

Product: EXCAVATOR

Model: 315C EXCAVATOR ANF

Configuration: 315C L Excavator ANF00001-UP (MACHINE) POWERED BY 3054 Engine

Disassembly and Assembly 3054E Engine for Caterpillar Built Machines

Media Number -REN2411-03

Publication Date -01/05/2017

Date Updated -03/05/2017

i02298103

Rocker Shaft - Disassemble

SMCS - 1102-015

Disassembly Procedure

Table 1

Required Tools			
Tool	Part Number	Part Description	Qty
A	1P-1855	Retaining Ring Pliers	1

Start By:

- Remove the rocker shaft assembly. Refer to Disassembly and Assembly, "Rocker Shaft and Pushrod - Remove".



WARNING

Personal injury can result from being struck by parts propelled by a released spring force.

Make sure to wear all necessary protective equipment.

Follow the recommended procedure and use all recommended tooling to release the spring force.

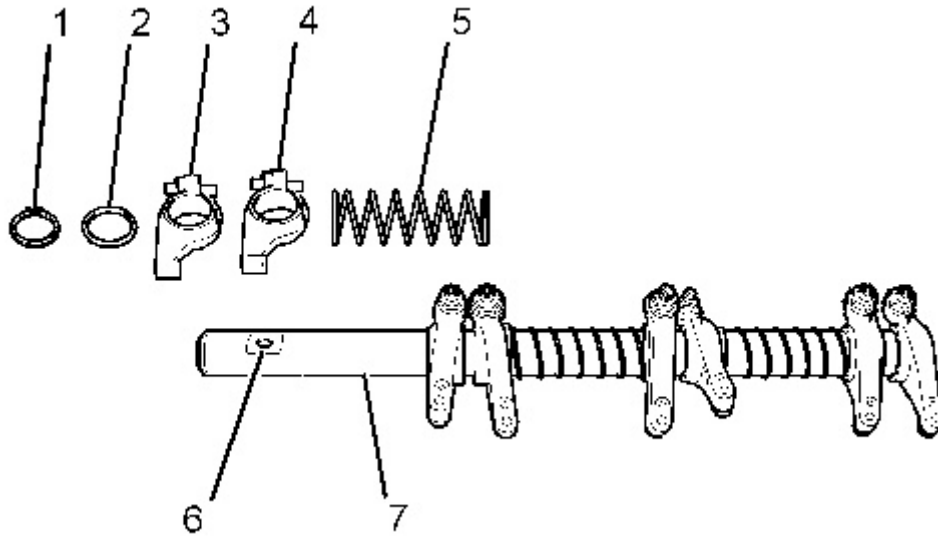


Illustration 1

g01150908

1. Remove the retaining ring (1) and remove the washer (2) from both ends of the rocker shaft assembly.
Note: The rocker shaft (7) is not symmetrical as there is a machined flat (6) toward one end of the shaft.
 2. Place an identification mark on each of the components for installation. Ensure that you note the component's relationship to the machined flat (6).
 3. Remove the rocker arm assembly (3) for the inlet valve from the rocker shaft (7). Remove the rocker arm assembly (4) for the exhaust valve from the rocker shaft (7).
 4. Remove the spring (5) from the rocker shaft assembly.
 5. Repeat Step 3 and Step 4 in order to completely disassemble the rocker shaft assembly.
-

Product: EXCAVATOR

Model: 315C EXCAVATOR ANF

Configuration: 315C L Excavator ANF00001-UP (MACHINE) POWERED BY 3054 Engine

Disassembly and Assembly 3054E Engine for Caterpillar Built Machines

Media Number -REN2411-03

Publication Date -01/05/2017

Date Updated -03/05/2017

i02298104

Rocker Shaft - Assemble

SMCS - 1102-016

Assembly Procedure

Table 1

Required Tools			
Tool	Part Number	Part Description	Qty
A	1P-1855	Retaining Ring Pliers	1

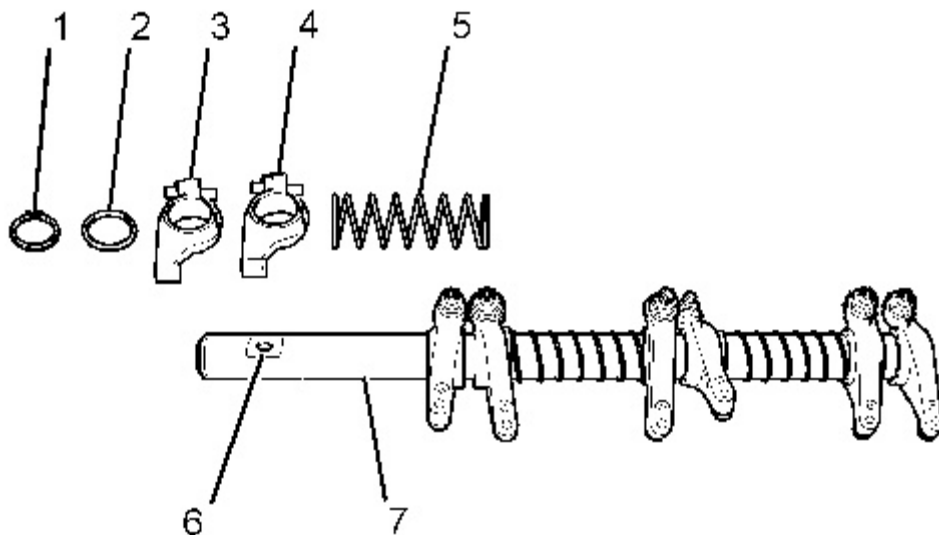


Illustration 1
Typical example

g01150908

1. Clean all of the components and inspect all of the components. Inspect the grooves for the circlips (1) and ensure that all of the oil holes in the rocker shaft (7) and in the rocker arms (3 and 4) are not plugged before you begin the assembly procedure. If necessary, replace any worn components and any damaged components.
2. Check the clearance between the rocker shaft (7) and the bushing of every rocker arm (3 and 4). Refer to the Specifications Manual, "Rocker Shaft" or further information. If necessary, replace any worn components.
3. Lubricate all of the components with clean engine oil before assembly.
Note: Ensure that the machined flat (6) on the rocker shaft (7) is facing upward.
4. Install a circlip (1) onto the end of the rocker shaft (7) that is closest to the machined flat (6). Install a washer (2) onto the rocker shaft (7).
5. Install the rocker arm assembly (3) for the inlet valve onto the rocker shaft (7). Install the rocker arm assembly (4) for the exhaust valve onto the rocker shaft (7).
6. Install the spring (5) onto the rocker shaft (7).
7. Repeat Step 5 and Step 6 in order to assemble the rocker shaft assembly.



Improper assembly of parts that are spring loaded can cause bodily injury.

To prevent possible injury, follow the established assembly procedure and wear protective equipment.

8. Install the remaining washer (2) and the remaining circlip (1) onto the rocker shaft (7).
-

Product: EXCAVATOR

Model: 315C EXCAVATOR ANF

Configuration: 315C L Excavator ANF00001-UP (MACHINE) POWERED BY 3054 Engine

Disassembly and Assembly 3054E Engine for Caterpillar Built Machines

Media Number -REN2411-03

Publication Date -01/05/2017

Date Updated -03/05/2017

i02298106

Rocker Shaft and Pushrod - Install

SMCS - 1102-012; 1208-012

Installation Procedure

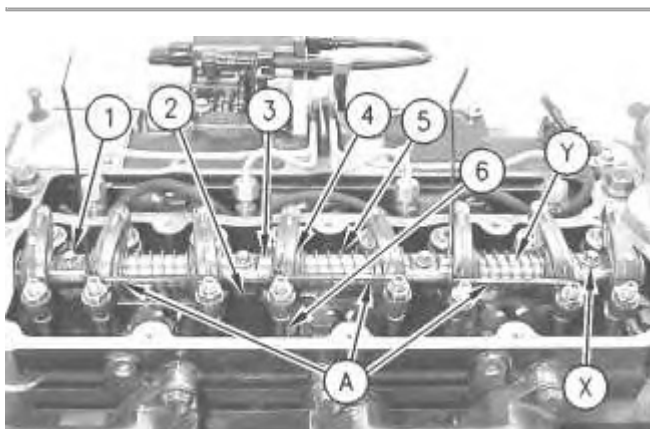
Table 1

Required Tools			
Tool	Part Number	Part Description	Qty
A	6K-0806	Cable Strap	3

NOTICE

Keep all parts clean from contaminants.

Contaminants may cause rapid wear and shortened component life.



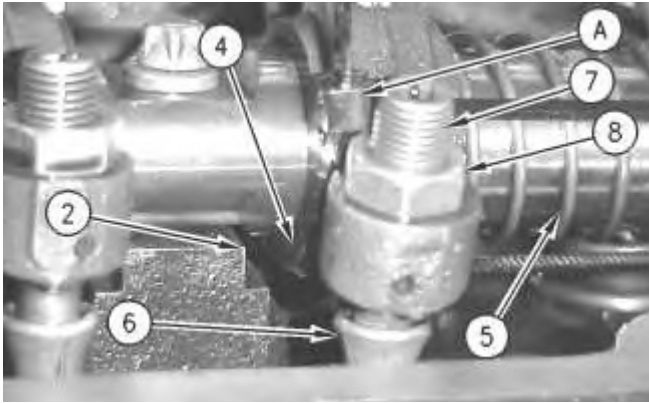


Illustration 2

1. Apply clean engine lubricating oil to both ends of the pushrods (6). Install the pushrods (6).

Note: Ensure that the pushrods are installed in the original location and that the pushrods are seated in the valve lifters correctly.

2. If the rocker shaft was disassembled, install the Tooling (A) around the rocker arms (4) in order to slightly compress spring (5). The rocker arms must be held away from the machined face of the cylinder head (2) during reassembly.
3. Loosen the nut (8) and the adjustment screw (7) on each rocker arm. This will help prevent a bent valve or a bent pushrod during the installation of the rocker shaft.
4. Position the rocker shaft assembly on the cylinder head.

Note: The rocker shaft (3) of the rocker shaft assembly is not symmetrical. The rocker shaft (3) has a machined flat at the front end of the shaft. Ensure that the machined flat is toward the top and toward the front end of the engine.

5. Install the Torx screws (1) in the rocker shaft (3).

Note: The longest Torx screw must be installed at the front of the cylinder head in the hole (X).

6. Ensure that the adjustment screws (7) are properly seated in the ends of the pushrods (6).
7. Alternately tighten the Torx screws (1). Start from the center and work toward the outside. Tighten the Torx screws (1) to a torque of 35 N·m (26 lb ft).
8. Cut and remove the Tooling (A) from the rocker shaft assembly.
9. Adjust the inlet valve lash to 0.20 mm (0.008 inch) and adjust the exhaust valve lash to 0.45 mm (0.018 inch). Refer to Testing and Adjusting, "Engine Valve Lash - Inspect/Adjust" for more information on adjusting the valve lash.

End By:

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