

## SERVICE

# Equipment Protection Plan

Global

Machines

## Hydraulic Equipment Protection Plan

### Overview

This Equipment Protection Plan (EPP) addresses the hydraulic components on the base machine that are covered under various new, used and rebuilt equipment programs offered through Caterpillar. Hydraulic components are the components on a machine that are associated with steering and implement control.

The following are the major component categories that are covered under Hydraulic - EPP:

- **Hydraulic / Steering Hoses & Lines (Hydraulic Hoses excluded for the 6000 series Hydraulic Mining Shovels)**
- **Hydraulic Swivels (Removed “Hydraulic Quick Coupler” effective for machine deliveries on or after 01JAN12)**
- **Hydraulic Tanks** - includes specified internal parts.
- **Hydraulic Oil Filter Base** - excluding hydraulic oil filters.
- **Hydraulic Pumps & Motors** - including steering pumps (main and supplemental).
- **Hydraulic Cylinders** - steering, implement hydraulic cylinders (includes bulldozer and ripper cylinders on track-type tractors).
- **Hydraulic Valves & Controls** - includes specified parts that make up a valve for directing or controlling hydraulic fluid for steering and implements, including automatic blade controls and bucket position controls.
- **Hydraulic Accumulators** - steering and implement.
- **Hydraulic Oil Coolers** - steering & implement. (excluded for the 6000 series Hydraulic Mining Shovels)

The following are components commonly mistaken by dealers as covered under Hydraulic - EPP. **These components are not covered under Hydraulic - EPP:**

- **Hydraulic Line Quick Connect/Disconnect Components** - Effective for sales on/after 01Jul10, for Compact Construction Equipment (CCE) Machines, these components are excluded from Hydraulic - EPP.
- **Transmission Pumps, Controls or Valves** - These components are not part of the hydraulic system.

➤ 08.02-00 (08/15)  
<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.

- **Winch Pumps & Valves** - These components are part of the transmission system, not the hydraulic system.
- **Hydraulic Brake System Components** - While part of the hydraulic system, they are not associated with machine steering or implement control.
- **Steering Clutch Components** - These components are part of the powertrain for machines so equipped.
- **Hydraulic Actuated Work Tools and Other Attachments** which are individually serialized and warranted by Caterpillar under separate warranty statements.
- **Non-serialized Work Tools and Other Attachments** shipped with the base machine are generally excluded from EPP coverage unless specifically identified as covered components within applicable warranty bulletins.

## General Exclusions and Limitations

**Hydraulic - EPP** does not cover the following:

- Operator abuse, neglect, improper or abusive use of the machine including but not limited to the failure to perform the recommended preventative maintenance as specified in the Operation and Maintenance (O&M) Manual.
- Applications not approved by Caterpillar.
- Improper or abusive use of machine.
- Operation beyond the design and/or capacity of the machine.
- Wear-out and normal deterioration in performance, accelerated wear-out of components due to operating technique or application; including but not limited to oil consumption and gasket or seal leaks.
- Chemical corrosion and physical or mechanical erosion.
- Unauthorized fuel setting changes.
- Acts of war, vandalism, riot, theft, explosion, collision, fire and/or any other act of nature, person or vermin.
- Operating equipment with improper, contaminated, or improper levels of fuel or fluids, or the use of improper filters.
- Modifications, unless the modifications were authorized at the request of Caterpillar and performed at an approved repair facility.
- Operating at performance settings other than the standard Caterpillar specification.
- Accelerated wear-out of components due to operating technique or application.
- Physical damage.
- Any repairs if the service meter has been stopped or altered or misrepresents the equipment's actual usage.
- Mechanical transportation or towing costs or field service travel expenses.
- Loss of time, inconvenience, downtime or downtime-related expenses or other incidental or consequential loss that results from a defect in material or workmanship.
- Any costs incurred to improve operating performance due to normal wear and tear.
- Storage or miscellaneous shop supplies.
- Mechanical breakdown resulting from failure of a non-covered component.
- Freight and taxes.
- Any cost covered by any warranty of the manufacturer including emissions warranty or repairer's guarantee regardless of whether the warranty or repairer's guarantee is honored.
- Performance complaints including, but not limited to, adjustments to fuel settings or electronic unit injectors to comply with emissions standards under Environmental Protection Agency or similar national, federal, provincial or state law.

- Any costs incurred for the manufacturer to comply with emissions standards under the Environmental Protection Agency or similar national, federal, provincial or state law.
- Failure to use fuels and lubricants that meet or exceed the minimum specification requirements of the manufacturer as specified in the operations manual or other technical bulletins.

For machines enrolled in the **Hydraulic - EPP**, please refer to the Contractual Liability Policy (CLIP) for a complete list of exclusions and limitations. In the event of any ambiguity, the CLIP issued to the dealer by Caterpillar Insurance Company will govern. Additional information regarding the CLIP policy may be obtained by contacting your dealership designated Warranty Manager.

## Customer's Responsibilities

The customer is responsible for assuring all recommended preventative maintenance is performed at the specified service intervals as described in the O&M Manuals. Preventative maintenance includes, but is not limited to the servicing, adjusting and/or replacing of specified components.

**Hydraulic - EPP** does not cover failure of any components as a result of not performing scheduled maintenance. The dealer may be required to provide proof of compliance with the maintenance schedules at the time of a failure. Proof may include receipts or copies of work orders or invoices showing the performed maintenance services.

**S•O•S<sup>SM</sup> Fluid Analysis Test Results** - S•O•S is not a requirement of the EPP program, other than the 6000 series Hydraulic Mining Shovels, however it is recommended that at the point of enrollment, S•O•S sampling begins at the first recommended interval and continue throughout the remainder of the EPP coverage term. For the 6000 series Hydraulic Mining Shovels the S•O•S is a requirement of the EPP program and S•O•S sampling should begin at the first recommended interval and continue throughout the remainder of the EPP coverage term.

## Wear-out and Extent of Coverage

Wear-out and/or deterioration are not covered by **Hydraulic - EPP**.

The intent 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. **Hydraulic - EPP** covers only the repair or replacement of the failed component and any resultant damaged parts. Other parts removed in the process of repair will be reinstalled as is, unless the customer authorized the additional cost for their account.

**Example:** While performing a **Hydraulic - EPP** program repair of a leaking bucket cylinder, the dealer service technician notices the hydraulic hoses have cuts from falling rocks. He also notices some wear (within acceptable limits) in the rod eye bearing. In addition to repairing the leaking bucket cylinder, the service technician replaces the hydraulic hoses and rod eye bearing to avoid future downtime.

In this example the hydraulic hoses and rod eye bearing cannot be claimed to Caterpillar because they did not have a defect nor were they damaged as a result of the leaking bucket cylinder. They were repaired or replaced as a result of the customer responsibilities for assuring all recommended preventative maintenance is performed.

**NOTE:** If the bucket cylinder seals failed due to abuse (damage to the cylinder rod from falling rocks), the repair of the leaking lift cylinder and resultant damage would not be due to a Caterpillar defect and therefore is not a covered failure.

## 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 component codes are used to describe the area of primary use for the parts and/or components listed on that page.

**NOTE:** Sometimes a parts book page with an acceptable hydraulic component code will include parts that are not covered, or may include parts that are broken out on another parts book page. Additionally, there may be instances of a non-acceptable component code containing parts that may qualify for hydraulics coverage. For clarification regarding coverage, please submit a ticket to the Warranty Service Desk.

## Use of Parts Book Component Code on Labor Lines

Caterpillar simplified some of the SMCS component codes by phasing out and combining certain component codes. As a result, some component codes listed on the following pages indicate in their code description to use another component code, which is 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.

On the following pages are the SMCS component codes in numeric order that Caterpillar considers part of extended hydraulic coverage. For Hydraulic - EPP qualification, the component code listed on the parts book page should be compared to this list of acceptable hydraulic components.

The SMCS component codes can be used as a guide for helping to determine if a failed part may be considered part of hydraulic coverage.

## Lubrication System

1306 Hydraulic Oil Base

## Cooling System

1374 Hydraulic Oil Cooler

## Transmission and Drive Line

3016 Drive Train Oil Lines

3154 Transmission Oil Lines

## Steering System

4303 Steering Cylinder  
 4304 Steering Lines or Hoses  
 4306 Steering Pump  
 4307 Steering Valve  
 4311 Steering Booster  
 4312 Steering Metering Pump  
 4315 Servo Steering Cylinder  
 4317 Steering Gear & Valve  
 4320 Steering Flow Divider Valve  
 4322 Steering Relief Valve  
 4324 Secondary Steering Pump  
 4330 Steering Neutralizer Valve  
 4331 Steering Accumulator  
 4332 Steering Hydraulic Tank  
 4337 Steering Pressure Reducing Valve  
 4339 Secondary Steering Diverter Valve  
 4340 Steering Counterbalance Valve  
 4341 Steering Cooler Pump  
 4342 Steering Pilot Valve  
 4343 Steering Control  
 4344 Steering Charge Pump  
 4346 Steering Oil Cooler  
 4347 All Wheel Steer Valve  
 4349 Steering Selector & Pressure Control Valve

## Hydraulic System

5051 Hydraulic Control Valve  
 5052 Hydraulic Motor - Vane Type  
 5054 External Control Valve  
 5055 Hydraulic Pump - Vane Type  
 5056 Hydraulic Tank  
 5057 Hydraulic Hoses or Lines (Hydraulic Hoses excluded for the 6000 series Hydraulic Mining Shovels)  
 5058 Hydraulic Motor - Piston Type  
 5059 Pilot Control Valve  
 505C Piston Cylinder  
 505Q Quick Release Valve  
 505U Unloading Valve  
 5060 Swivel  
 5061 Hydraulic Motor - Gear Type  
 5063 Implement Control  
 5064 Combination Valve  
 5065 Selector Valve  
 5066 Diverter Valve  
 5067 Check Valve  
 5069 Main System Relief Valve  
 506G Gear Pump & Motor  
 506P Implement Priority Valve  
 5070 Hydraulic Pump - Piston Type  
 5071 Hydraulic Oil Cooler Bypass Valve  
 5072 Pilot System Relief Valve  
 5073 Hydraulic Pump - Gear Type  
 5074 Thermal Bypass Valve  
 5076 Hydraulic Tank Valve  
 5077 Hydraulic Accumulator (excluded for the 6000 series Hydraulic Mining Shovels)  
 5078 Hydraulic Actuator  
 5079 Shuttle Valve  
 507G Piston & Gear Pump  
 507V Piston & Vane Pump  
 5080 Make-Up Valve  
 5081 Hydraulic Accumulator Charging Valve

- 5082 Gerotor Motor
- 5083 Hydraulic Hoist Pump
- 5084 Implement Pump
- 5085 Pilot Pump
- 5086 Pressure & Flow Compensator Valve
- 5087 Cooling & Test Manifold
- 5088 Pilot Test Valve
- 5089 Blocker Valve
- 5090 Line Make-Up Valve
- 5093 Hydraulic Filter By-Pass Valve
- 5097 Hydraulic Flow Divider Valve
- 509T Hydraulic Oil Temperature Sensor

### **Lift, Tilt, Tip Controls**

- 5101 Angling Cylinder
- 5102 Lift or Hoist Cylinder
- 5104 Tilt Cylinder
- 5105 Swing Cylinder
- 5106 Tip Cylinder
- 5107 Tailgate Cylinder
- 5108 Side Dump Cylinder
- 5109 Lift Kickout Control
- 5110 Quick Drop Valve
- 5111 Crossover Valve
- 5112 Bucket Positioner Control
- 5115 Bulldozer Control Valve
- 5117 Pressure Control / Relief Valve
- 5118 Vent Valve
- 5119 Float Selector Valve
- 5120 Pump Selector Valve
- 5122 Bucket Control Valve
- 5123 Tilt Control Valve
- 5124 Loader Control Valve
- 5125 Tilt Pilot Valve
- 5126 Lift Pilot Valve
- 5127 Cylinder Check Valve
- 5128 Over-Center Valve

- 5129 Restrictor Valve
- 5130 Lock Valve
- 5132 Hydraulic Position Sensor
- 5133 Coupler Cylinder
- 5134 Kickout Valve
- 5136 Lift or Hoist Control Valve
- 5137 Flow Control Valve
- 5138 Door Cylinder
- 5140 Angle Control Valve
- 5141 Hitch Lift Cylinder
- 5142 Draft Control
- 5143 Drift Reduction Valve
- 5144 Frame Level Valve
- 5145 Top Clamp Cylinder
- 5146 Dump Cylinder
- 5147 Lowering Control Valve
- 5148 Multipurpose Bucket Control Valve

### **Skidder Controls**

- 5164 Winch Hydraulic Pump
- 5179 Winch Hoses / Lines

### **Motor Grader Implement Controls**

- 5201 Power Control Box
- 5206 Circle Drive Motor
- 5211 Wheel Lean Cylinder
- 5213 Scarifier Cylinder
- 5214 Scarifier Valve
- 5216 Automatic Blade Control
- 5220 Centershift Lock Control Valve
- 5223 Centershift Cylinder
- 5226 Leaning Wheel Control Valve
- 5227 Blade Sideshift Control
- 5229 Blade Sideshift Cylinder
- 5235 Lock Check Valve
- 5236 Power Control Pump
- 5261 Servo Valve
- 5264 Hydraulic Manifold

- 5265 Articulation Cylinder
- 5266 Articulation Valve

### Scraper Controls

- 5301 Apron Lift Cylinder
- 5302 Apron Sequence Valve
- 5303 Bowl Lift Cylinder
- 5304 Scraper Control Valve
- 5305 Ejector Cylinder
- 5306 Ejector Sequence Valve
- 5307 Push-Pull Bail Cylinder
- 5308 Bail-Pull Control Valve
- 5309 Floor Dump Cylinder
- 5310 Traction Control Cylinder
- 5311 Traction Control Valve
- 5312 Leveling Valve
- 5313 Cushion Hitch Control Valve
- 5314 Elevator Motor
- 5315 Elevator Hydraulic Pump
- 5316 Cushion Hitch Pump
- 5317 Cushion Hitch Load Cylinder
- 5318 Elevator Delay Valve
- 5319 Cushion Hitch Selector Valve
- 5320 Elevator Chain Adjustment Cylinder
- 5321 Carry Check Valve
- 5322 Ejector Check Valve
- 5323 Push-Pull Pump
- 5325 Speed Control Valve

### Ripper, Tool Bar & Other Implement Controls

- 5351 Ripper Control Valve
- 5352 Ripper Lift Cylinder
- 5353 Ripper Pin Puller Control Valve
- 5354 Ripper Pin Puller Cylinder
- 5355 Tool Bar Cylinder
- 5356 Ripper Tilt Cylinder
- 5357 Ripper Control

- 5358 Pulverizer Cylinder (Discontinued from all regions effective 01Jan2012)
- 5359 Crusher Cylinder (Discontinued from all regions effective 01Jan2012)

### Excavator, Backhoe, Front Shovel & Other Implement Controls

- 5451 Shovel Boom Cylinder
- 5452 Shovel Stick Cylinder
- 5453 Check & Relief Valve
- 5454 Swing Relief Valve
- 5455 Pump Signal Pressure Control Valve
- 5456 Boom Cylinder
- 5457 Bucket Cylinder
- 5458 Stick Cylinder
- 5459 Swing Drive
- 5461 Boom Control Valve
- 5462 Speed & Direction Pilot Control Valve
- 5463 Offset Cylinder
- 5464 Stick Control Valve
- 5465 Stick & Swing Pilot Control Valve
- 5466 Boom & Attachment Pilot Control Valve
- 5467 Pressure Reducing / Summing Valve
- 5468 Stabilizer Cylinder
- 5469 Underspeed Valve
- 5470 Bucket Master Cylinder
- 5471 Combiner & Relief Valve
- 5472 Load Check Valve
- 5473 Swing Pump
- 5474 Extendable Stick Control Valve
- 5475 Bottom Dump Bucket Control Valve
- 5476 Backhoe Control Valve
- 5477 Swing Actuator
- 5478 Bucket Bowl Cylinder (excluded for the 6000 series Hydraulic Mining Shovels)
- 5479 Solenoid Valve
- 5480 Swing Control Valve
- 5481 Stabilizer Control Valve
- 5482 Heel Cylinder

- 5483 Swing Brake Valve
- 5484 Sideshift Lock
- 5486 Telescoping Cylinder
- 5487 Slow Return Valve
- 5488 Hydraulic Hammer Control
- 5489 Increased Pressure Control
- 5490 Clamshell Rotator (Discontinued from all regions effective 01Jan2012)
- 5491 Quick Coupler Valve
- 5492 Clam Control Valve
- 5493 Shovel Bucket Cylinder
- 5494 Rotator Motor
- 5495 Rotator Cylinder
- 5496 Control Pattern Change Valve
- 5497 Fore Boom Cylinder
- 5498 Multipurpose Bucket Cylinder

### **Logger & Skidder Controls**

- 5551 Speed Reducer Valve
- 5553 Shear Cylinder
- 5554 Delimb Cylinder
- 5555 Grapple Cylinder
- 5557 Arch Cylinder
- 5558 Saw Cylinder
- 5560 Logger Head Control Valve
- 5561 Logger Head Check Valve
- 5562 Delimb Cylinder Selector Valve
- 5563 Shear Speed Change Valve
- 5564 Grapple Cylinder Check Valve
- 5565 Grapple / Delimb Arm Pilot Valve
- 5567 Logger Head Positioner Master Cylinder
- 5568 Grapple Control Valve
- 5570 Grapple Hydraulic Control
- 5571 Solenoid & Relief Valve
- 5572 Feed Roller Arm Cylinder
- 5573 Holding Arm Cylinder
- 5574 Measuring Sensor
- 5575 Saw Motor

- 5576 Gate Cylinder

### **Implement Electronic Controls**

- 5701 ECM
- 5702 Implement Hydraulic Electronic Control
- 5705 Joystick
- 5721 Potentiometer
- 5736 Linkage Position Sensor
- 5737 Control Lever Position Sensor
- 5740 Implement Software & Hydraulic Software

### **Material Handler Controls**

- 5802 Full Free Lift Cylinder
- 5803 Full Free Triple Lift Cylinder
- 5809 Sideshift Valve
- 5811 Load Control Valve
- 5812 Full Free Triple Lift Primary Cylinder
- 5813 Full Free Triple Lift Second Cylinder
- 5814 Full Free Quadruple Lift Cylinder
- 5815 Slew Cylinder
- 5822 Twist Lock Cylinder

### **Other Controls**

- 5804 Side Shift Cylinder
- 5807 Fork Positioner Cylinder
- 5816 Compensating Cylinder
- 5823 Fork Leveling Cylinder
- 5904 Auger Drive
- 5909 Reel Fore & Aft Cylinder (Discontinued from all regions effective 01Jan2012)
- 5911 Speed Control Cylinder (Discontinued from all regions effective 01Jan2012)
- 5912 Feeder Reverse Drive Cylinder (Discontinued from all regions effective 01Jan2012)
- 5916 Concave Cylinder (Discontinued from all regions effective 01Jan2012)
- 5918 Belt Tensioner Cylinder (Discontinued from all regions effective 01Jan2012)



- 5926 Sieve Cylinder (Discontinued from all regions effective 01Jan2012)
- 5928 On / Off Control Cylinder (Discontinued from all regions effective 01Jan2012)
- 5935 Combine Control Valve (Discontinued from all regions effective 01Jan2012)
- 5936 Feeder House Rev. Drive Valve (Discontinued from all regions effective 01Jan2012)
- 5937 Auto Contour Valve (Discontinued from all regions effective 01Jan2012)
- 5938 Auto Contour Cylinder (Discontinued from all regions effective 01Jan2012)
- 5949 Deck Plate Control Valve (Discontinued from all regions effective 01Jan2012)
- 5951 Deck Plate Cylinder (Discontinued from all regions effective 01Jan2012)

## **Other Implements & Machine Components**

- 6129 Quick Coupler (Discontinued from all regions effective 01Jan2012)
- 7078 Frame Level Cylinder
- 7080 Oscillation Lock Cylinder
- 7063 Swing Gear (EAME Only - Discontinued 01Jan2015)
- 7260 Cab Riser (Discontinued from all regions effective 01Jan2012)

## **6000 Series Hydraulic Mining Shovel Components**

- 4265 Service Brake Control Valve
- 508A Auxiliary Pilot Pump
- 508C Hydraulic Cooling Pump
- 79C3 Propel Brake
- 79PA Swing Drive Motor

