

FRONT AXLE & FRONT SUSPENSION

SECTION **FA**

MODIFICATION NOTICE:

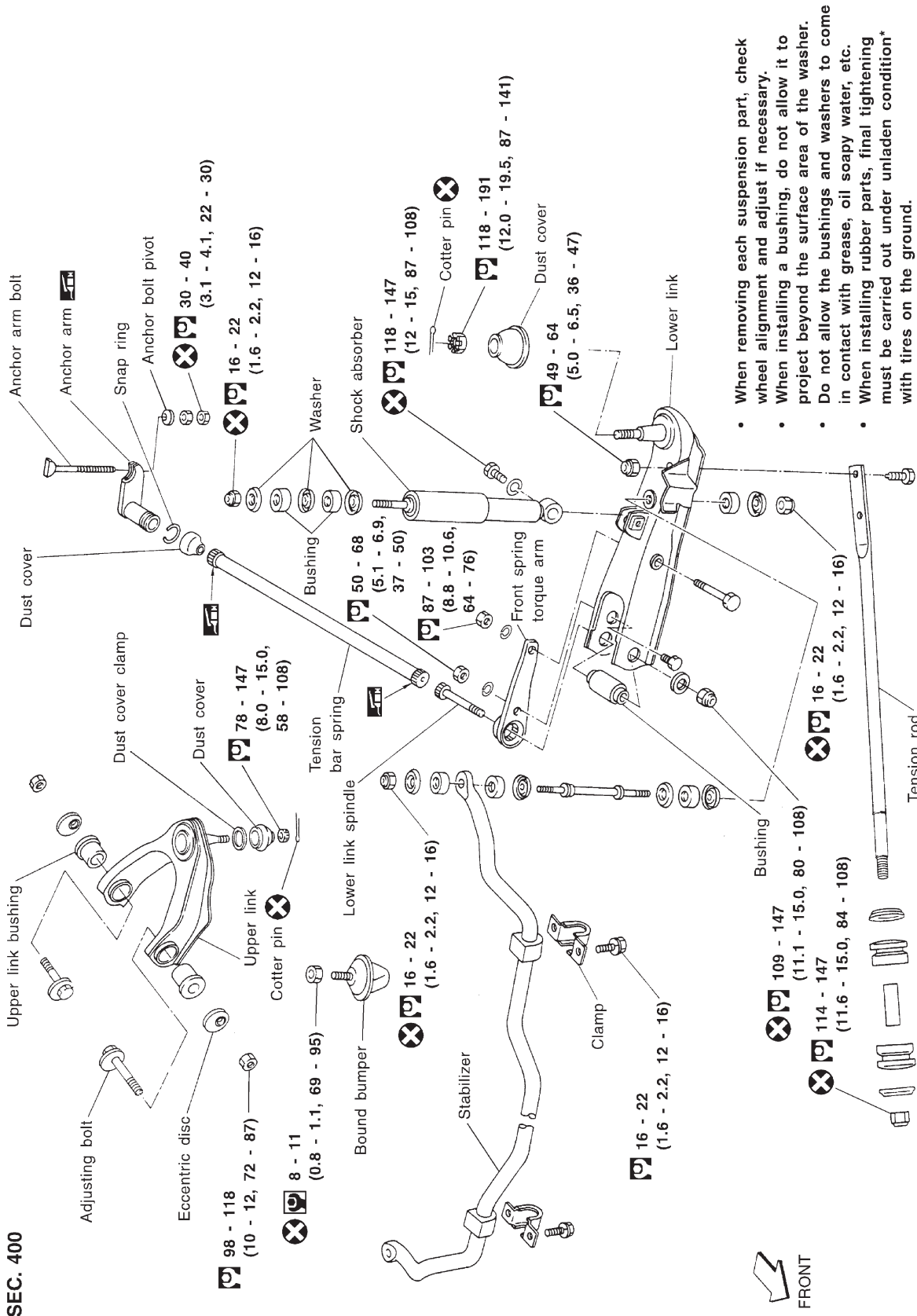
- Tightening torque have been changed.
- Wheel alignment have been changed.

CONTENTS

FRONT SUSPENSION	2002	Inspection and Adjustment	2004
SERVICE DATA AND SPECIFICATIONS (SDS)	2004		

FRONT SUSPENSION

2WD



- When removing each suspension part, check wheel alignment and adjust if necessary.
- 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 soapy water, etc.
- When installing rubber parts, final tightening must be carried out under unladen condition* with tires on the ground.

* Fuel, radiator coolant and engine oil full.
Spare tire, jack, hand tools and mats in designated positions.

- When removing or installing brake tubes, use flare nut torque wrench.

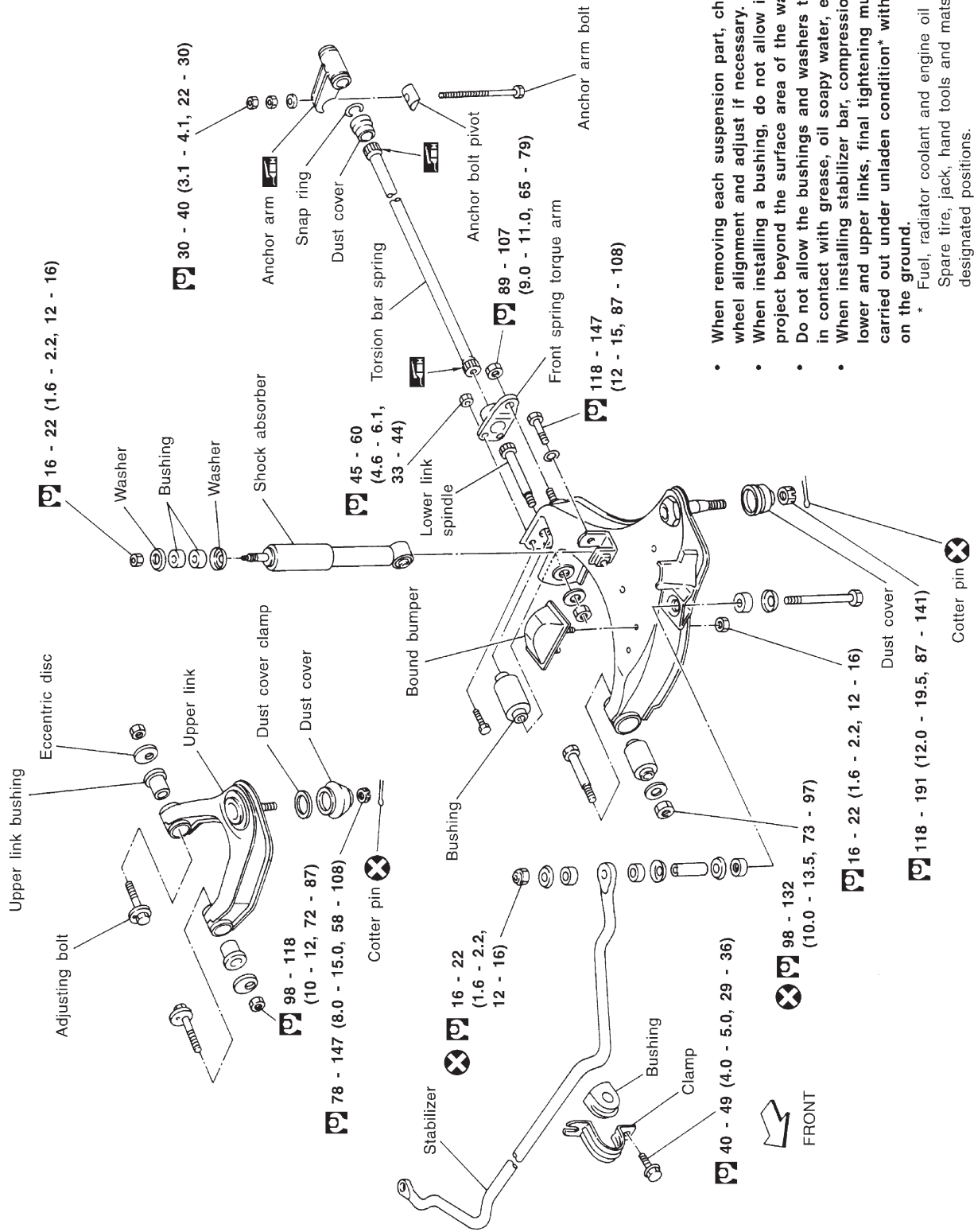
: N•m (kg-m, in-lb)

: N•m (kg-m, ft-lb)

FRONT SUSPENSION

4WD

SEC. 401



- When removing each suspension part, check wheel alignment and adjust if necessary.
- 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 soapy water, etc.
- When installing stabilizer bar, compression rod, lower and upper links, final tightening must be carried out under unladen condition* with tires on the ground.

* Fuel, radiator coolant and engine oil full.
Spare tire, jack, hand tools and mats in designated positions.

- When removing or installing brake tubes, use flare nut torque wrench.

⊞ : N·m (kg-m, ft-lb)

SERVICE DATA AND SPECIFICATIONS (SDS)

Inspection and Adjustment

WHEEL ALIGNMENT (Unladen*1)

2WD

Applied model		Europe			
Camber	Degree minute (Decimal degree)	Minimum	-0°05' (-0.08°)		
		Nominal	0°25' (0.42°)		
		Maximum	0°55' (0.92°)		
		Left and right difference	45' (0.75°) or less		
Caster	Degree minute (Decimal degree)	Minimum	-0°08' (-0.13°)		
		Nominal	0°22' (0.37°)		
		Maximum	0°52' (0.87°)		
		Left and right difference	45' (0.75°) or less		
Kingpin inclination	Degree minute (Decimal degree)	Minimum	8°35' (8.58°)		
		Nominal	9°05' (9.08°)		
		Maximum	9°35' (9.58°)		
Total toe-in	Distance (A - B) mm (in)	Radial tire	Minimum	2 (0.08)	
			Nominal	3 (0.12)	
			Maximum	4 (0.16)	
		Bias tire	Minimum	4 (0.16)	
			Nominal	5 (0.20)	
			Maximum	6 (0.24)	
	Angle (left plus right)	Degree minute (Decimal degree)	Radial tire	Minimum	10' (0.17°)
				Nominal	15' (0.25°)
				Maximum	20' (0.33°)
			Bias tire	Minimum	20' (0.33°)
				Nominal	25' (0.42°)
				Maximum	30' (0.50°)
Wheel turning angle	Inside Full turn*2	Degree minute (Decimal degree)	Minimum	36°00' (36.00°)	
			Nominal	38°00' (38.00°)	
			Maximum	38°00' (38.00°)	
	Outside	Degree minute (Decimal degree)	Minimum	32°36' (32.60°)	
			Nominal	34°36' (34.60°)	
			Maximum	34°36' (34.60°)	
Vehicle posture					
Lower arm pivot height (H)	mm (in)	111 - 115 (4.37 - 4.53)			

*1: Fuel, radiator coolant and engine oil full. Spare tire, jack, hand tools and mats in designated positions.

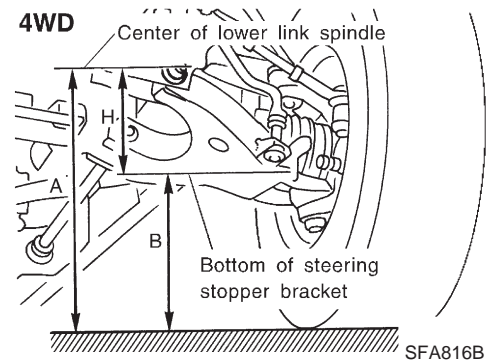
*2: On power steering models, wheel turning force (at circumference of steering wheel) of 98 to 147 N (10 to 15 kg, 22 to 33 lb) with engine idle.

SERVICE DATA AND SPECIFICATIONS (SDS)

Inspection and Adjustment (Cont'd)

4WD

Applied model		Europe			
		255/70R15 tire	Except 255/70R15 tire		
Camber	Degree minute (Decimal degree)	Minimum	0°06' (0.10°)		
		Nominal	0°36' (0.60°)		
		Maximum	1°06' (1.10°)		
		Left and right difference	45' (0.75°) or less		
Caster	Degree minute (Decimal degree)	Minimum	1°40' (1.67°)		
		Nominal	2°10' (2.17°)		
		Maximum	2°40' (2.67°)		
		Left and right difference	45' (0.75°) or less		
Kingpin inclination	Degree minute (Decimal degree)	Minimum	10°18' (10.30°)		
		Nominal	10°48' (10.80°)		
		Maximum	11°18' (11.30°)		
Total toe-in	Distance (A - B) mm (in)	Radial tire	Minimum	3 (0.12)	
			Nominal	4 (0.16)	
			Maximum	5 (0.20)	
		Bias tire	Minimum	4 (0.16)	
			Nominal	5 (0.20)	
			Maximum	6 (0.24)	
Angle (left plus right)	Degree minute (Decimal degree)	Radial tire	Minimum	15' (0.25°)	
			Nominal	20' (0.33°)	
			Maximum	25' (0.42°)	
		Bias tire	Minimum	20' (0.33°)	
			Nominal	25' (0.42°)	
			Maximum	30' (0.50°)	
Wheel turning angle	Full turn*2 Inside Degree minute (Decimal degree) Outside Degree minute (Decimal degree)	Minimum	31°00' (31°00')	33°06' (33.10°)	
		Nominal	33°00' (33°00')	35°06' (35.10°)	
		Maximum	33°00' (33°00')	35°06' (35.10°)	
		Minimum	29°00' (29°00')	31°12' (31.20°)	
		Nominal	31°00' (31°00')	33°12' (33.20°)	
		Maximum	31°00' (31°00')	33°12' (33.20°)	
Vehicle posture Lower arm pivot height (H)		mm (in)	45.5 - 49.5 (1.791 - 1.949)		



*2: On power steering models, wheel turning force (at circumference of steering wheel) of 98 to 147 N (10 to 15 kg, 22 to 33 lb) with engine idle.