



# Everyday Reliability for School Buses

CAT® Integrated Powertrains for 2007

**CATERPILLAR®**

# Spec the school bus engine that

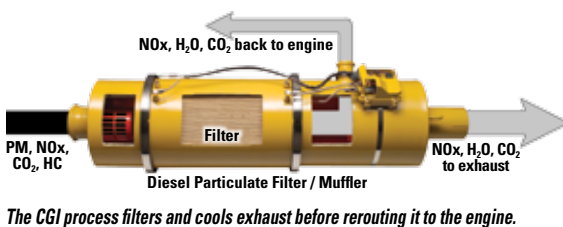
Nothing is more important than the safe transport of school children day in and day out. And nothing does the job more reliably than the integrated powertrain solution of a Cat® engine with ACERT™ Technology matched to a Cat automatic transmission. Proven over millions of miles, Cat engines are enhanced for 2007 to meet tougher emissions standards while providing peace of mind and bottom-line value. Cat automatic transmissions complete the equation with versatile performance and PTO flexibility.

For 2007, the C7 meets tougher 2007 EPA emissions regulations to let riders breathe easier—while still offering the outstanding reliability that allows fleet owners to relax. This efficient mid-range engine even delivers up to 4% improved fuel economy to help keep operating costs low. Credit ACERT Technology, now enhanced with Clean Gas Induction and a Cat Diesel Particulate Filter featuring its own Cat Regeneration System.

## More Cool, Clean Air

Clean Gas Induction (CGI) is a proprietary ACERT Technology process that draws off a small amount of non-combustible gas after it has passed through the Diesel Particulate Filter (DPF). The gas is then cooled, blended with more incoming cool, clean air and returned to the combustion chamber.

## The CGI process through the DPF



The CGI advantage is clear. It recycles cool, clean air, which is key to good fuel economy, reliability and durability.

## Precision Combustion

Cat Designed Injection Technology  
Clean Gas Induction

## Air Management

Variable Nozzle Turbocharger



## Advanced Electronics

Electronic Control Module  
System Integration

## Effective Aftertreatment

Diesel Particulate Filter  
Cat Regeneration System

## Automatic Regeneration

The Cat Regeneration System (CRS) activates automatically when soot builds up, with no driver action required. It works under any operating condition, using only the precise amount of fuel necessary to oxidize soot. Ash that collects in the Cat DPF can be cleared with a special cleaning tool. The CRS is as reliable as the engine itself, and is covered by the standard Cat engine warranty.

# t answers the bell day after day.

## Choose from a range of ratings to get the right fit for any fleet.

The Cat C7 with ACERT Technology for 2007 continues a tradition of value and versatility. Horsepower ratings range from 210-300, providing the perfect fit for virtually any school bus operation. And the engine's compact design delivers excellent horsepower-to-weight ratio. Even with its many components typically found only on heavy duty engines, the C7 provides outstanding fuel economy and low overall operating costs.

## Parent Bore = Overall Value

The C7 "parent bore" design offers certain advantages over the more common "wet-sleeve" design. For example, it stiffens and strengthens the engine's cylinder block for greater durability. More importantly, parent bore engines such as the C7 offer better overall value for school bus applications.

Here's why. Wet-sleeve engines are more easily rebuilt — but more expensive to produce. When overhaul isn't part of the picture there's no need to spec their added cost. That's the case with school buses, which typically average 15,000 miles a year and are traded in before 10 years or a life cycle of 150,000 miles. The durable C7 has a projected life to overhaul of 350,000-450,000 miles, so chances are strong that an overhaul won't be necessary during the first life cycle — or even the second.



Cylinders: In-line 6

Bore/Stroke: 4.33 x 5.00 (110mm x 127mm)

Displacement: 7.2 L (441 cu in)

Weight: 1425 lbs (647 kg)

Horsepower: 210-230 @ 2500 rpm  
230-300 @ 2400 rpm

Torque: 520-860 lb-ft @ 1440 rpm

## For the benefits of an integrated powertrain, the choice is automatic.

Match the Cat CX28 Automatic Transmission with the C7 engine.

The powerful result is a powertrain that provides all the benefits of integration, including the ability to diagnose on-site with the same laptop used for Cat engines. A single point of service means more convenience and less service downtime.



## Mid-Range Versatility, Heavy Duty Power

- Designed to match the Cat C7 engine
- Multiple PTO configurations for flexibility
- Engineered and built with classic Cat quality

Speeds: 6 forward, 1 reverse

Horsepower: 425 maximum

Torque: 1350 lb-ft maximum

Weight: 680 lbs (309 kg)

## Enjoy the additional value of long-term warranty protection.

The Cat® C7 is so dependable you may never need to take advantage of its warranty. But it's still nice to know it's there. The standard warranty\* period for Cat C7 on-highway engines powering school buses is 60 months/6,000 operating hours. Extended Service Coverage (ESC)\* is an optional repair cost protection plan for owners of school buses powered by Cat on-highway engines. ESC pays 100% of parts and labor charges for any covered failures caused by defects in materials or workmanship under normal use and service.

\*See your dealer for full details and conditions.

## Go to the head of the class with genuine Cat parts and service.

Count on the Cat network of more than 2,500 authorized locations for convenient access to genuine Cat parts and service across North America. Our industry-leading support includes the Caterpillar On-Highway Engine Call Center, where technicians are available 24/7 to answer technical questions or direct you to a dealer. Just dial 1-800-447-4986 or send an email to [Call\\_CAT@cat.com](mailto:Call_CAT@cat.com).

