



The Genuine Alternative...

# What is Regulation 90?

UN ECER90, is a safety regulation which was introduced in 1999 for replacement disc brake pads and brake shoes.

The aim was to establish a common minimum standard of braking performance, product integrity and quality across the whole of Europe.

Brake drums and discs were not included in ECE R90. These too are safety critical components and so the approval was extended in 2014 to include commercial vehicle products and in 2016 for light vehicles and it became known as ECE R90:02.

This regulation only applies to replacement parts for braking systems type-approved after the introduction dates,

## Light Vehicles

Pads and shoes - September 1999

Discs and drums - November 2016

## Commercial Vehicles


Brake Pads - November 2014


Brake linings - November 2014

Discs and drums - November 2014

## How Do I Know If a Product is Approved?




All approved products will carry the "E" approval mark which will be of the following general form:

series one numbers  90R-01820/099

series two numbers  90R-02A0184/28786

These numbers should be clearly displayed on both the label and product.



Equivalent Part Numbers	
<b>JCP8061</b>	<b>PAD2036</b>
	<b>BBP2514</b>
HONDA: Accord, Civic, Prelude (R)	<b>LP3682</b>
	<b>FVR4661</b>
	<b>MDB3719</b>
	<b>GDB2117</b>
Part numbers of third party manufacturers shown are to identify the equivalent compatible Juratek product and such use does not imply any connection with such manufacturers. This part may fit other applications. For a full list see <a href="http://www.juratek.com">www.juratek.com</a>	
Brake Pad Set (4 pads)	
SGBP	Batch No. SG2777
	
5 060100 060682	
 90R-02A0184/28786	
A22130	AD104

[www.juratek.com](http://www.juratek.com)

# How is Product Tested?

**ECE R90** for brake pads and shoes comprises of the following vehicle tests:

- R13H (the legal tests used to approve new vehicle braking systems)
- Type O cold performance
- Type O high speed performance
- Type 1 (Fade) test
- Parking brake test (rear pads only)
- Cold performance comparison With OE product (equivalence within 15% required)
- Speed performance tests – 65/135 kph (< 15% variation required)

Additionally ECE R90 sets minimum standards for:

- Pad assembly
- Shear strength
- Conformance of production
- Hot and cold compressive strength
- Identification
- Packaging

**ECE R90:02** for brake discs and drums comprises of the following vehicle tests:

- Geometric Parameters
  - Disc thickness variation (DTV),
  - Cheek thickness variation,
  - Lateral run-out,
  - Parallelism,
  - Flatness & surface roughness
- Performance tests
  - These tests are to check that a vehicle fitted with replacement parts meets the braking regulations that all new vehicles must meet before they can be released into the market by their manufacturer; to ensure vehicle safety, ECER90:02 requires that replacement brake discs and drums should provide performance levels within 8% of the OE part that it is replacing.
- Structural Integrity Tests
- Thermal Fatigue
- High Load
  - The regulation incorporates very demanding thermal fatigue and high load tests. These tests are at the heart of ECER90:02 and are designed to ensure that replacement parts match the capability of OE parts in dissipating high levels of braking energy without excessive cracking of the braking surface or structural failure.
- Packaging
- On-going conformance of production (CoP)
  - Chemical composition
  - Tensile strength
  - Hardness

