



# WHEN SHOULD I CHANGE MY BRAKING COMPONENTS?

## BRAKE PADS

When the pad becomes too thin, the disc comes into contact with the wear indicator and the warning light on the dashboard is illuminated.

Failure to change the brake pads promptly risks premature damage to the disc, and accordingly,

- Less safe braking
- Double or even quadruple bills!

## BRAKE DISCS

The discs usually require replacement every second change of the brake pads. **But beware - if you do not choose quality products, this frequency increases!**

if you do not change your discs promptly, these may crack or break, leading to:

- A non-functioning braking system
- A broken down vehicle, or even risk of accident!



*Did you know?*

All components of the same axle must be changed systematically, in order to avoid any system imbalance. This is in the interests of your safety!

*Did you know?*

The disc must be changed when it is worn beyond a certain thickness. This is always indicated on Iveco discs.

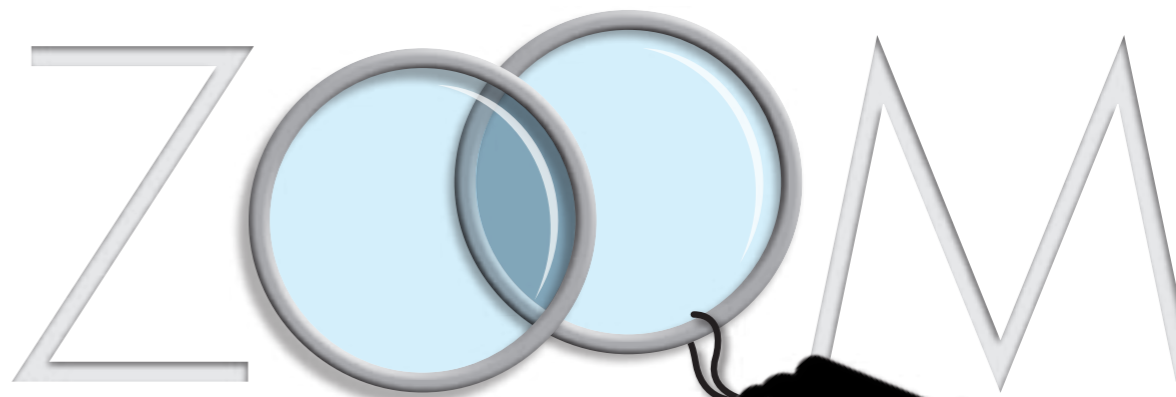
### A DELAY IN CHANGING YOUR BRAKING COMPONENTS =

- The risk of unbalanced braking and loss of control of the vehicle
- Increased braking distances
- Noise and vibrations
- Premature wear of other components and increased bills as a result of this



### IVECO TAKES CARE OF YOUR SAFETY AND THE ENVIRONMENT

- WE COMPLY WITH EUROPEAN STANDARD ECE-R90
- WE GUARANTEE THAT OUR PRODUCTS ARE FREE FROM ASBESTOS, LEAD, ANTIMONY OR CADMIUM, WHICH ARE HARMFUL TO THE ENVIRONMENT AND TO HUMAN HEALTH



IVECO MAKES THE DIFFERENCE. LET'S SEE HOW.



## THE BRAKING SYSTEM WITH IVECO DISCS

TRAVEL IN TOTAL SAFETY.

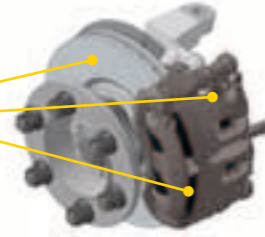




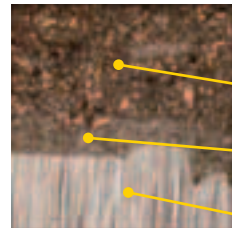
# THE MAIN COMPONENTS OF A DISC BRAKING SYSTEM.

The disc braking system is the most widely used today, and is also the most efficient. It contains four main components:

- DISCS
- CALLIPERS
- PAD AND WEAR INDICATORS



The calliper is attached to the chassis and the disc is attached to the wheel. When you brake, the calliper pistons push the pads against the disc, stopping its rotation, and consequently, that of the wheel.



## BRAKE PADS

FRICITION MATERIAL

UNDER-LAYER

STEEL BASE

### FRICITION MATERIAL:

- Contains more than 30 different raw materials
- Is in contact with the disc
- Ensures the braking force

### UNDER-LAYER:

- Ensures good grip for the friction material
- Reduces noise associated with braking
- Makes sure that heat is evenly distributed

### STEEL BASE:

- Very resistant, does not become deformed under pressure from the pistons
- Treated against rust

The composition of the friction material is crucial to ensuring total safety, and this varies greatly from one manufacturer to another!



## THE DISC

Along with the pads, the disc is the second component subject to most stress. This part is placed under significant mechanical and thermal stress. During braking the kinetic force is transformed into thermal energy.

**FOR THIS REASON, BRAKING COMPONENTS CAN BE EXPOSED TO VERY HIGH TEMPERATURES, SOMETIMES REACHING UP TO 800°C!**

A disc which resists = a very high quality cast iron + a specially-designed ventilation system.



# DON'T LET ANYONE ELSE MAKE DECISIONS ABOUT YOUR SAFETY!

Not all pads and discs are made equal. And even if you are not responsible for changing your components, demand the best quality. This is in the interests of your own safety!

## ONLY TRUST ORIGINAL REPLACEMENT PARTS!



It is difficult to compare the quality of two discs or pads with the naked eye. However, parts that look identical do not guarantee the same level of safety!

### TESTS CARRIED OUT WITH ADAPTABLE PADS

At first sight, the adaptable brake pads appear to be of good quality.

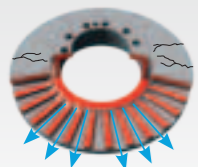
ADAPTABLE

AFTER BRAKING 50 TIMES		<p><b>Signs of overheating</b> Heat is ineffectually dispersed by the pads</p> <p><b>Transfer of friction material</b> The pads offer little resistance</p>	<p><b>AN IRREGULAR LAYER FORMS ON THE DISC, WHICH BECOMES LESS EFFECTIVE</b></p>		
AFTER BRAKING 100 TIMES		<p><b>Cracks in disc</b></p>	<p><b>Cracks in pads</b></p>	<p><b>BAD-QUALITY PADS = PREMATURE WEAR OF DISCS AND DANGER</b></p>	

IVECO

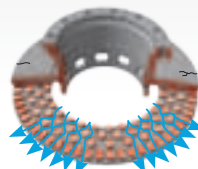
AFTER BRAKING 500 TIMES				<p><b>ORIGINAL REPLACEMENT PARTS = SAFETY AND DURABILITY</b></p>	
-------------------------	--	--	--	--	--

# SPECIALISED VENTILATION FOR HIGH DURABILITY.



### CLASSIC VENTILATED DISC

The air is diffused through the disc by linear pillars  
> Around the pillars, the disc continues to heat up rapidly  
> If a crack appears, this will then extend little by little across the whole width of the disc



### IVECO ORIGIN VENTILATED DISC

The air is diffused through the disc by T-shaped pillars  
> Air distribution is greatly facilitated, and the disc surface is exposed to less heat  
> If a crack appears, this is prevented from increasing in size by the pillars

→ Air circulation

~~~~~ Cracks caused by heat



## Did you know?

The braking system is a real puzzle. Right from conception, all the parts are developed together for a perfect match. This ensures optimum safety, greater durability and improved comfort.

REPLACING ORIGINAL PARTS WITH EVEN GOOD-QUALITY ADAPTABLE COMPONENTS LEADS TO LOSSES IN COMFORT (NOISE, VIBRATION ...), SAFETY AND DURABILITY.



## CHOOSE ORIGIN REPLACEMENT PARTS

- **SAVINGS** - LESS FREQUENT REPLACEMENT OF COMPONENTS
- **LESS VEHICLE DOWNTIME**
- **GREATER SAFETY** WITH PARTS THAT ARE MORE RESISTANT TO CRACKING