

Product: SKID STEER LOADER

Model: 246D SKID STEER LOADER JSL

Configuration: 246D Skid Steer Loader JSL00001-UP (MACHINE) POWERED BY C3.3B Engine

Disassembly and Assembly C2.6 and C3.3B Engines for Caterpillar Built Machines

Media Number -UENR0137-11

Publication Date -01/08/2015

Date Updated -12/07/2018

i05242540

Crankshaft Rear Seal and Wear Sleeve - Remove - Includes Crankshaft Gear

SMCS - 1161-011; 7558-011

Removal Procedure

Start By:

- a. Remove the flywheel.

NOTICE

Keep all parts clean from contaminants.

Contaminants may cause rapid wear and shortened component life.

1. Place the engine at top dead center.



2. Use a screw driver to remove rear seal (1).



Illustration 2

3. Check the alignment of crankshaft gear (2) and camshaft gear (3). Remove crankshaft gear (2) and ring seal.

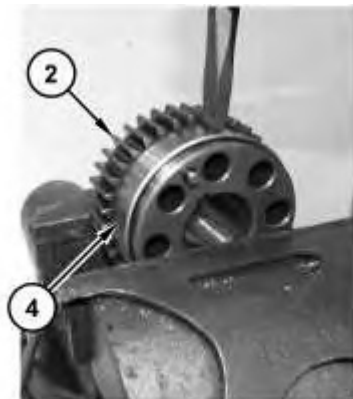


Illustration 3

4. Place crankshaft gear (2) with wear sleeve (4) in a suitable vice. Remove wear sleeve (4) with a suitable chisel.
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i05242547

Crankshaft Rear Seal and Wear Sleeve - Install - Includes Crankshaft Gear

SMCS - 1161-012; 7558-012

Installation Procedure

Table 1

Required Tools			
Tool	Part Number	Part Description	Qty
A	390-1146	Crankshaft Rear Seal and Wear Sleeve Driver ⁽¹⁾	1
	423-9665	Crank shaft Rear Seal and Wear Sleeve Driver ⁽²⁾	1

⁽¹⁾ Used for the C3.3B

⁽²⁾ Used for the C2.6

Note: Refer to Specification UENR0995 "Engine Design" for non-specified engine Torque Values.

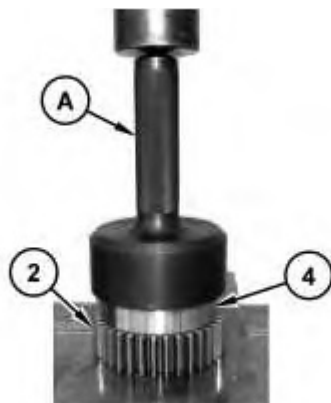


Illustration 1

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1. Place wear sleeve (4) on crankshaft gear (2). Position Tooling (A). Use a suitable press and install wear sleeve (4).



Illustration 2

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2. Align crankshaft gear (2) with camshaft gear (3). Install crankshaft gear (2) into the flywheel housing.

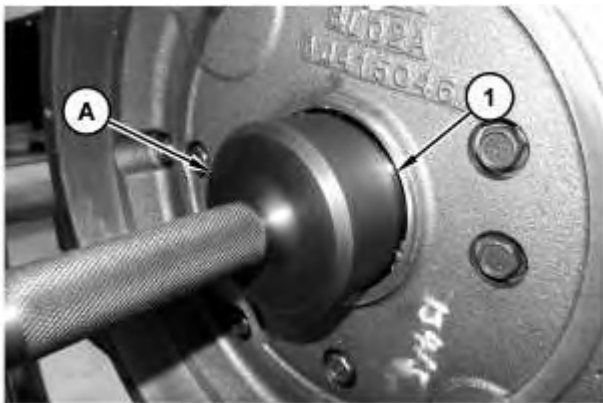


Illustration 3

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3. Apply clean engine oil on the lip of crankshaft rear seal (1). Use Tooling (A) in order to install crankshaft rear seal (1).

End By:

- a. Install the flywheel.
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i05242551

Flywheel Housing - Remove and Install

SMCS - 1157-010

Removal Procedure

Table 1

Required Tools			
Tool	Part Number	Part Description	Qty
A	-	Guide Stud M12 x 1.25 by 100 mm	2
B	138-7575	Link Brackets	2

Start By:

- a. Remove the flywheel.
- b. Remove the rear crankshaft seal.

Note: Refer to Specification UENR0995 "Engine Design" for non-specified engine Torque Values.

NOTICE

Keep all parts clean from contaminants.

Contaminants may cause rapid wear and shortened component life.

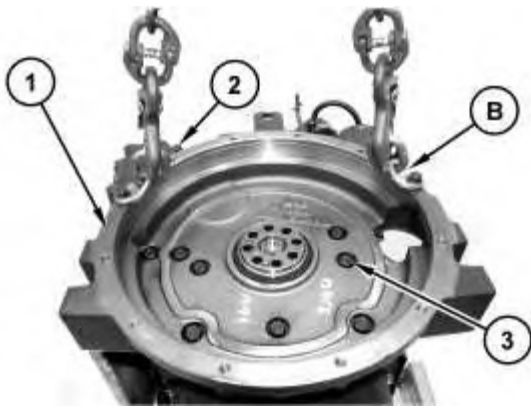


Illustration 1

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1. Remove two bolts (3) from flywheel housing (1).
2. Install Tooling (A) into flywheel housing (1).
3. Install Tooling (B). Install a suitable lifting device to flywheel housing (1). The weight of flywheel housing (1) is approximately 25 kg (55 lb).
4. Remove remaining six bolts (3) and 8 bolts (2) from flywheel housing (1).
5. Remove flywheel housing (1) from the cylinder block.



Illustration 2

g02794825

6. Remove bearing (4).
7. Remove the gasket (5).
8. If necessary, remove the dowels from the cylinder block.

Installation Procedure

1. Install flywheel housing (1) in the reverse order of removal.
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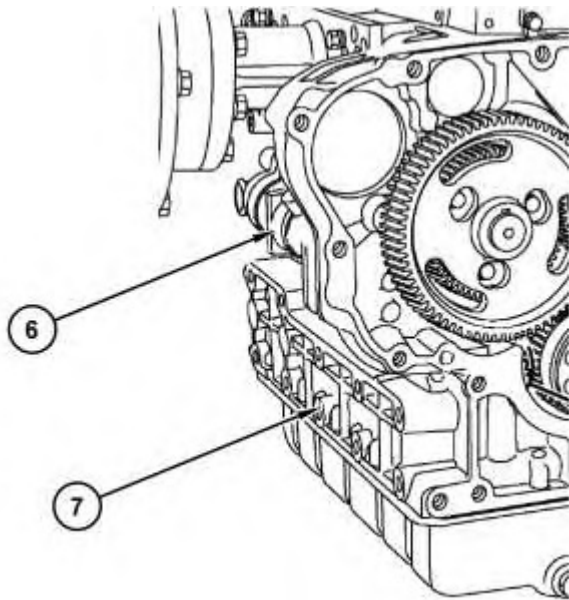


Illustration 3

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- a. Install liquid gasket to the seam between the lower crankcase section (7) and the upper crankcase section (6).
 - b. For the C3.3B tighten 8 bolts (3) and 8 bolts (2) to a torque of 103 to 117 N·m (76 to 87 lb ft).
 - c. For the C2.6 tighten 8 bolts (3) and 8 bolts (2) to a torque of 78 to 90 N·m (58 to 66 lb ft).
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i05242553

Crankshaft Pulley - Remove and Install

SMCS - 1205-010

Removal Procedure

Start By:

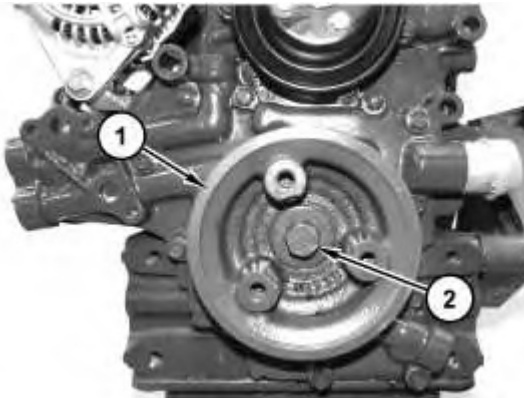
- a. Remove the v-belt.

Note: Refer to Specification UENR0995 "Engine Design" for non-specified engine Torque Values.

NOTICE

Keep all parts clean from contaminants.

Contaminants may cause rapid wear and shortened component life.



1. Use a suitable tool in order to prevent the crankshaft from rotating. Remove bolt (2) in order to remove crankshaft pulley (1).

Installation Procedure

1. Install crankshaft pulley (1) in the reverse order of removal.
 - a. Apply clean engine oil to the threads of bolt (2). Tighten bolt (2) to a torque of 255 to 274 N·m (188 to 202 lb ft).
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