### Making heavy vehicle fleet management easy for you

## REAL

Contact maintenance for any questions on 0800 80 80 69

December 2025

## Torque

### **Air Conditioning**

With summer time here, it's a good time to revisit something many forget about during winter – air conditioning.

Air conditioning (AC) is all about removing heat from your cab, so it stays cool and comfortable when temperatures rise outside

#### How does it work?

In simple terms, the AC system turns refrigerant from a liquid into a gas. As the refrigerant changes state, it absorbs heat and moisture from the cab. This allows the system to deliver cool, dry air back into the cab.





#### KEY PARTS OF AN AC SYSTEM.

#### **AC COMPRESSOR**

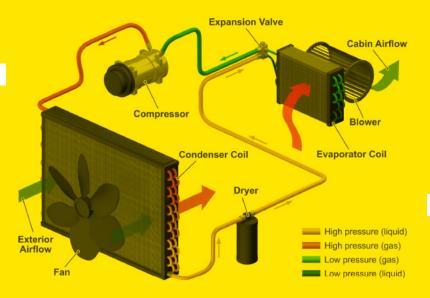
Mounted at the front of the engine and is driven by a belt. It compresses low-pressure refrigerant gas into high-pressure temperature gas.

#### **CONDENSER & FAN**

Usually located at the front of the truck. This works like a radiator, using air to transfer heat. As it cools, refrigerant changes from a gas to a liquid. The fan works alongside the condenser to push through the condenser fins. This airflow is essential for carrying away heat, especially when the truck is idling or moving slowly.

#### **METERING DEVICE**

Also called an expansion valve. This reduces refrigerant pressure quickly, which also lowers in temperature.



#### **EVAPORATOR**

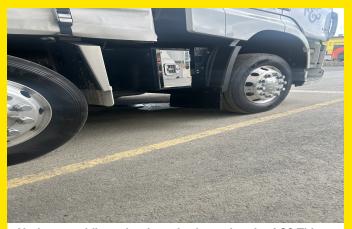
Found inside the cab behind the dashboard. Refrigerant evaporates here, changing from liquid to gas, which creates a cooling effect.

#### **DRYER**

This uses a drying agent to remove moisture from the refrigerant.

#### Is that a leak under the truck?

Ever notice water dripping under your truck after running the AC? Don't worry – that's usually normal. This happens because condensation builds up on the evaporator during regular use. A drain hose carries this water away, which then drips onto the ground. On hot, humid days, you'll see this more often.



Notice a puddle under the cab after using the AC? This photo shows condensation that drains from the AC evaporator.

#### Why does my AC smell funny sometimes?

Unpleasant smells from the AC are usually caused by bacteria or mould growing on the evaporator, where moisture naturally collects. If the drain tube is blocked, moisture can build up even more, making the problem worse. If you notice strong or musty odours, it's best to get the system checked.



This image shows the difference between a clean and dirty evaporator.

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#### Tips and Tricks



- Keep vents clear try not to place items on the dash, as they can block air flow.
- On a really hot days, rolling down the windows before starting the AC can let trapped heat escape, this can allow the AC to cool down the cab quicker.
- Start on recirculation mode to cool the cab down quicker and then flick it over to fresh air mode once the temperature is right to keep the air clean and prevent stuffiness
- Full blast on cold all the time can increase component wear and fuel use. Once comfortable raising the temp slightly or dropping the fan speed can help reduce this wear.
- Cycling the AC during the wintertime can keep the AC compressor and the components lubricated which can potentially prevent leaks and failures when summer comes around again.

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