

## C O R E   A C C E P T A N C E   C R I T E R I A

### Engines

You will receive:

#### *Full Core Refund*

- ◆ Cylinder block not visibly cracked, broken or welded.
- ◆ Non-failed, running engine core.\*
- ◆ Must be returned on Caterpillar® engine stand.
- ◆ Fully assembled and complete.
- ◆ No nonoperational damage (mishandling, excessive rust, corrosion, pitting or fire damage.)
- ◆ Must be a Cat® 1160, 3160, 3116, 3126, 3176, 3208, C-10, C-12, 3406, C-15, or C-16 Engine.

#### *Damaged Core Refund*

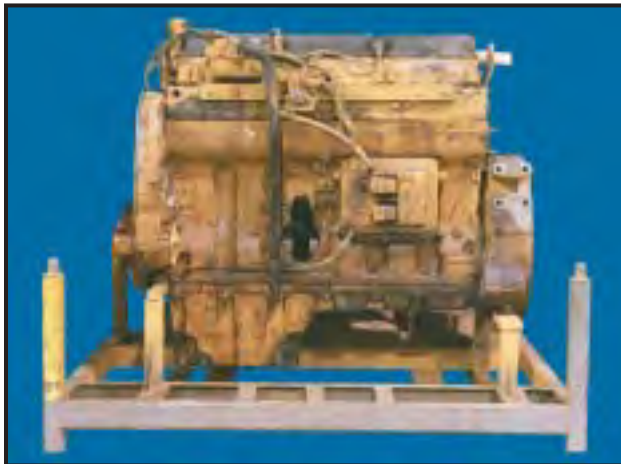
- ◆ Cylinder block visibly cracked, broken, or welded.
- ◆ Failed, non-running engine core. \*
- ◆ Evidence of bearing, piston, connecting rod, valve, gear train or other internal failure.

#### *No Core Refund*

- ◆ Scavenged cores (see Note on add charges).
- ◆ Disassembled cores.
- ◆ Nonoperational damage (mishandling, excessive rust, corrosion, pitting or fire damage.)

**NOTE:** There will be an add charge for missing parts or engine stand.

\* Bar over test does not apply to 3176, C-10, C-12, 3406, C-15 and C-16 engines.



**Figure 1**                      **Damaged Core Refund**  
Visibly Broken Engine Block



**Figure 2**                      **Full Core Refund**  
Fully Assembled and Correctly Fastened to Metal Stand

Dealers should refer to REMAN Policies and Core Management (SELD0122), Core Management Systems and Operations procedures (SELD0040), and Shipping Instructions (SELD0039) in the “Operations and Core Management Tab”, and to Core Acceptance Guide Introduction (SELD0013) in the “Core Acceptance Guidelines Tab” for additional information applicable to all cores.

### Damaged Blocks

- Cracked, broken, or welded cylinder blocks will receive a damaged core refund. If the cylinder block has sound suppression panels, the panels should be examined for signs of a broken block such as dents on the outside of the panels.
- The aluminum spacer deck in 3176 engines is not part of the block. Damage limited to the aluminum casting will qualify for full core refund.

### Nonoperational Damage

- Engine cores which have been in fires receive No Core Refund.
- Engine cores which appear to have had salvageable parts removed from them and had non-salvageable parts substituted in their place will be subject to a detailed inspection. Disassembly of suspect cores may be necessary to determine the authenticity of the core.
- If a returned core is found to have been scavenged or assembled from scrap material, the core will be rejected, and the dealer will be assessed a \$300 inspection fee.

### Full Versus Damaged Core Refund

- To receive full core refund for 3208, 3116, 3126, 1160 and 3160 engines, you must have determined the engine to be a non-failed, running core. As confirmation of this, the following test must be performed on all cores submitted for “running core” Core Refund.

“Bar over” the engine two revolutions in one direction and one revolution in the opposite direction. Listen for any sign of loose parts indicating possible internal damage.

**NOTE:** An engine may not “bar over” if:

1. There are parts left loose in the oil pan.
  2. The head gaskets have been removed.
  3. Water has filled the cylinders and caused hydraulic lock.
- Engines without compression during “bar over” are subject to additional inspection.
  - If there is known internal failure, use “KNOW” inspection code on the electronic CCR.

# Engines

## IDENTIFICATION TIPS

### 1100 Versus 3208

- You can distinguish 1100 and 3100 from 3208 engines by the following characteristics:
  - ❑ Front housing - 3208 is flat across the top; 1100 and 3100 Series Engines are not flat.
  - ❑ Fuel systems - 3208 has a V-shaped, sleeve metering fuel pump housing; 1100 and 3100 Series Engines have an I-shaped, scroll type fuel pump housing.

### 3176

- An upgrade charge is applied when 3176 core is returned for 3176B. Clearly identify the core as 3176 or 3176B

### General

- Serial numbers are stamped beneath the identification plates on blocks.

### 3406

- 3406 Engines: Core refund depends on the engine model (3406 "A", "B", "C" or "E"). Make sure you correctly identify the engine core for proper core refunding.
- Upgrade charges are applied on some 3406 engine exchanges. Refer to Chart A to be sure the correct model is identified.

	Chart A		
3406	3406B	3406C	3406E
90U00001 UP	7FB00001 UP	5KJ07800 UP	5EK00001 UP
91U00001 UP	4MG00001 UP	3ZJ16182 UP	6TS00001 UP
92U00001 UP	5KJ00001-07799	4CK00846 UP	1LW0001 UP
	3ZJ00001-16181	8PN00001 UP	5DS00001 UP
	8TC00001 UP	6TB09857 UP	2WS00001 UP
	5YG00001 UP	3ER00001 UP	1MM00001 UP
	2EK00001 UP	41Z00001 UP	
	4CK00001-00845	11N03780 UP	
	6TB00001-09856	7XC00001 UP*	
	11N00001-03779	2MZ00001 UP	
	7XC00001 UP*	2WB11476 UP	
	2WB00001-11475		

\*Serial number prefix '7XC' can be a 3406B or 3406C model. Refer to the serial number plate for verification of model.

# Engines

## CORE RETURN REQUIREMENTS

### Return Engine Stands

- All engine cores must be returned securely fastened to a metal stand as shown in Figure 2. Cores not returned on a metal stand are subject to an add charge. Return the removable support posts of the metal stands with the engine core and stand.

### Drain All Cores

- Completely drain and recycle or properly dispose of all fluids. Drain all coolant from the engine block, oil cooler and water pump. Drain all oil from the engine block, remove oil filters, and seal all openings with plugs and covers from the remanufactured engine or with puncture resistant tape. Leaks or spills during transportation are very serious. Dealers are liable for clean up costs or damage resulting from in transit leaks or spills.

## Direct Purchase Criteria

Engine Direct Purchase pricing is not included in Core Management Information System (CMIS2) Part Information. However, REMAN does purchase engines on an as needed basis. Please contact your Reman Representative for engine pricing availability. Engines returned on the Direct Purchase program must have a Return Authorization number issued by Corinth before shipment.

Engines must bar over and meet full exchange criteria requirements to qualify for the Direct Purchase program.

Add charges will apply as appropriate based on the normal exchange core acceptance criteria.