





## DAF CF65: A winner in every respect

The DAF CF65 has been designed for optimum efficiency, safety and comfort. Enjoy your drive with the CF.

Please read the instructions and tips in this guide to ensure that you quickly feel at ease and will be getting the most out of your CF, while you are on your way.

#### 1. A quick start with your CF65

A visual overview with short instructions of major vehicle controls.

#### 2. Getting the most out of your CF65

Short tips and facts on how to get the best economic performance (e.g fuel consumption, low maintenance intervals) and physical performance (e.g. torque) out of the CF65.

#### 3. AdBlue in practice

What you should know about AdBlue and how to use it.

- \* Note that specific vehicle configurations may differ from these instructions. Full details are available in the driver's handbook.
- \* Content of this quick guide applies to edition 2009 vehicles.









- 1 Mirror control, select and adjust.
- 2 Heating on all four mirrors, on/off.
- 3 Window control left/right, with express up/down (activate 0,5 sec) opens automatically window fully.



#### Master display

- Information bar with status of warnings, alarm, AS-Tronic gear, cruise-/down hill speed control and telephone.
- 2 Information screen (red, yellow warnings). Press Menu Selector Switch to access main menu. Scroll and press to select.



#### Menu Selector Switch

Press to access main menu. Scroll and press to select.

#### Menu contains among others:

vehicle info

• fuel consumption

warnings

boost pressure

trip infosettings

- next service
- PTO counter



#### Remote control

Setting chassis height, with 2 memory settings and automatic setting of driving height.







Centre position (dipped beam, lights on). 1 Headlight flash.

- 2 Main beam.
- Direction indicator left/right.
- Horn.
- Windscreen washer.
- 6 Windscreen wiper. --- Intermittent wipe (interval time set by on, time off, on).

0, 1, 2 Wipers off, low- and high speed.



#### Steering wheel switch (left)

- 1 Top: accept call. Bottom: end or reject call.
- 2 Select driving: 1 of last 10 calls. Whilst calling: adjust volume. Select stationary: listing phonebook.

#### Steering wheel switch (right)

3 Variable vehicle speed limiter Top: set actual speed as maximum speed. Bottom: off.

4 Cruise Control/Engine speed control

Top: resume the set speed. Bottom: off

5 Cruise Control/Engine speed control Top: set speed or adjust to higher speed.

Bottom: set speed or adjust to lower speed.



- 1 Manual gearbox and engine brake
  - · Engine brake on/off (acceleration or clutch pedal usage overrules setting).
  - · Variable vehicle speed limiter set/off.
  - Cruise Control/Engine speed control set/resume/off.







- 1 Parking and marker lights on.
- 2 Headlamps, parking and marker lights on.



#### 1 AS-Tronic and engine brake.

- Auto/manual (use twice for search in manual mode).
- Shift up/down (one click - one gear).
- Engine brake on/off (accelerator pedal usage overrules setting, gear changing not).



#### AS-Tronic, automated gearbox

- N Neutral.
- **D** Drive.
- R Reverse.



#### Manual gearbox

6-speed pattern.
Option 9-speed gearbox; H-pattern
4 low range, 4 high range:

1 (Pre)select range at front side gearlever.

For automatic gearboxes on CF65 check the driver manual.





#### Heating & ventilation

- 1 Fan speed.
- 2 Air distribution.
- 3 Air temperature. Set temperature is thermostatical controlled by the ATC (optional).



#### Centre console

- Flasher hazard warning lights.
- 2 Main switch.
- ASR switch (slightly more traction at low speed, by allowing wheel slip).
- Pos 1: night light (no reflections whilst driving). Pos 2: interior light.
- 5 Deactivating superstructure loadspace detection.
- 6 Roof hatch switch (Space Cab only).

- 7 Auxiliary cab heater.
- 8 Locking & unlocking co-drivers door.
- 9 Spare.
- 10 Interior light (Space Cab only).





#### Dashboard panel (left)

- 1 Work lamp/load space lighting.
- 2 Front/rear fog lights.
- 3 Headlamp height adjustment.
- 4 Instrument lighting dimming.
- 5 Interior light off (all off and remain off).
- 6 Taillift.
- 7 Taillift active indication.



#### Dashboard panel (right)

- 1 PTO 2.
- 2 PTO 1.
- 3 Spare.



#### Control panel

- 1 Spare.
- 2 Resume normal driving height (air suspension).
- 3 Spare.
- 4 Airconditioning.



- 5 Spare.
- 6 Deactivating reversing buzzer.
- 7 Spare.
- 8 Spare.
- 9 Spare.
- **10** Recirculation flap; use short periods of time only.
- 11 Cross-axle differential lock.
- 12 Spare.
- **13** Lane Departure Warning System (LDWS).





# 1. Pay attention to your driving style

Anticipate; avoid unnecessary braking; drive constantly. 1 start from standstill to 80 km/h uses 0.75 l diesel.

- When no throttle is given, drive in the highest gear (low internal resistance).
- Accelerating quickly uses fuel unnecessarily.
- Release throttle in time, use the energy and let the mass work for you. (18 tons of moving vehicle represents a lot of energy).
- When throttle is released, the consumption is zero.
- Taking a regular trip during daytime and in morning traffic: up to 10% difference in fuel consumption.
- Taking a regular trip in both summer and winter: up to 11% difference in fuel consumption.

## What can you do as a driver for the environment?

# 2. Stay in the green zone Drive in the green zone of the rev

counter, also when accelerating and driving up gradients.

On level roads, ease off the

- On level roads, ease off the accelerator to let the AS-Tronic gearbox change earlier, or change gear manually.
- Change gear as early as possible.
   Always drive in the highest possible gear.
- Full throttle: 1,200-1,600 rpm\*.
- Partial engine load stay at the bottom of the green band.
- Tractive force for a CF65 at 1,700 rpm is the same as at 1,200, resulting in high driving comfort at low revs.

#### 3. Prevent waste

Don't accelerate unnecessarily and don't leave the engine ticking over unnecessarily.

 Even a fuel-efficient GR engine uses
 1 litres of diesel fuel an hour just ticking over.

Additional equipment have an impact as well:

- Auxiliary lighting or other electrical equipment: 1%-3%.
- The airconditioning consumes: 2%.
- Auxiliary lights and bars on front: 3%-10%

#### 4. Think about your speed

Most speed regulators are set at 89 km/h. But that doesn't mean you always have to drive at 89 km/h. Each 1 km/h slower = 1% lower fuel consumption.

If you drive at 85 km/h maximum, you will save 5% fuel. That's as much as 1,500 litres or more per annum! This means not only lower costs, but lower CO<sub>2</sub> emissions.

## 5. Keep your truck in top condition

An airmanagement kit account for approx. 10% of the overall fuel consumption.

 Check the roof spoiler: every 6 cm to low/high = 0.6% higher fuel consumption.

- Cover the load, get straps done up tight; if possible, avoid resistance with the load or equipment.
- Ensure that the tarpaulin is stretched taut. Flapping tarpaulins cost fuel and cause unnecessary noise.

Low tyre pressure (at 6.4 bar instead of 8.6 bar) results in higher fuel consumption by up to 5% and tyre wear by up to 25%. Check the pressures at least once per month.

And naturally keep the truck or combination in top condition by timely and qualified maintenance by an approved DAF service workshop. Optimum lubrication and tuning result in a 3% to 5% improvement in fuel economy.



<sup>\*</sup> rpm = revolutions per minute = engine revs

#### **Engine**

#### The GR engine in your CF65 offers:

- Maximum output already from 1,900 rpm onwards.
- Max. tractive force from as low as 1,200 and up to 1,700 rpm (1,900 for 300 hp version).

Optimum fuel economy is reached in general between 1.200 and 1.600 rpm (green band).





#### Engine revs

#### Accelerating laden on level ground:

- Change full gear at 1,600-1,700 rpm.
- On a slope: some 100 rpm more.

#### Driving with optimum fuel economy:

- At full throttle: 1,200–1,600 rpm.
- If not: close to 1,200 rpm.

#### **Driving performance**

## Putting the CF65's power to work in a fuel-conscious way.

#### The 3 basic rules:

Use as little energy as possible to get the vehicle up to speed.

· Select appropriate gear.

#### Rate the energy required.

 Do I really need to accelerate that much in this situation?

#### Use the vehicle speed.

 A laden vehicle at speed is a lot of energy; make optimal use of that vehicle energy.

#### Gearbox

## Gear selection advice for manual gearbox (laden, on the level):

6 gear: 1-2-3-4-5-6 9 gear: 1-3-4-5-6-7-8

#### AS-Tronic, 6 gears

Automated gear changing based on:

- · Vehicle weight.
- · Driving resistance.
- Throttle position.

You don't have to, but over-riding the shifting is always possible:

- Change gear up at lower engine speeds.
- · Hold the gear (driver's judgement).

Using kick-down on the throttle will achieve higher engine revs but results in higher fuel consumption with only a limited increase in performance:

 The kick-down is to be used very rarely.



#### **Driving steadily**

#### Driving on the level.

- Drive in the highest possible gear (lowest possible revs).
- Keep your speed constant (use the cruise control system).
- Keep your distance (determine your own performance).
- Bring the vehicle back to cruising speed using the throttle before pressing the RES button.

#### Giving throttle:

- In the low gears, not more throttle than necessary.
- In the high gears, accelerate with full throttle only when necessary.

#### Driving on a slope

#### Hold speed at the start of the slope:

- . Throttle up to full load in time.
- Don't change gear if your vehicle "holds its speed" between 1,200–1,600 rpm.
- Change down at 1,200 rpm.

#### Change up:

• Full gear at 1,700 rpm.





#### Typical GR

## Making the most of the engine's benefits

Optimum performance at low revs.At full engine load; 1,200-1,600 rpm.

- At low engine load; close to 1,200 rpm.
   Maximum engine torque from 1,200 rpm up to 1,700 rpm (1,900 rpm for 300 hp version).
- Maximum engine power available from as low as 1,900 rpm onwards.

No need to increase revs!



# AdBlue in practice





DAF SCR Technology for a bright future

## DAF SCR Technology: The road to a bright future

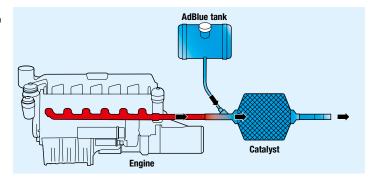
#### Exhaust gases and environment

The CF65 complies with the active European emission legislation norm Euro 5. This means that per kW performance, during one hour, not more than 2 gram of nitrogen oxide ( $NO_X$ ) originates from the exhaust and not more than 0.02 gram of soot (PM).

#### The DAF solution

Realizing these low values, all DAF engines make use of high pressure fuel injection systems with precise injection timing. The resulting excellent combustion values radically prevent the formation of soot. DAF engines do not need soot filters. The temperature and pressure during the combustion process cause chemical reactions between nitrogen and oxygen resulting in nitrogen oxide ( $NO_X$ ) dissipating in the exhaust stream.

To suppress the amount of nitrogen oxides  $(NO_X)$  DAF engines benefit from SCR (Selective Catalytic Reduction). This technology 'purifies' the exhaust stream by injecting in minute measured quantities an additive; AdBlue into the exhaust stream before reaching the muffler/catalyst. The result of this proces is to convert  $NO_Y$  into harmless nitrogen (as in our surrounding air) and water vapor.





#### AdBlue operating range

AdBlue consumption is approximately 1 liter per 100 km. The tank capacity is in accordance with the vehicle's application. On the CF65 series two AdBlue tank sizes are available; 26 litres or 70 liters. Offering an operating range up to 7000 km.

#### AdBlue

AdBlue, a mixture of 32% urea (ammonia molecules) with 68% distilled water, is harmless, non toxic. There are already many petrol outlets offering AdBlue. AdBlue can also be delivered by the DAF Dealer in cans of 5 or 18 liters or in containers. And carrying a 5 litre can, can give you a 500 km reserve.

The AdBlue tank filling pipe is substantially smaller than that of the diesel tank and with its blue cap it is easily recognizable to prevent mistakes. Finally, the AdBlue filling pistol cannot be activated in the diesel tank filling pipe.











#### What will the driver notice?

Basically nothing. As long as diesel and AdBlue are topped up in time the driver doesn't notice anything regarding the exhaust gas after treatment.

The engine emissions are continually measured, when any malfunction occurs or if you've a low level of AdBlue, this is indicated on the dashboard display as warning.

When excess  $\mathrm{NO}_{\mathrm{X}}$  is detected for any reason (for example due to malfunctioning or if you're out of AdBlue) the engine's torque will be restricted to encourage rectification. Vehicles above 15 tons are reduced in torque by as much as 40% as soon as it comes to a standstill. If the problem is caused by malfunction of the vehicle system, the power limit is only activated after 36 driving hours. Largely sufficient to get home.

As soon as the problem is fixed, full torque capacity is available again. The anomaly is registered in the vehicle system. This intervention is according to legislation for all commercial vehicles and regardless of brand or type.





#### Possible AdBlue display warnings

- 1. AdBlue level low: You have some 10% AdBlue (approx 250 to 500 km driving) left.
- 2. AdBlue tank empty: You have no AdBlue left, power limit will apply after standstill.
- 3. System warning: A system malfunction occurs, only if excess  $NO_X$  is detected power limit will apply after standstill.



# Enjoy your drive with your CF65



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