

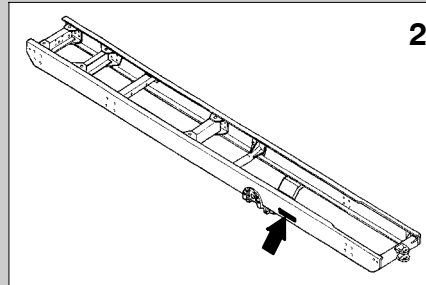
## POSITION OF VEHICLE IDENTIFICATION DATA PLATES

### Model identification plate

Located on the side walls of the cab (Fig. 1, see arrow).

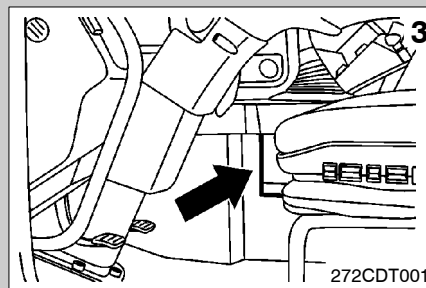
### Imprinting of the vehicle chassis

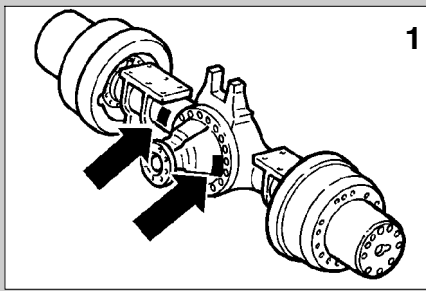
Punch marked at the front end of the right-hand side member (Fig. 2, see arrow). (see following page).



### Vehicle identification plate

On bonnet left side in cabin for vehicle identification as per EU standards (Fig. 3, see arrow).





### Single rear drive axle (Fig. 1)

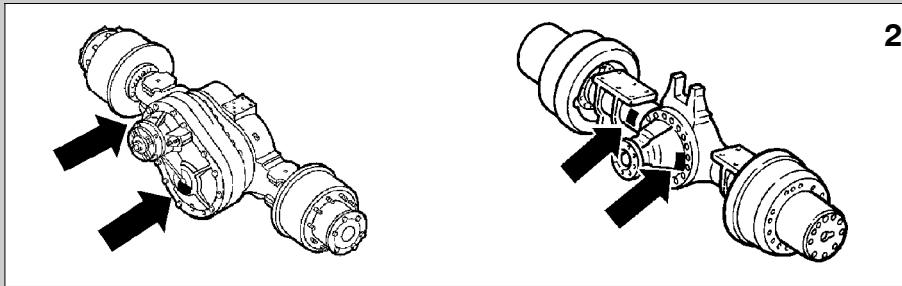
With double reduction, central by pinion set and final in wheel hubs with epicyclic gear. Differential between wheels with pneumatic lock.

### Tandem rear drive axles (Fig. 2)

Two drive axles in tandem with double reduction, central with bevel gear and final in wheel hubs with epicyclic gear set.

The tandem is provided with splitter between axles and pneumatic lock.

Differential between wheels with pneumatic lock.

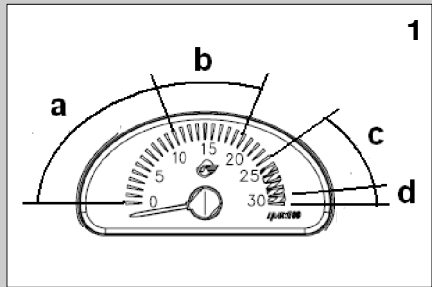


## TYRES

Front: single (\*)

Rear: double (\*\*) or single (\*)

DIMENSION	TYPE	(*) bar	(**) bar	DIMENSION	TYPE	(*) bar	(**) bar
13R22.5	MICHELIN XZY2	8	8	12.00R20	MICHELIN XDY	8.5	8.5
	MICHELIN XDY3	8	8		MICHELIN XZY2	8.5	8.5
	MICHELIN XZH	8	8		MICHELIN XZL	8.5	8.5
	PIRELLI AP05	9	-		MICHELIN XZY	8.5	8.5
	PIRELLI AT75	-	9		PIRELLI AP05	9	-
	PIRELLI AT99	8.5	8.5		PIRELLI AT75	-	8.5
	PIRELLI FG85	9	9		PIRELLI FG85	9	9
	PIRELLI TG85	9	9		PIRELLI TG85	9	9
	PIRELLI FG88	9	9		MICHELIN XZE2TL	9	9
	PIRELLI TG88	9	9		MICHELIN XDE2TL	9	9
	CONTINENTAL HSC	-	-	315/70R22.5	PIRELLI FG88	9	9
	CONTINENTAL HDC	-	-		PIRELLI TG88	9	9
315/80R22.5	MICHELIN XZY2	8.5	8	20.00R20	CONTINENTAL	-	-
	MICHELIN XDY3	8.5	8	385/68R22.5	MICHELIN XZY3	9	-
	MICHELIN XZE2	8.5	8		MICHELIN XFA1+	8.5	-
	MICHELIN XDE2	8.5	8	365/85R20	MICHELIN XZL	7.5	-
	MICHELIN XDE2+	8.5	8	365/80R20	MICHELIN XZL	6	-
	PIRELLI AP05	8	8	16.00R20	MICHELIN XZL	7.6	7.6
	PIRELLI AT75	8	8	14.00R20	MICHELIN XZL	7.6	7.6
	PIRELLI FG85	8	8		PIRELLI PS22 PISTA	7	7
	PIRELLI TG85	8	8	24.00R20.5	MICHELIN XS	6	-
	PIRELLI FG88	8.5	8.5	385/95R24	MICHELIN X	9	-
	PIRELLI TG88	8.5	8.5	385/55R22.5	MICHELIN XFA2	9	9
	CONTINENTAL HSR1	-	-	525/65R20.5	MICHELIN XS	8	-
	CONTINENTAL HDR	-	-	395/85R20	MICHELIN XZL	8.5	.
495/45R22.5	MICHELIN XDA2	9	-	525/80R25	MICHELIN XL	7	.
445/65R22.5	MICHELIN XZL	8	-	24R21	MICHELIN XZL	6	.



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### Range of use of the engine

The following table shows indications for correct engine use.

- a white sector: minimum, low use
- b green sector: economic running



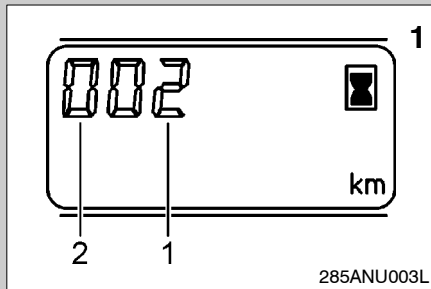
**The best performance/consumption ratio is obtained when the engine rate is in the green sector.**

- c yellow sector: maximum engine speed range
- d red sector: runaway rate



**NEVER USE RED SECTOR.**

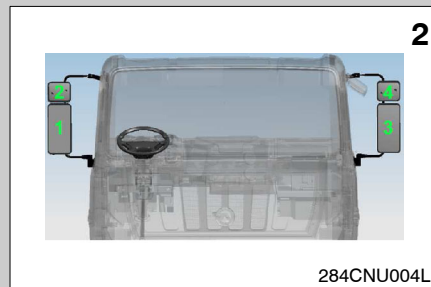
Engine	Tachometer sector (RPM)			
	White	Green	Yellow	Red
F2B/F3B	0 - 1200	1200 - 1900	2400 - 3000	3000 - 3200



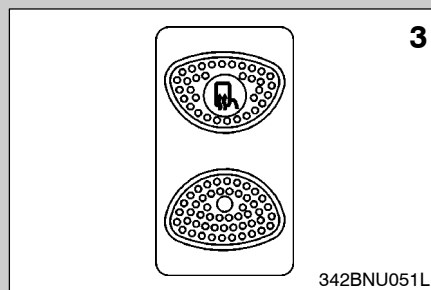
The selected mirror is identified by the number on the LCD (Fig. 1, ref. 1)  
The selected mirror is graphically highlighted on the LCD (Fig. 1, ref. 2).

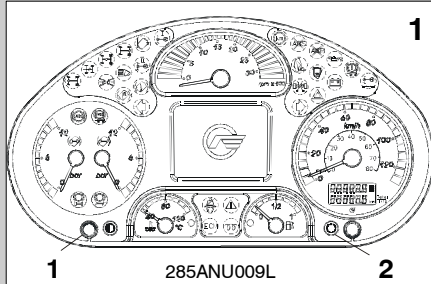
The mirrors controlled by the system are (Fig. 2):

1. Main driver's mirror
2. Driver's wide-angle mirror
3. Main passenger side mirror
4. Passenger side wide-angle mirror



Press the mirror heater button (Fig. 1, ref. 3) to rapidly demist the mirrors. Press the button to turn the mirror heating system on. Press the button again to turn the mirror heating system off.





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## Functions of instrument panel keys

### Key 1 (Fig. 1, ref. 1):

Instrument illumination adjustment.

or

Error memory display.



Refer to the DIAGNOSTIC chapter for more information

### Key 2 (Fig. 1, ref. 2):

Press key 2 for less than three seconds to display trip km or total km

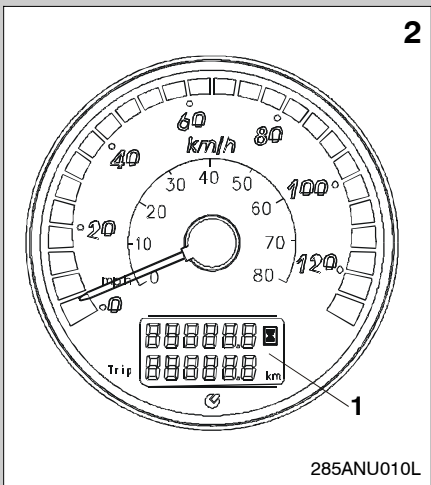
Trip odometer reset

With trip odometer displayed on LCD (Fig. 2, ref. 1), press key 2 for more than three seconds to zero the indicated distance.

### Units of measure conversion (Km - miles)

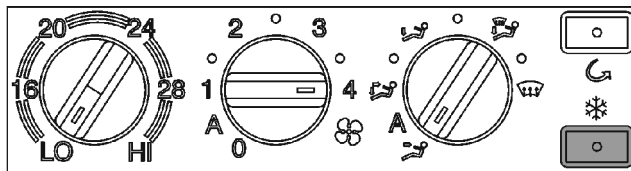
To convert the units of measure displayed on the LCD, proceed as follows:

- With ignition key out, press both buttons (Fig. 1, ref 1 and 2).
- Holding the buttons down, turn the key to MAR and wait 10 seconds.

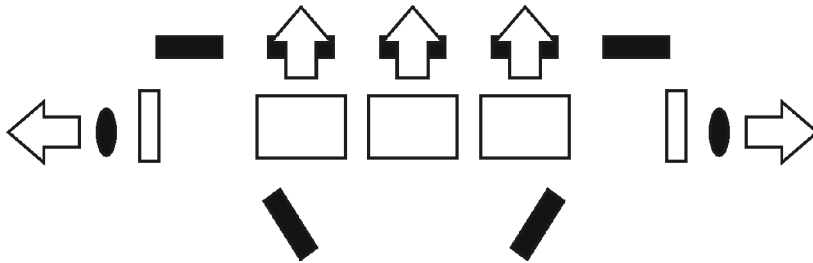


2

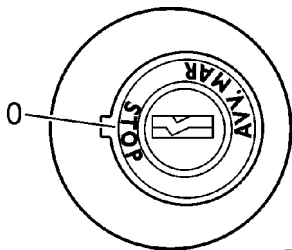
285ANU010L

Maximum cooling position

**For versions with air conditioner  
press the start button.**



342BNU48L



272BNU091

## STOPPING ENGINE

### Stopping from drivers cabin

To stop the engine, proceed as follows:

- bring the engine to idle speed for a few minutes to reached steady state temperature and ensure turbocompressor lubrication;
- turn the ignition switch to STOP (Fig. 1, ref. 0) and remove the key.



**DO NOT** switch off the engine with the vehicle in motion to prevent loss of power steering.

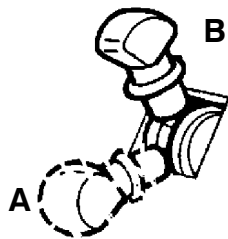
**DO NOT** remove the key from the ignition switch with vehicle in motion to prevent locking the steering.



**Vehicles with automated transmission:** if the gearbox is not in neutral when the engine is stopped, the system automatically sets this position when the key is removed from the switch.

In this condition there is no mechanical connection between engine and wheels, and the vehicle may roll forward if the parking brake is not applied.





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## VEHICLE PARKING

### Parking brake – vehicles without trailer

The parking brake (Fig. 1) has two positions:

- position A: engaged, vehicle braked;
- position B: disengaged, vehicle NOT braked.

To engage the parking brake bring the lever to position A.

To disengage the parking brake raise the collar and bring the control lever to position B.



**Never use the parking brake (unless in an emergency) when the vehicle is running.**



**The parking brake must be engaged in the following situations:**

- temporary or prolonged parking of the vehicle;
- when loading/unloading the vehicle.

## Pivoting fifth wheel



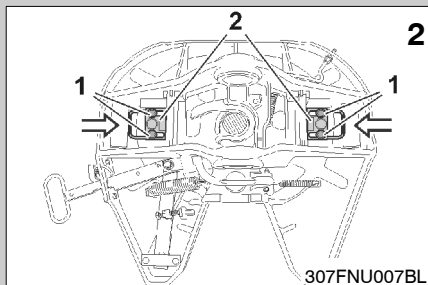
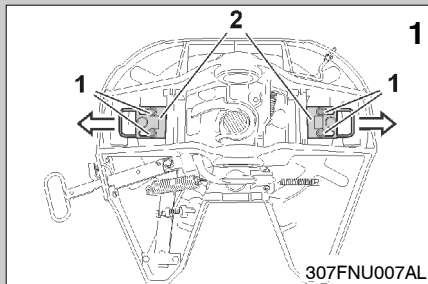
Crosswise pivoting movements may be enabled for off-road use only. Crosswise pivoting must be blocked for safety reasons when travelling at high speed on roads.

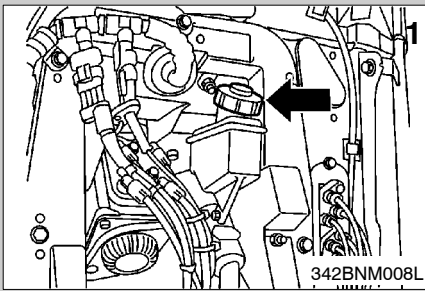
### How to enable crosswise pivoting

- Loosen the hexagonal head screws (Fig. 1, ref. 1) on each side.
- Extract the two lock teeth (Fig. 1, ref. 2) to reach end of travel in the slot (see arrow).
- Fasten the hexagonal head screws again (Fig. 1, ref. 1) at a tightening torque of 80 Nm.

### How to lock crosswise pivoting

- Loosen the hexagonal head screws (Fig. 2, ref. 1) on each side.
- Insert the two lock teeth (Fig. 2, ref. 2) to reach end of travel in the slot (see arrow).
- Fasten the hexagonal head screws again (Fig. 2, ref. 1) at a tightening torque of 80 Nm.





### Changing the hydraulic fluid

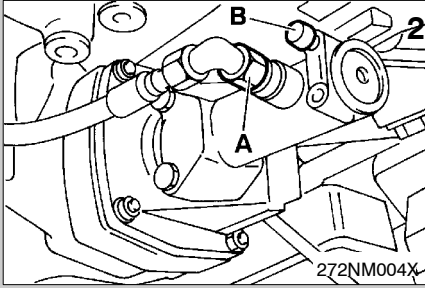
Proceed as follows:

- prepare a suitable container, unscrew tank cap (Fig. 1, see arrow) and unscrew drain pipe (Fig. 2, ref. A), draining off oil completely;
- seal drain pipe and fill tank with oil to the max. level;
- bleed out air from the system.

### Air bleeding

Proceed as follows:

- check whether reservoir is full;
- use a transparent tubing and insert one end into the drain valve union (Fig. 2, ref. B) and the other end into a clean container;
- press clutch pedal and keep it in position;
- open the drain valve a little to allow oil and air bubbles to come out and close it after a few seconds;
- release clutch pedal completely;
- repeat operation until oil without air bubbles comes out of the drain valve;



**COMPRESSED AIR SYSTEM****Tank visual inspection**

Visually inspect tank external condition.



**Under no circumstances should any form of heat treatment or welding be carried out on the outside of the tank.**

**If the reservoir is dented, have it replaced.**

**The conditions for use of the compressed air tank (pressure and temperature) are given on the label applied to the tank itself (Fig. 1).**

**Application should conform to these indications.**

**During operation the tank must not be subject to stresses in addition to those deriving from the normal conditions of use and by its weight.**

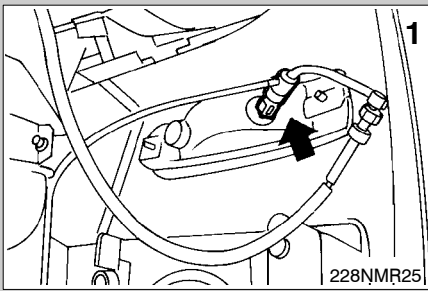
**The tank is only designed for use with compressed air systems.**

The tank is maintenance-free. The following precautions should however be taken:

- any painting should be preceded by a preparatory coat;
- surface treating of the bolts and screws with passivation;
- clean with products which do not contain alcohol.

SAG	
Type	88412829EA79-8300
Fabr. Nr.	1051613
PS	14 V
T max	+85
T min	-40
C C-92 0036	

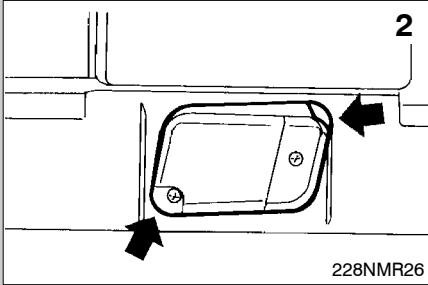
178NM66



### Front direction indicator light bulb replacement

Proceed as follows:

- working from the inside of the fenders, disconnect the connector (Fig. 1, see arrow);
- rotate and extract the fitting with bulb;
- press and turn the bulb anti-clockwise;
- check that bulb is correctly fitted;
- for replacement, follow the removal instructions in reverse order.



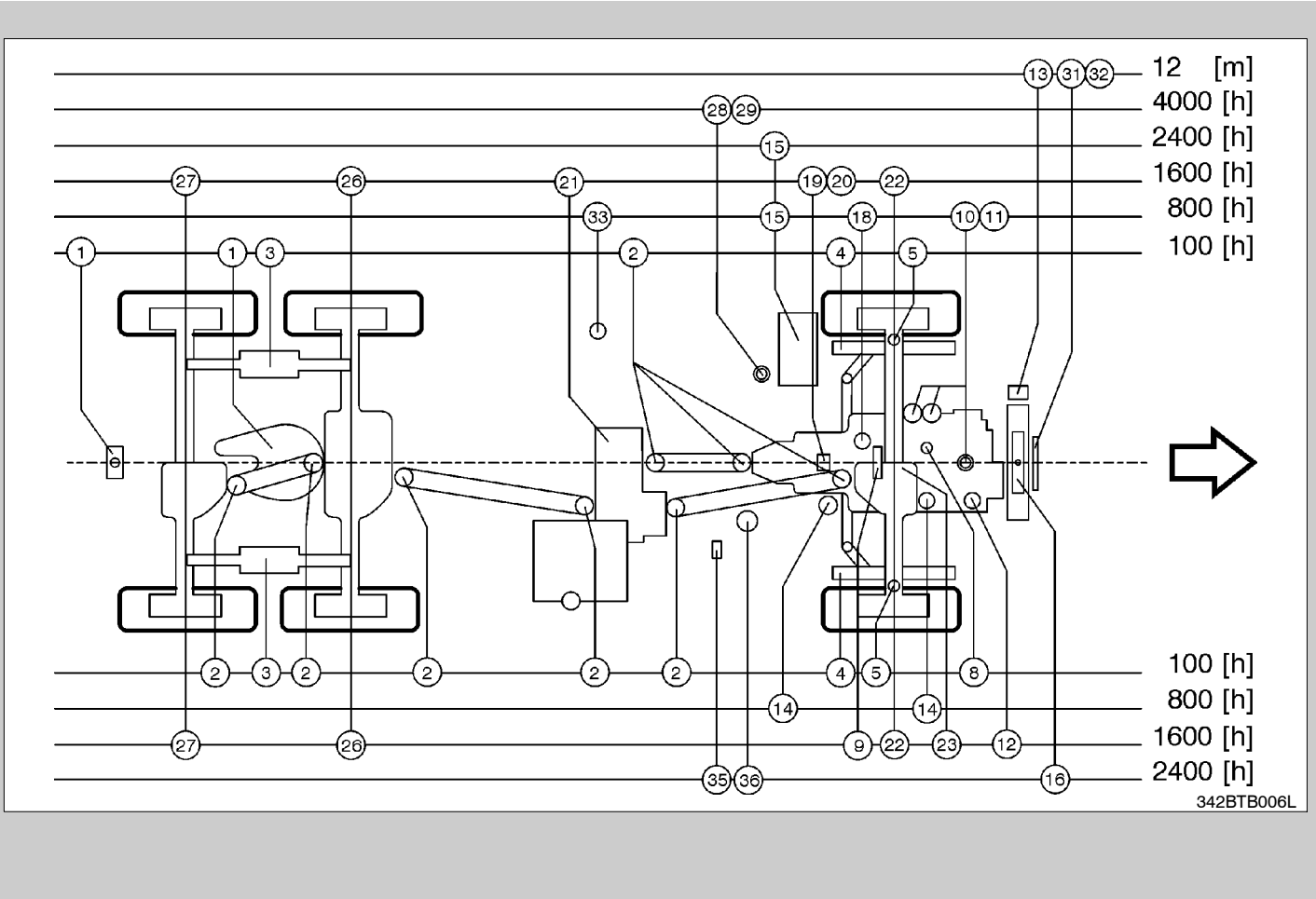
### Side direction indicator bulb replacement

Proceed as follows:

- remove the cover fastening screws (Fig. 2, see arrow) and remove it;
- press and turn the bulb anti-clockwise;
- check that bulb is correctly fitted;
- for replacement, follow the removal instructions in reverse order.

LUBRICANTS, OILS, HYDRAULIC FLUIDS AND FILTER REFILLING/REPLACEMENT DIAGRAM

3-axle vehicles



LOCATION OF COMPONENTS

Suspension geasing

