

51858

Figure 158

The wheel hubs are keyed, with "UNIT - BEARING" with "Long Life" lubrication, onto the arms of the axle casing.

The bearings need no adjustment.

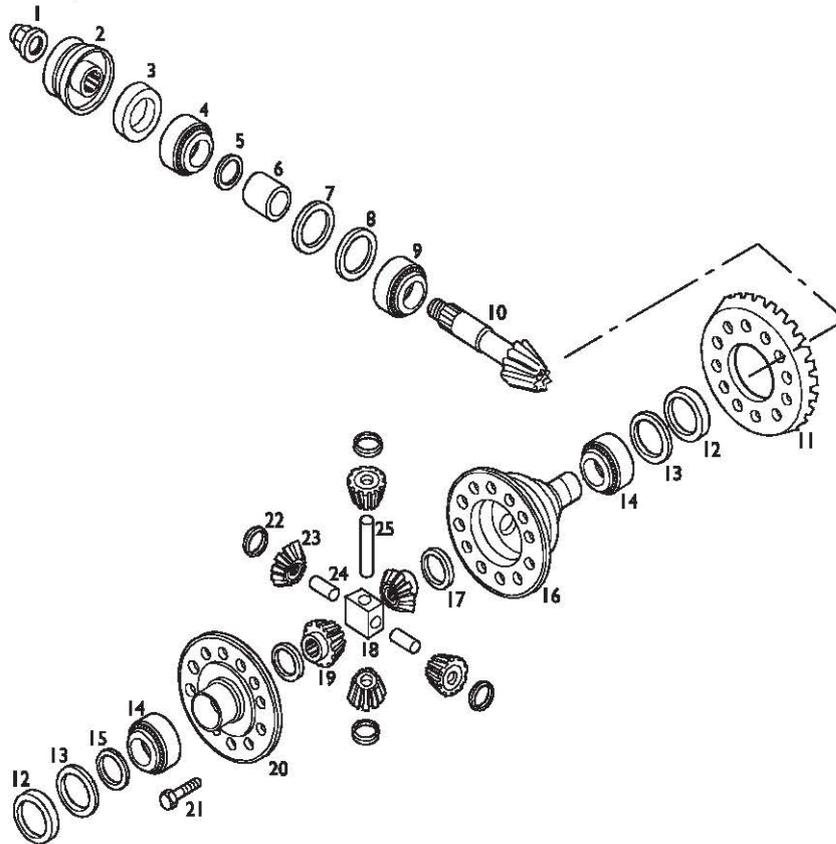
The brakes are disc brakes with floating brake callipers.

The disc brakes are keyed to the wheel hubs.

The brake calipers are secured with flanges fixed onto the arms of the axle casing.

The parking brake is a drum brake, built into the brake disc.

**Differential assembly components**

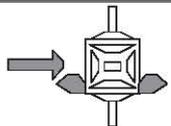


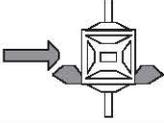
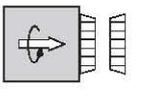
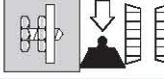
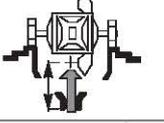
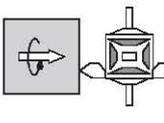
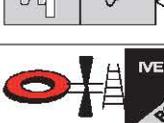
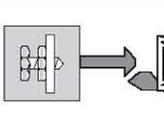
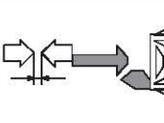
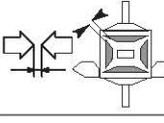
51863 **Figure 159**

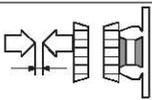
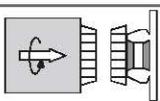
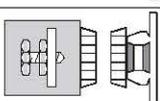
- |    |                                |    |   |
|----|--------------------------------|----|---|
| 1  | Nut                            | 14 | Bearing -                                 |
| 2  | Transmission connection sleeve | 15 | Thrust ring (differential lock rear axle) |
| 3  | Seal ring                      | 16 | Gear housing                              |
| 4  | Front bearing                  | 17 | Sun gear thrust block                     |
| 5  | Bearing adjusting shim         | 18 | Cross                                     |
| 6  | Fixed spacer                   | 19 | Planetary gear                            |
| 7  | Spacer ring                    | 20 | Differential box cover                    |
| 8  | Adjusting ring                 | 21 | Screw                                     |
| 9  | Rear bearing                   | 22 | Planetary gear thrust block               |
| 10 | Bevel pinion                   | 23 | Planet gear                               |
| 11 | Bevel crown                    | 24 | Short pin                                 |
| 12 | Fixed ring                     | 25 | Long pin                                  |
| 13 | Adjusting ring                 |    |   |

**5250 CHARACTERISTICS AND DATA**

**Rear axle 4505 I I characteristics**

	Type of rear axle: Single reduction type	4505 I I
Electrically-controlled mechanical differential lock		optional
	<b>DIFFERENTIAL UNIT</b>	

	Type of rear axle: Single reduction type		4505 I I
	Crown wheel and pinion reduction ratio (no. of teeth: pinion/crown wheel)		1:3,615 (13/47)- 1:3,917 (12/47) - 1:4,182 (11/46) - 1:4,444 (9/40) - 1:4,889 (9/44)* - 1:5,111 (9/46) * - 1:5,222 (9/47) * - 1:3,308 (13/43) *
	Bevel pinion bearings		2 with taper rollers
	Bevel pinion bearing rolling torque (lubricated seal rings and bearings).	Nm	1.2 ÷ 2.4
	New bearings	kgm	0.12 ÷ 0.24
	Bevel pinion bearings pre-load adjustment		using adjustment rings
	Bevel pinion bearings pre-load adjustment shims thickness		1 ÷ 1,975 mm with progression of 0.025 mm
	Inner bearing ring on bevel pinion installation temperature		80 °C ÷ 90 °C
	Position of bevel pinion with respect to differential case		using adjustment rings
	Thickness of adjustment shim located between bevel pinion and differential case		1 ÷ 1,975 mm with progression of 0.025 mm
	Bearings for differential case		2 with taper rollers
	Differential housing bearings rolling torque		
			Nm 2 ÷ 2.8
		kgm	0.20 ÷ 0.28
	Differential case bearings rolling torque adjustment		using adjustment rings
	Differential case bearings rolling torque adjustment shim thickness		1 ÷ 1,95 mm with progression of 0.05 mm
	Clearance between pinion and crown wheel		0.15 ÷ 0.20 mm
	Pinion to crown wheel clearance adjustment		using adjustment rings
	Clearance between planetary gears and sun gears		0.12 ÷ 0.22 mm

	<b>Type of rear axle: Single reduction type</b>		<b>450511</b>
	<b>WHEEL HUBS</b>		
	Wheel hub bearings		Unit-Bearing
	Hub bearing axial clearance		
	Wheel hub bearings rolling torque	Nm	–
		kgm	–
	Wheel hub bearing axial clearance adjustment		Not adjustable
			Tighten the ring nut to the specified torque
	Rear axle oil		TUTELAW140/M-DA (SAE 85W140)
			TUTELAW90/M-DA (SAE 80W90) (*)
	Quantity	Litres	1.9
	Dry rear axle weight:		
	with ABS	kg	154.6
	without ABS	kg	153
	maximum capacity (GRW)	kg	3700

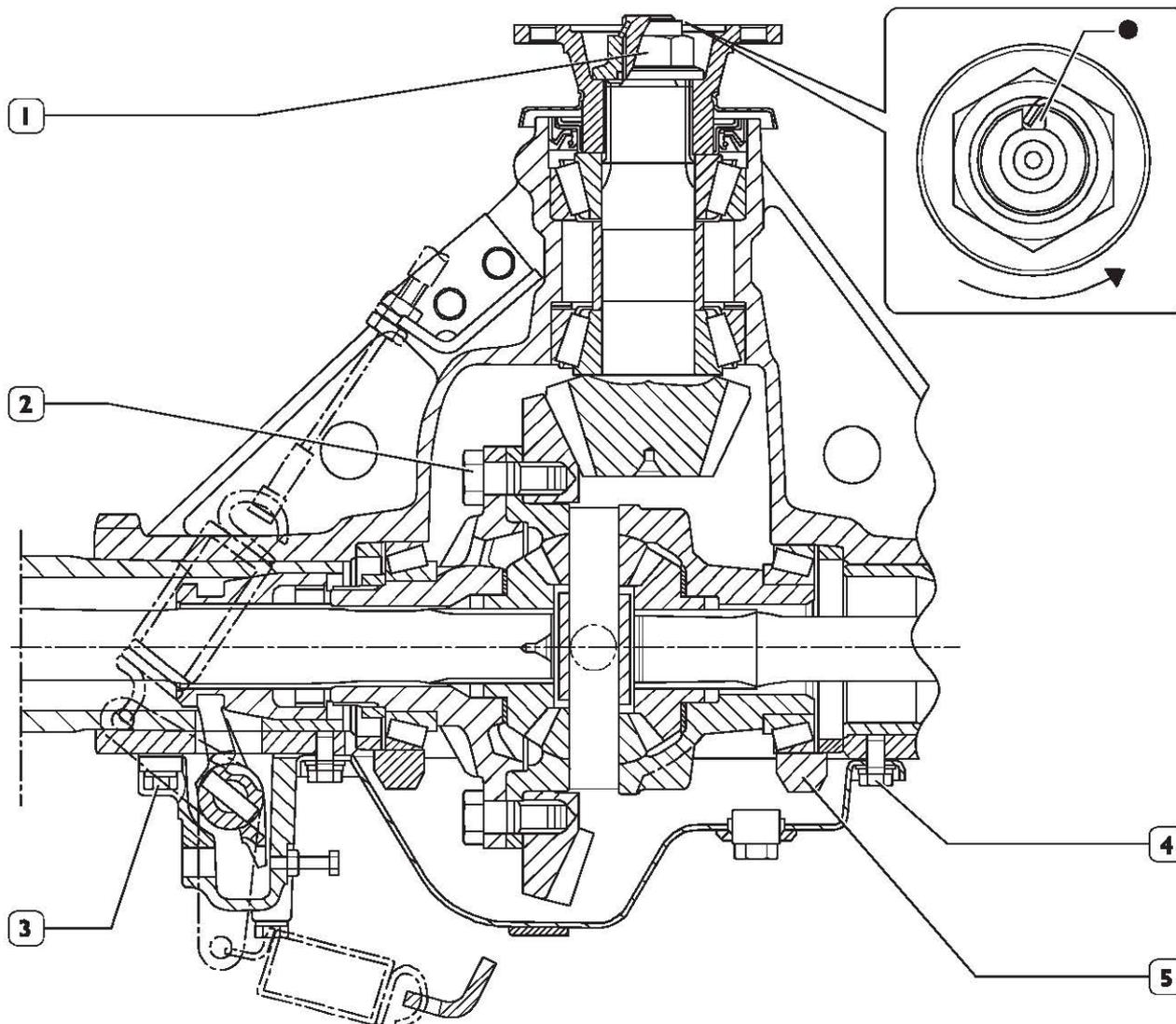
**Note** (\*) Specific for cold climates

★ Only chassis cab vehicles

☆ Only VAN vehicles

## 5250 TIGHTENING TORQUES

## Central part



159459

Figure 160

## TIGHTENING TORQUES

DETAIL		TORQUE
		Nm
1•	M26x1.5 bevel pinion mounting nut	450 ± 50
2	Half-casing and crown wheel M14X1.5 mounting screw	205 ± 5
3	Mounting screw for support for differential lock to rear axle casing or cover for differential lock support seat	23 ± 2
4	Differential inspection cover to axle casing mounting screw	87.5 ± 7.5
5	Caps to axle casing mounting screw	106.5 ± 6.5

• The closest possible notch to the side of the milling as shown in the diagram