

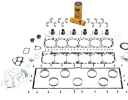


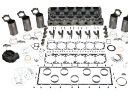






# CAT® REMAN HEAVY-DUTY ENGINES REPAIR OPTIONS REFERENCE GUIDE

For the work you do, you need a heavy-duty truck engine that keeps running strong. We've been committed to Cat® truck engines and the people who depend on them for 85 years and counting. To deliver on that commitment, we offer a broad range of repair solutions, from high quality components to overhaul kits to complete Cat Reman engines. To find the right repair solution for your engine, see the other side of this guide for part numbers specific to your engine model and serial number. Work with your local authorized Cat dealer or enjoy fast online ordering from [parts.cat.com](http://parts.cat.com), anytime, day or night.

SOLUTIONS FOR HEAVY-DUTY ENGINES <sup>1</sup>										
MINOR LEVEL		CAT® PRECIOUS METALS KITS				ASSEMBLED SOLUTIONS		COMPLETE ENGINES		
										
<ul style="list-style-type: none"> <li>» Air compressors</li> <li>» Bearings</li> <li>» Cylinder heads</li> <li>» Cylinder packs and pieces</li> <li>» Electronic Control Modules (ECM)</li> <li>» Filters</li> <li>» Fluids</li> <li>» Gaskets, seals, and o-rings</li> <li>» Injectors</li> <li>» Oil coolers</li> <li>» Oil pumps</li> <li>» Sensors and harnesses</li> <li>» Turbochargers</li> <li>» Water pumps</li> </ul>	<ul style="list-style-type: none"> <li>» Exhaust manifold</li> <li>» Injector cup</li> <li>» Exhaust bellows</li> <li>» Spacer plate and shim</li> <li>» Camshaft and rocker arms</li> <li>» Head gasket sets</li> <li>» Other gasket sets</li> </ul>	<ul style="list-style-type: none"> <li>» Economical repair option for engine leaks</li> <li>» No core charge</li> <li>» Includes:                             <ul style="list-style-type: none"> <li>» Rod and main bearing set</li> <li>» Head gasket set</li> <li>» Front cover gasket</li> <li>» Oil pan gasket</li> <li>» Fuel injector kit gasket</li> <li>» Exhaust manifold sleeves, studs and locking nuts</li> <li>» Oil pan isolator assemblies</li> <li>» Thermostats</li> <li>» Oil and fuel filters</li> </ul> </li> <li>» When pistons, rings, or liners are needed, move to silver</li> </ul>	<ul style="list-style-type: none"> <li>» Economical engine rebuild option</li> <li>» No core charge</li> <li>» Includes everything in the bronze kit plus:                             <ul style="list-style-type: none"> <li>» Liners</li> <li>» Liner seals</li> <li>» Piston body skirts</li> <li>» Piston rings</li> <li>» Piston wrist pins</li> </ul> </li> <li>» When connecting rods are needed, move to gold</li> </ul>	<ul style="list-style-type: none"> <li>» Intermediate engine rebuild</li> <li>» Includes everything in the silver kit plus:                             <ul style="list-style-type: none"> <li>» Pre-assembled cylinder packs, which come with connecting rods, saving you labor time</li> </ul> </li> <li>» When head or injector set is needed, move to platinum</li> </ul>	<ul style="list-style-type: none"> <li>» Comprehensive engine rebuild</li> <li>» Includes everything in gold kit plus:                             <ul style="list-style-type: none"> <li>» Cat Reman cylinder head and cylinder head bolt set</li> <li>» Cat Reman water pump</li> <li>» Cat Reman injectors</li> <li>» Cat Reman oil pump</li> </ul> </li> <li>» When advanced block machining is needed, move to short block or long block</li> <li>» When advanced block machining and Variable Valve Actuator (VVA) set and/or camshaft set is needed, move to long block</li> </ul>	<ul style="list-style-type: none"> <li>» Cylinder block</li> <li>» Assembled pistons and connecting rods</li> <li>» Crankshaft</li> </ul>	<ul style="list-style-type: none"> <li>» Assembled components:                             <ul style="list-style-type: none"> <li>» Cylinder block and head</li> <li>» Front gear train and housing</li> <li>» Camshaft and valve train</li> </ul> </li> <li>» Shipped loose components:                             <ul style="list-style-type: none"> <li>» Fuel pump</li> <li>» Water pump</li> <li>» Oil cooler</li> </ul> </li> <li>» When you choose a Cat Reman long block with new content—which features 100% new cylinder block, cylinder head and crankshaft—even catastrophic engine issues like a broken crankshaft, damaged and/or ventilated block, excessive rust and corrosion or fire damage can get you core credit<sup>2</sup></li> <li>» When turbocharger(s) exhaust/intake manifold, fuel/oil lines, ECM, wiring harnesses or engine sensor set is needed, move to a complete engine</li> </ul>	<ul style="list-style-type: none"> <li>» Extend the lifecycle of your truck with Cat Reman complete engines</li> <li>» True drop-in solution for customers</li> </ul>	<ul style="list-style-type: none"> <li>» Inspected and dyno tested to meet original Caterpillar performance specifications</li> <li>» Includes the ECM, engine wiring harness and sensor set, complete set of oil and fuel lines, turbo(s), injectors, and more</li> <li>» Less downtime and saves money on labor</li> </ul>	<ul style="list-style-type: none"> <li>» Same features and benefits as Cat Reman engines, plus 100% new cylinder block, cylinder head and crankshaft</li> <li>» When you choose a Cat Reman engine with new content—which features 100% new cylinder block, cylinder head and crankshaft—even catastrophic engine issues like a broken crankshaft, damaged and/or ventilated block, excessive rust and corrosion or fire damage can get you core credit<sup>2</sup></li> <li>» Good option for customers who want to upgrade to a newer model or replace another engine brand<sup>3</sup></li> <li>» Allows you to restart the lifecycle of your engine, making future overhauls possible</li> </ul>
<b>INDIVIDUAL COMPONENTS</b>	<b>MINOR LEVEL REPAIR KITS</b>	<b>BRONZE</b>	<b>SILVER</b>	<b>GOLD</b>	<b>PLATINUM</b>	<b>CAT REMAN SHORT BLOCK</b>	<b>CAT REMAN LONG BLOCK AND LONG BLOCK WITH NEW CONTENT</b>	<b>CAT REMAN ENGINE</b>	<b>CAT REMAN ENGINE WITH NEW CONTENT</b>	

## CATERPILLAR WARRANTIED PRODUCT

Genuine Cat new and Cat Reman parts are covered by a 12-month Caterpillar Limited Warranty<sup>4</sup> against Caterpillar defects in material and/or workmanship. Cat Reman heavy-duty engines are covered by a 24-month Caterpillar Limited Warranty.<sup>4</sup>

## EXTENDED SERVICE COVERAGE (ESC)

U.S. and Canada only.

Qualified components have available Component Plus ESC options up to 48 months. This coverage pays for parts and repairer labor charges for covered component failures due to defects in materials or factory workmanship under normal use and service.

Cat precious metals kits have available ESC options no matter if installed by an authorized Cat dealer or the do-it-yourself installer.

ESC Terms for precious metals kit parts last up to 48 months from the purchase date. Should a kit part fail due to a defect in material or factory workmanship your authorized Cat dealer will replace it.

Cat Reman heavy-duty engines have ESC options up to 60 months.<sup>5</sup>

<sup>1</sup>Repair options and component consists may vary by model. New content options not available for all models. Contact your authorized Cat dealer for details.

<sup>2</sup>Additional requirements apply. Contact your authorized Cat dealer for more information.

<sup>3</sup>Some exclusions apply.

<sup>4</sup>Warranty can vary by model and application; limitations apply. For complete details about the applicable Caterpillar Limited Warranty, contact an authorized Cat dealer.

<sup>5</sup>60-month coverage is available on heavy-duty Cat Reman engines, with a 500k mile limit. Contact your authorized Cat dealer for details.

## YOUR DEALER IS STANDING BY

The Cat dealer network stocks a broad line of new and Cat Reman parts and components, supported by the Caterpillar worldwide inventory and distribution system. With over 30 authorized Cat dealers in North America who manage a combined network of 2,000+ sales and service locations, most components are available and ready to install, reducing your downtime and maintaining productivity. [Contact your local authorized Cat dealer today.](#)



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# CAT® REMAN HEAVY-DUTY ENGINES REPAIR OPTIONS REFERENCE GUIDE

CAT PRECIOUS METALS OVERHAUL KITS								
Sales Model	Engine S/N	Horsepower Range	Bronze	Silver	Gold	Platinum		
C-12	2KS00387-UP	335-455 HP	603-6649	350-5735	10R-9808	10R-9810		
	MBL00001-UP			352-6018 <sup>1</sup>	10R-9809	10R-9811		
C13 ACERT™	KCB00001-05433	380-430 HP	603-6650	422-9598	10R-9920	10R-9921		
	KCB00001-06811	335-410 HP				10R-9922		
	KCB05434-UP	380-430 HP						
	KCB06812-UP	335-410 HP						
	LEE00001-UP	380-470 HP				438-7105 <sup>1</sup>	438-8632 <sup>1</sup>	20R-1166
3406E	5EK00001-UP, 6TS00001-20554	500-550 HP	603-6647	348-7339	10R-9552	20R-7815		
	5EK67193-UP, 6TS00001-20554	475 HP <sup>1</sup>						
	5EK00001-67192	475 HP <sup>1</sup>				348-7346 <sup>1</sup>	10R-9554	20R-7816
	5EK53004-UP, 6TS00001-20554	435-455 HP <sup>1</sup>			348-7339	10R-9552	20R-7817	
	5EK00001-53003	455 HP <sup>1</sup>					20R-7816	
	5EK01185-53003	435 HP <sup>1</sup>			348-7346 <sup>1</sup>	10R-9554	20R-7818	
	5EK00001-UP, 6TS00001-20554	355-410 HP					20R-7818	
		310-330 HP					N/A	
		475-550 HP			349-5917 <sup>1</sup>	10R-9553	20R-7819	
		435-455 HP <sup>1</sup>		603-6648			N/A	
		310-410 HP			N/A	N/A	N/A	
		2WS00406-UP		435-550 HP	603-6646	346-3791 <sup>1</sup>	10R-9346 <sup>2</sup>	20R-7821 <sup>2</sup>
	1LW00230-UP	435-550 HP	603-6646	346-3791 <sup>2</sup>	10R-9346 <sup>2</sup>	20R-7821 <sup>2</sup>		
C-15	6NZ00001-UP, 9NZ00001-UP	435-550 HP	603-6644	618-8059 <sup>2</sup>	10R-9343 <sup>2</sup>	20R-7822 <sup>2</sup>		
	MBN00001-UP	435-550 HP	603-6644	610-0751	10R-9345	20R-7823		
C-16	7CZ00001-UP	575-600 HP	603-6644	426-1892 <sup>1</sup>	10R-9344	20R-7824		
C15 ACERT	BXS00001-UP	435-550 HP	606-0909	618-8046 <sup>2</sup>	10R-9923 <sup>2</sup>	20R-7411 <sup>2</sup>		
	MXS00001-UP	435-550 HP						
	NXS00001-UP	435-550 HP						
	MXS00001-UP	600-625 HP				356-1448 <sup>2</sup>	10R-9924	20R-7412
	NXS00001-UP	600-625 HP						
C15 ACERT ('07)	SDP00001-UP	435-550 HP	442-7439	442-8972 <sup>1</sup>	20R-3076	20R-7414		

<sup>1</sup> Difference in pistons; confirm piston part number compatibility with dealer when ordering silver, gold or platinum kits.

<sup>2</sup> Kit ships with cylinder packs for normal load applications. High load applications (gross vehicle weight rating greater than 140,000 lbs.) should replace top ring with 247-6130. Refer to SEBD6832.

SHORT/LONG BLOCKS		
Sales Model	Short Block	Long Block
C9 ACERT	10R-9871	10R-9964
C-10 (Bridge)	N/A	10R-1383
C11 ACERT	10R-6461	10R-6462
C-12	10R-1491	10R-1384
	0R-9680	10R-1406
	0R-9680	0R-9682
C13 ACERT	10R-7437	10R-9650
	10R-9834	10R-9649
	10R-7437	10R-6464
	10R-9374	10R-9376
C13 ACERT ('07)	10R-9374	10R-9376
C13 ACERT (KCB) Cat Reman with new content	N/A	30R-1445
3406A (direct injection)	20R-9058	N/A
3406B/C	0R-4812	0R-3752
		0R-3751
3406C (3ZJ, 2EK, 4CK)	0R-7943	0R-4408
3406C (5YG, 11N, 2EK)	0R-4399	0R-4409
3406E (1LW)	0R-1096	0R-1097
3406E (1LW) Cat Reman with new content	N/A	20R-9110
3406E (5EK, 6TS)	0R-8323	0R-7961
3406E (5EK, 6TS) Cat Reman with new content	N/A	20R-9111
3406E (2WS)	10R-1511	10R-1512
3406E (2WS) Cat Reman with new content	N/A	20R-9112
C-15 (6NZ)	10R-0885	10R-1061
C-15 (6NZ) Cat Reman with new content	N/A	20R-9108
C-15 (MBN)	10R-1489	10R-1372
C-15 (MBN) Cat Reman with new content	N/A	20R-9109
C-16	10R-1506	N/A
C15 ACERT (BXS)	10R-4404	10R-4411
C15 ACERT (BXS) Cat Reman with new content	N/A	20R-9105
C15 ACERT (low HP MXS, NXS)	10R-4404	10R-4412
C15 ACERT (low HP MXS, NXS) Cat Reman with new content	N/A	20R-9106
C15 ACERT (high HP MXS, NXS)	10R-4405	10R-4413
C15 ACERT (high HP MXS, NXS) Cat Reman with new content	N/A	20R-9107
C15 ACERT ('07) (435-550 HP)	10R-9173	10R-9486

COMPLETE ENGINES													
Sales Model	Complete Engine Part Number	Horsepower Range	Torque Range	RPM	Oil Sump	Reference Engine Arrg.	Reference S/N	Additional Information					
C-10	10R-1351	305 (305-370)	1150	1800	Front Sump	169-9488	3CS19334	3CS					
	10R-1410	430 (335-455)	1650	1800	Front Sump	169-9212	2KS50367	2KS 1YN without eng brake					
	0R-9683					160-2312	9NS11742	9NS without eng brake					
	N/A	204-2392	9NZ18564			8YF with eng brake for Australia							
	30R-0129 <sup>3</sup>	355 (335-455)	1350			180-2208	2KS41678	2KS/1YN REPTO without eng brake Cat Reman engine with new content					
30R-0130 <sup>3</sup>	430 (335-455)	1650	169-9212			2KS50367	2KS/1YN without eng brake Cat Reman engine with new content						
C13 ACERT	10R-8830	430 (335-475)	1650	1800	Rear Sump	242-7872	KCB93109						
	10R-8831				Front Sump/Deep	264-0811	KCB83688	KCB high mount turbo with eng brake					
	10R-8832	335 (335-475)	1550		Front Sump	253-5885	KCB92179						
	10R-8833	430 (335-475)	1650		Front Sump/Deep	258-9318	KCB65653	KCB low mount turbo with eng brake					
	10R-8834				267-5964	KCB60158	KCB mid mount turbo with eng brake						
	30R-0131 <sup>3</sup>	335 (335-475)	1550		Front Sump	251-8901	KCB92997	KCB high mount turbo REPTO Cat Reman engine with new content					
3406B (ATAAC)	20R-9058	425	1390	2100	Rear Sump	7C-9429	4MG03571	4MG SEHS8607 <sup>4</sup>					
3406B (JWVAC)	0R-1284	400	1330	2100	Rear Sump	4W-3608	7FB97954	7FB SEHS8607 <sup>4</sup>					
3406C (ATAAC)	0R-4697	425	1580	2000	Rear Sump	4P-1294	3ZJ39132	3ZJ					
	0R-4696				Front Sump	4P-1295	3ZJ42949	3ZJ					
3406E	0R-8325	375 (375-455)	1450	1800	Rear Sump	141-4251	5EK93390	5EK/6TS					
	30R-0061 <sup>3</sup>						550 (475-550)	1850	2100	131-7283	5EK90511	5EK/6TS with eng brake, Cat Reman engine with new content	
	0R-8700									132-6084	6TS02940	5EK/6TS with eng brake	
	10R-7248	475 (435-550)	1750			1800	155-3226	1LW33251	1LW with eng brake (40 pin ECM)				
	20R-6605						170-7808	2WS42778	5EK/6TS with eng brake (70 pin ECM) (REHS0416)				
	20R-9318						2WS/1LW with eng brake (70 pin ECM) (REHS0416) Cat Reman engine with new content						
C-15	10R-1972	475 (435-550)	1650	1800	Front Sump	180-2082	6NZ52907	6NZ/9NZ with eng brake					
	10R-1322				180-2191	6NZ88636	6NZ/9NZ with eng brake & Upgrade to New (UTN) crankshaft						
	10R-1360						6NZ/9NZ with eng brake, Cat Reman engine with new content						
	20R-9323 <sup>3</sup>	475 (435-525)	1750		Rear Sump	180-2082	6NZ52907	6NZ/9NZ with eng brake					
	N/A					244-4600	9NZ18564	6NZ/9NZ with eng brake for Australia					
	20R-5084					230-1666	MBN30162	MBN (bridge 10/2002) with eng brake					
C15 ACERT ('04)	10R-8767	475 (435-550)	1850	1800	Rear Sump	261-5245	MXS98787	BXS/MXS/NXS with eng brake (high mount turbo)					
	20R-9335 <sup>3</sup>					BXS/MXS/NXS with eng brake (high mount turbo) Cat Reman engine with new content							
	10R-8802	625 (600-625)	2050			261-5406	NXS12325	BXS/MXS/NXS (high mount turbo)					
	20R-9336					BXS/MXS/NXS (high mount turbo) Cat Reman engine with new content							
	10R-8803	435 (435-550)	1650			261-5260	NXS26290	BXS/MXS/NXS with eng brake (mid mount turbo)					

<sup>3</sup> Cat Reman engines with new content include 100% new cylinder blocks, crankshafts, and cylinder heads. All other parts could be Cat Reman.

<sup>4</sup> Built for Freightliner, Kenworth, Peterbilt, etc. Engine is mounted vertically and turbo is mid-mounted. Ford applications require changing flywheel housing and turbo piping.

<sup>5</sup> This part number is no longer available as a kit. It can be used as reference for the parts required to build the kit.



If you're viewing this document online, click the blue part numbers to go to [parts.cat.com](https://parts.cat.com) and add parts to your cart, for easy and fast online ordering.