

# FRONT AXLE & FRONT SUSPENSION

## SECTION **FA**

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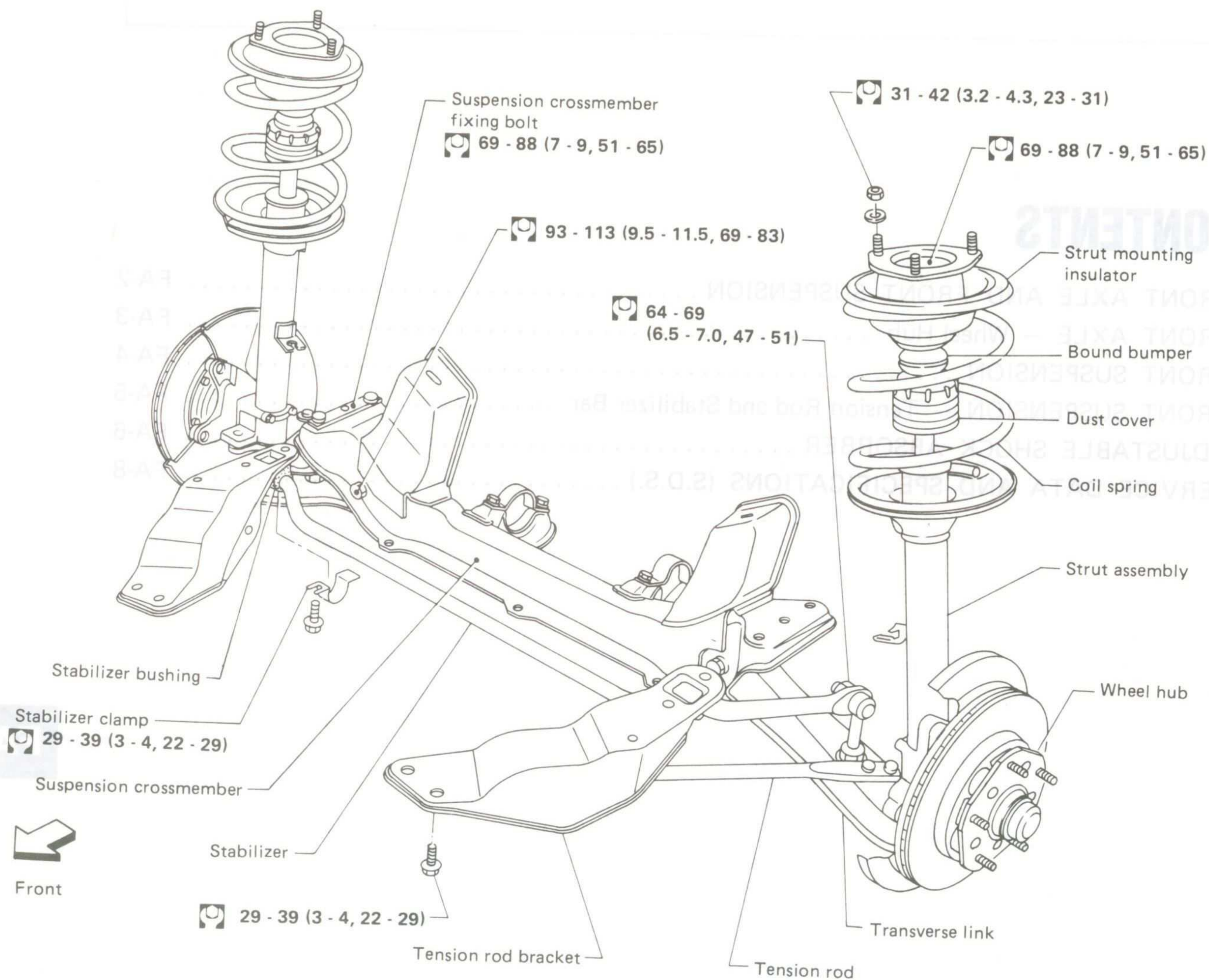
**FA**

# FRONT AXLE AND FRONT SUSPENSION

## Wheel alignment

- Camber, caster and kingpin inclination are preset at factory and cannot be adjusted.
- The vehicle requires only toe-in adjustment.  
1 - 3 mm (0.04 - 0.12 in)  
6' - 17' (Total toe-in)

Refer to section MA for Checking Wheel Alignment.



## Wheel bearing

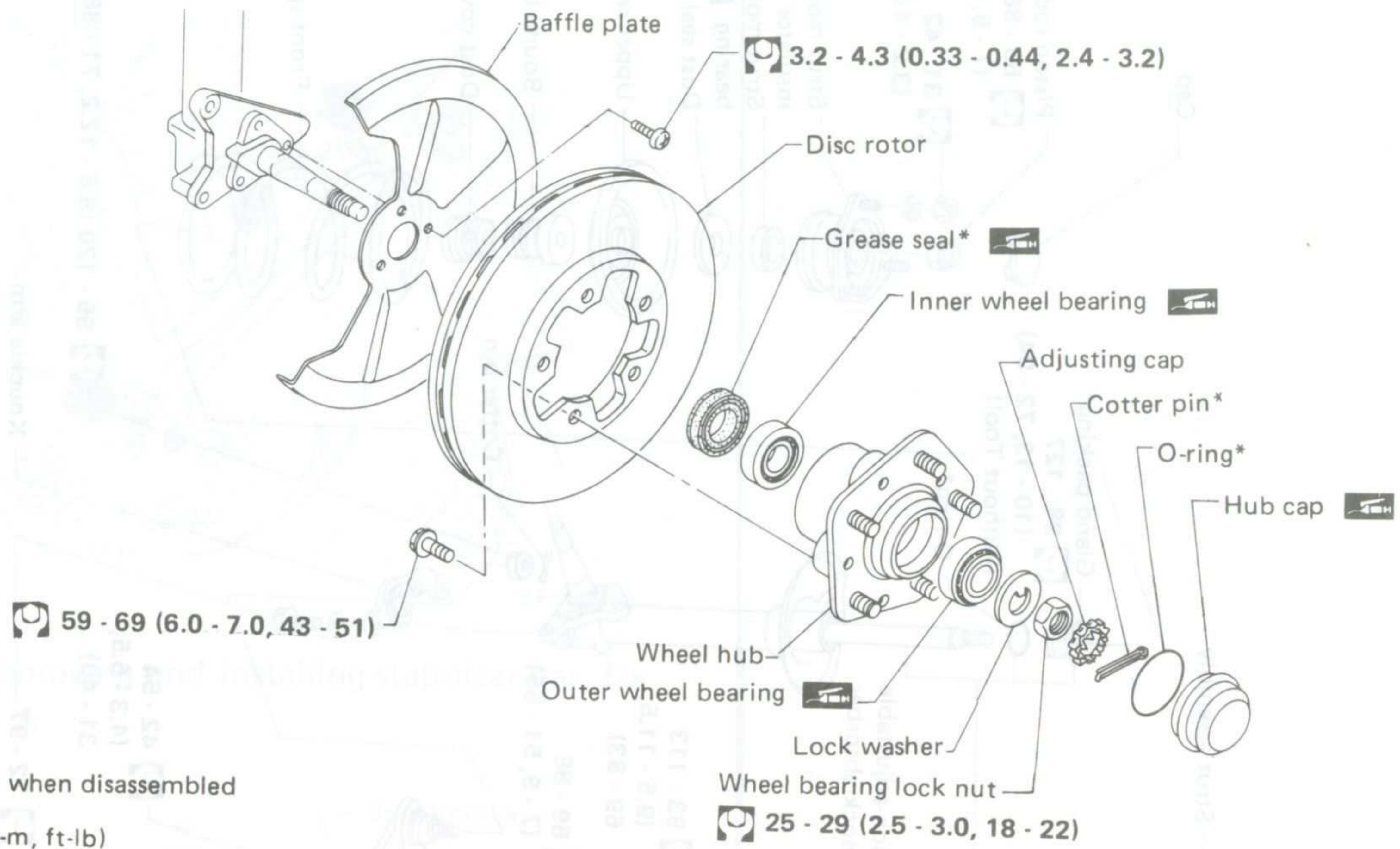
- Do not overtighten wheel bearing nut, as this can cause wheel bearing seizure.
- Axial play: 0 mm (0 in)
- Tightening torque 25 - 29 N·m (2.5 - 3.0 kg·m, 18 - 22 ft·lb)
- Return angle 60°
- Rotation starting torque  
with new grease seal 0.39 - 0.83 N·m (4.0 - 8.5 kg·cm, 3.5 - 7.4 in·lb)  
with used grease seal 0.10 - 0.44 N·m (1.0 - 4.5 kg·cm, 0.87 - 3.91 in·lb)  
As measured at wheel hub bolt  
with new grease seal 6.86 - 14.61 N (0.70 - 1.49 kg, 1.54 - 3.29 lb)  
with used grease seal 1.67 - 7.75 N (0.17 - 0.79 kg, 0.37 - 1.74 lb)
- When measuring starting torque, do not include "dragging" resistance with brake pads.

: N·m (kg·m, ft·lb)

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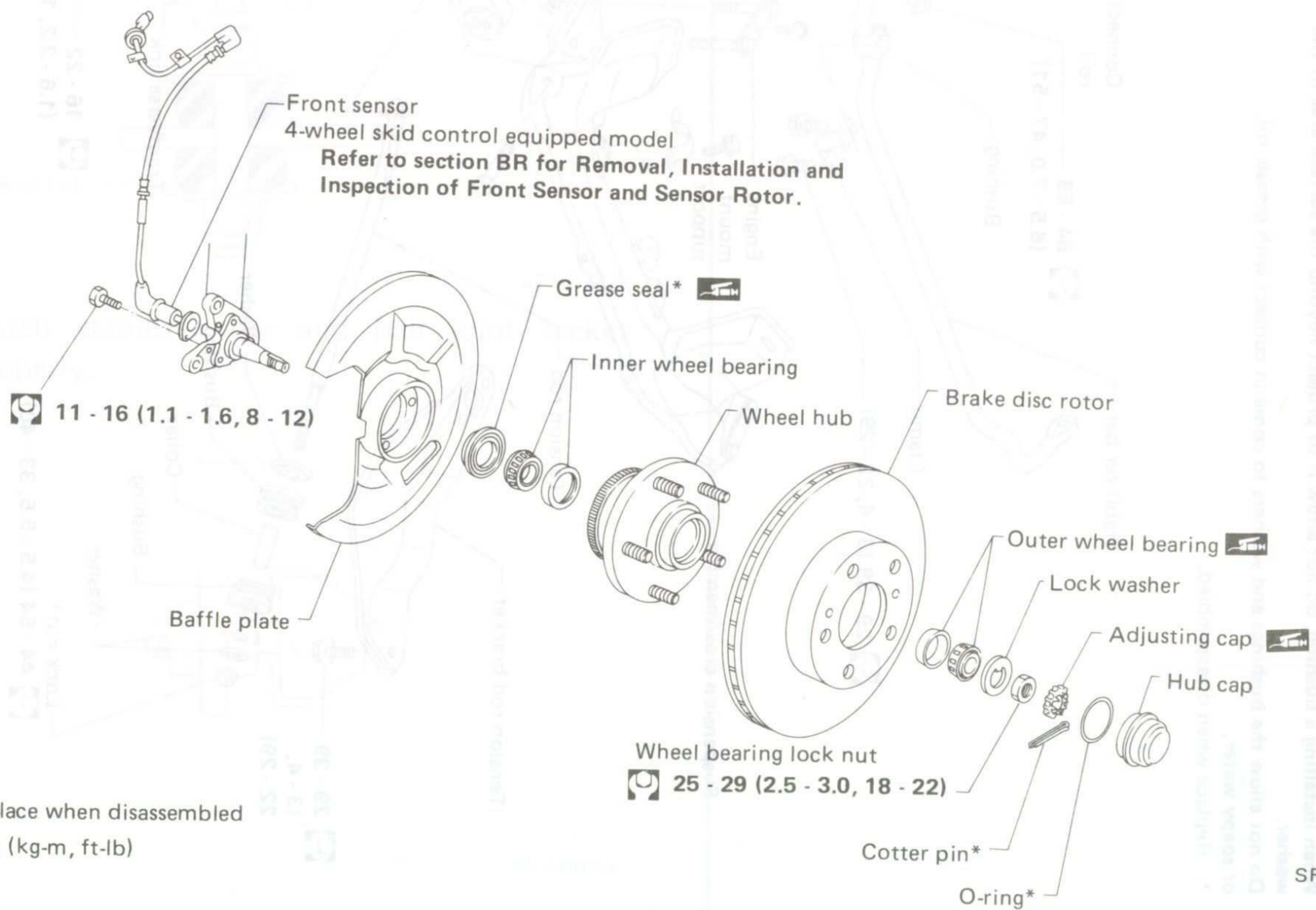
# FRONT AXLE — Wheel Hub

VG30E ENGINE MODEL EXCEPT FOR EUROPE AND AUSTRALIA



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EXCEPT ABOVE MODEL



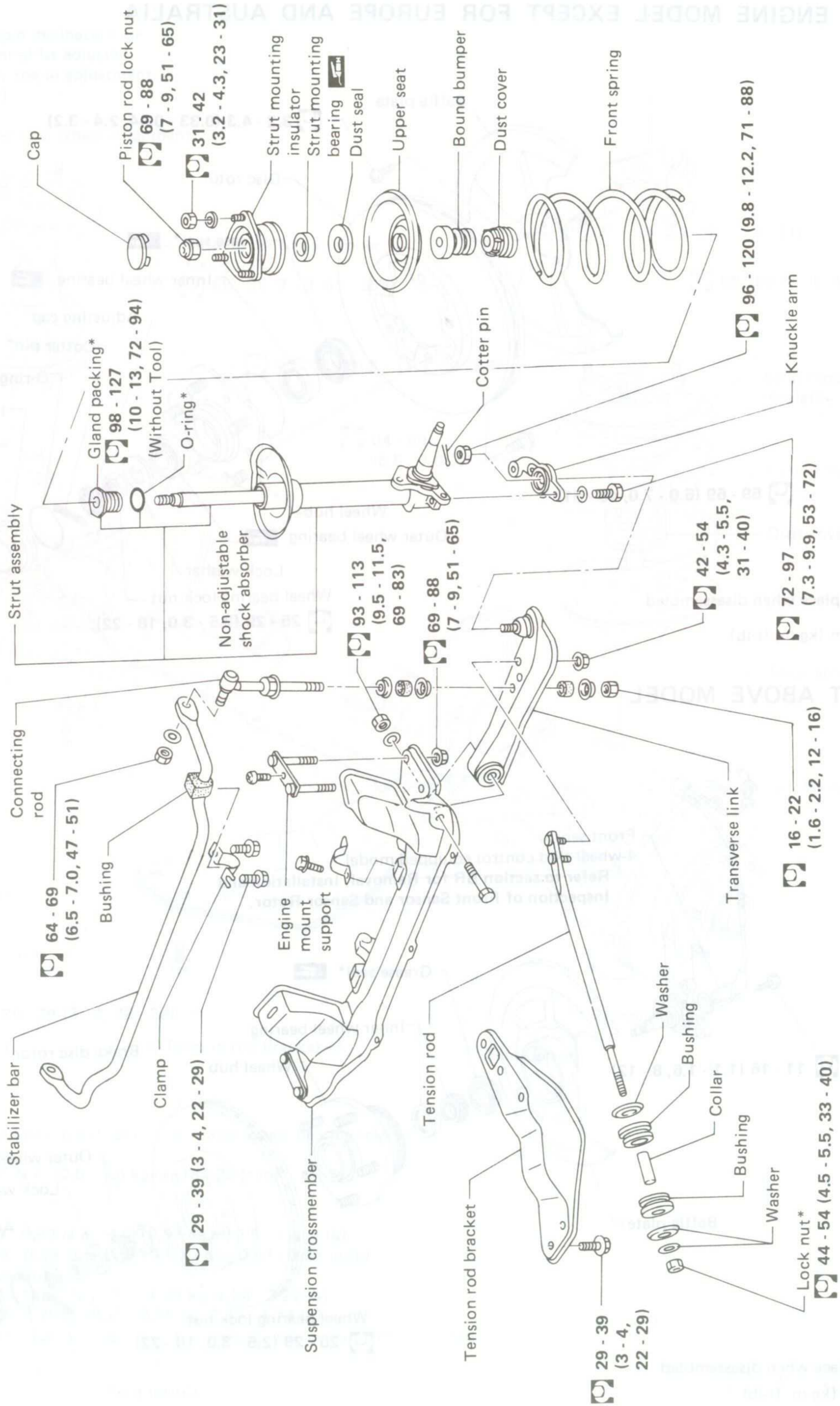
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# FRONT SUSPENSION

When removing each suspension part, check wheel alignment and adjust if necessary. Refer to section MA for front axle and front suspension. Final tightening must be carried out with tires on ground. **When installing a bushing, do not allow it to project beyond the surface area of the washer.**

**Do not allow the bushings and washers to come in contact with grease, oil, or soapy water.**

\*: Replace when disassembled.



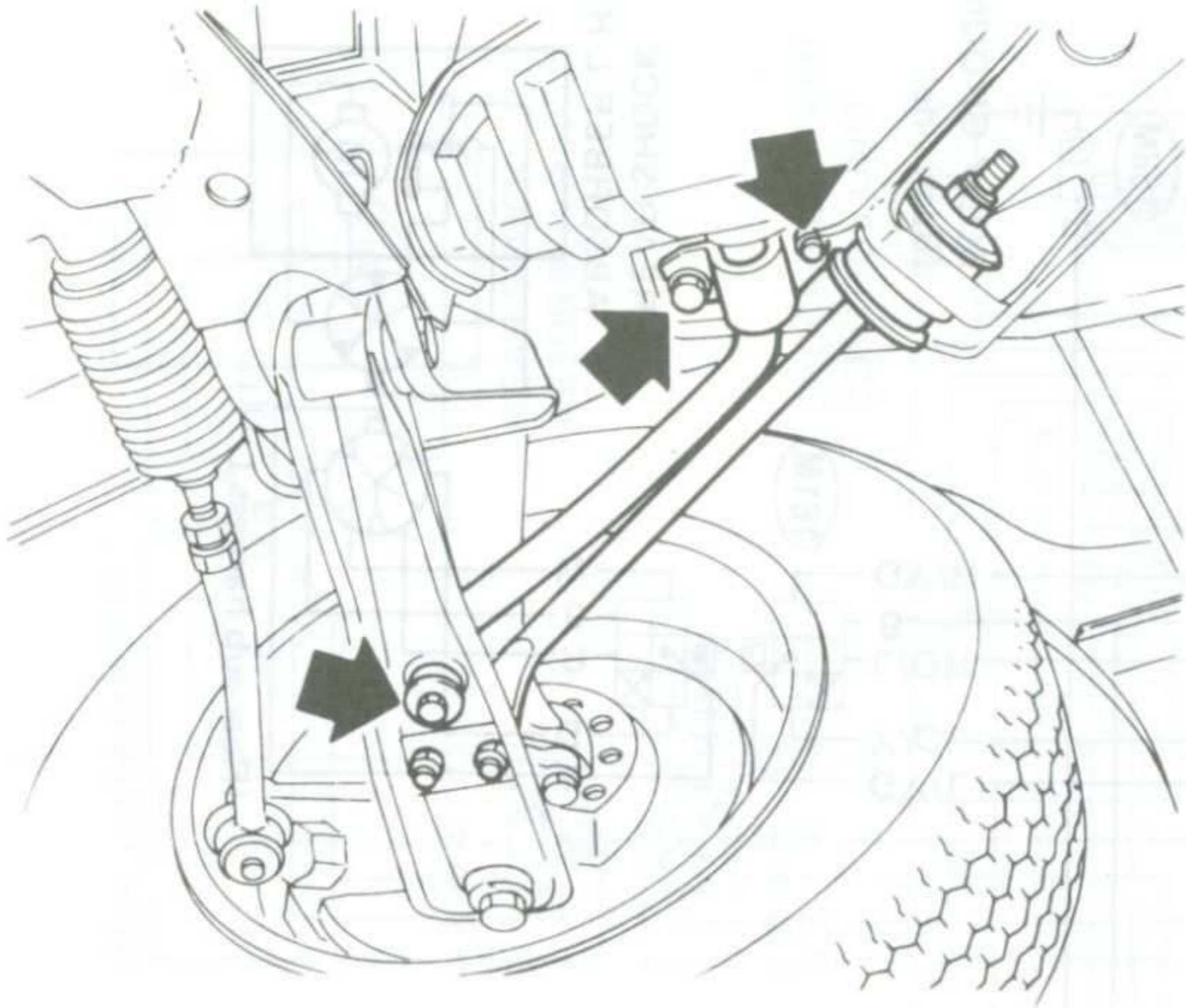
: N-m (kg-m, ft-lb)

# FRONT SUSPENSION — Tension Rod and Stabilizer Bar

## Removal and Installation

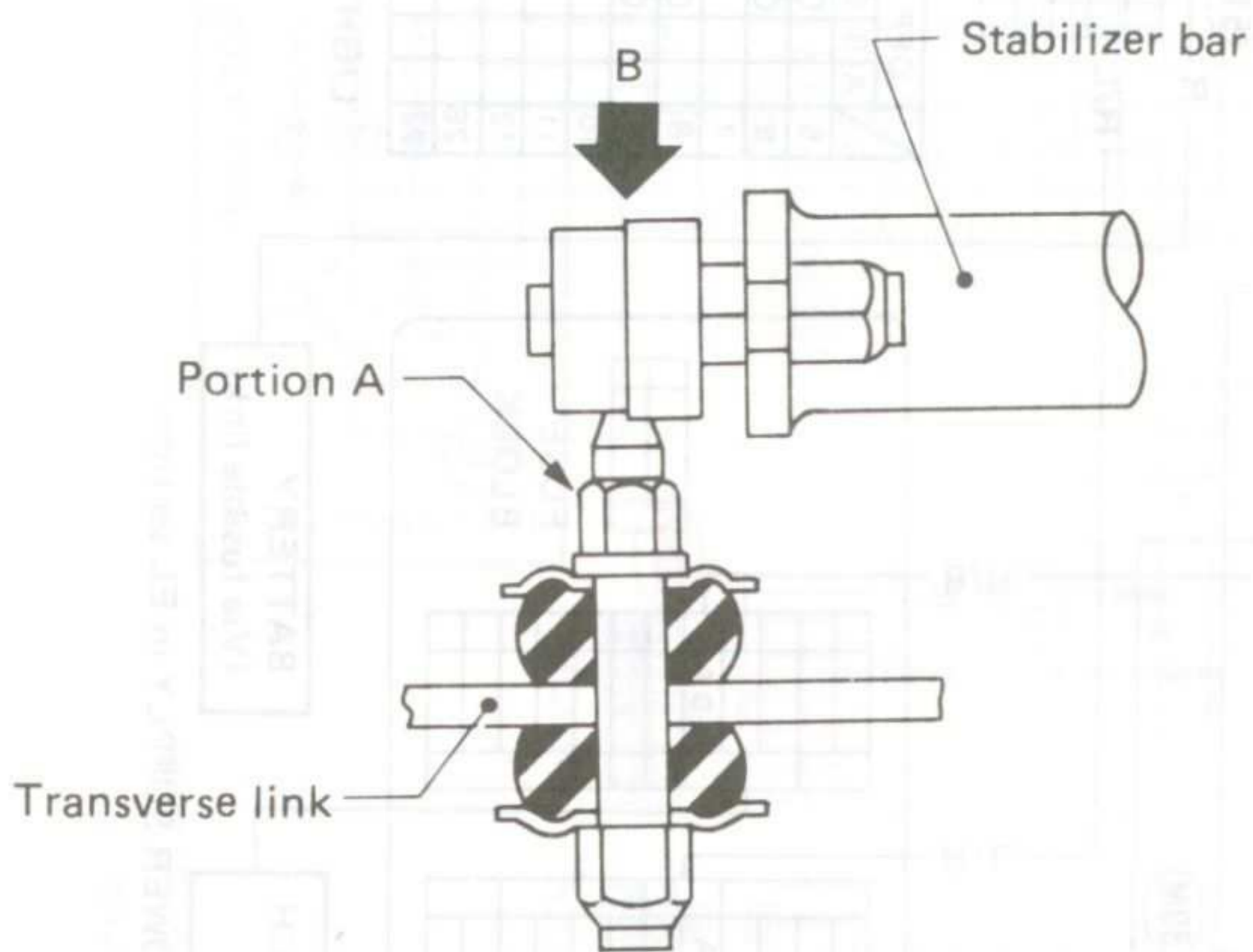
### [STABILIZER BAR]

- Remove stabilizer bar.



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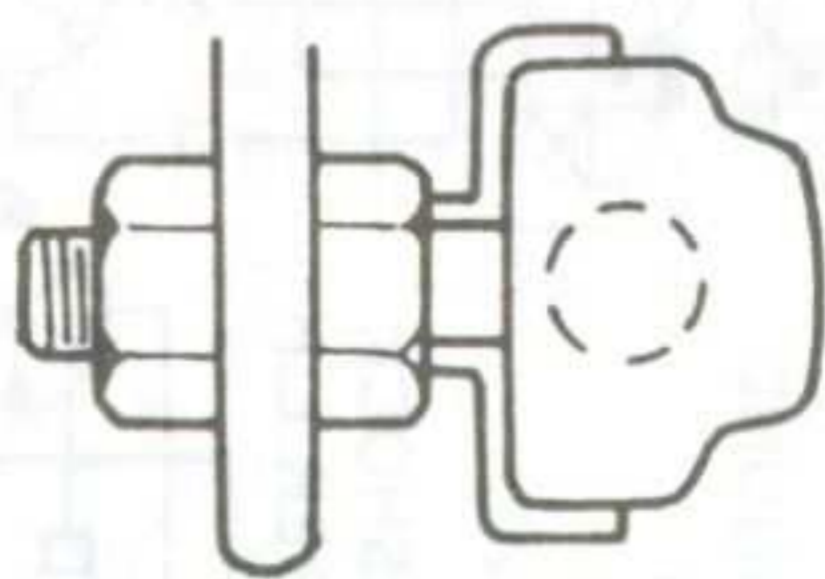
- When removing and installing stabilizer bar, fix portion A.



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- Install stabilizer bar and ball joint socket properly.

View from B



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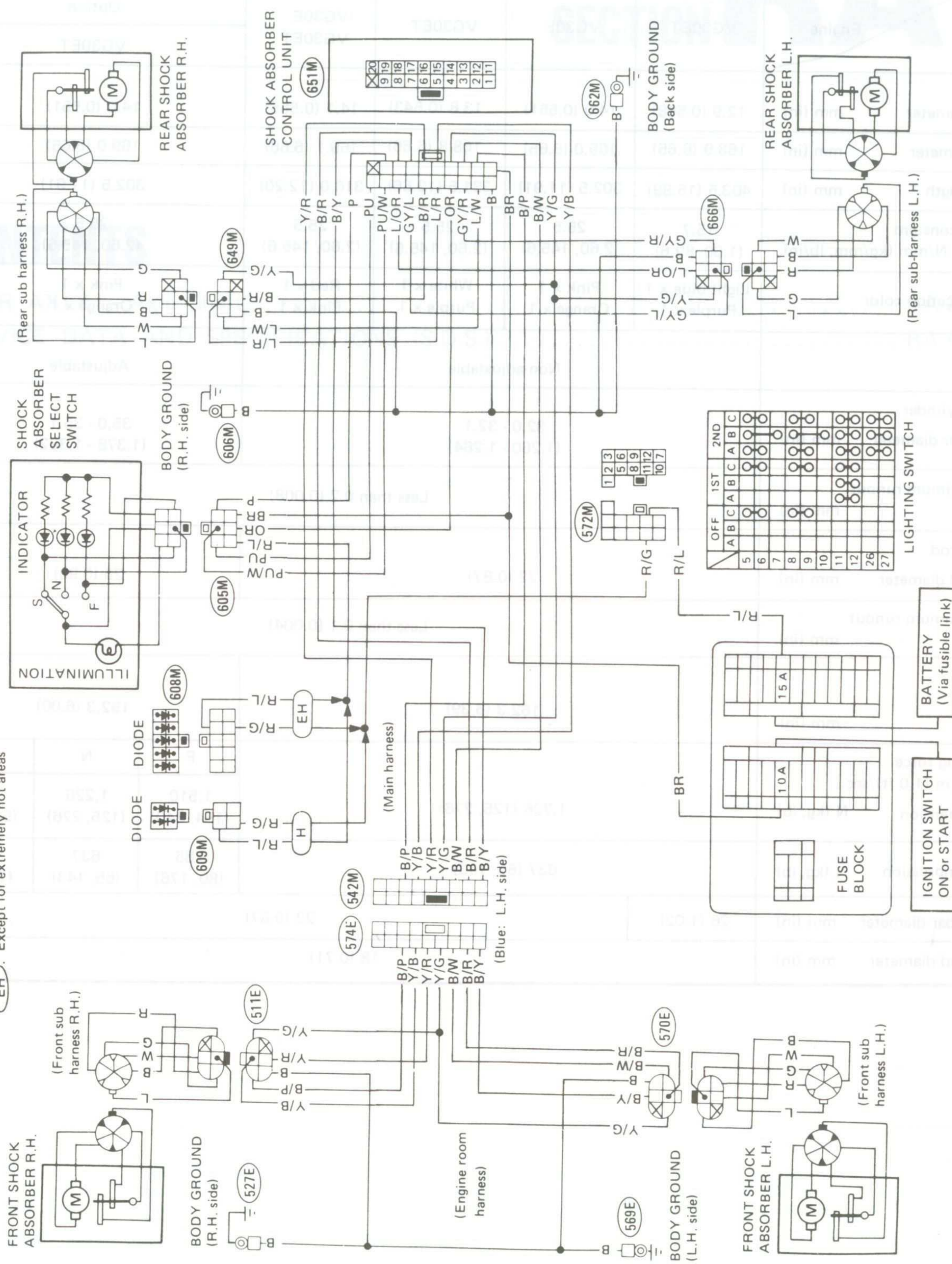


# ADJUSTABLE SHOCK ABSORBER

## Electrical Circuit (Cont'd)

### WIRING DIAGRAM (R.H. DRIVE MODELS)

(H) : For extremely hot areas  
 (EH) : Except for extremely hot areas



Refer to POWER SUPPLY in EL section.

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# SERVICE DATA AND SPECIFICATIONS (S.D.S.)

## General Specifications

Item	Destination Engine	For Europe		For Australia	Except for Europe and Australia			
		VG30ET	VG30E	VG30ET	VG30E VG30ET	Option VG30ET		
Coil spring								
Wire diameter	mm (in)	12.9 (0.508)	14.0 (0.551)	13.8 (0.543)	14.1 (0.555)	14.0 (0.551)		
Coil diameter	mm (in)	168.9 (6.65)	169.0 (6.65)	168.8 (6.65)	169.1 (6.66)	169.0 (6.65)		
Free length	mm (in)	403.5 (15.89)	302.5 (11.91)	321.5 (12.66)	310.0 (12.20)	302.5 (11.91)		
Spring constant	N/mm (kg/mm, lb/in)	15.7 (1.60, 89.6)	25.5 (2.60, 145.6)	25.5 (2.60, 145.6)	25.5 (2.60, 145.6)	25.5 (2.60, 145.6)		
Identification color		Light blue x 1 Purple x 1	Pink x 1 Orange x 1	White x 1 Purple x 1	Red x 1 Pink x 1	Pink x 1 Orange x 1		
Strut		Non-adjustable				Adjustable		
Type								
Inner cylinder								
Inner diameter	mm (in)	32.0 - 32.1 (1.260 - 1.264)				35.0 - 35.1 (1.378 - 1.382)		
Maximum runout	mm (in)	Less than 0.2 (0.008)						
Piston rod								
Rod diameter	mm (in)	22 (0.87)				25 (0.98)		
Maximum runout	mm (in)	Less than 0.1 (0.004)						
Stroke	mm (in)	162.3 (6.39)				152.3 (6.00)		
Damping force	[at 0.3 m (1.0 ft)/sec.]					F	N	S
Expansion	N (kg, lb)	1,226 (125, 276)				1,510 (154, 340)	1,226 (125, 276)	530 (54, 119)
Compression	N (kg, lb)	637 (65, 143)				785 (80, 176)	637 (65, 143)	255 (26, 57)
Stabilizer bar diameter	mm (in)	26 (1.02)	22 (0.87)					
Tension rod diameter	mm (in)	18 (0.71)						