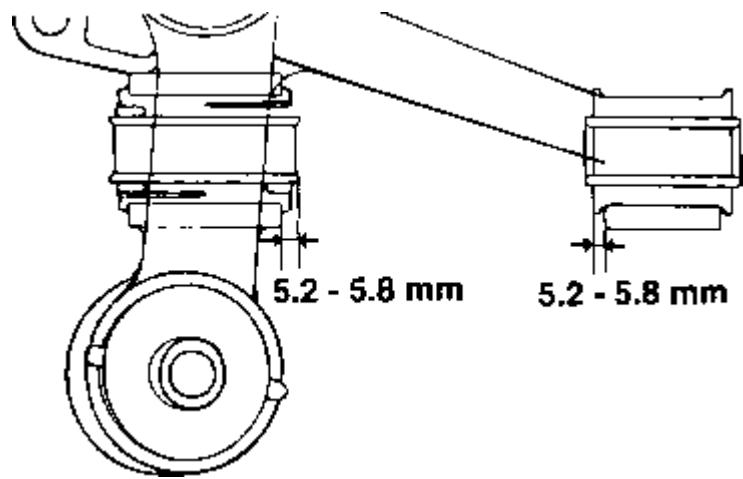
Apply soap solution to the new bushing and suspension arm bushing mount.

Install the special tool (09456-21100) and new bushing onto the rear axle carrier.



Press fit the bushing into the suspension arm bushing mount as shown in the illustration.

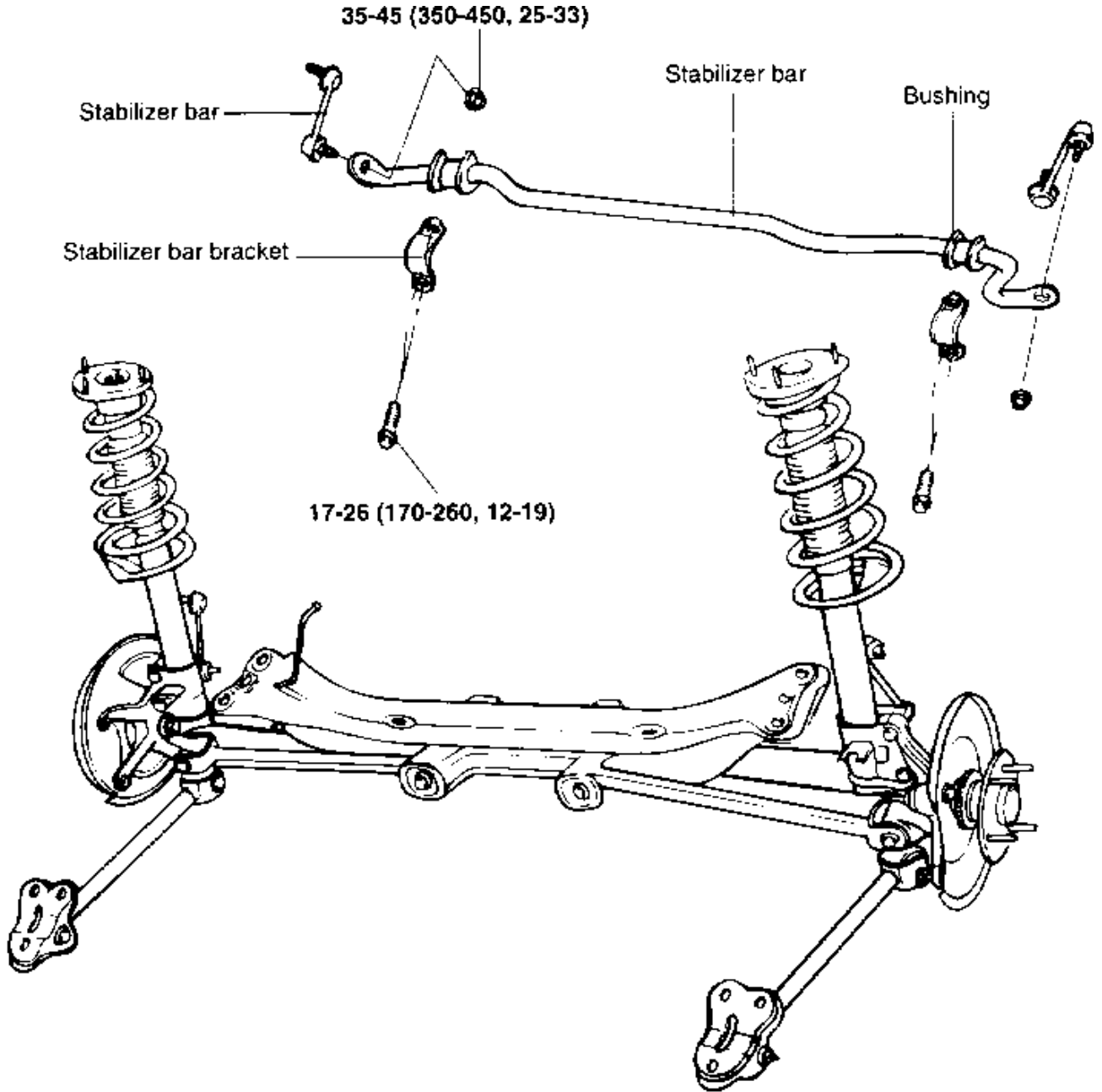
MEASUREMENT SPECIFICATION	
A	4.7 - 5.3 mm



SERVICE MANUAL	
Applies to: Hyundai Coupe/Tiburon 1998-2001	
GROUP	
Suspension System	Rear Suspension System

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

COMPONENTS



TORQUE : Nm (kg·cm, lb·ft)

SERVICE MANUAL	
Applies to: Hyundai Coupe/Tiburon 1998-2001	
GROUP	
Suspension System	Rear Suspension System

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

REMOVAL

Remove the stabilizer link mounting nuts.

Remove the stabilizer bar brackets and bushing.

Remove the stabilizer bar.

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

INSPECTION

Check the bushing for wear and deterioration.

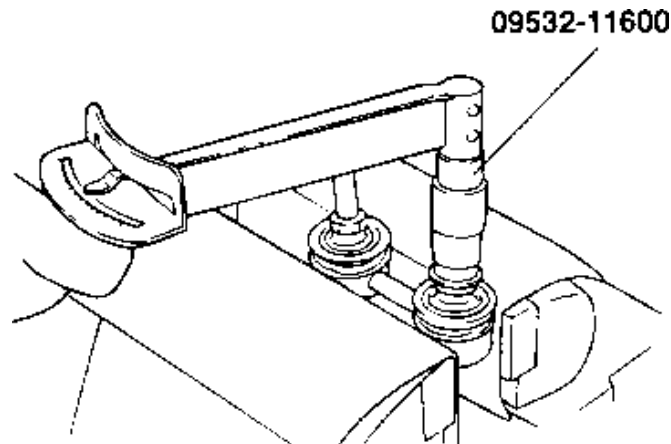
Check the stabilizer bar for deterioration or damage.

Check the stabilizer link ball joint dust cover for crack.

Check all bolts for condition and straightness.

CHECKING OF STABILIZER LINK BALL JOINT FOR STARTING TORQUE

With the special tool measure the ball joint continuous rotating torque.

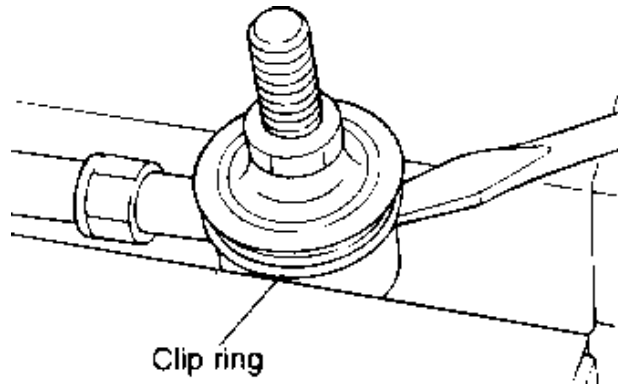


TORQUE SPECIFICATION	
Standard value	0.3-1 Nm (3-10 kg·cm, 2.7-8.8 lb·ft)

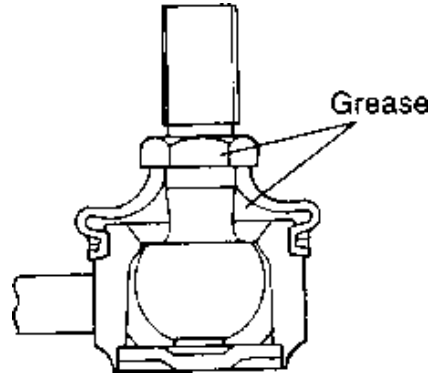
Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

BALL JOINT DUST COVER REPLACEMENT

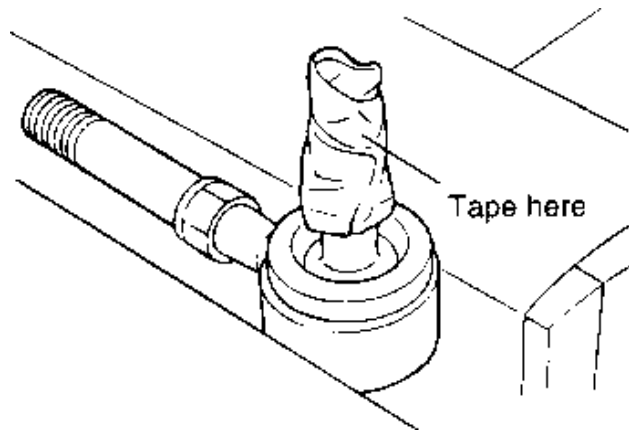
Remove the clip ring and the dust cover.



Apply multipurpose grease to the lip and inside of the dust cover.



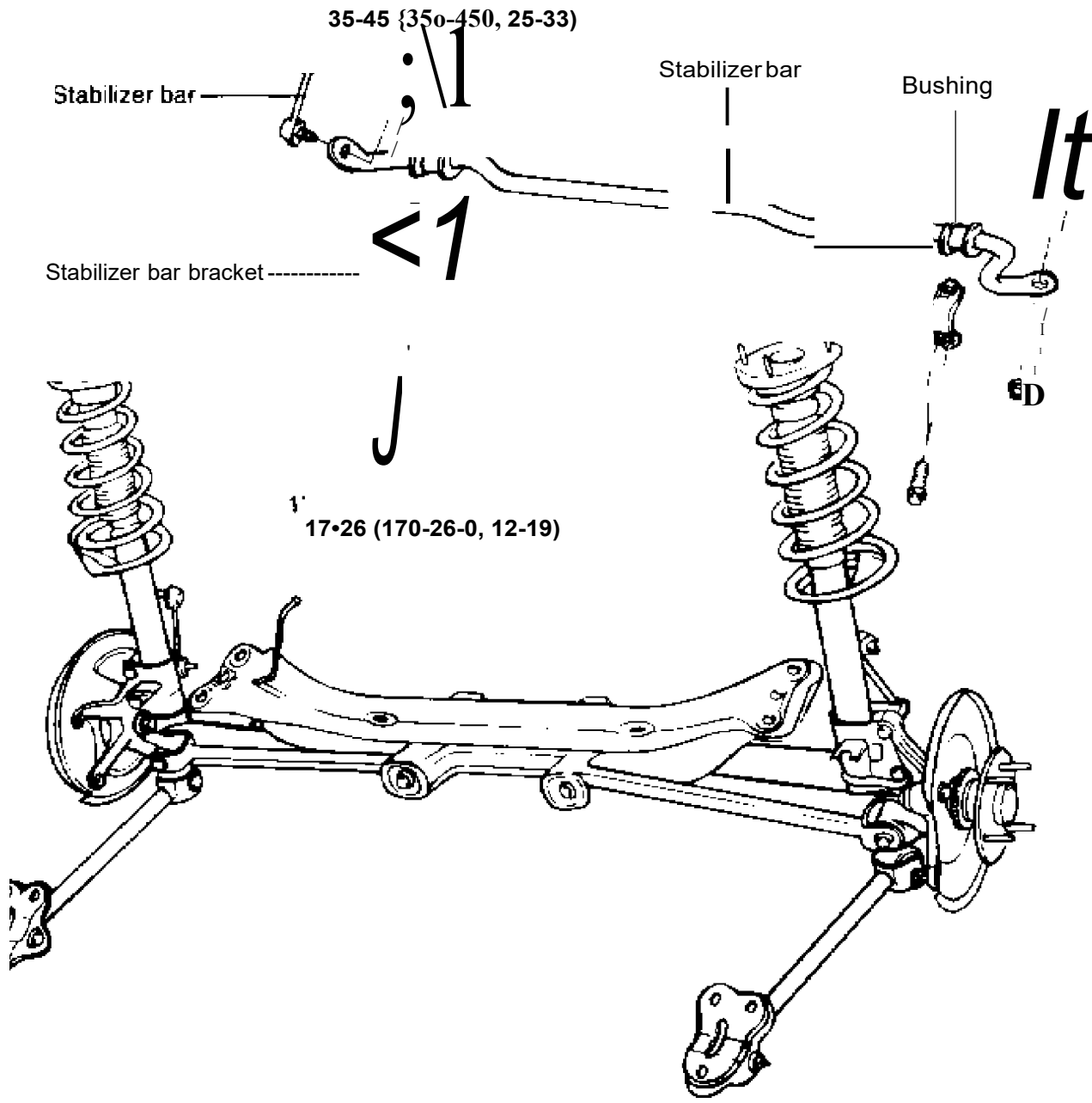
Use vinyl tape to tape the stabilizer link as shown in the illustration. Install the dust cover to the stabilizer link.



Secure the dust cover by the clip ring.

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COMPONENTS

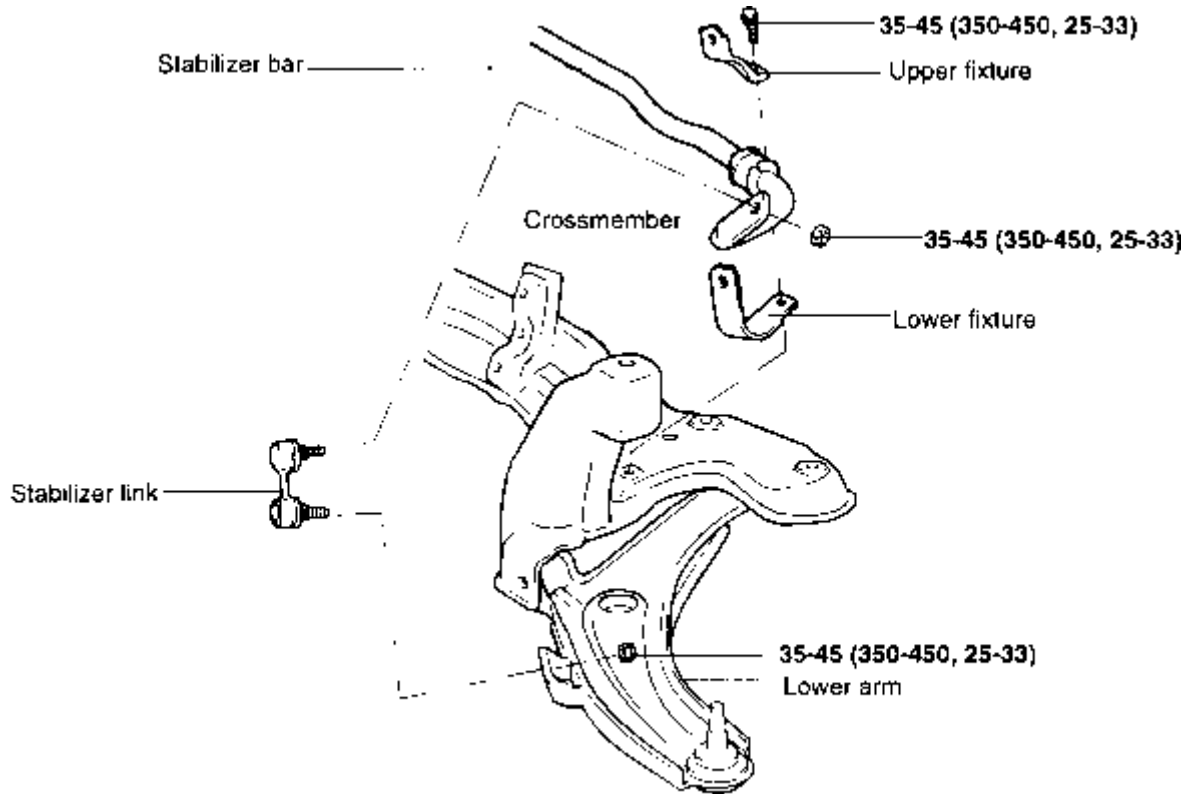


TORQUE: Nm (kg-cmi lb•ft)

SERVICE MANUAL	
Applies to: Hyundai Coupe/Tiburon 1998-2001	
GROUP	
Suspension System	Front Suspension System

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

COMPONENTS

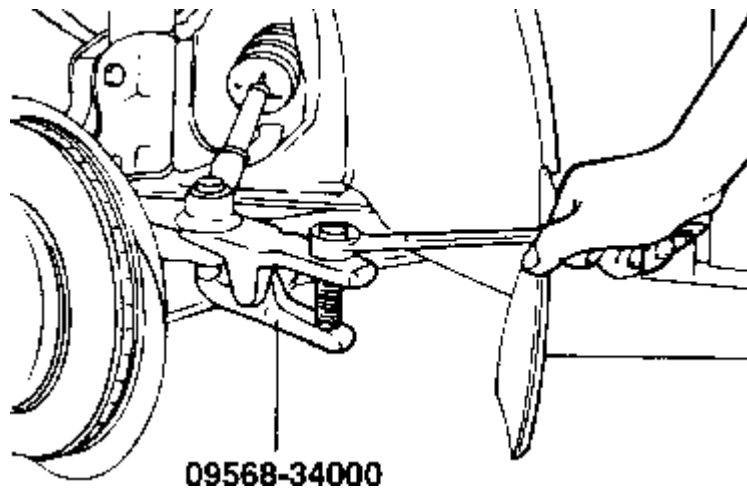


TORQUE : Nm (kg-cm, lb-ft)

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REMOVAL

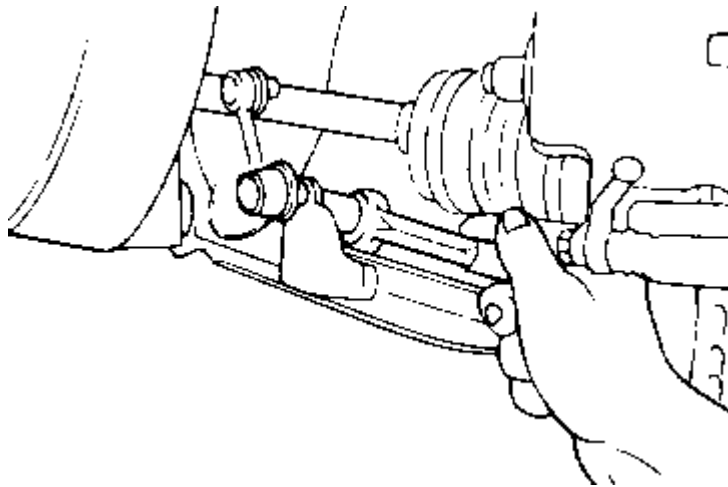
Disconnect the tie rod end ball joint from the knuckle using special tool.



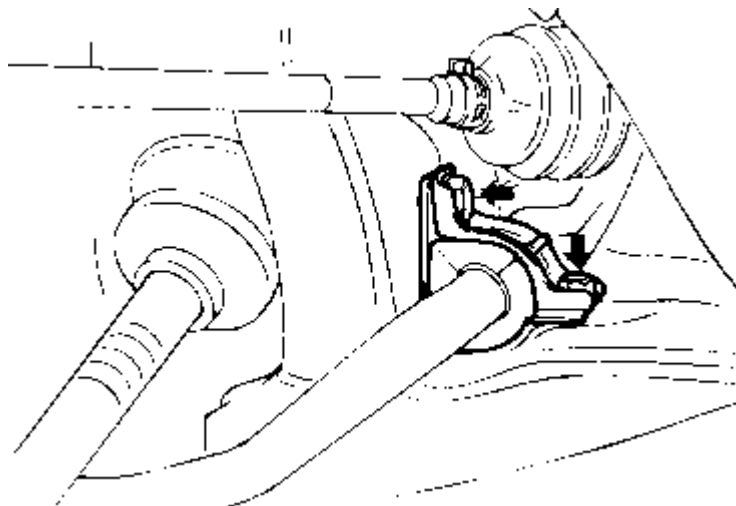
NOTE

Be sure to tie a cord to the special tool and to nearby part for safety.

Remove the stabilizer bar link self locking nut.



Remove the stabilizer bar mounting bracket.



Remove the steering gear box assembly. (Refer to the GROUP STEERING SYSTEM.)

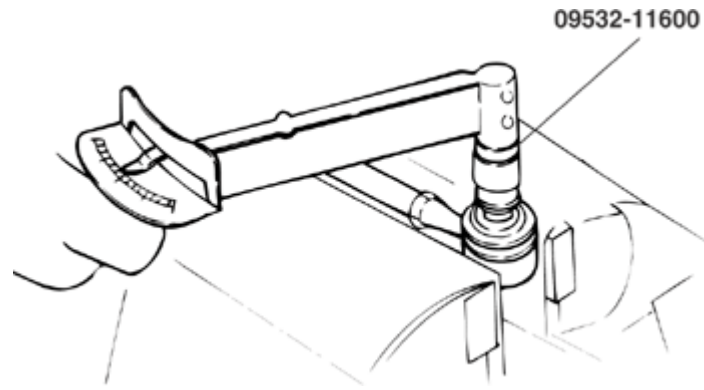
Remove the stabilizer bar through the access opening.

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

INSPECTION

Check all parts for cracks, damage and wear.

Check the stabilizer link ball joint rotation starting torque.



If there is a crack in the dust cover, replace it adding grease.

Shake the stabilizer link ball joint stud several times.

Mount the self-locking nut on the ball joint, and then measure the ball joint starting torque.

TORQUE SPECIFICATION	
Standard value	1.7-3.2 Nm (17-32 kg·cm, 15-27 lb·ft)

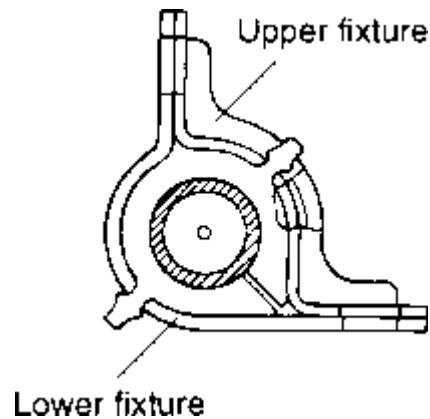
If the starting torque exceeds the upper limit of standard value, replace the stabilizer link.

Even if the starting torque is below the lower limit of the standard value, the ball joint may be reused unless it has drag and excessive play.

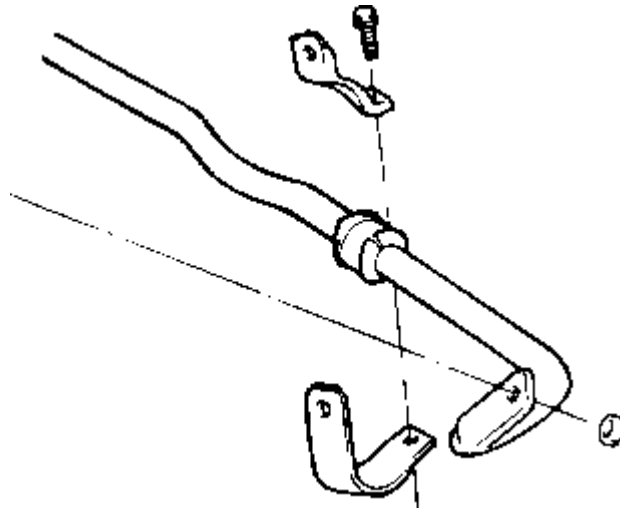
INSTALLATION

Install the bushing onto the stabilizer bar.

Align the upper and lower fixtures with the bushing. Make sure the projections are secured in the space between the fixtures.

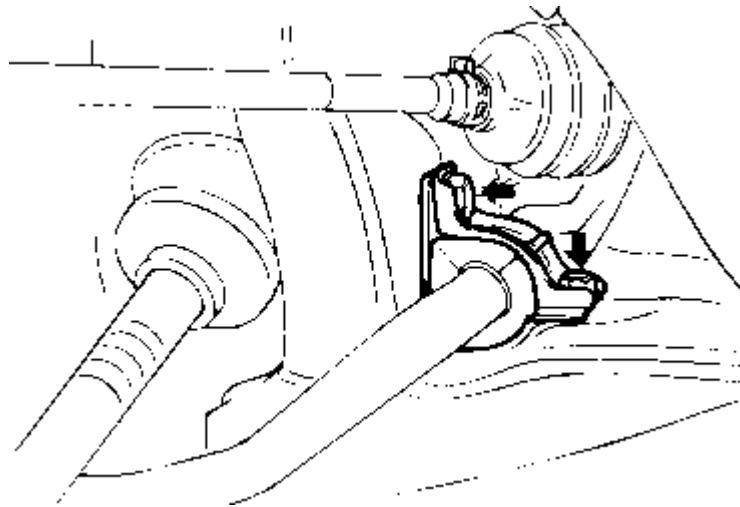


Using the access opening, temporarily tighten the bushing fixtures then position the opposite side bushing.



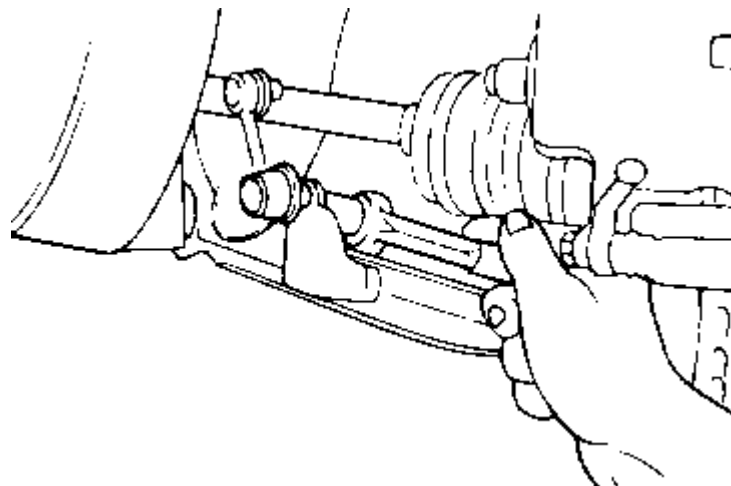
Install the steering gear box assembly.

Tighten the stabilizer bar mounting bracket bolts.



Tighten the stabilizer bar link mounting self locking nut.

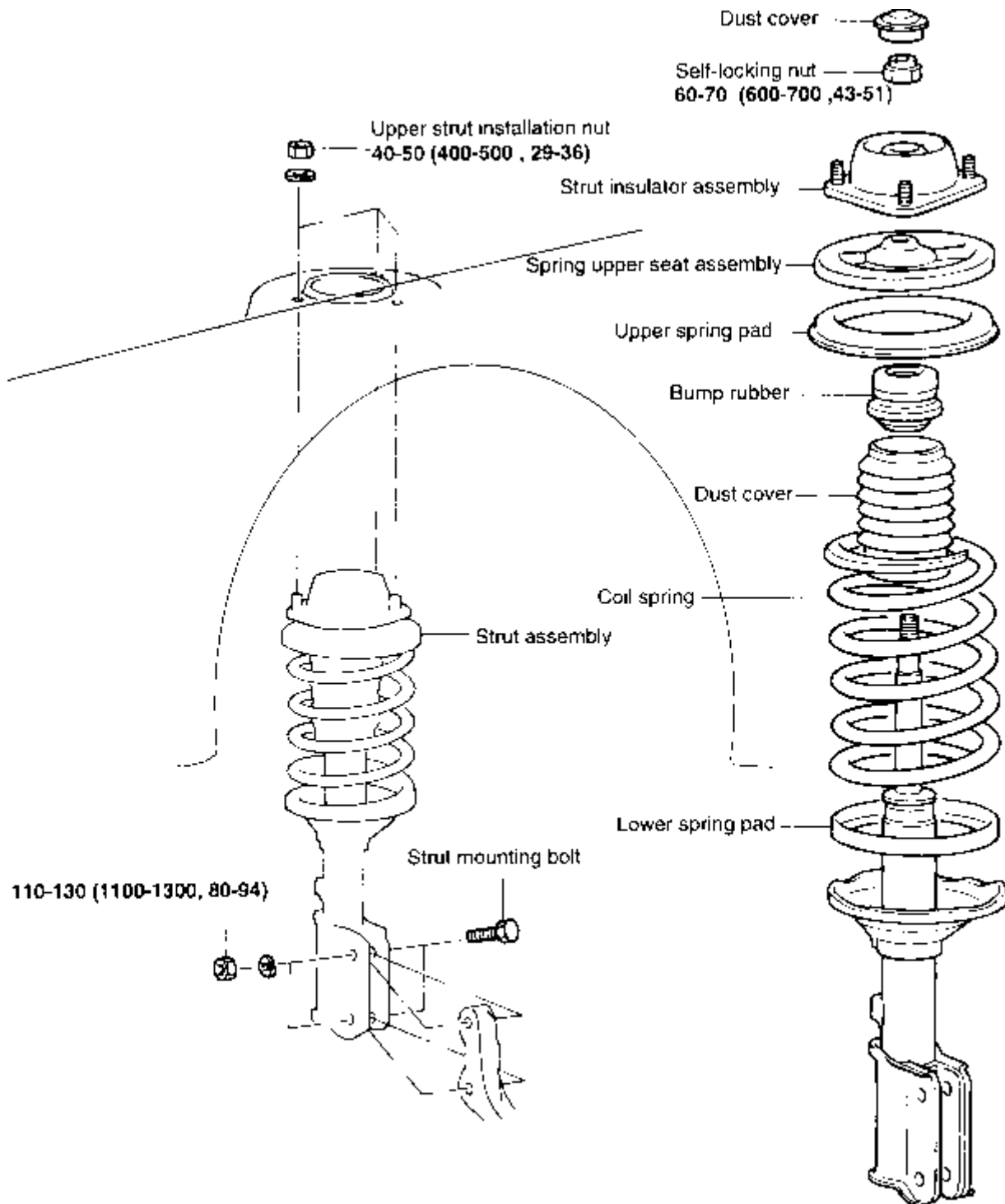
Connect the tie rod end ball joint to the knuckle.



SERVICE MANUAL	
Applies to: Hyundai Coupe/Tiburon 1998-2001	
GROUP	
Suspension System	Front Suspension System

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

COMPONENTS

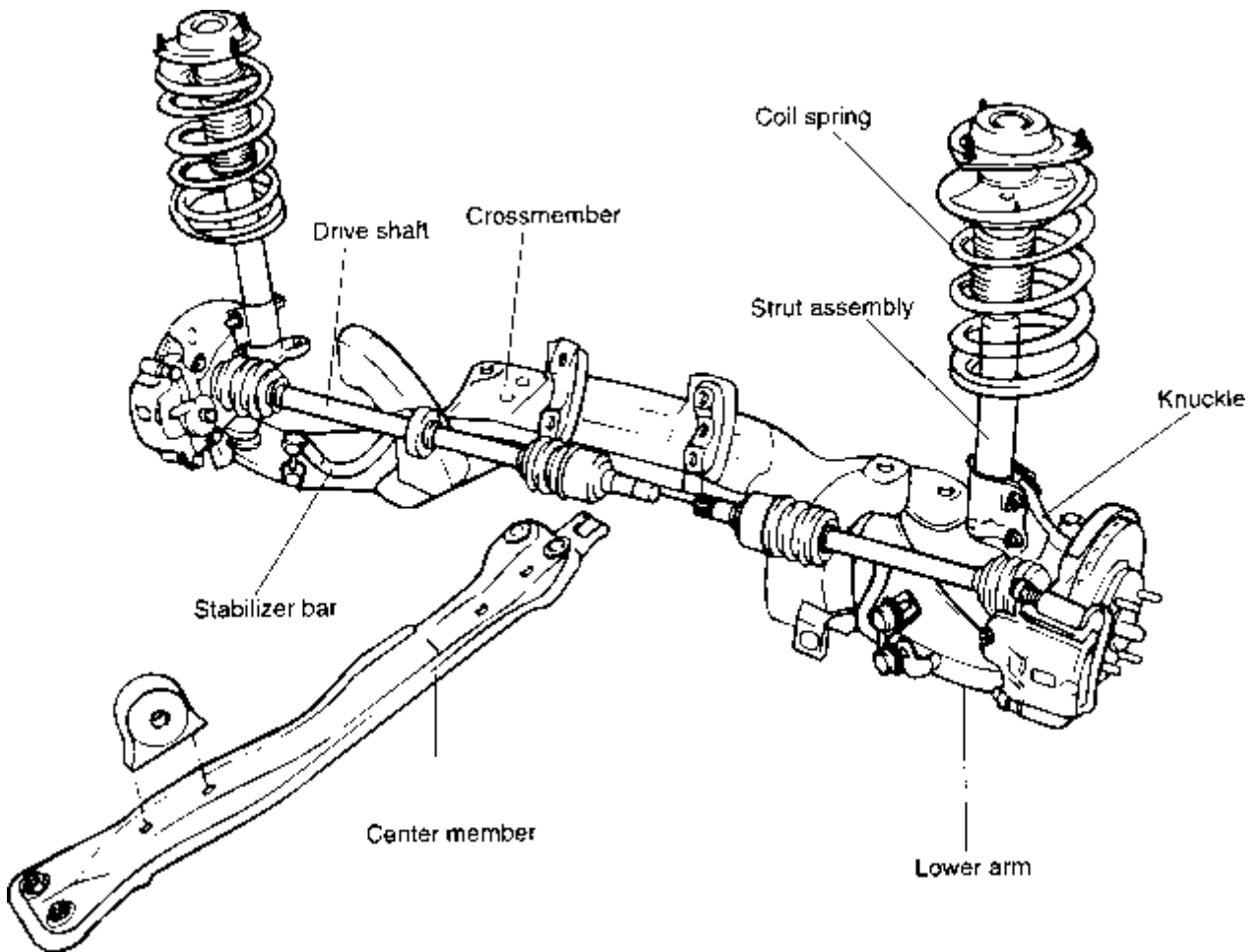


TORQUE : Nm (kg-cm, lb-ft)

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

GENERAL VIEW

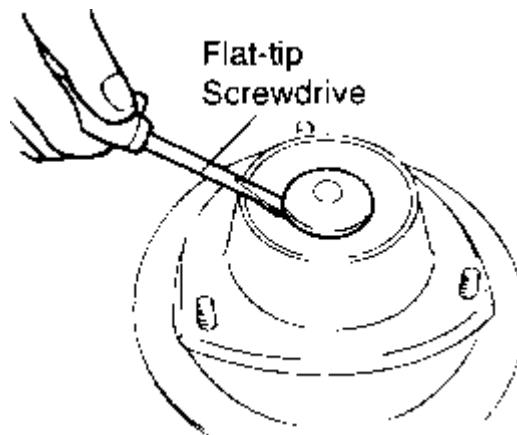
The front suspension is a MacPherson strut type independent suspension. The upper end of the strut assembly is attached to the wheel housing through a rubber insulator, while the lower end is attached to the steering knuckle. The knuckle is attached to the lower arm through the ball joint.



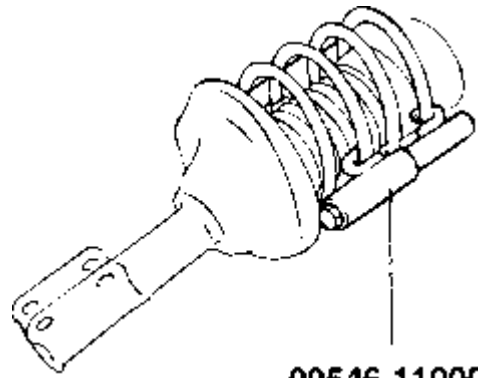
Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

REASSEMBLY

Install the lower spring pad so that the protrusions fit to the holes in the spring lower seat.

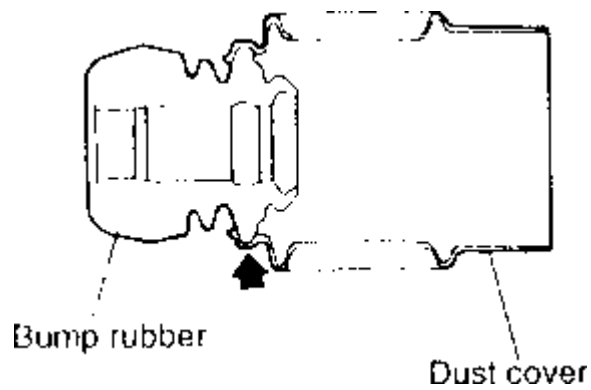


Attach the special tool to the front coil spring, then press it on the strut.

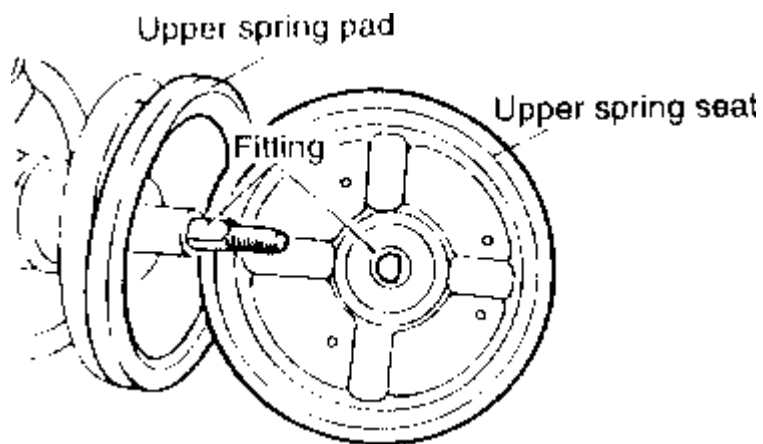


09546-11000

Join the dust cover and bump rubber.



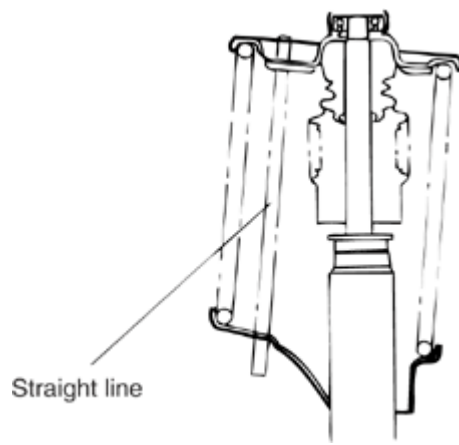
Assemble the spring upper seat to the piston rod, fitting the notch in the rod to the D shaped hole in the spring seat.



Line up the holes in the strut assembly spring lower seat with the hole in the spring upper seat.

NOTE

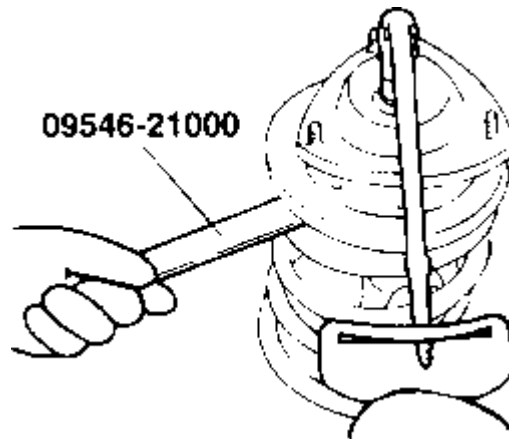
The job is easily accomplished with a guide pin [8 mm x 227 mm (0.32 in x 8.94 in.)].



Thread the self-locking nut onto the strut assembly.

Align the two ends of the coil spring to the grooves on the spring seat.

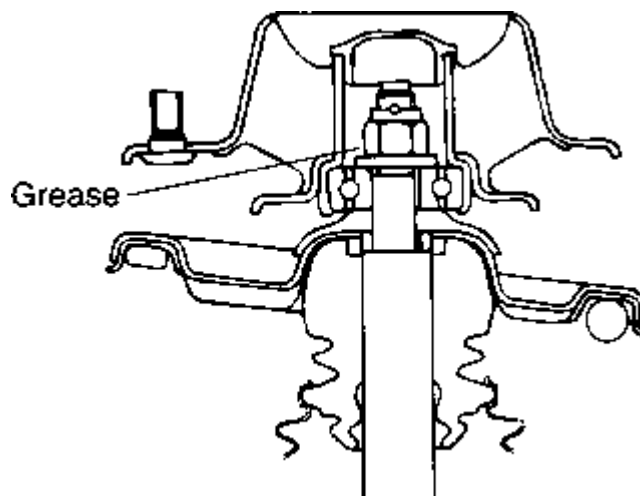
Using special tool, hold the upper spring seat and tighten the self-locking nut to the specified torque.



TORQUE SPECIFICATION

Tightening of spring seat to piston rod	60-70 Nm (600-700 kg·cm, 43-51 lb·ft)
---	---

Pack grease in the strut upper bearing and install the cap.



CAUTION

Make sure that no grease is on the insulator rubber.

Recommended grease SAE j310a, Chassis grease (NLGI No. 0, equivalent)

When installing the strut, the mating surface must be cleaned.

Tighten the following parts to the specified torque.

TORQUE SPECIFICATION	
Strut upper installation nut	40-50 Nm (400-500 kg·cm, 29-36 lb·ft)
Strut assembly to knuckle	110-130 Nm (1100-1300 kg·cm, 80-94 lb·ft)

Install the brake hose and front speed sensor wiring to the strut assembly.

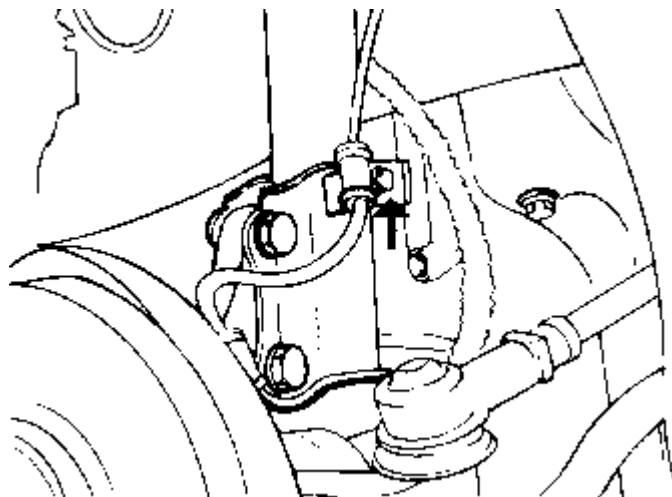
Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

REMOVAL

Raise the front of the vehicle and mount it on a jack stand.

Remove the wheel and tire.

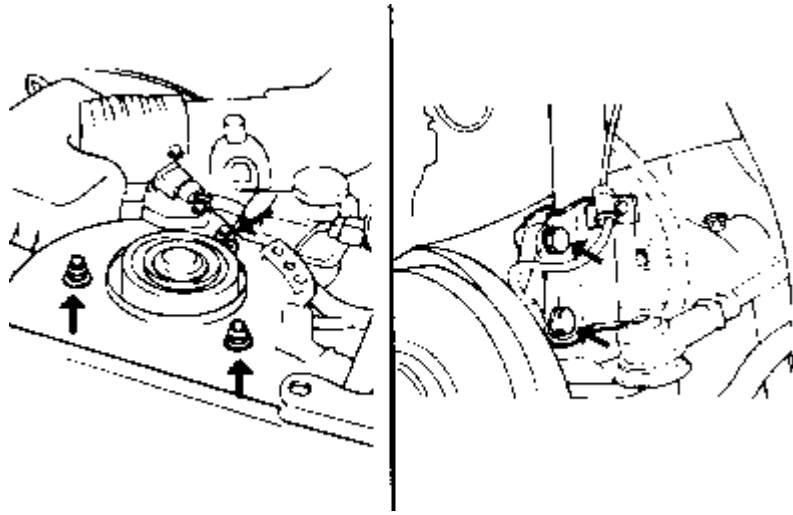
Detach the brake hose and front speed sensor wiring from the strut assembly.



NOTE

Do not pry or force the components.

Remove the strut assembly from the knuckle and wheel house.

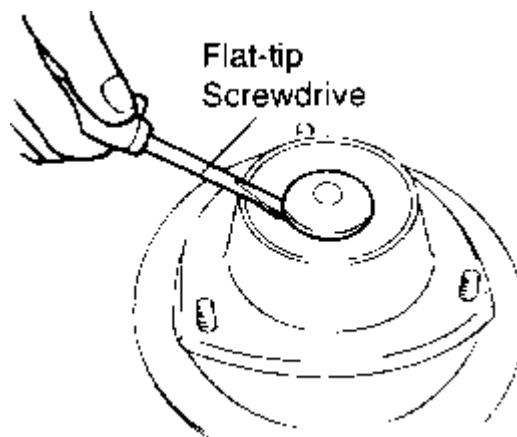


Having removed the union between the strut and the knuckle, jack up the lower arm. Attach the brake hose, brakeline, front speed sensor wiring harness and drive shaft to the knuckle with wire to prevent them from being damage.

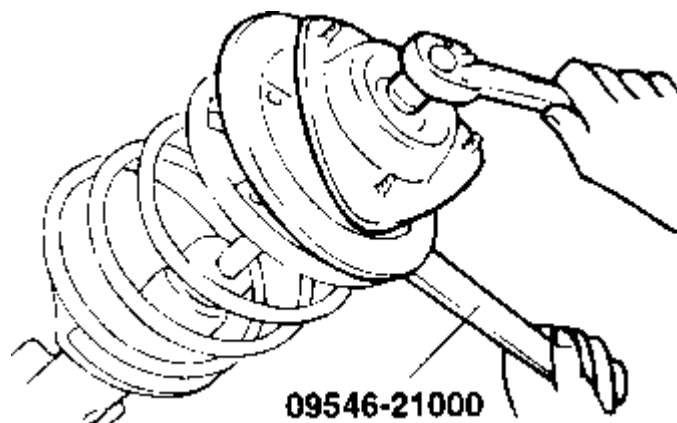
Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

DISASSEMBLY

Remove the dust cover with a flat-tip screwdriver.



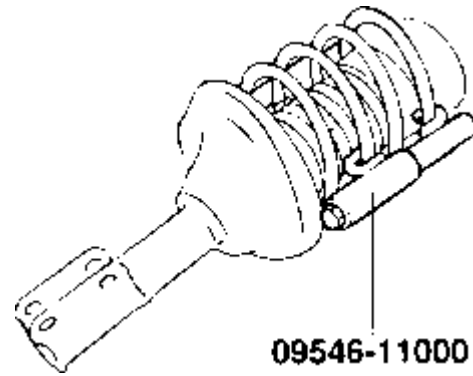
While holding the spring upper seat with the special tool, loosen the self-locking nut.



CAUTION

The self-locking nut should be loosened only, don't removed.

Press the front coil spring with the special tool.

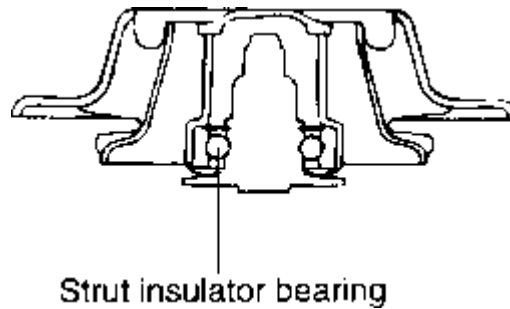


Remove the self-locking nut from the strut assembly.

Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

INSPECTION

Check the strut insulator bearing for wear or rust.



Check the rubber parts for damage or deterioration.

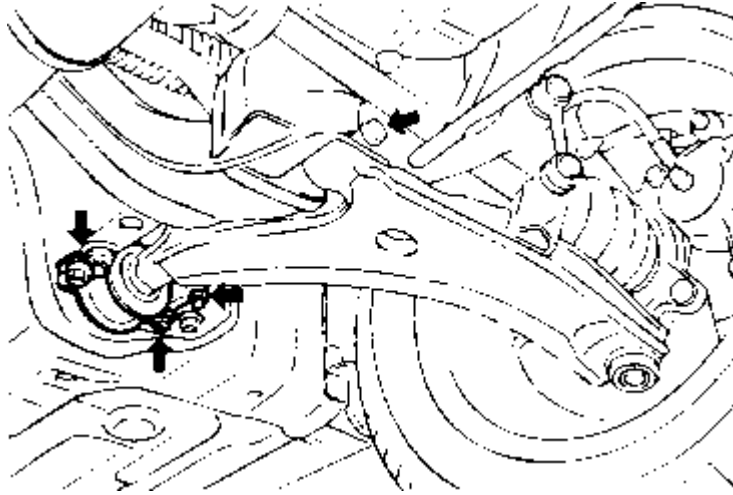
Check the spring for deformation, deterioration or damage

SERVICE MANUAL	
Applies to: Hyundai Coupe/Tiburon 1998-2001	
GROUP	
Suspension System	Front Suspension System

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INSTALLATION

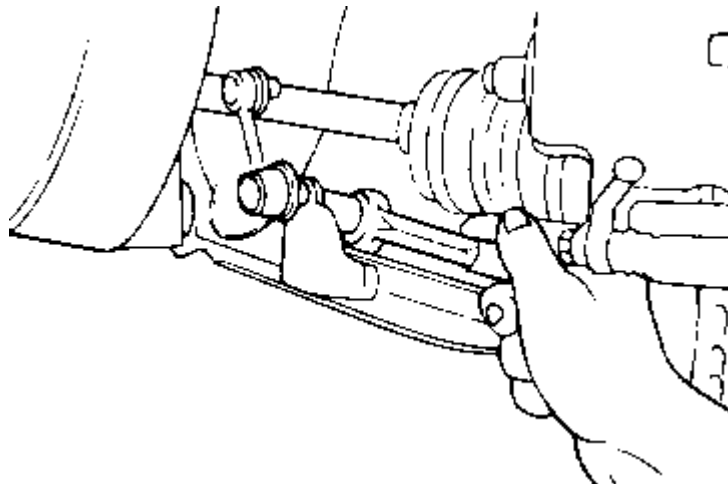
Install the lower arm mounting bolt and nut.



TORQUE SPECIFICATION	
Lower arm bush A mounting bolt	100-120 Nm (1000-1200 kg·cm, 72-87 lb·ft)
Lower arm rod bush mounting bolt	80-100 Nm (800-1000 kg·cm, 58-72 lb·ft)
Lower arm rod bush mounting nut	35-45 Nm (350-450 kg·cm, 25-33 lb·ft)

Tighten the stabilizer link mounting self-locking nut.

Install the lower arm ball joint to the knuckle.

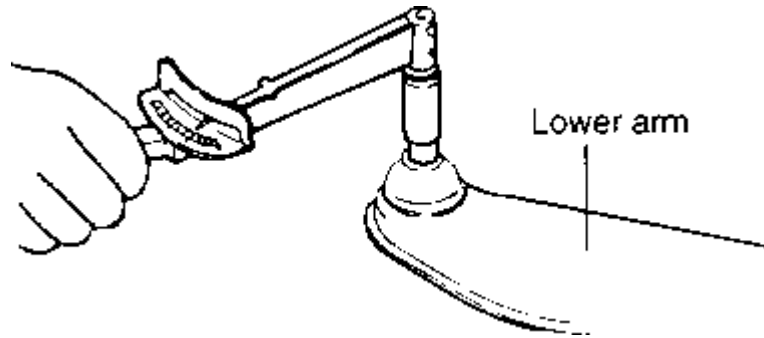


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INSPECTION

Check the bushing for wear and deterioration.

Check the lower arm for bending or breakage.



Check the clamp for deterioration or damage.

Check the ball joint dust cover for cracks.

Check all bolts.

Check the ball joint for starting torque.

If a crack is noted in the dust cover, replace it and add grease.

Shake the ball joint stud several times.

Mount two nuts on the ball joint, then measure the ball joint starting torque.

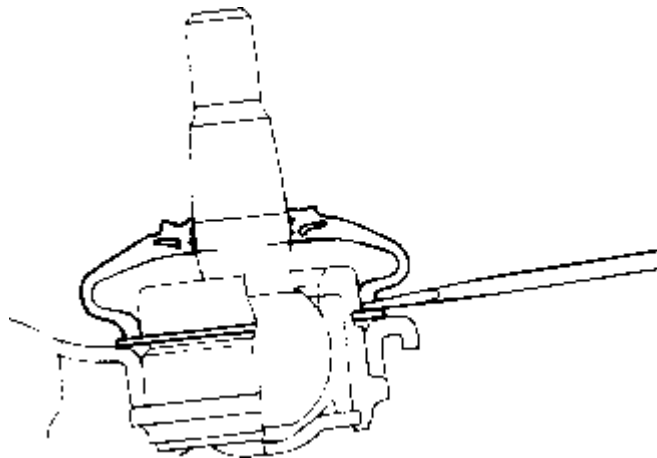
TORQUE SPECIFICATION	
Ball joint starting torque	2-10 Nm (20-100 kg·cm, 17.7-88.5 lb·ft)

If the starting torque exceeds the upper limit of standard value, replace the tie rod end.

Even if the starting torque is below the lower limit of the standard value, the ball joint may be reused unless it has drag and excessive play.

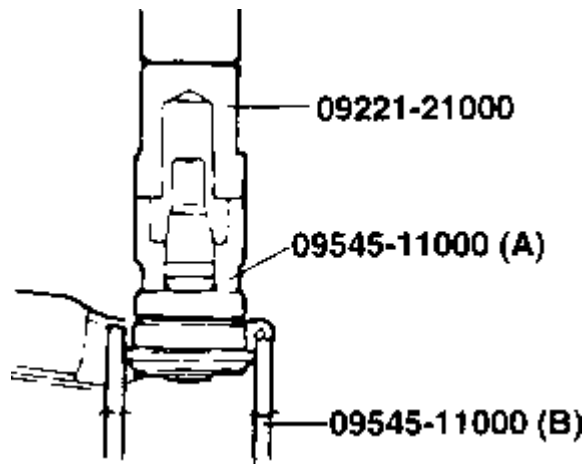
BALL JOINT AND DUST COVER REPLACEMENT

Using a screwdriver, remove the dust cover from the lower arm ball joint.



Remove the snap ring.

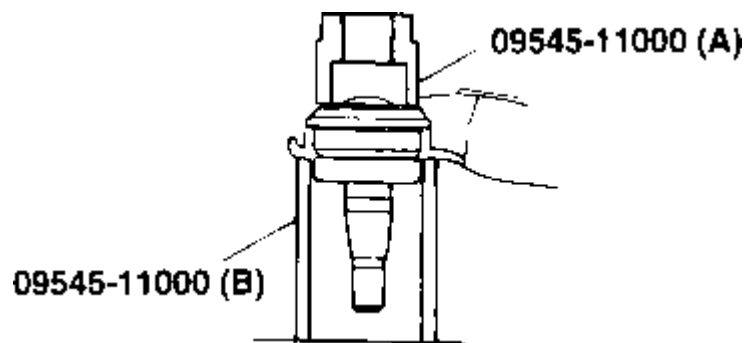
Using the special tools, remove the ball joint from the lower arm assembly.



Press fit the ball joint into the lower arm assembly.

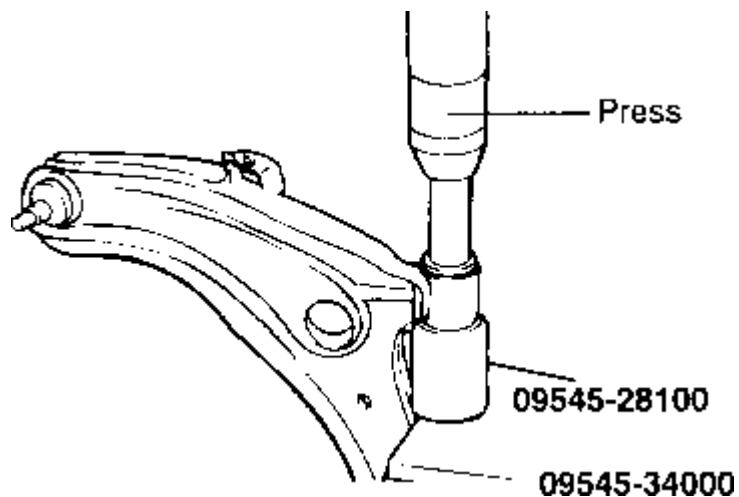
Pack the specified grease or equivalent in the new dust cover.

Press fit the dust cover to the ball joint with special tool.



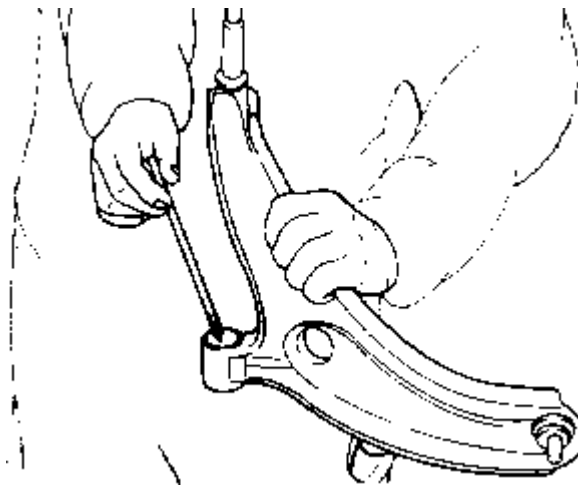
LOWER ARM BUSHING (A) REPLACEMENT

Install the Special Tools (09545-34000, 09545-28100) on the lower arm.



Press out the bushing.

Apply soap solution to following portions.

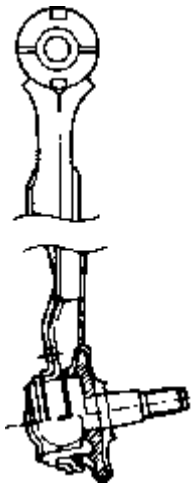


Outer surface of the new bushing.

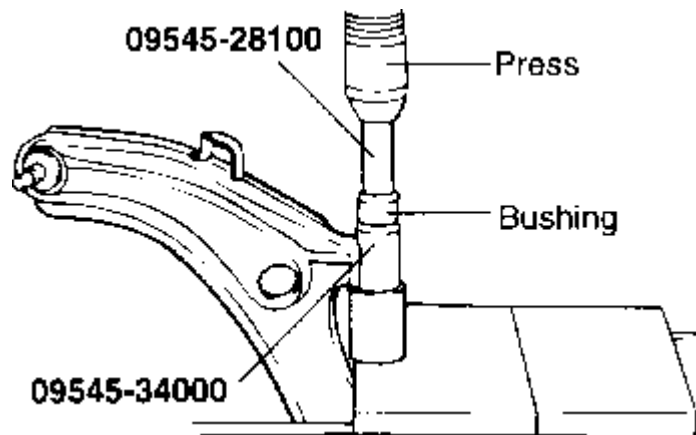
Inner surface of the lower arm bushing mount.

Inner surface of the Special Tools.

Install the new bushing onto the lower arm as shown in the illustration.



Install the Special Tools and new bushing onto the lower arm.



Press fit the bushing into the lower arm bushing mount.

Center the bushing by the following procedure, if necessary.

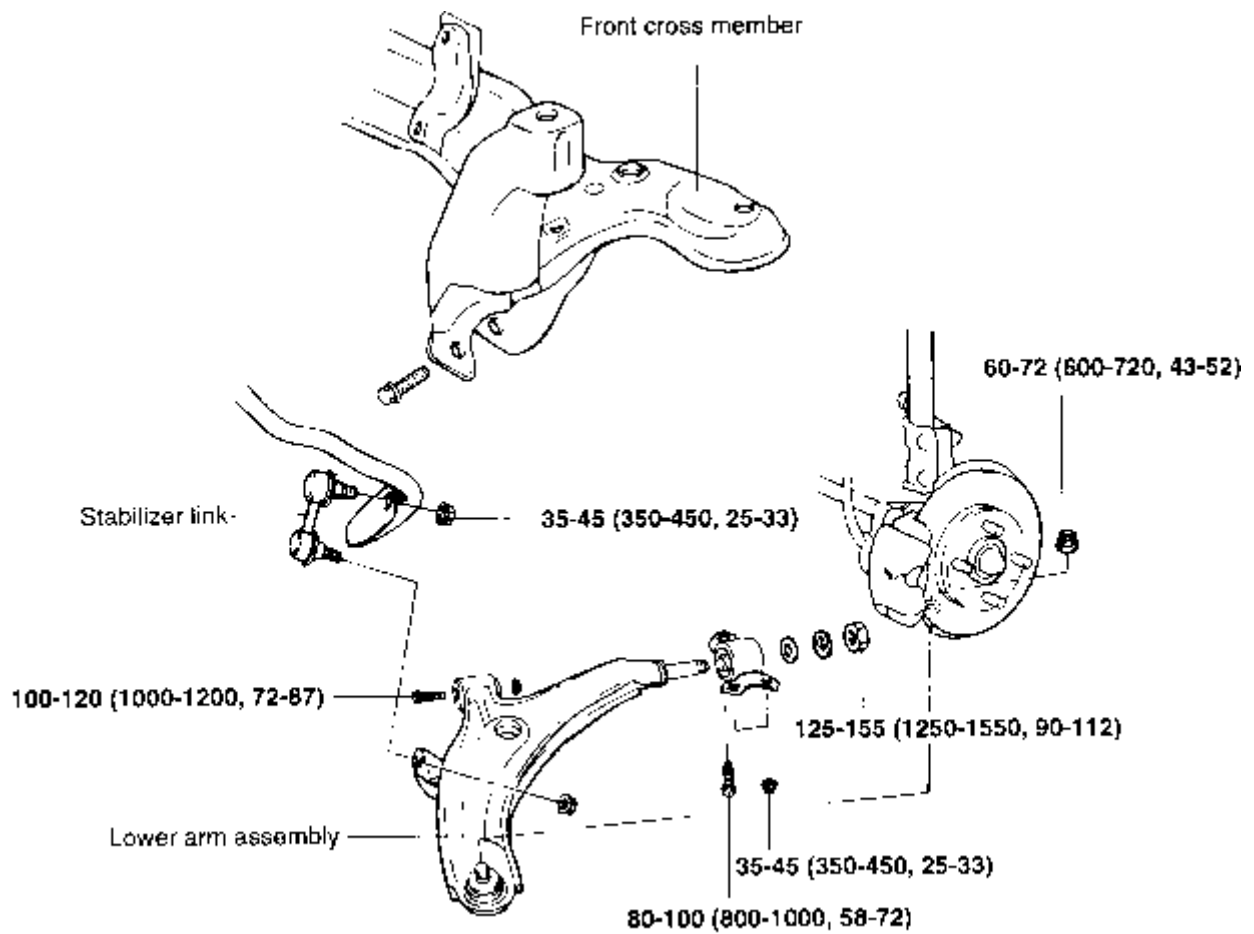
Reset the Special Tools and lower arm.

Center the bushing.

NOTE

After centering the bushing, wipe off the soap solution.

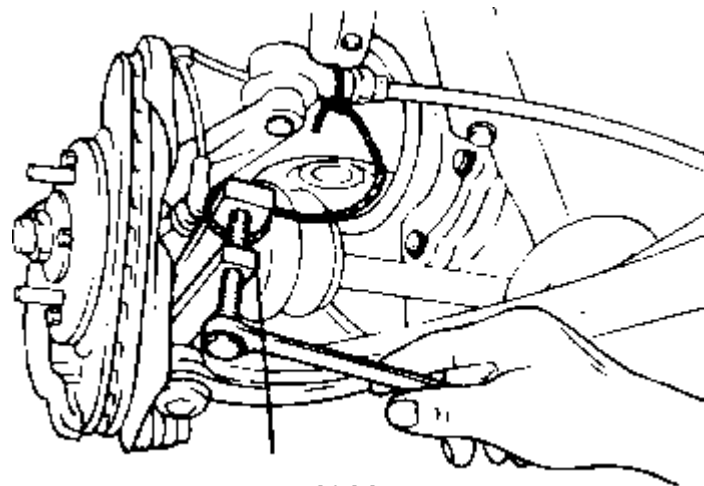
COMPONENTS



TORQUE : Nm (kg-cm, lb-ft)

REMOVAL

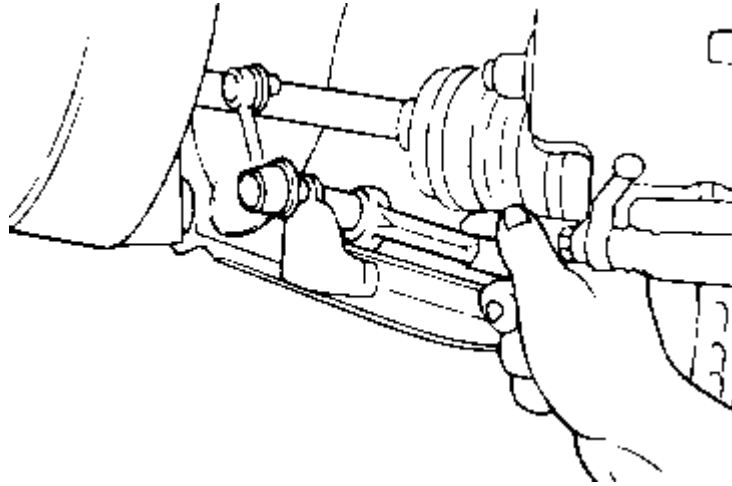
Using the special tool, disconnect the lower arm ball joint from the knuckle.



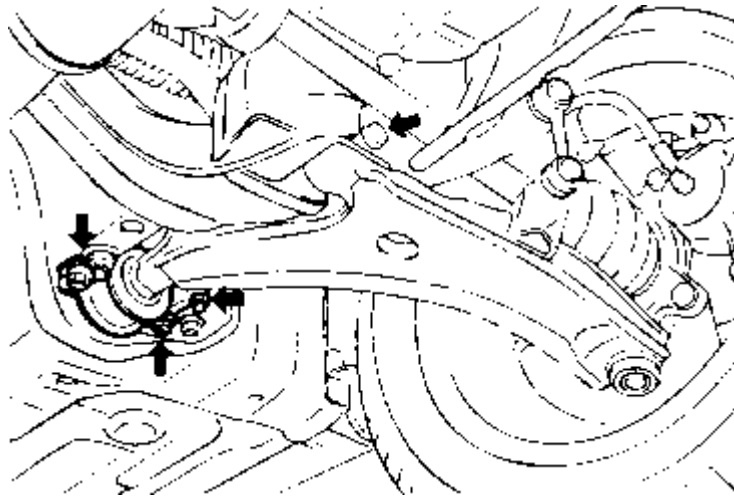
NOTE

Loosen the nut but do not remove it. Be sure to tie a cord to the special tool to a nearby part.

Remove the stabilizer link mounting self-locking nut, and detach the stabilizer bar from the lower arm.



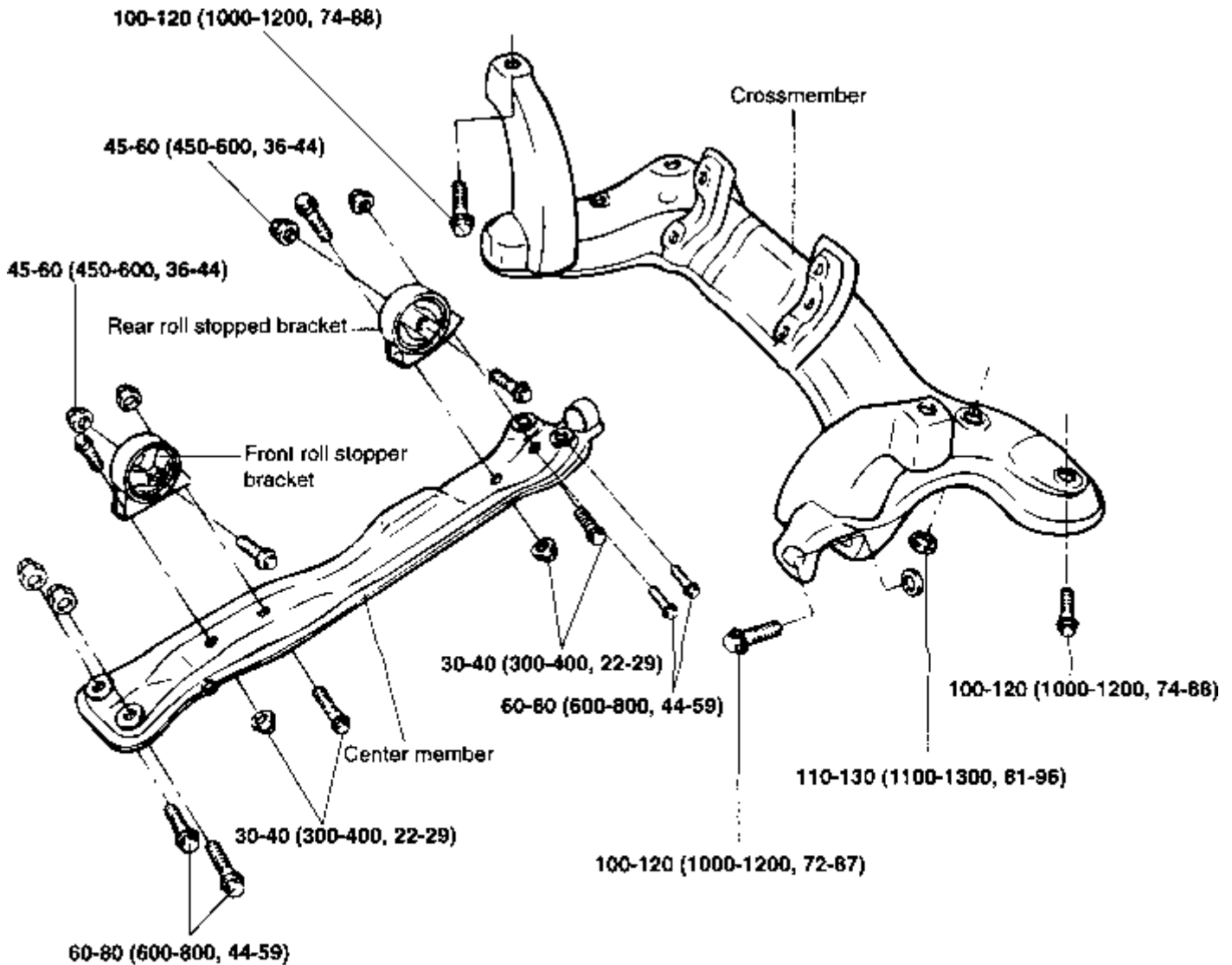
Remove the lower arm mounting nut and bolt.



SERVICE MANUAL	
Applies to: Hyundai Coupe/Tiburon 1998-2001	
GROUP	
Suspension System	Front Suspension System

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COMPONENTS

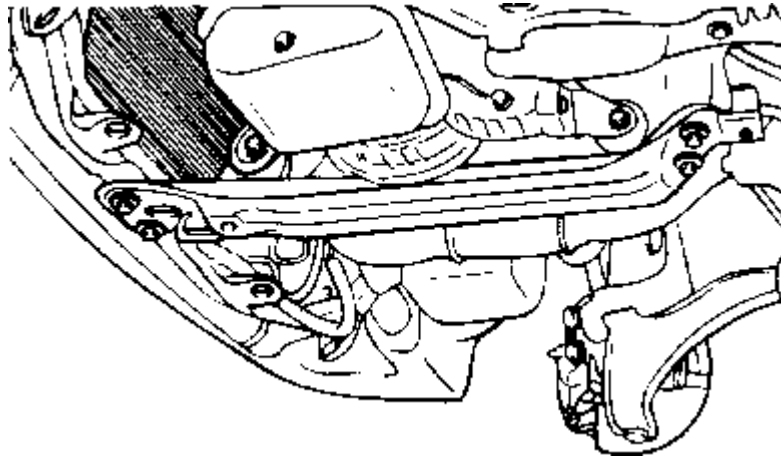


TORQUE : Nm (kg-cm, lb-ft)

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REMOVAL

Raise the vehicle and position the jack stands.

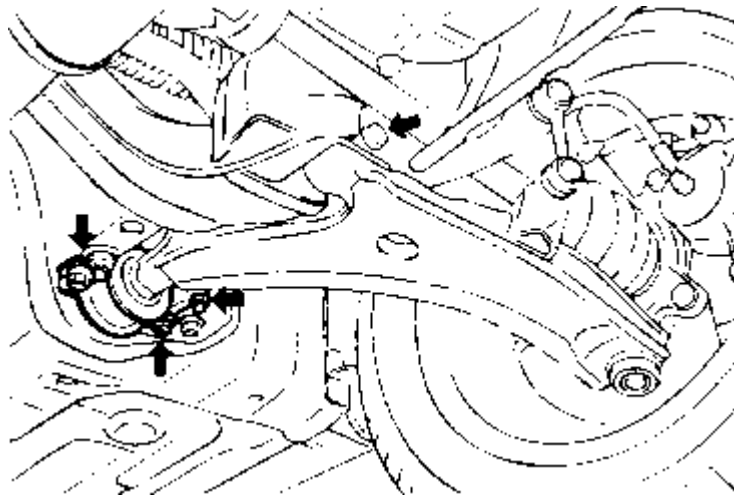


Detach the front and rear roll stopper brackets from the engine mounting bracket.

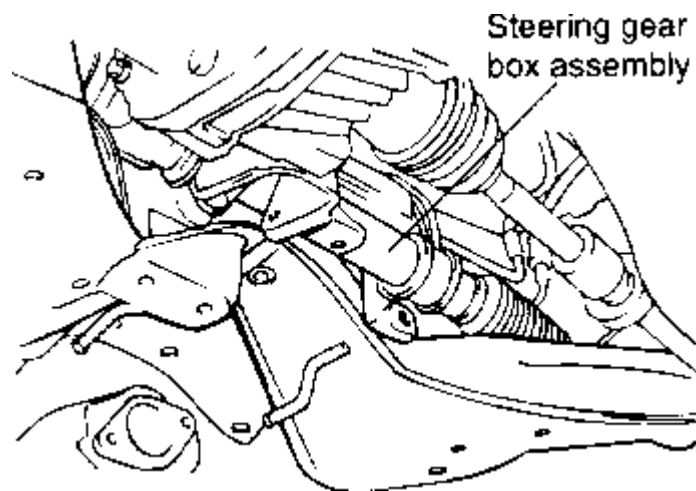
Remove the center member assembly.

Remove the stabilizer bar link mounting nut.

Remove the lower arm bushing mounting bolts and nuts.



To remove the crossmember, remove steering gear box mounting bolts, and then support the steering gear and linkage on the vehicle side as illustration.



Remove the crossmember.

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INSPECTION

Check the crossmember for cracks or deformation.

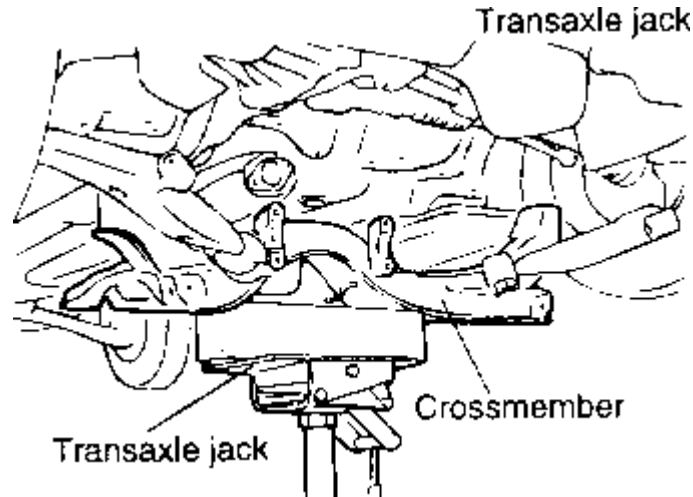
Check each insulator and the bushings for cracks or deterioration.

Check the center member for cracks or deformation.

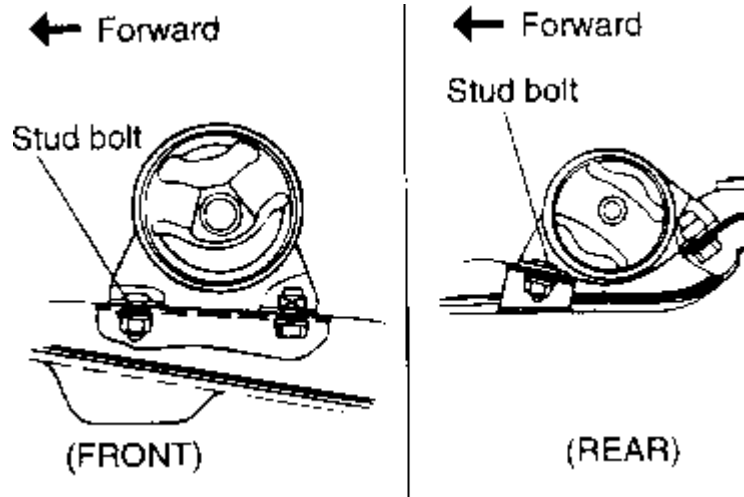
Return to Main Menu(s): [Mechanical Manual](#) [Electrical Manual](#)

INSTALLATION

Install the crossmember while supporting it with a transaxle jack.



Install steering gear box assembly and stabilizer bar link to the vehicle.



Install lower arm bushing mounting bolts and nuts.

Install front and rear roll stopper brackets to the center member as illustration.

Install the center member assembly.

Temporarily tighten the front roll stopper bracket bolt. After the total weight of the engine has been placed on the vehicle body, securely tighten the nut.

TORQUE SPECIFICATION	
Center member mounting bolt	60-80 Nm (600-800 kg·cm, 43-58 lb·ft)
Front roll stopper bracket	30-40 Nm (300-400

to member bolt	kg·cm, 25-29 lb·ft)
Rear roll stopper bracket to center member bolt	30-40 Nm (300-400 kg·cm, 25-29 lb·ft)
Insulator to transaxle mounting bracket bolts	45-60 Nm (450-600 kg·cm, 33-43 lb·ft)