# **REPAIR OPTIONS FOR CAT®** 324 D EXCAVATORS

Repair option information also applies to forestry machine applications



Our recommendation:			
Rebuild price:		Comparable new machine price:	
Customer name:		Customer phone number:	
Date:	Model serial number:	Make/model:	
Machine Sales Rep:		Product Sales Rep:	

While excavator applications vary, certain goals remain — keep owning and operating costs down and equipment uptime high. Peterson offers repair options to maintain performance and profitable operations of excavators.

We want to help you reduce your cost of ownership.

## **ENGINE REPAIR OPTIONS**

#### LEVEL 1 MINOR OVERHAUL

Includes: Bearings, seals, gaskets and normal onelife wear parts. Assumes all multiple-life parts meet Caterpillar reuse guidelines.

**Does not include:** External parts, including turbos, exhaust, electrical and electronics

#### LEVEL 1 FINAL DRIVE

#### **Minor Overhaul**

**Includes:** Bearings, seals, gaskets and normal onelife wear parts. Assumes all multiple-life parts meet Caterpillar reuse guidelines.

**Does not include:** Replacing housings, carriers, shafts, machine work, or other critical parts not meeting Caterpillar reuse guidelines

# LET'S DO THE WORK."

CONTACT US 888-738-3776

#### LEVEL 2 MAJOR OVERHAUL

**Includes:** All Level 1 parts and turbocharger. Reconditions or replaces other critical parts not meeting Caterpillar reuse guidelines.

**Does not include:** Replacement housings, carriers, valve bodies, shafts or machine work

#### LEVEL 2 FINAL DRIVE

#### **Major Overhaul**

**Includes:** All Level 1 parts. Reconditions or replaces other critical parts not meeting Caterpillar reuse guidelines.

#### LEVEL 3 COMPLETE REBUILD

**Includes:** Complete component rebuild including all Level 1 & 2 parts. Replacement of sensors and harness.

**Does not include:** Replacement of major housings/castings

#### LEVEL 4 REMANUFACTURED

Includes: Starter and alternator

### LEVEL 3 FINAL DRIVE

#### Remanufactured



### ENGINE REPAIR OPTIONS Inspect or Test:

- Camshaft
- Cooling system
- Cooling fan
- Coolant hoses
- Radiator
- Crankshaft
- Cylinder block
- ECM
- Engine mounts
- Engine oil cooler
- Exhaust & intake manifolds
- Fan drive, pulleys, belts & belt tensioner
- Flywheel & ring gear
- Front gear train
- Fuel injectors
- Fuel transfer pump & fuel lines
- Fumes disposal & clamps
- Piston spray jets
- Pushrods, lifters & spring guides
- Rocker arm assemblies
- Intake & exhaust
- Rocker arm shaft
- Turbocharger, aftercooler/hoses
  & clamps
- Unit injection hydraulic pump
- Vibration damper
- Wiring harnesses, switches & sensors

# FINAL DRIVE REPAIR OPTIONS Inspect or Test:

- Gears
- Shaft
- Carrier
- Wheel spindle
- Operational test

Quote	Level 1	Level 2	Level 3	Level 4
RECONDITION, REPAIR, OR REPLACE	IN-FRAME	<b>OUT-OF-FRAME</b>	<b>OUT-OF-FRAME</b>	REMAN
Camshaft bearings	х	х	Х	
Coolant temperature regulator	х	X	Х	
Crankshaft thrust plates	х	х	Х	
Exhaust manifold studs/locknuts	х	x	X	
Gaskets & seals for components that are removed	х	х	Х	
Main bearings & rod bearings	х	x	X	
Breather	х	х	Х	
PM Service - oil, fuel, & air filters	х	x	X	
Turbocharger (mounting) studs/locknuts	х	х	Х	
Cylinder head	х	x	X	
Cylinder pack	х	х	Х	
Water pump		X	X	
Turbocharger		Х	Х	
Engine oil pump	х	X	X	
Fuel injectors	х	Х	Х	
Paint engine		X	X	
Fuel transfer pump		Х	Х	
Engine oil cooler		x	X	
Rocker shaft & arm assemblies (as needed)			Х	
Electrical wiring harness & sensors			X	
Piston spray jets			Х	
Front gear train bearings	1	x	X	
V-belt			Х	
Polish crankshaft			х	
Inspect fuel lines & replace (as needed)			х	
Camshaft				
Crankshaft				
Exhaust & intake manifolds				
Fan drive, pulleys, belts & belt tensioner				
ECM				
Dyno test engine		x	X	
, ,		X	X	
Replace with Cat remanufactured, includes starter & alternator				Х

Quote	Level 1	Level 2	Level 3				
RECONDITION, REPAIR, OR REPLACE	REBEARING RESEAL	REPAIR OR RECONDITION AS NEEDED	REMAN				
All bushings & anti-friction bearings	Х	х					
All seals & gaskets	Х	X					
Thrust washers	Х	х					
Duo-Cone™ seal	Х	X					
Miscellaneous hardware	Х	х					
REPLACE, REPAIR, OR RECONDITION AS NEEDED FOR THE FOLLOWING:							
Planet gears		х					
Sun gears		х					
Planet shafts		х					
Ring gear		X					
Wheel spindle		х					
Case repairs		X					
Shafts		x					
Housings & carriers		x					
Replace with Cat remanufactured			x				