

# GENUINE CUMMINS PARTS



THERE IS A DIFFERENCE.

# The Genuine Cummins Difference.

The difference between a Genuine Cummins part and a non-genuine part isn't always easy to see. It can be something as small as a ring gap that's a couple of millimeters too wide on a non-genuine part. In a Cummins engine, that small difference could result in less power, insufficient lubrication, poor fuel economy, premature wear and even catastrophic engine failure.

While you may save a little money upfront by purchasing non-genuine parts, it could cost you a lot more in the long run. To prove this, Cummins engineers performed thorough analytical testing pitting Genuine Cummins parts against their non-genuine counterparts.

Testing included visual inspection, critical measurements, materials analysis and parts chemistry analysis. The following results demonstrate why **Genuine Cummins parts are** always better for your Cummins engine than non-genuine parts.



## Genuine

Considered the heart of the engine, the piston is a critical component that performs under stressful and demanding conditions.

#### **BENEFITS:**

- Better combustion efficiency
- Better emissions
- Optimally designed for durability and Iongevity
- Better fuel economy



**Stronger** 

due to better metallurgical technology and process

#### **PROVIDES:**

- Increased protection against corrosion and wear
- Higher heat resistance
- Less potential for cracking
- Better reliability and durability

## Non-Genuine

Bowl height is over

**Shorter** 



#### 🔼 RISKS

- Less efficient combustion
- Poor emissions performance

Piston exhibits

#### **DEBOND**

in the ring carrier



#### RISKS

- Cracking
- Crown disintegration
  - Air and fuel blowby

Piston offset is more than

**Smaller** 



#### A RISKS

- Increased friction and wear
  - Inefficient piston thrust

## Genuine

The cylinder liner provides a replaceable surface for the piston rings to slide upon. The geometric relationship of the pistons, sleeves and engine block's cylinder bores is critical to the proper function of the engine.

#### **BENEFITS:**

- Optimally designed for durability and longevity
- Better engine operating temperature
- Lower risk of premature overhaul



Genuine cylinder liner is 10% harder due to containing

more nickel and copper

#### **PROVIDES:**

- Higer tensile strength
- Lower engine operating temperature
- Extended need for overhaul

## Non-Genuine

Liner has a

larger cylinder liner bead fillet radius



- Combustion gas leakage
  - Reduced engine output

Top stop insert fillet is

**Smaller** 



- Liner cracking
- Water leakage
- Premature need for overhaul

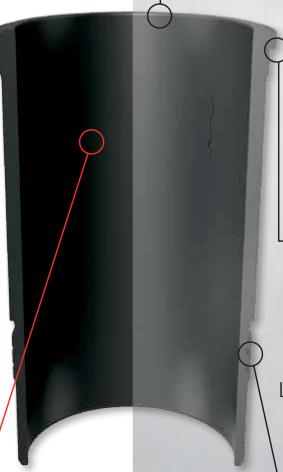
Liner's outer diameter is

**Smaller** 



🗥 RISKS

- Increased noise and vibration
  - Insufficient press fit
  - Coolant and oil mixture
  - Degradation of sealing and cooling potential



## **Genuine**

The connecting rod bearings are designed to provide a smooth, durable surface for the part to move on.

#### **BENEFITS:**

- Better durability
- Reliability under extreme operating conditions
- Lower risk of catastrophic failure



## **CONNECTING ROD BEARING**

is constructed of

#### **SIX LAYERS**

- 1. Tin plating
- 2. Lead-tin-copper overlay
- 3. Nickel barrier
- 4. Copper-lead-tin lining
- 5. Steel back
- 6. Tin plating

#### **PROVIDES:**

- Increased reliability
- Protection against rust
- Better protection against catastrophic failure

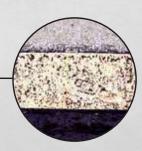
## Non-Genuine

## **CONNECTING ROD BEARING**

is constructed of

## THREE LAYERS

- 1. Copper
- 2. Nickel
- 3. Steel back





#### **RISKS**

- Susceptible to rust
- Could cause catastrophic failure of connecting rod
  - Compromised reliability

## A Better Warranty That Travels Well.

Genuine Cummins quality is the reason our parts come with a full factory warranty. Cummins parts warranty is comprehensive, ensuring peace of mind and financial protection. Every part is backed 100% for parts, labor, progressive damage and consumables, with no deductible. Having a great warranty doesn't matter when you are stranded and nowhere near an authorized repair shop. That's one more advantage of buying Genuine Cummins parts – Cummins has a network of over 7,100 authorized service locations worldwide, where your warranty will be honored and the work will be completed by Cummins-certified technicians. For additional warranty information or to find an authorized service location near you, visit locator.cummins.com.



## **Better Parts. Better Availability.**

Of course, it doesn't matter how good the quality of Genuine Cummins parts is if the part is not close at hand when you need it. That's why Cummins distributors and dealers stock thousands of commonly used parts in local inventory. If for some reason the part you need is not already in stock, we can quickly obtain it through our global logistics network. Regardless of where you are located, we can find the exact Genuine Cummins part you need, and have it expedited to you, minimizing downtime and any associated loss in productivity.



## Not All Parts Are Created Equally.

Often, what you can't see makes all the difference. Engine components must be accurate to specifications that can't be discerned by the human eye. Precision design, state-of-the-art manufacturing and rigorous testing ensures that Genuine Cummins parts perform at Cummins factory-specified levels of efficiency, reliability and durability. For more information about Genuine Cummins parts, visit cumminsengines.com/parts, or see your local Cummins distributor or authorized dealer.



Cummins Inc., Box 3005, Columbus, IN 47202-3005 U.S.A. Bulletin 5410593 Printed in U.S.A. 11/16 ©2016 Cummins Inc.