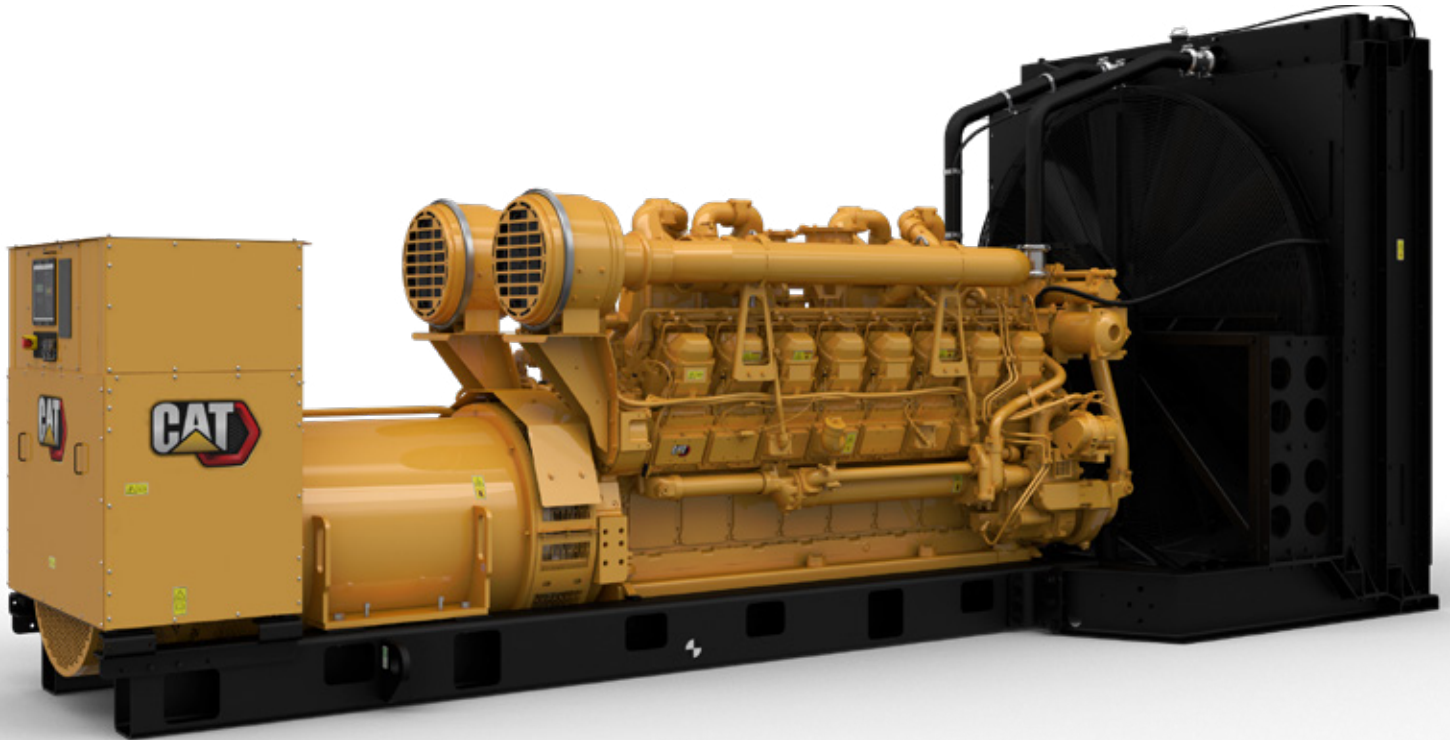


Cat[®] Dynamic Gas Blending[™] Engine Upgrade Kits

For Select 3500 Electric Power Engines



Your Engines...Today's Flexible Technology

Upgrade select electric power engines to get the most from fuel combustion. The Dynamic Gas Blending[™] (DGB[™]) solution continuously modulates gas substitution under all operating conditions to optimize fuel costs while maintaining engine performance, reliability, and durability. Dynamic Gas Blending automatically adjusts to changes in incoming fuel quality and pressure, allowing your engine to run on a wide variety of gaseous fuels.

This upgrade will deliver tangible customer value through:

- Latest control technology with ADEM[™] A4 for improved diagnostic capability
- Safety features including in-engine flame arresters
- Full parts warranty coverage
- Up to 70% gas substitution with a wide range of gas quality and a wide load range
- Substantial reduction in fuel costs
- Increased return on investment with new and Reman kit options

Caterpillar recognizes the market demand for a flexible solution to utilize both natural gas and diesel fuels. Dynamic Gas Blending technology allows for engines to be upgraded to a system that will provide sustainable development, lower cost of ownership, and improved diagnostic capability. >>



Applicable Engines

Engine Model	3516B				3516B HD			
Speed	1500 rpm		1800 rpm		1500 rpm	1800 rpm	1500 rpm	
Frequency	50 Hz		60 Hz		50 Hz	60 Hz	50 Hz	
Application	Prime	Continuous	Prime	Continuous	Continuous – Switchable		Prime	Continuous
Power	2000 kVA / 1710 bkW	1750 kVA / 1514 bkW	1825 ekW / 1968 bkW	1640 ekW / 1772 bkW	1750 kVA / 1536 bkW	1640 ekW / 1785 bkW	2275 kVA / 1934 bkW	2000 kVA / 1704 bkW
Max Gas %	70							
Transient Performance	G2 ISO 8528-5							
Engine Emissions Labeling	Non-Certified – Not for use in EPA-regulated territories							
Serial Number Prefix	YAT, YBT, ZAP, ZBP, YAP, JCH, LY3, LNW, SNE, NYJ, 8NW, FDN		YAT, YBT, ZAP, ZBP, JCH, LY3, FDN		1HZ, DD8, DD9, GZS		YAW, YBW, ZAR, ZBR, SNF, YAR, JCN, LY4	
Restrictions	Radiators/coolers must be capable of rejecting enough heat to allow proper operation at worst case site conditions. Gas substitution rates may decrease when SCAC coolant supplied to the aftercooler inlet exceeds 140°F (60°C). New SCAC thermostats are provided in the DGB™ kits for installation if needed.							

Upgrade Features & Benefits

- Core diesel engine with natural gas introduced into the intake air stream
- Remains a compression ignition engine
- Uses natural gas when it's available, seamlessly reverts to diesel-only mode if natural gas is not available
- Continuously optimizes natural gas substitution up to 70% gas/30% diesel while maintaining diesel power and transient performance characteristics
- Closed loop feedback monitors combustion characteristics to continuously protect engine from exceeding design limits
- Automatically adapts to operate over a wide range of gaseous fuels (i.e. methane number & BTU content)
- Simple installation and no load bank required
- No recalibration needed when equipment is moved or gas supply changes

Additional Options = Added Flexibility

With additional kit options you can choose the right kit for your operation.

- **Main Kit** – Features all new components, the best option for customers who cannot purchase Reman
- **Main Kit without heads** – Same components as the Main Kit with the exception of cylinder heads, for customers who can utilize DGB heads today and complete the upgrade tomorrow
- **Reman Main Kit** – Same as the Main Kit, but includes Reman cylinder heads instead of new. Allows core return on cylinder heads and ECM for those customers who can purchase Reman

For additional information, [contact your local Cat® dealer.](#)

LET'S DO THE WORK.™

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We offer you the right parts and service solutions, when and where you need them.

The Cat dealer network of highly trained experts keeps your entire fleet up and running to maximize your equipment investment.

