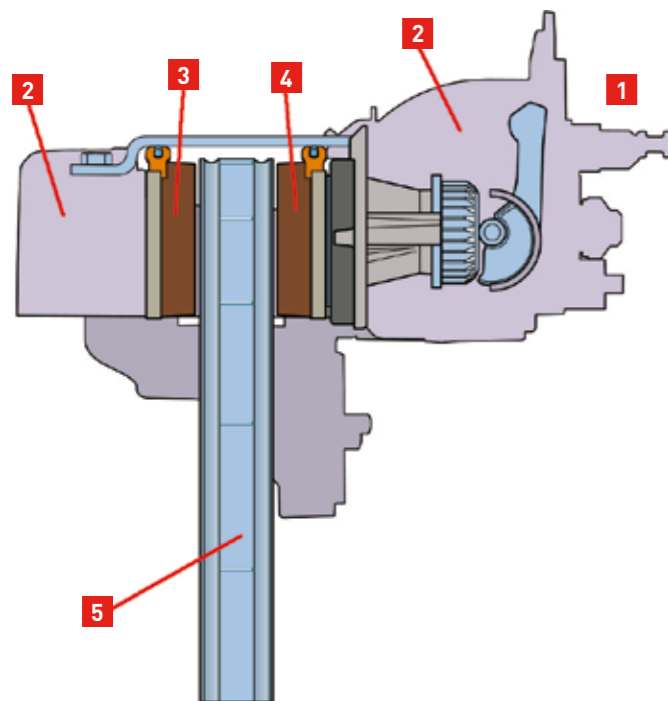


THE BRAKING SYSTEM MAIN COMPONENTS



THE BRAKING SYSTEM MAIN CONSISTS OF THE FOLLOWING COMPONENTS:

1 Pneumatically controlled brake cylinder.

2 So-called "floating brake caliper".

3 An outer and an **4** inner brake pad.

Wheel hub (not visible on the drawing).

5 Brake disc which is attached to the wheel hub via a spline.

The brake caliper is a so-called "floating caliper" with a compressed air controlled brake cylinder which applies the brakes via a lever in the caliper.

In order to always have the correct clearance between brake pad and brake disc the caliper has an automatic adjustment of the clearance.

The brake caliper can be equipped with two wear sensors, one mechanical and one electrical:

- The mechanical sensor shows the wear on the outer brake pad by means of a calibrated dipstick.
- The electrical sensor sends a signal, which is proportional to the pad thickness, to the control unit.

ALL ABOUT BRAKE PADS



PRACTICAL ADVICE

MAXIMISE THE SALE

Don't just sell the part – look for further opportunities to maximise the sale:

- Hub bearings: inner and outer
- Hub bearing seals: inner and outer
- Oil/grease.
- Brake cylinder seals.
- Brake discs.
- Ask the number of brake pads changed - ratio of brake pad change versus brake disc change.

RENAULT FITTED-PART

- One year warranty.
- Fitted by Renault Trucks trained technicians.

RENAULT TRUCKS 24/7

- Professional roadside assistance 24 hrs a day, 7 days a week, 365 days a year.
- Dedicated to getting customers' trucks back on the road with minimum delay.



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Renault Trucks SAS with a capital of 50 000 000 € - 954 506 077 RCS Lyon Crédit photos : © Renault Trucks - 01/2017



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RENAULT
TRUCKS
DELIVER

PRODUCT
COMMERCIAL KNOWLEDGE



FACT

The braking system is the most important safety system on your truck and the most critical components are brake discs and pads.

Not all brake discs perform in the same way under heat and pressure and not all brake pads have correctly positioned wear sensors and expansion grooves. There is no universal material for brake pads that works on all vehicles. Each pad composition must take a number of parameters into consideration; the vehicle's weight and range of use, the type of brakes and the material in the brake disc. Each Renault Trucks model is therefore fitted with a brake pad that is specifically developed to work under its own unique conditions.

THE DIAMOND DISTINCTION

1 | The Renault Trucks performance

Renault Trucks brake discs and pads have been developed together and adapted for each particular model, so providing you with the ultimate in stopping safety and long life performance. The pads are designed with a focus on **low noise level, absence of vibration and a long service life.**

2 | The Renault Trucks wear sensor

Renault Trucks brake pads have a correctly positioned wear sensor closer to the back plate, as well as precisely ground grooves for optimum heat dissipation, so providing maximum service life and squeal-free braking.

Renault Trucks brake discs and pads offer **reduced transmission of heat from the brake disc to the wheel** ensuring maximum braking efficiency and providing for a longer service life.



3 | Good temperature properties

Renault Trucks's brake pads have good properties at high temperatures. The risk of fading, i.e. the temperature of the brake increases to such an extent that the braking effort decreases, is considerably reduced.

4 | Renault Trucks and the environment

All GENUINE Renault Trucks brake pads are **free of asbestos and lead**, and do not contain prohibited amounts of environmentally hazardous substances. Preserves nature and protects the people who service and maintain trucks.

FEATURES	BENEFITS
Pad friction material to OE specification. OE specification developed by understanding the vehicle type, weight and operation.	Friction material delivers maximum braking efficiency/optimal service life. Right pad – Right vehicle – reduced overall running costs.
OE specification meeting all Renault Trucks brake testing criteria – to ensure all brake components work together.	Longer life for both disc and pads – reduced overall running costs.
Pad backing plate – tailored to match caliper.	Pads engage with caliper correctly – right first time.
Pad friction material incorporating centre groove and chamfered edges.	Smooth operation – reduce vibration and noise – inhibits cracking.
Fade free	Maintain braking effort.
Environmentally friendly material used throughout.	Workshop compliant (health & safety).

TWO PARTS MAY LOOK ALIKE, BUT...

There will always be non-genuine suppliers wanting to sell braking system components to Renault Trucks operators. The quality of these non-genuine makes naturally varies as much as their prices.

However, even if a well-known non-genuine Renault Trucks make is chosen – it is by no means certain that the braking components are tailored to the specification of a Renault Trucks vehicle braking system in the same way as a GENUINE Renault Trucks part.

BRAKE PADS – BACKING PLATES

- Cast steel plates (on which the friction material is attached) have been strengthened and are thicker – also preventing vibration.

FRICTION MATERIAL

- A friction sensor that provides optimal braking effect.
- A mild abrasive that removes dirt and corrosion from the disc.
- A lubricant that preserves both pads and the brake disc.
- Reinforcing fibres that increase service life.
- Grooved and bevelled edges to provide for a "screach-free" braking.

CALIBRATION

- Renault Trucks Tech Tool used for calibration – brake pad change.

BRAKE PADS GENERAL

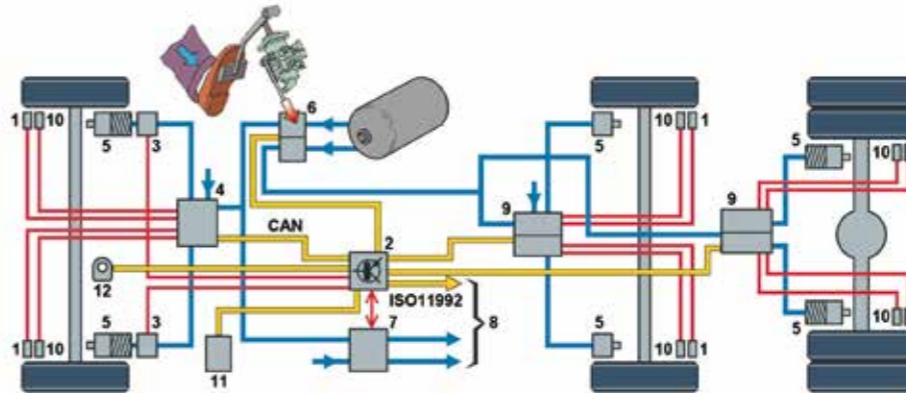
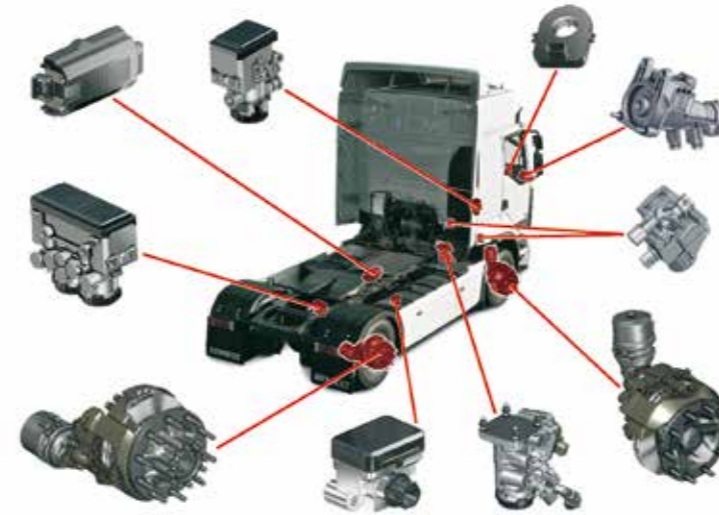
- The Renault Trucks brake pads are designed with a focus on low noise level, absence of vibration and long service life.
- An adhesive that provides mechanical strength.
- All substances included are chosen with consideration for the environment.

TESTING

- The brake pads are one of the most important safety parts in a vehicle. This is one of the reasons why Renault Trucks spends a lot of time, energy and money in developing new brake pads.
- Renault Trucks uses 3 testing periods in the extremely meticulous creation of a new brake pad: dynamometer/test track/field trials.

THE BRAKING SYSTEM HOW IT WORKS

On today's Renault Trucks, a **pneumatic system** is used. The engine powers a compressor that generates compressed air. When the driver presses the brake pedal, air is forced through the footbrake valve to the wheel brakes. This system also makes the connection to trailers very easy.



THIS SYSTEM MAKES THE CONNECTION TO TRAILERS VERY EASY

BRAKE PAD

The brake pad for the brake disc consists of a plate and an asbestos-free pad. The main function of the pads is **to transfer the force from the brake mechanism to a friction force between pad and disc.**



BRAKE DISC

The solid brake disc is made from a highly durable material, which reduces the risk of crack formation and vibration. The brake disc is fitted to the hub via splines – which allows the brake disc to expand radially, extending lifespan and reduces the risk of crack formation.

This design also reduces the risk of the wheel bearings, overheating.

