

SERVICE

EPP BULLETIN

Global

Machines

Cat Certified Machine Component Rebuild (CMCR)

Overview

The CMCR Equipment Protection Plan (EPP) program covers designated components in eligible machines for parts and labor reimbursement when failures are caused by defects in material or workmanship. The program reimburses for labor beginning at the first date of service and reimburses for parts after the new parts warranty ends. The parts warranty for the Cat® Certified Machine Component Rebuild (CMCR) program covers Cat® remanufactured components and Cat new components, as per Caterpillar warranty bulletin 4.01. Four components are eligible for CMCR coverage: engines, torque converters, transmissions and drive axles. Because some torque converters and transmissions share an oil supply, both must be rebuilt or replaced, and enrolled, at the same time. If the engine is also rebuilt or replaced at the same time as the transmission and torque converter, a separate enrollment for each is required. Only components going into machines eligible for the Cat Certified Rebuild program by model and serial number are eligible for CMCR EPP*. For a list of eligible models, please visit: <https://dealer.cat.com/en/ps/repair-options/certified-rebuild.html>.

***Brazil Specific:** This program is available only for machines that were originally manufactured in Brazil (domestic) and are eligible for the Cat Certified Rebuild program by model and serial number. (If a machine has at any time been imported, it is not eligible for this program.)

Other Certified Rebuild Programs:

- For **Cat Certified Machine Rebuild (CCR)**, please refer to bulletins 8.52
- For **Cat Certified Powertrain Rebuild (CPT)**, please refer to bulletins 8.53

Certified Machine Component Rebuild (CMCR)

Dealers must be authorized under the terms of an agreement with Caterpillar in order to perform a Cat Certified Machine Component Rebuild. The rebuild process includes specific Caterpillar requirements such as:

- Parts that must always be replaced.
- Procedures, quality checks, and other work that must be performed.
- Product engineering updates that must be incorporated in the rebuild.
- Ensuring all open Product Improvement Plans (PIP) are completed and reported against the original serial number during the certified rebuild process.
- Dealer completion of all component removal and installation.

➤ 08.54-03 (04/16)
<https://warranty.cat.com/wtyguide>

➤ Indicates change.

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Dealer and Dealers are defined as any Cat Authorized Dealer or Cat Authorized Repair Representative.

- Enrollment into the dealer's scheduled oil sampling program for the duration of the CMCR EPP coverage period. (This is recommended, not required.)

It also involves a complete disassembly of the component(s), removal of all paint and replacement or reconditioning of parts that do not meet minimal standards. Upon reassembly, the entire component is repainted and new decals affixed.

Caterpillar Machine Component Rebuild Enrollment Request

Prior to commencing a CMCR, the authorized dealer submits an enrollment request form to Caterpillar. The enrollment form can be found at: <https://dealer.cat.com/en/ps/repair-options/certified-rebuild.html>. This is a Cat Certified Rebuild form. It is not and does not initiate an EPP enrollment.

Caterpillar Machine Component Rebuild Delivery Notice

Upon completion of the rebuild, Caterpillar requires the dealer to submit a Delivery Notice at the time the component has been installed and the machine delivered to a customer. Separately, the dealer is responsible for the CMCR EPP enrollment. The date of delivery, specified by the dealer on the Delivery Notice, is used as the coverage start date for both the standard parts warranty and the EPP. The Parts Information System (PIS) delivery date remains as the original delivery date. The Delivery Notice form can be found at <https://dealer.cat.com/en/ps/repair-options/certified-rebuild.html>.

EPP Coverage Options

Several coverage terms are available under Powertrain and Powertrain+Hydraulics options. Please visit: <https://dealer.cat.com/en/ps/esc-epp/machine-worktool/used/cert-rebuild.html>.

➤ EPP Enrollment

Enrollment in the CMCR Equipment Protection Plan must be done within 60 days of the date the machine was delivered to the customer. Complete the EPP enrollment by using Quote Plus on-line Machine Enrollment and Registration (MER) process or Claims: <https://claims.cat.com>. Dealers must keep a copy of the customer signed Delivery Notice on file for verification if requested by Caterpillar.

In the Findings/Comment field, enter the customized coverage code located under the coverage period on the pricing tables.

In the claim story, enter the serial number of the component(s) and the source of the component(s). (Cat Remanufactured component or Cat new component.) When enrolling a torque converter and transmission, include the serial number of both. When enrolling drive axles, include the tag tracking number provided by the Certified Rebuild group.

EPP Covered Components

A complete list of covered components by Service Management Control System (SMCS) code is located at the end of this document. There are separate lists for each of the three eligible components: engines, torque converters, transmissions, and drive axles. Parts that are not covered include: external hoses and lines, the engine radiator and engine attachments (i.e. alternator, starter, air compressor and air conditioner compressor).

Validating Coverage

Dealers can verify EPP enrollment / coverage through Caterpillar's on-line computer system using the dealer Service Information Management System (SIMSi). The coverage / customer information screens will show the coverage start date, coverage terms and the customer name and address.

Resold or Transferred Machines

Send questions about machines that will be resold or moved outside the selling dealer's territory during the EPP coverage period to EquipmentProtectionPlan@cat.com, as coverage may not be transferable.

Wear Out and Extent of Repair During EPP Term

Wear out and normal deterioration is not covered. Such occurrences are not due to defects in the material or workmanship.

The intent of a repair is not to restore the product to a like-new condition, but rather to restore the product to its operating condition just prior to the covered failure. The repair or replacement of the failed part or component and any associated resultant damaged parts are reimbursable on allowed claims. Other parts removed in the process of repair will be reinstalled as is, unless the customer authorizes the additional cost at the customer's expense.

Dealer Reimbursement During the New Parts Standard Warranty Period

Cat Remanufactured or Cat New Parts Installed in the Cat CMCR

The new parts standard warranty will reimburse the dealer for defects in material and workmanship for Cat remanufactured or Cat new parts installed in the CMCR during the warranty period. Please refer to Bulletin 4.01.

- **Americas North / Americas South / EAME** - CMCR Equipment Protection Plan will reimburse labor at the dealer's registered selling labor rate for repairs associated with the replacement of covered parts.
- **Asia Pacific** - CMCR Equipment Protection Plan will reimburse labor at the dealer's warranty cost rate for replacement of covered parts. (Effective January 1, 2013 CMCR Equipment Protection Plan will reimburse labor at the dealer's registered selling labor rate for repairs associated with the replacement of covered parts.)

Re-used Parts Installed During Rebuild:

- **Americas North / EAME*** - During the new parts standard warranty period (Bulletin 4.01), the dealer will not be reimbursed for parts to make the repairs or labor associated with the repairs if a re-used part causes a failure.
*EAME Improved EPP coverage is not available under this CMCR program.
- **Americas South / Asia Pacific** - During the new parts standard warranty period (Bulletin 4.01), the dealer will be reimbursed for re-used parts at Dealer Net (D/N). Applicable labor will be reimbursed under EPP at the dealer's registered selling labor rate to make repairs if a re-used part causes failure.

Unique Claim Field Information for CMCR

The unique claim field information that is required for parts warranty claims associated with CMCR Equipment Protection Plan is outlined below:

Delivery Date - Always leave blank.

Parts Start Date - Always leave blank.

Product Hr/Mi/Km - Enter the hours shown on the service hour meter.

Parts Hr/Mi/Km - Enter the machine hours accumulated since enrollment in this CMCR Equipment Protection Plan program.

Parts Expense Lines - No longer need to mark resultant damage parts as "RD." (Reference Bulletin 4.01)

Claim Story -In addition to the usual description of the complaint, cause, correction and complication for the repair, the first line of the claim story should state: "This claim is in conjunction with CMCR Equipment Protection Plan, component serial number XXX99999."

Dealer Reimbursement After the Parts Standard Warranty

After the new parts standard warranty, dealer reimbursement for covered repair expenses related to the EPP will be per the Summary of Reimbursement Practices Chart found below, and in accordance with applicable reimbursement practices as outlined in Bulletin 1.02. Prior to January 1, 2016, some contracts were underwritten with Customer List as the defined reimbursement rate rather than D/N + 33%. For those contracts, claims will continue to be honored at Customer List through the duration of their specified term.

**General Parts and Labor reimbursement charts can be found at:
<https://dealer.cat.com/en/ps/esc-epp/machine-worktool/used/cert-rebuild.html>.

CMCR EPP - Summary of Reimbursement Practices	
Repair Expense	Allowance & Rate
Parts	Reimbursable at D/N + 33% (Customer List Prior to January 1, 2016) - Americas (North/South) Reimbursable at D/N + 10% - EAME and Asia Pacific
Service Items	Reimbursable at dealer/acquisition cost, if made unusable.
Parts Service Charges	Reimbursable.
Repair Labor	Reimbursable at dealer's registered selling labor rate- Americas (North/South), EAME, Asia Pacific* *Reimbursable at warranty cost prior to January 1, 2013 for Asia Pacific, if justified.
Parts Salvage Labor	Reimbursable at dealer's registered selling labor rate - Americas (North/South), EAME, Asia Pacific*, if justified. *Reimbursable at warranty cost prior to January 1, 2013 for Asia Pacific, if justified.
Outside Repair Expenses	Reimbursable, at cost.
Shop Supplies	Not reimbursable as an itemized expense.
Overtime Labor Rate, Travel Time & Mileage, Meals & Lodging, Freight Charges and Hauling Costs	Not Reimbursable.

Parts Book Component Codes

At the bottom of each page on all Cat® Parts Books (paper or electronic), is printed a four-digit numeric Service Management Control System (SMCS) component code. These SMCS codes are used to describe the area of primary use for the parts and/or components listed on that page and can be used as a mechanism for helping to determine if a failed part may be considered part of the CMCR. On the following pages are the SMCS codes in numeric order that are covered under the CMCR EPP program. For CMCR qualification, the component code listed on the parts book page should be compared to this list of acceptable components codes.

NOTE: Sometimes a parts book page with an acceptable component code will include parts that are not covered and parts that are broken out on another parts book page (i.e. brakes). When in doubt, submit inquiries through the Warranty Service Desk.

Use of Parts Book Component Code on Labor Expense Lines

Caterpillar simplified some of the SMCS component codes by phasing out some and combining others. As a result, some component codes listed on the following pages indicate in their code description to use another component code as a substitute code. For example: 1299 Hydraulic Timing Advance (**use 1272**)

These references, which indicate use of a substitute code, apply only when using the component code on a labor expense line if labor reimbursement is applicable. In some cases, a component code, which indicates use of a substitute code, may have been canceled. Using a canceled component code on a labor expense line will cause the entire service claim to be canceled. To avoid this, dealers should use the substitute component code listed in parentheses for claiming labor reimbursement in the expenses detail section of the claim.

NOTE: Refer to Bulletins 1.06 and 1.09 for proper group number and labor line SMCS code usage.

----- SMCS Codes -----

Engine

1014 Engine & Output Drive Assembly
1020 Long Block

Air Induction & Exhaust System

1052 Turbocharger Group
1053 Turbocharger Cartridge
1056 Turbocharger Cartridge Housing
1057 Exhaust Bypass Valve
1058 Inlet Manifold
1059 Exhaust Manifold
1060 Turbocharger Compressor Housing
1063 Aftercooler Group
1064 Aftercooler Core
1065 Turbocharger Turbine Housing
1066 Turbocharger Thrust Plate Assembly
1070 Water Cooled Turbocharger
1073 Turbocharger Heat Shield
1076 Differential Pressure Ratio Regulator
1077 Turbocharger Shaft & Wheel Assembly
1079 Aftercooler Intake Manifold
1080 Exhaust Gas Recirculation System
1081 Boost Control Valve
1085 Hydra-Mechanical Shutoff Control
1086 Hydra-Mechanical Shutoff Drive
1096 Oxygen Sensor

Cylinder Head Assembly

1101 Cylinder Head Casting
1102 Rocker Shaft Assembly
1103 Valve Seat/Insert
1104 Valve Guide
1105 Inlet/Exhaust Valve
1106 Prechamber/Nozzle Adapter
1107 Valve Cover

1108 Valve Spring
1109 Valve Rotator
1113 Camshaft Housing Assembly
1115 Water Director
1117 Threaded Insert
1118 Compression Release
1119 Jake Brake (removed effective Jan. 1, 2008)
1120 Valve Cover Base
1121 Valve Bridge
1123 Rocker Arm
1124 Cylinder Head Gasket
1125 Injector Sleeve
1126 Cylinder Head Manifold
1129 Engine Brake

Front and Rear Covers

1151 Cover/Housing (use 1162 or 1166)
1155 Brakesaver Group
1156 Flywheel
1157 Flywheel Housing
1158 Flywheel Ring Gear
1159 Brakesaver Control Valve
1160 Crankshaft Front Seal
1161 Crankshaft Rear Seal
1162 Timing Gear Housing
1163 Timing Gear Housing Plate
1164 Engine Output Transfer Gear
1165 Engine Power Takeoff Drive
1166 Timing Gear Housing Cover
1167 Flywheel Housing Scavenge Pump

Short Block

1201 Cylinder Block
1202 Crankshaft
1203 Crankshaft Main Bearing
1204 Crankshaft Gear

1205 Crankshaft Damper/Pulley
1206 Timing/Accessory Gears
1207 Accessory Drive
1208 Push Rod
1209 Camshaft Roller/Follower/Lifter
1210 Camshaft
1211 Camshaft Bearing
1212 Camshaft Gear
1213 Piston & Liner
1214 Piston
1215 Piston Rings
1216 Cylinder Liner
1217 Liner Seat/Insert
1218 Connecting Rod
1219 Connecting Rod Bearing
1220 Balancer
1221 Spacer Plate
1222 Cylinder Block Sleeve
1223 Cylinder Block Cylinder
1224 Cylinder Block Main Bearing Bores
1225 Piston & Connecting Rod
1230 Crankshaft Main & Rod Bearings
1231 Crankshaft Counterweight
1232 Crankshaft Thrust Plate
1233 Crankcase Explosion Relief Valve
1234 Idler Gear
1237 Engine Stub Shaft
1239 Cylinder Pack
1240 Block Underframe
1241 Timing Chain/Belt

Fuel System

1251 Fuel Injection Pump
1252 Fuel Injection Lines
1253 Fuel Injection Pump Housing
1254 Fuel Injection Valve/Nozzle
1255 Fuel Transfer Pump Housing

1256 Fuel Transfer Pump
1257 Rack/Control Shaft
1259 Fuel Shutoff Solenoid
1264 Governor
1268 Speed Limiter
1272 Timing Advance
1275 Air Control Valve
1278 Air/Fuel Ratio Control
1281 Fuel Injection Pump-Lifters
1286 Injection Pump & Governor Group
1287 Governor Housing
1288 Fuel Pump/Governor Drive
1289 Hydraulic/Hydra-Mechanical Governor
1290 Unit Injector
1292 Fuel Camshaft
1295 Auxiliary Fuel Transfer Pump
1298 Unit Injector Control Linkage
1299 Hydraulic Timing Advance (use 1272)
1705 Variable Horsepower Control Valve/Solenoid
1714 Unit Injector Hydraulic Pump
1715 Fuel Pressure Regulator Valve
1716 Governor Actuator
1718 Fuel Pressure Sensor

Lubrication System

1302 Engine Oil Pan Group
1304 Engine Oil Pump
1306 Engine Oil Filter Housing/Base
1309 Turbocharger Lube Valve
1312 Oil Scavenge Pump
1313 Oil Pump Drive
1314 Oil Cooler Bypass Valve
1315 Oil Pressure Relief Valve
1319 Prelube Pump
1329 Shutoff Valve
1330 Oil Temperature Regulator
1331 Piston Cooling Tube
1332 Oil Sequence Valve

Cooling System

1355 Thermostat/Regulator
 1356 Fan & Fan Drive
 1358 Fan Belt Tightener
 1359 Fan Drive Assembly
 1361 Jacket Water Pump, Drive Group
 1362 Water Manifold
 1363 Aftercooler Water Pump
 1364 Water Pump Impeller
 1373 Water Pump Housing
 1378 Engine Oil Cooler
 1384 Water Pump Pulley
 1389 Water Pump Shaft

Starting System

1469 Prelube Starter

Engine Electronic Control System

1901 Electronic Control Module (ECM)
 1902 Ratings Personality Module
 1904 Transducer Module
 1905 Timing Position Sensor
 1906 Water Temperature Sensor
 1907 Engine Speed Sensor
 1908 Electronic Governor
 1909 Rack Solenoid
 1910 Timing Solenoid
 1911 Rack Position Sensor
 1912 Engine Speed/Timing Sensor
 1913 Throttle Speed Sensor
 1914 Machine Speed Buffer
 1915 Engine Speed Control
 1916 Crankcase Pressure Sensor
 1917 Boost Pressure Sensor
 1918 Throttle Lock Control
 1919 Exhaust Temperature Sensor
 1920 Engine Software

1921 Inlet Air Temperature Sensor
 1922 Fuel Temperature Sensor
 1923 Atmospheric Pressure Sensor
 1924 Engine Oil Pressure Sensor
 1925 Injection Actuation Pressure Sensor
 1929 Engine Oil Temperature Sensor
 192T Injection Actuator Temperature Sensor

Torque Converter, Divider, Retarder

1366 Brake/Torque Converter Cooler
 1368 Retarder Cooler
 1375 Torque Converter/Transmission Cooler
 1376 Torque Converter Trans. & Hydraulic Cooler
 3101 Torque Converter
 3102 Torque Converter Clutch
 3105 Torque Converter Housing
 3107 Power Takeoff Drive
 3108 Pump Drive
 3109 Torque Converter & Retarder
 3110 Torque Divider Transmission (use 3030)
 3111 Torque Divider Control Valve (use 3073)
 3112 Torque Divider Governor (use 3151)
 3113 Torque Divider
 3114 Torque Divider Planetary Carrier
 3115 Torque Converter Scavenge Pump
 3116 Transfer Gears, Torque Divider, & Retarder (use 3031)
 3117 Transfer Gears and Retarder
 3118 Torque Divider & Retarder (use 3032)
 3120 Retarder
 3121 Retarder Extended Braking Control
 3123 Retarder Control Valve
 3124 Lockup Clutch Pressure Control Valve
 3126 Retarder Selector Valve
 3127 Torque Converter Bearing Retainer
 3128 Torque Converter Flange
 3129 Torque Converter Stator

3130 Torque Divider/Torque Converter Shaft
3131 Torque Converter Turbine Wheel
3133 Torque Converter Relief Valve
3134 Torque Converter Impeller
3135 Torque Converter Carrier
3136 Torque Converter Hub
3137 Torque Converter Pressure/Sequence Control Valve
3138 Torque Converter & Park Brake Release Pump
3139 Modulating Valve
3140 Torque Converter Control
3141 Torque Converter Speed Sensor
3143 Torque Converter Electronic Control

Transmission

Powertrain Transmission

3017 Drive Train Oil Pump (use 3066)
3011 Bevel and Transfer Case
301T Drive Train Oil Temperature Sensor
3030 Transmission
3032 Transmission and Retarder

Clutch & Manual Shift/Direct Drive Transmission

3060 Manual Shift Direct Drive Trans. (use 3030)
3061 Transmission Gears
3062 Transmission Reverse Box
3063 Transmission Shaft
3064 Transmission Case
3066 Transmission Oil Pump
3068 Transmission Oil Filter Base
3071 Flywheel Clutch Hydraulic Control
3073 Transmission Hydraulic Control Valve
3074 Transmission Pressure Control Valve
3075 Transmission Output Gears
3077 Transmission Brake
3083 Transmission Selector & Pressure Control Valve

Powershift Transmission

3151 Transmission Governor
3153 Transmission Oil Pump (use 3066)
3155 Transmission Clutches
3157 Transmission Manual Selector Valve
3159 Transfer Gear Group
3160 Transmission Planetary
3164 Oil Filter Base (use 3068)
3167 Transmission Hydraulic Control
3168 Transmission Electronic Control (includes finger tip controls)
3169 Transmission Clutch Housing
3170 Transmission Clutch Piston
3171 Transmission Manual Switch
3172 Transmission Slave Switch
3173 Transmission Synchronous Switch
3174 Transmission Shift Solenoid
3175 Transmission Speed Sensor
3180 Transmission Priority Valve
3181 Transmission Neutralizer Control Valve
3182 Transmission Lubrication Relief Valve
3183 Transmission Control Lock
3184 Transmission Oil Cooler Bypass Valve
3186 Transmission Planet Carrier
3187 Transmission Planet Carrier Thrust Disc/Plate
3188 Transmission Case (use 3064)
3189 Transmission Shaft (use 3063)
3190 Transmission Clutch Plate
3191 Transmission Neutralizer
3194 Transmission Temperature Sensor

Hydrostatic Transmission

3202 Hydraulic Flow Control
3203 Drive Pump
3204 Charge Pump
3205 Servo Control Valve
3206 Manifold/Metering Valve
3207 Servo Cylinder

3208 Hydrostatic Control Valve (use 3073)
 3210 High Pressure Relief Valve
 3211 Hydrostatic Transmission Input Shaft (use 3063)
 3212 Hydrostatic Transmission Output Shaft (use 3063)
 3213 Charge and Main Relief Valve
 3214 Synchronizing Valve
 3216 Transmission Underspeed/Overspeed Valve
 3218 Hydrostatic Lines & Hoses
 3219 Hydrostatic Pilot Overspeed Valve
 3220 Hydrostatic Transmission Speed Control Valve
 3221 Hydrostatic Power Case
 3222 Hydrostatic Pump Head
 3223 Transmission Underspeed/Override Valve
 3226 Downshift Inhibitor

Drive Line / Drive Axle

3251 Universal Joint
 3252 Flexible Coupling
 3253 Drive Shaft
 3254 Drive Line Pinion
 3256 Bevel Gear/Shaft
 3267 Bevel Gear Shaft Bearing
 3258 Differential
 3259 Axle Shaft
 3260 Axle Housing Assembly
 3261 Drive Chain
 3262 Double Reduction Differential
 3263 Limited Slip Differential
 3264 Differential Lock
 3265 No-Spin Differential
 3266 Differential Lock Cylinder
 3267 Drive Shaft Support
 3268 Axle Housing Support/Trunnion
 3269 Pinion Housing
 3270 Locking Differential
 3271 Transaxle

3272 Differential Lock Control Valve
 3273 Differential Lock Actuator Valve
 3274 Constant Velocity Universal Joint
 3278 Drive Axle
 3279 Engine Output Drive Assembly/Coupling
 3281 Bevel Gear Case
 3283 Differential Gear Case
 3284 Differential Carrier
 3287 Interaxle Differential
 3288 Anti-Spin Control
 3291 Drive Axle Oil Pump
 3292 Differential Lock Pump

Countershaft Transmission

3401 Countershaft Transmission Case (use 3064)
 3402 Countershaft Oil Pump (use 3066)
 3403 Countershaft Lines/Hoses
 3404 Countershaft Clutches (use 3155)
 3405 Countershaft Clutch Housing (use 3169)
 3406 Countershaft Clutch Piston (use 3170)
 3407 Countershaft Transfer Gear (use 3159)
 3408 Countershaft Shaft (use 3063)
 3409 Countershaft Output Gears (use 3075)
 3410 Countershaft Brake (use 3077)
 3412 Countershaft Pressure Control Valve (use 3074)
 3417 Hydrostatic Control Groups (use 3167)
 3418 Electrical Control Groups (use 3168)

Power Consumption Drive

4001 Final Drive & Brake Wheel
 4009 Final Drive, Brake & Differential Steering Planetary
 4010 Final Drive, Brake & Differential Steering Drive

Final Drive

4050 Final Drive & Torque Hub
 4051 Final Drive & Wheel
 4052 Final Drive Seal

4053 Drive Axle Hub/Gear Assembly
4054 Final Drive Hub
4055 Final Drive Gears
4056 Final Drive Shaft
4057 Final Drive Pinion Flange
4058 Sprocket Shaft/Bore
4059 Final Drive Case/Bore
4060 Final Drive Oil Pump
4062 Tandem Drive
4063 Tandem/Single Drive Chain
4064 Tandem Drive Housing
4066 Final Drive Outer Bearing Support
4068 Tandem Drive Stub Axle
4069 Final Drive Chain
4072 Tandem Drive Sprocket
4073 Tandem Drive Driven Sprocket
4074 Final Drive – Outer Section
4075 Final Drive – Inner Section
4084 Final Drive Planet Carrier Hub/Ring Gear
4091 Final Drive Pinion
4092 Planetary Final Drive Carrier
4093 Final Drive Planet Carrier Thrust Surface
4094 Final Drive Pinion & Flange