# **CATERPILLAR®**

# Service Repair Manual

# **Models**

345B and 345B L Series II Excavator

Model: 345B II EXCAVATOR AKJ

Configuration: 345B & 345B L Series II Excavators AKJ00001-UP (MACHINE) POWERED BY 3176C Engine

## **Disassembly and Assembly**

#### 3176C and 3196 Engines for Caterpillar Built Machines

Media Number -RENR1223-15

Publication Date -01/08/2015

Date Updated -03/08/2015

i01970055

# **Connecting Rod Bearings - Install**

**SMCS -** 1219-012

# **Installation Procedure**

#### **NOTICE**

Keep all parts clean from contaminants.

Contaminants may cause rapid wear and shortened component life.

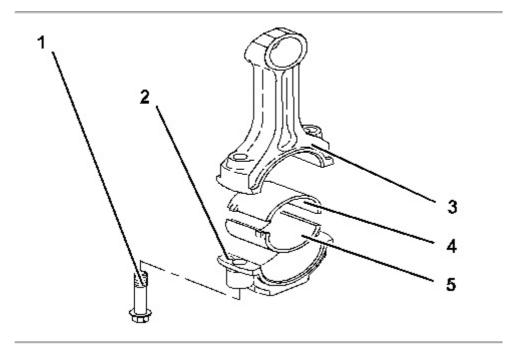


Illustration 1 g01022743

1. Install the upper half of connecting rod bearing (4) into connecting rod (3). Ensure that the bearing tab engages with the slot in the connecting rod.

- 2. Apply clean engine oil on the surface of the upper half of connecting rod bearing (4).
- 3. Position connecting rod (3) and connecting rod bearing (4) on the crankshaft.
- 4. Install the lower half of connecting rod bearing (5) in corresponding connecting rod cap (2). Ensure that the bearing tab engages with the groove in connecting rod cap (2).
- 5. Apply clean engine oil on the surface of the lower half of connecting rod bearing (5).
- 6. Install connecting rod cap (2) on the corresponding connecting rod. Ensure that the numbers are on the same side.
- 7. Install connecting rod cap bolts (1). Tighten the bolts to a torque of  $130 \pm 7 \text{ N} \cdot \text{m}$  (95 ± 5 lb ft).
- 8. Place an index mark on each bolt head. Tighten each bolt for an additional  $60 \pm 5$  degrees (1/6 turn).
- 9. Repeat Steps 1 through 8 in order to install the remaining connecting rod bearings.

**End By:** Install the engine oil pan. Refer to Disassembly and Assembly, "Engine Oil Pan - Remove and Install".

Copyright 1993 - 2020 Caterpillar Inc. All Rights Reserved. Private Network For SIS Licensees. Fri Sep 11 23:24:31 UTC+0800 2020

Model: 345B II EXCAVATOR AKJ

Configuration: 345B & 345B L Series II Excavators AKJ00001-UP (MACHINE) POWERED BY 3176C Engine

## **Disassembly and Assembly**

### 3176C and 3196 Engines for Caterpillar Built Machines

Media Number -RENR1223-15

Publication Date -01/08/2015

Date Updated -03/08/2015

i02087520

# **Crankshaft Main Bearings - Remove**

SMCS - 1203-011

## **Removal Procedure**

Table 1

Required Tools			
Tool	Part Number	Part Description	Qty
A	2P-5518	Bearing Tool	1

### **Start By:**

A. Remove the oil pan. Refer to Disassembly and Assembly, "Engine Oil Pan - Remove and Install".

#### **NOTICE**

Keep all parts clean from contaminants.

Contaminants may cause rapid wear and shortened component life.

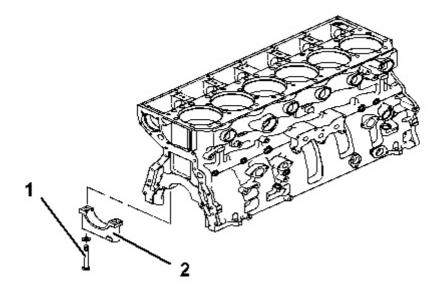


Illustration 1 g01022767

1. Remove bolts (1) that hold crankshaft main bearing cap (2). Remove crankshaft main bearing cap (2).

2. Remove the lower half of the crankshaft main bearing from crankshaft main bearing cap (2).

### **NOTICE**

If the crankshaft is turned in the wrong direction, the tab of the crankshaft main bearing will be pushed between the crankshaft and the cylinder block. this can cause damage to either or both the crankshaft and the cylinder block.

Thank you so much for reading.

Please click the "Buy Now!"

button below to download the complete manual.



After you pay.

You can download the most perfect and complete manual in the world immediately.

Our support email: ebooklibonline@outlook.com